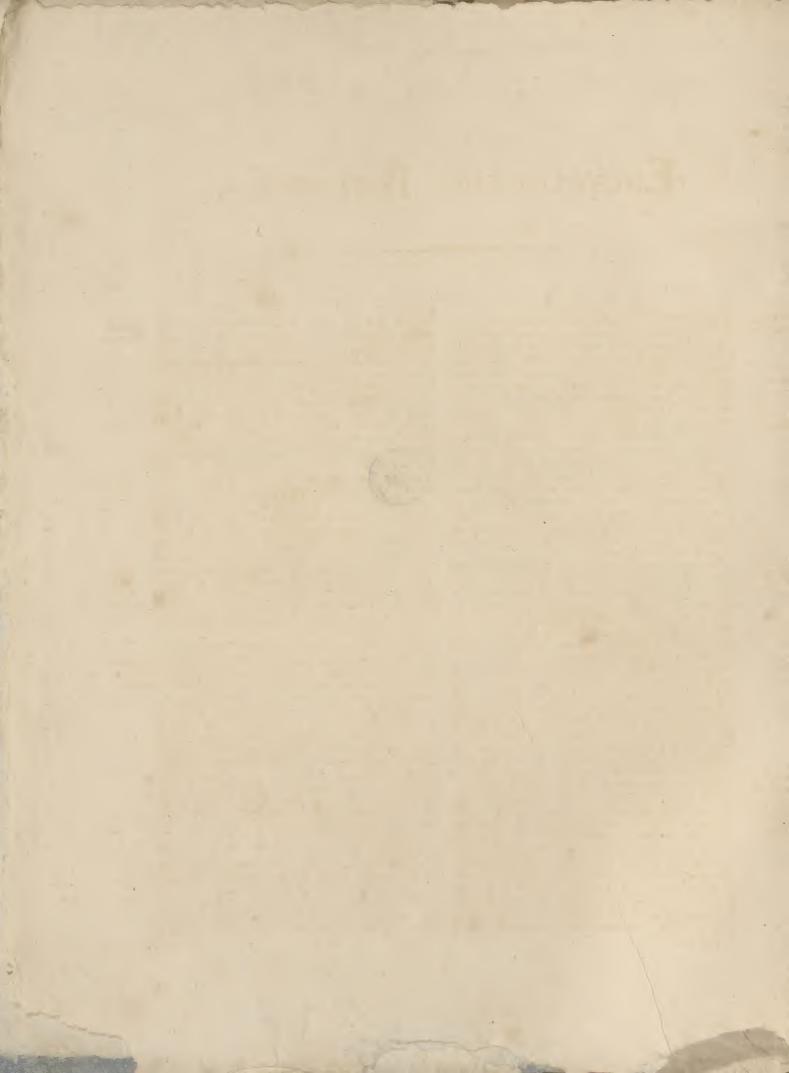


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ENCYCLOPÆDIA BRITANNICA.

P R A

ARTHIA, a celebrated empire of antiquity, bounded on the west by Media, on the north by Hyrcania, on the east by Aria, on the fouth by Carmania the defert; furrounded on every fide by mountains, which still serve as a boundary, though its name is now changed, having obtained that of Eyrac or Arac; and, to distinguish it from Chaldæa, that of Eyrac Agami. By Ptolemy it is divided into five districts, viz. Caminfine, or Gamisene, Partheyne, Choroane, Atticene, and Tabiene. The ancient geographers enumerate a great many cities in this country. Ptolemy in particular reckons 25 large cities; and it certainly must have been very populous, fince we have accounts of 2000 villages, befides a number of cities, in this diffrict, being destroyed by earthquakes. Its capital was named Hecatompolis, from the circumstance of its having 100 gates. It was a noble and magnificent place; and, according to some, it still remains under the name of Ispahan, the capital of the present Persan empire.

Parthia is by some supposed to have been first peopled by the Phetri or Pathri, often mentioned in Scripture, and that the Parthians are descended from Pathrusim the fon of Mifraim. But however true this may be with regard to the ancient inhabitants, yet it is certain, that those Parthians who were so famous in hiftory, descended from the Scythians, though from what

tribe we are not certainly informed.

The history of the ancient Parthians is totally lost. All that we know about them is, that they were first fubject to the Medes, afterwards to the Persians, and lastly to Alexander the Great. After his death the province fell to Seleucus Nicator, and was held by him and his fucceffors till the reign of Antiochus Theus, about the year 250 before Christ. At this time the Parthians revolted, and chose one Arsaces for their The immediate cause of this revolt was the lewdness of Agathocles, to whom Antiochus had committed the care of all the provinces beyond the Euphrates. This man made an infamous attempt on Tiridates, a youth of great beauty; which so enraged his brother Arfaces, that he excited his countrymen to revolt; and before Antiochus had leisure to attend to the rebellion, it became too powerful to be crushed. Seleucus Callinicus, the fuccessor of Antiochus Theus, attempted to reduce Arfaces; but the latter having had so much time to strengthen himself, deseated and drove his antagonist out of the country. Seleucus, however, in a short time, undertook another expedition against VOL. XVI. Part I.

Arfaces; but was still more unfortunate than he had Parthia. been in the former, being not only defeated in a great battle, but taken prisoner, and died in captivity. The day on which Arfaces gained this victory was ever after observed among the Parthians as an extraordinary festival. Arfaces being thus fully established in his new kingdom, reduced Hyrcania and fome other provinces under his power; and was at last killed in a battle against Ariarathes IV. king of Cappadocia. From this prince all the other kings of Parthia took the furname of Arfaces, as those of Egypt did that of Ptolemy, from Ptolemy Soter.

Arfaces I. was fucceeded by his fon Arfaces II. who, entering Media, made himself master of that country, while Antiochus the Great was engaged in a war with Ptolemy Euergetes king of Egypt. Antiochus, how-ever, was no fooner difengaged from that war, than he marched with all his forces against Arfaces, and at first drove him quite out of Media. But he foon returned with an army of 100,000 foot and 20,000 horse, with which he put a stop to the further progress of Antiochus; and a treaty was foon after concluded, in which it was agreed, that Arfaces should remain master of Parthia and Hyrcania, upon condition of his affifting him in his wars with other nations.

Arfaces II. was succeeded by his fon Priapatius, who conquests reigned 15 years, and left three fons, Phraates, Mithri- of the Pardates, and Artabanus. Phraates, the eldeft, fucceeded thian moto the throne, and reduced under his subjection the narchs. Mardi, who had never been conquered by any but Alexander the Great. After him, his brother Mithridates was invested with the regal dignity. He reduced the Bactrians, Medes, Persians, Elymeans, and overran in a manner all the east, penetrating beyond the boundaries of Alexander's conquests. Demetrius Nicator, who then reigned in Syria, endeavoured to recover those provinces; but his army was entirely destroyed, and himself taken prisoner, in which state he remained till his death; after which victory Mithridates made himfelf master of Babylonia and Mesopotamia, so that be now commanded all the provinces from between the Euphrates and the Ganges.

Mithricates died in the 37th year of his reign, and Antiochus left the throne to his fon Phrahates II. who was fcarce sidetes defettled in his kingdom when Antiochus Sidetes march froyed with his ed against him at the head of a numerous army, under whole arpretence of delivering his brother Demetrius, who was my. still in captivity. Phrahates was defeated in three

Cause of the Par-

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Parthia. pitched batiles; in consequence of which he lost all the countries conquered by his father, and was reduced within the limits of the ancient Parthian kingdom. Antiochus did not, however, long enjoy his good fortune; for his army, on account of their number, a-mounting to no fewer than 400,000, being obliged to teparate to fuch distances as prevented them, in case of any fudden attack, from joining together, the inhabitants, whom they had most cruelly oppressed, taking advantage of this feparation, conspired with the Parthians to destroy them. This was accordingly executed; and the vast army of Antiochus, with the monarch himself, were slaughtered in one day, scarce a fingle person escaping to carry the news to Syria. Phrahates, clated with this fuccess, proposed to invade Syria; but in the mean time, happening to quarrel with the Scythians, he was by them cut off with his whole army, and was succeeded by his uncle Amabanus.

The new king enjoyed his dignity but a very short time, being, a few days after his accession, killed in another battle with the Scythians. He was succeeded by Pacorus I. who entered into an alliance with the Romans; and he by Phrahates III. This monarch took under his protection Tigranes the fon of Tigranes the Great, king of Armenia, gave him his daughter in marriage, and invaded the kingdom with a defign to place the fon on the throne of Armenia; but on the approach of Pompey he thought proper to retire, and foon after folemnly renewed the treaty with

the Romans.

Phrahates was murdered by his children Mithridates and Orodes; and foon after the former was put to death by his brother, who thus became fole mafter of the Parthian empire. In his reign happened the memorable war with the Romans under Crassus. This was occasioned not by any breach of treaty on the side of the Parthians, but through the shameful avarice of Crassus. The whole Roman empire at that time had been divided between Cæsar, Pompey, and Crassus; and by virtue of that partition, the eastern provinces had fallen to the lot of Crassus. No sooner was he inveiled with this dignity, than he resolved to carry the war into Parthia, in order to enrich himself with the fpoils of that people, who were then looked upon to be very wealthy. Some of the tribunes opposed him, as the Parthians had religiously observed the treaty; but Crassus having, by the assistance of Pompey, carried every thing before him, left Rome in the year 55 B. C. and purfued his march to Brundusium, where he immediately embarked his troops, though the wind blew very high; and after a difficult passage, where he lost many of his ships, he reached the ports of Ga-

Plunders the temple at Jerusa-Iem.

From Galatia Craffus haftened to Syria, and paffing through Judea, plundered the temple at Jerusalem in his way. He then marched with as great expedition as he could to the river Euphrates, which he croffed on a bridge of boats: and, entering the Parthian dominions, began hostilities. As the enemy had not expected an invafion, they were quite unprepared for refiftance; and therefore Craffus overran all Mesopotamia; and if he had taken advantage of the consternation which the Parthians were in, might have also reduced Baby-Ionia. But instead of this, early in the autumn, he repassed the Euphrates, leaving only 7000 foot and 1000

horse to garrison the places he had reduced; and put- Parthia. ting his army into winter quarters in Syria, gave himself totally up to his favourite passion of amassing

Early in the fpring, the Roman general drew his forces out of their winter quarters, in order to purfue the war with vigour; but, during the winter, Orodes had collected a very numerous army, and was well prepared to oppose him. Before he entered upon action, however, the Parthian monarch fent ambeffadors to Craffus, in order to expostulate with him on his injuffice in attacking an ally of the Roman empire; but Craffus, without attending to what they faid, only returned for answer, that "they should have his answer at Seleucia."

Orodes, finding that a war was not to be avoided, divided his army into two bodies. One he commanded in person, and marched toward Armenia, in order to oppose the king of that country, who had raised a confiderable army to affift the Romans. The other he fent into Mesoperamia, under the command of Surena or Surenas, a most experienced general, by whose conduct all the cities which Crassus had reduced were quickly retaken. On this fome Roman foldiers who His foldiers made their escape, and fled to the camp of Crassus, disheartenfilled the mind of his army with terror at the accounts ed. of the number, power, and strength, of the enemy. They told their fellow foldiers, that the Parthians were very numerous, brave, and well disciplined; that it was impossible to overtake them when they fled, or escape them when they pursued; that their defensive weapons were proof against the Roman darts, and their offensive weapons so tharp, that no buckler was proof against them, &c. Crassus looked upon all this only as the effect of cowardice: but the common foldiers, and even many of the chief officers, were fo disheartened, that Caffius, the fame who afterwards conspired against Cæfar, and most of the legionary tribunes, advised Crasfus to fuspend his march, and consider better of the enterprife before he proceeded farther in it. But Craffus obstinately persisted in his former resolution, being encouraged by the arrival of Artabazus king of Armenia, who brought with him 6000 horse, and promised to send 10,000 cuirastiers and 30,000 foot, whenever he should stand in need of them. At the same time, he advised him by no means to march his army through the plainsof Mesopotamia, but to take his route over the mountains of Armenia. He told him, that as Armenia was a mountainous country, the enemy's cavalry, in which their main strength confisted, would there be entirely useless; and besides, his army would there be plentifully supplied with all manner of necessaries: whereas, if he marched by the way of Mesopotamia, he would be perpetually haraffed by the Parthian horse, and frequently be obliged to lead his army through fandy deferts, where he would be diffressed for want of water and all other provisions. This falutary advice, however, was rejected, and Craffus entered Mesopotamia with an army of about 40,000 men.

The Romans had no fooner croffed the Euphrates, than Cassius advised his general to advance to some of those towns in which the garrisons yet remained, in order to halt and refresh his troops: or if he did not choose to follow this advice, he faid that his best way would be to march along the banks of the Euphrates to Seleucia; as by this method he would prevent the Parthians from furrounding him, at the fame time he would be plentifully supplied with provisions from his ships. Of this advice Crassus seemed to approve; but was diffuaded by Abgarus king of Edessa, whom the Romans took for an ally, but who was in reality a traitor sent by Surenas to bring about the destruction of the Roman army.

Under the conduct of this faithless guide, the Romans entered a vast green plain divided by many rivulets. Their march proved very eafy through this fine country; but the farther they advanced, the worfe the reads became, infomuch that they were at last obliged to climb up rocky mountains, which brought them to a dry and fandy plain, where they could neither find food to fatisfy their hunger, nor water to quench their thirst. Abgarus then began to be suspected by the tribunes and other officers, who earnestly entreated Craffus not to follow him any longer, but to retreat to the mountains; at the same time an express arrived from Artabazus, acquainting the Roman general that Orodes had invaded his dominions with a great army, and that he was obliged to keep his troops at home, in order to defend his own dominions. The fame messenger advised Crassus in his master's name to avoid by all means the barren plains, where his army would certainly perish with hunger and fatigue, and by all means to approach Armenia, that they might join their forces against the common enemy. But all was to no purpose; Crassus, instead of hearkening either to the advice of the king or his own officers, first flew into a violent passion with the messengers of Artabazus, and then told his troops, that they were not to expect the delights of Campania in the most remote parts of the

Thus they continued their march for some days cross a defert, the very fight of which was fufficient to throw them into the utmost despair; for they could not perceive, either near them or at a distance, the least tree, plant, or brook, not fo much as a hill, or a fingle blade of grafs; nothing was to be feen all around them but huge heaps of burning fand. The Romans had fearcely got through this defert, when word was brought them by their fcouts, that a numerous army of Parthians was advancing full march to attack them; for Abgarus, under pretence of going out on parties, had often conferred with Surenas, and concerted measures with him for deftroying the Roman army. Upon this advice, which occasioned great confusion in the camp, the Romans being quite exhaufted and tired out with their long and troublesome march, Crassius drew up his men in battalia, following at first the advice of Cassius, who was for extending the infantry as wide as possible, that they might take up the more ground, and by that means prevent the enemy from furrounding them: but Abgarus assuring the proconful that the Parthian forces were not fo numerous as was reprefented, he changed this disposition, and believing only the man who betrayed him, drew up his troops in a square, which faced every way, and had on each fide 12 cohorts in front. Near each cohort he placed a troop of horse to support them, that they might charge with the greater fecurity and boldness. Thus the whole army looked more like one phalanx than troops drawn up in manipuli, with spaces between them, after the Roman manner. The general himselfcommanded in the centre, his fon in the left wing, and Parthia. Cassius in the right.

In this order they advanced to the banks of a small river called the Baliffus, the fight of which was very pleafing to the foldiers, who were much haraffed with drought and excessive heat. Most of the officers were for encamping on the banks of this river, or rather rivulet, to give the troops time to refresh themselves after the fatigues of fo long and painful a march; and, in the mean time, to procure certain intelligence of the number and disposition of the Parthian army; but Crassus, fuffering himself to be hurried on by the inconsiderate ardour of his fon, and the horse he commanded, only allowed the legions to take a meal standing; and before this could be done by all, he ordered them to advance, not flowly, and halting now and then, after the Roman manner, but as fast as they could move, till they came in fight of the enemy, who, contrary to their expectation, did not appear either fo numerous or fo terrible as they had been represented; but this was a stratagem of Surenas, who had concealed his men in convenient places, ordering them to cover their arms, left their brightness should betray them, and, starting up at the first figual, to attack the enemy on all fides. The stra-The battle tagem had the defired effect; for Surenas no fooner gave of Carrhæ. the fignal, than the Parthians, rifing as it were out of the ground, with dreadful cries, and a most frightful noise, advanced against the Romans, who were greatly furprifed and difmayed at the fight; and much more fo, when the Parthians, throwing off the covering of their arms, appeared in shining cuirasses, and helmets of burnished steel, finely mounted on horses covered all over with armour of the same metal. At their head appeared young Surenas, in a rich drefs, who was the first who charged the enemy, endeavouring, with his pikemen, to break through the first ranks of the Roman army; but finding it too close and impenetrable, the cohorts supporting each other, he fell back, and retired in a feeming confusion: but the Romans were much surprised when they faw themselves suddenly surrounded on all fides, and galled with continual showers of arrows. Crassus ordered his light-armed foot and archers to advance, and charge the enemy; but they were foon repulsed, and forced to cover themselves behind the heavyarmed foot. Then the Parthian horse, advanced near the Romans, discharged showers of arrows upon them, every one of which did execution, the legionaries being drawn up in fuch close order, that it was impossible for the enemy to miss their aim. As their arrows were of an extraordinary weight, and discharged with incredible force and impetuofity, nothing was proof against them. The two wings advanced in good order to repulse them, but to no effect; for the Parthians shot their arrows with as great dexterity when their backs were turned, as when they faced the enemy; fo that the Romans, whether they kept their ground, or purfued the flying enemy, were equally annoyed with their fatal ar-

The Romans, as long as they had any hopes that the Parthians, after having fpent their arrows, would either betake themselves to flight, or engage them hand to hand, stood their ground with great resolution and intrepidity; but when they observed that there were a great many camels in their rear loaded with arrows, and that those who emptied their quivers wheeled about to fill

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then

Parthia. them anew, they began to lofe courage, and loudly to complain of their general for fuffering them thus to stand still, and serve only as a butt to the enemy's arrows, which, they well faw, would not be exhausted till they were all killed to a man. Hereupon Craffus ordered his fon to advance, at all adventures, and attack the enemy with 1300 horse, 500 archers, and 8 cohorts. But the Parthians no fooner faw this choice body (for it was the flower of the army) marching up against them, than they wheeled about, and betook themselves, according to their custom, to slight. Here-upon young Crassus, crying out as loud as he could, They fly before us, pushed on full speed after them, not doubting but he should gain a complete victory; but when he was at a great distance from the main body of the Roman army, he perceived his miftake; for those who before had fled, facing about, charged him with incredible fury. Young Crassus ordered his troops to halt, hoping that the enemy, upon feeing their small number, would not be afraid to come to a close fight: but herein he was likewise greatly disappointed; for the Parthians, contenting themselves to oppose his front with their heavy-armed horse, surrounded him on all fides; and, keeping at a distance, discharged incessant showers of arrows upon the unfortunate Romans, thus furrounded and pent up. The Parthian army, in wheeling about, raifed fo thick a dust, that the Romans could fcarce fee one another, much less the enemy: neverthe-Jefs, they found themfelves wounded with arrows, though they could not perceive whence they came. In a short time the place where they flood was all ftrown with dead

Extreme diftress of the Romans.

Some of the unhappy Romans finding their entrails torn, and many overcome by the exquisite torments they fuffered, rolled themselves in the fand with the arrows in their bodies, and expired in that manner. Others endeavouring to tear out by force the bearded points of the arrows, only made the wounds the larger, and increased their pain. Most of them died in this manner; and those who outlived their companions were no more in a condition to act; for when young Crassus exhorted them to march up to the enemy, some showed him their wounded bodies, others their hands nailed to their bucklers, and some their feet pierced through and pinned to the ground; fo that it was equally impossible for them either to attack the enemy or defend themselves. The young commander, therefore, leaving his infantry to the mercy of the enemy, advanced at the head of the cavalry against their heavy armed horse. The thousand Gauls whom he had brought with him from the west, charged the enemy with incredible boldness and vigour; but their lances did little execution on men armed with euiraffes, and horses covered with tried armour: however, they behaved with great resolution; for some of them taking hold of the enemy's fpears, and closing with them, threw them off their horses on the ground, where they lay without being able to stir, by reason of the great weight of their armour; others, difmounting, crept under the enemy's horses, and thrusting their fwords into their bellies, made them throw their riders. Thus the brave Gauls fought, though greatly haraffed with heat and thirst, which they were not accustomed to bear, till most of their horses were killed, and their commander dangeroully wounded. They then thought it adviseable to retire to their infantry, which they no

fooner joined, than the Parthians invested them anew, Parthia. making a most dreadful havock of them with their arrows. In this desperate condition, Crassus, spying a rifing ground at a small distance, led the remains of his detachment thither, with a defign to defend himfelf in the best manner he could, till succours should be sent him from his father. The Parthians purfued him; and having furrounded him in his new post, continued showering arrows upon his men, till most of them were either killed or difabled, without being able to make use of their arms, or give the enemy proofs of their valour.

Young Crassus had two Greeks with him, who had fettled in the city of Carrhee. These, touched with compassion, at seeing so brave a man reduced to such straits, pressed him to retire with them to the neighbouring city of Ischnes, which had declared for the Romans; but the young Roman rejected their propofal with indignation, telling them, that he would rather die a thousand times than abandon so many valiant men, who facrificed their lives for his fake. Having returned this answer to his two Greek friends, he embraced and difinified them, giving them leave to retire and shift for themselves in the best manner they could. As for himself, having now lost all hopes of being relieved, and feeing most of his men and friends killed round him, he gave way to his grief; and, not The death being able to make use of his arm, which was shot of young through with a large barbed arrow, he presented his Crassus. fide to one of his attendants, and ordered him to put an end to his unhappy life. His example was followed by Cenforius a fenator, by Megabacchus an experienced and brave officer, and by most of the no-

bility who ferved under him. Five hundred com-

mon foldiers were taken prisoners, and the rest cut in

The Parthians, having thus cut off or taken the whole detachment commanded by young Craffus, marched without delay against his father, who, upon the first advice that the enemy fled before his fon, and were closely purfued by him, had taken heart, the more because those who had remained to make head against him seemed to abate much of their ardour, the greatest part of them having marched with the rest against his son. Wherefore, having encouraged his troops, he had retired to a small hill in his rear, to wait there till his fon returned from the pursuit. Young Crassus had despatched frequent expresses to his father, to acquaint him with the danger he was in; but they had fallen into the enemy's hands, and been by them put to the fword: only the last, who had escaped with great difficulty, arrived safe, and informed him that his son was lost if he did not send him an immediate and powerful reinforcement. This news threw Crassius into the utmost consternation; a thousand affecting thoughts rose in his mind, and disturbed his reason to such a degree, that he scarce knew what he was doing. However, the defire he had of faving his fon, and fo many brave Romans who were under his command, made him immediately decamp, and march to their affiftance; but he was not gone far before he was met by the Parthians, who, with loud shouts, and fongs of victory, gave, at a distance, the unhappy father notice of his misfortune. They had cut off young Craffus's head, and, having fixed it on the point of a lance, were advancing full speed to fall on the father. As they

Parthia. drew near, Crassus was struck with that difinal and affecting fight; but on this occasion, behaved like a hero: for though he was under the deepest concern, he had the presence of mind to shirle his grief, for fear of discouraging the army, and to cry out to the dismayed troops, "This misfortune is entirely mine; the loss of one man cannot affect the victory: Let us charge, let us fight like Romans: if you have any compassion for a father who has just now lost a son whose valour you admired, let it appear in your rage and refentment against these insulting barbarians." Thus Crassus strove to reanimate his troops; but his efforts were unfuccefsful: thir courage was quite funk, as appeared from the faint and languishing shout which they raised, according to custom, before the action. When the fignal was given, the Parthians, keeping to their old way of fighting, difcharged clouds of arrows on the legionaries, without drawing near them; which did fuch dreadful execution, that many of the Romans, to avoid the arrows, which occasioned a long and painful death, threw themselves, like men in despair, on the enemy's heavy-armed-horse, feeking from their spears a more quick and easy kind of death. Thus the Parthians continued plying them inceffantly with their arrows till night, when they left the field of battle, crying out, that they would allow the father one night to lament the death of his fon.

Diftress of Crassus.

This was a melancholy night for the Romans. Craffus kept himself concealed from the soldiery, lying not in the general's tent, but in the open air, and on the bare ground, with his head wrapped up in his paludamentum or military cloak; and was, in that forlorn condition, says Plutarch, a great example to the vulgar, of the inflability of fortune; to the wife, a still greater of the pernicious effects of avarice, temerity, and ambition. Octavius, one of his lieutenants, and Cassius, approached him, and endeavoured to raife him up and confole him: but, feeing him quite funk under the weight of his affiiction, and deaf to all comfort, they fummoned a council of war, composed of all the chief officers; wherein it was unanimously resolved, that they should decamp before break of day, and retire, without found of trumpet, to the neighbouring city of Carrhæ, which was held by a Roman garrison. Agreeable to this resolution, they began their march as soon as the council broke up; which produced dreadful outcries among the fick and wounded, who, perceiving that they were to be abandoned to the mercy of the enemy, filled the camp with their complaints and lamentations: but their cries and tears, though very affecting, did not flop the march of the others, which, indeed, was very flow, to give the ftragglers time to come up. There were only 300 light horse, under the command of one Ægnatius, who purfued their march without stopping. These arriving at Carrhæ about midnight, Ægnatius, calling to the centinels on the walls, defired them to acquaint Coponius, governor of the place, that Crassus had fought a great battle with the Parthians; and, without faying a word more, or letting him know who he was, continued his march with all possible expedition to the bridge of Zeugma; which he paffed, and by that means faved his troops, but was much blamed for abandoning his

However, the message he sent to Coponius was of fome temporary fervice to Craffus. For that commander, wifely conjecturing, from the manner in which Parthias the unknown person had given him that intelligence, that some misfortune had befallen Crassus, immediately ordered his garrison to stand to their arms; and, marching out, met Craffus, and conducted him and his army into the city: for the Parthians, though informed of his flight, did not offer to purfue him, observing therein the superstitious custom which obtained among them and the Persians, not to fight in the night; but when it was day, they entered the Roman camp, and having put all the wounded, to the number of 4000, to the fword, dispersed their cavalry all over the plain, in pursuit of the fugitives. One of Crassus's lieutenants, named Vargunteius, having separated in the night from the main body of the army, with four cohorts, miffed his way, and was overtaken by the enemy; at whose approach he withdrew to a neighbouring hill, where he defended himself, with great valour, till all his men were killed, except 20, who made their way through the enemy, fword in hand, and got fafe to Carrhæ: but Vargunteius himself lost his life on this occasion.

In the mean time Surenas, not knowing whether Surenas Craffus and Cassius had retired to Carrhæ, or chosen a pretends different route; in order to be informed of the truth, to confer and take his measures accordingly, despatched a messen-fus. ger, who spoke the Roman language, to the city of Carrhæ, enjoining him to approach the walls, and acquaint Craffus himself, or Cassius, that the Parthian general was inclined to enter into a treaty with them, and demanded a conference. Both the proconful and his quartor Caffius spoke from the walls with the messenger; and, accepting the proposal with great joy, defired that the time and place for an interview might be immediately agreed upon. The messenger withdrew, promising to return quickly with an answer from Surenas: but that general no fooner understood that Craffus and Caffius were in Carrhoe, than he marched thither with his whole army; and, having invested the place, acquainted the Romans, that if they expected any favourable terms, they must deliver up Crassus and Cassius to him in chains. Hereupon a council of the chief officers being fummoned, it was thought expedient to retire from Carrhæ that very night, and feek for another afylum. It was of the utmost importance that none of the inhabitants of Carrhee should be acquainted with their design till the time of its execution; but Crassus, whose whole conduct evidently fliows that he was blinded, as Dio Caffius observes, by some divinity, imparted the whole matter in confidence to one Andromachus, choosing him for his guide, and relying injudiciously on the fidelity of a man whom he scarce knew. Andromachus immediately acquainted Surenas with the defign of the Romans; promifing at the same time, as the Parthians did not engage in the night, to manage matters fo, that they. should not get out of his reach before daybreak. Purfuant to his promife, he led them through many windings and turnings, till he brought them into deep marshy grounds, where the infantry were up to the knees in mire. Then Cassius, suspecting that their guide had led them into those bogs with no good defign, refused to follow him any longer; and returning to Carrhæ, took his route towards Syria, which he reached with 500 horse. Octavius, with 5000 men. under his command, being conducted by trufty guides,

gained the mountains called by Plutarch and Appian Sinnaci, and there intrenched himfelf before break of

As for Craffus, he was still entangled in the marshes, when Surenas, at the rising of the sun, overtook him, and invested him with his cavalry. The proconsul had with him four cohorts, and a fmall body of horse; and with these he gained, in spite of all opposition, the summit of another hill within 12 furlongs of Octavius; who feeing the danger that threatened his general, flew to his affiftance, first with a small number of his mon, but was foon followed by all the rest, who, being ashamed of their cowardice, quitted their post, though very fafe, and charging the Parthians with great fury, disengaged Crassus, and obliged the enemy to abandon the hill. Upon the retreat of the enemy, they formed themselves into a hollow square; and placing Crassus in the middle, made a kind of rampart round him with their bucklers, refolutely protesting, that none of the enemy's arrows should touch their general's body, till they were all killed fighting in his defence. Surenas, loth to let fo fine a prey escape, surrounded the hill, as if he designed to make a new attack: but, finding his Parthians very backward, and not doubting but the Romans, when night came on, would pursue their march, and get out of his reach, he had recourse again to artifice; and declared before some prisoners, whom he foon after set at liberty, that he was inclined to treat with the proconful of a peace; and that it was better to come to a reconciliation with Rome, than to fow the feeds of an eternal war, by shedding the blood of one of her generals.

Agreeable to this declaration, Surenas, as foon as the prisoners were released, advanced towards the hill where the Romans were posted, attended only by some of his officers, and, with his bow unbent, and open arms, invited Craffus to an interview. So fudden a change feemed very suspicious to the proconsul; who therefore declined the interview, till he was forced, by his own foldiers, to intrust his life with an enemy whose treachery they had all experienced; for the legionaries flocking round him, not only abused him in an outrageous manner, but even menaced him if he did not accept of the proposals made him by the Parthian general. Sceing, therefore, that his troops were ready to mutiny, he began to advance, without arms or guards, towards the enemy, after having called the gods and his officers to witness the violence his troops offered him; and entreated all who were prefent, but especially Octavius and Petronius, two of the chief commanders, for the honour of Rome their common mother, not to mention, after his death, the shameful behaviour of the Roman legionaries. Octavius and Petronius could not resolve to let him go alone; but attended him down the hill, as did likewise some legionaries, keeping at a distance. Crassus was met at the foot of the hill by two Greeks who, difmounting from their horses, saluted him with great refpect; and defired him in the Greek tongue, to fend some of his attendants, who might satisfy him that Surenas, and those who were with him, came without arms. Hereupon Craffus fent two brothers, of the Rofcian family; but Surenas having caused them to be seized, advanced to the foot of the hill, mounted on a fine horse, and attended by the chief officers of his army. Craffus, who waited for the return of his two messengers, was furprifed to fee himfelf prevented by Suremas in perfon, when

he least expected it. The Parthian general, perceiving, Parthia. as he approached Crassus, that he was on foot, cried out, in a feeming furprife, "What do I fee? a Roman general on foot, and we on horseback! Let a horse be brought for him immediately." "You need not be farprifed (replied Craffus): we are come only to an interview, each after the custom of his country." "Very well (anfwered Surenas), there shall be henceforth a lasting peace between King Orodes and the people of Rome: but we must fign the articles of it on the banks of the Euphrates; for you Romans do not always remember your conventions." Craffus would have fent for a horfe: but a very flately one with a golden bit, and richly caparisoned, was brought to him by a Parthian; which Surenas presenting to him, "Accept this horse from my hands (said he), which I give you in the name of my master King Orodes." He had scarce uttered these words, when some of the king's officers, taking Crassus by the middle, fet him upon the horse, which they bcgan to whip with great violence before them in order to make him quicken his pace. Octavius, offended at this infult, took the horse by the bridle; Petronius and the few Romans who were prefent, feconded him, and flocking all round Craffus, stopped his horse. The Parthians endeavoured to repulse them, and clear the way for the proconful; whereupon they began to justle and push one another with great tumult and disorder. At last, Ochavius, drawing his fword, killed one of the king's grooms; but, at the same time, another coming behind Octavius, with one blow laid him dead at his feet. Both parties fought with great resolution, the Parthians striving to carry off Craffus, and the Romans to rescue him out of their hands. In this fcuffle most of the Romans who came to the conference were killed; and amongst the Craffus rest, Crassus himself, but whether by a Roman or a Par-killed. thian is uncertain.

Upon his death, the rest of the army either surrendered to the enemy, or, dispersing in the night, were purfued, and put to the fword. The Romans loft in this campaign at least 30,000 men; of which 20,000 were killed, and 10,000 taken prisoners.

When the battle of Carrha was fought, King Orodes was in Armenia, where he had made peace with Arta-bazus. While the two kings were folemnizing their new alliance with expensive and public feasts, Styllaces or Syllaces, a Parthian officer, whom Surenas had fent with the news of his late victory, and the head of Craffus as a proof of it, arrived in the capital of Armenia. The transports of joy which Orodes felt at this fight, and these news, are not to be expressed; and the lords of both kingdoms, who attended their fovereigns, raifed loud and repeated shouts of joy. Syllaces was ordered to give a more particular and distinct account of that memorable action; which when he had done, Orodes commanded melted gold to be poured into Craffus's mouth; reproaching him thereby with avarice, which had been always his predominant passion.

Surenas did not long enjoy the pleasure of his victory; Surenas put for Orodes, jealous of his power and authority among to death by the Parthians, foon after caused him to be put io death. Pacorus, the king's favourite fon was put at the head of the army; and agreeably to his father's directions, invaded Syria: but he was driven out from thence with great loss by Cicero and Cassius, the only general who furvived the defeat of Craffus. After this we find no

Parthia, mention of the Parthians, till the time of the civil war between Cæsar and Pompey, when the latter sent amballadors to folicit fuccour against his rival. This Orodes was willing to grant upon condition that Syria was delivered up to him; but as Polapey would not confent to fuch a proposal, the succours were not only denied, but, after the battle of Pharfalia, he put Lucius Hirtius in irons, whom Pompey had again fent to ask assistance, or at least to defire leave to shelter himself in the Parthian dominions.

18 War commenced a-gainst the Parthians

by Mark

Antony.

19

feated and killed by

Ventidius.

Casfar is faid to have meditated a war against the Parthians, which in all probability would have proved fatal to them. His death delivered them from this danger. But, not long after, the eaftern provinces, being grievoufly oppressed by Mark Antony, rose up in arms; and having killed the tax-gatherers, invited the Parthians to join them and drive out the Romans. They very readily accepted the invitation, and croffed the Euphrates with a powerful army under the command of Pacorus, and Labienus a Roman general of Pompcy's party. At first they met with great success, overran all Asia Minor, and reduced all the countries as far as the Hellespont and the Egrean sea, subduing likewise Phænicia, Syria, and even Judea. They did not however long enjoy their new conquests: for being elated with their victories, and despifing the enemy, they engaged Ventidius, Antony's lieutenant, before Labienus had time to join them, and were utterly defeated. This fo disheartened Labienus's army, that they all abandoned him; and he himfelf, being thus obliged to wander from place to place in difguife, was at last taken and put to death at Cyprus. Ventidius pursuing his advantage, gained feveral other victories; and at last entirely defeated the Parthian army under Pacorus, cutting almost the whole of them in pieces, and the Pacorus de- prince himself among the rest. He did not, however, purfue this last victory as he might have done; being afraid of giving umbrage to Antony, who had already become jealous of the great honour gained by his lieutenant. He therefore contented himfelf with reducing those places in Syria and Phænicia which the Parthians had taken in the beginning of the war, until Antony arrived to take the command of the army upon himself.

Orodes was almost distracted with grief on receiving the dreadful news of the loss of his army and the death of his favourite fon. However, when time had reftored the use of his faculties, he appointed Phrahates, the eldest but the most wicked, of all his children, to succeed him in the kingdom, admitting him at the fame time to a share of the sovereign authority with himself. The confequence of this was, that Phrahates very foon attempted to poifon his father with hemlock. But this contrary to expectation, proving a cure for the dropfy, which an excess of grief had brought upon the king, the unnatural fon had him stilled in bed, and foon after not only murdered all his own brethren, who were thirty in number, but cut off all the rest of the royal family, not sparing even his own eldest son, lest the discontented Parthians should place him, as he was already of age,

on the throne.

Many of the chief lords of Parthia being intimidated by the cruelty of Phrahates, retired into foreign countries: and among those one Moncos, a person of great distinction, as well as skill and experience in war. This man, having fled to Antony, foon gained his confidence, and was by him eafily prevailed upon to engage in a war

against his countrymen. But Phrahates justly dreading Parthia. the confequences of fuch a person's defection, sent a solemn embasly to invite him home on fuch terms as he should think fit to accept; which greatly provoked Antony; though he did not hinder him from returning, left others should thereby be discouraged from coming over to him. He therefore difmissed him with great civility, fending ambaffadors at the same time to Phrahates to treat of a peace. Thus he hoped to divert the Parthian monarch's attention from making the necessary prepara-tions for war, and that he should be able to fall upon him in the spring when he was in no condition to make refistance. But herein he was greatly disappointed; for on his arrival at the Euphrates, which he intended to pass, and enter the Parthian dominions on that side, he found all the paffes fo well guarded, that he thought proper to enter Media with a defign first to reduce that

R

country, and then to enter Parthia.

This plan had been fuggested to him by Artabazus Antony king of Armenia, who in the end betrayed him; for betrayed by instead of conducting the army the straight way from king of Ar-

Zeugma on the Euphrates, to the Araxes which part-menia. ed Media from Armenia, and which was about 500 miles distant from the place whence he first fet out, Artabazus led them over the rocks and mountains fo far about, that the army had marched above 1000 miles before they reached the borders of Media, where they intended to begin the war. Thus they were not only greatly fatigued but had not fufficient time, the year being far spent, to put in execution the design on which they had come. However, as Antony was impatient to get back to Cleopatra, he left behind him most of the baggage of the army, and 300 waggons loaded with battering rams and other military engines for fieges; appointing Statianus, one of his licutenants. with a body of 10,000 men, to guard them, and to bring them, by flower marches, after the army. With the rest of the forces he marched more than 300 miles before the rest, without allowing his men any respite till he arrived at Praaspa or Phrahata, the capital of Media, which he immediately invested. But the Parthians, well knowing that he could not make any progress without his military machines, passed by his army, in order to attack Statianus; which they did with such success, that Tenthou-

the body commanded by him were all to a man cut off, fand Roand all their military engines taken, among which was a mans cut

battering ram 80 feet long.

Antony, notwithstanding this difaster, continued the fiege of Praaspa; but was daily haraffed by fallies of the garrison from within, and the enemy's army without. At last he began to think of a retreat when his provifions were almost exhausted, finding it impossible to become master of the city. But as he was to march 300 miles through the enemy's country, he thought proper first to send ambassadors to the Parthian monarch, acquainting him that the Roman people were willing to allow him a peace, provided he would reftore the flandards and prisoners taken at Carrhæ. Phrahates received the ambaffadors, fitting on a golden throne; and, after having bitterly inveighed against the avarice and unbounded ambition of the Romans, told them that he would not part with the standards and prisoners; but that if Antony would immediately raise the siege of Praaspa, he would suffer him to retire unmolested.

Antony, who was reduced to great straits, no sooner

Orodes murdered.

Antony

Parthia

fubdued by Tra-

Parthia. received this answer than he broke up the siege, and marched towards Armenia. However, Phrahates was not fo good as his word; for the Romans were attacked leaves Par- by the enemy no fewer than 18 times on their march, and were thrice in the utmost danger of being cut off. A famine also raged in the Roman army; upon which they began to defert to the enemy; and indeed Antony would probably have been left by himfelf, had not the Parthians, in a very cruel as well as impolitic manner, murdered all those who fled to them in fight of the rest. At last, after having lost 32,000 men, and being reduced to fuch despair that he was with difficulty prevented from laying violent hands on himself, he reached the river Araxes; when his men, finding themselves out of the reach of the enemy, fell down on the ground, and kissed it with tears of joy.

Antony was no fooner gone, than the kings of Media and Parthia quarrelled about the booty they had taken; and after various contests Phrahates reduced all Media and Armenia. After this, being elated with his conquelts, he oppressed his subjects in such a cruel and tyrannical manner, that a civil war took place; in which the competitors were alternately driven out and restored, till the year 50, when one Vologeles, the fon of Gortarzes, a former king, became peaceable possessor of the throne. He carried on some wars against the Romans, but with very indifferent fuccess, and at last godly confented to a renewal of the ancient treaties with that

powerful people.

From this time the Parthian history affords nothing remarkable till the reign of the emperor Trajan; when the Parthian king, by name Cosdroes, infringed the treaty with Rome, by driving out the king of Armenia. Upon this Trajan, who was glad of any pretence to quarrel with the Parthians, immediately hastened into Armenia. His arrival there was fo fudden and unexpected, that he reduced almost the whole country without opposition; and took prisoner Parthamafiris, the king whom the Parthians had fet up. After this he entered Mesopotamia, took the city of Nifibis, and reduced to a Roman province the whole

of that wealthy country.

Early in the spring of the following year, Trajan, who had kept his winter quarters in Syria, took the field again; but was warmly opposed by Cosdroes .-He found him encamped on the banks of the Euphrates, with a defign to difpute his passage; which he did with such vigour, that the emperor, after having several times attempted to ford that river, and been always repulfed with great flaughter, was obliged to cause boats to be built on the neighbouring mountains, which he privately conveyed from thence on carriages to the water fide; and having in the night time formed a bridge with them, he passed his army the next day; but not without great loss and danger, the Parthians harassing his men the whole time with incessant showers of arrows, which did great execution. Having gained the opposite bank, he advanced boldly into Affyria, the Parthians flying everywhere before him, and made himself master of Arbela. Thence he pursued his march; subduing, with incredible rapidity, countries where the Roman standard had never been before displayed. Babylonia, or the province of Babylon, voluntarily submitted to him. The city itself was, after a vigorous refistance, taken by from; by which means he became mafter of

all Chaldea and Affyria, the two richest provinces of Parthia. the Parthian empire. From Babylon he marched to Ctefiphon, the metropolis of the Parthian monarchy; which he befieged, and at last reduced. But as to the particulars of these great conquests, we are quite in the dark; this expedition, however glorious to the Roman name, being rather hinted at than described, by the writers of those times. While Trajan was thus making war in the heart of the enemy's country, Coldroes, having recruited his army, marched into Mesopotamia, with a defign to recover that country, and cut off all communication between the Roman army and Syria. On his arrival in that province, the inhabitants flocked to him from all parts; and most of the cities, driving out the garrisons left by Trajan, opened their gates to him. Hereupon the emperor detached Lucius and Maximus, two of his chief commanders, into Mesopotamia, to keep fuch cities in awe as had not revolted, and to open a communication with Syria. Maximus was met by Cofdroes; and having ventured a battle, his army was entirely defeated, and himself killed. But Lucius being joined by Euricius and Clarius, two other commanders fent by Trajan with fresh supplies, gained considerable advantages over the enemy, and retook the cities of Nifibis and Seleucia, which had revolted.

And now Trajan, feeing himself possessed of all the best and most fruitful provinces of the Parthian empire, but at the same time being well apprifed that he could not, without a vast expence, maintain his conquests, nor keep in subjection so fierce and warlike a people at such a distance from Italy; resolved to set over them a king of his own choosing, who should hold the crown of him and his fucceffors, and acknowledge them as his lords and fovereigns. With this view he repaired to Ctefiphon; and having there affembled the chief men of the nation, he crowned one of the royal family, by name Parthanaspates, king of Parthia, obliging all who were Partha. present to pay him their allegiance. He chose Partha-naspates naspates, because that prince had joined him at his first appointed entering the Parthian dominions conducted him with king by the entering the Parthian dominions, conducted him with Roman emgreat fidelity, and shown on all occasions an extraordi-peror, but nary attachment to the Romans. Thus the Parthians foon after were at last fubdued, and their kingdom made tributary driven out. to Rome. But they did not long continue in this state of subjection: for they no sooner heard of Trajan's death, which happened shortly after, than, taking up

arms, they drove Parthanaspates from the throne; and recalling Cofdroes, who had retired into the country of the Hyrcanians, openly revolted from Rome. Adrian, who was then commander in chief of all the forces in the east, and soon after acknowledged emperor by the army, did not with, though he was at that time in Syria with a very numerous army, to engage in a new war with the Parthians; but contented himfelf with preferving the ancient limits of the empire, without any ambitious pro-fpects of further conquests. Therefore, in the beginning of his reign, he abandoned those provinces beyond the Euphrates which Trajan had conquered; withdrew the Roman garrisons from Mesopotamia; and, for the greater fafety of other places, made the Euphrates the boundary of, and barrier in, those parts, posting his legions along the banks of wat river.

Cofdroes died after a long reign, and was fucceeded Unfuccesby his eldest fon Vologeses: in whose reign the Alani Vologeses breaking into Media, then subject to the Parthians, with the committed Romans.

Parthia. committed there great devastations; but were prevailed upon, with rich prefents fent them by Vologefes, to abandon that kingdom, and return home. Upon their retreat, Vologeses, having no enemy to contend with at home, fell unexpectedly upon Armenia; furprifed the legions there; and having cut them all in pieces to a man, entered Syria; defeated with great flaughter Attilius Cornelianus, governor of that province; and advanced without opposition to the neighbourhood of Antioch; putting everywhere the Romans, and those who favoured them, to the sword. Hereupon the emperor Verus, by the advice of his colleague Antoninus furnamed the Philosopher, leaving Rome, hastened into Syria: and having driven the Parthians out of that province, ordered Statius Priscus to invade Armenia, and Cassius with Martius Verus to enter the Parthian territories, and carry the war into the enemy's country. Priscus made himself master of Artaxata; and in one campaign drove the Parthians, though not without great loss on his side, quite out of Armenia. Cassius, on the other hand, having in several encounters defeated Vologeses, though he had an army of 400,000 men under his command, reduced, in four years time, all those provinces which had formerly submitted to Trajan, took Seleucia, burnt and plundered the famous cities of Babylon and Ctefiphon, with the stately palaces of the Parthian monarchs, and struck terror into the most remote provinces of that great empire. On his return, he loft above half the number of his forces by fickness and famine; fo that, after all, the Romans, as Spartianus observes, had no great reason to boait of their victories and conquests.

> However, Verus, who had never stirred during the whole time of the war from Antioch and Daphne, took upon him the lofty titles of Parthicus and Armenicus, as if he had acquired them justly in the midst of his pleafures and debaucheries. A'ter the revolt and death of Cassius, Antoninus the Philosopher repaired into Syria to fettle the affairs of that province. On his arrival there, he was met by ambaffadors from Vologefes; who having recovered most of the provinces subdued by Caffius, and being unwilling either to part with them or engage in a new war, folicited the emperor to confirm him in the possession of them, promising to hold them of him, and to acknowledge the fovereignty of Rome. To these terms Antoninus readily agreed, and a peace was accordingly concluded between the two empires; which Vologeles did not long enjoy, being foon after carried off by a diftemper, and not murdered by his own subjects, as we read in Constantinus Manasses, who calls him Be-

Ctefiphon

Upon his death, Vologefes III. the fon of his brother Sanatruces, and grandfon of Cosdroes, was raised to the throne. He fided with Niger against the emperor Severus: who thereupon having fettled matters at home, marched with all his forces against him; and advancing to the city of Cteliphon, whither he had retired, laid close siege to that metropolis. Vologeses made a most gallant defence: but the city, after a long fiege, and much bloodshed on both fides, was at length taken by affault. The king's treasures, with his wives and children, fell into the emperor's hands: but Vologefes himfelf had the good luck to make his escape; which was a great disappointment to Severus, who immediately despatched an express to acquaint the senate with the fuccess that had attended him in his expedition VOL. XVI. Part I.

against the only nation that was then formidable to Parthia-Rome. But he had no fooner croffed the Euphrates than Vologeses recovered all the provinces except Mefopotamia, which he had reduced. These expeditions were chargeable to the Romans, and cost them much blood, without reaping any advantages from them; for as they had not fufficient forces to keep in awe the provinces they had fubdued, the inhabitants, greatly attached to the family of Arfaces, never failed to return to their ancient obedience as foon as the Roman armies were withdrawn. Vologeses was soon after engaged in a war still more troublesome and destructive, with his brother Artabanus, who, encouraged by fome of the discontented nobles, attempted to rob him of the crown, and place it on his own head. Vologeses gained feveral victories over his brother and rebellious subjects; but died before he could restore the empire to its former

Artabanus, who had a numerous army at his devotion, did not meet with any opposition in seizing the throne, vacant by the death of his brother, though Tiridates had a better title to it, as being his elder brother. He had scarce settled the affairs of his kingdom, when the emperor Caracalla, defirous to fignalize himself as some of his predecessors had done, by some memorable exploit against the Parthians, sent a folemn embaffy to him, defiring his daughter in marriage. Artabanus, overjoyed at this propofal, which he thought would be attended with a lafting peace between the two empires, received the ambassadors with all possible marks of honour, and readily complied with their request. Soon after, Caracalla infamous fent a fecond embaffy to acquaint the king that he treachery was coming to folenmize the nuptials; whereupon Ar-of the emtabanus went to meet him attended with the chief of calla. the nobility and his best troops, all unarmed, and in most pompous habits : but this peaceable train no fooner approached the Roman army, than the foldiers, on a fignal given them, falling upon the king's retinue, made a most terrible slaughter of the unarmed multitude, Artabanus himfelf escaping with great difficulty. The treacherous Caracalla, having gained by this exploit great booty, and, as he thought, no less glory, wrote a long and boatting letter to the fenate, affuming the title of Parthicus for this piece of treachery; as he had before that of Germanicus, for murdering, in like manner, fome of the German nobility.

Artabanus, resolving to make the Romans pay dear for their inhuman and barbarous treachery, raised the most numerous army that had ever been known in Parthia, croffed the Euphrates, and entered Syria, putting all to fire and fword. But Caracalla being murdered before this invasion, Macrinus, who had fucceeded him, met the Parthians at the head of a mighty army, composed of many legions, and all the auxiliaries of the states of Asia. The two armies no sooner A desperate came in fight of each other, but they engaged with battle be-the utmost fury. The battle continued two days; tween the both Romans and Parthians fighting fo obstinately, Parthians that night only parted them, without any apparent mans, advantage on either fide; though both retired when night had put an end to the contest, crying, Victory, victory. The field of battle was covered all over with dead bodies, there being already above 40,000 killed. including both Romans and Parthians: nevertheless

Artabanus

Artabanus was heard to fay, that the battle was only begun, and that he would continue it till either the Parthians or Romans were all to a man cut in pieces. But Macrinus, being well apprifed that the king came highly enraged against Caracalla in particular, and dreading the consequences which would attend the deftruction of his army, fent a herald to Artabanus, acquainting him with the death of Caracalla, and propofing an alliance between the two empires. The king, understanding that his great enemy was dead, readily embraced the propofals of peace and amity, upon condition that all the prisoners who had been taken by the treachery of Caracalla should be immediately restored, and a large fum of money paid him to defray the expences of the war.

These articles being performed without delay or hefitation, Artabanus returned into Parthia, and Ma-

crinus to Antioch.

empire.

As Artabanus lost on this occasion the flower of The Perfians revolt, his army, Artaxerxes, a Persian of mean descent, but of great courage and experience in war, revolting from throw the the Parthians, prevailed on his countrymen to join him, Parthian and attempt the recovery of the fovereign power, which he faid they had been unjustly deprived of, first by the Macedonians, and afterwards by the Parthians, their vaffals. Artabanus, upon the news of this revolt, marched with the whole strength of his kingdom to suppress it; but being met by Artaxerxes at the head of a no less powerful awny, a bloody battle ensued, which is faid to have lasted three days. At length the Parthians, though they behaved with the utmost bravery, and fought like men in despair, were forced to yield to the Persians, who were commanded by a more experienced leader. Most of their troops were cut off in the flight; and the king himfelf was taken

> tion which had been subject to them for the space of 475 years. For an account of the manners, customs, &c. of the

> prisoner, and soon after put to death at Artaxerxes's order. The Parthians, having lost in this fatal en-

gagement both their king and their army, were forced

to submit to the conqueror, and become vassals to a na-

ancient Parthians, fee the article PERSIA.

PARTI, PARTIE, Party, or Parted, in Heraldry, is applied to a shield or escutcheon, denoting it divided or marked out into partitions.

PARTI per pale, is when the shield is divided perpendicularly into two halves, by a cut in the middle from

PARTI per fess, is when the cut is across the middle from fide to fide.

PARTI per bend dexter, is when the cut comes from the upper corner of the shield on the right hand, and descends athwart to the opposite lower corner.

PARTI per bend sinister, is when the cut, coming . from the upper left corner, descends across to the oppo-

fite lower one.

All these partitions, according to M. de la Colombiere, have their origin from the cuts and bruifes that have appeared on fhields after engagements; and, being proofs of the dangers to which the bearers had been exposed, they gained them esteem: for which reason they were transmitted to posterity, and became arms and marks of honour to their future families.

PARTIALITY. See SELF-partiality and PREJU- Partiality

PARTICIPLE, in Grammar, an adjective formed Particle. of a verb; fo called, because it participates partly of the properties of a noun, and partly of those of a verb. See GRAMMAR.

PARTICLE, in Physics, the minute part of a body, an affemblage of which constitutes all natural bodies.

In the new philosophy, particle is often used in the fame fense with atom in the ancient Epicurean philofophy, and corpufcle in the latter. Some writers, however, diffinguish them; making particle an affem-blage or composition of two or more primitive and physically indivisible corpuscles or atoms; and corpuscle, or little body, an assemblage or mass of several particles or fecondary corpufcles. The distinction, however, is of little moment; and, as to most purposes of physics, particle may be understood as fynonymous with corpufcle. Particles are then the elements of bodies: it is the various arrangement and texture of thefe, with the difference of the cohesion, &c. that conflitute the various kinds of bodies, hard, foft, liquid, dry, heavy, light, &c. The smallest particles or corpuscles cohere, with the strongest attractions, and always compose larger particles of weaker cohesion; and many of these cohering compose larger particles. whose vigour is still weaker; and so on for divers successions, till the progression end in the largest particles, on which the operations in chemistry, and the colours of natural bodies, depend, and which, by cohering, compose bodies of sensible bulks.

The cohesion of the particles of matter, according to the Epicureans, was effected by hooked atoms; the Aristotelians thought it managed by rest, that is, by nothing at all. But Sir Isaac Newton shows it is by means of a certain power, whereby the particles mutually attract or tend towards each other, which is still perhaps giving a fact without a cause. By this attraction of the particles he shows that most of the phenomena of the leffer bodies are effected, as those of the heavenly bodies are by the attraction of gravity. See ATTRAC-

TION and COHESION.

PARTICLE, a term in Theology, used in the Latin. church for the crumbs or little pieces of confecrated bread, called in the Greek church megides. The Greeks have a particular ceremony, called Two particles, wherein certain crumbs of bread, not confecrated, are offered up in honour of the Virgin, St John Baptift, and feveral other faints. They also give them the name of προσφορα, oblatio. Gabriel archbishop of Philadelphia wrote a little treatife express meg two pregider, wherein he endeavours to show the antiquity of this ceremony, in that it is mentioned in the liturgies of St Chryfostom and Bafil. There has been much controverly on this head between the reformed and catholic divines. Aubertin and Blondel explain a paffage in the theory of Germanus patriarch of Constantinople, where he mentions the ceremony of the particles as in use in his time, in favour of the former; Messieurs de Port Royal contest the explanation; but M. Simon, in his notes on Gabriel of Philadelphia, endeavours to show that the passage itself is an interpolation, not being found in the ancient copies of Ger-

fhip.

Organic PARTICLES, are those small moving bodies which are imperceptible without the help of glaffes; for besides those animals which are perceptible to the fight, some naturalists reckon this exceedingly small fpecies as a separate class, if not of animals properly to called, at least of moving bodies, which are found in the femen of animals, and which cannot be feen without the help of the microscope. In consequence of these observations, different systems of generation have been proposed concerning the spermatic worms of the male and the eggs of the female. In the fe-cond volume of Buffon's Natural History, feveral experiments are related, tending to show that those moving bodies which we discover by the help of glasses in the male femen are not real animals, but organic, lively, active, and indestructible molecules, which possess the property of becoming a new organized body fimilar to that from which they were extracted. Buffon found fuch bodies in the female as well as in the male femen; and he supposes that the moving bodies which he observed with the microscope in infusions of the germs of plants are likewise vegetable organic molécules. Needham, Wrisberg, Spalanzani, and several other writers on the animal economy, have purfued the fame track with M. de Buffon.

Some fuppose that these organic molecules in the femen answer no purpose but to excite the venereal defire: but fuch an opinion cannot be well founded; for eunuchs, who have no feminal liquor, are nevertheless subject to venereal desire. With respect to the beautiful experiments which have been made with the microscope on organic molecules, M. Bonnet, that learned and excellent observer of nature, remarks that they feem to carry us to the farthest verge of the fenfible creation, did not reason teach us that the smallest visible globule of seminal liquor is the commencement of another universe, which, from its infinite smallness, is beyond the reach of our best microscopes .- Animalcules, properly fo called, must not be confounded with the wonderful organic particles of Buffon. See ANI-

PARTICLE, in Grammar, a denomination for all those fmall words that tie or unite others, or that express the modes or manners of words. See GRAMMAR.

PARTING, in Chemistry and Metallurgy, an operation by which gold and filver are separated from each other. See CHEMISTRY, and ORES, Reduction of.

PARTISAN, in the art of war, a person dexterous in commanding a party; who, knowing the country well, is employed in getting intelligence, or furprifing the enemy's convoys, &c. The word also means an officer fent out upon a party, with the command of a body of light troops, generally under the appellation of the partifan's corps. It is also necessary that this corps should be composed of infantry, light horse, and

PARTNERSHIP, is a contract among two or more persons, to carry on a certain business, at their joint expence, and share the gain or loss which arises from it. Of this there are four kinds.

I. Occasional joint trade, where two or more merchants agree to employ a certain fum in trade, and divide the gain or loss so soon as the adventure is brought to an iffue. This kind of contract being Partnergenerally private, the parties concerned are not liable for each other. If one of them purchase goods on trust, the furnisher, who grants the credit through confidence in him alone, has no recourse, in case of his infolvency, against the other partners. They are only answerable for the share of the adventure that belongs to the infolvent partner.

If it be proposed to carry the adventure farther than originally agreed on, any partner may withdraw his interest; and if it cannot be separated from the others, may infift that the whole shall be brought to an

II. Standing companies, which are generally established by written contract between the parties, where the stock, the firm, duration, the division of the gain

or lofs, and other circumstances, are inserted.

All the partners are generally authorized to fign by the firm of the company, though this privilege may be confined to some of them by particular agreement. The firm ought only to be subscribed at the place where the copartnery is established. If a partner has occasion, when absent, to write a letter relating to their affairs, he subscribes his own name on account of the company. When the fame partners carry on bufiness at different places, they generally choose different firms for each. The fignature of each partner is generally fent to new correspondents; and when a partner is admitted, although there be no alteration in the firm, his fignature is transmitted, with an intimation of the change in the copartnery to all their corre-fpondents. Houses that have been long established, often retain the old firm, though all the original partners be dead or withdrawn.

The powers of each partner are, in general, difcretionary; but they ought not to act, in matters of importance, without confulting together, when there is an opportunity. No partner is liable to make good the loss arising from his judging wrong in a case where he had authority to act. If he exceeds his power, and the event prove unfuccefsful, he must bear the loss; but if it prove fuccefsful, the gain belongs to the company: yet if he acquaints the company immediately of what he has done,' they must either acquiesce therein, or leave him the chance of gain, as well as the rifk of lofs.

All debts contracted under the firm of the company are binding on the whole partners, though the money was borrowed by one of them for his private use, without the consent of the rest. And if a partner exceeds his power, the others are nevertheless obliged to implement his engagements; though they may render him responsible for his misbehaviour.

Although the fums to be advanced by the partners be limited by the contract, if there be a necessity for raising more money to answer emergencies or pay the debts of the company, the partners must furnish what is necessary,

in proportion to their shares.

A debt to a company is not cancelled by the private debts of the partner: and when a partner becomes infolvent, the company is not bound for his debts beyond the extent of his share.

The debts of the company are preferable, on the company's effects, to the private debts of the partners. Partnership is generally dissolved by the death of a

B 2

Partner- partner; yet, when there are more partners than two, it may, by agreement, subfift among the survivors. Sometimes it is stipulated, that, in case of the death of a partner, his place thall be supplied by his son, or some other perfou condescended on. The contract ought to specify the time and manner in which the surviving partners shall reckon with the executors of the deceased for his share of the stock, and a reasonable time allowed

for that purpofe.

When partnership is dissolved, there are often outstanding debts that cannot be recovered for a long time. and effects that cannot easily be disposed of. The partnership, though dissolved in other respects, still subfits for the management of their outstanding affairs: and the money arising from them is divided among the partners, or their representatives, when it is recovered. But as this may protract the final fettlement of the company's affairs to a very inconvenient length, other methods are fometimes used to bring them to a conclusion, either in consequence of the original contract, or by agreement at the time of diffolution. Sometimes the debts and effects are fold by auction; fornetimes they are divided among the partners; and when there are two partners, one divides them into flares, as equal as possible, and the other chooses either share he thinks best.

If a partner withdraws, he continues responsible for his former partners till it be publicly known that he hath done fo. A deed of separation, registered at a public office, is fufficient prefumption of fuch noto-

riety.

III. Companies, where the business is conducted by officers. There are many companies of this kind in Britain, chiefly established for purposes which require a larger capital than private merchants can command. The laws with respect to these companies, when not confirmed by public authority, are the same as the former, but the articles of their agreement usually very different. The capital is condescended on; and divided into a certain number of shares, whereof each partner may hold one or more, but is generally restricted to a certain number. Any partner may transfer his share; and the company must admit his assignee as a partner. The death of the partners has no effect on the company. No partner can act personally in the affairs of the company: but the execution of their buuness is intrusted to officers, for whom they are responfible; and, when the partners are numerous, the fuperintendency of the officers is committed to directors chosen annually, or at other appointed times, by the

IV. Companies incorporated by authority. A royal charter is necessary to enable a company to hold lands, to have a common feal, and enjoy the other privileges of a corporation. A charter is fometimes procured. in order to limit the risk of the partners: for, in every private company, the partners are liable for the debts. without limitation; in corporated focieties, they are only liable for their shares in the stock of the society. The incorporation of focieties is fometimes authorized by act of parliament : but this high authority is not necessary, unless for conferring exclusive privileges.

Mr Paley fays, " I know of nothing upon the fub-Political ject of partnership that requires explanation, but how Philosophy the profits are to be divided where one partner contri-

butes money and the other labour, which is a common Partner-

" Rule. From the flock of the partnership deduct Partridge. the fum advanced, and divide the remainder between the moneyed partner and the labouring partner, in the proportion of the interest of the money to the wages of the labour, allowing fuch a rate of interest as money might be borrowed for upon the fame fecurity, and fuch wages as a journeyman would require for the fame la-

" Example. A advances 1000l. but knows nothing of the buliness; B produces no money, but has been brought up to the bulinefs, and undertakes to conduct it. At the end of the year the flock and effects of the partnership amount to 1200l. consequently there are 200l. to be divided. Now nobody would lend money upon the event of the business succeeding, which is A's fecurity, under 6 per cent. therefore A must be allowed 601. for the interest of his money. B, before he engaged in the partnership, earned 301. a-year in the fame employment: his labour, therefore, ought to be valued at 30l. and the 200l. must be divided between the partners in the proportion of 60 to 30; that is, A must receive 133l. 6s. 8d. and B 66l. 13s. 4d. If there be nothing gained, A lotes his interest, and B his labour, which is right. If the original flock be diminished, by this rule B loses only his 1 abour as before; whereas A loses his interest and part of the principal; for which eventual difadvantage A is compensated, by having the interest of his money computed at 6 per cent, in the division of the profits when there is any. It is true, that the division of the profit is feldom forgotten in the constitution of the partnership; and is therefore commonly fettled by exprefs agreement; but thefe agreements, to be equitable, should purfue the principle of the rule here laid down. All the partners are bound by what any one of them does in the course of the business; for, quoad hoc, each partner is confidered as an authorized agent for the

PARTRIDGE, a species of bird. See TETRAO,

ORNITHOLOGY Index.

The partridge is fo valuable at the table, that a great many ways of taking it have been invented by sportsmen, all of which succeed from the natural folly

and timidity of the animal.

The places partridges delight in most are corn fields, especially whilst the corn grows, for under that cover they shelter and breed: neither are those places unfrequented by them when the corn is cut down, by reafon of the grain they find there, especially in wheat stubble, the height of which they delight in, being to them as a covert or shelter. When the wheat stubble is much trodden by men or beafts, they then betake themselves to the barley stubble, provided it be fresh and untrodden; and they will, in the furrows, amongst the clots, branches, and long grafs, hide both themfelves and coveys, which are fometimes 20 in number, nay 30, in a covey.

When the winter feafon is arrived, and the flubble fields are ploughed up, or over-foiled with cattle, partridges refort into the upland meadows, and lodge in the dead grafs, or fog, under hedges, amongst mole hills, or under the roots of trees; fometimes they refort Partridge to coppices and underwoods, especially if any corn fields are adjacent, or where there is grown broom, brakes,

In the harvest time, when every field is full of men and cattle, in the day time they are found in the fallow fields which are next adjoining to the corn fields, where they lie lurking till evening or morning, and then they

feed among the sheaves of corn.

When their haunts are known, according to the fituation of the country and feason of the year, the next care must be to find them out in their haunts, which is done feveral ways. Some do it by the eye only; and this art can never be taught, but learned by frequent experience, the colour of the birds being fo like that of the earth at a distance, that no eye but a very conver-faut one could diffinguish them. When they are once feen, the business is to keep the eye upon them, and then to keep in continual motion. They are a very lazy bird, and by this means will let a person almost tread upon them; though if the person stands still to eye them, they will rife immediately though they be at

a confiderable distance.

Another method of discovering them is, by going to their haunts very early in the morning, or at the close of the evening, which is called the juck ng time. The noise of the cock partridge is to be attended to at this time, and is very loud and earnest. The henwill foon come up to the cock after her making the noise, which she does by way of answer; and when they are got together, their chattering will discover them. Thus they may always be found at these times. But there is yet a better method of finding this bird, which is by the call. The business, in order to have fuccefs in this way, is carefully to learn the notes of the partridge, and be able to imitate all the feveral founds. When perfect in this, the perfon is to go to the haunts morning and evening, and placing himfelf in some place where he can see the birds without being feen by them, he is to liften to their calling; and when they are heard, he is to answer in the same notes, doubling again as they do: by continuing this, they may be brought fo near, that the perfon lying down on his back may count their whole number. Having in this manner found where the birds are, the next care is to catch them.

They are so foolish, that it is extremely easy to take them in nets. In order to this, there needs no more than the going out, provided with two or three nets, with meshes somewhat smaller than those of the pheafant nets, and walking round about the covey, a net is to be fixed fo as to draw over them, on pulling a line at a diffance. All this may be eafily done; for fo long as the fportfman continues moving about, and does not fix his eye too intenfely upon them, they will let him come near enough to fix the net without moving. If they lie fo straggling, that one net will not cover them, then two or three must be fixed in the same manner. The fportfman may then draw the nots over them, and they will often lie still with the nets upon them till he comes up to fright them; then they will rife, and be entangled in the net.

A fecond method of taking them is with bird lime: this is done by means of wheat straws. These must be large, and cut off between knot and knot; they must be well limed with the best and strongest bird

lime, and the sportsman must carry a great number out Partridge. with him. Having found a field where there are partridges, he is to call; and if they answer, he is then to flick up the limed flraws in rows across two or three lands, and going backward, call again to them, leading them on in the road where the ftraws are: they will follow one another like a flock of chickens, and ceme out to the call; and will in their way run upon the itraws, and liming themselves they will daub one another by crowding together, fo that very few of them will be able to escape.

But there is yet a pleafanter way of taking them than this, that is, by driving of them. In order to this, an engine is to be made of canvals stuffed with ftraw, to reprefent a horse; this horse and nets are to be taken to the haunts of the partridges, and the netsbeing placed flinting or flopwise in the lower part of the field, the sportsman is to take the wind in his back and get above them, driving them downwards; his face is to be covered with fomething green or blue, and placing the horse before him, he is to go towards them flowly and gently; and by this means they will be raifed on their legs, but not on their wings, and will run before the horse into the nets. If in the way they go into a wrong path, the horse is to be moved to face them; and they will be thus driven back again, and driven every way the sportsman pleases.

The partridges of Abyllinia, we are told, are very

large, being as big as capons.

In Jeremiah xvii. 11. we have the following curiouspassage: " As the partridge sitteth on eggs, and hatcheth them not; so he that getteth riches, and not by right, shall leave them in the midst of his days, and at his end shall be a fool;" which is explained by Mr Poole as follows: It is no wonder if we cannot be certain as to the fense of these words, so far as they concern natural history, when we are not certain what bird it is to which this doth relate. We translate it partridge: others will have it to be a cuckoo; but certain it is, that it is the same word which we translate partridge, (I Sam. xxvi. 20.); and cuckoos use not to be much hunted after. How the partridge is faid to fit on eggs and hatch them not, is yet a greater question. It may be occasioned so many ways, viz. either sitting upon wind eggs; or being killed before the eggs are hatched; or having its eggs destroyed by the male partridge, or by fome dog or other vermine; or, its nest being found, having her eggs taken from her, that it is hard to determine which the prophet means. Of all others, I least approve of that which I crome makes the fense, though the thing be true (if we may believe Caffiodorus and several natural historians, Aldrovandus, &c.), that partridges have fuch a love and defire to hatch young ones, that having loft their own eggs, they will steal the eggs of other partridges, and hatch them; which being hatched, the young ones knowing the cry of their proper dams, hearing them call, leave the partridge that hatched them (which is one thing quoted by Aldrovandus, to show the fagacity of that bird); but if this were the fense, the words would be, 'as the partridge fitteth on eggs, and hatcheth them, but enjoyeth them not; whereas they are, 'hatcheth them not:' that is, having lost them, either by some man that hath taken them from her, or by some vermin or wild beast." Poole's Annot. in Loc.

The words in the original are, רגר ולא ילר קרא, which the Septuagint translate εφωνης περδιέ, &c. "The partridge cried; it gathered together what it had not produced;" and fome translate the Hebrew, " The partridge lays many eggs, but does not hatch them all." Le Clerc, upon the authority of Bocchart, understands the Hebrew word kore here to fignify a woodcock. Le Clerc's translation is as follows: Rusticula ova colligit, sed non parit; facit sibi divitias, sed sine jure, mediis suis diebus eas relinquit, atque ad extremum stulta est.

PARTURITION, the act of bringing forth or being

delivered of young. See MIDWIFERY.

PARTY, in a military fense, a small number of men, horse, or foot, fent upon any kind of duty; as into an enemy's country to pillage, to take priloners, and to oblige the country to come under contribution. Parties are often fent out to view the roads and ways, get intelligence, feek forage; to reconnoitre, or amuse the enemy upon a march: they are also frequently fent upon the flanks of an army or regiment, to discover the enemy if near, and prevent furprile or ambufcade.

PARVICH, an island near Dalmatia, and one of the best peopled and most considerable of those which are under the jurisdiction of Sibenico. It contains a great number of fishermen, and a considerable number of persons employed in agriculture. It contains many Roman antiquities, which evidently show that it was a Roman station. It feems to be among the number of those islands which Pliny calls Celaduffie, which is supposed to be an inversion of dooresandos, which means ill founding or noify. Parvich is not of large extent, but it is extremely fertile. Every product succeeds in perfection there: we mean those products of which a very shallow ground is susceptible; such as wine, oil, mulberry-trees, and fruit. The aspect of this island is also very pleasant at a distance, whereas that of the others adjacent difgusts the eye, by their too high, rocky, and bare hills. The name of Parvich feems to have been given it because it is the first one meets with on going out of the harbour of Sibenico; for the Illyric word parvi fignifies first.

PARULIDES, in Surgery, tumors and inflammations of the gums, commonly called gum-boils. They are to be treated with discutients like other inflammatory

tumors.

PARUS, or TITMOUSE, a genus of birds belonging to the order of pafferes. See ORNITHOLOGY Index.

PASCAL, BLAISE, one of the greatest geniuses and best writers France has produced, was born at Clermont in Auvergne, in the year 1623. His father, Stephen Pascal, born in 1588, and of an ancient family, was prefident of the court of aids in his province : he was a very learned man, an able mathematician, and a friend of Descartes. Having an extraordinary tenderness for this child, his only son, he quitted his office in his province, and went and fettled at Paris in 1631, that he might be quite at leifure for the instruction of him; and Blaise never had any master but his father. From his infancy he gave proofs of a very extraordinary capacity; for he defired to know the reason of every thing; and when good reasons were not given him, he would feek for better; nor would he ever yield his affent but upon fuch as appeared to him well grounded. There was room to fear, that with fuch a cast of mind he would fall into free thinking, or at least into hetero-

doxy; yet he was always very far from any thing of this Pafeal.

What is told of his manner of learning the mathematics, as well as the progress he quickly made in that science, seems almost miraculous. His father, perceiving in him an extraordinary inclination to reasoning, was afraid left the knowledge of the mathematics would hinder his learning the languages. He kept him therefore as much as he could from all notions of geometry, locked up all his books of that kind, and refrained even from speaking of it in his presence. He could not, however, make his fon refrain from musing upon proportions; and one day furprifed him at work with charcoal upon his chamber-floor, and in the midst of figures. He asked him what he was doing? I am fearching, fays Pascal, for such a thing; which was just the 32d proposition of the first book of Euclid. He asked him then how he came to think of this? It was, fays Pascal, because I have found out such another thing: and fo going backward, and using the names of bar and round, he came at length to the definitions and axioms he had formed to himself. Does it not feem miraculous that a boy should work his way into the heart of a mathematical book, without ever having feen that or any other book upon the fubject, or knowing any thing of the terms? Yet we are affured of the truth of this by Madame Perrier, and feveral other writers, the credit of whose testimony cannot reasonably be questioned. He had, from henceforward, full liberty to indulge his genius in mathematical pursuits. He understood Euclid's Elements as foon as he cast his eyes upon them: and this was not strange; for, as we have seen, he understood them before. At 16 years of age he wrote a treatife of conic fections, which was accounted by the most learned a mighty effort of genius; and therefore it is no wonder that Descartes, who had been in Holland a long time, should, upon reading it, choose to believe that Mr Pascal the father was the real author of it. At 19, he contrived an admirable arithmetical machine, which was efteemed a very wonderful thing, and would have done credit as an invention to any man versed in fcience, and much more to fuch a youth .- About this time his health became impaired, and he was in confequence obliged to fuspend his labours; nor was he in a condition to refume them till four years after. About that period, having feen Torricelli's experiment respecting a vacuum and the weight of the air, he turned his thoughts towards these objects; and in a conference with Mr Petit, intendant of fortifications, proposed to make farther refearches. In confequence of this idea, he undertook feveral new experiments, one of which was as follows: Having provided a glass tube, 46 feet in length, open at one end, and fealed hermetically at the other, he filled it with red wine, that he might distinguish the liquor from the tube. He then elevated it in this condition; and having placed it perpendicularly to the horizon, stopped up the bottom, and plunged it into a veffel full of water, to the depth of a foot; after which he opened the extremity of the tube, and the wine descended to the distance of about 32 feet from the furface of the veffel, leaving a confiderable vacuum at the upper extremity. He next inclined the tube, and remarked that the wine rose higher: and having inclined it till the top was within 32 feet of the

demonstrating the causes. Pascal knew that Torricelli

conjectured that those phenomena which he had observ-

ed were occasioned by the weight of the air (A); and, in order to discover the truth of this theory, he made an

experiment at the top and bottom of a mountain in Auvergne, called Le Puy de Dome, the refult of which

gave him reason to conclude that air was weighty. Of

this experiment he published an account, and sent copies

of it to most of the learned men in Europe. He like-

wife renewed it at the top of feveral high towers, fuch

as those of Notre Dame at Paris, St Jacques de la

Boucherie, &c.; and always remarked the same differ-

ence in the weight of the air, at different elevations. This fully convinced him of the weight of the atmo-

sphere; and from this discovery he drew many useful

and important inferences. He composed also a large

treatife, in which he thoroughly explained this subject,

and replied to all the objections that had been started

against it. As he thought this work rather too prolix,

and as he was fond of brevity and precision, he divided it

into two small treatises, one of which he entitled, A

Differtation on the Equilibrium of Liquors; and the

other, An Essay on the Weight of the Atmosphere.

These labours procured Pascal so much reputation, that

the greatest mathematicians and philosophers of the age

proposed various questions to him, and consulted him respecting such difficulties as they could not solve.—

Some years after, while tormented with a violent fit

of the toothache he discovered the solution of a pro-

blem proposed by Father Mersenne, which had baffled the penetration of all those who had attempted it.

This problem was to determine the curve described in

the air by the nail of a coach-wheel, while the machine

is in motion. Pascal offered a reward of 40 pistoles to

any one who should give a satisfactory answer to it.

No one, however, having fucceeded, he published his

own at Paris; but as he began now to be difgusted with

ground, making the wine thus run out, he found that the water rose in it, so that it was partly filled with that sluid, and partly with wine. He made also a great many experiments with siphons, fyringes, bellows, and all kinds of tubes, making use of different liquors, such as quicksilver, water, wine, oil, &c.; and having published them in 1647, dispersed his work throughout all France, and transmitted it also to foreign countries. All these experiments, however, ascertained effects, without

After he had thus laboured abundantly in mathematical and philosophical disquisitions, he forsook those fludies and all human learning at once; and determined to know nothing, as it were, for the future, but Jefus Christ and him crucified. He was not 24 years of age, when the reading fome pious books had put him upon taking this holy resolution; and he became as great a devotee as any age has produced. Mr Pafcal now gave himself up entirely to a state of prayer and mortification. He had always in his thoughts these great maxims, of renouncing all pleasure and all superfluity; and this he practifed with rigour even in his illnesses, to which he was frequently subject, being of a very invalid habit of body: for instance, when his fickness obliged him to feed somewhat delicately, hetook great care not to relish or taste what he ate. He had no violent affection for those he loved; he thought it finful, fince a man possesses a heart which belongs only to God. He found fault with fome discourses of his fifter, which the thought very innocent; as if the had faid upon occasion, that she had seen a beautiful woman, he would be angry, and tell her, that she might raise bad thoughts in footmen and young people. He frequently wore an iron girdle full of points next to his skin; and when any vain thought came into his head, or when he took particular pleasure in any thing, he gave himself fome blows with his elbow, to redouble the prickings, and to recal himself to his duty.

Though Mr Pascal had thus abstracted himself from the world, yet he could not forbear paying some attention to what was doing in it; and he even interested himself in the contest between the Jesuits and the Jansenists. The Jesuits, though they had the popes and kings on their side, were yet decried by the people, who brought up asresh against them the assassination of Henry the Great, and all the old stories that were likely to make them odious. Pascal went farther; and by his Lettres Provinciales (B), published in 1656, under the name of Louis de Montalie, made them

the

(A) Before this period, all those effects which are now known to be produced by the weight of the atmosphere, were attributed to Nature's abhorrence of a vacuum.

⁽B) The origin of these letters was this: for the sake of unbending his mind, Pascal used often to go to-Port Royal des Champs, where one of his sisters had taken the veil, and where he had an opportunity of seeing the celebrated Mr Arnaud, and several of his friends. This gentleman's dispute with the doctors of the Sorbonne, who were endeavouring to condemn his opinions, was of course frequently brought upon the carpet. Mr Arnaud, solicited to write a defence, had composed a treatise, which, however, did not meet with approbation, and which he himself considered as a very indifferent work. Pascal being one day in company, some of those present, who were sensible of his abilities, having said to him, "You who are a young man ought to do something;" he took the hint, and composed a letter, which he showed to his friends, and which was so much admired, that they insisted on its being printed. The object of this letter is an explanation of the terms, next power, sufficient grace, and actual grace; and the author here shows, as well as in two others which followed it, that a regard for the faith was not the motive which induced the doctors of the Sorbonne to enter into dispute with Mr Arnaud, but a desire of oppressing him by ridiculous questions. Pascal, therefore, in other letters which he published afterwards, attacks the Jesuits, whom he believed to be the authors of this quarrel, and in the most elegant style, seasoned with wit and satire, endeavours to render them not only odious but ridiculous. For

" These letters (says Volthe subject of ridicule. taire) may be confidered as a model of eloquence and hamour. The best comedies of Moliere have not more wit than the first part of these letters; and the sublimity of the latter part of them is equal to any thing in Boffuet. It is true, indeed, that the whole book was built upon a false foundation; for the extravagant notions of a few Spanish and Flemish Jesuits were artfully ascribed to the whole society. Many absurdities might likewise have been discovered among the Dominican and Franciscan casuists; but this would not have answered the purpose; for the whole raillery was to be levelled only at the Jesuits. These letters were intended to prove, that the Jesuits had formed a defign to corrupt mankind; a defign which no fect or fociety ever had, or can have." Voltaire calls Pascal the first of their fatirists; for Despreaux, fays he, must be considered as only the fecond. In another place, speaking of this work of Pascal, he says, that " examples of all the various species of eloquence are to be found in it. Though it has been now written almost 100 years, yet not a fingle word occurs in it, favouring of that viciffitude to which living languages are fo subject. Here then we are to fix the epocha when our language may be faid to have affumed a fettled form. The bithop of Lucon, fon of the celebrated Buffy, told me, that asking one day the bishop of Meaux what work he would covet most to be the author of, supposing his own performances fet afide, Boffuet replied, The Provincial Letters." These letters have been translated into all languages, and printed over and over again. Some have faid, that there were decrees of formal condemnation against them; and also that Pascal himself, in his last illness, detested them, and repented of having been a Jansenist: but both these particulars are false and without foundation. Father Daniel was supposed to be the anonymous author of a piece against them, entitled, The Dialogues of Cleander and Eudoxus.

Pascal was only about the age of 30 when these letters were published, yet he was extremely infirm, and his diforders increasing foon after; fo much that he conceived his end fast approaching, he gave up all farther thoughts of literary composition. He resolved to spend the remainder of his days in retirement and pious meditation; and with this view he broke off all his former connections, changed his habitation, and spoke to no Pascal. one, not even to his own domestics. He made his own bed, fetched his dinner from the kitchen, carried it to his apartment, and brought back the plates and dishes in the evening; fo that he employed his fervants only to cook for him, to go to town, and to do fuch other things as he could not absolutely do himself. In his chamber nothing was to be feen but two or three chairs, a table, a bed, and a few books. It had no kind of ornament whatever; he had neither a carpet on the floor nor curtains to his bed; but this did not prevent him from fometimes receiving vifits; and when his friends appeared furprifed to fee him thus without furniture, he replied, that he had what was necessary, and that any thing else would be a superfluity, unworthy of a wife man. He employed his time in prayer, and in reading the Holy Scriptures; and he wrote down such thoughts as this exercise inspired. Though his continual infirmities obliged him to use very delicate food, and though his fervants employed the utmost care to provide only what was excellent, he never relished what he ate, and feemed quite indifferent whether what they brought him was good or bad. When any thing new and in feafon was presented to him, and when he was asked, after he had finished his repast, how he liked it, he replied, "You ought to have informed me before-hand, I should have then taken notice of it." His indifference in this respect was so great, that though his taste was not vitiated, he forbade any fauce or ragout to be made for him which might excite his appetite. He took without the least repugnance all the medicines that were prescribed him for the re-establishment of his health; and when Madame Perrier, his fifter, feemed aftonished at it, he replied ironically, that he could not comprehend how people could ever shew a dislike to a medicine, after being apprifed that it was a difagreeable one, when they took it voluntarily; for violence or furprife ought only to produce that effect.

Though Pascal had now given up intense study, and though he lived in the most temperate manner, his health continued to decline rapidly; and his diforders had fo enseebled his organs, that his reason became in some measure affected. He always imagined that he saw a deep abyss on his left side, and he never would sit down till a chair was placed there, to fecure him from the

danger

this purpose he employs the form of dialogue, and introduces an ignorant person, as men of the world generally are, who requelts information respecting the questions in dispute from these doctors, whom he consults by propoling his doubts; and his answers to their replies are so perspicuous, pertinent, and just, that the subject is illustrated in the clearest manner possible. He afterwards exposes the morality of the Jesuits, in some conversations between him and one of their casuists, in which he still represents a man of the world, who seeks for instruction, and who, hearing maxims altogether new to him, feems aftonished, but still listens with moderation. The casuist believes that he is sincere, and relishes these maxims; and under this persuasion he discovers every thing to him with the greatest readiness. The other is still surprised; and as his instructor attributes this surprise only to the novelty of his maxims, he fail continues to explain himself with the same confidence and freedom. This inftructor is a fimple kind of man, who is not overburdened with acuteness, and who infensibly engages himself in details which always become more particular. The person who listens, wishing neither to contradict him nor to subscribe to his doctrine, receives it with an ambiguous kind of raillery; which, however, fufficiently shows what opinion he entertains of it. The Jesuits reproached the author with having employed only raillery against them, and with having misrepresented several passages of their authors; which induced Pascal to write eight more in vindication of himself. All these letters, in number 18, written in a style altogether new in France, appeared in 4to, one after another, from the month of January 1636, to the month of March of the year following.

Pascal. danger which he apprehended. His friends did every thing in their power to banish this melancholy idea from his thoughts, and to cure him of his error, but without the defired effect; for though he would become calm and composed for a little, the phantom would in a few moments again make its appearance and torment him. The cause of his seeing this singular vision for the first time, is faid to have been as follows: His physicians, alarmed on account of the exhausted state to which he was reduced, had advised him to substitute easy and agreeable exercise for the fatiguing labours of the closet. One day, in the month of October 1654, having gone according to custom to take an airing on the Pont de Neuilly, in a coach and four, the two first horses fuddenly took fright, opposite to a place where there was no parapet, and threw themselves violently into the Seine; but the traces luckily giving way, the carriage remained on the brink of the precipice. The shock which Pascal, in his languishing situation, must have received from this dreadful accident, may easily be imagined. It threw him into a fit, which continued for fome time, and it was with great difficulty that he could be restored to his senses. After this period his brain became fo deranged, that he was continually haunted by the remembrance of his danger, especially when his disorders prevented him from enjoying sleep. To the fame cause was attributed a kind of vision or ecstasy that he had some time after; a memorandum of which he preferved during the remainder of his life in a bit of paper, put between the cloth and the lining of his coat, and which he always carried about him. Some of the Jesuits had the baseness and inhumanity to reproach this great genius with the derangement of his organs. In the Dictionary of Jansenist Books, he is called a hypochondriac, and a man of a wrong head, and a bad heart. But, as a celebrated writer has observed, Pascal's disorder had in it nothing more surprising or disgraceful than a fever, or the vertigo. During the last years of his life, in which he exhibited a melancholy example of the humiliating reverfes which take place in this tranfitory scene, and which, if properly considered, might teach mankind not to be too proud of those abilities which a moment may take from them, he attended all the falutations (c), visited every church in which relicks were exposed, and had always a spiritual almanack, which gave an account of all those places where particular acts of devotion were performed. On this occasion it has been said, that "Religion renders great minds capable of little things, and little minds capable

> In company, Pascal was distinguished by the amiableness of his behaviour; by his easy, agreeable, and instructive conversation, and by great modesty. He posfessed a natural kind of eloquence, which was in a manner irrefistible. The arguments he employed for the most part produced the effect which he proposed; and though his abilities intitled him to assume an air of fuperiority, he never displayed that haughty and imperious tone which may often be observed in men of shining talents. The philosophy of this great man confisted in

Vol. XVI. Part I.

renouncing all pleasure, and every superfluity. He not Pascal. only denied himself the most common gratifications; but he took also without reluctance, and even with pleafure, either as nourishment or as remedies, whatever was disagreeable to the senses; and he every day retrenched fome part of his drefs, food, or other things, which he confidered as not absolutely necessary. Towards the close of his life, he employed himself wholly in pious and moral reflections, writing down those which he judged worthy of being preserved. The first piece of paper he could find was employed for this purpose; and he commonly put down only a few words of each fentence, as he wrote them merely for his own use. The bits of paper upon which he had written these thoughts, were found after his death filed upon different pieces of ftring, without any order or connection; and being copied exactly as they were written, they were afterwards arranged and published.

The celebrated Bayle, speaking of this great man, fays, An hundred volumes of fermons are not of so much avail as a simple account of the life of Pascal. His humility and his devotion mortified the libertines more than if they had been attacked by a dozen of missionaries. In a word, Bayle had fo high an idea of this philosopher, that he calls him a paradox in the human Species. "When we consider his character (says he), we are almost inclined to doubt that he was born of a woman, like the man mentioned by Lucretius:

" Ut vix humana videatur stirpe creatus,"

Mr Pascal died at Paris the 19th of August 1662, aged 39 years. He had been some time about a work against atheists and infidels, but did not live long enough to digest the materials he had collected. What was found among his papers was published under the title of Pensées, &c. or Thoughts upon religion and other subjects, and has been much admired. After his death appeared also two other little tracts; one of which is intitled, The equilibrium of fluids; and the other, The weight of the mass of air.

The works of Pascal were collected in five volumes 8vo, and published at the Hague by De Tune, and at Paris by Nyon senior, in 1779. This edition of Pascal's works may be confidered as the first published; at least the greater part of them were not before collected into one body; and fome of them had remained only in manuscript. For this collection, the public were indebted to the abbé Bossu, and Pascal deserved to have such an editor. "This extraordinary man (lays he) inherited from nature all the powers of genius. He was a geometrician of the first rank, a profound reasoner, and a sublime and elegant writer. If we resect, that in a very short life, oppressed by continual infirmities, he invented a curious arithmetical machine, the elements of the calculation of chances, and a method of resolving various problems respecting the cycloid; that he fixed in an irrevocable manner the wavering opinions of the learned respecting the weight of the air; that he wrote one of the completest works which exist in the French language; and that in his Thoughts there are passages,

⁽c) Certain folemn prayers, which are repeated at certain hours, and on certain days, in the Popish churches.

Faffage.

Pauphae.

Paseal the depth and beauty of which are incomparable—we shall be induced to believe, that a greater genius never existed in any age or nation. All those who had occafion to frequent his company in the ordinary commerce of the world, acknowledged his superiority; but it excited no envy against him, as he was never fond of showing it. His conversation instructed, without making those who heard him sensible of their own inferiority; and he was remarkably indulgent towards the faults of others. It may be eafily feen by his Provincial Letters, and by some of his other works, that he was born with a great fund of humour, which his infirmities could never entirely destroy. In company, he readily indulged in that harmless and delicate raillery which never gives offence, and which greatly tends to enliven conversation; but its principal object generally was of a moral nature. For example, ridiculing those authors who say, My Book, my Commentary, my History, they would do better (added he) to fay, Our Book, our Commentary, our History; fince there are in them much more of other people's than their own." An elegant Latin epitaph was inferibed on his tomb.

PASCHAL, fomething belonging to the paffover,

or Easter. See Passover and Easter.

PAS-EP-A, the chief of the Lamas, particularly eminent for having invented characters for the Moguls. He was much esteemed by the Chinese, though the literati exclaimed against the manner in which the people demonstrated their affection. There is still at Pekin a myau or temple, built in honour of Paf-ep-a in the time

of the Mogul emperors. He died in 1279.

PASIGRAPHY (from π25 omnis, and γεαφω, feribo), the art of writing on any fubject whatever, fo as to be univerfally understood by all nations upon earth. The idea of establishing such a language is deemed by many extremely fanciful and abfurd, while the practicability of it is as strenuously contended for by others. Hints respecting such a system of writing as might be underflood by all mankind, are to be met with in the writings of many eminent philosophers; but if such an attempt failed in the hands of a Leibnitz, a Kircher, a Becher, a Wilkins, and fome others, it is at least to be prefamed, that the execution of a pafigraphy, or universal language, will always be found to bear a striking analogy to the chimerical fentiments which were formerly entertained respecting the doctrines of the quadrature of the circle, the multiplication of the cube, the philosopher's stone, or perpetual motion, all of which have been finely ridiculed by Dean Swift in his idea of circular shot. Kant is clearly of opinion, however, that such a pafigraphy falls within the limits of possibility; -nay, he even afferts, that it will actually be established at some future period. And, while none of its admirers venture to bid us believe that it will ever be univerfally spoken or understood, they confidently think, that, by means of it, the valuable labours of erudition and human genius will be effectually prevented from ever falling into oblivion. See a Memoir on this subject in Nicholson's Journal, ii. 342. 4to.

PASIPHAE, in fabulous history, daughter of the Sun by Perseis, who married Minos king of Crete. She differed herfelf by an unnatural paffion for a bull, which we are told she was enabled to gratify by means of the artist Dædalus. This celebrated bull had been given to Minos by Neptune, to be offered on his altars.

But as the monarch refused to facrifice the animal on Pasiphae account of his beauty, the god revenged his disobedience by impining Patiphaë with an unnatural love for him. This fable, which is univerfally believed by the poets, who observe, that the minotaur was the fruit of this infamous commerce, is refuted by fome writers; who suppose that the infidelity of Pasiphaë to her husband was betrayed in her affection for an officer of the name of Taurus, and that Dædalus, by permitting his house to be the asylum of the two lovers, was looked upon as accessory to the gratification of Pasiphaë's lust. From this amour with Taurus, as it is farther remarked, the queen became mother of twins; and the name of Minotaurus arises from the resemblance of the children to the husband and the lover of Pahphaë. Minos had four fons by Pasiphaë, Castreus, Deucalion, Glaucus, and Androgeus; and three daughters, Hecate, Ariadne, and Phædra.

PASQUIN, a mutilated flatue at Rome, in a corner of the palace of the Urfini. It takes its name from a cobler of that city called Pasquin, famous for his sneers and gibes, and who diverted himself by passing his jokes on all that went through that street. After his death, as they were digging up the pavement before his door, they found in the earth the statue of an ancient gladiator, well cut, but mained and half-spoiled : this they fet up in the place where it was found, and by common consent named it Pasquin. Since that time all fatires are attributed to that figure; and are either put into its mouth, or pasted upon it, as if they were written by Pasquin redivivus; and these are addressed by Pasquin to Marsorio, another statue at Rome. When Marforio is attacked, Pafquin comes to his affiffance; and, when Pasquin is attacked, Marsorio assists him in his turn; that is, the people make the statues speak just what they pleafe.

PASQUINADE, a fatirical libel fastened to the statue of Pasquin: these are commonly short, witty, and pointed; and from hence the term has been applied to

all lampoons of the same cast.

PASS, or PASSADE, in fencing, an advance or leap forward upon the enemy. Of these there are several kinds; as passes within, above, beneath, to the right, the left, and passes under the line, &c. The measure of the pass is when the swords are so near as that they may touch one another.

Pass, in a military fense, a strait and difficult passage,

which shuts up the entrance into a country.

Pass Parole, in military affairs, a command given at the head of an army, and thence communicated to the

rear, by passing it from mouth to mouth.

PASSADE, in the manege, is a turn or course of a horse backwards or forwards on the same spot of ground. Hence there are feveral forts of passades, according to the different ways of turning, in order to part or return upon the same tread, which is called closing the passade; as the passade of one time, the passade of five times, and the raised or high passades, into which the demivolts are made into curvets. See HORSEMANSHIP.

North-west PASSAGE. See NORTH-West Passage, North-east PASSAGE. POLE.

Right of PASSAGE, in commerce, is an imposition or duty exacted by some princes, either by land or sea, in certain close and narrow places in their territories, on Paffant all veffels and carriages, and even sometimes on persons or paffengers, coming in or going out of ports, &c. The most celebrated passage of this kind in Europe is the Sound: the dues for paffing which strait belong to the king of Denmark, and are paid at Elfinore or Cronenburg.

PASSANT, in Heraldry, a term applied to a lion or other animal in a shield, appearing to walk leifurely: for most beasts, except lions, the trippant is frequently

used instead of passant.

PASSAU, an ancient, handsome, and celebrated town of Germany, in Lower Bavaria, with a bishop's fee and fort. The houses are well built, and the cathedral is thought to be the finest in all Germany. It is divided into four parts, three of which are fortified; but the other is only a fuburb, and has nothing but an old castle in which the bishop generally resides. It is seated at the confluence of the rivers Inn and Iltz, in E. Long. 13. 34. N. Lat. 48. 26.
PASSAU, a bishopric of Germany, lying between

Lower Bavaria, Austria, and Bohemia. It extends not above 20 miles where largest; and has no considerable place, except the capital, which is of the same

PASSERES, the name of one of the orders (the 6th) into which the class of birds is divided. See OR-NITHOLOGY Index.

PASSIFLORA, or Passion Flower; a genus of plants belonging to the gynandria class; and in the natural method ranking under the 34th order, Cucurbita-

ceæ. See BOTANY Index.

PASSION, is a word of which, as Dr Reid observes, the meaning is not precifely afcertained either in common discourse or in the writings of philosophers. In its original import, it denotes every feeling of the mind occasioned by an extrinsic cause; but it is generally used to fignify some agitation of mind, opposed to that state of tranquillity in which a man is most master of himself. That it was thus used by the Greeks and Romans, is evident from Cicero's rendering παθος, the word by which the philosophers of Greece expressed it, by perturbatio in Latin. In this fense of the word, passion cannot be itself a distinct and independent principle of action; but only an occasional degree of vehemence given to those dispositions, defires, and affections, which are at all times present to the mind of man; and that this is its proper fense, we need no other proof than that pasfion has always been conceived to bear analogy to a storm at sea or to a tempest in the air.

With respect to the number of passions of which the mind is susceptible, different opinions have been held by different authors. Le Brun, a French writer on painting, justly considering the expression of the passions as a very important as well as difficult branch of his art, has enumerated no fewer than twenty, of which the figns may be expressed by the pencil on canvals. That there are so many different states of mind producing different effects which are visible on the features and the gestures, and that those features and gestures ought to be diligently studied by the artist, are truths which cannot be denied; but it is abfurd to confider all these different states of mind as palhons, fince tranquillity is one of them,

which is the reverse of passion.

The common division of the passions into desire and aversion, hope and fear, joy and grief, love and hatred,

has been mentioned by every author who has treated of Paffion. them, and needs no explication; but it is a question of some importance in the philosophy of the human mind, whether these different passions be each a degree of an original and innate disposition, distinct from the dispositions which are respectively the foundations of the other passions, or only different modifications of one or two general dispositions common to the whole race.

The former opinion is held by all who build their fystem of metaphysics upon a number of distinct internal fenses; and the latter is the opinion of those who, with Locke and Hartley, refolve what is commonly called instinct into an early affociation of ideas. (See In-STINCT). That without deliberation mankind inflantly feel the passion of fear upon the apprehension of danger, and the passion of anger or resentment upon the reception of an injury, are truths which cannot be denied: and hence it is inferred, that the feeds of thefe paffions are innate in the mind, and that they are not generated, but only fwell to magnitude on the prospect of their respective objects. In support of this argument, it has been observed that children, without any knowledge of their danger, are inftinctively afraid on being placed on the brink of a precipice; and that this passion contributes to their fafety long before they acquire, in any degree equal to their necessities, the exercise of their rational powers. Deliberate anger, caused by a voluntary injury, is acknowledged to be in part founded on reason and reflection; but where anger impels one fuddenly to return a blow, even without thinking of doing mischief, the passion is instinctive. In proof of this, it is observed, that instinctive anger is frequently raised by bodily pain, occasioned even by a stock or a stone, which instantly becomes an object of refentment, that we are violently incited to crush to atoms. Such conduct is certainly not rational, and therefore it is supposed to be necessarily instinctive.

With respect to other passions, such as the lust of power, of fame, or of knowledge, innumerable instances, fays Dr Reid, occur in life, of men who facrifice to them their ease, their pleasure, and their health. But it is abfurd to suppose that men should facrifice the end to what they defire only as means of promoting that end; and therefore he feems to think that these passions must be innate. To add strength to this reasoning, he obferves, that we may perceive some degree of these principles even in brute animals of the most fagacious kind, who are not thought to defire means for the fake of ends

which they have in view.

But it is in accounting for the passions which are difinterested that the advocates for innate principles seem most completely to triumph. As it is impossible not to feel the passion of pity upon the prospect of a fellow creature in distress, they argue, that the basis of that passion must be innate; because pity, being at all times more or less painful to the person by whom it is felt, and frequently of no use to the person who is its object, it cannot in fuch inflances be the refult of deliberation, but merely the exertion of an original instinct. The fame kind of reasoning is employed to prove that gratitude is the exercise of an innate principle. That good offices are, by the very constitution of our nature, apt to produce good will towards the benefactor, in good and bad men, in the favage and in the civilized, cannot furely be denied by any one in the least acquainted with C 2

Passion. human nature. We are grateful not only to the benefactors of ourselves as individuals, but also to the benefactors of our country; and that, too, when we are confcious that from our gratitude neither they nor we can reap any advantage. Nay, we are impelled to be grateful even when we have reason to believe that the objects of our gratitude know not our existence. This passion cannot be the effect of reasoning, or of association founded on reasoning; for, in such cases as those mentioned, there are no principles from which reason can infer the propriety or usefulness of the feeling. That public spirit, or the affection which we bear to our country, or to any subordinate community of which we are members, is founded on instinct, is deemed so certain, that the man destitute of this affection, if there be any fuch, has been pronounced as great a monster as he who has two heads.

All the difinterested passions are founded on what philosophers have termed benevolent affection. Instead therefore of inquiring into the origin of each passion feparately, which would fwell this article to no purpofe, let us liften to one of the finest writers as well as ablest reasoners of the age, treating of the origin of benevolent affection. "We may lay it down as a principle (fays + Essays on Dr Reid +), that all benevolent affections are in their nature agreeable; that it is effential to them to defire the good and happiness of their objects; and that their objects must therefore be beings capable of happiness. A thing may be defired either on its own account, or as the means in order to fomething elfe. That only can properly be called an object of defire which is defired upon its own account; and therefore I confider as benevolent those affections only which defire the good of their object ultimately, and not as means in order to fomething else. To say that we desire the good of others, only to procure some pleasure or good to ourfelves, is to fay that there is no benevolent affection in human nature. This indeed has been the opinion of some philosophers both in ancient and in later times. But it appears as unreasonable to resolve all benevolent affections into felf-love, as it would be to refolve hunger and thirst into self-love. These appetites are necessary for the preservation of the individual. Benevolent affections are no less necessary for the preservation of society among men; without which men would become an easy prey to the beasts of the field. The benevolent affections planted in human nature, appear therefore no less necessary for the preservation of the human species than the appetites of hunger and thirst." In a word, pity, gratitude, friendship, love, and patriotism, are founded on different benevolent affections; which our learned author holds to be original parts of the human constitution."

This reasoning has certainly great force; and if authority could have any weight in settling a question of this nature, we know not that name to which greater deference is due than the name of him from whom it is taken. Yet it must be confessed that the philosophers, who confider the affections and passions as early and deep rooted affociations, support their opinion with very plaufible arguments. On their principles we have endeavoured elsewhere to account for the passions of fear and love, (fee INSTINCT and LOVE); and we may here fafely deny the truth of what has been stated respecting fear, which feems to militate against that account. We have

attended with much folicitude to the actions of chil- Pathon. dren; and have no reason to think that they feel terror on the brink of a precipice till they have been repeatedly warned of their danger in fuch fituations by their parents or their keepers. Every person knows not only that they have no original or inflinctive dread. of fire, which is as dangerous to them as any precipice; but that it is extremely difficult to keep them from that destructive element till they are either capable of weighing the force of arguments, or have repeatedly experienced the pain of being burnt by it. With respect to fudden refentment, we cannot help confidering the argument, which is brought in proof of its being inflinctive, as proving the contrary in a very forcible manner. Instinct is some mysterious influence of God upon the mind exciting to actions of beneficial tendency: but ean any benefit arise from wreaking our impotent vengeance on a flock or a flone? or is it supposable that a Being of infinite wifdom would excite us to actions fo extravagantly foolish? We learn from experience to defend ourselves against rational or sensible enemies by retaliating the injuries which they inflict upon us; and if we have been often injured in any particular manner, the idea of that injury becomes in time fo closely affociated with the means by which it has been constantly repelled, that we never receive fuch an injury-a blow for instance—without being prompted to make the usual retaliation, without reflecting whether the object be fensible or infensible. So far from being instinctive does refentment appear to us, that we think an attentive obferver may eafily perceive how the feeds of it are gradually infused into the youthful mind; when the child, from being at first a timid creature shrinking from every pain, learns by degrees to return blow for blow and threat for threat.

But instead of urging what appears to ourselves of most weight against the instinctive fystem, we shall lay before our readers a few extracts from a differtation on the origin of the passions, by a writer whose elegance of language and ingenuity of investigation do honour to

the school of Hartley.

"When an infant is born (fays Dr Sayers +), there + Difquistis every reason to suppose that he is born without ideas. tions These are rapidly communicated through the medium toph fical of the fenses. The same senses are also the means of rary. conveying to him pleasure and pain. These are the hinges on which the passions turn: and till the child is acquainted with these sensations, it would appear that no passion could he formed in his mind; for till he has felt pleasure and pain, how can he desire any object, or wish for its removal? How can he either love or hate? Let us observe then the manner in which love and hatred are formed; for on these passions depend all the rest. When a child endures pain, and is able to detect the cause of it, the idea of pain is connected in his mind with that of the thing which produced it; and if the object which occasioned pain be again presented to the child, the idea of pain affociated with it arises also. This idea confequently urges the child to avoid or to remove the object; and thus arises the passion of dislike or hatred. In the same manner, the passion of liking or love is readily formed in the mind of a child from the affociation of pleasant ideas with certain objects which produced them.

" The passions of hope and fear are states of the

Paffion. mind depending upon the good or bad prospects of gratifying love or hatred; and joy or forrow arises from the final fuccess or disappointment which attends the exertions produced by love or by hatred. Out of these passions, which have all a perceptible relation to our own good, and are univerfally acknowledged to be felfish, all

our other passions are formed."

To account for the passions called disinterested, he observes, that in the history of the human mind we find many instances of our dropping an intermediate idea, which has been the means of our connecting two other ideas together; and that the affociation of these two remains after the link which originally united them has vanished. Of this fact the reader will find fushcient evidence in different articles of this work (See Instinct, No 19, and Metaphysics, No 101): and, to apply it to the difinterested passions, let us suppofe, with Dr Sayers, that any individual has done to us many offices of kindness, and has consequently much contributed to our happiness; it is natural for us to feek with fome anxiety for the continuance of thosepleasures which he is able to communicate. But we foon difcern, that the furest way of obtaining the continuance of his friendly offices is to make them, as much as possible, a source of pleasure to himself. We therefore do every thing in our power to promote his happiness in return for the good he has conferred upon us, that thus we may attach him to us as much as we are able. Hitherto all is plainly felfish. We have been evidently endeavouring, for the fake of our own future gratification, to promote the happiness of this person: but observe the consequence. We have thus, by contemplating the advantage, to be derived to ourselves from promoting the prosperity of our friend, learned to affociate a fet of pleasant ideas with his happiness; but the link which has united them gradually escapes us, while the union itself remains. Continuing to affociate pleafure with the well-being of our friend, we endeavour to promote it for the fake of his immediate gratification, without looking farther; and in this way his happiness, which was first attended to only as a means of future enjoyment, finally becomes an end. Thus then the passion which was originally felfish, is at length difinterested; its gratification being completed merely by its fuccess in promoting the happiness of another.

In this way does our author account for the origin of gratitude; which at last becomes a habit, and flows spontaneously towards every man who has either ben or intended to be our benefactor. According to him, it is eafy to observe also, that from affociating pleasure with the happiness of an individual when we procure it

ourselves, it must of course soon follow, that we should Passion experience pleasure from a view of his happiness any way produced; fuch happiness raising at all times pleafant ideas when it is prefented to our minds. This is another feature of a difinterested affection, to feel delight from the mere increase of happiness in the object whom

" It may be objected, perhaps, that parents feem to have an instinctive disinterested love of their offspring: but furely the love of a paient (A) for a new-born infant is not usually equal to that for a child of four or five years old. When a child is first born, the profpect and hopes of future pleasure from it are sufficient to make a parent anxious for its preservation. As the child grows up, the hope of future enjoyment from it must increase: hence would pleasure be affociated with the well-being of the child, the love of which would of

course become in due time difinterested."

Our author does not analyze pity, and trace it to its fource in felfishness; but he might easily have done it, and it has been ably done by his master. Pity or compassion is the uneafiness which a man feels at the mifery of another. It is generated in every mind during the years of childhood; and there are many circumstances in the constitution of children, and in the mode of their education, which make them particularly fufceptible of his pathon. The very appearance of any kind of mifery which they have experienced, or of any figns of diffress which they understand, excite in their minds painful feelings, from the remembrance of what they have fuffered, and the apprehension of their fuffering it again. We have feen a child a year old highly entertained with the noise and struggles made by its elder brother when plunged naked into a veffel fil-led with cold water. This continued to be the case for many days, till it was thought proper to plunge the younger as well as the elder; after which the daily entertainment was foon at an end. The little creature had not been itself plunged above twice till it ceased to find diversion in its brother's fufferings .-On the third day it cried with all the fymptoms of the bitterest anguish upon seeing its brother plunge, though no preparation was then made for plunging itself; but surely this was not difinterested sympathy, but a feeling wholly felfish, excited by the remembrance of what it had fuffered itself, and was apprehensive of suffering again. In a short time, however, the painful feelings accompanying the fight of its brother's struggles, and the found of his cries, were doubtless so associated with that fight and that found, that the appearance of the latter would have brought the former

⁽A) That this is true of the father is certain; but it may be questioned whether it be equally true of the mother. A woman is no fooner delivered of her infant, than the careffes it with the utmost possible fondness. We believe, that if she were under the necessity of making a choice between her child of four years, and her infant an hour old, she would rather be deprived of the latter than of the former; but we are not convinced that this would proceed from a less degree of affection to the infant than to the child. She knows that the child has before his fourth year escaped many dangers which the infant must encounter, and may not escape; and it is there-fore probable that her choice would be the result of prudent reslection. Though we are not admirers of that philosophy which supposes the human mind a bundle of instincts, we can as little approve of the opposite scheme which allows it no inflinces at all. The form of a mother to her new-born infant is undoubtedly inflinctive, as the only thing which at that moment can be affociated with it in her mind is the pain she has suffered in bringing it to the world.

Passion. former along with them, even though the child might have been no longer under apprehension of a plunging itself. This affociation, too, would soon be transferred to every boy in the fame circumstances, and to similar founds and struggles, from whatever cause they might

+ Observa-Man.

Thus, as Dr Hartley observes +, " when several children are educated together, the pains, the denials of pleafure, and the forrows which affect one generally extend to all in some degree, often in an equal one. When their parents, companions, or attendants are fick, or afflicted, it is usual to raise in their minds the nafcent ideas of pains and miferies by fuch words and figns as are fuited to their capacities. They also find themfelves laid under many restraints, on account of the fickness or affiction of others; and when these and such like circumstances have raised in their minds desires to remove the causes of their own internal feelings, i. e. to ease the miteries of others, a variety of internal feelings and defires become fo blended and affociated together, as that no part can be diffinguified feparately from the rest, and the child may properly be said to have compassion. The same sources of compassion remain, though with fome alteration, during our whole progress through life. This is fo evident, that a reflecting person may plainly difcern the conflitment parts of his compassion while they are yet the mere internal, and, as one may fay, felfish feelings above mentioned; and before they have put on the nature of compassion by a coalescence with the reft. Agreeably to this method of reasoning, it may be observed, that persons whose nerves are eafily irritable, and those who have experienced great trials and afflictions, are in general more disposed to compassion than others; and that we are most apt to pity others in those diseases and calamities which we either have felt or of which we apprehend ourselves to be in danger."

The origin of patriotism and public spirit is thus traced by Dr Sayers: "The pleasures which our country affords are numerous and great. The wish to perpetuate the enjoyment of these pleasures, includes the wish to promote the fafety and welfare of our country, without which many of them would be loft. All this is evidently felfish; but, as in the progress of gratitude, it finally becomes difinterested. Pleasant ideas are thus strongly connected with the welfare of our country, after the tie which first bound them together has escaped our notice. The prosperity which was at first defirable as the means of future enjoyment, becomes itself an end: we feel delight in such prosperity, however produced; and we look not beyond this immediate delight. It is thus not difficult to observe in what manner a general and difinterested benevolence takes place in a mind which has already received pleasure from the happiness of a few; the transition is easy towards affociating it with happiness in general, with the happinefs of any being, whether produced by ourselves or by

any other cause whatever."

From this reasoning, our author concludes, that all our passions may be traced up to original feelings of regard for ourselves. " Thus (in the forcible language of * Warbur- a learned writer * of the fame school) does self-love, under the varying appearance of natural affection, domeftic relation, and the connexions of focial habitude, at first work blindly on, obscure and deep in dirt : But as it makes its way, it continues rifing, till it emerges into Possion. light; and then fuddenly expiring, leaves behind it the fairest issue,"-benevolent affection.

Self-love partook the path it first pursu'd, And found the private in the public good.

Thus have we stated the two opposite theories respect-

ing the origin of passions in the mind, and given our

readers a fhort specimen of the reasonings by which they

are supported by their respective patrons. Were we cal-

led upon to decide between them, we should be tempted to fay, that they have both been carried to extremes by fome of their advocates, and that the truth lies in the middle between them. "It is impossible + but that Dr Price's creatures capable of pleasant and painful sensations, &c. should love and choose the one, and dislike and avoid the other. No being who knows what happiness and mifery are, can be supposed indifferent to them, without a plain contradiction. Pain is not a possible object of defire, nor happiness of aversion."-To prefer a greater good though diftant, to a lefs good that is prefent; or to choose a present evil, in order to avoid a greater future evil-is indeed wife and rational conduct; but to choose evil ultimately, is absolutely impossible. Thus far then must be admitted, that every being possessed of fense and intellect, necessarily defires his own good as foon as he knows what it is; but if this knowledge be not innate, neither can the defire. Every human being comes into the world with a capability of knowledge, and of course with a capability of affections, defires, and passions; but it feems not to be conceivable how he can actually love, or hate, or dread any thing, till he know whether it be good, or ill, or dangerous. If, therefore, we have no innate ideas, we cannot possibly have innate defires or averfions. Those who contend that we have, feem to think, that without them reason would be infufficient, either for the prefervation of the individual or the continuation of the species; and some writers have alleged, that if our affections and passions were the mere refult of early affociations, they would necessarily be more capricious than we ever find them. But this objection feems to arise from their not rightly understanding the theory of their antagonists. The disciples of Locke and Hartley do not suppose it possible for any man in society to prevent such associations from being formed in his mind as shall necessarily produce defires and aversions ; far less do they think it possible to form affociations of ideas utterly repugnant, fo as to defire that as good which his fenfes and intellect have experienced to be evil. Affociations are formed by the very fame means, and at the very fame time, that ideas and notions are impressed upon the mind; but as pain is never mistaken for pleasure by the senses, so an object which has given

us only pain, is never affociated with any thing that

makes it defireable. We fay an object that has given

us only pain, because it is possible to form such an asso-

ciation between life and the loss of a limb, as to make

us grateful to the furgeon by whom it was amputated.

Affociations being formed according to the fame laws by which knowledge is acquired, it by no means follows

that passions resulting from them should be more capri-

cious than they are found to be; and they certainly are fufficiently capricious to make us suspect that the greater

part of them has this origin, rather than that they are

all infused in the mind by the immediate agency of the

Creator.

Passion. Creator. If man be a being formed with no innate ideas, and with no other inflinctive principles of action than what are absolutely necessary to preserve his existence and perpetuate the species, it is casy to perceive why he is placed in this world as in a flate of probation, where he may acquire habits of virtue to fit him for a better. It is likewife eafy to perceive why some men are better than others, and why fome are the flaves of the most criminal passions. But all this is unintelligible, upon the supposition that the seeds of every passion are innate, and that man is a compound of reason and of instincts fo numerous and various as to fuit every circum-

stance in which he can be placed. If passions, whatever be their origin, operate instantaneously, and if they be formed according to fixed laws, it may be thought a question of very little importance whether they be inflinctive or acquired .- This was long our own opinion; but we think, that upon maturer reflection we have feen reason to change it. If passions be the result of early associations, it is of the utmost confequence that no improper affociations be formed in the minds of children, and that none of their unreasonable defires be gratified. Upon this theory it feems indeed to depend almost wholly upon education, whether a child shall become a calm, benevolent, sleady, and upright man; or a passionate, capricious, selfish miscreant. By teaching him to refent every petty injury, the feeds of irafcibility are fown in his mind, and take fuch reot, that before the age of manhood he becomes intolerable to all with whom he must converse. By exciting numberless defires in his youthful mind, and instantly gratifying them, you make him capricious and impatient of disappointment; and by representing other children as in any degree inferior to him, you inspire him with the hateful passion of pride. According to the instinctive theory, education can only augment or diminish the strength of passions; according to the other theory, it is the fource of by far the greater part of them. On either fuppolition, parents should watch with folicitude over the actions of their children; but they will furely think themselves obliged to be doubly watchful, if they believe, that through their neglect their children may acquire hateful passions, to which, if properly educated, they might have remained strangers through their whole lives. And let it be remembered, that this folicitude should begin at an early period; because the mind is fusceptible of deep affociations much sooner than is sometimes imagined. Without this susceptibility, no language could be learned; and therefore a child by the time he learns to speak, may have planted in his mind the seeds of passions, on the just regulation and subordination of which depends in a great measure the happiness of mankind. See MORAL Philosophy, Part I. chap. 1. & 2. Part III. Nº 216.

PASSIONS and Emotions, difference between them. See EMOTIONS and Passions.

External Signs of Emotions and PASSIONS. So intimately connected are the foul and body, that every agitation in the former produces a visible effect upon the latter. There is, at the fame time, a wonderful uniformity in that operation; each class of emotions and passions being invariably attended with an external appearance peculiar to itself. These external appearances, or figns, may not improperly be confidered as a natural language, expressing to all beholders emotions and pasfions as they rife in the heart. Hope, fear, joy, grief, Paffion. are displayed externally: the character of a man can be read in his face; and beauty, which makes fo deep an impression, is known to result, not so much from regular features and a fine complexion, as from good nature, good fense, sprightlines, sweetness, or other mental quality, expressed upon the countenance. Though perfect skill in that language be rate, yet what is generally known is fufficient for the ordinary purposes of life. But by what means we come to understand the language, is a point of fome intricacy. It cannot be by fight merely; for upon the most attentive inspection of the Luman vilage, all that can be discerned are, figure, colour, and motion, which, fingly or combined, never can represent a passion nor a fentiment : the external fign is indeed visible; but to understand its meaning, we must be able to connect it with the passion that causes it; an operation far beyond the reach of eye-fight. Where then is the instructor to be found that can unveil this fecret connexion? If we apply to experience, it is yielded, that from long and diligent observation, we may gather, in some measure, in what manner those we are acquainted with express their paffions externally; but with respect to strangers, we are left in the dark; and yet we are not puzzled about the meaning of thefe external expressions in a ftranger, more than in a bosom companion. Further, Had we no other means but experience for understanding the external figns of passion, we could not expect any uniformity, nor any degree of skill, in the bulk of individuals; yet matters are fo much better ordered, that the external expressions of passion form a language understood by all, by the young as well as the old, by the ignorant as well as the learned: We talk of the plain and legible characters of that language; for undoubtedly we are much indebted to experience, in deciphering the dark and more delicate expressions. Where then shall we apply for a solution of this intricate problem, which feems to penetrate deep into human nature? Undoubtedly if the meaning of external figns be not derived to us from fight, nor from experience, there is no remaining fource whence it can be derived but from na-

We may then venture to pronounce, with some de-Element: gree of confidence, that man is provided by nature with of Critia fense or faculty that lays open to him every passion by cijm. means of its external expressions. And we cannot entertain any reasonable doubt of this, when we restect, that the meaning of external figns is not hid even from infants: an infant is remarkably affected with the paffions of its nurse expressed on her countenance; a finile cheers it, a frown makes it afraid: but fear cannot be without apprehending danger; and what danger can the infant apprehend, unless it be fensible that its nurse is angry? We must therefore admit, that a child can read anger in its nurse's face; of which it must be sensible intuitively, for it has no other mean of knowledge. We do not affirm, that these particulars are clearly apprehended by the child; for to produce clear and diltinct perceptions, reflection and experience are requifite: but that even an infant, when afraid, must have some notion of its being in danger, is evident.

That we should be conscious intuitively of a passion from its external expressions, is conformable to the analogy of nature: the knowledge of that language is of too great importance to be left upon experience; tecause Paffion. a foundation to uncertain and precarious, would prove a great obstacle to the formation of societies. Wisely therefore is it ordered, and agreeably to the fystem of Providence, that we should have nature for our instructor.

Such is the philosophy of Lord Kames, to which objections unanswerable may be made. It is part of the instinctive system of metaphysics, which his lordship has carried farther than all who wrote before him, and perhaps farther than all who have fucceeded him in this department of science. That a child intuitively reads anger in its nurse's face, is so far from being true, that for some short time after birth it is not terrified by the most menacing gestures. It is indeed absolutely incapable of fear till it has fuffered pain, (fee INSTINCT); and could we constantly carefs it with what is called an angry look, it would be cheered by that look, and frightened at a fmile. It feels, however, the effects of anger, and is foon capable of observing the peculiarity of feature with which that passion is usually accompanied; and these two become in a short time so linked together in its tender mind, that the appearance of the one necessarily suggests to it the reality of the other.

Should it be faid that a loud and fudden noise startles a child immediately after birth, and that, therefore, the infant must be instinctively afraid, the fact may be admitted, without any necessity of admitting the inference. The nerves of an infant are commonly very irritable, and the strong impulse on the auditory nerves may agitate its whole frame, without inspiring it with the passion of fear. The loud noise is in all probability not the fign of approaching danger, but the immediate cause of real pain, from which the infant surinks as it would from the prick of a pin or the fcorching of a candle. But we have faid enough in the article immediately preceding, and in others which are there quoted, to show how the passions may be formed by affociations even in early in fancy, and yet operate as if they were instinctive. This being the case, we shall through the remainder of this article fuffer his lordship to speak his own language, without making any further remarks upon it. We are induced to do this for two reasons; of which the first is, that many of our readers will probably prefer his theory to ours; and the fecond is, that his conclusions respecting the signs and language of passion hold equally good from either theory.

We perfectly agree with him, that manifold and admirable are the purpofes to which the external figns of passion are made subservient by the Author of our

1. The figns of internal agitation displayed externally to every spectator, tend to fix the fignification of many words. The only effectual means to afcertain the meaning of any doubtful word, is an appeal to the thing it represents: and hence the ambiguity of words expressive of things that are not objects of external fense; for in that case an appeal is denied. Passion, strictly speaking, is not an object of external fense: but its external figns are: and by means of these figns, passions may be appealed to with tolerable accuracy; thus the words that denote our passions, next to those that denote external objects, have the most distinct meaning. Words fignifying internal action and the more delicate feelings, are less distinct. This defect, with regard to internal action, is what chiefly occasions the intricacy of logic: the terms of that science are far from being sufficiently ascertained, even after much care and labour bestowed by an emi- Passon, nent writer +; to whom, however, the world is greatly indebted, for removing a mountain of rubbish, and Locke. moulding the subject into a rational and correct form, the same defect is remarkable in criticism, which has for its object the more delicate feelings; the terms that denote these feelings being not more distinct than those

2. Society among individuals is greatly promoted by that universal language. Looks and gestures give direct access to the heart; and lead us to select, with tolerable accuracy, the perfons who are worthy of our confidence. It is furprifing how quickly, and for the most part how correctly, we judge of character from external

appearance.

3. After focial intercourse is commenced, these external figns, which diffuse through a whole affembly the feelings of each individual, contribute above all other means to improve the focial affections. Language, no doubt is the most comprehensive vehicle for communicating emotions: but in expedition, as well as in power of conviction, it falls short of the figns under confideration; the involuntary figns especially, which are incapable of deceit. Where the countenance, the tones, the gestures, the actions, join with the words in communicating emotions, these united have a force irresistible. Thus all the pleasant emotions of the human heart, with all the focial and virtuous affections, are, by means of these external figns, not only perceived, but felt: By this admirable contrivance, conversation becomes that lively and animating amusement, without which life would at best be insipid: one joyful countenance fpreads cheerfulness instantaneously through a multitude

4. Diffocial passions, being hurtful by prompting violence and mischief, are noted by the most conspicuous external figns, in order to put us upon our guard: thus anger and revenge, especially when sudden, display themselves on the countenance in legible characters. The external figns, again, of every passion that threatens danger, raise in us the passion of fear: which frequently operating without reason or reflection, moves us by a sud-

den impulse to avoid the impending danger.

5. These external figns are remarkably subservient to morality. A painful passion, being accompanied with difagreeable external figns, must produce in every spectator a painful emotion: but then, if the passion be social, the emotion it produces is attractive, and connects the spectator with the person who suffers. Dissocial pasfions only are productive of repulfive emotions, involving the spectator's aversion, and frequently his indignation. This artful contrivance makes us cling to the virtuous,

and abhor the wicked.

6. Of all the external figns of passion, those of affliction or distress are the most illustrious with respect to a final cause, and deservedly merit a place of distinction. They are illustrious by the fingularity of their contrivance; and also by inspiring sympathy, a passion to which human fociety is indebted for its greatest bleffing, that of providing relief for the distressed. A subject so interesting deserves a leifurely and attentive examination. The conformity of the nature of man to his external circumstance is in every particular wonderful: his nature makes him prone to fociety; and fociety is necessary to his wellbeing, because in a solitary state he is a helpless

Paffion. being, destitute of support, and in his distresses destitute of relief: but mental support, the shining attribute of fociety, is of too great moment to be left dependent upon cool reason; it is ordered more wisely, and with greater conformity to the analogy of nature, that it should be enforced even instinctively by the passion of fympathy. Here fympathy makes a capital figure; and contributes, more than any other means, to make life eafy and comfortable. But however effential the fympathy of others may be to our wellbeing, one beforehand would not readily conceive how it could be raifed by external figns of diffress; for considering the analogy of nature, if these signs be agreeable, they must give birth to a pleafant emotion leading every beholder to be pleafed with human woes: if difagreeable, as they undoubtedly are, ought they not naturally to repel the spectator from them, in order to be relieved from pain? Such would be the reasoning beforehand; and such would be the effect were man purely a felfish being. But the benevolence of our nature gives a very different direction to the painful passion of sympathy, and to the desire involved in it: instead of avoiding distress, we fly to it in order to afford relief; and our fympathy cannot be otherwife gratified but by giving all the fuccour in our power. Thus external figns of diffrefs, though difagreeable, are attractive; and the fympathy they infpire is a powerful cause, impelling us to afford relief even to a stranger, as if he were our friend or rela-

> It is a noted observation, that the deepest tragedies are the most crowded; which in an overly view will be thought an unaccountable bias in human nature. Love of novelty, defire of occupation, beauty of action, make us fond of theatrical representations; and when once engaged, we must follow the story to the conclusion, whatever distress it may create. But we generally become wife by experience; and when we foresee what pain we shall suffer during the course of the representation, is it not furprifing that perfons of reflection do not avoid fuch spectacles altogether? And yet one who has scarce recovered from the diffress of a deep tragedy, resolves coolly and deliberately to go to the very next, without the flightest obstruction from felf-love. The whole myflery is explained by a fingle observation: That fympathy, though painful, is attractive; and attaches us to an object in diffress, instead of promoting us to fly from it. And by this curious mechanism it is, that persons of any degree of fensibility are attracted by affliction still more than by joy.

> To conclude: the external figns of passion are a strong indication, that man, by his very constitution, is framed to be open and fincere. A child, in all things obedient to the impulses of nature, hides none of its emotions; the favage and clown, who have no guide but pure nature, expose their hearts to view, by giving way to all the natural figns. And even when men learn to diffemble their fentiments, and when behaviour degenerates into art, there still remain checks, that keep diffimulation within bounds, and prevent a great part of its mischievous effects: the total suppression of the voluntary figns during any vivid passion, begets the utmost uneasiness, which cannot be endured for any confiderable time: this operation becomes indeed less painful by habit; but luckily the involuntary figns cannot, by any effort, be suppressed or even dissembled. An

Vol. XVI. Part I.

absolute hypocrify, by which the character is concealed Passion. and a fictitious one assumed, is made impracticable; and nature has thereby prevented much harm to fociety. We may pronounce, therefore, that Nature, herfelf fincere and candid, intends that mankind should preserve the fame character, by cultivating simplicity and truth, and banishing every fort of distimulation that tends to

Influence of PASSION with respect to our Perceptions, Opinions, and Belief. So intimately are our perceptions, passions, and actions, connected, it would be wonderful if they should have no mutual influence. That our actions are too much influenced by paffion, is a known truth; but it is not less certain, though not so well known, that passion hath also an influence upon our perceptions, opinions, and belief. For example, the opinions we form of men and things are generally directed by affection: An advice given by a man of figure has great weight; the fame advice from one in a low condition is despised or neglected: a man of courage underrates danger; and to the indolent the flightest obstacle appears unfurmountable. All this may be accounted for

by the fimple principle of affociation.

There is no truth more univerfally known, than that tranquillity and fedateness are the proper state of mind for accurate perception and cool deliberation; and for that reason, we never regard the opinion even of the wifest man, when we discover prejudice or passion behind the curtain. Passion hath such influence over us, as to give a false light to all its objects. Agreeable passions prepoffess the mind in favour of their objects; and difagreeable passions, not less against their objects: A woman is all perfection in her lover's opinion, while in the eye of a rival beauty she is awkward and disagreeable: when the paffion of love is gone, beauty vanishes with it ;-nothing is left of that genteel motion, that fprightly conversation, those numberless graces, which formerly, in the lover's opinion, charmed all hearts. To a zealot every one of his own fect is a faint, while the most upright of a different fect are to him children of perdition: the talent of speaking in a friend, is more regarded than prudent conduct in any other. Nor will this furprise any one acquainted with the world; our opinions, the refult frequently of various and complicated views, are commonly fo flight and wavering, as readily to be fusceptible of a bias from passion.

With that natural bias another circumstance concurs, to give passion an undue influence on our opinions and belief; and that is a strong tendency in our nature to justify our passions as well as our actions, not to others only, but even to ourselves. That tendency is peculiarly remarkable with respect to disagreeable passions: by its influence, objects are magnified or leffened, circumstances supplied or suppressed, every thing coloured and difguifed, to answer the end of justification. Hence the foundation of felf-deceit, where a man imposes upon himself innocently, and even without suspicion of a bias.

We proceed to illustrate the foregoing observations by

proper examples.

Gratitude, when warm, is often exerted upon the children of the benefactor; especially where he is removed out of reach by death or absence. The passion in this case being exerted for the sake of the benefactor. requires no peculiar excellence in his children: but the practice of doing good to these children produces affec-

tion

Pation. tion for them, which never fails to advance them in our efteem. By fuch means, ftrong connections of affection are often formed among individuals, upon the flight foundation now mentioned.

Envy is a passion, which, being altogether unjustifiable, cannot be excused but by disguising it under some plaufible name. At the same time, no passion is more eager than envy to give its object a difagreeable appearance: it magnifies every bad quality, and fixes on the most humiliating circumstances:

Cashus. I cannot tell what you and other men Think of this life; but for my fingle felf, I had as lief not be, as live to be In awe of fuch a thing as I myfelf. I was born free as Cæfar, fo were you; We both have fed as well, and we can both * Endure the winter's cold as well as he. For once, upon a raw and gufty day, The troubled Tyber chafing with his shores, Cæfar fays to me, Dar'st thou, Cassius, now Leap in with me into this angry flood, And fwim to yonder point ?- Upon the word, Accoutred as I was, I plunged in, And bid him follow; fo indeed he did. The torrent roar'd, and we did buffet it With lufty finews; throwing it afide, And stemming it with hearts of controversy. But ere we could arrive the point propos'd, Cæfar cry'd, Help me, Caffius, or I fink. I, as Æneas, our great ancestor, Did from the flames of Troy upon his fhoulder The old Anchifes bear; fo from the waves of Tyber Did I the tired Cæfar: and this man Is now become a god; and Cassius is A wretched creature, and must bend his body If Cæfar carelessly but nod on him. He had a fever when he was in Spain; And when the fit was on him, I did mark How he did shake. 'Tis true, this god did shake; His coward lips did from their colour fly; And that same eye whose bend doth awe the world Did lose its lustre: I did hear him groan; Ay, and that tongue of his, that bade the Romans Mark him, and write his speeches in their books, Alas! it cry'd—Give me fome drink, Titinius,— As a fick girl. Ye Gods, it doth amaze me, A man of fuch a feeble temper should So get the start of the majestic world, And bear the palm alone. Julius Cafar, act. ii. fc. 3.

Glo'ster, inflamed with refentment against his fon Edgar, could even force himfelf into a momentary conviction that they were not related:

O strange fasten'd villain! Would he deny his letter?- I never got him. King Lear, act ii. fc. 3.

When by great fensibility of heart, or other means, Passion. grief becomes inunoderate, the mind, in order to justify itself, is prone to magnify the cause; and if the real cause admit not of being magnified, the mind seeks a cause for its grief in imagined future events:

Bufby. Madam, your majesty is much too sad: You promis'd, when you parted with the king, To lay afide felf-harming heavinefs, And entertain a cheerful disposition.

Queen. To please the king, I did; to please myself, I cannot do it. Yet I know no cause Why I should welcome such a guest as gricf; Save bidding farewell to fo fweet a guest As my fweet Richard: yet again, methinks, Some unborn forrow, ripe in Fortune's womb, Is coming tow'rd me; and my inward foul With fomething trembles, yet at nothing grieves, More than with parting from my lord the king. Richard II. act ii. fc. 5.

Refentment at first is vented on the relations of the offender, in order to punish him; but as refentment, when fo outrageous, is contrary to conscience, the mind, to justify its passion, is disposed to paint these relations in the blackest colours; and it comes at last to be convinced, that they ought to be punished for their own de-

Anger, raifed by an accidental stroke upon a tender part of the body, is fometimes vented upon the undefigning cause. But as the passion in that case is absurd, and as there can be no folid gratification in punishing the innocent, the mind, prone to justify as well as to gratify its passion, deludes itself into a conviction of the action's being voluntary. The conviction, however, is but momentary; the first reflection shows it to be erroneous: and the passion vanisheth almost instantaneously with the conviction. But anger, the most violent of all passions, has still greater influence: it sometimes forces the mind to personify a stock or a stone if it happen to occasion bodily pain, and even to believe it a voluntary agent, in order to be a proper object of resentment. And that we have really a momentary conviction of its being a voluntary agent, must be evident from considering, that without fuch conviction the passion can neither be justified nor gratified: the imagination can give no aid; for a flock or a flone imagined infenfible, cannot be an object of punishment, if the mind be conscious that it is an imagination merely without any reality (A). Of fuch personification, involving a conviction of reality, there is one illustrious instance. When the first bridge of boats over the Hellespont was destroyed by a storm, Xerxes fell into a transport of rage, so excessive, that he commanded the fea to be punished with 300 stripes; and a pair of fetters to be thrown into it, enjoining the following words to be pronounced: "O thou falt and bitter water! thy master hath condemned thee to this punishment for offending him without cause; and is

⁽A) We have already shown how a man may be instigated to wreak his vengeance on a stock or a stone, without ever confidering whether it be sensible or insensible: (See Passion). If the story of Xerxes be true, he may have confidered the fea as fenfible and animated, without dreaming that a stock or a stone is so. The fea was a god among many of the pagans, and was confidered as fuch by Xerxes, otherwise he could not have applauded men for not facrificing to it.

Passion. resolved to pass over thee in despite of thy insolence: with reason all men neglect to facrifice to thee, because

thou art both difagreeable and treacherous."
Shakespeare exhibits beautiful examples of the irregular influence of passion in making us believe things to be otherwise than they are. King Lear, in his distress, personifies the rain, wind, and thunder; and in order to justify his resentment, believes them to be taking part with his daughters:

Lear. Rumble thy bellyful, spit fire, spout rain! Nor rain, wind, thunder, fire, are my daughters. I tax not you, ye elements, with unkindness; I never gave you kingdoms, call'd you children; You owe me no subscription. Then let fall Your horrible pleasure. Here I stand, your brave; A poor, infirm, weak, and despis'd old man! But yet I call you fervile ministers, That have with two pernicious daughters join'd Your high-engender'd battles 'gainst a head So old and white as this. Oh! oh! 'tis foul!

Act iii. sc. 2.

King Richard, full of indignation against his favourite horse for carrying Bolingbroke, is led into the conviction of his being rational:

Groom. O, how it yearn'd my heart, when I beheld In London streets, that coronation-day, When Bolingbroke rode on Roan Barbary, That horse that thou so often hast bestrid, That horse that I so carefully have dressed.

K. Rich. Rode he on Barbary? tell me, gentle friend,

How went he under him?

Groom. So proudly as he had disdain'd the ground. K. Rich. So proud that Bolingbroke was on his back! That jade had eat bread from my royal hand. This hand hath made him proud with clapping him. Would he not stumble? would he not fall down, (Since pride must have a fall), and break the neck Of that proud man that did usurp his back? Richard II. act v. fc. 11.

Hamlet, swelled with indignation at his mother's second marriage, was strongly inclined to lessen the time of her widowhood, the shortness of the time being a violent circumstance against her; and he deludes himself by degrees into the opinion of an interval shorter than the real one:

-That it should come to this! Hamlet. -But two months dead! nay, not fo much; not two-So excellent a king, that was, to this, Hyperion to a fatyr: fo loving to my mother, That he permitted not the wind of heav'n Visit her face too roughly. Heav'n and earth! Must I remember-why, she would hang on him, As if increase of appetite had grown By what it fed on: yet, within a month—— Let me not think—Frailty, thy name is Woman! A little month! or ere those shoes were old, With which she follow'd my poor father's body, Like Niobe, all tears—why she, ev'n she-(O heav'n! a beast, that wants discourse of reason, Wou'd have mourn'd longer) married with mine uncle, My father's brother; but no more like my father Than I to Hercules. Within a month !-

Ere yet the falt of most unrighteous tears Had left the flushing in her galled eyes, She married—Oh, most wicked speed! to post With fuch dexterity to incestuous sheets! It is not, nor it cannot, come to good. But break, my heart, for I must hold my tongue. Act i. fc. 3.

The power of passion to falsify the computation of time is remarkable in this instance; because time, having an accurate measure, is less obsequious to our defires and wishes, than objects which have no precise standard of magnitude.

Good news are greedily swallowed upon very slender evidence; our wishes magnify the probability of the event, as well as the veracity of the relater; and we be-

lieve as certain what at best is doubtful:

Quel, che l'huom vede, amor li fa invisible E l' invisibil fa veder amore. Questo creduto fu, che 'l miser suole Dar facile credenza a' quel, che vuole. Orland. Furiof. cant. 1. ft. 56.

For the same reason, bad news gain also credit upon the flightest evidence: fear, if once alarmed, has the same effect with hope, to magnify every circumstance that tends to conviction. Shakespeare, who shows more knowledge of human nature than any of our philosophers, hath in his Cymbeline represented this bias of the mind; for he makes the person who alone was affected with the bad news, yield to evidence that did not convince any of his companions. And Othello is convinced of his wife's infidelity from circumstances too slight to move any person less interested.

If the news interest us in so low a degree as to give place to reason, the effect will not be altogether the fame: judging of the probability or improbability of the story, the mind settles in a rational conviction either that it is true or not. But even in that case, the mind is not allowed to rest in that degree of conviction which is produced by rational evidence: if the news be in any degree favourable, our belief is raifed by hope to an improper height; and if unfavourable,

This observation holds equally with respect to future events: if a future event be either much wished or dreaded, the mind never fails to augment the probability be-

That easiness of belief, with respect to wonders and prodigies, even the most absurd and ridiculous, is a strange phenomenon; because nothing can be more evident than the following proposition, That the more fingular any event is, the more evidence is required to produce belief: a familiar event daily occurring, being in itself extremely probable, finds ready credit, and therefore is vouched by the slightest evidence; but to overcome the improbability of a strange and rare event, contrary to the course of nature, the very strongest evidence is required. It is certain, however, that wonders and prodigies are fwallowed by the vulgar, upon evidence that would not be sufficient to ascertain the most familiar occurrence. It has been reckoned difficult to explain that irregular bias of mind; but we are now made acquainted with the influence of passion upon opinion and belief; a flory of ghosts or fairies, told

Paffion.

Paffion. with an air of gravity and truth, raileth an emotion of wonder, and perhaps of dread; and these emotions imposing on a weak mind, impress upon it a thorough

conviction contrary to reason.

Opinion and belief are influenced by propenfity as well as by passion. An innate propensity is all we have to convince us that the operations of nature are uniform: influenced by that propenfity, we often rashly think, that good or bad weather will never have an end; and in natural philosophy, writers, influenced by the same propensity, stretch commonly their analogical reasonings beyond just bounds. See METAPHYSICS, Nº 133, 134.

Opinion and belief are influenced by affection as well as by propenfity. The noted flory of a fine lady and a curate viewing the moon through a telescope is a pleafant illustration: " I perceive (fays the lady) two shadows inclining to each other; they are certainly two happy lovers:" "Not at all (replies the curate), they are two steeples of a cathedral."

Language of PASSION. Among the particulars that compose the social part of our nature, a propensity to communicate our opinions, our emotions, and every thing that affects us, is remarkable. Bad fortune and injustice affect us greatly; and of these we are so prone to complain, that if we have no friend or acquaintance to take part in our fufferings, we fometimes utter our complaints aloud, even where there are none to liften.

But this propenfity operates not in every state of mind. A man immoderately grieved, feeks to afflict himself, rejecting all consolation: immoderate grief accordingly is mute; complaining is struggling for consolation.

It is the wretch's comfort still to have Some small reserve of near and inward wo, Some unsuspected hoard of inward grief, Which they unfeen may wail, and weep, and mourn, And glutton-like alone devour.

Mourning Bride, act i. fc. 1.

When grief subsides, it then, and no sooner, finds a tongue: we complain, because complaining is an effort to disburden the mind of its distress. This observation is finely illustrated by a story which Herodotus records, book iii. Cambyses, when he conquered Egypt, made Psammeticus the king prisoner; and for trying his constancy, ordered his daughter to be dressed in the habit of a flave, and to be employed in bringing water from the river; his fon also was led to execution with a halter about his neck. The Egyptians vented their forrow in tears and lamentations: Pfammeticus only, with a downcast eye, remained filent. Afterward meeting one of his companions, a man advanced in years, who, being plundered of all, was begging alms, he wept bitterly, calling him by his name. Cambyfes, struck with wonder, demanded an answer to the following question: " Pfammeticus, thy master Cambyses is desirous to know, why, after thou hadst feen thy daughter so ignominiously treated, and thy fon led to execution, without exclaiming or weeping, thou shouldst be so highly concerned for a poor man noway related to thee?" Pfammeticus returned the following answer: " Son of Cyrus, the calamities of my family are too great to leave me the power of weeping; but the misfortunes of a companion, reduced in his old age to want of bread, is a fit Paffion. fubject for lamentation."

Surprise and terror are filent passions, for a different reason: they agitate the mind so violently, as for a time to suspend the exercise of its faculties, and among others the faculty of speech.

Love and revenge, when immoderate, are not more loquacious than immoderate grief. But when thele paffions become moderate, they fet the tongue free, and, like moderate grief, become loquacious. love, when unfuccessful, is vented in complaints; when fuccessful, is full of joy expressed by words and gef-

As no passion hath any long uninterrupted existence, nor beats always with an equal pulle, the language fuggested by passion is not only unequal but frequently interrupted; and even during an uninterrupted fit of paffion, we only express in words the more capital fentiments. In familiar conversation, one who vents every fingle thought, is justly branded with the character of loquacity; hecause sensible people express no thoughts but what make fome figure: in the fame manner, we are only disposed to express the strongest impulses of passion, especially when it returns with impetuosity after interruption.

It is elsewhere observed * that the sentiments ought * See the to be tuned to the passion, and the language to both article Sen-Elevated sentiments require elevated language: tender timents. fentiments ought to be clothed in words that are foft and flowing: when the mind is depressed with any pasfion, the fentiments must be expressed in words that are humble, not low. Words being intimately connected with the ideas they represent, the greatest harmony is required between them: to express, for example, an humble fentiment in high-founding words, is difagreeable by a discordant mixture of feelings; and the discord is not less when elevated sentiments are dressed in low words:

Versibus exponi tragicis res comica non vult. Indignatur item privatis ac prope focco Dignis carminibus narrari cœna Thyestæ.

HORAT. Ars Poet. 1. 80.

This, however, excludes not figurative expression, which, within moderate bounds, communicates to the fentiment an agreeable elevation. We are fentible of an effect dian agreeable elevation. rectly opposite, where figurative expression is indulged beyond a just measure: the opposition between the expression and the sentiment makes the discord appear greater than it is in reality.

At the same time, figures are not equally the language of every passion: pleasant emotions, which elevate or swell the mind, vent themselves in strong epithets and figurative expression; but humbling and dispiriting

passions affect to speak plain:

Et tragicus plerumque dolet sermone pedestri. Telephus et Peleus, cum pauper et exul uterque, Projicit ampullas et sesquipedalia verba, Si curat cor spectantis tetigisse querela.

HORAT. Ars Poet. 95.

Figurative expression, being the work of an enlivened imagination, cannot be the language of anguish or distress. Otway, sensible of this, has painted a scene of distress in colours finely adapted to the subject : there is manner.

Paffice. fearcely a figure in it, except a fhort and natural fimile with which the fpeech is introduced. Belvidera, talking to her father of her husband:

Think you faw what paft at our laft parting;
Think you beheld him like a raging lion,
Pacing the earth, and tearing up his fleps,
Fate in his eyes, and roaring with the pain
Of burning fury; think you faw his one hand
Fix'd on my throat, while the extended other
Grafp'd a keen threat'ning dagger: oh, 'twas thus
We laft embrac'd, when, trembling with revenge,
He dragg'd me to the ground, and at my bofom
Prefented horrid death; cry'd out, My friends!
Where are my friends? fwore, wept, rag'd, theaten'd,
lov'd;

For he yet lov'd, and that dear love preferv'd me
To this last trial of a father's pity.
I fear not death, but cannot bear a thought
That that dear hand should do th' unfriendly office.
If I was ever then your care, now hear me;
Tly to the senate, save the promised lives.
Of his dear friends, ere mine be made the facrifice.

Venice Preferv'd, act v.

To preferve the forefaid refemblance between words and their meaning, the fentiments of active and hurring paffinos ought to be drefled in words where fyllables prevail that are pronounced fhort or faft; for these make an impression of hurry and precipitation. Emotions, on the other hand, that rest upon their objects, are best expressed by words where fyllables prevail that are pronounced long or flow. A person affected with melancholy, has a languid and slow train of perceptions. The expression best suited to that state of mind, is where words, not only of long, but of many syllables, abound in the composition; and for that reason, nothing can be finer than the following passage:

In those deep solitudes, and awful cells,
Where heav'nly-pensive Contemplation dwells,
And ever-musing Melancholy reigns.
Pore, Eloisa to Abelard.

To preferve the same resemblance, another circumstance is requisite, that the language, like the emotion, be rough or smooth, broken or uniform. Calm and sweet emotions are best expressed by words that glide softly: surprise, fear, and other turbulent passions, require an expression both rough and broken.

It cannot have escaped any diligent inquirer into nature, that, in the hurry of passion, one generally expresfes that thing first which is most at heart; which is beautifully done in the following passage:

Me, me; adsum qui feci : in me convertite ferrum,

Æneid. ix. 427.

Paffion has often the effect of redoubling words, the
better to make them express the fitrong conception of
the mind. This is finely imitated in the following examples.

O Rutuli, mea fraus omnis.

Thou fun, faid I, fair light!
And thos enlighten'd earth, fo fresh and gay!
Ye hills and dales, ye rivers, woods, and plains!

And ye that live, and move, fair creatures! tell, Tell, if ye faw, how came I thus, how here.—

Paradife Loft, viii. 273.

Both have finn'd! but thou
Againft God only; I, 'gainft God and thee:
And to the place of judgement will return;
There with my cries importune Heav'n, that all
The fentence, from thy head remov'd, may light
On me, fole eause to thee of all this wo;
Me! me! only just object of his ire.

Paradise Lost, x. 930.

In general, the language of violent passion ought to be broken and interrupted. Soliloquies ought to be so in a peculiar manner: Ianguage is intended by nature for society; and a man when alone; though he always clothes his thoughts in words, feldom gives his words utterance, unless when prompted by some strong emotion; and even then by starts and intervals only. Shakespeare's foliloquies may be justly established as a model; for it is not easy to conceive any model more perfect. Of his many incomparable soliloquies, the two following only shall be quoted, being different in their starts.

Hamlet. Oh, that this too, too folid flesh would melt,

Thaw, and refolve itself into a dew ! Or that the Everlasting had not fix'd His canon 'gainst self-slaughter! O God! O God! How weary, stale, flat, and unprofitable, Seem to me all the uses of this world Fie on't! O fie! 'tis an unweeded garden, That grows to feed: things rank and gross in nature Possess it merely. That it should come to this! But two months dead! nay, not fo much; not two-So excellent a king, that was, to this, Hyperion to a fatyr: fo loving to my mother, That he permitted not the winds of heav'n Visit her face too roughly. Heav'n and earth! Must I remember-why, she would hang on him, As if increase of appetite had grown By what it fed on: yet, within a month-Let me not think-Frailty, thy name is Woman ! A little month! or ere those shoes were old, With which she follow'd my poor father's body, Like Niobe, all tears-why she, ev'n she-(O heav'n! a beaft, that wants discourse of reason, Would have mourn'd longer-) married with mine-

uncle,

My father's brother; but no more like my father
Than I to Hercules. Within a month!

Ere yet the falt of most unrighteous tears
Had left the fluthing in her galled eyes,
She married.

Oh, most wicked speed, to post
With such dexterity to incestuous sheets!
It is not, nor it cannot come to good.
But break, my heart, for I must hold my tongue.

Hamlet, act i. sc. 3.

"Ford. Hum! ha! is this a vifion? is this a dream?
do I sleep? Mr Ford, awake; awake, Mr Ford; there's a hole made in your best coat, Mr Ford! this 'tis to be married! this 'tis to have linen and buck baskets! Well, I will proclaim myself what I am;

am s

Passion. " I will now take the leacher; he is at my house; " he cannot 'fcape me; 'tis impossible he should; he

" cannot creep into a halfpenny purfe, nor into a pepper-"box. But left the devil that guides him should aid " him, I will fearch impossible places; tho' what I am

"I cannot avoid, yet to be what I would not, shall not "make me tame."

Merry Wives af Windfor, act iii. fc. laft.

These soliloquies are accurate and bold copies of nature: in a pattionate foliloquy one begins with thinking aloud, and the strongest feelings only are expresfed; as the speaker warms, he begins to imagine one listening, and gradually slides into a connected dif-

How far distant are soliloquies generally from these models? So far indeed as to give difguft instead of plea-fure. The first scene of Iphigenia in Tauris discovers that princefs, in a foliloquy, gravely reporting to herfelf her own history. There is the same impropriety in the first scene of Alcestes, and in the other introductions of Euripides, almost without exception. Nothing can be more ridiculous; it puts one in mind of a most curious device in Gothic paintings, that of making every figure explain itself by a written label issuing from its mouth. The description which a parasite, in the Eunuch of Terence (act ii. fc. 2.) gives of himfelf, makes a fprightly foliloquy: but it is not confiftent with the rules of propriety; for no man, in his ordinary state of mind and upon a familiar fubject, ever thinks of talking aloud to himself. The same objection lies against a soliloquy in the Adelphi of the fame author (act i. fc. 1.). The foliloguy which makes the third scene, at third of his Heicyra, is infufferable; for there Pamphilus, foberly and circumstantially, relates to himself an adventure which had happened to him a moment before.

Corneille is unhappy in his foliloquies: Take for a

fpecimen the first scene of Cinna.

Racine is extremely faulty in the same respect. His foliloquies are regular harangues, a chain completed in every link, without interruption or interval: that of Antiochus in Berenice (act i. fc. 2.) refembles a regular pleading, where the parties pro and con display their arguments at full length. The following foliloquies are equally faulty: Bajazet, act iii. fc. 7.; Mithridate, act iii. fc. 4. and act iv. fc. 5.; Iphigenia, act iv. fc. 8.

Soliloquies upon lively or interesting subjects, but without any turbulence of passion, may be carried on in a continued chain of thought. If, for example, the nature and sprightliness of the subject prompt a man to fpeak his thoughts in the form of a dialogue, the expression must be carried on without break or interruption, as in a dialogue between two persons; which jus-

tifies Falftaff's foliloguy upon honour:

"What need I be fo forward with Death, that calls " not on me? Well, 'tis no matter, Honour pricks me "on. But how if Honour prick me off, when I come "on? how then? Can honour fet a leg? No. Or an "arm? No. Or take away the grief of an wound? " No. Honour hath no skill in furgery then? No. "What is Honour? A word .- What is that word ho-

" nour? Air; a trim reckoning.-Who hath it? He sthat dy'd a Wednesday. Doth he feel it? No. "Doth he hear it? No. Is it infenfable then? Yea,

" to the dead. But will it not live with the living? Peffion. " No. Why? Detraction will not fuffer it. Therefore " I'll none of it; honour is a mere scutcheon: and so " ends my catechism."

S

First Part, Henry IV. act v. fc. 2.

And even without dialogue a continued discourse may be juffified, where a man reasons in a soliloquy upon an important subject; for if in such a case it be at all excufable to think aloud, it is necessary that the reasoning be carried on in a chain; which justifies that admirable foliloquy in *Hamlet* upon life and immortality, being a ferene meditation upon the most interesting of all subjects. And the fame confideration will justify the foliloguy that introduces the 5th act of Addison's Cato.

Language ought not to be elevated above the tone of

the fentiment.

Zara. Swift as occasion I Myfelf will fly; and earlier than the morn Wake thee to freedom. Now 'tis late; and yet Some news few minutes past arriv'd, which seem'd To shake the temper of the king-Who knows What racking cares difease a monarch's bed? Or love, that late at night still lights his lamp, And strikes his rays through dusk, and folded lids, Forbidding rest, may stretch his eyes awake, And force their balls abroad at this dead hour. I'll try. Mourning Bride, act iii. fc. 4.

The language here is undoubtedly too pompous and laboured for describing so simple a circumstance as absence of fleep. In the following paffage, the tone of the language, warm and plaintive, is well fuited to the paffion, which is recent grief: but every one will be fenfible, that in the last couplet fave one the tone is changed, and the mind fuddenly elevated to be let fall as fuddenly in the last couplet:

Il détefte à jamais sa coupable victoire, Il renonce à la cour, aux humains, à la gloire ; Et se fuiant lui-même, au milieu des deserts, Il va cacher fa peine au bout de l'univers ; Là, soit que le soleil rendit le jour au monde, Soit qu'il finit sa course au vaste sein de l'onde, Sa voix faifoit redire aux echos attendris, Le nom, le trifte nom, de fon malheureux fils.

Henriade, chant. viii. 229.

Light and airy language is unfuitable to a fevere paf-

Imagery and figurative expression are discordant, in the highest degree, with the agony of a mother, who is deprived of two hopeful fons by a brutal murder. Therefore the following paffage is undoubtedly in a bad

Queen. Ah, my poor princes! ah, my tender babes! My unblown flowers, new appearing fweets! If yet your gentle fouls fly in the air, And be not fixt in doom perpetual, Hover about me with your airy wings, And hear your mother's lamentation.

Richard III. act iv. fc. 4.

Again:

K. Philip. You are as fond of grief as of your child. Conflance. Grief fills the room up of my absent child, Lies

Paffion. Lies in his bed, walks up and down with me, Puts on his pretty looks, repeats his words, Remembers me of all his gracious parts, Stuffs out his vacant garment with his form; Then have I reason to be fond of grief.

K. John, act iii. fc. 9.

Thoughts that turn upon the expression instead of the fubject, commonly called a play of words, being low and childish, are unworthy of any composition, whether gay or serious, that pretends to any degree of

In the Amynta of Taffo, the lover falls into a mere play of words, demanding how he who had loft himfelf, could find a mistress. And for the same reason, the following passage in Corneille has been generally con-

Chimene. Mon pere est mort, Elvire, et la premiere

Dont s'est armée Rodrigue a sa trame coupée. Pleurez, pleurez, mes yeux, et fondez-vous en caux, La moietié de ma vie a mis l'autre au tombeau, Et m'oblige à venger, après ce coup funeste, Celle que je n'ai plus, sur celle que me reste.

Cid, act iii. fc. 3.

To die is to be banish'd from myself: And Sylvia is myfelf: banish'd from her, Is felf from felf; a deadly banishment!

Two Gentlemen of Verona, act iii. sc. 3.

Countefs. I pray thee, Lady, have a better cheer: If thou engrossest all the griefs as thine, Thou robb'st me of a moiety.

All's well that ends well, act in. fc. 3.

K. Henry. O my poor kingdom, fick with civil blows!

When that my care could not withhold thy riots, What wilt thou do when riot is thy care? O, thou wilt be a wilderness again, Peopled with wolves, thy old inhabitants. Second Part, Henry IV. act iv. fc. 11.

Cruda Amarilli, che col nome ancora

D'amar, ahi lasso, amaramente insegni. Pastor Fido, act i. sc. 2.

Antony, speaking of Julius Cæsar:

O world! thou wast the forest of this hart; And this, indeed, O world, the heart of thee. How like a deer, stricken by many princes, Julius Cæfar, act iii. sc. 3. Dost thou here lie!

Playing thus with the found of words, which is still worse than a pun, is the meanest of all conceits. But Shakespeare, when he descends to a play of words, is not always in the wrong; for it is done fometimes to denote a peculiar character, as in the following paffage:

K. Philip. What fay'ft thou, boy? look in the lady's

Lewis. I do, my Lord, and in her eye I find A wonder, or a wond'rous miracle; The shadow of myself form'd in her eye; Which being but the shadow of your son, Becomes a fon, and makes your fon a shadow.

I do protest, I never lov'd myself Till now infixed I beheld myfelf Drawn in the flatt'ring table of her eye.

Faulconbridge. Drawn in the flatt'ring table of her eye!

Hang'd in the frowning wrinkle of her brow! And quarter'd in her heart! he doth efpy Himself Love's traitor: this is pity now. That hang'd, and drawn, and quarter'd there should be. In fuch a love so vile a lout as he.

King John, act ii. fc. 5.

Passion.

A jingle of words is the lowest species of that low wit, which is scarcely sufferable in any case, and least of all in an heroic poem: and yet Milton in some instances has descended to that puerility:

And brought into the world a world of wo. -Begirth th' Almighty throne Befeeching or befieging-Which tempted our attempt-At one flight bound high overleap'd all bound. -With a shout Loud as from numbers without number.

One should think it unnecessary to enter a caveat against an expression that has no meaning, or no distinct meaning; and yet somewhat of that kind may be found even among good writers.

Sebastian. I beg no pity for this mould'ring clay. For if you give it burial, there it takes Possession of your earth: If burnt and scatter'd in the air; the winds That strow my dust, diffuse my royalty, And spread me o'er your clime; for where one atom Of mine shall light, know there Sebastian reigns. DRYDEN, Don Sebastian King of Portugal, act i.

Cleopatra. Now, what news, my Charmion? Will he be kind? and will he not forfake me? Am I to live or die? nay, do I live? Or am I dead? for when he gave his answer, Fate took the word, and then I liv'd or dy'd. DRYDEN, All for Love, act ii.

If the be cov, and fcorn my noble fire, If her chill heart I cannot move; Why, I'll enjoy the very love, And make a mistress of my own defire. COWLEY, poem inscribed " The Request."

His whole poem inscribed My Picture is a jargon of the same kind.

-'Tis he, they cry, by whom Not men, but war itself is overcome.

Indian Queen.

Such empty expressions are finely ridiculed in the Rehearfal.

Was't not unjust to ravish hence her breath, And in life's stead to leave us nought but death? Act iv. fc. I.

Passions, in Medicine, make one of the non-naturals, and produce very fenfible effects. Joy, anger, and fear, are the principal. In the two first, the spirits are hurried with too great vivacity; whereas, in fear or dread. * See Ora-

tory, No

20.37.

Passion. dread, they are as it were curbed and concentrated whence we may conclude, that they have a very bad effect upon health; and therefore it will be best to keep them within bounds as much as possible, and to preserve an inward ferenity, calmness, and tranquillity.

PASSIONS, in Painting, are the external expressions of the different dispositions and affections of the mind; but particularly their different effects upon the feveral features of the face: for though the arms, and indeed every part of the body *, ferve likewife, by their quick, languid, and variously diversified motions, to express the passions of the foul; yet, in painting, this difference is most conspicuous in the face. See PAINTING, and DRAWING, § 8,

As we have given engravings of Le Brun's drawings of the passions, we shall here subjoin the account which

he has given of each of these heads.

Plates CCCCV. and

1. The effects of attention are, to make the eyebrows fink and approach the fides of the nose; to turn the eyeballs toward the object that causes it; to open the CCCCVI. mouth, and especially the upper part; to decline the head a little, and fix it without any other remarkable al-

2. Admiration causes but little agitation in the mind, and therefore alters but very little the parts of the face; nevertheless the eyebrow rises; the eye opens a little more than ordinary; the eyeball placed equally between the eyelids appears fixed on the object; the mouth half opens, and makes no fensible alteration in the cheeks.

3. The motions that accompany admiration with aftoni/hment are hardly different from those of simple admiration, only they are more lively and stronger marked; the eyebrows more elevated; the eyes more open; the eyeball further from the lower eyelid, and more fleadily fixed: The mouth is more open, and all the parts in a much stronger emotion.

4. Admiration begets esteem, and this produces veneration, which, when it has for its object fomething divine or beyond our comprehension, makes the face decline, and the eyebrows bend down; the eyes are almost shut and fixed: the mouth is shut. These motions are gentle, and produce but little alteration in the other

5. Although rapture has the fame object as veneration, only confidered in a different manner, its motions are not the fame; the head inclines to the left fide; the eyeballs and eyebrows rife directly up; the mouth half opens, and the two corners are also a little turned up: the other parts remain in their natural state.

6. The passion of desire brings the eyebrows close together and forwards toward the eyes, which are more open than ordinary: the eyeball is inflamed, and places itself in the middle of the eye; the nostrils rife up, and are contracted towards the eyes; the mouth half opens, and the fpirits being in motion give a lively glowing

7. Very little alteration is remarked in the face of those that feel within themselves the fweetness of joy, or joy with tranquillity. The forehead is ferene; the eye-brow without motion, elevated in the middle; the eye pretty open and with a laughing air; the eyeball lively and shining; the corners of the mouth turn up a little; the complexion is lively; the cheeks and lips are red.

8. Laughter, which is produced by joy mixed with Passion. furprise, makes the eyebrow rise towards the middle of the eye, and bend towards the fides of the nofe; the eyes are almost shut, and sometimes appear wet, or shed tears, which make no alteration in the face; the mouth half open, shows the teeth; the corners of the mouth drawn back, cause a wrinkle in the cheeks, which appear so swelled as to hide the cyes in some measure; the nostrils are open, and all the face is of a red co-

9. Acute pain makes the eyebrows approach one another, and rife towards the middle; the eyeball is hid under the eyebrows; the nostrils rife and make a wrinkle in the cheeks; the mouth half opens and draws back: all the parts of the face are agitated in proportion to the violence of the pain.

10. Simple bodily pain produces proportionally the fame motions as the last, but not so strong: The eyebrows do not approach and rife fo much; the eyeball appears fixed on some object; the nostrils rise, but the wrinkles in the cheeks are lefs perceivable; the lips are further afunder towards the middle, and the mouth is

11. The dejection that is produced by fadness makes the eyebrows rife towards the middle of the forehead more than towards the cheeks; the eyeball appears full of perturbation; the white of the eye is yellow; the eyelids are drawn down, and a little fwelled; all about the eyes is livid; the noftrils are drawn downward; the mouth is half open, and the corners are drawn down; the head carelessly leaning on one of the shoulders: the

face is of a lead colour; the lips pale.

12. The alterations that weeping occasions are strongly marked: The eyebrows fink down towards the middle of the forehead; the eyes are almost closed, wet, and drawn down towards the cheeks; the nostrils swelled; the muscles and veins of the forehead appear; the mouth is shut, and the sides of it are drawn down, making wrinkles on the cheeks; the under lip pushed out, preffes the upper one : all the face is wrinkled and contracted; its colour is red, especially about the eyebrows, the eyes, the nofe, and the cheeks.

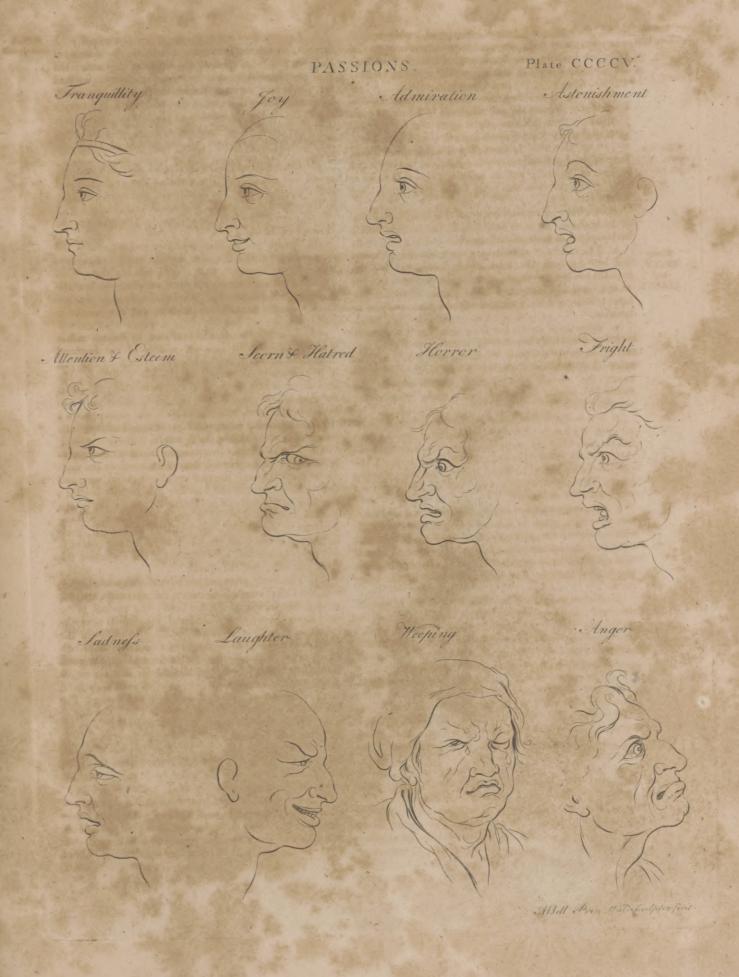
13. The lively attention to the misfortunes of another. which is called compassion, causes the eyebrows to fink towards the middle of the forehead; the eyeball to be fixed upon the object; the fides of the noftrils next the nose to be a little elevated, making wrinkles in the cheeks; the mouth to be open; the upper lip to be lifted up and thrust forwards; the muscles and all the parts of the face finking down and turning towards the object

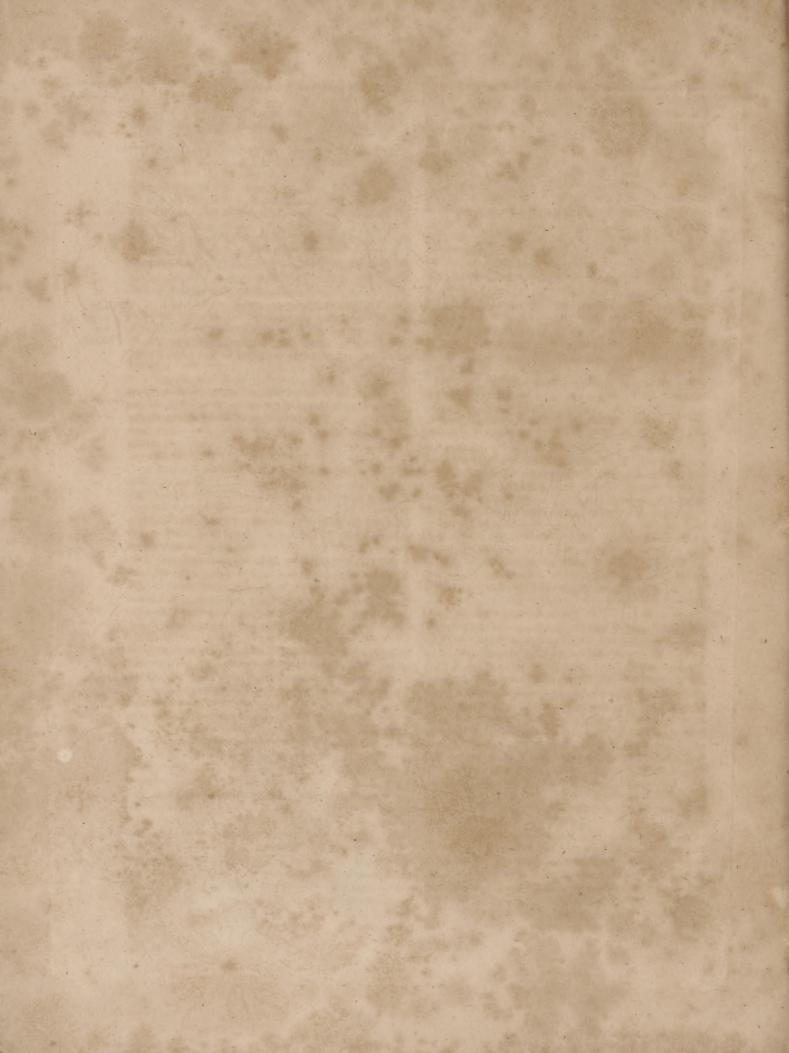
which excites the paffion.

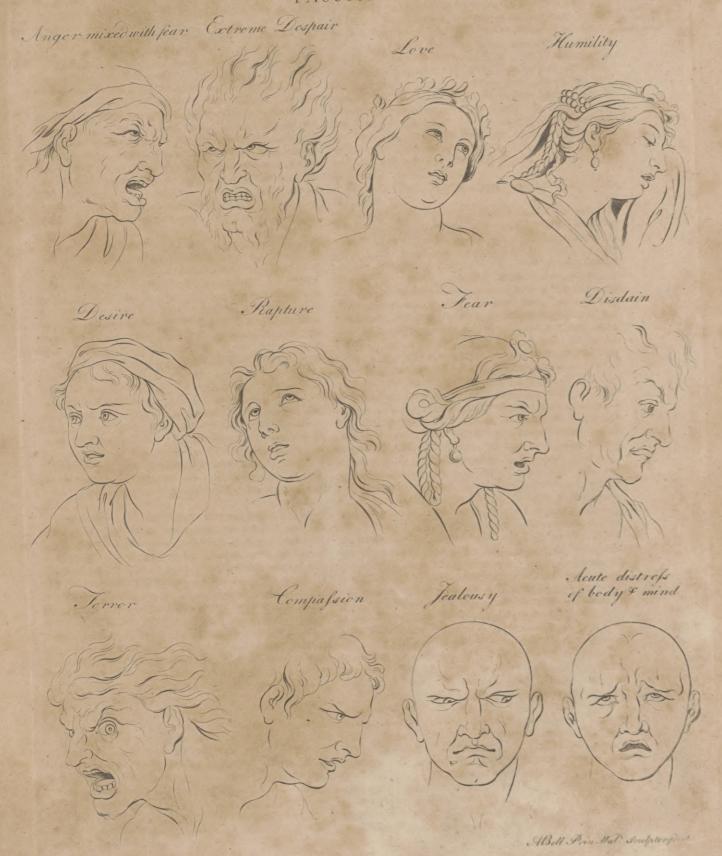
14. The motions of fcorn are lively and strong: The forehead is wrinkled; the eyebrow is knit; the fide of it next the nose finks down, and the other side rises very much; the eye is very open, and the eyeball is in the middle; the nostrils rife, and draw towards the eyes, and make wrinkles in the cheeks; the mouth shuts, its fides finking down, and the under-lip is pushed out beyond the upper one.

15. An object despised sometimes causes horror, and then the eyebrow knits, and finks a great deal more. The eyeball, placed at the bottom of the eye, is half covered by the lower eyelid; the mouth is half open, but closer in the middle than the fides, which being drawn

back.







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back, makes wrinkles in the cheeks; the face grows pale, and the eyes become livid; the muscles and the veins are marked.

16. The violence of terror or fright, alters all the parts of the face; the eyebrow rifes in the middle; its mufcles are marked, fwelled, preffed one againft the other, and funk towards the nofe, which draws up as well as the noftrils; the eyes are very open; the upper eyelid is hid under the eyebrow; the white of the eye is encompaffed with red; the eyeball fixes toward the lower part of the eye; the lower part of the eyelid wells and becomes livid; the mufcles of the nofe and cheeks fwell, and thefe laft terminate in a point toward the fides of the noftrils; the mouth is very open, and its corners very apparent; the mufcles and veins of the neck firetched; the hair flands on end; the colour of the face, that is, the end of the nofe, the lips, the ears, and round the eyes, is pale and livid; and all ought to be flrongly marked.

17. The effects of anger show its nature. The eyes become red and inflamed; the eyeball is staring and sparkling; the eyebrows are sometimes elevated and formetimes sunk down equally: the forehead is very much wrinkled, with wrinkles between the eyes; the nostrils are open and enlarged: the lips preffing against one another, the under one rising over the upper one leaves the corners of the mouth a little open, making a cruel and

disdainful grin.

18. Harred or jealoufy wrinkles the forehead; the eye brows are funk down and knit; the eyeball is half hid under the eyebrows, which turn towards the object; it fhould appear full of fire, as well as the white of the eye and the eyelid; the noftrils are pale, open, more marked than ordinary, and drawn backward fo as to make wrinkles in the cheeks; the mouth is fo flut as to fhow the teeth are clofed; the corners of the mouth are drawn back and very much funk; the muscles of the jaw appear funk; the colour of the face is partly inflamed and partly yellowish; the lips pale or livid.

19. As despair is extreme, its motions are so likewise; the forehead wrinkles from the top to the bottom; the eyebrows bend down over the eyes, and press one another on the sides of the nose; the eye seems to be on sire, and full of blood; the eyeball is disturbed, hid under the eyebrow, sparkling and unfixed; the eyelid is swelled and livid; the nostrils are large, open, and listed up; the end of the nose sinks down; the muscles, tendons, and veins, are swelled and stretched; the upper part of the checks is large, marked, and narrow towards the jaw; the mouth drawn backwards is more open at the sides than in the middle; the lower lip is large and turned out; they gnash their teeth; they soam; they bite their lips, which are pale; as is the rest of the face; the hair is fraight and stands on end.

PASSION-Flower. See Passiflora, Botany In-

PASSION-Week, the week immediately preceding the fellival of Eafter; fo called, because in that week our Saviour's passion and death happened. The Thursday of this week is called Maunday Thursday; the Friday, Good Friday; and the Saturday, the Great Sabbath.

PASSIVE, in general, denotes fomething that suffers the action of another, called an agent or active power.

Vol. XVI. Part I.

is termed a paffive verb: which, in the learned languages, has a peculiar termination; as amor, doceor, &c. in Obedience. Latin; that is an r is added to the actives amo, doceo: and, in the Greek, the inflection is made by changing ω into ομαι; as τυπθω, τυπθομαι, &c. But in the modern languages, the paffive inflection is performed by means of auxiliary verbs, joined to the participle of the paff tenfe; as, "I am praifed," in Latin laudor, and in Greek εναινομαι; or, "I am loved," in Latin amor, and in Greek φικιμαι. Thus it appears that the auxiliary verb am, ferves to form the paffives of English verbs: and the same holds of the French; as, Je fuis loud, "I am praifed;" γ' γ'ai eté loué, "I have been praifed," &c. See GRAMMAR.

PASSIVE Title, in Scots Law. See LAW, Part III.

No clxxx. 30.

PASSIVE Obedience, a political doctrine which has been much mifrepreiented, and is, of courfe, very obnoxious to the friends of freedom. Some nonjurors, in the end of the last and in the beginning of the passing century, imagining that monarchy is the only lawful form of government, and that hereditary monarchy is the only lawful species of that government, have coupled with passive obedience the ridiculous notion of a divine, hereditary, indefeasible right of certain families to govern with despotic sway all other families of the same nation. The absurdity of this notion needs not to be dwelt upon; but it may not be improper, to observe, that it has nothing to do with passive obedience.

As taught by the ablest reasoners, who think that they are supported by the holy scripture, passive obedience is as much a duty under republican as under monarchical governments; and it means no more, but that private individuals are bound by the most folemn moral ties not to refift the fupreme power wherefoever placed in any nation. The fupreme power can only be the legislature; and no man or body of men, who have not the power of enacting and abrogating laws can, on this principle, claim passive obedience from any subject. Whether the principle be well or ill founded, the abfurdity which commonly attaches to the phrase passive obedience, originates from the mistaken loyalty of the adherents of the house of Stuart, who to aggravate the illegality of the revolution, were wont to represent James II. as supreme over both houses of parliament, and of course over all law. That such reveries were foolish, we need no farther evidence than the statutebook, which shows, that in the office of legislation, the king, lords, and commons, are co-ordinate; and that when any one of these powers shall take upon itself to counterast the other two, the duty of passive obedience will oblige the fubject to support the legislature. That relistance to the legislature, if lawful on any occasion, can be so only to oppose the most violent tyranny, has been shown by Mr Hume with great cogency of argument, and is indeed a proposition felf-evident. That it can never be lawful on any occasion, Bishop Berkeley endeavoured to prove by a chain of reasoning which it would be difficult to break. We enter not into the controversy, but refer our readers to Hume's Effays and Berkeley's Passive Obedience and Nonresistance, or, as it was intitled by a late editor, The Meafure of Submission to Civil Government. We shall only observe, that there is a great difference between

Passive active and passive obedience; and that many who con-Obedience fider themselves as bound on no account whatever to re-Pastover. fist the supreme power, would yet suffer death rather than do an immoral action in obedience to any law of

earthly origin.

PASSIVE Prayer, among the mystic divines, is a total fulpension or ligature of the intellectual facultics; in virtue whereof, the foul remains of itself, and as to its own power, impotent with regard to the producing of any effects. The passive state, according to Fenelon, is only passive in the same sense as contemplation is, i. e. it does not exclude peaceable, difinterested acts, but only unquiet ones, or fuch as tend to our own interest. the passive state, the foul has not properly any activity, and fensation, of its own: it is a mere infinite flexibility of the foul, to which the feeblest impulse of grace gives

PASSOVER, a folemn festival of the Jews, institurted in commemoration of their coming out of Egypt; because the night before their departure, the destroying angel, who put to death the first born of the Egyptians, waffed over the houses of the Hebrews without entering therein, because they were marked with the blood of the lamb which was killed the evening before, and which for this reason was called the paschal lamb. This feast was called pascha by the old Greeks and Romans; not we presume from πατχω " I fuffer," as Chrysostom, Irenæus, and Tertullian, fuppose, lat from the Hebreau word pefah, paffage, leap. The following is what God ordained concerning the passover of the Jews, (Exod. xii.). The month of the coming forth from Egypt was looked upon from this time to be the first month of the facred or ecclefiastical year, and the fourteenth day of this month, between the two vespers, that is, between the fun's decline and his fetting : or rather, according to our manner of reckoning, between two o'clock in the afternoon and fix o'clock in the evening at the equinox, they were to kill the paichal lamb, and to abstain from leavened bread. The day following being the fifteenth, counting from fix o'clock of the foregoing evening, which concluded the fourteenth, was the grand feast of the passover, which continued seven days. But it was only the first and the seventh day that were solemn. The lamb that was killed ought to be without any defect, a male, and yeaned that year. If no lamb could be found, they might take a kid. They killed a lamb or a kid in every family; and if the number of those that lived in the house was not sufficient to eat a lamb, they might join two houses together. With the blood of the paschal lamb they sprinkled the door-posts and lintel of every house, that the destroying angel, at the fight of the blood, might pass over them, and save the Hebrew children. They were to eat the lamb the fame night that followed the facrifice; they ate it roafted, with unleavened bread, and a falad of wild lettuce. The Hebrew fays literally, with bitter things, as suppose mustard, or any thing of this nature to give a relish. It was forbid to eat any part of it raw, or boiled in water, nor were they to break a bone, (Exod. vii. 46. Numb. ix. 12. John xix. 36.); and if any thing remained to the day following, it was thrown into the fire. They that ate it were to be in the posture of travellers, having their reins girt, their shoes on their feet, their staves in their hands, and eating in a hurry. But this last part of the ecremony was but little observed, at least it was

of no obligation, but only upon that night they came Pafforer. forth out of Egypt. For the whole eight days of the paffover no leavened bread was to be used; and whoever should eat any, was threatened to be cut off from his people. With regard to the ceremonies which are observed in relation to the bread, see the article

They keep the first and last day of the feast, yet so as that it was allowed to drefs victuals, which was forbidden on the Sabbath-day. The obligation of keeping the passover was so strict, that whoever should neglect to do it, was condemned to death, (Numb. ix. 13.). But those who had any lawful impediment, as a journey, fickness, or any uncleanness, voluntary or involuntary; for example, those that had been present at a funeral, or by any other accident had been defiled, were to defer the celebration of the passover till the second month of the ecclefiastical year, or to the fourteenth day of the month Jair, which answers to April and May. It was thus the Lord ordered Moses, upon the occasion of the inquiry of some Israelites, who had been obliged to pay their last offices to some of their relations, and who being thus polluted, were not capable of partaking of the paschal sacrifice, (2 Chr. xxx. 1, 2, &c.) The modern Jews observe in general the same ceremonies that were practifed by their ancestors, in the celebration of the paffover. On the fourteenth of Nifan, the first-born fast in memory of God's fmiting the first-born of the Egyptians. The morning prayers are the same with those said on other festivals. They take the roll of the pentateuch out of the cheft, and read as far as the end of the twelfth chapter of Exodus, and what is contained in the eighteenth chapter of Numbers, relating to the paffover. The matron of the family then spreads a table, and fets on it two unleavened cakes, and two pieces of the lamb, a shoulder boiled and another roasted, to put them in mind that God delivered them with a stretched-out arm. To this they add some small fishes, because of the leviathan; a hard egg, because of the ziz; fome meal, because of the behemoth, (these three animals being appointed for the feast of the elect in the other life); and peas and nuts for the children, to provoke their curiofity to ask the reason of this ceremony. They likewife use a kind of mustard, which has the appearance of mortar, to represent their making bricks in Egypt. The father of the family fits down with his children and flaves, because on this day all are free. Being set down, he takes bitter herbs, and dips them in the mustard, then eats them, and distributes to the rest. Then they eat of the lamb, the history and institution of which is at that time recited by the master of the family. The whole repast is attended with hymns and prayers. They pray for the prince under whose dominion they live, according to the advice of Jeremiah (xxix. 7.), " Seek the peace of the city whither I have caused you to be carried away captives, and pray unto the Lord for it: for in the peace thereof shall ye have peace." See the article FEAST, &c. The fame things are put in practice the two following days; and the festival is concluded by the ceremony habdala or distinction. This ceremony is performed at the closing of the Sabbath-day, at which time the master of the house pronounces certain benedictions, accompanied with certain formalities, requesting that every thing may succeed well the week following. After going out of the fynagogue,

Paffport

Passover, they then eat leavened bread for the last time. (Leo of Paffport. Modena, p. iii. c. 3, and the Rabbins.) While the temple was ftanding, they brought their lambs thither, and facrificed them, offering the blood to the prieft, who poured it out at the foot of the altar. The paffover was typically predictive of Christ our christian passover, (I Cor. v. 7.). As the destroying angel passed over the houses marked with the blood of the paschal lamb, so the wrath of God paffes over them whose fouls are fprinkled with the blood of Christ. The paschal lamb was killed before Ifrael was delivered, fo it is necessary Christ should suffer before we could be redeemed. It was killed before Mofes's law or Aaron's facrifices were enjoined, to show that deliverance comes to mankind by none of them; but only the true passover, that Lamb of God flain from the foundation of the world, (Rom. iii. 25. Heb. ix. 14.). It was killed the first month of the year, which prefigured that Christ should suffer death in this month, (John xviii. 28.). It was killed in the evening, (Exod. xii. 6.). So Christ fuffered in the last days, and at this time of the day, (Matt. xxvii. 46. Heb. i. 2.). At even also the sun sets, which shows that it was the Sun of Righteousness who was to suffer and die, and that at his passion universal darkness should be upon the whole earth, Luke xxiii. 44.). The passover was roafted with fire, to denote the sharp and dreadful pains which Christ should suffer, not only from men, but from God alfo. It was to be eaten with bitter herbs, not only to put them in remembrance of their bitter bondage in Egypt but also to typify our mortification to fin, and readiness to undergo afflictions for Christ, (Col. i. 24.). Many erroneously imagine, that the passover was instituted in memory of the Ifraelites passing the Red Sea; though it is certain the feast was held, and had its name, before the Ifraelites took a step of their way out of E. gypt, and confequently feveral days before their paffing the Red Sea. Besides the passover celebrated on the fourteenth of the first month, there was a second passover held on the fourteenth of the fecond month after the equinox, instituted by God in favour of travellers and fick perfons, who could not attend at the first, nor be at Jerusalem on the day. The Greeks, and even some of the catholic doctors, from the thirteenth, eighteenth, and nineteenth, chapters, of St John, take occasion to conclude, that Jesus anticipated the day marked for the passover in the law; but the authority of three evangelists feems to evince the contrary. See Whitby's Differtation on this subject, in an appendix to the fourteenth chapter of St Mark. F. Lamy supposes, that our Lord did not attend at the paffover the last year of his life; which sentiment has drawn upon him abundance of oppofers. F. Hardouin afferts, that the Galileans celebrated the paffover on one day, and the Jews on another

PASSPORT, or Pass, a licence or writing obtained from a prince or governor, granting permission and a safe conduct to pass through his territories without molestation: Also a permission granted by any state to navigate in some particular sea, without hinderance or molestation from it. It contains the name of the vessel, and that of the mafter, together with her tonnage and the number of her crew, certifying that she belongs to the fubjects of a particular state, and requiring all perfons at peace with that state to suffer her to proceed on her voyage without interruption.

The violation of fafe conducts or paffports expressly granted by the king or by his ambaffadors to the fubjects of a foreign power in time of mutual war, or comnutting acts of hostility against such as are in amity. league, or truce with us, who are here under a general implied fafe-conduct, are breaches of the public faith, without which there can be no intercourse or commerce between one nation and another; and fuch offences may, according to the writers upon the law of nations, be a proper ground of a national war. And it is enacted by the statute 31 Hen. VI. cap. 4. still in force, that if any of the king's fubjects attempt or offend upon the fea, or in any port within the king's obeyfance, or against any stranger in amity, league, or truce, or under fafe-conduct, and especially by attacking his person, or spoiling him, or robbing him of his goods; the lordchancellor, with any of the justices of either the king'sbench or common-pleas, may cause full restitution and amends to be made to the party injured. Pasquier says. that paffport was introduced for paffe-par-tout. Balzac mentions a very honourable paffport given by an emperor to a philosopher in these terms: " If there be any one on land or fea hardy enough to molest Potamon, let him confider whether he be strong enough to wage war with Cæfar."

PASSPORT is used likewise for a licence granted by a prince for the importing or exporting merchandizes, moveables, &c. without paying the duties. Merchants procure such passports for certain kinds of commodities: and they are always given to ambassadors and ministers for their baggage, equipage, &c.

PASSPORT is also a licence obtained for the importing or exporting of merchandizes deemed contraband, and declared fuch by tariffs, &c. as gold, filver, precious stones, ammunition of war, horses, corn, wool, &c. upon paying duties.

PASSUS, among the Romans, a measure of length, being about four feet ten inches, or the thousandth part of a Roman mile. The word properly fignifies, the space betwixt the feet of a man walking at an ordinary rate. See MEASURE.

PASTE, in Cookery, a foft composition of flour, wrought up with proper fluids, as water, milk, or the like, to ferve for cases or cossins, therein to bake meats, fruits, &c. It is the basis or foundation of pyes, tarts, patties, pasties, and other works of pastry. It is also used in confectionary, &c. for a preparation of some fruit, made by beating the pulp thereof with some fluid or other admixture, into a foft pappy confiltence, fpreading it into a dish, and drying it with fugar, till it becomes as pliable as an ordinary paste. It is used occasionally also for making the crusts and bottoms of pyes, &c. Thus, with proper admixtures, are made almond pastes, apple pastes, apricot pastes, cherry, currant, lemon, plum, peach, and pear pastes.

PASTE is likewise used for a preparation of wheaten flour, boiled up and incorporated with water; used by various artificers, as upholfterers, faddlers, bookbinders, &c. instead of glue or fize, to fasten or cement their cloths, leathers, papers, &c. When paste is used by bookbinders, or for paper-hangings to rooms, they mix a fourth, fifth, or fixth, of the weight of the flour of powdered refin; and where it is wanted ftill more tenacious, gum arabic or any kind of fize may be added. Paste may be preserved, by dissolving a little sublimate, in the proportion of a dram to a quart, in the water employed for making it, which will prevent not only rats and mice, but any other kind of vermin and infects, from preying upon it.

PASTES, in the glass trade, or the imitation or coun-

terfeiting of gems in glass; see GEM.

PASTEBOARD, a kind of thick paper, formed of feveral fingle sheets pasted one upon another. The chief use of pasteboard is for binding books, making lettercases, &c. See Paper.

PASTERN of a Horse, in the manege, is the diffance betwirt the joint next the foot and the coronet of the hoof. This part should be short, especially in middle-fized horses; because long pasterns are weak, and cannot so well endure travelling.

PASTERN-Joint, the joint next a horse's foot.

PASTIL, or PASTEL, among painters, a kind of paste made of different colours ground up with gum-water, in order to make CRAYONS.

PASTIL, in *Pharmacy*, is a dry composition of sweetfmelling refins, aromatic woods, &c. sometimes burnt to

clear and fcent the air of a chamber.

PASTIME, a fport, amusement, or diversion. Pastimes of some kind seem to be absolutely necessary, and to none more than to the man of fludy; for the most vigorous mind cannot bear to be always bent. Constant application to one pursuit, if it deeply engage the attention, is apt to unhinge the mind, and to generate madness; of which the Don Quixote of Cervantes, and the aftronomer of Johnson, are two admirably conceived instances. But though pastime is necessary to relieve the mind, it indicates great frivolity when made the business of life; and yet the rich and the great, who are not obliged to labour for the means of subfistence, too often rove from pastime to pastime with as constant assiduity as the mechanic toils for his family, or as the philosopher devotes himself to the cultivation of science. When those pastimes tend to give elasticity to the mind or ftrength to the body, fuch conduct is not only allowable, but praife-worthy; but when they produce effects the reverse of these, it is both hurtful and criminal. The gaming-table, the masquerade, the midnight assembly of any fort, must of necessity enfeeble both the body and the mind; and yet fuch are the fashionable amusements of the present day, to which many a belle and many a beau facrifice their beauty, their health, their quiet, and their virtue.

Far different were the pastimes of our wifer ancestors: Remote from vice and esseminacy, they were innocent,

manly, and generous exercifes. From the ancient re- Pattime. cords of this country, it appears, that the sports, amusements, pleafures, and recreations, of our ancestors, as defcribed by Fitz-Stephen (A), added ftrength and agility to the wheels of state mechanism, while they had a direct tendency towards utility. For most of these ancient recreations are refolvable into the public defence of the state against the attacks of a foreign enemy. The play at ball, derived from the Romans, is first introduced by this author as the common exercise of every school-boy. The performance was in a field, where the refort of the most substantial and considerable citizens, to give encouragement and countenance to this feat of agility, was fplendid and numerous. The intention of this amusement at this period of time was to make the juvenile race active, nimble, and vigorous; which qualities were requifite whenever their affiftance should be wanted in the protection of their country. The next species of pastime indeed does not seem to have this tendency; but it was only, as it feems, an annual custom: This was cock-fighting. The author tells us, that in the afternoon of Shrove-Tuesday, on which day this custom prevailed, they concluded the day in throwing the ball: which feems to infinuate, that the cock-fighting was merely in conformity to ancient ufage, and limited only to part of the day, to make way for a more laudable performance. We may reasonably suppose, although this author is entirely filent upon this head, that while cockfighting was going on, cock-throwing was the fport of the lowest class of people, who could not afford the expence of the former (B). Another species of manly exercife was truly martial, and intended to qualify the adventurers for martial discipline. It is related by Fitz-Stephen thus: " Every Friday in Lent, a company of young men comes into the field on horseback, attended and conducted by the best horsemen: then march forth the fons of the citizens, and other young men, with difarmed lances and shields; and there practife feats of war. Many courtiers likewife, when the king is near the fpot, and attendants upon noblemen, do repair to these exercises; and while the hope of victory does inflame their minds, they show by good proof how serviceable they would be in martial affairs." This evidently is of Roman descent, and immediately brings to our recollection the Ludus Trojæ, supposed to be the invention, as it was the common exercise of, Ascanius. The common people, in this age of masculine manners, made every amusement where strength was exerted the subject-matter of instruction and improvement: instructed

(A) Otherwise called William Stephanides, a monk of Canterbury, who lived in the reign of King Stephen to the time of Richard I. He wrote a Latin treatise, in which he gives an account of the leveral patimes which were countenanced in his time. Bale in his writings draws a pleasing portrait of him. He is likewise sketched in strong and forcible outlines of praise and commendation by Leland. Bale says thus of him: "The time which other people usually misemployed in an idle and frivolous manner, he consecrated to inquiries which tended to inverse the fame and dignity of his country: in doing which, he was not unworthy of being compared to Plato; for like him, he made the study of men and heaven his constant exercise."

(B) There were places fet apart for the battles of these animals, as at this day, where no one was admitted without money. These places, or pits commonly called, were schools, as at this day, in which people were instructed in the doctrines of chance, loss and gain, betting and wagers, and particularly in the liberal art of laying two to one. Cock-throwing has been laudably abolished; for it was a species of cruelty towards an innocent and useful animal; and such a cruelty as would have kindled compassion in the heart of the rankess.

barbarian.

Pastime. instructed to exert their bodily strength in the mainte- upright post firmly fixed in the ground, upon the top of Pastime. nance of their country's rights; and their minds improved by fuch exertion, into every manly and generous principle.

In the vacant intervals of industry and labour, commonly called the holy-days, indolence and inactivity, which at this day mark this portion of time, were found only in those whose lives were distempered with age or infirmity. The view which Fitz-Stephen gives us of the Easter holydays is animated. "In Easter holydays they fight battles upon the water. A shield is hanged upon a pole, fixed in the middle of the stream. A boat is prepared without oars, to be borne along by the violence of the water; and in the forepart thereof standeth a young man, ready to give charge upon the shield with his lance. If fo be that he break his lance against the shield, and doth not fall, he is thought to have performed a worthy deed. If without breaking his lance he runs strongly against the shield, down he falleth into the water; for the boat is violently forced with the tide: but on each fide of the shield ride two boats, furnished with young men, who recover him who falleth foon as they may. In the holydays all the fummer the youths are exercised in leaping, dancing, shooting, wrestling, casting the stone, and practifing their shields; and the maidens trip with their timbrels, and dance as long as they can well see. In winter, every holyday before dinner, the boars prepared for brawn are fet to fight, or elfe bulls or bears are baited."

These were the laudable pursuits to which leisure was devoted by our forefathers, fo far back as the year 1130. Their immediate fuccessors breathed the same generous fpirit. In the year 1222, the fixth year of Henry III. we find, that certain masters in exercises of this kind made a public profession of their instructions and discipline, which they imparted to those who were defirous of attaining excellence and victory in these honourable atchievements. About this period, the perions of better rank and family introduced the play of Tennis (c); and erected courts or oblong edifices for the performance of

About the year 1253, in the 38th year of Henry III. the Quintan was a sport much in fashion in almost every part of the kingdom. This contrivance confifted of an which was a cross piece of wood, moveable upon a spindle; one end of which was broad like the flat part of a halberd, while at the other end was hung a bag of fand. The exercise was performed on horseback. The mafferly performance was, when, upon the broad part being struck with a lance, which sometimes broke it, the affailant rode fwiftly on, fo as to avoid being ftruck on the back by the bag of fand, which turned round infantly upon the stroke given with a very swift motion. He who executed this feat in the most dexterous manner was declared victor, and the prize to which he became intitled was a peacock. But if, upon the aim taken, the contender miscarried in striking at the broadfide, his

impotency of skill became the ridicule and contempt of the fpectators.

Dr Plott, in his Natural History of Oxfordshire, tells us, that this pastime was in practice in his time at Ded-dington in this county. "They first (fays this author) fixed a post perpendicularly in the ground, and then placed a small piece of timber upon the top of it, fastened on a spindle, with a board nailed to it on one end, and a bag of fand hanging at the other. Against this board they anciently rode with spears: now as I saw it at Deddington only with strong staves, which violently bringing about the bag of fand, if they make not good fpeed away, it strikes them in the neck or shoulders. and fometimes perhaps strikes them down from their horses; the great defign of the sport being to try the agility both of man and horse, and to break the board; which, whoever did, was accounted conqueror: for whom heretofore there was fome reward always appointed." (D)

Matthew Paris, speaking of this manly diversion, says, "The London youths made trial of their strength on horseback, by running at the Quintan; in doing which, whoever excelled all the rest was rewarded with a peacock." This fport is continued to this day in Wales; and being in use only upon marriages, it may be considered as a votive pastime, by which these heroic spirits seem to wish, that the male issue of such marriage may be as ftrong, vigorous, and active, as those who are at that time engaged in the celebration of this festive exertion of manhood. Virtuous exercises of this kind

(c) The word *Tennis* feems to owe its original to the French language: if fo, the game is of French produc-m. Yet the word *tenes* will hardly be found to afford incontrovertible evidence upon this subject. For the holding or keeping possession of the ball is no part of the game, but rather a circumstance casually attending it : fince, during the performance of it the ball is in continual motton, so there can be no tenez at this juncture. Perhaps a place in France called Tennois (as there is a town which differs only in a letter, called Sennois, in the diftrict of Champagne) was the place where the balls were first made, and the game first introduced.

(D) This was certainly an exercise derived from a military institution of the Romans, though not instrumentally the fame: Whoever confiders the form and disposition of the Roman camps, which were formed into a square figure, will find there were four principal gates or passages. Near the Quastorium, or Quastor's apartment, was the Forum, or what is now called a futtling-house, and from being near the Quæstor's station called Quæstorium forum. At this part was a fifth gate Quintana, where the foldiers were inftructed in the discipline of the Palaria, which was to aim at and strike their javelins against an upright post fixed in the ground, as a kind of prolusion to a real engagement with ae enemy. By the frequent practice of this exercise, sometimes called exercitium ad palum by Roman writers, the foldiers at length acquired not only a dexterity and address in the management of their arms, but a constant and regular exactness in the direction of them. Titus Livius Patavinus, cap. 2. Pancirollus Rerum Memoral, lib. ii. tit. 21. Vulturius in Augustanis Monumentis. lib. li. p. 237.

Upon the irruption of the Istri into the Roman camps, which they plundered, fays Livius, ad Quafforium forum-

quintanamque pervenerunt.

Pastime. would be too rude and barbarous for the attendants on pleasure in the present age. The hand would tremble at the weight of the javelin; and the heart would pant upon the apprehension of personal insecurity. While these exertions of triumphant prowess continued, the fordid degeneracy of disposition, the supple baseness of temper, were unknown: for the love of country, as the Roman orator has wifely observed, included all other virtues. But if we guard the palace of honour, like the brazen castle of Danaë, with every possible security, importunate corruption will be ever waiting at the gate, to seize an opportunity of intrusion. These feats of honourable contest were succeeded by the gilded banners of exhibition, and all the long train of dependents in the interest of indolence: for the writers of these times inform us, that the fost pleasures of the stage forced the passes to public favour in the year 1391, and likewise in the year 1409; so that utility, which before stood on the right hand of pleasure, was now ordered to withdraw for a feafon. The drama, it feems, was attempted by a fet of useless and infignificant persons called parishclerks; who, because they had the knowledge of the alphabet, ignorantly prefumed that this included every other species of knowledge. The subject was truly serious, the creation of the world; but the performance must have been ludicrous. It was, however, honoured with the attendance of noble personages; and royalty itself deigned to cast a favourable eye upon it, for the king and queen were present. These interludes lasted no longer than the time requisite for the former confederacy of utility and pleasure to resume its powers; as when the pliable bow by being too much bent is put out of shape, and by its elasticity recovers its former position. The lance, the shield, the ball, and the equestrian procession, came forward again, and put the dramatic usurper to flight. After this period, these objects of generous pleasure seem to have had their audience of leave, and one general object, indeed no less manly than the former, to have filled their flations, which was archery. This had a continuance to the reign of Charles I. for we find in many hospitals founded in that reign among the articles of benefaction recorded upon their walls, this fingular provision, arms for the boys, which fignified bows and arrows.

There are many places at this day, formerly reforted to, for the practice of this noble art, distinguished by appellations which indicate their ancient usage: fuch as Brentford Butts, Newington Butts, and many others of the like denomination. It appears from 33 Hen. VIII. that by the intrusion of other pernicious games, archery had been for a long time difused; to revive which this statute was made. It seems that the bows of the best kind were made of yew; and that this wood might be Passime. readily obtained for this purpose, yew-trees were planted in churchyards. The fons of those only who were perfons of fortune and fashion, if under 17 years of age, were permitted to use such bows. The words of the statute are singular, and ran thus: "No person under feventeen years, except he, or his father or mother, have lands or tenements to the yearly value of ten pounds, or be worth in value or moveables the fum of forty marks sterling, shall shoot with any bow of yew, which shall be bought for him, after the feast of our Lady next coming, under the pain to lose and forfeit fix shillings and eightpence." Two observations arise here upon these words. One, that the yew-wood, not being so common as other wood, might probably be soon found deficient, as it was the best wood for making bows, if not restrained in the use of it to particular ages and perfons, as young people wantonly destroy what is put into their hands for useful purposes. The other observation is, that the age of 17 is by this statute distinguished as the age of discretion, when young people are more attentive and considerate in things of private concern; an age in these times which few ever arrive at, and some never. This statute makes provision of other kinds of wood for the common people in the following manner: "To the intent that every person may have bows of mean price, be it enacted, that every bowyer shall, for every bow that he maketh of yew, make four other bows, meet to shoot with, of elm, witch hafill, ash, or other wood apt for the same, under pain to lose and forfeit for every fuch bow fo lacking the fum of three shillings and fourpence." It feems there was a species of yew at this time called elk, which wood was stronger and more pliant than the common yew mentioned in this statute, and the price of it fixed. "Moreover, no bowyer shall fell or put to fale to any of the king's subjects, any bow of yew of the tax called elk, above the price of three shillings and fourpence, under the pain to forfeit twenty shillings for every bow fold above the faid price."

From these several considerations which occur in this statute, we can trace three resplendent qualities, courage, strength, and agility; which three united, inspired to more, generosity and magnanimity. Upon the decline of this and other polished (E) amusements, a favage deformity of manners fprung up, but spangled here and there with the opposite character of lazy opulence, which began now to erect her velvet standard in defiance of chaste and regular manners.

Towards the beginning of James I.'s reign, military prowess seems to have founded a retreat (F). He, to gratify the importunity of the common people, and at

(F) It has been confidently afferted by fome historians, that James was, during his whole life, struck with terror upon the fight of a drawn fword; which was the reason of his great unwillingness in bestowing the honour of knighthood.

⁽E) How widely different the conceptions of politeness at this day from what they were in the most refined ages of Greece and Rome! These two states agreed in fixing the standard of this accomplishment upon the sitness and propriety of things. We bend to an arbitrary imposture of language, trusting to the fense and meaning of our opposite Gallic neighbours, as if this island was at all times to be the foot-ball of that continent. To define politenels in its ancient and true fense, it is a manly exertion of conduct, founded upon every noble and virtuous principle. Gallic politeness is an effeminate impotence of demeanor, founded upon fallacy, evasion, and every infidious artifice. There can be no fecurity, no happiness, no prosperity, awaiting this kingdom, so long as we fawn to fashions that disgrace humanity, and to manners which confist of more than Punic perfidy.

Pastime, the same time to obviate his own fears upon a refusal, Pastinaca. published a book of sports, in which the people had been some time before usually indulged on Sunday evenings, but which had been lately prohibited. Thefe sports confifted of dancing, finging, wreftling, church ales, and

other profanations of that day.

Charles, his fucceffor, wifely, in the very entrance of his reign, abolished these sports. The act of Charles states the feveral amusements in part; by which we may conjecture what was the remainder as stated in the book of sports by James. It is necessary to transcribe that part of the act relating to this subject. " Forasmuch as there is nothing more acceptable to God, than the true and fincere worship of Him, and fervice according to His holy will, and that the holy keeping of the Lord's day is a principal part of the fervice of God, which in many places of this realm hath been, and now is, prophaned and neglected by a diforderly fort of people, in exercifing and frequenting bear-baiting, bull-baiting, interludes, and common-plays, and other unlawful exercises and pastimes, neglecting divine fervice both in their own parishes and elsewhere: Be it enacted, that from and after forty days next after the end of this fession of parliament, there shall be no meetings, assemblies, or concourse of people, out of their own parishes, on the Lord's day, within this realm of England, or any the dominions thereof, for any sports or pastimes whatsoever: nor any bear-baiting, bull-baiting, interludes, common plays, or other unlawful exercises or pastimes, used by any person or persons within their own parishes: and that every person and persons offending in any of the faid premises, shall forfeit for every offence the fum of three shillings and fourpence; the same to be employed and converted to the use of the poor of the parish where such offence shall be committed." All this was perhaps proper, and showed the distinguished piety of this unfortunate monarch. But in this age likewife ended the manly sports of Britons, and nothing was introduced that could compensate for the loss

All these lusory arts, considered as vehicles of pleafure, from the variety of their inventions, represent pleafure as a fleeting phantom: evincing at the same time the stability of happiness as springing from internal order. Even reflex acts, pregnant with future hopes of folace and focial recreation, have more true feelings in expectancy than those which arise from the object in possession. Nay, pleasure is found frequently in the imagination only: for Ixion's difappointment frequently awaits us when we advance to embrace this Juno of

our defires.

Upon the whole, happiness, the only thing of intrinsic value, must arise in the heart, and be something more folid than what mere amusement can possibly supply. Amusements or pastimes ought to be considered only as necessary relaxations from severer and more useful employment; and in this point of view they may be folely purfued; but they become criminal when they occupy the place of the business of life.

PASTINACA, the PARSNEP, a genus of plants

belonging to the pentandria class; and in the natural Pastinaca method ranking under the 45th order, Umbellatæ. See

Patæci.

PASTOPHORI, among the ancients, were priests whose office it was to carry the images, along with the fhrines of the gods, at folemn festivals, when they were to pray to them for rain, fair weather, or the like. Greeks had a college of this order of priests in Sylla's time. The cells or apartments near the temples, where the pastophori lived, were called pastophoria. There were several lodging rooms for the priests of a similar kind in the temple of Jerusalem.

PASTORAL, in general, fomething that relates to shepherds: hence we say, pastoral life, manners,

poetry, &c.

Paltoral life may be confidered in three different Blair's views; either fuch as it now actually is; when the Lectures state of shepherds is reduced to be a mean, fervile, and vol. iii. laborious state; when their employments are become p. 117. difagreeable, and their ideas gross and low; or such as we may suppose it once to have been, in the more early and fimple ages, when it was a life of eafe and abundance; when the wealth of men confifted chiefly in flocks and herds, and the shepherd, though unrefined in his manners, was respectable in his state: or, lastly, such as it never was, and never can in reality be, when, to the eafe, innocence, and fimplicity of the early ages, we attempt to add the polified taffe, and cultivated manners of modern times. Of these three states, the first is too gross and mean, the last too refined and unnatural, to be made the groundwork of pastoral poetry. Either of these extremes is a rock upon which the poet will split, if he approach too near it. We will be disgusted if he give us too much of the servile employments and low ideas of actual peafants, as Theocritus is cenfured for having fometimes done; and if, like some of the French and Italian writers of passorals he make his shepherds discourse as if they were courtiers and scholars, he then retains the name only, but wants the spirit of pastoral poetry.

PASTORAL Poetry. See POETRY, Part II. fect. 4. PASTRY, that branch of cookery which is chiefly taken up in making pies, pasties, cakes, &c. See PASTE.

Dr Cullen observes, that paste is very hard and indigestible without butter; and even with it, is apt to produce heartburn and acescency. Perhaps this is increafed by the burned butter, from a certain fensibility in the stomach, which occasions all empyreumatic oils to be long retained, and fo produce acidity.

PASTURE, or PASTURE Land, is that referved for

feeding cattle. See AGRICULTURE Index.

PATÆCI, in Mythology, images of gods which the Phænicians carried on the prows of their gallies. Herodotus, lib. iv. calls them malwinou. The word is Phoenician, and derived from pethica, i. e. titulus. See Bocchart's Chanaan, lib. ii. cap. 3. But Scaliger does not agree. Morin derives it from midanos, monkey, this animal having been an object of worship among the Egyptians, and hence might have been honoured by their

knighthood. For at this juncture, he had fuch a tremor upon him, that instead of laying the sword upon the shoulder of the person to be knighted, he frequently would be observed almost to thrust the point of it into the face of the party : which occasioned those about him to affift him in the direction of his hand.

Patæi, their neighbours. Mr Elsner has observed, that He-Patagonia rodotus does not call the patæci gods; but that they obtained this dignity from the liberality of Helychius and Suidas, and other ancient lexicographers, who place them at the stern of ships; whereas Herodotus placed them at the prow. Scaliger, Bochart, and Selden, have taken some pains about this subject .- M. Morin has also given us a learned differtation on this head in the Memoires de l'Acad. des Inscript. et Belles Lettres, tom. i.; but Mr Elsner thinks it defective in point of evidence.

PATAGONIA, a country of South America, comprehending all that country extending from Chili and Paraguay to the utmost extremity of South America; that is, from 35° almost to 54° of latitude: being surrounded by the countries just mentioned, the South and North feas, and the straits of Magellan, which separate it from the island called Terra del Fuego, and extend about 116 leagues in length from sea to sea, but only from half a league to three or four in breadth.

This country had the name of Terra Magellanica, from Ferdinand Magellan, a Portuguese officer in the fervice of the Catholic king, who is reported to have failed through the straits that also bear his name, from the North to the South sea, in the year 1519.

The lofty mountains of the Andes, which are covered with fnow a great part of the year, traverfing the country from north to fouth, the air is faid to be much colder than in the north under the same parallels of latitude. Towards the north, it is faid to be covered with wood, and stored with an inexhaustible fund of large timber; whereas, to the fouthward, not fo much as a fingle tree fit for any mechanical purpose is to be feen: yet there is good pasture, and incredible numbers of wild horned cattle and horses, which were first brought hither by the Spaniards, and have increased amazingly. Fresh water, we are told by some writers, is very scarce; but if that were really the case, it is difficult to conceive how the prefent inhabitants and fuch multitudes of cattle could fubfift. The east coast is mostly low land, with few or no good harbours: one of the best is Port St Julian.

Patagonia is inhabited by a variety of Indian tribes; as the Patagons, from which the country takes its names; the Pampas, the Cossares, &c. of whom we know very little. Only it appears, from the accounts of former voyagers, lately confirmed by Commodore Byron and his crew, and the testimonies of other navigators, that some of them are of a gigantic stature, and clothed with skins; but it would feem that there are others who go almost quite naked, notwithstanding the inclemency of the climate. Some of them also, that live about the straits, if we may credit the navigators who have passed that way into the South sea, are perfect favages: but those with whom Commodore Byron and his people conversed, are represented as of a more gentle, humane disposition; only, like other savages, they live on fish and game, and the spontaneous productions of the earth.

The Spaniards once built a fort upon the straits, and left a garrison in it, to prevent any other European nation paffing that way into the South sea: but most of the men perished by famine, whence the place obtained the name of Port Famine; and no people have attempted to plant colonies here ever fince.

About the middle of the strait is a promontory called Patagonia. Cape Froisard, which is the most southerly on the continent of South America.

On the coasts of Patagonia lie a great number of islands, or clusters of islands. On the west coasts are the islands Madre de Dios, Santa Trinidad, Santa Cruz, the isles of the Chunians and Huillans, the Sarmientos, and many others; to the number of 80 in all, as some fay. Of those on the fouth coast, the most considerable are Terra del Fuego, and Staten Land. See thefe

A vast deal has been said respecting the stature of the Patagonians, by people of different nations, and on vari-We shall insert the following letter from Mr Charles Clarke, who was on board Byron's ship in

1764, and gave this account to Dr Maty.
"We had not got above 10 or 12 leagues into the straits of Magellan, from the Atlantic ocean, before we faw feveral people, some on horseback, some on foot, upon the north shore (continent), and with the help of our glaffes could perceive them beckoning to us to come on shore, and at the same time observed to each other, that they feemed to be of an extraordinary fize: However, we continued to stand on, and should have passed without taking the least farther notice of them, could we have proceeded; but our breeze dying away, and the tide making against us, we were obliged to anchor; when the Commodore ordered his boat of 12 oars, and another of fix, to be hoisted out, manned, and armed. In the first went the Commodore, in the other Mr Cummins our first lieutenant, and myself. At our first leaving the ship, their number did not exceed 40; but as we approached the shore, we perceived them pouring down from all quarters, fome galloping, others running, all making use of their utmost expedition. They collected themselves into a body just at the place we steered off for. When we had got within 12 or 14 yards of the beach, we found it a disagreeable flat shore, with very large stones, which we apprehended would injure the boats; so looked at two or three different places to find the most convenient for landing. They supposed we deferred coming on shore through apprehensions of danger from them; upon which they all threw open the skins which were over their shoulders, which was the only clothing they had, and consequently the only thing they could fecret any kind of arms with, and many of them lay down close to the water's edge .- The commodore made a motion for them to go a little way from the water, that we might have room to land, which they immediately complied with, and withdrew 30 or 40 yards; we then landed, and formed each man with his musket, in case any violence should be offered. As soon as we were formed, the commodore went from us to them, then at about 20 yards diffance: they feemed vaftly happy at his going among them, immediately gathered round him, and made a rude kind of noise, which I believe was their method of finging, as their countenances bespoke it a species of jollity. The commodore then made a motion to them to fit down, which they did in a circle, with him in the middle, when Mr Byron took fome beads and ribbons, which he had brought for that purpose, and tied about the women's necks, with which they feemed infinitely pleafed. We were struck with the greatest astonishment at the fight of people of fuch a gigantic flature, notwithstanding our

Patagonia. previous notice with glasses from the ship. Their body was increased, by the time we got in there, to the number of 500, men, women, and children. The men and women both rode in the same manner; the women had a kind of belt to close their skins round the waist, which the men had not, as theirs were only flung over their shoulders, and tied with two little slips, cut from the Ikin, round the neck. At the time of the commodore's motica for them to retire farther up the beach, they all difmounted, and turned their horses loose, which were gentle, and stood very quietly. The commodore having disposed of all his presents, and satisfied his curiofity, thought proper to retire; but they were vaftly anxious to have him go up into the country to eat with them. That they wanted him to go with them to eat, we could very well understand by their motions, but their language was wholly unintelligible to us .--There was a very great smoke to which they pointed about a mile from us, where there must have been several fires; but some intervening hills prevented our feeing any thing but the fmoke. The commodore returned the compliment, by inviting them on board the ship; but they would not favour him with their company; fo we embarked, and returned to the ship. We were with them near two hours at noon-day within a very few yards, though none had the honour of shaking hands but Mr Byron and Mr Cummins; however, we were near enough, and long enough with them, to convince our fenses, so far as not to be cavilled out of the very existence of those senses at that time, which some of our countrymen and friends would absolutely attempt to do. They are of a copper colour, with long black hair; and fome of them are certainly nine feet, if they do not exceed it. The commodore, who is very near fix feet, could but just reach the top of one of their heads, which he attempted on tip-toes, and there were feveral taller than the person on whom the experiment was tried. They are prodigious ftout, and as well and as proportionally made as ever I faw people in my life. That they have some kind of arms among them, is, I think, indisputable, from their taking methods to convince us they had none at that time about them. The women, I think, bear much the fame proportion to the men as our Europeans do; there was hardly a man there less than eight feet, most of them considerably more. The women, I believe, run from feven and a half to eight feet .- Their horses were stout and bony, but not remarkably tall; they are, in my opinion, from 15 to 15 1/2 hands. They had a great number of dogs, about the fize of a middling pointer, with a fox nofe. They continued on the beach till we got under way, which was two hours after we got on board. I believe they had some expectations of our returning again; but as foon as they faw us getting off, they betook themselves to the country.

"The country of Patagonia is rather hilly, though not remarkably fo. Vou have here and there a ridge of hills, but no very high ones. We lay some time at Port Defire, which is not a great way to the northward of the straits, where we traversed the country many miles round. We found fire-brands in different places, which convinced us there had been people, and we suppose them to have been the Patagonians. The foil is fandy, produces nothing but a coarse harsh grass, and a few fmall shrubs, of which Sir John Narborough remark-

Vol. XVI. Part I.

ed, he could not find one of fize enough to make the Patagonia. helve of a hatchet; which observation we found very just. It was some time in the winter we made this visit to our gigantic friends. I am debarred being fo particular as I could with, from the lofs of my journals, which were demanded by their lordships of the admiralty im-

mediately upon our return."

That the whole of this account is true, we cannot affert; but that the writer has been misled in some respects, and miniformed with regard to some of his facts, is at least probable: for Captain Wallis, who went out to the straits of Magellan after Byron's return, gives a different turn to many of the observations; and with respect to the stature of the people, he differs very materially. We shall give the following epitome of his remarks on what occurred to him.-He had three ships with him, which entered the straits on the 16th December 1766, and came to an anchor in a bay fouth of Cape Virgin Mary, where they were immediately accoiled by a whole troop of Patagonians, who made figns for them to come on shore. The captain, having made previous dispositions for the security of his men in case of an attack, manned all the boats belonging to the three ships, and with a party of marines landed on the beach where those giants had affembled. The commanders of the three ships, and most of their officers, were of this party. On their leaping ashore, the Indians seemed to welcome them; and being by figns defired to retreat, they all fell back, and made room for the marines to form. When they were drawn up, Captain Wallis advanced, and by figns directed the Indians to feat themselves in a semicircle, which they readily understood and obeyed. He then distributed among them knives, feiflars, buttons, beads, combs, and particularly ribbons, with which he complimented the women, who received them with a mixture of pleasure and respect. He then gave them to understand that he had still more valuable articles to beflow, and showed them axes and bill-hooks; but, at the same time, pointed to some guanicoes and offriches, intimating that he expected some of those in return: but they either did not, or would not, understand him; fo that no traffic took place.

The whole company that were affembled on this occafion, had each a horse, with a saddle and bridle. The faddle had a fort of stirrups, and the bridle was made of thongs of leather very well put together, for the purpose of guiding the horses. The women, as well as the men, rode aftride. The men, in general, wore each a wooden spur: but one of them had a large pair of Spanish spurs, brass stirrups, and a Spanish scimitar. Their horses were nimble and spirited, but small in proportion to their riders, feemingly not above 14 hands high. Their dogs were of the Spanish breed. The captain, having purpofely provided himself with measuring rods, found that the tallest man among them measured only fix feet feven inches high; feveral were within an inch or two as tall; but the ordinary fize was from five feet ten inches to fix feet. It is pity that none of our voyagers thought of measuring the whole fize of one of those gigantic men. They tell us, indeed, that they are well made, that they are proportionally large, and that they are robust and bony; but they give us no criterion to judge of their bulk, nor one instance of their extraordinary strength. As they are represented not only

peaceable,

Patagonia peaceable, but remarkably tractable, fome trials might have been made of the weight they could have lifted, and how much they could exceed in that respect the strongest man in the ships. This, in a great measure, would have determined the point, which is yet left doubtful by the different relations that are given by the different voyagers who have feen thefe people, no two of them agreeing in the same description. All agree, however, that their hair is black, and harsh like bruilles; that they are of a dark copper colour, and that their features are rather bandsome than ugly; that they clothe themselves decently with the skins of guanicoes; that they paint themselves variously; and there is reafon to suspect, that by that variety they distinguish their tribes. Those feen by Commodore Byron were painted round both eyes, no two of them alike; those seen by Captain Wallis had only a red circle round the left eye; and those feen by Bougainville had no circle round the eyes, but had their cheeks painted red. may account for the different reports of voyagers concerning their flature: it is not impossible, nay, it is very probable, that they may vary in this particular, according to their tribes; as is feen in the Highlands of Scotland, where one clan of the Campbells is remarkably tall, and another of the Frasers remarkably fhort. Were it not for some such natural discrimination, there could not be so wide a difference in the defcriptions of gentlemen, who, having no ends to ferve, either in falfifying one another's reports, or in imposing upon the public, cannot be supposed to mistake willfully.

One remarkable observation made by our voyagers. must not be omitted; and that is, that though our people could diftinguish but one word of their language. which the English prenounce chewow, and the French shawa, yet the Patagonians could repeat whole fentences after our men more distinctly than almost any European foreigner of what nation soever. This appears the more singular, as, among the islanders between the tropics, it was hardly possible to make them articulate any of our words. Sydney Parkinson, in a specimen he has given us, fays, that though the English remained at Otaheite three months, the nearest the natives could approach the found of Cook was Toote; Banks, Opane; Solander, Tolano; Gore, Towara; Monkhouse, Mata; and so of the rest: whereas the Patagonians presently got by heart this sentence of invitation, Come ashore, Englishmen! which they showed they well understood, by repeating it afterwards whenever the ships came so near the shore as to be within call.

Another very remarkable particular is, that they had none of the characters of a ferocious people; there was no offensive wcapon among them, except the scimitar already mentioned. The men, indeed, had a kind of fling, which they use in hunting, confisting of two round stones of about a pound weight each, connected together by a thong. These stones were fastened to the extremities of the thong; and, when they threw them, they held one stone in the hand, and swung the other about the head. "They are fo expert in the management of this double-headed that (fays the writer of the voyage), that they will hit a mark not bigger than a shilling with both these stones at the distance of fifteen yards; but their method of availing themselves of their dexterity against the guanicoe and ostrich is, to sling the stones so as to entangle their legs, by which means they are re-

tarded in their flight, and eafily overtaken. Bougain- Patagonia ville speaks of these slings as common among other Indian nations in South America; but we do not remember to have feen this affertion confirmed by any other

These people certainly dress differently as well as paint differently; for the drefs described by Bougainville is very unlike the drefs of those seen by the English voyagers. Captain Wallis invited some of them on board his ship: but, among all the wonders that were shown them, none seemed to attract their notice fo much as the looking-glasses: they looked in the glassics and at each other; they laughed and gazed, and gazed again and laughed; in short, there was no end to their merriment when in possession of this article of curiofity. They are whatever was given them, but would drink nothing but water. In this they differ from all the tribes of Indians in North America, who are immoderately fond of spirituous liquors. . They admired the European sheep, hogs, and poultry; but did not seem over-desirous of any thing they saw except clothes. When the magines were exercised to entertain them, they appeared disconcerted; an old man among them made figns, by striking his breast, and tumbling down and lying as if he had been dead upon deck, that he knew the effect of their guns; and none of them feemed eafy till the firing was over. When the Captain had fatisfied his own curiofity, and, as he imagined, theirs, he gave them to understand, that he was going to fail, and that they must depart; which they were very unwilling to do. However, having given each of them a canvas bag, with some needles ready threaded, a knife, a pair of sciffars, a few boads, a comb, and a looking-glass, he dismissed them, with great reluctance on their part, particularly on that of the old man's, who by very figuificant figns expressed his defire to flay till funset.

PATAGONULA, in Botany, a genus of plants belonging to the pentandiia class. See BOTANY Index.

PATAN, a kingdom of Asia, in the East Indics, and in the peninfula of Malacca, and on the eaftern coast between the kingdoms of Siam and Paha. The inhabitants are partly Mahometans and partly Gentcos; but they are all very voluptuous. The air is wholesome, though very hot; and they have no feafons but the winter and fummer. The former is more properly the rainy feason; and contains the months of November, December, and January. The woods are full of elephants and many wild animals. Some voyagers pretend that this country is governed by a queen, who never marries, but may have as many gallants as she pleases. They have some trade with the Chinese; and the principal town is of the same name, which is one of the strongest in these parts, having a well defended

PATAN, a town of Afia, and capital of a province of the same name, in the dominions of the Great Mogul; it is very little known. E. Long. 109. o. N. Lat. 27.

PATAVINITY, among critics, denotes a peculiarity of Livy's diction; derived frem Patavium or Padua, the place of his nativity; but wherein this patavinity confifts, they are by no means agreed.

Afinius Pollio, according to Quintilian, taxed Livy with patavinity. But what he meant by this censure we believe no man can say. Morhof believes it to be a fingular turn of expression, and some phrases peculiar to the Paduese. All we certainly know about it is, that it was a fault in the language of Livy, not in the fentiments or manners. In all probability, it is one of those delicacies that are lost in a dead language. Dan. Georg. Morhof published a treatise De Patavinitate Liviana, at Kiel, in 1685, where he explains, very learnedly, the urbanity and peregrinity of the Latin

PATARA, (Livy, Mela); the capital of Lycia, to the cast of the mouth of the river Xanthus; famous for. a temple and oracle of Apollo, thence called Patareus, three fyllables only; but Pataraus, (Horace). For the fix winter months, Apollo gave answers at Patara; and for the fix fummer at Delos, (Virgil, Servius): these are the Lycie Sortes of Virgil. The town was fituated in a peninfula, called Liciorum Cherfonesus, (Stephanus). Acts xxi. 1. St Paul in his passage from Philippi to Jerufalem, came to Miletus, hence to Coos, then to Rhodes, and from Rhodes to Patara; where having found a thip that was bound for Phænicia, he went on board and arrived at Jerusalem, to be at the feast of Pentecoit.

PATAVIUM (Tacitus, Strabo), a town of the Transpadana, situated on the left or north bank of the Medoacus Minor; founded by Antenor the Trojan, (Mela, Virgil, Seneca); Patavini, the people, (Livy); who himself was a native, and by Asinius Pollio charged with patavinity. Now Padua, in the territory and to the west of Venice. E. Long. 12. 15. N. Lat. 45.

PATAY, a town of France, in the province of Orleannois, remarkable for the defeat of the English in 1429, and where Joan of Arc did wonders. E. Long.

1. 43. N. Lat. 48. 5.
PATE, in Fortification, a kind of platform, refem-

bling what is called an horse's shoe.

PATEE, or PATTEE, in Heraldry, a cross, small in the centre, and widening to the extremities, which are very broad.

PATELLA, or KNEE-PAN, in Anatomy. See ANA-

PATELIA, or LIMPET, a genus of shell-fish belonging to the order of vermes teltacea. See Conchology

PATELLA, in the History of Infects, a name given by Lifter and other authors to a little hufk or thell, found on the bark of the cherry, plum, rose, and other trees, containing an animal within, and ufeful in colouring. These patellie are of the form of globes, except where they adhere to the tree, and are for the most part of a thining chefnut colour. The hulk itself strikes a very fine crimfon colour on paper, and within it is found a white maggot which is of no value: this, in time, hatches into a very fmall but beautiful bee. The fize of this bee is about half that of an ant. They have a sting like bees, and three spots placed in a triangle on the forehead, which are supposed to be eyes. They are of a black colour, and have a large round whitish or pale yellow fpot on the back. The upper pair of wings are thaded and spotted, but the under pair are clear. It might be worth while to try the shells or husks in order to discover whether the colour they yield might not be

useful. It is to be remarked, that the decpest coloured husks afford the finest and deepest purple: they must be used while the animal in them is in the maggot form; for when it is changed into the bee state the shell is dry and colourless. Lifter, who first observed these patella, went fo far on comparing them with the common kermes, as to affert that they were of the same nature with that production: but his account of their being the workmanship of a bee, to preserve her young maggot in, is not agreeable to the true history of the kermes; for that is an infect of a very peculiar kind. He has in other instances been too justly censured for his precipitancy of judging of things, and perhaps has fallen into an error by means of it here. It is very possible that these patellae may be the same fort of animals with the kermes, but then it produces its young within this shell or husk, which is no other than the skin of the body of the mother animal; but as there are many flies whose worms or maggots are lodged in the bodies of other animals, it may be that this little bee may love to lay its egg in the body of the proper infect, and the maggot hatched from that egg may eat up the proper progeny, and, undergoing its own natural changes there, issue out at length in form of the bee. This may have been the case in some few which Dr Lister examined; and he may have been misled by this to suppose it the natural change of the infect.

PATENT, in general, denotes fomething that stands open or expanded: thus a leaf is said to be patent, when it stands almost at right angles with the stalk.

PATENT, or Letters Patent. See LETTER.

PATER NOSTER, the Lord's Prayer, fo called from the two first words thereof in Latin.

PATER Nofter, illands of Afia, in the East Indian fea, fo called because of the great number of rocks, which failors have likened to the beads with which the Papists tell their pater-noster. They abound in corn and fruits, and are very populous.

PATER Patratus, was the name of the first and principal person in the college of heralds called Feciales. Some fay the Pater Patratus was a constant officer and perpetual chief of that body; and others suppose him to have been a temporary minister, elected upon account of making peace or denouncing war, which were both done by him. See FECIALES.

PATERA, among antiquaries, a goblet or veffel used by the Romans in their facrifices; wherein they offered their confecrated meats to the gods, and wherewith they made libations. See SACRIFICE and LIBA-

The word is Latin, formed from pates, "I am open;" quod patent, " because it has a great aperture;" in contradiffinction to bottles, &c. which have only narrow necks, or whose aperture is less than the body of the

On medals the patera is feen in the hands of feveral deities; and frequently in the hands of princes, to mark the facerdotal authority joined with the impe-

Hence F. Joubert observes, that besides the patera, there is frequently an altar upon which the patera fecms to be pouring its contents.

The patera was of gold, filver, marble, brafs, glafs, or F 2.

The patera is an ornament in architecture, frequently feen in the Doric freeze, and the tympans of arches; and they are fometimes used by themselves, to ornament a space; and in this case it is common to hang a string of hufks or drapery over them: fometimes they are much enriched with foliage, and have a mask or a head in the

PATERCULUS, CAIUS VELLEIUS, an ancient Roman historian, who flourished in the reign of Tiberius Cæfar, was born in the year of Rome 735. His anceflors were illustrious for their merit and their offices. His grandfather espoused the party of Tiberius Nero, the emperor's father; but being old and infirm, and not able to accompany Nero when he retired from Naples, he ran himself through with his sword. His father was a foldier of rank, and fo was Paterculus himfelf. He was a military tribune when Caius Cæfar, a grandfon of Augustus, had an interview with the king of the Parthians, in an island of the river Euphrates, in the year 753. He commanded the cavalry in Germany under Tiberius; and accompanied that prince for nine years fuccessively in all his expeditions. He received honourable rewards from him; but we do not find that he was preferred to any higher dignity than the prætorship. The praifes he bestows upon Sejanus give some probability to the conjecture, that he was looked upon as a friend of this favourite, and confequently that he was involved in his ruin. His death is placed by Mr Dodwell in the year of Rome 784, when he was in his 50th

He wrote an abridgement of the Roman History in two books, which is very curious. His purpose was only to deduce things from the foundation of Rome to the time wherein he lived; but he began his work with things previous to that memorable era: for, though the beginning of his first book is wanting, we yet find in what remains of it, an account of many cities more ancient than Rome. He promifed a larger history; and no doubt would have executed it well: for during his military expeditions he had feen, as he tells us, the provinces of Thrace, Macedonia, Achaia, Afia Minor, and other more easterly regions; especially upon the shores of the Euxine sea, which had furnished his mind with much entertaining and useful knowledge. In the Abridgement which we have, many particulars are related that are nowhere else to be found; and this makes it the more valuable. The ftyle of Paterculus, though miserably disguised through the carelessness of transcribers, and impossible to be restored to purity for want of manuscripts, is yet manifestly worthy of his age, which was the time of pure Latinity. The greatest excellence of this historian lies in his manner of commending and blaming those he speaks of; which he does in the finest terms and most delicate expressions. He is, however, condemned, and indeed with the greatest reafon, for his partiality to the house of Augustus; and for making the most extravagant eulogies, not only upon Tiberius, but even upon his favourite Sejanus: whom, though a vile and cruel monster, Paterculus celebrates as one of the most excellent persons the Roman commonwealth had produced. Lipfius, though he praifes him in other respects, yet censures him most severely for

his infincerity and partiality. " Velleius Paterculus Paterculus (fays he) raifes my indignation: he reprefents Sejanus as endowed with all good qualities. The impudence of this historian! But we know that he was born, and died, to the destruction of mankind. After many commendations, he concludes, that Livia was a woman more refembling the gods than men: and as to Tiberius, he thinks it a crime to speak otherwise of him than as of an immortal Jove. What fincere and honest mind can bear this? On the other hand, how artfully does he everywhere conceal the great qualities of Cæfar Germanicus! how obliquely does he ruin the reputation of Agrippina and others, whom Tiberius was thought to bate! In fhort, he is nothing but a court-profitute. You will fay, perhaps, it was unfafe to fpeak the truth at those times: I grant it; but if he could not write the truth, he ought not to have written lies: none are called to account for filence." La Mothe le Vayar has made a very just remark upon this occasion: " The fame fault (fays he) may be observed in many others, who have written the history of their own times, with a defign to be published while they lived."

It is strange, that a work so elegant and worthy to be preserved, and of which, by reason of its shortness, copies might be fo eafily taken, should have been fo near being loft. One manufcript only has had the luck to be found, as well of this author among the Latins as of Helychius among the Greeks: in which, fays a great critic of our own nation, " The faults of the scribes are found so numerous, and the defects so beyond all redrefs, that notwithstanding the pains of the learned and most acute critics for two whole centuries, these books still are, and are like to continue, a mere heap of errors." No ancient author but Prifcian makes mention of Paterculus: the moderns have done him infinitely more justice, and have illustrated him with notes and commentaries. He was first published, from the manufcript of Morbac, by Rhenanus, at Bafil in 1520: afterwards by Lipfius at Leyden in 1581; then by Gerard Vossius in 1639; next by Boeclerus at Strasburg in 1642; then by Thyfius and others; and, lastly, by Peter Burman at Leyden, 1719, in 8vo. To the Oxford edition in 1693, 8vo, were prefixed the Annales Velleiani of Mr Dodwell, which flow deep learning and

a great knowledge of antiquity.

PATH, in general, denotes the course or track marked out or run over by a body in motion.

For the path of the moon, &c. fee Moon, &c. ASTRONOMY Index.

PATHETIC, whatever relates to the paffions, or that is proper to excite or awake them. The word comes from the Greek πωθος, passion or emotion. See

PASSION. PATHETIC, in Music, fomething very moving, expreffive, or passionate; capable of exciting pity, compassion, anger, or other passions. Thus we speak of the pathetic style, a pathetic figure, pathetic fong, &c. The chromatic genus, with its greater and leffer femitones, either afcending or descending, is very proper for the pathetic; as is also an artful management of discords; with a variety of motions, now brisk, now languishing, now swift, now flow.

Nieuwentyt speaks of a musician at Venice who so excelled in the pathetic, that he was able to play any of his auditors into distraction: he says also, that the

Pathogno great means he made use of it was the variety of mo-

Patience. PA

PATHOGNOMONIC, among *Physicians*, an appellation for a fymptom, or concourse of fymptoms, that are integrarable from a difference, and are found in that only, and in no other.

PATHOLOGY, that part of medicine which explains the nature of diseases, their causes and fymp-

toms. See MEDICINE.

PATHOS, a Greek term, literally fignifying paf-

PATHROS, a city and canton of Egypt, of which the prophets Jeremiah and Ezekiel make mention; Jerem. Niv. 1. 15. Ezek. xxix. 14. Xxx. 14. We do not very well know its fituation, though Pliny and Ptolemy the geographer speak of it by the name of Phaturis; and it appears to have been in Upper Egypt. Isiah (xii. 2.) calls it Pathros; and it is the country of the Pathrusim, the posterity of Mizraim, of whom Moses speaks, Gen. x. 14. Ezekiel threatens them with an entire ruin. The Jews retired thither notwithstanding the remonstrances of Jeremiah; and the Lord says by Haiah, that he will bring them back from thence.

PATIENCE, that calm and unruffled temper with which a good man bears the evils of life, from a conviction that they are at leaft permitted, if not feut, by the best of Beings, who makes all things work together

for good to those who love and fear him.

The evils by which life is embittered may be reduced to these four: I. Natural evils, or those to which we are by nature subject as men, and as periliable animals. The greatest of these are, the death of those whom we love, and of ourselves. 2. Those from which we might be exempted by a virtuous and prudent conduct, but which are the inseparable consequences of imprudence or vice, which we shall call punishments; as infamy proceeding from fraud, poverty from prodigality, debility and disease from intemperance. 3. Those by which the fortitude of the good are exercised; such as the perfecutions raised against them by the wicked. To these may be added, 4. The opposition against which we must perpetually struggle, arising from the diversity of sentiments, manners, and characters of the persons among whom we live.

Under all these evils patience is not only necessary but useful: it is necessary, because the laws of nature have made it a duty, and to murmur against natural events is to affront providence; it is useful, because it renders our sufferings lighter, shorter, and less dan-

gerous.

Is your reputation fullied by invidious calumnies? rejoice that your character cannot fuffer but by falle imputations. You are arraigned in a court of judicature, and are unjuftly condemned: pafion has influenced both your profecutor and your judge, and you cannot forbear repining that you fuffer although innocent. But would it have been better that you flould have fuffered being guitty? Would the greateff misfortune that can befal a virtuous man be to you a confolation? The opulence of a villain, the elevated flation to which he is raifed, and the honours that are paid to him, excite your jealoufy, and fill your bosom with repinings and regret. What! Is you, are riches,

dignity, and power, referved for fuch wretches as this? Patience Ceafe these groundless murmurs. If the possession you regret were real benefits, they would be taken from the wicked and transferred to you. What would you say of a successful hero, who, having delivered his country, should complain that his services were ill requited, because a few sugar-plums were distributed to some children in his pretence, of which they had not offered him a share? Ridiculous as this would appear, your complaints are no better sounded. Has the Lord of all no reward to confer on you but perishable riches and empty precarious honour?

T

It is fancy, not the reason of things, that makes life so uneasy to us. It is not the place nor the condition, but the mind alone, that can make any body happy or

miserable.

He that values himself upon conscience, not opinion, never heeds reproaches. When we are evil spoken of, if we have not deserved it, we are never the worfe; if

we have, we should mend.

Tiberius the Roman emperor, at the beginning of his reign, acted in most things like a truly generous, good natured, and clement prince. All flanderous reports, libels, and lampoons upon him and his administration, he bore with extraordinary patience; faying, "That in a free state the thoughts and tongues of every man ought to be free;" and when the fenate would have proceeded against some who had published libels against him, he would not consent to it; saying, "We have not time enough to attend to fuch trifles: if you once open a door to fuch informations, you will be able to do nothing elfe; for under that pretence every man will revenge himfelf upon his enemies by accufing them to you." Being informed that one had ipoken detractingly of him: "If he fpeak ill of me," fays he, " I will give him as good an account of my words and actions as I can; and if that be not fufficient, I will fatisfy myfelf with having as bad an opinion of him as he has of me." Thus far even Tiberius may be an example to

Men will have the same veneration for a person who suffers adversity without dejection, as for demolished temples, the very ruins of which are reverenced and adored.

A virtuous and well-difposed person, is like to good metal; the more he is fired, the more he is refined; the more he is opposed, the more he is approved; wrongs may well try him and touch him, but cannot imprint in him any falle stamp.

The man.*arefore who poffeffes this virtue (patience), in this ample fense of it, stands upon an eminence, and fees human things below him: the tempest indeed may reach him; but he stands secure and collected against it upon the basis of conscious virtue, which the severest storms can feldom shake, and never overthrow.

Patience, however, is by no means incompatible with fentibility, which, with all its inconveniences, is to be cherified by those who understand and with to maintain the dignity of their nature. To feel for others, dispose us to exercise the amiable virtue of charity, which our religion indispensably requires. It constitutes that enlarged benevolence which philosophy inculcates, and which is indeed comprehended in Christian charity. It is the privilege and the ornament of man; and the pain

which

Patience which it causes is abundantly recompensed by that sweet fensation which ever accompanies the exercise of benefi-

> To feel our own mifery with full force is not to be deprecated. Affliction foftens and improves the heart. Tears, to speak in the style of figure, fertilize the soil in which the virtues grow. And it is the remark of one who understood human nature, that the faculties of the mind, as well as the feelings of the heart, are meliorated by adversity.

> But in order to promote these ends, our sufferings must not be permitted to overwhelm us. We must oppose them with the arms of reason and religion; and to express the idea in the language of the philosopher, as well as the poet, of Nature, every one, while he is compelled to feel his misfortunes like a man, should resolve also to bear them like a man.

Refign'd in ev'ry flate, With patience bear, with prudence puth, your fate; By fuffering well our fortune we fubdue, Fly when the frowns, and when the calls purfue.

PATIGUMO (a corruption of the words pate-de guimauve); the name of a fort of paste or cakes much used on the continent as an agreeable and useful remedy for catarrhal defluxions, and supposed by Dr Percival to confift of gum-arabic combined with fugar and the whites of eggs (fee the article HUNGER). But we have been informed that the powdered substance of the marshmallow is the chief ingredient of the com-

PATIN, Guy, professor of physic in the royal college of Paris, was born in 1602. He made his way into the world merely by the force of his genius, being at first corrector of a printing-house. He was a man of great wit and erudition: he spoke with the gravity of a Stoic, but his expressions were very satirical. He hated bigotry, fuperflition, and knavery; had an upright foul, and a well-disposed heart. He was a most tender father, courteous to every body, and polite in the highest degree. He died in 1672, and did not owe his reputation to any writings published in his lifetime upon physic; but his letters which appeared after his death have rendered his name famous. He left a fon mentioned in the enfuing article.

PATIN, Charles, who made a great figure in the world, and excelled in the knowledge of medals. He was born in Paris in 1633; and made fo furprifing a progrefs, that he maintained thefes in Greek and Latin, on all parts of philosophy, in 1647. He studied the law in compliance to an uncle, and was admitted an advocate in the parliament of Paris; but could not lay afide that of physic, for which he always had an inclination. He therefore quitted the law, and devoted himself to physic; in which, after taking the doctor's degree, he applied himfelf to practice with great fuccels. He afterwards travelled into Germany, Holland, England, Switzerland, and Italy. In 1676 he was appointed profesior of physic in Padua; and three years after was created a knight of St Mark. He died in that city in 1694. · His works are many, and well known to the learned world. His wife too, and his daughters, were authoresses.

PATKUL, John Reinhold, was born of a noble family in Livonia, a northern province belonging to the crown of Sweden. The Livonians having been flript Patkul. of their privileges, and great part of their estates, by Charles XI. Patkul was deputed to make their complaint; which he did with fuch elequence and courage, that the king, laying his hand upon his shoulder, faid, 'You have spoken for your country as a brave man should, and I esteem you for it.'

Charles, however, who added the baseness of hypocrify to the ferocity of a tyrant, was determined to punish the zeal and honesty which he thought fit to commend; and a few days afterwards caused Patkul to be declared guilty of high treason, and condemned to die. Patkul, however, found means to escape into Poland, where he continued till Charles was dead. He hoped that his fentence would have been then reverfed, as it had been declared unjust even by the tyrant that procured it: but being disappointed in this expectation, he applied to Augustus king of Poland, and solicited him to attempt the conquest of Livonia from the Swedes; which, he faid, might be eafily effected, as the people were ready to shake off their yoke, and the king of Sweden was a child incapable of compel-

ling their subjection.

Augustus possessed himself of Livonia in consequence of this proposal; and afterwards, when Charles XII. entered the province to recover it, Patkul commanded in the Saxon army against him. Charles was victorious; and Patkul, some time afterwards, being disgusted at the haughty behaviour of General Fleming, Augustus's favourite, entered into the service of the Czar, with whom Augustus was in strict alliance, and a little before Charles compelled Augustus to abdicate the throne of Poland, and his subjects to elect Stanislaus in his stead. The Czar sent Patkul, with the title of his ambaffador, into Saxony, to prevail with Augustus to meet him at Grodno, that they might confer on the flate of their affairs. This conference took place; and immediately afterwards the Czar went from Grodno to quell a rebellion in Aftracan. As foon as the Czar was gone, Augustus, to the surprise of all Europe, ordered Patkul, who was then at Dresden, to be seized as a state criminal. By this injurious and unprecedented action, Augustus at once violated the law of nations, and weakened his own interest; for Patkul was not only an ambassador, but an ambassador from the only power that could afford him protection. The cause, however, was this: Patkul had discovered that Augustus's ministers were to propose a peace to Charles upon any terms; and had therefore formed a defign to be beforehand with them, and procure a separate peace between Charles and his new mafter the Czar. The defign of Patkul was difcovered; and, to prevent its success, Augustus ventured to feize his person, affuring the Czar that he was a traitor, and had betrayed them both.

Augustus was soon after reduced to beg a peace of Charles at any rate; and Charles granted it upon certain conditions, one of which was, that he should deliver up Patkul. This condition reduced Augustus to a very distressful dilemma: the Czar, at this very time, reclaimed Patkul as his ambassador; and Charles de-manded, with threats, that he should be put into his hands. Augustus therefore contrived an expedient bywhich he hoped to fatisfy both: he fent fome guards to deliver Patkul, who was prisoner in the castle of Konigstein, to the Swedish troops; but by secret orPat'al ders privately dispatched, he commanded the governor to let him cfcape. The governor, though he received this order in time, yet disappointed its intention by his villany and his avarice. He knew Patkul to be very rich; and having it now in his power to fuffer him to elcape with impunity, he demanded of Patkul a large fum for the favour: Patkul refused to buy that liberty which he made no doubt would be gratuitoufly restored. and, in the mean time, the Swedish guards arrived with the order for his being delivered up to them. By this party he was first carried to Charles's head quarters at Albranfiadt, where he continued three months, bound to a stake with a heavy chain of iron. He was then tried; and he was by his judges found guilty. His fentence depended upon the king; and after having been kept a prisoner some months, under a guard of Mayerfeldt's regiment, uncertain of his fate, he was, on the 28th of September 1707, towards the evening, delivered into the cuttody of a regiment of dragoous, commanded by Colonel Nicholas Isielm. On the next day, the 20th, the colonel took the chaplain of his regiment afide, and telling him that Patkul was to die the following day, ordered him to acquaint him with his fate, and prepare him for it. About this very time he was to have been married to a Saxon lady of great quality, virtue, and beauty; a circumstance which renders his cafe flill more affecting. What followed in confequence of the colonel's order to the minister will be related in his

> "Immediately after evening fervice I went to his prifon, where I found him lying on his bed. The first compliments over, I entered upon the melancholy duty of my profession, and turning to the officer who had him in charge, told him the colonel's orders were, that I should be alone with his prisoner. The officer having withdrawn, Patkul grasping both my hands in his, cried out with most affecting anxiety and distress, My dear paffor! what are you to declare? what am I to hear? I bring you, replied I, the same tidings that the prophet brought to King Hezekiah, Set thine house in order, for show must die. To morrow by this time thou shall be no longer in the number of the living! At this terrible warning he bowed himfelf upon his bed and burst into I attempted to comfort him, by faying that he must, without all doubt, have often meditated on this fubject : Yes, cried he, I know, alas! too well, that we must all die; but the death prepared for me will be cruel and insupportable. I assured him that the manner of his death was to me totally unknown; but, believing that he would be prepared for it, I was fure his foul would be received into the number of happy spirits. Here he rose up, and folding his hands together, Merciful Jefus! let me then die the death of the righteous! A little after, with his face inclined to the wall, where stood his bed, he broke out into this foliloquy: Auguflus! O Augustus, what must be thy lot one day! Must thou not answer for all the crimes thou hast committed ? He then observed that he was driven out from his country, by a fentence against his life, pronounced for doing what the king himself encouraged him to do, saying to him one day in terms of much kindness, ' Patkul, maintain the rights of your country like a man of honour, and with all the spirit you are capable of.' That flying

into an enemy's country was also unavoidable, as the Patkul. country of an ally would not have afforded him protection; but that he was in Saxony a wretched exile, not a counfellor or advifer; that before his arrival every thing was already planned, the alliance with Muscovy figned, and the measures with Denmark agreed upon. "My inclination (faid he, after a paule) were always to ferve Sweden, though the contrary opinion has prevailed. The elector of Brandenburg owed his title of king of Prussia to the services I did him; and when, in recompenie, he would have given me a confiderable fum of money, I thanked him, and rejected the offer; adding, that the reward I most wished for was to regain the king of Sweden's favour by his interceffion. This he promifed, and tried every possible method to succeed, but without fuccefs. After this I laboured fo much for the interest of the late emperor in his Spanish affairs, that I brought about what scarce any other man could have effected. The emperor as an acknowledgement gave me an affignment for 50,000 crowns, which I humbly laid at his feet, and only implored his imperial majefty's recommendation of me to my king's favour : this request he immediately granted, and gave his orders according ly, but in vain. Yet, not to lose any opportunity, I went to Moscow while the Swedish ambassadors were at that court; but even the mediation of the Czar had no effect. After that I distributed among the Swedish prifoners at Moscow at least 100,000 crowns, to show the ardent defire I had, by all ways, to regain the favour of their fovereign. Would to heaven I had been equally in earnest to obtain the grace of God.'-At these words another shower of tears fell from his eyes, and he remained for some moments filent, and overwhelmed with grief. I used my best endeavours to comfort him with the affurance that this grace would not be denied him, provided he fpent the few hours still left in earnestly imploring it; for the door of heaven's mercy was never thut, though that of men might be cruelly fo. 'This (replied he), this is my confolation; for thou art God and not man, to be angry for ever. He then inveighed bitterly against Augustus, and reproached himself for having any connection with a wretch who was wholly destitute of all faith and honour, an atheist, without piety, and without virtue. 'While he was at Warfaw (faid he), and heard the king was advancing to attack him, he found himself extremely diffrested. He was absolutely without money, and therefore obliged to diffnis fome of his troops. He had recourse to my affiftance, and intreated me, for the love of God, to borrow whatever fum I could. I procured him 400,000 crowns; 50,000 of which, the very next day, he fquandered on trinkets and jewels, which he gave in prefents to some of his women. I told him plainly my thoughts of the matter; and by my importunity prevailed, that the Jews should take back their toys, and return the money they had been paid for them. The ladies were enraged; and he fwore that I should one time or other fuffer for what I had done: there indeed he kept his word; would to God he had always done fo with those he employed !" I now left him for a short time, and at feven in the evening I returned; and the officer being retired, he accossed me with a smiling air, and an appearance of much tranquillity, 'Welcome, dear fir, the weight that lay heavy on my heart is removed, and I already feel a fensible change wrought in my mind. I am

Patkul. ready to die: death is more eligible than the solitude of a long imprisonment. Would to heaven only that the kind of it were less cruel. Can you, my dear sir, inform me in what manner I am to fuffer?' I answered, that it had not been communicated to me; but that I imagined it would pass over without noise, as only the colonel and myself had notice of it. 'That (replied he) I esteem as a favour; but have you seen the sentence? or must I die, without being either heard or condemned ? My apprehensions are of being put to intolerable tortures.' I comforted him in the kindest manner I could; but he was his own best comforter from the Word of God, with which he was particularly acquainted; quoting, among many other passages, the following in Greek, We must enter into the kingdom of heaven through many tribulations. He then called for pen and ink, and intreated me to write down what he should dictate. I did fo, as follows:

'Testamentum, or my last will as to the disposition of my effects after my death .- I. His majesty King Auguflus, having first examined his conscience thoroughly, will be so just as to pay back to my relations the sum he owes me; which, being liquidated, will amount to 50,000 crowns; and as my relations are here in the fervice of Sweden, that monarch will probably obtain it for them.'

"At this he faid, let us stop here a little; I will quickly return to finish this will; but now let us addrefs ourselves to God by prayer. Prayers being ended, 'Now (cried he) I find myself yet better, yet in a quieter frame of mind: Oh! were my death less dréadful, with what pleasure would I expiate my guilt by embracing it !- Yes (cried be, after a pause), I have friends in different places, who will weep over my deplorable fate. What will the mother of the king of Prussia say? What will be the grief of the Counters Levolde who attends on her? But what thoughts must arise in the bosom of her to whom my faith is plighted? Unhappy woman! the news of my death will be fatal to her peace of mind. My dear pastor, may I venture to beg one favour of you?' I assured him he might command every fervice in my power. ' Have the goodness then (said he, pressing my hand), the moment I am no more, to write-Alas! how will you fet about it? a letter to Madam Einseidelern, the lady I am promised to-Let her know that I die her's; inform her fully of my unhappy fate: Send her my last and eternal farewell! My death is in truth difgraceful; but my manner of meeting it will, I hope by heaven's and your affiftance, render it holy and bleffed. This news will be her only confolation. Add farther, dear Sir, that I thanked her with my latest breath for the sincere affection she bore me: May she live long and happy: This is my dying wish.'-I gave him my hand in promise that I would faithfully perform all he defired.

"Afterwards he took up a book: 'This (faid he)

is of my own writing. Keep it in remembrance of me, and as a proof of my true regard for religion. I could with it might have the good fortune to be presented to the king, that he may be convinced with what little foundation I have been accused of atheism.' Taking it from his hand, I affured him that my colonel would not fail to present it as soon as opportunity offered.

"The rest of his time was employed in prayer, which he went through with a very fervent devotion. On the 30th of September I was again with him at four in the morning. The moment he heard me he arose, and ren- Patkul. dering thanks to God, affured me he had not flept fo foundly for a long time. We went to prayers; and in truth his piety and devout frame of mind were worthy of admiration. About fix he faid he would begin his confession, before the din and clamour of the people without could rife to diffurb his thoughts. He then kneeled down, and went through his confession in a mauner truly edifying. The fun beginning to appear above the horizon, he looked out of the window, faying, Salve festa dies! 'This is my wedding-day. I looked, alas! for another, but this is the happier; for to-day shall my foul be introduced by her heavenly bridegroom into the assembly of the blessed! He then asked me, whether I yet knew in what way he was to die? I anfwered, that I did not. He conjured me, by the facred name of Jesus, not to fersake him; for that he should find in my company some consolation even in the midst of tortures. Casting his eye on the paper that lay on the table, 'This will (faid he) can never be finished.' I asked him, whether he would put his name to what was already written? No (replied he, with a deep figh), I will write that hated name no more. My relations will find their account in another place; falute them for me.' He then addressed himself again to God in prayer, and continued his devotions till the lieutenant entered to conduct him to the coach. He wrapped himfelf up in his cloak, and went forward a great pace, guarded by 100 horsemen. Being arrived at the place of execution, we found it furrounded by 300 foot foldiers; but at the fight of the stakes and wheels, his horror is not to be described. Clasping me in his arms, ' Beg of God (he exclaimed) that my foul may not be thrown into despair amidst these tortures! I comforted, I adjured him to fix his thoughts on the death of Jesus Christ, who for our fins was nailed to a cross.

"Being now on the spot where he was to suffer, he bid the executioner to do his duty well, and put into his hands some money which he got ready for that purpose. He then stretched himself out upon the wheel; and while they were stripping him naked, he begged me to pray that God would have mercy on him, and bear up his foul in agony. I did fo; and turning to all the fpectators, faid to them, Brethren, join with me in prayer for this unhappy man. 'Yes (cried he), affift me all of you with your supplications to heaven.' Here the executioner gave him the first stroke. His cries were terrible: 'O Jesus! Jesus! have mercy upon me.' This cruel scene was much lengthened out, and of the utmost horror; for as the headsman had no skill in his business, the unhappy victim received upwards of 15 feveral blows, with each of which were intermixed the most piteous groans and invocations of the name of God. At length, after two strokes given on the breast, his strength and voice failed him. In a faltering dying tone, he was just heard to fay, 'Cut off my head?' and the executioner still lingering, he himself placed his head on the scaffold: After four strokes with an hatchet, the head was separated from the body, and the body quartered. Such was the end of the renowned Patkul."

Charles XII. has been very generally and feverely censured for not pardoning him, and we are not inclined to vindicate the fovereign. Yet it must be remembered, that Patkul was guilty of a much greater crime than that which drew upon him the displeasure of Charles Patkul Patna.

XI. He incited foreign powers to attack his country when under the government of a boy, hoping, as he faid himself, that it would in such circumstances become an eafy conquest. He was therefore a rebel of the worst kind; and where is the absolute monarch that is ready to-pardon fuch unnatural rebellion? Let it be remembered, too, that Charles, among whose faults no other instance of cruelty has been numbered, certainly thought that, in ordering the execution of Patkul, he was difcharging his duty. That monarch, it is known, believed in the possibility of discovering the philosopher's stone. Patkul, when under fentence of death, contrived to impose so far upon the senate at Stockholm, as to persuade them that he had, in their presence, converted into gold a quantity of baser metal. An account of this experi-ment was transmitted to the king, accompanied with a petition to his majefty for the life of fo valuable a fubject; but Charles, blending magnanimity with his feverity, replied with indignation, that he would not grant to interest what he had refused to the call of humanity

and the intreaties of friendship. PATMOS, in Ancient Geography, one of the Sporades (Dionysius); 30 miles in compass (Pliny); concerning which we read very little in authors. It was rendered famous by the exile of St John, and the Revelation showed him there. The greatest part of interpreters think that St John wrote them in the same place during the two years of his exile; but others think that he did not commit them to writing till after his return to Epheius. The island of Patmos is between the island of Icaria and the promontory of Miletus. Nothing has done it more honour than to have been the place of the banishment of St John. It is now called Patino, or Pactino, or Patmol, or Palmofa. Its circuit is five and twenty or thirty miles. It has a city called Patmos, with a harbour, and fome monasteries of Greek monks. It is at prefent in the hands of the Turks. It is confiderable for its harbours; but the inhabitants derive little benefit from them, because the corfairs have obliged them to quit the town, and retire to a hill on which St John's convent stands. This convent is a citadel confifting of feveral irregular towers, and is a fubftantial building feated on a very steep rock. The whole island is very barren, and without wood; however, it abounds with partridges, rabbits, quails, turtles, pigeons, and fnipes. All their corn does not amount to 1000 barrels in a year. In the whole island there are scarcely 300 men: but there are above 20 women to one man, who expect that all strangers who land in the island should carry fome of them away. To the memory of St John is an hermitage on the fide of a mountain, where there is a chapel not above eight paces long and five broad. Over head they show a chink in the rock, through which they pretend that the Holy Ghost distated to St John. E. Long. 26. 84. N. Lat. 37. 24.

PATNA, a town of Afia, in the dominions of the Great Mogul, to the north of the kingdom of Bengal, where the English have factories for faltpetre, borax, and raw filk. It is the capital of the province of Bahar, a dependency of Bengal, in the empire of Indoftan, fituated in a pleasant country, 400 miles east of Agra. It extends seven miles in length on the banks of the Ganges, and is about half a mile in breadth.—Mr Rennel gives strong reasons for supposing it to be the ancient Pallbothera. The town is large and po-Vol. XVI. Part I.

pulous, but the houses are built at a distance from each Patemack other. E. Long. 85. 40. N. Lat. 45: 25.
PATOMACK, a large river of Virginia, in North

PATOMACK, a large river of Virginia, in North America, which rifes in the Alleghany mountains, feparates Virginia from Maryland, and falls into Chefapeake bay. It is about feven miles broad, and is navigable for near 200 miles.

PATONCE, in *Heraldry*, is a crofs, flory at the ends; from which it differs only in this, that the ends inftead of turning down like a fleur-de-lis, are extended formewhat in the natter form. See FLORY.

ed fomewhat in the pattee form. See FLORY.
PATRÆ, a city of Achaia. This place was vifited by Dr Chandler, who gives the following account of it. " It has been often attacked by enemies, taken, and pillaged. It is a confiderable town, at a distance from the fea, fituated on the fide of a hill, which has its fummit crowned with a ruinous castle. This made a brave defence in 1447 against Sultan Morat, and held out until the peace was concluded, which first rendered the Morea tributary to the Turks. A dry flat before it was once the port, which has been choked with mud. It has now, as in the time of Strabo, only an indifferent road for veffels. The house of Nicholas Paul, Esq. the English conful, stood on part of the wall either of the theatre or the odeum. By a fountain was a fragment of a Latin infcription. We faw also a large marble bust much defaced; and the French conful showed us a collection of medals. We found nothing remarkable in the citadel. It is a place of some trade, and is inhabited by Jews as well as by Turks and Greeks. The latter have feveral churches. One is dedicated to St Andrew the apostle, who suffered martyrdom there, and is of great fanctity. It had been recently repaired. The fite by the sea is supposed that of the temple of Ceres. By it is a fountain. The air is bad, and the country round about overrun with the low shrub called glycyrrhiza or

Of its ancient state, the same author speaks thus: " Patræ assisted the Ætolians when invaded by the Gauls under Brennus; but afterwards was unfortunate. reduced to extreme poverty, and almost abandoned. Augustus Cæsar reunited the scattered citizens, and made it a Roman colony, fettling a portion of the troops which obtained the victory of Actium, with other inhabitants from the adjacent places. Patræ reflourished and enjoyed dominion over Naupactus, Oeanthé, and several cities of Achaia. In the time of Paulanias, Patrae was adorned with temples and porticoes, a theatre, and an odéum which was fuperior to any in Greece but that of Atticus Herodes at Athens. In the lower part of the city was a temple of Bacchus Æfymnetes, in which was an image preferved in a cheft, and, conveyed, it was faid, from Troy by Eurypylus; who, on opening it, became disordered in his senses. By the port were temples; and by the sea, one of Ceres, with a pleasant grove and a prophetic fountain of unerring veracity in determining the event of any illness. After supplicating the goddels with incense, the fick person appeared, dead or living, in a mirror fulpended fo as to touch the furface of the water. In the citadel of Patræ was a temple of Diana Laphria, with her statue in the habit of a huntrefs of ivory and gold, given by Augustus Cæsar when he laid waste Calydon and the cities of Atolia to people Nicopolis. The Patrenfians honoured her with a yearly festival, which is described by Pausanias who Patriarch.

Patrana was a spectator. They formed a circle round the altar with pieces of green wood, each 16 cubits long, and within heaped dry fuel. The folemnity began with a most magnificent procession, which was closed by the virgin-priestess in a chariot drawn by stags. On the following day, the city and private persons offered at the altar fruits, and birds, and all kinds of victims, wildboars, stags, deer, young wolves, and beasts full grown; after which the fire was kindled. He relates, that a bear and another animal forced a way through the fence, but were reconducted to the pile. It was not remembered that any wound had ever been received at this ceremony, though the spectacle and sacrifice were as dangerous as favage. The number of women at Patræ was double that of the men. They were employed chiefly in a manufacture of flax which grew in Elis, weaving garments, and attire for the head."

PATRANA, or PASTRANA, a town of New Castile in Spain, with the title of a duchy. It is feated between the rivers Tajo and Tajuna, in W. Long. 2. 45. N. Lat.

40. 26.

PATRAS, an ancient and flourishing town of European Turkey, in the Morea, capital of a duchy, with a Greek archbishop's see. It is pretty large and populous; and the Jews, who are one-third part of the inhabitants, have four fynagogues. There are feveral handsome mosques and Greek churches. The Jews carry on a great trade in filk, leather, honey, wax, and cheese. There are cypress trees of a prodigious height, and excellent pomegranates, citrons, and oranges. has been feveral times taken and retaken, and it is just now in the hands of the Turks. It is feated in E. Long. 21. 45. N. Lat. 38. 17.

PATRICA, a town of Italy, in the territory of the church, and in the Campagna of Rome, towards the fea-coast, and eight miles east of Ostia. About a mile from this place is a hill called Monte de Livano, which fome have thought to be the ancient Lavinium founded

by Æneas.

PATRES CONSCRIPTI. See Conscript and SE-NATOR.

PATRIARCH, PATRIARCHA, one of those first fathers who lived towards the beginning of the world, and who became famous by their long lines of descendants. Abraham, Isaac, and Jacob, and his twelve sons, are the patriarchs of the Old Testament; Seth, Enoch, &c.

were antediluvian patriarchs.

The authority of patriarchal government existed in the fathers of families, and their first-born after them exercifing all kinds of ecclefiaftical and civil authority in their respective households; and to this government, which lasted till the time of the Israelites dwelling in Egypt, some have ascribed an absolute and despotic power, extending even to the punishment by death. In proof of this, is produced the curse pronounced by Noah upon Canaan (Gen. ix. 25.); but it must be observed, that in this affair Noah feems to have acted rather as a prophet than a patriarch. Another instance of supposed despotic power is Abraham's turning Hagar and Ishmael out of his family (Gen. xxi. 9, &c.); but this can hardly be thought to furnish evidence of any singular authority vested in the patriarchs, as such, and peculiar to those ages. The third instance brought forward to the fame purpose is that of Jacob's denouncing a curse upon Simeon and Levi (Gen. xlix. 7.), which is maintained by others to be an instance of prophetic inspiration more Patriarch. than of patriarchal power. The fourth instance is that of Judah with regard to Tamar (Gen. xxxviii. 24.); with regard to which it is remarked, that Jacob, the father of Judah, was still living; that Tamar was not one of his own family; and that the had been guilty of adultery, the punishment of which was death by burning; and that Judah on this occasion might speak only as a profe-

On the whole, however, it is difficult to fay which of these opinions is most agreeable to truth. Men who believe the origin of civil government, and the obligation to obedience, to arise from a supposed original contract, either real or implied, will be naturally led to weaken the authority of the patriarchs: and those again who esteem government to be a divine institution, will be as apt to raise that authority to the highest pitch that either reason or scripture will permit them. It cannot be denied, that authority existed in fathers, and descended to their first-born, in the first ages of the world; and it is neither unnatural nor improbable to imagine, that the idea of hereditary power and hereditary honours was first taken from this circumstance. But whether authority has descended through father and fon in this way to our times, is a circumstance that cannot in one instance be afferted, and can be denied in a thousand. The real source of the dignity and of the authority of modern times feems to have been, skill in the art of war, and success in the conduct

of conquests.

Jewish PATRIARCH, a dignity, respecting the origin of which there are a variety of opinions. The learned authors of the Universal History think, that the first appearance and institution of those patriarchs happened under Nerva the successor of Domitian. It seems probable that the patriarchs were of the Aaronic or Levitical race; the tribe of Judah being at that time too much depressed, and too obnoxious to the Romans to be able to affume any external power. But of whatever tribe they were, their authority came to be very confiderable. Their principal business was to instruct the people; and for this purpose they instituted schools in feveral cities. And having gained great reputation for their extraordinary learning, zeal, and piety, they might, in time, not only bring a great concourse of other Jews from other parts, as from Egypt and other western provinces of their dispersion, but likewise prove the means of their patriarchal authority's being acknowledged there. From them they ventured at length to levy a kind of tribute, in order to defray the charges of their dignity, and of the officers, (viz. the Apostoli or Legati,) under them, whose business it was to carry their orders and decisions through the other provinces of their difpersion, and to see them punctually executed by all, that fome shadow of union at least might be kept up among the western Jews. They likewise nominated the doctors who were to prefide over their schools and academies; and these were in process of time styled chiefs and princes, in order to raife the credit of that dignity, or to imply the great regard which their disciples were to pay to them. These chiefs became at length rivals of the patriarchs; and some of them possessed both dignities at once; an usurpation which caused not only great confufion amongst them, but oftentimes very violent and bloody contests. However, as the Jewish Rabbies have Patriarch trumped up a much older era for this patriarchal dignity, and have given us a succession of them down to the fifth century, in which it was abolished, it will not be amiss to give our readers the substance of what they have written of the rife and progress of this order of men; and at the same time to show them the absurdity and falsehood of that pretended succession to this imagi-

> According to them, the first patriarch was Hillel, furnamed the Babylonian, because he was sent for from thence to Jerusalem about 100 years before the ruin of their capital, or 30 years before the birth of Christ, to decide a dispute about the keeping of Easter, which on that year fell out on the Sabbath-day; and it was on account of his wife decision that he was raised to that dignity, which continued in his family till the faid fifth century. He was likewise looked upon as a second Moses, because he lived like him 40 years in obscurity, 40 more in great reputation for learning and fanctity, and 40 more in possession of this patriarchal dignity. They make him little inferior to that lawgiver in other of his excellencies, as well as in the great authority he gained over the whole Jewish nation. The wonder will be, how Herod the Great, who was so jealous of his own power, could suffer a stranger to be raised to such a height of it, barely for having decided a dispute which must in all likelihood have been adjudged by others long before

However, Hillel was succeeded by his fon Simeon, whom many Christians pretend to have been the venerable old person of that name, who received the divine infant in his arms. The Jews give him but a very obfcure patriarchate; though the authors above quoted make him, moreover, chief of the fanhedrim; and Epiphanius fays, that the priestly tribe hated him so much for giving so ample a testimony to the divine child, that they denied him common burial. But it is hardly credible that St Luke should have so carelessly passed over his two fold dignity, if he had been really possessed of them, and have given him no higher title than that of

a just and devout man. He was succeeded by Jochanan, not in right of defcent, but of his extraordinary merit, which the Rabbies, according to custom, have raised to so surprising a height, that, according to them, if the whole heavens were paper, all the trees in the world pens, and all the men writers, they would not fuffice to pen down all his lessons. He enjoyed his dignity but two years, according to some, or five according to others: and was the person who, observing the gates of the temple to open of their own accord, cried out, "O temple, temple! why art thou thus moved! We know that thou art to be destroyed, seeing Zechariah hath foretold it, saying, " Open thy gates, O Lebanus, and let the flames confume thy cedars." Upon this he is further reported to have complimented Vespasian, or rather, as some have corrected the story, Titus, with the title of king, affuring him that it was a royal person who was to destroy that edifice; on which account they pretend that general gave him leave to remove the fanhedrim to

Japhne. The Jewish writers add, that he likewise erected an academy there, which subsisted till the death of Akiba; and was likewife the feat of the patriarch; and confifted of 300 schools, or classes of scholers. Another he

erected at Lydda, not far from Japhne, and where the Patriarch Christians have buried their famed St George. He lived 120 years, and being asked, what he had done to prolong his life? he gave this wife answer; I never made water nearer a house of prayer than four cubits; I never difguised my name: I have taken care to celebrate all feftivals: and my mother hath even fold my head ornaments to buy wine enough to make me merry on fuch days; and left me at her death 300 hogsheads of it, to fanctify the Sabbath .- The doctors who flourished in his time were no less considerable, both for their number and character; particularly the famed Rabbi Chanina, of whom the Bath Col was heard to fay, that the world was preserved for the sake of him; and R. Nicodemus, whom they pretend to have stopped the course of the fun, like another Joshua.

He was succeeded by Gamaliel, a man, according to them, of unfufferable pride; and yet of so universal authority over all the Jews, not only in the west, but over the whole world, that the very monarchs fuffered his laws to be obeyed in their dominions, not one of them offering to obstruct the execution of them. In his days flourished Samuel the Less, who composed a prayer full of the bitterest curses against heretics, by which they mean the Christians; and which are still in use to this day. Gamaliel was no less an enemy to them; and yet both have been challenged, the former as the celebrated master of our great apostle, the other as his difciple in his unconverted state.

Simon II. his fon and fucceffor, was the first martyr who died during the fiege of Jerusalem. The people fo regretted his death, that an order was given, instead of 10 bumpers of wine, which were usually drank at the funeral of a faint, to drink 13 at his, on account of his martyrdom. These bumpers were in time multiplied, they tell us, to fuch shameful height, that the sanhedrim was forced to make some new regulations to prevent that

abuse.

There are the patriarchs which, the Rabbies tell us, preceded the destruction of the temple; and we need no farther confutation of this pretended dignity, than the filence of the facred historians, who not only make not the least mention of it, but assure us all along that they were the high-priefts who prefided in the fanhedrim; and before whom all cases relating to the Jewish religion were brought and decided. It was the high-priest who examined and condemned our Saviour; that condemned St Stephen; that forbade the apostles to preach in Christ's name; and who sat as judge on the great apoftle at the head of that supreme court. The same may be urged from Josephus, who must needs have known and mentioned this pretended dignity, if any fuch there had been; and yet is so far from taking the least notice of it, that, like the evangelists, he places the pontiffs alone at the head of all the Jewish affairs; and names the high-priest Ananus as having the care and direction of the war against the Romans; -which is an evident proof that there were then no such patriarchs in being.

To all this let us add, that if there had been any fuch remarkable fuccession, the Talmudists would have preserved it to future ages; whereas, neither they, nor any of the ancient authors of the Jewish church, make any mention of it; but only some of their doctors, who have written a confiderable time after them, as of writers to whom little credit can be given in points of this

nature ;

Patriarch, nature; especially as there are such unsurmountable contradictions between them, as no authors either Jewish or Christian have, with all their pains, been hitherto able to

Their fuccession, according to the generality of those

rabbies, stands as follows:

1. Hillel the Babylonian. 2. Simeon the fon of Hillel. 3. Gamaliel the fon of Simeon. 4. Simeon II. the fon of Gamalicl. 5. Gamaliel II. the fon of Sime-on II. 6. Simeon III. the fon of Gamaliel II. 7. Judah the fon of Simeon III. 8. Gamaliel III. the fon of Judah. 9. Judah II. the fon of Gamaliel III. 10. Hillel II. fon of Judah II. 11. Judah III. fon of Hillel II. 12. Hillel III. fon of Judah III. 13. Gamaliel IV. fon of Hillel III.

According to Gants Tzcmach David, who hath re-

duced them to 10, they are,

1. Hillel the Babylonian. 2. Simeon the fon of Hillel. 3. Rabb. Gamaliel Rebona. 4. R. Simeon the fon of Gamaliel. 5. Rabban Gamaliel his fon. 6. R. Jehudah the prince. 7. Hillel the prince, his fon. 8. Rabban Gamaliel the Old. 9. Simeon III. 10. R. Judah,

Nassi or prince.

On the whole, it cannot be doubted but that their first rife was in Nerva's time, however much Jewish pride may have prompted them to falfify, and to affert their origin to have been more ancient than it really was. Nor have the Jews been faithful in giving an account of the authority of these men. They have exaggerated their power beyond all bounds, for the purpose of repelling the arguments of Christians: for their power was certainly more showy than substantial. In time, however, they certainly imposed upon the people; and what power they did possess (which the Romans only allowed to be in religious matters, or in fuch as were connected with religion) they exercised with great rigour. Their pecuniary demands, in particular, became very exorbitant; and was the cause of their suppression in the year

PATRIARCHS, among Christians, are ecclesiastical dignitaries, or bishops, so called from their paternal authority in the church. The power of patriarchs was not the fame in all, but differed according to the different customs of countries, or the pleasures of kings and coun-Thus the patriarch of Constantinople grew to be

a patriarch over the patriarchs of Ephefus and Ciefarea, Patriarchs. and was called the accumenical and univerfal patriarch; and the patriarch of Alexandria had some prerogatives which no other patriarch but himself enjoyed, such as the right of confecrating and approving every fingle bishop under his jurisdiction.

The patriarchate has been ever estcemed the supreme dignity in the church : the bishop had only under him the territory of the city of which he was bithop; the metropolitan superintended a province, and had for suffragans the bishops of his province; the primate was the chief of what was then called a diocese (A), and had feveral metropolitans under him; and the patriarch had under him feveral diocefes, composing one exarchate, and

the primates themselves were under him.

Usher, Pagi, De Marca, and Morinus, attribute the establishment of the grand patriarchates to the apostles themselves; who, in their opinion, according to the description of the world, hen given by geographers, pitched on the three principal cities in the three parts of the known world; viz. Rome in Europe, Antioch in Afia, and Alexandria in Africa: and thus formed a trinity of patriarchs. Others maintain that the name patriarch was unknown at the time of the council of Nice; and that for a long time afterwards patriarchs and primates were confounded together, as being all equally chiefs of diocefes, and equally fuperior to metropolitans, who were only chiefs of provinces. Hence Socrates gives the title patriarch to all the chiefs of diocefes, and rcc kons ten of them. Indeed, it does not appear that the dignity of patriarch was appropriated to the five grand feesof Rome, Constantinople, Alexandria, Antioch, and Jerusalem, till after the council of Chalcedon in 451; for when the council of Nice regulated the limits and prerogatives of the three patriarchs of Rome, Antioch, and Alexandria, it did not give them the title of patriarchs, though it allowed them the pre-eminence and privileges thereof; thus when the council of Constantinople adjudged the fecond place to the bishop of Constantinople, who till then was only a fuffragan of Heraclea, it faid nothing of the patriarchate. Nor is the term patriarch found in the decree of the council of Chalcedon, whereby the fifth place is affigned to the bishop of Jerusalem; nor did these five patriarchs govern all the churches.

There

⁽A) The word diocese was then of very different import from what it bears now. Under the article Episcopacy, it was observed, that the first founders of churches regulated their extent and the jurisdiction of their bishops by the divisions of the Roman empire into civil jurisdictions. One of these divisions was into provinces and dioceses. A province comprised the cities of a whole region subjected to the authority of one chief magistrate, who reflect in the metropolis or chief city of the province. A diocese was a still larger district, comprehending within it several provinces, subject to the controul of a chief magistrate, whose residence was in the metropolis of the diocese. The jurifdiction of the bishops of the Christian church was established upon this model. The authority of a private bishop extended only over the city in which he resided, together with the adjacent villages and surrounding tract of country. This district was called magainea, though it comprehended many parishes in the modern scrife of that word. Under Arcadius and Honorius the empire was divided into thirteen dioceses: 1. The Oriental diocese, containing fifteen provinces; 2. The diocese of Egypt, six provinces; 3. The Asiatic diocese, ten provinces; 4. The Pontic diocese, ten provinces; 5. The diocese of Thrace, six provinces; 6. The diocese of Macedonia, six provinces; 7. The diocese of Decia, five provinces; 8. The Italic diocese, seventeen provinces; 9. The diocese of Illyricum, fix provinces; 10. The diocese of Africa, fix provinces; 11. The Spanish diocese, seven provinces; 12. The Gallican diocese, seventeen provinces; 13. The Britannic diocese, sive provinces. Each of these provinces comprehended many παζοικιαι, and each παζοικια many modern parishes. See Bingham's Origines Sacræ, Book ix.

Patriarchs Patrician.

* Eccles. Hist. vol. i. p. 284.

There were, besides many independent chiefs of dioceses, who far from owning the jurisdiction of the grand patriarchs, called themselves patriarchs; such as that of Aquileia; nor was Carthage ever subject to the patriarch of Alexandria. Mosheim * imagines that the bishops, who enjoyed a certain degree of pre-eminence over the rest of their order, were distinguished by the Jewish title of patriarchs in the fourth century. The authority of the patriarchs gradually increased, till about the close of the fifth century, all affairs of moment within the compass of their patriarchate came before them, either at first hand or by appeals from the metropolitans. They confecrated bishops; affembled yearly in council the clergy of their respective districts; pronounced a decifive judgment in those cases where accusations were brought against bishops; and appointed vicars or deputies, clothed with their authority, for the preservation of order and tranquillity in the remoter provinces. In fhort, nothing was done without confulting them; and their decrees were executed with the same regularity and respect as those of the princes.

It deserves to be remarked, however, that the authority of the patriarchs was not acknowledged through all the provinces without exception. Several districts, both in the eastern and western empires, were exempted from their jurisdiction. The Latin church had no patriarchs till the fixth century; and the churches of Gaul, Britain, &c. were never subject to the authority of the patriarch of Rome, whose authority only extended to the fuburbicary provinces. There was no primacy, no exarchate nor patriarchate, owned here; but the bishops, with the metropolitans, governed the church in common. Indeed, after the name patriarch became frequent in the west, it was attributed to the bishops of Bourges and Lyons; but it was only in the first fignification, viz. as heads of dioceses. Du Cange says, that there have been some abbots who have borne the title of

PATRIARCHAL cross, in Heraldry, is that where the shaft is twice crossed; the lower arms being longer

than the upper ones.

PATRICIAN, a title given, among the ancient Romans, to the descendants of the hundred, or, as some will have it, of the two hundred, first senators chosen by Romulus; and by him called patres, "fathers." Romulus established this order after the example of the Athenians; who were divided into two classes, viz. the ευπατρίδας patricios, and δημοτικους populares. cians, therefore, were originally the nobility; in opposition to the plebeians. They were the only persons whom Romulus allowed to aspire to the magistracy; and they exercised all the functions of the priesthood till the year of Rome 495. But the cognizance and character of these ancient families being almost lost and extinguished by a long course of years, and frequent changes in the empire, a new kind of patricians were afterwards fet on foot, who had no pretentions from birth, but whose title depended entirely on the emperor's favour. This new patriciate, Zozimus tells us, was crected by Constantine, who conferred the quality on his counsellors, not because they were descended from the ancient fathers of the senate, but because they were the fathers of the republic or of the empire. This dignity in time became the highest of the empire. Justinian calls it fummam dignitatem. In effect, the patricians feem to have had the

precedence of the confulares, and to have taken place Patrician before them in the fenate; though F. Faber afferts the contrary. What confounds the question is, that the two dignities often met in the same person; because the patriciate was only conferred on those who had gone through the first offices of the empire, or had been confuls. Pope Adrian made Charlemagne take the title of patrician before he assumed the quality of emperor; and other popes have given the title to other kings and princes by reason of its eminence.

PATRICIAN is also a title of honour often conferred on men of the first quality in the time of our Anglo-Saxon kings. See THANE.

PATRICIAN Deities, Patricii Dii, in Mythology, were Janus, Saturn, the Genius, Pluto, Bacchus, the Sun, the

Moon, and the Earth.

PATRICIANS, in ecclefiaftical writers, were ancient fectaries, who disturbed the peace of the church in the beginning of the third century: thus called from their founder Patricius, preceptor of a Marcionite called Symmachus. His distinguishing tenet was, that the fubstance of the flesh is not the work of God, but that of the devil: on which account his adherents bore an implacable hatred to their own flesh; which sometimes carried them fo far as to kill themselves. They were also called TATIANITES, and made a branch of the En-

PATRICK, ST, the apostle of Ireland, and second bishop of that country. He was born April 5th A. D. 373, of a good family, at Kirk Patrick near Dumbarton, in what is now called Scotland, but then comprehended under the general name of Britain .- His baptifmal name Suceath, fignifies, in the British language, " valiant in war." On fome inroad of certain exiles from Ireland he was taken prisoner, and carried into that kingdom, where he continued fix years in the fervice of Milcho, who had bought him of three others, when Patrick acquired the new name of Cothraig, or Ceathar-Tigh, i. e. four families. In this time he made himself master of the Irish language, and at last made his escape, and returned home on board a ship. About two years after, he formed a design of converting the Irish, either in consequence of a dream, or of reflection on what he had observed during his acquaintance with them. The better to qualify himself for this undertaking, he travelled to the continent, where he continued 35 years, purfuing his studies under the direction of his mother's uncle St Martin, bishop of Tours, who had ordained him deacon; and after his death, with St German, bishop of Auxerre, who ordained him priest, and gave him his third name Mawn or Maginim.

An ancient author, Henricus Antifioderenfis, who wrote a book concerning the miracles of St German, confiders it as the highest honour of that prelate to have been the instructor of St Patrick: " As the glory of a father shines in the government of his fons; out of the many disciples in religion who are reported to have been his fons in Christ, suffice it briefly to mention one by far the most famous, as the feries of his actions shows, Patrick the particular apostle of Ireland, who being under his holy discipline 18 years, derived no little knowledge in the inspired writings from such a source. The most godly divine pontiff, confidering him alike diftinguished in religion, eminent for virtue, and stedfast in doctrine; and thinking it abfurd to let one of the best la-

Patrick. bourers remain inactive in the Lord's vineyard, recommended him to Celestine, pope of Rome, by his presbyter Segetius, who was to carry to the apostolic fee a testimonial of ecclesiastical merit of this excellent man. Approved by his judgement, supported by his authority, and confirmed by his bleffing, he fet out for Ireland; and being peculiarly destined to that people as their apostle, instructed them at that time by his doctrine and miracles; and now does and will forever display the wonderful power of his apostleship." Lastly, Pope Celestine consecrated him bishop, and gave him his most familiar name Patricius, expressive of his honourable descent; and to give lustre and weight to the commission which he now charged him with to convert the Irish. Palladius had been here a year before him on the same design, but with little fuccess: the faints Kieran, Ailbe, Declan, and Ibar, were precurfors both to Palladius and Patrick. But the great office of apostle of Ireland was referved for our prelate, who landed in the country of the Evolein, or at Wicklow, A. D. 441. His first convert was Sinell, eighth in deseent from Cormac king of Leinster; but not meeting with encouragement, he proceeded to Dublin, and thence to Ulfter, where he founded a church (afterwards the famous abbey of Saul, in the county of Down), remarkable for its position, being made out of a barn, and its greatest length reaching from north to fouth. After labouring feven years indefatigably in his great work, he returned to Britain, which he delivered from the herefies of Pelagius and Arius; engaged feveral eminent persons to affist him; visited the isle of Man, which he converted in 440, when the bishopric was founded; and, A. D. 448, returned to the see of Armagh (A), which he had founded three years before; and in 13 years more completed the conversion of the whole island (B). After giving an account of his commission at Rome, he once more returned hither, and spent the remainder of his life between the monasteries of Armagh and Saul, superintending and enforcing the great plan of doctrine and discipline which he had established. After having established schools, or an academy here, he closed his life and ministry at Saul abbey, in the 120th year of his age, March 17. A. D. 493, and was buried at Down afterwards, in the same grave with St Bridget and St Columb, in the fame place. Respecting his burial-place, however, there have been great disputes; and it has been as great a fubject of debate with the religious, as Homer's birthplace was formerly among the cities of Greece. Those of Down lay claim to it, on the authority of the follow-, Patrick.

These three in Down lie in tomb one, Briget, Patricius, and Columba pious.

Those of Glastenbury in England, from the old monuments of their church: And fome Scots affirm him to have been both born and buried among them at Glafgow. His genuine works were collected and printed by Sir James Ware, 1656. His immediate successor in this

fee was St Binen or Begnus.

Order of St PATRICK, an institution which took place in Ireland in the year 1783. On the fifth of February, in that year, the king ordered letters-patent to be passed under the great seal of the kingdom of Ireland, for creating a fociety or brotherhood, to be called knights of the illustrious order of St Patrick, of which his majesty, his heirs, and successors, shall perpetually be fovereigns, and his majesty's lieutenant-general and general-governor of Ireland, &c. for the time being. shall officiate as grand-masters; and also for appointing Prince Edward, and several of the prime nobility of Ireland, knights companions of the faid illustrious order. .

PATRICK, Simon, a very learned English bishop, was born at Gainsborough in Lincolnshire in 1626. In 1644 he was admitted into Queen's college, Cambridge, and entered into holy orders. After being for fome time chaplain to Sir Walter St John, and vicar of the church at Battersea in Surrey, he was preferred to the rectory of St Paul's, Covent-garden, in London, where he continued all the time of the plague in 1665 among his parishioners, to their great comfort. In 1668 he published his Friendly Debate between a Conformist and a Nonconformist. This was answered by the Diffenters, whom he had much exasperated by it; but by his moderation and candour toward them afterwards, they were perfectly reconciled to him, and he brought over many of them to the communion of the established church. In 1678 he was made dean of Peterborough, where he was much beloved. In 1682, Dr Lewis de Moulin, who had been a history-profesfor at Oxford, and written many bitter books against the church of England, sent for Dr Patrick upon his fick bed, and made a folemn declaration of his regret on that account, which he figned, and it was published after his death. During the reign of King James, the dean's behaviour showed that he had nothing more at heart than the Protestant religion; for which he ventured all that was dear to him, by preaching and writing

We are told, that Armagh was made a metropolitan fee in honour of St Patrick; in confequence of which it was held in the highest veneration not only by bishops and priests, but also by kings and bishops, as the venerable

Bede informs us.

⁽A) At Armagh St Patrick founded, A. D. 445 or 447, a priory of Augustine canons, dedicated to St Peter and St Paul, much enriched by the archbishops; restored by Imar O Hedegan in the 12th century. It was granted, A. D. 1611, to Sir Toby Caulfield, knight. St Patrick also founded there a house of canonesses of the same order, under his fifter Lupita, called Templeua firta, or the " house of miracles."

⁽B) There is a cave in the county of Donegal or Tir-connel, near the fource of the Liffey, which, it is pretended, was dug by Ulysses, in order to hold conversations with infernals. The present inhabitants call it Ellan n' Fradatory, or the "island of Purgatory, and Patrick's Purgatory." They affirm, with a pious credulity, that St Patrick the apostle of Ireland, or some abbot of that name, obtained of God by his earnest prayers, that the pains and torments which await the wicked after this life might be here fet forth to view, in order the more easily to recover the Irish from their sinful state and heathenish errors.

Patrick writing against the errors of the church of Rome. In Patriotism 1687 he published a prayer composed for that difficult time, when perfecution was expected by all who stood firm to their religion. The year after the Revolution, the dean was appointed bishop of Chichester, and was employed with others of the new bishops to settle the affairs of the church in Ireland. In 1691 he was translated to the see of Ely, in the room of the deprived Bishop Turner. He died in 1707, after having published various works; among which the most dithinguished are his Paraphrases and Commentaries on the Holy Scriptures, three volumes folio. These, with Lowth on the Proverbs, Arnold on the Apocrypha, and Whitby on the New Testament, make a regular continued commentary in English on all the sacred

PATRIMONY, a right or estate inherited by a

person from his ancestors.

The term patrimony has been also given to churchestates or revenues; in which sense authors still say, the patrimony of the church of Rimini, Milan, &c. The church of Rome hath patrimonies in France, Africa, Sicily, and many other countries. To create the greater respect to the estates belonging to the church, it was usual to give their patrimonies the names of the faints they held in the highest vencration: thus the estate of the church of Ravenna was called the patrimony of St Apollinarius; that of Milan, the patrimony of St Ambrofe; and the estates of the Roman church were called the patrimony of St Peter in Abruzzo, the patrimony of St Peter in Sicily, and the like.

What is now called St Peter's patrimony is only the duchy of Castro, and the territory of Orvietto. See

CASTRO, &c.

PATRIOTISM, a love of one's country, which is one of the noblest passions that can warm and animate the human breast. It includes all the limited and particular affections to our parents, children, friends, neighbours, fellow-citizens, and countrymen. It ought to direct and limit their more confined and partial actions within their proper and natural bounds, and never let them encroach on those facred and first regards we owe to the great public to which we belong. Were we folitary creatures, detached from the rest of mankind, and without any capacity of comprehending a public interest, or without affections leading us to defire and purfue it, it would not be our duty to mind it, nor criminal to neglect it. But as we are parts of the public fystem, and are not only capable of taking in large views of its interests, but by the strongest affections connected with it, and prompted to take a share of its concerns, we are under the most facred ties to profecute its fecurity and welfare with the utmost ardour, especially in times of public trial.

" Zeal for the public good (fays Mr Addison) is the characteristic of a man of honour and a gentleman, and must take place of pleasures, profits, and all other private gratifications: that whofoever wants this motive, is an open enemy, or an inglorious neuter to mankind, in proportion to the misapplied advantages with which nature and fortune have blessed him." This love of our country does not import an attachment to any particuliar foil, climate, or fpot of earth, where perhaps we first drew our breath, though those natural ideas are often affociated with the moral ones; and, like ex-

ternal figns or fymbols, help to afcertain and bind Patriotifm. them; but it imports an affection to that moral fyftem or community, which is governed by the fame laws and magistrates, and whose several parts are varioutly connected one with the other, and all united upon the bottom of a common interest. Wherever this love of our country prevails in its genuine vigour and extent, it swallows up all fordid and felfish regards; it conquers the love of ease, power, pleasure, and wealth; nay, when the amiable partialities of friendship, gratitude, private affection, or regards to a family, come in competition with it, it will teach us to facrifice all, in order to maintain the rights, and promote and defend the honour and happiness of our country. To pursue therefore our private interests in fubordination to the good of our country; to be examples in it of virtue, and obcdient to the laws; to choose such representatives as we apprehend to be the best friends to its constitution and liberties; and if we have the power, to promote fuch laws as may improve and perfect it; readily to embrace every opportunity for advancing its prosperity; cheerfully to contribute to its defence and fupport; and, if need be, to die for it :- these are among the duties which every man, who has the happi ness to be a member of our free and Protestant constitution, owes to his country.

The constitution of man is such, that the most selfish

passions, if kept within their proper bounds, have a tendency to promote the public good. There is no passion of more general utility than patriotism; but its origin may unquestionably be termed felsish. The love of one's relations and friends is the most natural expansion of felf-love: this affection connects itself too with local circumstances, and sometimes cannot easily be separated from them. It often varies, as relationship or place varies; but acquires new power when the whole community becomes its object. It was therefore with fingular propriety that the poet faid, " Self-love and focial are the fame." Under the article CALAIS we have al-Rapin's ready given the outlines of the transactions of its siege Hift. Eng by Edward III. during which the inhabitants difplayed Edw. III. a degree of patriotism truly wonderful. History scarcely affords a more diffinguished instance of true patriotic virtue than on this occasion. We shall therefore give a fuller account of this remarkable affair, as one of the best examples that can possibly be selected of the virtue we have been explaining. The inhabitants, under Count Vienne their gallant governor, made an admirable defence against a well disciplined and powerful army. Day after day the English effected many a breach, which they repeatedly expected to ftorm by morning; but, when morning appeared, they wondered to behold new ramparts raifed nightly, erected out of the ruins which the day had made. France had now put the fickle into her fecond harvest fince Edward with his victorious army fat down before the town. The eyes of all Europe were intent on the iffue. The English made their approaches and attacks without remisfion; but the citizens were as obstinate in repelling all their efforts. At length, famine did more for Edward than arms. After the citizens had devoured the lean carcases of their half-starved cattle, they tore up old foundations and rubbish in fearch of vermin: they fed on boiled leather, and the weeds of exhausted gardens; and a morfel of damaged corn was accounted matter of

56

Patriotism luxury. In this extremity they resolved to attempt the enemy's camp. They boldly fallied forth; the English joined battle; and, after a long and desperate engagement, Count Vienne was taken prisoner; and the citizens, who furvived the flaughter, retired within their gates. On the captivity of their governor, the command devolved upon Eustace Saint Pierre, the mayor of the town, a man of mean birth, but of exalted virtue. Eustace soon found himself under the necessity of capitulating, and offered to deliver to Edward the city, with all the possessions and wealth of the inhabitants, provided he permitted them to depart with life and liberty. As Edward had long fince expected to ascend the throne of France, he was exasperated to the last degree against these people, whose sole valour had defeated his warmest hopes; he therefore determined to take an exemplary revenge, though he wished to avoid the imputation of cruelty. He answered by Sir Walter Mauny, that they all deferved capital punishment, as obstinate traitors to him, their true and notable sovereign; that, however, in his wonted clemency, he confented to pardon the bulk of the plebeians, provided they would deliver up to him fix of their principal citizens with halters about their necks, as victims of due atonement for that spirit of rebellion with which they had inflamed the common people. All the remains of this defolate city were convened in the great fquare; and like men arraigned at a tribunal from whence there was no appeal, expected with throbbing hearts the fentence of their conqueror. When Sir Walter had declared his message, consternation and pale dismay was impressed on every face: each looked upon death as his own inevitable lot; for how should they defire to be faved at the price proposed? Whom had they to deliver up, fave parents, brothers, kindred, or valiant neighbours, who had so often exposed their lives in their defence? To a long and dead filence, deep fighs and groans fucceeded, till Eustace Saint Pierre ascending a little eminence, thus addressed the assembly: " My friends and fellow-citizens, you fee the condition to which we are reduced; we must either submit to the terms of our cruel and enfnafing conqueror, or yield up our tender infants, our wives, and chaste daughters, to the bloody and brutal lufts of the violating foldiery. We well know what the tyrant intends by his specious offers of mercy. It does not fatiate his vengeance to make us merely miferable, he would also make us criminal: he would make us contemptible: he will grant us life on no condition, fave that of our being unworthy of it. Look about you, my friends, and fix your eyes on the persons whom you wish to deliver up as the victims of your own fafety. Which of these would you appoint to the rack, the axe, or the halter? Is there any here who has not watched for you, who has not fought for you, who has not bled for you? Who, through the length of this inveterate fiege, has not suffered fatigues and miferies a thousand times worse than death, that you and yours might furvive to days of peace and prosperity? Is it your preservers, then, whom you would define to defiruction? You will not, you cannot, do it. Justice, honour, humanity, make such a treason impossible. Where then is our resource? Is there any expedient left, whereby we may avoid guilt and infamy on one hand, or the defolation and horwors of a facked city on the other? There is, my

friends, there is one expedient left; a gracious, an ex-Patriotifm. cellent, a god-like expedient! Is there any here to whom virtue is dearer than life! Let him offer himfelf an oblation for the fafety of his people! he shall not fail of a bleffed approbation from that power, who offered up his only Son for the falvation of mankind." He spoke—but an universal silence ensued. Each man looked round for the example of that virtue and magnanimity in others, which all wished to approve in themselves, though they wanted the resolution. At length Saint Pierre refumed: " It had been base in me, my fellow citizens, to promote any matter of damage to others, which I myfelf had not been willing to undergo in my own person. But I held it ungenerous to deprive any man of that preference and citimation, which might attend a first offer on so signal an occasion: for I doubt not but there are many here as ready, nay, more zcalous for this martyrdom than I can be, however modesty and the fear of imputed oftentation may withhold them from being foremost in exhibiting their merits. Indeed the station to which the captivity of Count Vienne has unhappily raised me, imports a right to be the first in giving my life for your fakes. I give it freely, I give it cheerfully. Who comes next? Your fon! exclaimed a youth, not yet come to maturity.—Ah, my child! cried St Pierre; I am then twice facrificed .- But no-I have rather bcgotten thee a fecond time. Thy years are few, but full, my fon; the victim of virtue has reached the utmost purpose and goal of mortality. Who next, my friends? This is the hour of heroes .- Your kinfman, cried John de Aire! Your kinfman, cried James Wissant! Your kinfman, cried Peter Wissant !- " Ah! (exclaimed Sir Walter Mauny, bursting into tears), why was I not a citizen of Calais?" The fixth victim was still wanting, but was quickly supplied by lot, from numbers who were now emulous of fo ennobling an example. The keys of the city were then delivered to Sir Walter. He took the fix prisoners into his custody. He ordered the gates to be opened, and gave charge to his attendants to conduct the remaining citizens with their families through the camp of the English. Before they departed, however, they defired permission to take their last adieu of their deliverers.—What a parting! what a fcene! they crowded with their wives and children about St Pierre and his fellow-prisoners. They embraced, they clung around, they fell proftrate before them. They groaned; they wept aloud; and the joint clamour of their mourning passed the gates of the city, and was heard throughout the camp. At length Saint Pierre and his fellow victims appeared under the conduct of Sir Walter and his guard. All the tents of the English were instantly emptied. The foldiers poured from all parts, and arranged themselves on each fide to behold, to contemplate, to admire this little band of patriots as they passed. They murmured their applause of that virtue which they could not but revere even in enemies; and they regarded those ropes which they had voluntarily assumed about their necks as enfigns of greater dignity than that of the British Garter. As soon as they had reached the royal presence, "Mauny (says the king), are these the principal inhabitants of Calais?" "They are (says Mauny); they are not only the principal men of Calais, they are the principal men of France, my lord;

Patriotism. if virtue has any share in the act of ennobling."

"Were they delivered peaceably, (fays Edward)? Was there no refistance, no commotion among the people?" " Not in the leaft, my lord. They are felfdelivered, felf-devoted, and come to offer up their ineftimable heads as an ample equivalent for the ranfom of

thousands."

The king, who was highly incenfed at the length and difficulty of the fiege, ordered them to be carried away to immediate execution; nor could all the remonstrances and intreaties of his courtiers divert him from his cruel purpose. But what neither a regard to his own interest and honour, what neither the dictates of justice, nor the feelings of humanity, could effect, was happily accomplished by the more powerful influence of conjugal affection. The queen, who was then big with child, being informed of the particulars respecting the fix victims, flew into her husband's prefence, threw herfelf on her knees before him, and, with tears in her eyes, befought him not to stain his character with an indelible mark of infamy, by committing fuch a horrid and barbarous deed. Edward could refuse nothing to a wife whom he fo tenderly loved, and especially in her condition; and the queen, not fatisfied with having faved the lives of the fix burghers, conducted them to her tent, where she applauded their virtue, regaled them with a plentiful repast, and having made them a present of money and clothes, sent them back to their fellow-citizens.

The love of their country, and of the public good, feems to have been the predominant paffion of the Spartans. Pedaretus having miffed the honour of being chosen one of the three hundred who had a certain rank of diffinction in the city, went home extremely Plwarch's pleased and satisfied; saying, "He was overjoyed there Life of Ly-were three hundred men in Sparta more honourable than

curgus. himfelf."

The patriotism of the Romans is well known, and has been justly admired. We shall content ourselves at prefent with the following example; a zeal and patriotic devotion fimilar to which is perhaps fcarcely equalled,

and certainly is not exceeded, in history

Rome, under the confuls Cæfo Fabius and T. Virginius, had feveral wars to fustain, less dangerous than lin's Rom. troublesome, against the Æqui, Volsci, and Veientes. Hift. v. i. p. To put a stop to the incursions of the last, it would have been necessary to have established a good garrison upon their frontiers to keep them in awe. But the commonwealth, exhaufted of money, and menaced by abundance of other enemies, was not in a condition to provide for fo many different cares and expences. The family of the Fabii showed a generosity and love of their country that has been the admiration of all ages. They applied to the fenate, and by the mouth of the conful demanded as a favour that they would be pleafed to transfer the care and expences of the garrifon ne-ceffary to oppose the enterprises of the Veientes to their house, which required an assiduous rather than a numerous body, promifing to support with dignity the honour of the Roman name in that post. Every body was charmed with fo noble and unheard of an offer; and it was accepted with great acknowledgment. The news fpread over the whole city, and nothing was talked of but the Fabii. Every body praifed, every body admired and extolled them to the skies. " If there Vol. XVI. Part I.

were two more fuch families in Rome," faid they, " the Patriotiin. one might take upon them the war against the Volsci, and the other against the Æqui, whilst the commonwealth remained quiet, and the forces of particulars fub-

dued the neighbouring states."

Early the next day the Fabii fet out, with the conful at their head, robed, and with his infignia. Never was there fo fmall, and at the fame time fo illustrious, an army feen; for which we have the authority of Livy. Three hundred and fix foldiers, all patricians, and of the fame family, of whom not one but might be judged worthy of commanding an army, march against the Veii full of courage and alacrity, under a captain of their own name, Fabius. They were followed by a body of their friends and clients, animated by the fame spirit and zeal, and actuated only by great and noble views. The whole city flocked to fee fo fine a fight; praifed those generous soldiers in the highest terms; and promifed them confulships, triumphs, and the most glorious rewards. As they passed before the capitol and the other temples, every body implored the gods to take them into their protection; to favour their departure and undertaking, and to afford them a speedy and happy return. But those prayers were not heard. When they arrived near the river Crimera, which is not far from Veii, they built a fort upon a very rough and steep mountain for the security of the troops, which they furrounded with a double fosse, and slanked with several towers. This fettlement, which prevented the enemy from cultivating their ground, and ruined their commerce with strangers, incommoded them extremely. The Veientes not finding themselves strong enough to ruin the fort which the Romans had erected, applied to the Hetrurians, who fent them very confiderable aid. In the mean time the Fabii, encouraged by the great fuccess of their incursions into the enemy's country, made farther progress every day. Their excessive boldness made the Hetrurians conceive thoughts of laying ambuscades for them in several places. During the night they feized all the eminences that commanded the plain, and found means to conceal a great number of troops upon them. The next day they dispersed more cattle about the country than they had done before. The Fabii being apprized that the plains were covered with flocks and herds, and defended by only a very small number of troops, they quitted their fort, leaving in it only a fufficient number to guard it. The hopes of a great booty quickened their march. They arrived at the place in order of battle; and were preparing to attack the advanced guard of the enemy, when the latter, who had their orders, fled without flaying till they were charged. The Fabii, believing themfelves fecure, feized the shepherds, and were preparing to drive away the cattle. The Hetrurians then quitted their skulking places, and fell upon the Romans from all fides, who were most of them dispersed in pursuit of their prey. All they could do was to rally immediately; and that they could not effect without great difficulty. They foon faw themselves surrounded on all fides, and fought like lions, felling their lives very dear. But finding that they could not fustain this kind of combat long, they drew up in a wedge, and advancing with the utmost fury and impetuosity, opened themselves a passage through the enemy that led to the side of the mountain. When they came thither, they halted, and

viii. p. 570. and Rol-

Dion, lib.

Patripal- fought with fresh courage, the enemy leaving them no time to respire. As they were upon the higher ground, they defended themselves with advantage, notwithstanding their small number; and beating down the enemy, who spared no pains in the attack, they made a great flaughter of them. But the Veientes having gained the top of the mountain by taking a compass, fell suddenly upon them, and galled them exceedingly from above with a continual shower of darts. The Fabii defended themselves to their last breath, and were all killed to a man. The Roman people were highly affected with the loss of this illustrious band of patriots. The day of their defeat was ranked amongst the unfortunate days, called nefasti, on which the tribunals were shut up, and no public affair could be negociated, or at least concluded. The memory of these public-spirited patricians, who had fo generously facrificed their lives and fortunes for the fervice of the state, could not be too much honoured.

PATRIPASSIANS, PATRIPASSIANI, in church history, a Christian feet, who appeared about the latter end of the second century; so called, from their ascribing the passion to the Father; for they afferted the unity of God in fuch a manner as to destroy all distinctions of persons, and to make the Father and Son precifely the same; in which they were followed by the Sabellians and others. The author and head of the Patripassians was Praxeas, a philosopher of Phrygia in Asia. Swedenbourg and his followers feem to hold the fame faith.

PATROCLUS, a Grecian chief at the Trojan war. He was the fon of Menœtius, by Sthenele, whom some call *Philomela* or *Polymela*. The murder of Clysonymus, the son of Amphidamas, by accident, in the time of his youth, made him fly from Opus, where his father reigned. He went to the court of Peleus king of Phthia. He was cordially received, and contracted the most intimate friendship with Achilles the king's fon. When the Grecks went to the Trojan war, Patroclus went with them at the express desire of his father, who had visited the court of Pelcus; and he accordingly embarked with ten ships from Phthia. He was the conflant companion of Achilles; lodged in the fame tent; and, when he refused to appear in the field of battle, because he had been offended by Agamemnon, Patto-clus imitated his example, and by his absence was the cause of much evil to the Greeks. At last, however, Nestor prevailed upon him to return to the war, and Achilles permitted him to appear in his armour. The bravery of Patroclus, together with the terror which the fight of the arms of Achilles inspired, foon routed the victorious armies of the Trojans, and obliged them to fly to the city for fafety. He would have broken down the walls; but Apollo, who interested himself for the Trojans, opposed him; and Hector, at the instigation of that god; dismounted from his chariot to attack him as he attempted to strip one of the Trojans whom he had flain. This engagement was obstinate; but Patroclus was at length overpowered by the valour of Hector, and the interpofition of Apollo. His arms became the property of the conqueror; and Hector would have fevered his head from his body had not Ajax and Menelaus prevented it. His body was at last recovered, and carried to the Grecian camp, where Achilles received it with the

loudest lamentations. His funerals were observed with Patrol, the greatest solemnity. Achilles sacrificed near the burning pile twelve young Trojans, four of his horses, and two of his dogs; and the whole was concluded by the exhibition of funeral games, in which the conquerors were liberally rewarded by Achilles. The death of Patroclus, as defcribed by Homer, gave rife to new events. Achilles forgot his refentment against Agamemnon, and entered the field to avenge the fall of his friend; and his anger was gratified only by the flaughter of Hector, who had more powerfully kindled his wrath by appearing at the head of the Trojan armies in the armour which had been taken from the body of Patroclus. The patronymic of Actorides is often applied to Patroclus, because Actor was father to Menœtius.

PATROL, in war, a round or march made by the guards or watch in the night time, to observe what passes in the streets, and to secure the peace and tranquillity of a city or camp. The patrol generally confifts of a body of five or fix men, detached from a body on guard, and commanded by a ferjeant.

They go every hour of the night, from the beating of the tattoo until the reveille: they are to walk in the streets in garrifons, and all over the camp in the field, to prevent diforders, or any number of people from affembling together: they are to fee the lights in the foldiers barracks put out, and to take up all the foldiers they find out of their quarters. Sometimes patrols confift of an officer and 30 or 40 men, as well infantry as cavalry; but then the enemy is generally near at hand,

and consequently the danger the greater.
PATRON, among the Romans, was an appellation given to a master who had freed his slave. As soon as the relation of master expired, that of patron began: for the Romans, in giving their flaves their freedom, did not despoil themselves of all rights and privileges in them; the law still subjected them to considerable fervices and duties towards their patrons, the neglect of which was very feverely punished.

Patron was also a name which the people of Rome gave to some great man, under whose protection they usually put themselves; paying him all kinds of honour and respect, and denominating themselves his clients; while the patron, on his fide, granted them his credit and protection. They were therefore mutually attach-ed and mutually obliged to each other; and by this means, in confequence of reciprocal ties, all those seditions, jealousies, and animosities, which are sometimes the effect of a difference of rank, were prudently avoided: for it was the duty of the patron to advise his clients in points of law, to manage their fuits, to take care of them as of his own children, and fecure their peace and happiness. The clients were to affift their patrons with money on feveral occasions; to ransom them or their children when taken in war; to contribute to the portions of their daughters; and to defray, in part, the charges of their public employments. They were never to accuse each other, or take contrary sides; and if either of them was convicted of having violated this law, the crime was equal to that of treason, and any one was allowed to kill the offender with impunity. This patronage was a tie as effectual as any confanguinity or alliance, and had a wonderful effect towards maintaining union and concord among the people for 59

Plackst.

Patron, the space of 600 years; during which time we find no Patronage diffensions or jealousies between the patrons and their clients, even in the times of the republic, when the populace frequently mutinied against those who were most powerful in the city.

PATRON, in the church of Rome, a faint whose name a person bears, or under whose protection he is put, and whom he takes particular care to invoke; or a faint in

whose name a church or order is founded.

PATRON, in the canon or common law, is a person who, having the advowson of a parsonage, vicarage, or the like spiritual promotion, belonging to his manor, hath on that account the gift and disposition of the benefice, and may prefent to it whenever it becomes vacant. The patron's right of disposing of a benefice originally arises either from the patron or his ancestors, &c. being the founders or builders of the church; from their having given lands for the maintenance thereof; or from the church's being built on their ground; and

frequently from all three together.

PATRONAGE, or Advowson, a fort of incorporeal hereditament, confifting in the right of prefentation to a church or ecclefiaftical benefice. Advowfon, advocatio, fignifies in clientelam recipere, the taking into protection; and therefore is fynonymous with patronage, patronatus: and he who has the right of advowsfon is called the patron of the church. For when lords of manors first built churches on their own demesnes, and appointed the tithes of those manors to be paid to the officiating ministers, which before were given to the clergy in common (from whence arose the divifion of parishes), the lord who thus built a church, and endowed it with glebe or land, had of common right a power annexed of nominating fuch minister as he pleased (provided he were canonically qualified) to officiate in that church, of which he was the founder, endower, maintainer, or, in one word, the patron.

Advowsons are either advowsons appendant, or advowfons in grofs. Lords of manors being originally the only founders, and of course the only patrons, of churches, the right of patronage or presentation, so long as it continues annexed to the possession of the manor, as some have done from the foundation of the church to this day, is called an advowfon appendant: and it will pass, or be conveyed, together with the manor, as incident and appendant thereto, by a grant of the manor only, without adding any other words. But where the property of the advowfon has been once separated from the property of the manor by legal conveyance, it is called an advowson in gross, or at large, and never can be appendant any more; but it is for the future annexed to the person of its owner, and not to his manor or lands.

Advowsons are also either presentative, collative, or donative. An advowson presentative, is where the patron hath a right of presentation to the bishop or ordinary, and moreover to demand of him to institute his clerk if he finds him canonically qualified: and this is the most usual advowson. An advowson collative, is where the bishop and patron are one and the same person: in which case the bishop cannot present to himself; but he does, by the one act of collation, or conferring the benefice, the whole that is done in common cases, by both presentation and institution. An advowson donative, is when the king, or any subject by his licence, doth found a church or chapel, and

ordains that it shall be merely in the gift or disposal of Patronage, the patron; subject to his visitation only, and not to Patronythat of the ordinary; and vested absolutely in the clerk by the patron's deed of donation, without presentation, institution, or induction. This is said to have been anciently the only way of conferring ecclefiaftical benefices in England; the method of institution by the bishop not being established more early than the time of Archbishop Becket in the reign of Henry II. and therefore, though Pope Alexander III. in a letter to Becket, feverely inveighs against the prava confuetudo, as he calls it, of investiture conferred by the patron only, this however shows what was then the common usage. Others contend that the claim of the bishops to institution is as old as the first planting of Christianity in this island; and in proof of it they allege a letter from the English nobility to the pope in the reign of Henry the third, recorded by Matthew Paris, which freaks of presentation to the bishop as a thing immemorial. The truth seems to be, that, where the benefice was to be conferred on a mere layman, he was first presented to the bishop in order to receive ordination, who was at liberty to examine and refuse him: but where the clerk was already in orders, the living was usually vested in him by the fole donation of the patron; till about the middle of the 12th century, when the pope and his bishops endcavoured to introduce a kind of feodal dominion over ecclesiaftical benefices, and, in confequence of that, began to claim and exercise the right of institution universally, as a fpecies of spiritual investiture.

However this may be, if, as the law now stands, the true patron once waves this privilege of donation, and presents to the bishop, and his clerk is admitted and inflituted, the advowfon is now become for ever prefentative, and shall never be donative any more. For these exceptions to general rules and common right are ever looked upon by the law in an unfavourable view, and construed as strictly as possible. If therefore the patron, in whom fuch peculiar right refides, does once give up that right, the law, which loves uniformity, will interpret it to be done with an intention of giving it up for ever; and will therefore reduce it to the standard of other ecclefiaftical livings. See further, LAW, Part III.

Sect. v. No clix. 5-10.

Arms of PATRONAGE, in Heraldry, are those on the top of which are some marks of subjection and dependence: thus the city of Paris lately bore the fleurs-delis in chief, to show her subjection to the king; and the cardinals, on the top of their arms, bear those of the pope, who gave them the hat, to show that they are his creatures.

PATRONYMIC, among grammarians, is applied to fuch names of men or women as are derived from

those of parents or ancestors. |

Patronymics are derived, 1. From the father; as Pelides, i. e. Achilles the fon of Peleus. 2. From the mother; as Philyrides, i. e. Chiron the fon of Philyra. 3. From the grandfather on the father's fide; as Æacides, i. e. Achilles the grandfon of Æacus. 4. From the grandfather by the mother's fide; as Atlantiades, i. e. Mercury the grandfon of Atlas. And, 5. From the kings and founders of nations; as Romulidæ, i. e. the Romans, from their founder King

The termination of Greek and Latin patronymics H 2

Patros. Pattans. are chiefly four, viz. des, of which we have examples above; as, as Thaumantias, i.e. Iris the daughter of Thaumas; is, as Atlantis, i. e. Electra the daughter of Atlas; and ne, as Nerine, the daughter of Nereus. Of these terminations des is masculine; and as, is, and ne, feminine: des and ne are of the first declension, as and is of the third.

The Ruffians, in their usual mode of address, never prefix any title or appellation of respect to their names; but persons of all ranks, even those of the first distinction, call each other by their Christian names, to which they add a patronymic. These patronymics are formed in some cases by adding Vitch (the same as our Fitz, as Fitzherbert, or the fon of Herbert) to the Christian name of the father; in others by Of or Ef; the former is applied only to persons of condition, the latter to those of inferior rank. Thus,

Ivan Ivanovitch, Ivan Ivanof, is Ivan the fon of Ivan: Peter Alexievitch, Peter Alexeof, Peter the fon of

The female patronymic is Efna or Ofna, as Sophia Alexeefna, or Sophia the daughter of Alexey; Maria Ivanofna, or Maria the daughter of Ivan.

Great families are also in general distinguished by a furname, as those of Romanof, Galitzin, Shereme-

PATROS, mentioned by Jeremiah and Ezekiel, appears from the context to be meant of a part of Egypt. Bocchart thinks it denotes the Higher Egypt: the Septuagint translate it the country of Pathure; in Pliny we have the Nomos Phaturites in the Thebais; in Ptolemy, Pathyris, probably the metropolis. From the Hebrew appellation Patros comes the gentilitious name Pathrusim, (Moses).

PATTANS, PATANS, or AFGHANS, a very warlike race of men, who had been subjects of the vast empire of Bochara. They revolted under their governor Abstagi, in the 10th century, and laid the foundation of the empire of Ghizni or Gazna. In the Differtation prefixed to vol. iii. of Dow's History, we have this account of the Pattans.

"They are divided into diffinct communities, each of which is governed by a prince, who is confidered by his subjects as the chief of their blood, as well as their fovereign. They obey him without reluctance, as they derive credit to their family by his greatness. They attend him in his wars with the attachment which children have to a parent; and his government, though fevere, partakes more of the rigid discipline of a general than the caprice of a defpot. Rude, like the face of their country, and fierce and wild as the storms which cover their mountains, they are addicted to incursions and depredations, and delight in battle and plunder. United firmly to their friends in war, to their enemies faithless and cruel, they place justice in force, and conceal treachery under the name of address."

The empire, which took its rife from the revolt of the Pattans, under a fuccession of warlike princes role to a furprifing magnitude. In the beginning of the 11th century, it extended from Ifpahan to Bengal, and from the mouths of the Indus to the banks of the Jaxertes, which comprehends at least half of the continent of Asia. They had fled to the mountains on the borders of Perfia, that they might escape the fword, or avoid submitting to the conquerors of India; and there they formed

their state, which the Moguls were never able thorough. ly to fubdue. Indeed they fometimes exercifed depredations on the adjacent countries; nor was it possible for the Moguls either to prevent it or to extirpate them. They were fenfible that the climate and foil of the delicious plains would only ferve to rob them of that hardiness they contracted in the hills to which they were confined; they, therefore, for a long time gave no indications of a defire to exchange them for more pleafing abodes, or a more accessible situation. This enabled them to brave the victorious army of Nadir Shah, whose troops they quietly fuffered to penetrate into Hindottan, and waited his return with the spoils of that country.—'They then haraffed his army in the straits and defiles of the mountains, and proved themselves such absolute masters of the passes, that they forced him to purchase from them his passage into Persia.

In the beginning of the 18th century, they had fpread themselves over the adjoining province of Kandahar; and fuch was the imbecility of the Persian empire at that time, that many other provinces and tributary states were also induced to revolt. When the king or shah of that time, whose name was Huffein, opposed the growing power of this warlike people, he was totally defeated, and Ifpahan was befieged and obliged to furrender, after having fuffered dreadful calamities, to an army confisting of only 30,000 men. In consequence of this, they brought about a revolution in Persia, and fubjected it to themselves. This fovereignty, however, they only held for feven years and 21 days, having fallen a facrifice to the enterprifing spirit of Kouli Khan, or Nadir Shah. See PERSIA and AFGHANS.

PAU, a town of France, in the province of Gascony and territory of Bearne, having formerly a parliament, a mint, and a castle. "The city of Pau (says Wraxal*) * Tour will be for ever memorable in history, since it was the through birthplace of Henry IV. That immortal prince was born in the castle, then the usual residence of the kings of Navarre. It stands on one of the most romantic and fingular fpots I have ever feen, at the west end of the town, upon the brow of a rock which terminates perpendicularly. Below runs the Gave, a river or rather a torrent which rifes in the Pyrenees, and empties itself into the Adour. On the other fide, about two miles off, is a ridge of hills covered with vineyards, which produce the famous Vin de Jorençon, fo much admired; and beyond all, at the distance of nine leagues, appear the Pyrenees themselves, covering the horizon from east to west, and bounding the prospect. The castle, though now in a state of decay, is still habitable; and the apartments are hung with tapestry, faid to be the work of Jane queen of Navarre, and mother of Henry IV. Gafton IV. count de Foix, who married Leonora heiress of the crown of Navarre, began the edifice in 1464; but his fuccessor Henry d'Albret completed and enlarged it about the year 1519, when he made choice of the city of Pau for his refidence, and where, during the remainder of his reign, he held his little court. In a chamber, which by its fize was formerly a room of state, is a fine whole length portrait of that Jane queen of Navarre whom I have just mentioned. Her dress is very splendid, and refembles those in which our Elizabeth is usually painted. Her head-drefs is adorned with pearls; round her neck she wears a ruff; and her arms, which are likewise covered with pearls, are concealed by her

habit quite down to the wrift. At her waist hangs by a chain a miniature portrait. The fingers of her right hand play on the strings of a guitar; and in her left the holds an embroidered handkerchief. The painter has drawn her as young, yet not in the first bloom of youth. Her features are regular, her countenance thin, but rather inclining to long; the eyes hazel, and the eyebrows finely arched. Her nofe is well formed though large, and her mouth pretty. She was a great princels, of high spirit, and undaunted magnanimity. Her memory is not revered by the French historians, because she was the protectress of the Huguenots and the friend of Coligni; but the actions of her life evince her diffin-

guished merit.

"In one of the adjoining chambers, is another portrait of Henry IV. himself when a boy; and on the second floor is the apartment in which he was born. The particulars of his birth are in themselves so curious, and and as relating to fo great and good a prince, are fo peculiarly interesting, that I doubt not you will forgive my enumerating them, even though you should have feen them elsewhere. His mother Jane had already lost two fons, the duke de Beaumont and the count de Marle. Henry d'Albret, her father, anxious to see an heir to his dominions, enjoined her (when she accompanied her husband Anthony of Bourbon to the wars of Picardy against the Spaniards), if she proved with child, to return to Pau, and to ly-in there, as he would himself superintend the education of the infant from the moment of its birth. He threatened to difinherit her if she failed to comply with this injunction. The princess, in obedience to the king's command, being in the ninth month of her pregnancy, quitted Compiegne in the end of November, traversed all France in 15 days, and arrived at Pau, where the was delivered of a fon on the 13th December 1553. She had always been desirous to fee her father's will, which he kept in a golden box; and he promifed to show it to her, provided she admitted of his being present at her delivery, and would, during the pains of her labour, fing a fong in the Bearnois language. Jane had courage enough to perform this unufual request; and the king being called on the first news of her illness, she immediately sung a Bearnois fong, beginning, ' Notre Dame du bout du pont, aidez * See Hen. moi en cette heure.'—As she finished it, Henry * was IV. King of born. The king instantly performed his promise, by giving her the box, together with a golden chain, which he tied about her neck; and taking the infant into his own apartment, began by making him fwallow fome drops of wine, and rubbing his lips with a root of garlic. They still show a tortoise-shell which served him for a cradle, and is preferved on that account. Several of the ancient fovereigns of Navarre refided and died in the castle of Pau. François Phœbus, who ascended the throne in 1479, died here in 1483."

Pau is a handsome city, well built, and contains near 6000 inhabitants. It is a modern place, having owed its existence entirely to the castle, and to the residence of the kings of Navarre. W. Long. o. 4. N. Lat. 43.

PAVAN, or PAVANE, a grave dance used among the Spaniards, and borrowed from them; wherein the performers made a kind of wheel or tail before each other, like that of pavo, "a peacock;" from whence the name is derived. The pavane was formerly in great

repute; and was danced by gentlemen with cap and Pavetta fword; by those of the long robe in their gowns, by princes with their mantles, and by the ladies with their gown tails trailing on the ground. It was called the grand ball, from the folemnity with which it was performed. To moderate its gravity, it was usual to introduce several flourishes, passades, capers, &c. by way of episodes. Its tablature or score is given at large by Thomot Arbeau in his Orchefographia.

Pavilion.

PAVETTA, a genus of plants belonging to the tetrandria class; and in the natural method ranking under the 47th order Stellatæ. See BOTANY Index.

PAVIA, an ancient and celebrated town of Italy, in the duchy of Milan, and capital of the Pavefan, with an university and bishop's see. It was anciently called Ticinum, from its situation on that river, and lies 20 miles to the fouthward of Milan. It was formerly the capital of the Longobardic kingdom, and is still remarkable for the broadness of its streets, the beauty and richness of some of its churches, and for its university founded by Charlemagne, and for several other literary institutions. Here is a bishop's see, which was once the richest in Italy, but is now dependent on the pope; and upon the whole the city is gone to decay, its trade being ruined through the exactions of the government. The few objects within it worth the public attention belong to the clergy or monks; and the church and convent of the Carthufians are inexpressibly noble, the court of the convent being one of the finest in the world, and furrounded by a portico supported by pillars, the whole a mile in circumference. It is defended by strong walls, large ditches, good ramparts, excellent bastions, and a bridge over the river Tafin. In the centre of the town is a strong castle, where the duke of Milan was wont to refide. There are a great number of magnificent castles, and some colleges. It was taken by the duke of Savoy in 1706; by the French in 1733; by the French and Spaniards in 1745; but retaken by the Austrians in 1746. E. Long. 9. 5. N. Lat. 45. 10. PAVILION, in Architecture, fignifies a kind of tur-

ret, or building, usually infulated, and contained under a fingle roof; fometimes square, and fometimes in form of a dome: thus called from the refemblance of its roof

Pavilions are fometimes also projecting pieces, in the front of a building, marking the middle thereof; fometimes the pavilion flanks a corner, in which case it is called an angular pavilion. The Louvre is flanked with four pavilions: the pavilions are usually higher than the rest of the building. There are pavilions built in gardens, commonly called fummer-houses, pleasurehouses, &c. Some castles or forts consist only of a single

PAVILION, in military affairs, fignifies a tent raifed on posts, to lodge under in the summer-time.

PAVILION, is also fometimes applied to flags, colours,

enfigns, standards, banners, &c.

PAVILION, in Heraldry, denotes a covering in form of a tent, which invests or wraps up the armories of dis vers kings and fovereigns, depending only on God their fword.

The pavilion confifts of two parts; the top, which is the chapeau, or coronet; and the curtain, which makes the mantle.

None but fovereign monarchs, according to the French

Faving. heralds, may bear the pavilion entire, and in all its parts: Those who are elective, or have any dependence, say the heralds, must take off the head, and retain nothing but the curtains.

PAVILIONS, among jewellers, the underfides and corners of the brilliants, lying between the girdle and the

collet.

PAVING, the construction of ground-floors, streets, or highways, in fuch a manner that they may be conveniently walked upon. In Britain, the pavement of the grand streets, &c. is usually of flint, or rubble-stone; courts, stables, kitchens, halls, churches, &c. are paved with tiles, bricks, flags, or fire-stone; fometimes with a kind of freestone and ragstone.

In some streets, e. g. of Venice, the pavement is of brick: churches fometimes are paved with marble, and fometimes with mosaic work, as the church of St Mark at Venice. In France, the public roads, streets, courts, &c. are all paved with gres or gritt, a kind of free-

stone.

In Amsterdam and the chief cities of Holland, they call their brick pavement the burgher-masters pavement, to diffinguish it from the stone or slint pavement, which usually takes up the middle of the street, and which ferves for carriages; the brick which borders it being

destined for the passage of people on foot.

Pavements of freeftone, flint, and flags, in streets, &c. are laid dry, i. e. in a bed of fand; those of courts, stables, ground-rooms, &c. are laid in a mortar of lime and fand; or in lime and cement, especially if there be vaults or cellars underneath. Some masons, after laying a floor dry, especially of brick, spread a thin mortar over it; fweeping it backwards and forwards to fill up the joints. The feveral kinds of pavement are as various as the materials of which they are composed, and whence they derive the name by which they are diffinguished;

I. Pebble-paving, which is done with stones collected from the fea-beach, mostly brought from the islands of Guernsey and Jersey: they are very durable, indeed the most so of any stone used for this purpose. They are used of various fizes, but those which are from fix to nine inches deep, are esteemed the most serviceable. When they are about three inches deep, they are denominated bolders or bowlers; these are used for paving court-yards, and other places not accustomed to receive carriages with heavy weights; when laid in geometrical figures, they have a very pleafing appearance.

2. Rag-paving was much used in London, but is very inferior to the pebbles; it is dug in the vicinity of Maidstone in Kent, from which it has the name of Kentish ragstone; there are squared stones of this material

for paving coach-tracks and footways.

3. Purbeck pitchens; fquare stones used in footways; they are brought from the island of Purbeck, and also frequently used in court-yards; they are in general from fix to ten inches square, and about five inches

4. Squared paving, for diffinction by some culled Scotch paving, because the first of the kind paved in the manner that has been and continues to be paved, came from Scotland; the first was a clear close stone, called blue whynn, which is now difused, because it has been found inferior to others fince introduced in the order they are bereafter placed.

5. Granite, a hard material, brought also from Scot- Paving. land, of a reddish colour, very superior to the blue whynn quarry, and at present very commonly used in London.

6. Guernfey, which is the best, and very much in use; it is the same stone with the pebble before spoken of, but broken with iron hammers, and squared to any dimenfions required of a prismoidical figure, fet with its smallest base downwards. The whole of the foregoing paving should be bedded and paved in small gravel.

7. Purbeck paving, for footways, is in general got in large furfaces about two inches and a half thick; the blue fort is the hardest and the best of this kind of

paving.
8. York/hire paving, is an exceeding good material for the same purpose, and is got of almost any dimensions of the same thickness as the Purbeck. This stone will not admit the wet to pass through it, nor is it affected by the frost.

9. Ryegate or firestone paving, is used for hearths, stoves, ovens, and such places as are liable to great heat,

which does not affect the stone if kept dry.

10. Newcastle slags, are stones about two feet square, and one inch and a half or two inches thick; they anfiver very well for paving out-offices: they are fomewhat like the Yorkshire.

11. Portland paving, with stone from the island of Portland; this is fometimes ornamented with black mar-

12. Swedland paving, is a black flate dug in Leicestershire, and looks well for paving halls, or in party-coloured paving.

13. Marble paving, is mostly variegated with differ-

ent marbles, fometimes inlaid in mosaic.

14. Flat brick paving, done with brick laid in fand, mortar, or groute, as when liquid lime is poured into

15. Brick on edge paving, done with brick laid edge-

wife in the same manner.

16. Bricks are also laid flat or edgewise in herring-

17. Bricks are also sometimes set endwise in fand, mortar, or groute.

18. Paving is also performed with paving bricks.

19. With ten inch tiles.

20. With foot tiles.

21. With clinkers for stables and outer offices.

22. With the bones of animals, for gardens, &c.

And, 23. We have knob-paving, with large gravel-

stones, for porticoes, garden-seats, &c.

Pavements of churches, &c. frequently confift of stones of feveral colours; chiefly black and white, and of feveral forms, but chiefly fquares and lozenges, artfully difposed. Indeed, there needs no great variety of colours to make a furprifing diverfity of figures and arrangements. M. Truchet, in the Memoirs of the French Academy, has shown by the rules of combination, that two square stones, divided diagonally into two colours, may be joined together chequerwife 64 different ways: which appears furprifing enough; fince two letters or figures can only be combined two ways.

The reason is, that letters only change their situation with regard to the first and second, the top and bottom remaining the same; but in the arrangement of these Rones, each admits of four feveral fituations, in each

whereof the other square may be changed 16 times, Paul.

which gives 64 combinations.

Indeed, from a farther examination of these 64 combinations, he found there were only 32 different figures, each figure being repeated twice in the same situation, though in a different combination; fo that the two only differed from each other by the transposition of the dark

and light parts.

PAUL, formerly named SAUL, was of the tribe of Benjamin, a native of Tarsus in Cilicia, a Pharisee by profession; first a persecutor of the church, and afterwards a disciple of Jesus Christ, and apostle of the Gentiles. It is thought he was born about two years before our Saviour, supposing that he lived 68 years, as we read in a homily which is in the 6th volume of St Chryfostom's works. He was a Roman citizen (Acts xxii. 27, 28.), because Augustus had given the freedom of the city to all the freemen of Tarfus, in confideration of their firm adherence to his interests. His parents sent him early to Jerusalem, where he studied the law at the feet of Gamaliel a famous doctor (id. xxii. 3.). He made very great progress in his studies, and his life was always blameless before men; being very zealous for the whole observation of the law of Moses (id. xxvi. 4, 5.). But his zeal carried him too far; he perfecuted the church, and insulted Jesus Christ in his members (1 Tim. i. 13.); and when the protomartyr St Stephen was floned, Saul was not only confenting to his death, but he even stood by and took care of the clothes of those that stoned him (Acts vii. 58, 59.). This happened in the 33d year of the common era, some time after our Saviour's death.

At the time of the perfecution that was raifed against the church, after the death of St Stephen, Saul was one of those that showed most violence in distressing the believers (Gal. i. 13. and Acts xxvi. 11.). He entered into their houses, and drew out by force both men and women, loaded them with chains, and sent them to pri-fon (Acts viii. 3. and xxii. 4.). He even entered into the fynagogues, where he caused those to be beaten with rods that believed in Jesus Christ, compelling them to blaspheme the name of the Lord. And having got credentials from the high-priest Caiaphas, and the elders of the Jews, to the chief Jews of Damascus, with power to bring to Jerusalem all the Christians he should find there, he went away full of threats, and breathing nothing but blood (Acts ix. 1, 2, 3, &c.). But as he was upon the road, and now drawing near to Damascus, all on a sudden about noon, he perceived a great light to come from heaven, which encompassed him and all those that were with him. This fplendor threw them on the ground; and Saul heard a voice that faid to him, " Saul, Saul, why perfecutest thou me?" It was Jesus Christ that spoke to him. To whom Saul answered, "Who art thou, Lord?" And the Lord replied to him, "I am Jesus of Nazareth whom thou persecutest; it is hard for thee to kick against the pricks." Saul, all in consternation, afked, "Lord, what is it that thou wouldst have me do?" Jesus bid him arise and go to Damascus, where the will of the Lord should be revealed to him.

Saul then rose from the ground, and felt that he was deprived of fight; but his companions led him by the hand, and brought him to Damascus, where he continued three days blind, and without taking any nourishment. He lodged at the house of a Jew named Judas. On the third day, the Lord commanded a disciple of his, named Ananias, to go to find out Saul, to lay his hands upon him, and to cure his blindness. And as Ananias made excuses, saying that this man was one of the most violent persecutors of the church, the Lord said to him, Go and find him, because this man is an instrument that I have chosen, to carry my name before the Gentiles, before kings, and before the children of Ifrael; for I will show him how many things he must fuffer for my name. Ananias went therefore, and found Saul, laid his hand upon him, and restored him to bis fight; then rifing, he was baptized, and filled with the Holy Ghost. After this he continued some days with the disciples that were at Damascus, preaching in the fynagogues, and proving that Jefus was the Meffiah (A).

From Damascus he went into Arabia (Gal. i. 17.),

probably

(A) The conversion of such a man, at such a time, and by such means, surnishes one of the most complete proofs that have ever been given of the divine origin of our holy religion. That Saul, from being a zealous perfecutor of the disciples of Christ, became all at once a disciple himself, is a fact which cannot be controverted without overturning the credit of all history. He must therefore have been converted in the miraculous manner in which he himfelf faid he was, and of course the Christian religion be a divine revelation; or he must have been either an impostor, an enthusiast, or a dupe to the fraud of others. There is not another alternative possible.

If he was an impostor, who declared what he knew to be false, he must have been induced to act that part by fome motive: '(See MIRACLE). But the only conceivable motives for religious imposture are, the hopes of advancing one's temporal interest, credit, or power; or the prospect of gratifying some passion or appetite under the authority of the new religion. That none of these could be St Paul's motive for professing the faith of Christ crucified, is plain from the state of Judaism and Christianity at the period of his forfaking the former and embracing the latter faith. Those whom he left were the disposers of wealth, of dignity, of power, in Judea: those to whom he went were indigent men, oppressed, and kept from all means of improving their fortunes. The certain consequence therefore of his taking the part of Christianity was the loss not only of all that he possessed, but of all hopes of acquiring more; whereas, by continuing to perfecute the Christians, he had hopes rifing almost to a certainty of making his fortune by the favour of those who were at the head of the Jewish state, to whom nothing could so much recommend him as the zeal which he had shown in that perfecution. As to credit or reputation, could the scholar of Gamaliel hope to gain either by becoming a teacher in a college of fishermen? Could be flatter himself, that the doctrines which he taught would, either in or out of Judea, do him honour, when he knew that "they were to the Jews a stumbling block, and to the Greeks soolishness?" Was it then the love of power that induced him to make this great change? Power! over whom? over a flock of sheep whom he himself had assisted to de-

probably into the neighbourhood of Damascus, being then under the government of Aretas king of Arabia; and having remained there for a little while, he returned to Damascus, where he began again to preach the gospel. The Jews could not bear to see the progress that the gospel made here; and so resolved to put him to death: and they gained to their fide the governor of Damascus, who was to apprehend him, and to deliver him to them. Of this Saul had early notice; and knowing that the gates of the city were guarded night and day to prevent him from making his escape, he was let down over the wall in a basket. And coming to Jerusalem to see Peter (Gal.i. 38.), the disciples were afraid to have any correspondence with him, not believing him to be a convert. But Barnabas having brought him to the apostles, Saul related to them the manner of his conversion, and all that had followed in consequence of it. Then he began to preach both to the Jews and Gentiles; and spoke to them with such strength of argument, that not being able to withstand him in reasoning, they resolved to kill him. For this reason, the brethren brought him to Cæsarea of Palestine, from whence he came, probably by fea, into his own country Tarfus in Cilicia.

There he continued about five or fix years, from the year of Christ 37 to the year 43; when Barnabas coming to Antioch by the order of the apostles, and there having found many Christians, went to Tarsus to see Saul, and brought him with him to Antioch (Acts xi. 20, 25, 26.); where they continued together a whole year, preaching to and instructing the faithful. During this time, there happened a great famine in Judea

(id. ib. 27, 28, &c.), and the Christians of Antioch having made some collections to assist their brethren at Jerusalem, they made choice of Paul and Barnabas to go thither with their offering. They arrived there in the year of Christ 44; and having acquitted themselves of their commission, they returned again to Antioch. They had not been there long before God warned them by the prophets he had in this church, that he had appointed them to carry his word into other places. Then the church betook themselves to fasting and praying, and the prophets Simeon, Lucius, and Manaeu, laid their hands on them, and fent them to preach whither the Holy Ghost should conduct them. And it was probably about this time, that is, about the year of Christ 44, that Paul being rapt up into the third heaven, faw there ineffable things, and which were above the comprehension of man (2 Cor. xii. 2, 3, 4. and Acts xiii. 4, 5, 6, &c.).

Saul and Barnabas went first into Cyprus, where they began to preach in the fynagogues of the Jews. When they had gone over the whole island, they there found a Jewish magician called Bar-jesus, who was with the proconful Sergius Paulus; and who refifted them, and endeavoured to prevent the proconful from embracing Christianity: whereupon St Paul struck him with blindness; by which miracle the proconful, being an eyewitness of it, was converted to the Christian faith.

From this conversion, which happened at the city of Paphos, in the year of Christ 45, many think, that the apostle first began to bear the name of Paul, which St Luke always gives him afterwards, as is supposed in memory of his converting Sergius Paulus. Some be-

stroy, and whose very Shepherd had lately been murdered! Perhaps it was with the view of gratifying some licentious passion, under the authority of the new religion, that he commenced a teacher of that religion! This cannot be alleged; for his writings breathe nothing but the strictest morality, obedience to magistrates, order, and government, with the utmost abhorrence of all licentiousness, idleness, or loose behaviour, under the cloak of religion. We nowhere read in his works, that faints are above moral ordinances; that dominion is founded in grace; that monarchy is despotism which ought to be abolished; that the fortunes of the rich ought to be divided among the poor; that there is no difference in moral actions; that any impulses of the mind are to direct us against the light of our reason and the laws of nature; or any of those wicked tenets by which the peace of society has been often diffurbed, and the rules of morality often broken, by men pretending to act under the fanction of divine revelation. He makes no distinctions like the impostor of Arabia in favour of himself; nor does any part of his life, either before or after his conversion to Christianity, bear any mark of a libertine disposition. As among the Jews, so among the Christians, his conversation and manners were blameless.-It has been sometimes objected to the other apostles, by those who were resolved not to credit their testimony, that, having been deeply engaged with Jefus during his life, they were obliged, for the support of their own credit, and from having gone too far to return, to continue the same professions after his death; but this can by no means be said of St Paul. On the contrary, whatever force there may be in that way of reasoning, it all tends to convince us, that St Paul must naturally have continued a Jew, and an enemy to Christ Jesus. If they were engaged on one side, he was as strongly engaged on the other. If shame withheld them from changing sides, much more ought it to have stopped him; who, from his fuperior education, must have been vastly more fensible to that kind of shame than the mean and illiterate fishermen of Galilee. The only other difference was, that they, by quitting their Master after his death, might have preferved themselves; whereas he, by quitting the Jews, and taking up the cross of Christ, certainly brought on his own destruction.

As St Paul was not an impostor, so it is plain he was not an enthusiast. Heat of temper, melancholy, ignorance, and vanity, are the ingredients of which enthufiafm is composed; but from all these, except the first, the apostle appears to have been wholly free. That he had great fervour of zeal, both when a Jew and when a Christian, in maintaining what he thought to be right, cannot be denied; but he was at all times fo much mafter of his temper, as, in matters of indifference, to "become all things to all men," with the most pliant condescension, bending his notions and manners to theirs, as far as his duty to God would permit; a conduct compatible neither with the stiffness of a bigot nor with the violent impulses of fanatical delusion. That he was not melancholy, is plain from his conduct in embracing every method which prudence could fuggeft to escape danger and shun persePaul.

fieve that he changed his name upon his own converfion; and Chrysostom will have this change to take place at his ordination, when he received his mission at Antioch; while others say, he took the name Paul only when he began to preach to the Gentiles: and, finally, several are of opinion, that he went by the names of both Saul and Paul, like many other Jews who had one Hebrew name and another Greek or Latin

From the ifle of Cyprus, St Paul and his company went to Perga in Pamphylia, where John Mark left them, to return to Jerusalem: but making no stay at Perga, they came to Antioch in Pisidia; where going into the fynagogue, and being defired to fpeak, St Paul made them a long discourse, by which he showed, that Jesus Christ was the Messiah foretold by the prophets, and declared by John the Baptist; that he had been unjustly put to death by the malice and jealoufy of the Jews; and that he rose again the third day. heard him very attentively; and he was defired to difcourse again on the same subject the next Sabbath-day; and feveral, both Jews and Gentiles, followed them, to receive particular instructions more at leisure. On the Sabbath-day following, almost all the city met together to hear the word of God: but the Jews, feeing the concourse of people, were moved with envy at it; opposed, with blafphemies, what St Paul faid; and not being able to bear the happy progress of the gospel in this country, they raised a persecution against the two apostles: whercupon Paul and Barnabas, shaking off the dust upon their feet against them, came from Antioch in Vol. XVI. Part I.

Pisidia to Iconium. Being come thither, they preached in their fynagogue, and converted a great number, both of Jews and Gentiles; and God confirmed their commission by a great number of miracles (Acts xiv. 1, 2, &c.). In the mean time, the unbelieving Jews, having incenfed the Gentiles against Paul and Barnabas, and threatening to stone them, they were obliged to retire to Lystra and Derbe, cities of Lycaonia, where they preached the gospel. At Lystra, there was a man who had been lame from his mother's womb. This man fixing his eyes on St Paul, the apostle bid him rise, and stand upon his feet: whereupon he presently rose up, and walked; the people, feeing this miracle, cried out, that the gods were descended among them in the shape of men. They called Barnabas Jupiter, and Paul Mercury, because of his eloquence, and being the chief speaker. The priest of Jupiter brought also garlands and bulls before the gate, to offer facrifices to them: but Paul and Barnabas tearing their clothes, and casting themsclves into the middle of the multitude, cried out to them, Friends, what do you do? we are men as well as yourselves; and we are preaching to you to turn away from these vain superstitions, and to worship only the true God, who has made heaven and earth. But whatever they could fay, they had much ado to restrain them from offering facrifices to them.

In the mean time, fome Jews of Antioch in Pisidia and of Iconium coming to Lystra, animated the people against the apostles. They stoned Paul, and drew him out of the city, thinking him to be dead. But the disciples gathering together about him, he rose up among

cution, when he could do it without betraying the duty of his office or the honour of his God. A melancholy enthufialt courts perfecution; and when he cannot obtain it, afflicts himfelf with abfurd penances: but the holinefs of St Paul confifted only in the simplicity of a godly life, and in the unwearied performance of his apeflolical duties. That he was ignorant, no man will allege who is not großly ignorant himfelf; for he appears to have been master not only of the Jewish learning, but also of the Greek philosophy, and to have been very conversant even with the Greek poets. That he was not credulous, is plain from his having resisted the evidence of all the miracles performed on earth by Christ, as well as those that were afterward worked by the apostles; to the same of which, as he lived in Jerusalem, he could not possibly have been a stranger. And that he was as free from vanity as any man that ever lived, may be gathered from all that we see in his writings, or know of his life. He represents himself as the least of the aposities, and not meet to be called an apositie. He says that he is the chief of sunners; and he prefers, in the strongest terms, universal benevolence to faith, and prophecy, and miracles, and all the gifts and graces with which he could be endowed. Is this the language of vanity or enthusiasm? Did ever fanatic prefer virtue to his own religious opinions, to illuminations of the spirit, and even to the merit of martyrdom?

Having thus shown that 3t Paul was neither an impostor nor an enthusiast, it remains only to be inquired, whether he was deceived by the fraud of others: but this inquiry needs not be long, for who was to deceive him? A few illiterate sishermen of Galilee? It was morally impossible for such men to conceive the thought of turning the most enlightened of their opponents, and the cruellest of their perfecutors, into an apossle, and to do this by a fraud in the very instant of his greatest sury against them and their Lord. But could they have been so extravagant as to conceive such a thought, it was physically impossible for them to execute it in the manner in which we find his conversion to have been effected. Could they produce a light in the air, which at mid-day was brighter than the sun? Could they make Saul hear words from out of that light which were not heard by the rest of the company? Could they make him blind for three days after that vision, and then make scales fall off from his cyes, and restore him to sight by a word? Or, could they make him and those who travelled with him believe, that all these things had happened, if they had not happened? Most unquestionably no fraud was equal to

Since then St Paul was neither an impostor, an enthusiast, nor deceived by the fraud of others, it follows, that his conversion was miraculous, and that the Christian religion is a divine revelation. Sec Lyttleton's "Observations on the Conversion of St Paul;" a treatise to which it has been truly said, that insidelity has never been able to sabricate a specious answer, and of which this note is a very short and imperfect abridgement.

Paul. Them, entered again into the city, and the day after left it with Barnabas to go to Derbe. And having here preached the gospel also, they returned to Lystra, to Iconium, and to Antioch of Pissdia. Passing throughout Pissdia, they came to Pamphylia, and having preached the word of God at Perga, they went down into Attalia. From hence they set fail for Antioch in Syria, from whence they had departed a year before. Being arrived there, they affembled the church together, and told them the great things God had done by their means, and how he had opened to the Gentiles a door of falvation; and here they continued a good while with

the disciples.

St Luke does not inform us of the actions of St Paul from the 45th year of Christ to the time of the council at Jerusalem, which was held in the 50th year of Christ. There is great likelihood that it was during this interval that St Paul preached the gespel from Jerusalem to Illyricum, as he informs us in his epittle to the Romans (xv. 19.); and this without making any flay in those places where others had preached before him. He does not acquaint us with the particulars of these journeys, nor with the fuccess of his preaching; but he says in general, that he had fuffered more labours than any other, and had endured more prisons. He was often very near death itself, fometimes upon the water and fometimes among thieves. He run great dangers, fometimes from the Jews and fometimes among false brethren and perverse Christians; he was exposed to great hazards, as well in the cities as, in the deferts : he fuffered hunger, thirst, nakedness, cold, fastings, watchings (2 Cor. xi. 23.-27.), and the fatigues inseparable from long journeys, which were undertaken without any prospect of human succour; in this very different from the good fortune of others who lived by the gospel, who received fubfishence from those to whom they preached it, and who were accompanied always by religious women, who ministered to them in their necessary occasions. He made it a point of honour to preach gratis, working with his hands that he might not be chargeable to any one (I Cor. ix. I .- 15.); for he had learned a trade, as was usual among the Jews, which trade was to make tents of leather for the use of those that go to war (Acts xviii. 3.).

St Paul and St Barnabas were at Antioch when some persons coming from Judea (Acts xv. 1, 2, &c.) pretended to teach, that there was no falvation without circumcifion, and without the observation of the other legal ceremonies. Epiphanius and Philaster say, that he that maintained this was Cerinthus and his followers. Paul and Barnabas withstood these new doctors; and it was agreed to fend a deputation to the apostles and elders at Jerusalem about this question. Paul and Barnabas were deputed; and being arrived at Jerusalem, they reported to the apostles the subject of their commissions. Some of the Pharifees that had embraced the faith, afferted, that the Gentiles that were converted ought to receive circumcifion, and to observe the rest of the law. But the apostles and elders affembling to examine into this matter, it was by them decreed, that the Gentiles, who were converted to Christianity, should not be obliged to submit to the yoke of the law, but only to avoid idolatry, fornication, and the eating of things strangled,

ad blood.

St Paul and St Barnabas were then fent back to An-

tisch with letters from the apostles, which contained the decision of the question, and the resolution of that august assembly. The apostles also deputed Jude surnamed Barfabas and Silas, who were principal brethren, to go to Antioch with Paul and Barnabas to give their testimony also of what had been decreed at Jerusalem. Being arrived at Antioch, they affembled the faithful, read to them the apostles letter, and acquainted them, that it had been resolved to discharge them from the yoke of the ceremonial law. Some time after this, St Peter coming to Antioch and joining himself to the converted Gentiles, he lived with them without foruple; but some brethren happening to arrive there from Jerusalem, he separated himself from the Gentile converts, and did no longer eat with them: for which conduct St Paul publicly cenfured him (Gal. ii. 11-16.). St Paul (id. ii. 2, 3, &c.) in the same journey to Jerufalem declared openly to the faithful there the doctrine he preached among the Gentiles; and belides, discourfed of it in private among the chief of them in presence of Barnabas and Titus. St Peter, St James, and St John, with whom he had these conversations, could find nothing either to be added or amended in fo pure and fo found a docume and demeanour. They faw with joy the grace that God had given him; they acknowledged that he had been appointed the aposile of the Gentiles, as St Peter had been of the circumcifion. They concluded that Paul and Barnabas should continue to preach among the Gentiles; and only recommended to them to take care concerning the collections for the poor; that is to fay, to exhort the converted Christians among the Gentiles, to affift the faithful brethren in Judea, who were in necessity; whether it were because they had fold and diffributed their goods, or because they had been taken away from them (Heb. x. 54.).

After Paul and Barnabas had continued some days at Antioch, St Paul proposed to Earnabas to return and vifit the brethren through all the cities wherein they had planted the gospel, to see in what condition they were. Barnabas confented to the proposal; but insisted upon taking John Mark along with them. This was opposed by Paul, which produced a feparation between them. Barnabas and John Mark went together to Cyprus; and St Paul, making choice of Silas, croffed over Syria and Cilicia, and came to Derbe, and afterwards to Lyftra (Acts xvi. 1, 2, exc.). Here they found a disciple, called Timothy, whom St Paul took with him, and circumcifed him that he might not offend the Jews of that country. When, therefore, they had gone over the provinces of Lycaonia, Phrygia, and Galatia, the Holy Ghoft would not allow them to preach the gospel in the proconfular Afia, which contained Ionia, Aolia, and Lydia. They therefore went on to Myfia, and coming to Troas, St Paul had a vision in the night. A man, habited like a Macedonian, presented himself before him, and faid, Pass into Maccdonia and come and fuccour us. Immediately he fet out on this journey, not doubting but that God had called him into this coun-

trv.

Embarking therefore at Troas, they failed to Neapolis. Thence they came to Philippi, where upon the fabbath-day they went near the river fide, where the Jews had a place of devotion, and where they found fome religious women, among whom was Lydia, who was converted and baptized, and invited the apofile and

his company to lodge at her house. Another day, as they went to the same place of devotion, they happened to meet a maid fervant possessed with a spirit of divination, who followed St Paul and his company, crying out, that these men were the servants of the most high God, who declared to the world the way of falvation. This she did for several days together; at last St Paul, turning himself towards her, said to the spirit, I command thee in the name of Jesus Christ to come out of the body of this woman: upon which it immediately left her. But the mafters of this damfel, who made much money by her, drew Paul and Silas before the magistrates, and accused them of attempting to introduce a new religion into the city. For this the magistrates ordered them to be whipt with rods upon the back and shoulders, and afterwards fent them to prison.

Towards midnight, as Paul and Silas were finging hymns and praifes to God, on a fudden there was a great earthquake, fo that the foundations of the prison were shaken, and all the doors flew open at the same time, and the fetters of the prisoners burst asunder. The gaoler being awakened at this noise, and seeing all the doors open, he drew his fword with an intention to kill himself, imagining that all the prisoners had made their escape. But Paul cried out to him, that he should do himself no mischief, for they were all safe. Then the gaoler entering and finding all the prifoners there, he brought out Paul and Silas from this place, asking them what he must do to be faved? Paul and Silas instructing him and all his family, gave them baptism. After this the gaoler fet before them fomething to eat; and when the morning was come, the magistrates sent him word that he might release his prisoners, and let them go about their bufiness. But Paul returned this answer to the magistrates; Ye have publicly whipped us with rods, being Roman citizens; ye have thrown us into prison; and now ye would privately dismiss us: But it shall not be so, for you yourselves shall come to fetch us out. The magistrates hearing that they were Roman citizens, came to excuse themselves; and having brought them out of prison, they defired them to depart out of their city. Paul and Silas went first to the house of Lydia, where having vifited and comforted the brethren, they departed from Philippi.

Then patting through Amphipolis and Apollonia, they came to Thefialonica the capital city of Macedonia, where the Jews had a fynagogue (Acts xvii. 1, &c.). Paul entered therein, according to his custom, and there preached the gospel to them for three Sabbath-days successively. Some Jews and several proselvtes believed in Jesus Christ, and united themselves to Paul and Silas: but the greatest part of the Jews being led away by a faile zeal, raised a tumult in the city, and went to the house of Jason where St Paul lodged. But not finding him there, they took Jason and led him before the magistrates, where they accused him of harbouring in his boule people that were disobedient to the ordinances of the emperor, and who affirmed that there was another king besides him, one Jesus whom they preached up. But Jason having given security to answer for the people who were accused, he was dismissed to his own house; and the night following the brethren conducted Paul and Silas out of the city, who went to Berea, where they began to preach in the fynagogue. The Jews of Berea heard them gladly, and many of them were converted; as also several of the Gentiles, and many wemen of distinction that were not Jewesies.

The Jews of Theffalonica being informed that Paul and Silas were at Berea, came thither and animated the mob against them; fo that St Paul was forced to withdraw, leaving Silas and Timothy at Berea to finish the work he had fo happily begun. Those who conducted St Paul embarked along with him, and brought him as far as Athens (Theod. in I Theffal.), where he arrived in the 52d year of Jesus Christ. As soon as he was got thither, he fent back those that had brought him, with orders to tell Silas and Timothy, that he defired them to follow him to Athens as foon as possible. In the mean time, he went into a fynagogue of the Jews, and preached to them as often as he had opportunity; and disputing with the philosophers who were frequent in that place, they at last brought him before the Areopagus, accufing him of introducing a new religion. St Paul being come before the judges, pleaded in his own defence, that among other marks of superstition which he had found in that city, he had observed an altar infcribed," To the unknown God." It was therefore this God whom they confessed that they knew not, that he came to make known to them. Afterwards he spoke to them of God the creator of heaven and earth, of the superintendence of a providence, of the last judgement, and of the refurrection of the dead. But after they had heard of the refurrection, some made fcorn of him, and others defired to hear him another time. However some of them embraced the Christian faith, of which number was Dionysius a senator of the Areopagus, and a woman called Damaris, and feveral others with them.

St Timothy came from Berea to Athens according to the request of St Paul, and informed him of the perfecution with which the Christians of Thessalonica were then afflicted. This obliged the apostle to send him into Maccdonia, that he might comfort them and keep them stedfast (1 Thessal. iii. 1, 2, &c.). After this St Paul left Athens and went to Corinth, where he lodged with one Aquila a Jew, and by trade a tent-maker (Acts xviii. 1, 2, &c.). With this Aquila the apostle worked, as being of the same trade himself. But, however, he did not neglect the preaching of the gospel, which he performed every day in the synagogue; showing both to the Jews and Gentiles that Jesus was the Messiah. There he made several converts: and he tells us himself (1 Cor. i. 14-17. and xvi. 15.) that he baptized Stephanus and his whole house, with Crispus and Gaius. About the same time Silas and Timothy came to Corinth, and acquainted him with the good state of the faithful at Thessalonica; and foon after this, he wrote his first epistle to the Thestalonians, which is the first of all the epistles that he wrote; and not long after he wrote his fecond epittle to that

St Paul, now finding himself encouraged by the prefence of Silas and Timothy, went on with the work of his ministry with new ardour, declaring and proving that Jesus Christ was the true Messiah. But the Jews opposing him with blasphemous and opprobrious words, he shook his clothes at them, and faid, "Your blood be upon your own head; from henceforth I shall go to the Gentiles." He then quitted the house of Aquila, and went to lodge with one Titus Justus, who was originalPaul. ly a Gentile, but one that feared God. In the mean time the Lord appeared to St Paul in a vision, told him, that in Corinth he had much people; and this was the reason why the apostle continued there eight

> But Gallio the proconful of Achaia being at Corinth, the Jews of that city role up against Paul and carried him before Gallio, accusing him of attempting to introduce a new religion among them: however, Gallio fent them away, telling them he would not meddle with disputes that were foreign to his office Paul continued some time longer at Corinth; but at last he fet out for Jerufalem, where he had a mind to be present at the feath of Pentecost. Before he went on shipboard, he cut off his hair at Cenchrea, because he had completed his vow of Nazariteship, in which he had engaged himself. He arrived at Ephesus with Aquila and Priscilla, from whence he went to Cæsarea of Palestine, and thence to Jerusalem. Here having performed his devotions, he came to Antioch, where he stayed some time; and then passing from thence, he made a progress through all the churches of Galatia and Phrygia fuccessively; and having gone over the higher provinces of Asia, he returned to Ephesus, where he abode three years; that is, from the year of Christ

54 to the year 57 (Acts xix. 1, 2, &c.).

St Paul having arrived at Ephefus, he found there fome disciples that had been initiated by Apollos, who had only baptized them with the baptism of John. St Paul instructed them, baptized them with the baptism of Jesus Christ, and laid his hands on them; whereupon they received the Holy Ghost, the gifts of languages and of prophecy. The apostle afterwards went into the fynagogue, and preached to the Jews for three months, endeavouring to convince them that Jesus Christ was the Messiah: but as he found them very obstinate, he feparated himself from them, and taught daily in the school of one Tyrannus. He performed there several miracles, infomuch, that the linen that had but touched his body, being afterwards applied to the fick, they were prefently cured of their difeases, or delivered from the devils that possessed them. He also suffered much there, as well from the Jews as from the Gentiles; and he himself informs us (I Cor. xv. 31, 32.), that after the manner of men he fought with beafts at Ephelus; that is to fay, that he was exposed to wild beafts in the amphitheatre, fo that it was expected he should have been devoured by them; but God miraculously delivered him: though fome are of opinion, that the fight here mentioned by St Paul was nothing elfe but the scuffle he had with Demetrius the filver-smith and his companions, who were disappointed in their attempt of putting the apostle to death. It was during his abode at Ephefus that the apostle wrote his epistle to the Galatians.

After this St Paul proposed, at the instigation of the Holy Ghoft, to pass through Macedonia and Achaia, and afterwards to go to Jerufalem, faying, that after he had been there, he must also see Rome; and having sent Timothy and Erastus before to Macedonia, he tarried fome time in Asia. During this time, he received intelligence that domestic troubles had rifen in the church of Corinth, and that abuses had begun to creep in; which made him refolve to write his first epistle to that church.

Soon after this, taking leave of the disciples, he departed for Macedonia (Acts xx. 1, 2, &c.). He embarked at Troas, took Timothy with him, and together passed into Macedonia (2 Cor. ii. 12. and vii. 5-15.). Titus came thither to him, and acquainted him with the good effects that his letter had produced among the Corinthians; and told him, that the collections that had been made by the church of Corinth for the faithful in Palestine were now ready; which engaged Paul to write a second letter to the Corinthians. St Paul, having passed through Macedonia, came into Greece or Achaia, and there continued three months. He vifited the faithful of Corinth: and having received their alms, as he was upon the point of returning into Macedonia,

he wrote his epiftle to the Romans.

At last he left Greece and came into Macedonia, in the year of Christ 58, intending to be at Jerusalem at the feast of Pentecost. He staid some time at Philippi, and there celebrated the feast of the passover. From hence he embarked and came to Troas, where he continued a week. On the first day of the week the disciples being affembled to break bread, as St Paul was to depart the day following, he made a discourse to them which held till midnight. During this time a young man called Eutychus, happening to fit in a window and fall afleep, fell down three stories high, and was killed by the fall. St Paul came down to him, and embraced him, and restored him to life again. Then he went up again, broke bread and ate it, and continued his difcourse till daybreak, at which time he departed. Those of his company took ship at Troas; but as for himfelf he went on foot as far as Assos, otherwise called Apollonia, and then embarked along with them at Mitylene. From hence he came to Miletus, whither the elders of the church of Ephesus came to see him; for he had not time to go to them, because he was defirous of being at Jerusalem at the feast of Pen-

When thefe elders had arrived at Miletus, St Paul discoursed with them, and told them that he was going to Jerusalem without certainly knowing what should happen to him; however he did not doubt but that he had much to fuffer there, fince in all cities the Holy Ghost had given him to understand, that chains and afflictions waited for him at Jerusalem. Nevertheless, he declared to them, that all this did not terrify him, provided he could but fulfil his ministry. After having exhorted them to patience, and having prayed along with them, he went on board, going straight to Cocs, then to Rhodes, and thence to Patara (Acts xxi. 1, 2, &c.), where finding a ship that was bound for Phœnicia, they went on board and arrived fafe at Tyre. Here they made a stop for seven days, and then going on, they arrived at Ptolemais, and thence at Cæfarea, where they found Philip the evangelist, who was one of the seven deacons. While St Paul was there, the prophet Agabus arrived there also from Judea; and have taken St Paul's girdle, he bound his own hands and feet with it, faying, "Thus shall the Jews of Jerusalem bind the man that owns this girdle, and shall deliver him up to the Gentiles." But St Paul's constancy was not shaken by all these predictions, and he told them, that he was ready, not only to fuffer bonds, but death itself, for the name of Christ.

When he was come to Jerusalem, the brethren re-

ceived him with joy; and the day following he went to fee St James the lefs, bishop of Jerusalem, at whose house all the elders assembled. Paul gave them an account of what God had done among the Gentiles by his ministry. Then St James informed him, that the converted Jews were strangely prejudiced against him, because they were informed he taught the Jews that lived among the Gentiles and out of Palestine, that they ought to renounce the law of Mofes, and no longer circumcife their children. Therefore, continued St James, we must assemble them here together, where you may speak to them yourself, and undeceive them. Moreover do this, that your actions may verify your words: join yourfelf to four men that are here, and who have taken upon them a vow of Nazariteship; and that you may share in the merit of their action, contribute to the charge of their purification, and purify yourself also, that you may offer with them the offerings and facrifices ordained for the purification of a Nazarite. See NAZA-

St Paul exactly followed this advice of St James, and on the next day went into the temple, where he declared to the priests, that in seven days these four Nazarites would complete their vow of Nazariteship; and that he would contribute his share of the charges. But towards the end of these seven days, the Jews of Asia having feen him in the temple, moved all the people against him, laid hold of him, and cried out, " Help, ye Ifraelites, that is he that teaches every where against the law, and against the temple, and has brought Gentiles into the temple, and profaned this holy place." At the fame time they laid hold on him, thut the gates of the temple, and would have killed him, had not Lysias the tribune of the Roman garrison there run to his rescue, taken him out of their hands, and brought him into the citadel. St Paul being upon the steps, defired the tribune to fuffer him to speak to the people, who followed him thither in a great multitude. The tribune permitted him, and St Paul, making a fign with his hand, made a speech in Hebrew (Acts xxii.), and related to them the manner of his conversion, and his mission from God to go and preach to the Gentiles. At his mentioning the Gentiles, the Jews began to cry out, "Away with this wicked fellow out of the world, for he is not worthy to live."

Immediately the tribune made him come into the caftle, and ordered that he should be examined by whipping him, in order to make him confess the matter why the Jews were fo incenfed against him. Being now bound, he faid to the tribune, " Is it lawful for you to whip a Roman citizen before you hear him?" The tribune hearing this, caused him to be unbound, and calling together the priefts and the senate of the Jews, he brought Paul before them, that he might know the occasion of this tumult of the people. Then Paul began to speak to them to this purpose, (Acts xxiii.): "Brethren, I have lived in all good conscience before God until this day." At which words, Ananias, fon of Nebedeus, who was the chief-priest, ordered the bystanders to give him a blow in the face. At which St Paul faid to him, "God shall smite thee, thou whited wall; for fittest thou to judge me after the law, and commandest me to be smitten contrary to the law?" Those that were present said to him, "Revilest thou God's high priest?" St Paul excused himself by faying,

that he did not know he was the high-prieft, " For it is Paul. written, thou shalt not speak evil of the ruler of thy people." Then perceiving that part of the affembly were Sadducees and part Pharifees, he cried out, " Brethren, I am a Pharisee, the son of a Pharisee; of the hope and refurrection of the dead I am called in que-

Then the affembly being divided in interests and opinions, and the clamour increasing more and more, the tribune ordered the foldiers to fetch him away out of the affembly, and bring him into the caftle. The following night the Lord appeared to Paul, and faid to him, "Take courage, for as you have borne testimony of me at Jerusalem, so must you also at Rome." The day following more than 40 Jews engaged themfelves by an oath, not to eat or drink till they had killed Paul. They came, therefore, and made known their defign to the priests and chiefs of the people, faying to them, "To-morrow cause Paul to appear before you, as if you would inquire more accurately into his affair, and before he can come to you, we will lie in wait for him and kill him." But St Paul, being informed of this confpiracy by his fafter's fon, acquainted the tribune with it; who gave orders that the night following he should be sent to Cæsarea, to Felix the governor, who had his ordinary residence there. Felix having received letters from Lysias, and being informed that St Paul was of Cilicia, he told him he would hear him when his accusers should ar-

Five days after, Ananias the high-priest and some of the fenators came to Caefarea, bringing with them Tertullus the orator, to plead against Paul. Tertullus accused him of being a seditious person, a disturber of the public peace; one who had put himfelf at the head of a feet of Nazarenes, and who made no scruple. even to profane the temple, (id. xxiv.). But St Paul eafily refuted these calumnies, and defied his accusers to prove any of the articles they had exhibited against him: he ended his discourse by faying, "That for the doctrine of the resurrection from the dead, his adversaries would have him condemned." Felix put off the further hearing of this cause till another time; and, fome days afterwards, came himfelf with his wife Drufilla to hear Paul; and being in hopes that the apo-file would purchase his freedom with a sum of money, he used him well, often fent for him, and had frequent conversations with him.

Two years having thus paffed away, Felix made way for his fuccessor Portius Festus; but being willing to oblige the Jews, he left Paul in prison. Testus being come to Jerusalem, the chief priests defired to send for Paul, with a defign to fall upon him by the way. But Festus told them, they might come to Casarea, where he would do them justice. Hither the Jews came, and accused Paul of several crimes, of which they were able to prove nothing (id. xxv.). Festus then proposed to the apossel to go to Jerusalem, and be tried there; but he answered, "That he was now at the emperor's tibunal, where he ought to be tried; and that he appealed to Cæfar:" whereupon Festus, having conferred with his council, told him, that therefore to Cæsar he should

Some days after, King Agrippa and his wife Berenice coming to Cæfarca, defired to hear Paul; who

pleaded,

pleaded his cause with such ability, that Agrippa exclaimed, "Almost thou persuadest me to be a Christian." See Agrippa.

As foon, therefore, as it was refolved to fend Paul into Italy, he was put on board a ship at Adramyttium, a city of Mysia; and having passed over the seas of Cilicia and Pamphylia, they arrived at Myra, in Lycia, where, having found a ship that was bound for Italy, they went on board, (id. xxvii.). But the feafon being far advanced (for it was at least the latter end of September), and the wind proving contrary, they with much difficulty arrived at the Fair Haven, a port in the isle of Crete. St Paul advised them to winter there: however, others were of opinion they had better go to Phenice, another harbour of the same island; but as they were going thither, the wind drove them upon a little island called Clauda, where the mariners, fearing to strike upon some bank of sand, they lowered their mast, and surrendered themselves to the mercy of the waves. Three days after this, they threw overboard the tackling of the ship. Neither sun nor stars had appeared now for 14 days. In this extreme danger, an angel appeared to St Paul, and affured him, that God had given him the lives of all that were in the thip with him; which were in all 276 fouls. St Paul told them of his vision, exhorted them to take courage, and promifed them that they should all come alive into an island; and that the vessel only should be lost. On the 14th night the feamen cast out the lead, and thought by their founding that they approached near to fome land. They were attempting to fave themselves by going into the boat; but St Paul told the centurion and the foldiers, that except the failors continued in the ship, their lives could not be faved. Then the foldiers cut the ropes of the boat, and let her drive. About daybreak, St Paul perfuaded them to take fome nourishment, assuring them that not a hair of their heads should perish. After his example, they took feme food, and when they had caten, they lightened their veffel, by throwing the corn into the sea. Day being come, they perceived a shore, where they resolved, if possible, to bring the ship to. But the vefiel having struck against a neck of land that run out into the fea, fo that the head remained fixed, and the flern was exposed to the mercy of the waves; the foldiers, fearing left any of the prisoners should make their escape by swimming, were for putting them all to the fword. But the centurion would not fuffer them, being willing to fave Paul; and he commanded those that could swim to throw themselves first out of the vessel; and the rest got planks, so that all of them came safe to shore. Then they found that the island was called Melita or Malta; the inhabitants of which received them with great humanity, (Acts xxvii. 1, 2,

They being all very wet and cold, a great fire was lighted to dry them; and Paul having gathered up a handful of flicks, and put them upon the fire, a viper leaped out of the fire, and took hold of his hand. Then the barbarous people faid to one another, "Without doubt this man is a murderer; and though he has been faved from the flipwreck, yet divine vengeance still pursues him, and will not suffer him to live." But Paul, shaking the viper into the fire, received no injury from it. The people, seeing this, changed their opinion of him, and took him for a god; which opinion of him, and took him for a god; which opinion

nion of theirs was more confirmed, by his curing the father of Publius, the chief man of the island, of a fever and bloody-flux. After this miracle, they all brought out their fick to him, and they were healed. See IVIE-LITA.

At the end of three menths they embarked again; and arrived, first at Syracuse, then at Rhegium, and laftly at Puteoli. Herc St Paul found fome Christians, who detained him for feven days; then he fet out for Rome. The brethren of this city having been informed of St Paul's arrival, came to meet him as far as Appii-forum, and the Three Taverns. And when he was come to Rome, he was allowed to dwell where he pleafed, having a foldier to guard him, who was joined to him with a chain. Three days afterwards, St Paul defired the chief of the Jews there to come to him. He related to them in what manner he had been feized in the temple of Jerusalem, and the necessity he was under of appealing to Cæfar. The Jews told him, that as yet they had received no information about his affair; and, as for Christianity, they knew nothing of it, but only that it was spoken against everywhere; however, that they should be very willing to have some account of that doctrine from him. A day was appointed for this purpose; when St Paul preached to them concerning the kingdom of God, endeavouring to convince them from Mofes and the prophets, that Jesus was the Messiah. Some of them believed what he had faid to them, while others disbelieved; so that they returned from him divided among them-

Paul dwelt for two whole years at Rome, from the year of Christ 61 to the year 63, in a lodging that he hired; where he received all that came to him, preaching the kingdom of God, and the religion of Jesus Christ, without any interruption.

Hitherto we have had the Acts of the Apostles for our guide, in compiling the history of St Paul; what we shall add hereafter, will be mostly taken from his own Epistles. His captivity did not a little contribute to the advancement of religion; for he converted several persons even of the emperor's court, (Philip. i. 12—13. and iv. 22.). The Christians of Philippi, in Macedodonia, hearing that St Paul was a prisoner at Rome, sent Epaphroditus their bishop to him, to bring him money, and otherwise to affish him in their name, (Phil. ii. 25.). Epaphroditus fell sick at Rome; and when he went back to Macedonia, the apostle sent by him his Epistle to the Philippians.

It is not known by what means St Paul was delivered from his prison, and discharged from the accusation of the Jews. There is great probability that they durst not appear against him before the emperor, as not having sufficient proof of what they laid to his charge. However that may be, it is certain that he was set at liberty, after having been two years a prisoner at Rome. He wrote also, during this imprisonment, his Epistles to Philemon and the Colossians.

He was still in the city of Rome, or at least in Italy, when he wrote his Epistle to the Hebrews. St Paul, having got out of prison, went over Italy; and, according to some of the fathers, passed into Spain; then into Judea; went to Ephesius, and there lest Timothy (Heb. xiii. 21. and 1 Tim. i. 3.); preached in Crete, and there fixed Titus, to take care to cultivate the church

Paul. he had planted in that place. Probably he might also visit the Philippians, according to the promise he had made them, (Phil. i. 23. 26. and ii. 24.); and it is believed, that it was from Macedonia that he wrote the First Epistle to Timothy.—Some time after, he wrote to Titus, whom he had left in Crete; he desires him to come to Nicopolis, from whence, probably, he sent this letter. The year following, that is, the 65th year of the Christian era, the apostle went into Asia, and came to Troas, (2 Tim. iv. 13.). Thence he went to visit Timothy at Ephesus, and from that to Miletus, (2 Tim. iv. 20.). Lastly, he went to Rome; and St Chrysostom

ment. See TIMOTHY and TITUS.

fays, that it was reported, that having converted a cupbearer and a concubine of Nero, this fo provoked the emperor, that he caused St Paul to be apprehended, and clapped into prison. It was in this last place of confinement that he wrote his Second Epistle to Timothy, which Chrysostem looks upon as the apostle's last testa-

This great apostle at last consummated his martyrdom, the 29th of June, in the 66th year of Jelus Christ, by having his head cut off, at a place called the Salvian Waters. He was busied on the way of Oslium, and a magnificent church was built over his tomb, which is in being to this day. Calmet's

PAUL, St, Cave or Grotto of, in the island of Malta, where St Paul and his company took thelter from the rains, when the viper fastened on his arm. Upon this spot there is a church built by the famed Alof de Vignacourt, grand-master of the order, in the year 1626, a very handsome, though but a fmall, structure. On the altar-piece is a curious painting, representing the apostle's shaking off the viper, surrounded with men, women, and children, in attitudes of admiration and surprise, and in the old Maltese garb; and the whole very well executed. On the top of the painting is the following inscription:

Vipera ignis acta calore frustra Pauli Manum invadit; is infulæ benedicens Anguibus et herbis adimit omne virus. M.DC.V.

PAUL, first bishop of Narbonne, or Sergius Paulus the procensul, converted and made bishop by St Paul, was descended from one of the best families of Rome. It is suid the apostle called himself Paul, from his name. The Spaniards will have him to be their apostle, which is not improbable; and it is said he died a martyr at Narbonne.

PAUL V. by birth a Roman, was first clerk of the chamber, and afterwards nuncio to Clement VIII. in Spain, who honoured him with a cardinal's hat. He was advanced to the papal chair the 16th of May 1605, after Leo XI. The ancient quarrel between the secular and ecclesiaftical jurisdictions, which in former times had occasioned so much bloodshed, revived in the reign of this pontisf. The senate of Venice had condemned by two decrees, 1. The new foundations of monasteries made without their concurrence. 2. The alienation of the estates both ecclesiatical and secular. The first decree passed in 1603, and the second in 1605. About the same time a canon and abbot, accused of rapine and murder, were arrested by order of the senate, and delivered over to the secular court; a circumstance which

could not fail to give offence to the court of Rome. Clement VIII. thought it proper to diffemble or take no notice of the affair; but Paul V. who had managed the Genoele upon a fimilar occasion, flattered himself with the hopes that the Venetians would be equally pliant. However, he was disappointed; for the fenate maintained that they held their power to make laws of God only; and therefore they refused to revoke their decrees and deliver up the ecclefiaftical prisoners into the hands of the nuncio, as the pere demanded. Paul, provoked at this behaviour, excommunicated the doge and fenate; and threatened to put the whole state underan interdict, if fatisfaction was not given him within the fpace of 14 hours. The fenate did no more than proteit against this menace, and forbid the publication of it throughout their dominions. A number of pamphlets, from both fides, foon announced the animofity of the two parties. The Capuchins, the Theatins, and Jesuits, were the only religious orders who observed the interdict. The fenate thipped them all off for Rome, and the Jesuits were banished for ever. Meantime his holiness was preparing to make the refractory republic submit to his spiritual tyranny by force of arms. He levied troops against the Venetians; but he soon found his defign baulked, as the cause of the Venetians appeared to be the common cause of all princes. He had recourse, therefore, to Henry IV. to settle the differences: and this prince had all the honour of bringing about a reconciliation between the contending parties. His ambassadors at Rome and Venice began the negotiation, and Cardinal de Joyeuse finished it in 1607. It was agreed upon, that this cardinal should declare at his entry into the fenate, that the cenfures of the church were to be taken off, or that he would remove them; and that the doge should at the same time surrender to him the deeds of revocation and protest. It was also stipulated, that all the religious who were banished, except the Jesuits, should be restored to their former privileges. In fine, the Venetians promifed to fend an ambaffador extraordinary to Ronfe, in order to thank the pope for the favour he had done them; but they would not allow the legate to speak of his holiness granting them absolution. Paul was wife enough to overlook the whole matter, but endeavoured to put an end to another difpute, which had been long agitated in the congregations de auxiliis. He caused it to be intimated in form to the disputants and counsellors, that, as the congregations were now diffolved, it was his express order that the contending parties should no longer continue to censure one another. Some authors have affirmed that Paul V. had drawn out a bull against the doctrine of Molina, which only wanted to be promulged; but for this fact there appears to be no other evidence than the draught of this bull, which we meet with in the end of the history of the above-mentioned congregations. Paul was strongly solicited, but in vain, to make the immaculate conception of the holy virgin an article of faith. He contented himself with fairly forbidding the contrary doctrine to be publicly taught, that he might not offend the Dominicans, who, at that time, maintained that she was conceived, like other human creatures, in original fin. His holiness afterwards applied himself to the embellishing of Rome, and was at great pains to collect the works of the most eminent painters and engravers. Rome is indebted to him for its most beautiful fountains,

Paul.

fountains, especially that where the water spouls out from an antique vase taken from the therme or hotbaths of Vespasian, and that which they call aqua Paola, an ancient work of Augustus, restored by Paul V. He brought water into it by an aqueduct 35 miles in length, after the example of Sixtus V. He completed the frontispiece of St Peter, and the magnificent palace of Mount Cavallo. He applied himself in a particular manner to the recovering and repairing ancient monuments, which he made to advance, as much as the nature of them would admit, the honour of Christianity; as appears from an elegant inscription placed upon a column of porphyry, taken from the temple of Peace, and bearing a beautiful statue of the Virgin, at the side of the church of St Mary the elder:

"Impura falsi templa
Quondam numinis
Jubente moesta perferebam Cæfare;
Nunc læta veri
Perferens matrem Dei
Te, Paule, nullis obticebo sæculis."

His pontificate was honoured with feveral illustrious embaffles. The kings of Japan, Congo, and other Indian princes, fent amballadors to him. He took care to fupply them with missionaries, and to found bishopricks in these countries newly brought over to the faith. He showed the same attention to the Maronites and other eastern Christians. He sent legates to different orthodox princes, both to testify his esteem for them, and to confirm them in their zeal for religion. He died the 28th of January 1621, aged 69; after having confirmed the French Oratory, the Urfulines, the Order of Charity, and some other institutions. Bold in his claims, but of narrow views, he diffinguished himself more by his piety and knowledge than by his politics. It has been remarked, that he never passed a single day of his popedom without celebrating mass. He enjoined all the religious in the profecution of their studies to have regular profesfors for Latin, Greek, Hebrew, and Arabic; if there were any among themselves properly qualified; or if that was not the case, to take the affistance of laymen for that purpole, until there were some of their own order who had learning enough to instruct their brethren. It was very difficult to carry this decree into execution; and indeed it was always very imperfectly obferved.

PAUL, Father, whose name, before he entered into the monastic life, was Peter Sarpi, was born at Venice, August 14. 1552. His father followed merchandise, but with fo little fuccefs, that at his death he left his family very ill provided for; but under the care of a mother whose piety was likely to bring the bleffing of providence upon them, and whose wife conduct supplied the want of fortune by advantages of greater value. Happily for young Sarpi she had a brother, master of a celebrated school, under whose direction he was placed by her. Here he lost no time, but cultivated his abilities, naturally of the first rate, with unwearied application. He was born for study, having a natural aversion to pleasure and gaiety, and a memory so tenacious that he could repeat 30 verses upon once hearing them. Proportionable to his capacity was his progress in literature: at 13, having made himself master of school learning, be turned his studies to philosophy and the mathematics,

and entered upon logic under Capella of Cremona, who, though a celebrated master of that science, confessed himself in a very little time unable to give his pupil any farther instructions.

As Capella was of the order of the Servites, his scholar was induced by his acquaintance with him to engage in the same profession, though his uncle and his mother represented to him the hardships and austerities of that kind of life, and advised him with great zeal against it. But he was steady in his resolutions, and in 1566 took the habit of the order, being then only in his 14th year, a time of life in most persons very improper for such engagements, but in him attended with such maturity of thought, and such a fettled temper, that he never seemed to regret the choice he then made, and which he confirmed by a soleran public profession in 1572.

At a general chapter of the Servites held at Mantua, Paul (for fo we shall now call him) being then only 20 years old, distinguished himself so much in a public disputation by his genius and learning, that William duke of Mantua, a great patron of letters, folicited the confent of his superiors to retain him at his court, and not only made him public professor of divinity in the cathedral, and reader of cafuiftical divinity and canon law in that city, but honoured him with many proofs of his esteem. But Father Paul finding a court life not agreeable to his temper, quitted it two years afterwards, and retired to his beloved privacies, being then not only acquainted with the Latin, Greek, Hebrew, and Chaldee languages, but with philosophy, the mathematics, canon and civil law, all parts of natural philosophy, and chemistry itself; for his application was unintermitted, his head clear, his apprehension quick, and his memory

Being made a priest at 22, he was distinguished by the illustrious Cardinal Borromeo with his confidence, and employed by him on many occasions, not without the envy of persons of less merit, who were so far exasperated as to lay a charge against him before the Inquifition, for denying that the Trinity could be proved from the first chapter of Genesis; but the accusation was too ridiculous to be taken notice of. After this he passed successively through the dignities of his order, of which he was chofen provincial for the province of Venice at 26 years of age; and discharged this post with fuch honour, that in 1579 he was appointed, with two others, to draw up new regulations and statutes for his order. This he executed with great fuccess; and when his office of provincial was expired, he retired for three years to the study of natural and experimental philosophy and anatomy, in which he is faid to have made some useful discoveries. In the intervals of his employment he applied himself to his studies with fo extensive a capacity, as left no branch of knowledge untouched. By him Acquapendente, the great anatomist, confesses that he was informed how vision is performed; and there are proofs that he was not a stranger to the circulation of the blood. He frequently conversed upon astronomy with mathematicians, upon anatomy with furgeons, upon medicine with physicians, and with chemists upon the analysis of metals, not as a superficial inquirer, but as a complete master. He was then chosen procurator general of his order; and during his residence at Rome was greatly esteemed by Pope Sixtus V. and contracted an intimate

intimate friendship with Cardinal Bellarmine and other eminent persons.

But the hours of repose, which he employed so well, were interrupted by a new information in the Inquifition; where a former acquaintance produced a letter written by him in cyphers, in which he faid, " that he detested the court of Rome, and that no preferment was obtained there but by dishonest means," This accusation, however dangerous, was passed over on account of his great reputation; but made such impressions on that court, that he was afterwards denied a bishopric by Clement VIII. After these difficulties were surmounted. F. Paul again retired to his folitude; where he appears, by fome writings drawn up by him at that time, to have turned his attention more to improvement in piety than learning. Such was the care with which he read the fcriptures, that, it being his custom to draw a line under any paffage which he intended more nicely to consider, there was not a single word in his New Testament but was underlined. The same marks of attention appeared in his Old Testament, Pfalter, and Breviary.

But the most active scene of his life began about the year 1615; when Pope Paul V. exasperated by some decrees of the fenate of Venice that interfered with the pretended rights of the church, laid the whole state under an interdict. The fenate, filled with indignation at this treatment, forbade the bishops to receive or publish the pope's bull; and, convening the rectors of the churches, commanded them to celebrate divine fervice in the accustomed manner, with which most of them readily complied: but the Jesuits and some others resufing, were by a folemn edict expelled the state. Both parties having proceeded to extremities, employed their ablest writers to defend their measures. On the pope's fide, among others, Cardinal Bellarmine entered the lifts. and, with his confederate authors, defended the papal claims with great fcurrility of expression, and very sophistical reasonings; which were consuted by the Venetian apologists in much more decent language, and with much greater folidity of argument. On this occasion F. Paul was most eminently distinguished by his Defence of the Rights of the supreme Magistrate, his Treatife of Excommunication, translated from Gerson, with an Apology, and other writings; for which he was cited before the Inquisition at Rome : but it may be easily imagined that he did not obey the fummons.

The Venetian writers, whatever might be the abilities of their adverfaries, were at least superior to them in the justice of their cause. The propositions maintained on the fide of Rome were thefe: That the pope is invested with all the authority of heaven and earth: that all princes are his vaffals, and that he may annul their laws at pleasure: that kings may appeal to him, as he is temporal monarch of the whole earth: that he can discharge subjects from their oaths of allegiance, and make it their duty to take up arms against their sovereign : that he may depose kings without any fault committed by them, if the good of the church requires it : that the clergy are exempt from all tribute to kings, and are not accountable to them even in cases of high-treason: that the pope cannot err: that his decisions are to be received and obeyed on pain of fin, though all the world should judge them to be false: that the pope is God upon earth: that his fentence and that of God are the fame:

VOL. XVI. Part I.

and that to call his power in question is to call in question the power of God: maxims equally shocking, weak, pernicious, and abfurd; of which it did not require the abilities and learning of F. Paul to demonstrate the falsehood and destructive tendency. It may be easily imagined that fuch principles were quickly overthrown, and that no court but that of Rome thought it for its interest to favour them. The pope, therefore, finding his authors confuted and his cause abandoned, was willing to conclude the affair by treaty; which, by the mediation of Henry IV. of France, was accommodated upon terms very much to the honour of the Venetians. But the defenders of the Venetian rights, though comprehended in the treaty, were excluded by the Romans from the benefit of it: some, upon different pretences, were imprisoned; fome fent to the galleys; and all debarred from preferment. But their malice was chiefly aimed against F. Paul, who soon felt the effects of it; for as he was going one night to his convent, about fix months after the accommodation, he was attacked by five ruffians armed with stilettoes, who gave him no less than fif-teen stabs, three of which wounded him in such a manner that he was left for dead. The murderers fled for refuge to the nuncio, and were afterwards received into the pope's dominions; but were purfued by divine juflice, and all, except one man who died in prison, perished by a violent death.

This, and other attempts upon his life, obliged him to confine himself to his convent, where he engaged in writing the History of the Council of Trent; a work unequalled for the judicious disposition of the matter, and artful texture of the paration; commended by Dr Burnet as the completed model of historical writing; and celebrated by Mr Worton as equivalent to any production of antiquity; in which the reader finds "liberty without licentiousness, piety without hypocrify, freedom of speech without neglect of decency, severity without rigour, and extensive learning without oftentation."

In this, and other works of lefs consequence, he

fpent the remaining part of his life to the beginning of the year 1622, when he was feized with a cold and fever, which he neglected till it became incurable. He languished more than twelve months, which he fpent almost wholly in a preparation for his passage into eternity; and among his prayers and aspirations was often heard to repeat, " Lord! now let thy fervant depart in peace." On Sunday the eighth of January of the next year, he rose, weak as he was, to mass, and went to take his repast with the rest; but on Monday was seized with a weakness that threatened immediate death; and on Thursday prepared for his change, by receiving the viaticum, with fuch marks of devotion as equally melted and edified the beholders. Through the whole course of his illness to the last hour of his life he was confulted by the fenate in public affairs, and returned answers in his greatest weakness with such presence of mind as could only arise from the consciousness of in-

On Saturday, the day of his death, he had the paffion of our bleffed Savieur read to him out of St John's gofpel, as on every other day of that week, and fpoke of the mercy of his Redeemer, and his confidence in his merits. As his end evidently approached, the brethren of his convent came to pronounce the laft prayers, with which be could only join in his thoughts, being able to

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pronounc no more than these words, Esto perpetua, an Armenian by birth, who lived under the reign of Ju. Paulicians. "Mayest thou last for ever;" which was understood to Paulicians. be a prayer for the prosperity of his country. Thus died F. Paul, in the 71st year of his age; hated by the Romans as their most formidable enemy, and honoured by all the learned for his abilities, and by the good for his integrity. His detestation of the corruption of the Roman church appears in all his writings, but particularly in this memorable passage of one of his letters: "There is nothing more effential than to ruin the reputation of the Jesuits. By the ruin of the Jesuits, Rome will be ruined; and if Rome be ruined, religion will reform of itself." He appears, by many passages in his life, to have had a high esteem for the church of England; and his friend F. Fulgentio, who had adopted all his notions, made no fcruple of adminiflering to Dr Duncombe, an English gentleman who fell fick at Venice, the communion in both kinds, according to the Common Prayer which he had with him in Italian. F. Paul was buried with great pomp at the public charge, and a magnificent monument was erected to his memory.

PAUL, in sea language, is a short bar of wood or iron, fixed close to the capstern or windlas of a ship, to prevent those engines from rolling back or giving way when they are employed to heave in the cable, or other-

wife charged with any great effort.

PAULIANISTS, PAULIANISTÆ, a sect of heretics, fo called from their founder Paulus Samofatenus, a native of Samosata, elected bishop of Antioch in 262. His doctrine feems to have amounted to this: that the Son and the Holy Ghost exist in God in the same manner as the faculties of reason and activity do in man; that Christ was born a mere man; but that the reason or wisdom of the Father descended into him, and by him wrought miracles upon earth, and instructed the nations; and, finally, that on account of this union of the Divine Word with the man Jefus, Christ might, though improperly, be called God. It is also said, that he did not baptize in the name of the Father and the Son, &c.; for which reason the council of Nice ordered those baptized by him to be re-baptized.

Being condemned by Dionysius Alexandrinus in a council, he abjured his errors to avoid deposition; but foon after he refumed them, and was actually deposed by another council in 269.—He may be confidered as the father of the modern Socinians; and his errors are feverely condemned by the council of Nice, whose creed differs a little from that now used, under the same name, in the church of England. The creed agreed upon by the Nicene fathers, with a view to the errors of Paulus Samosatenus, concludes thus: Tous de Leyoutas nu ποτε ουκ ην και πειν γεννηθηναι, ουκ ην, & c. τουλους αναθερια--" But those τίζει ή καθολικη και αποσθολική εκκλησια.who fay there was a time when he was not, and that he was not before he was born, the catholic and apostolic church anathematizes." To those who have any veneration for the council of Nice this must appear a very fevere, and perhaps not unjust, censure of some other modern fects as well as of the Socinians.

PAULICIANS, a branch of the ancient Manichees, fo called from their founder, one Paulus, an Armenian, in the feventh century; who, with his brother John, both of Samosata, formed this sect: though others are of opinion, that they were thus called from another Paul,

stinian II. In the seventh century a zealot called Constantine revived this drooping sect, which had suffered much from the violence of its adverfaries, and was ready to expire under the feverity of the imperial edicts, and that zeal with which they were carried into execution. The Paulicians, however, by their number, and the countenance of the emperor Nicephorus, became formidable to all the East.

But the cruel rage of perfecution, which had for fome years been fuspended, broke forth with redoubled violence under the reigns of Michael Curopalates and Leo the Armenian, who inflicted capital punishment on fuch of the Paulicians as refused to return into the bofom of the church. The empress Theodora, tutoress of the emperor Michael, in 845, would oblige them either to be converted or to quit the empire: upon which feveral of them were put to death, and more retired among the Saracens; but they were neither all extermi-

nated nor banished.

Upon this they entered into a league with the Saracens; and choosing for their chief an officer of the greatest resolution and valour, whose name was Carbeus, they declared against the Greeks a war which was carried on for fifty years with the greatest vehemence and fury. During these commotions, some Paulicians, towards the conclusion of this century, spread abroad their doctrines among the Bulgarians; many of them, either from a principle of zeal for the propagation of their opinions, or from a natural defire of flying from the perfecution which they fuffered under the Grecian yoke, retired, about the close of the eleventh century, from Bulgaria and Thrace, and formed fettlements in other countries. Their first migration was into Italy; whence, in process of time, they sent colonies into almost all the other provinces of Europe, and formed gradually a confiderable number of religious affemblies, who adhered to their doctrine, and who were afterwards perfecuted with the utmost vehemence by the Roman pontiss. In Italy they were called Patarini, from a certain place called Pataria, being a part of the city of Milan, where they held their affemblies; and Gathari or Gazari, from Gazaria, or the Lesser Tartary. In France they were called Albigenses, though their faith differed widely from that of the Albigenses whom Protestant writers generally vindicate. (See ALBIGENSES). The first religious assembly the Paulicians had formed in Europe is faid to have been discovered at Orleans in 1017, under the reign of Robert, when many of them were condemned to be burnt alive. The ancient Paulicians, according to Photius, expressed the utmost abhorrence of Manes and his doctrine. The Greek writers comprise their errors under the fix following particulars: 1. They denied that this inferior and visible world is the production of the fupreme Being; and they diffinguish the Creator of the world and of human bodies from the most high God who dwells in the heavens: and hence fome have been led to conceive that they were a branch of the Gnostics rather than of the Manichæans. 2. They treated contemptuously the Virgin Mary; or, according to the usual manner of fpeaking among the Greeks, they refused to adore and worship her. 3. They refused to celebrate the institution of the Lord's Supper. 4. They loaded the cross of Christ with contempt and reproach; by which we are only to understand, that they refused to follow Paulina Paulo.

follow the abfurd and superstitious practice of the Greeks, who paid to the pretended wood of the cross a certain fort of religious homage. 5. They rejected, after the example of the greatest part of the Gnostics, the books of the old Testament; and looked upon the writers of that facred history as inspired by the Creator of this world, and not by the supreme God. 6. They excluded prefbyters and elders from all part in the administration of

PAULINA, a Roman lady, wife of Saturnius governor of Syria, in the reign of the emperor Tiberius. Her conjugal peace was disturbed, and violence was offered to her virtue, by a young man named Mundus, who fell in love with her, and had caused her to come to the temple of Isis by means of the priests of that goddess, who declared that Anubis wished to communicate to her fomething of moment. Saturnius complained to the emperor of the violence which had been offered to his wife; and the temple of Isis was overturned, and Mundus banished, &c .- There was besides a Paulina, wife of the philosopher Seneca. Se attempted to kill herfelf when Nero had ordered her husband to die. The emperor, however, prevented her; and she lived fome few years after in the greatest melancholy.

PAULINIA, a genus of plants belonging to the octandria class, and in the natural method ranking under the 23d order, Trihilatæ. See BOTANY Index.

PAULINUS, a bishop who flourished in the early part of the 7th century. He was the apostle of Yorkshire, having been the first archbishop of York. dignity feems to have been conferred on him about the year 626. He built a church at Almonbury, and dedicated it to St Alban, where he preached to and converted the Brigantes. Camden mentions a crofs at Dewsborough, which had been erected to him, with this inscription, Paulinus hic prædicavit et celebravit. York was fo fmall about this time, that there was not fo much as a small church in it in which King Edwin could be baptized. Constantius is said to have made it a bishopric. Pope Honorius made it a metropolitan see. We are told that Paulinus baptized in the river Swale, in one day, 10,000 men, besides women and children, on the first conversion of the Saxons to Christianity, besides many at Halystone. At Walstone, in Northumberland, he baptized Segbert king of the East Saxons. Bede fays, " Paulinus coming with the king and queen to the royal manor called Ad Gebrin (now Yeverin), staid there 36 days with them, employed in the duties of catechizing and baptizing. In all this time he did nothing from morning to night but inftruct the people, who flocked to him from all the villages and places, in the doctrine of Christ and falvation; and, after they were instructed, baptizing them in the neighbouring river Glen." According to the fame Bede, "he preached the word in the province of Lindisti; and first converted the governor of the city of Lindocollina, whose name was Blecca, with all his family. In this city he built a stone church of exquisite workmanship, whose roof being ruined by long neglect or the violence of the enemy, only the walls are now standing." He is also faid to have founded a collegiate church of prebends near Southwell, in Nottinghamshire, dedicated to the Virgin Mary. This church he is faid to have built when he baptized the Coritani in the Trent.

PAULO, MARCO, a celebrated traveller, was fon to

Nicholas Paulo, a Venetian, who went with his brother Paulo. Matthew, about the year 1255, to Constantinople, in the reign of Baudoin II. Nicholas, at his departure, left his wife big with child; and she brought to the world the famous Marco Paulo, the fubject of this memoir. The two Venetians, having taken leave of the emperor, croffed the Black fea, and travelled into Armenia; whence they passed over land to the court of Barka, one of the greatest lords of Tartary, who loaded them with honours. This prince having been defeated by one of his neighbours, Nicholas and Matthew made the best of their way through the deferts, and arrived at the city where Kublai, grand khan of the Tartars, refided. Kublai was entertained with the account which they gave him of the European manners and customs; and appointed them ambassadors to the pope, in order to demand of his holiness a hundred missionaries. They came accordingly to Italy, obtained from the Roman pontiff two Dominicans, the one an Italian, the other an Afiatic, and carried along with them young Marco, for whom Kublai expressed a singular affection. This young man, having learned the different dialects of Tartary, was employed in embassies which gave him the opportunity of traverfing Tartary, China, and other eastern countries. At length, after a residence of seventeen years at the court of the grand khan, the three Venetians returned to their own country, in the year 1295, with immense fortunes. A short time after his return, Marco ferving his country at fea against the Genoese, his galley, in a great naval engagement, was funk, and himself taken prisoner, and carried to Genoa. He remained there many years in confinement; and, as well to amuse his melancholy as to gratify those who desired it from him, he fent for his notes from Venice, and composed the history of his own and his father's voyages in Italian, under this title, Delle maraviglie del mondo da lui vidute, &c.; the first edition of which appeared at Venice, in 8vo, 1496. His work was translated into different languages, and inferted in various collections. The editions most esteemed are the Latin one published by Andrew Muller at Cologne, in 4to, 1671; and that in French, to be found in the collection of voyages published by Bergeron, at the Hague, 1735, in 2 vols 4to. In the writings of Marco Paulo, there are some things true and others highly incredible. It is indeed difficult to believe, that as foon as the grand khan was informed of the arrival of two Venetian merchants, who were come to fell theriaca (or treacle) at his court, he fent before them an efcort of 40,000 men, and afterwards dispatched these Venetians ambassadors to the Pope, to beseech his holiness to send him a hundred missionaries. It is equally difficult to believe that the pope, who doubtless had an ardent zeal for the propagation of the faith, instead of a hundred, should have sent him only two missionaries. There are therefore some errors and exaggerations in Marco Paulo's narrative; but many other things which were afterwards verified, and which have been of service to succeeding travellers, prove that in feveral respects his relation is valuable. He not only gave better accounts of China than had been before received; but likewise furnished a description of Japan, of many of the islands of the East Indies, of Madagascar, and the coasts of Africa; so that from his work it might be easily collected, that a direct passage by sea to the Indies was not only possible, but practicable. It

may be worth while to add, that, in the opinion of the authors of the Universal History, what he wrote from Paufanias. his own knowledge is both curious and true, fo that where he has erred his father and uncle must have deceived him.

PAULUS ÆMILIUS. See ÆMILIUS Paulus. PAVO, the PEACOCK; a genus of birds belonging to the order of gallinæ. See ORNITHOLOGY Index.

PAVO, in Astronomy, a constellation in the southern hemisphere, unknown to the ancients, and not visible in our latitude. It confifts of 14 stars, of which the names and fituations are as follows:

		oigns.	Lo	ngit	ude		titu outl	de	Magnitude.
			0	1	"	0	1	"	ie.
The eye of the peace	ock	3	20	0	3	36	II	18	2
In the breaft			24	41	51	46	56	21	3
In the right wing			18	41	38	45	52	34	3
In the middle	ca			42					
In the root of the tail	, nrit		3	53	24	44	0	13	5
5.	fecond		2	42	11	41	37	Q	5
	third			55					
	fourth		5	II	3	37	IO	46	
*	fifth		0	49	34	38	54		5
	fixth	7	29	39	17	38	3	36	4
10.	C .1							-0	1
	feventh laft		27			40		28	5
In the right foot!	lait	7-0	24 I	7 22	44	41	28	3	4
In the right foot		B	0	12		50	49		
In the left 100t		(1 9	43	1	130	49	/	1 4

See ASTRONOMY.

PAVOR, a Roman deity, whose worship was introduced by Tullus Hostilius, who, in a panic, vowed a shrine to him, and one to Pallor, Paleness; and therefore they are found on the coins of that family.

PAUSANIA, in Grecian antiquity, a festival in which were folemn games, wherein nobody contended but free-born Spartans; in honour of Paufanias the Spartan general, under whom the Greeks overcame the Perfians in the famous battle of Platæa.

PAUSANIAS, a Spartan king and general, who fignalized himself at the battle of Platza against the Perfians. The Greeks, very fenfible of his fervices, rewarded his merit with a tenth of the spoils taken from the Perfians. He was afterwards appointed to command the Spartan armies, and he extended his conquests in Afia; but the haughtiness of his behaviour created him many enemies; and the Athenians foon obtained a fuperiority in the affairs of Greece.-Paufanias, diffatisfied with his countrymen, offered to betray Greece to the Persians, if he received in marriage as the reward of his perfidy the daughter of their king. His intrigues were discovered by means of a young man who was intrusted with his letters to Perfia, and who refused to go, on recollecting that fuch as had been employed in that office before had never returned. The letters were given to the Ephori of Sparta, and the perfidy of Paulanias was thus discovered. He fled for safety to a temple of Minerva; and as the fanctity of the place screened him from the violence of his pursuers, the sacred building was furrounded with heaps of stones, the first of which

was carried there by the indignant mother of the un- Pausanias happy man. He was starved to death in the temple, and died about 474 years before the Christian era. There was a festival and solemn games instituted to his honour, in which only free-born Spartans contended. There was also an oration spoken in his praise, in which his actions were celebrated, particularly the battle of Platæa, and the defeat of Mardonius. See PAUSANIA.

PAUSANIAS, a learned Greek historian and orator, in the fecond century, under the reign of Antoninus the Philosopher, was the disciple of Herodus Atticus. He lived for a long time in Greece; and afterwards went to Rome, where he died at a great age. He wrote an excellent description of Greece, in ten books; in which we find not only the fituation of places, but the antiquities of Greece, and every thing most curious and worthy of knowledge. Abbe Gedoin has given a French translation of it, in 2 vols 4to.

PAUSE, a stop or cessation in speaking, singing, playing, or the like. One use of pointing in grammar is to make proper paufes, in certain places .-There is a paufe in the middle of each verse; in an hemistich, it is called a rest or repose. See POETRY, and READING.

PAW, in the manege. A horse is faid to paw the ground, when, his leg being either tired or painful, he does not rest it upon the ground, and sears to hurt himfelf as he walks.

PAWN, a pledge or gage for furety of payment of money lent. It is faid to be derived à pugno, quia res quæ pignori dantur, pugno vel manu traduntur. The party that pawns goods hath a general property in them; they cannot be forfeited by the party that hath them in pawn for any offence of his, nor be taken in execution for his debt; neither may they otherwise be put in execution till the debt for which they are pawned is fatisfied.

If the pawn is laid up, and the pawnee robbed, he is not answerable; though if the pawnee use the thing, as a jewel, watch, &c. that will not be the worse for wearing, which he may do, it is at his peril; and if he is robbed, he is answerable to the owner, as the using occafioned the lofs, &c.

If the pawn is of fuch a nature that the keeping is a charge to the pawnee, as a cow or a horse, &c. he may milk the one and ride the other, and this shall go in recompence for his keeping.

Things which will grow the worse by using, as apparel, &c. he may not use.

PEA, in Botany. See PISUM.

PEACE, TEMPLE OF, a celebrated temple at Rome, which was confumed by fire A. D. 191; produced, as fome writers suppose, by a slight earthquake, for no thunder was heard at the time. Dio Cassius, however, supposes that it began in the adjoining houses. Be that as it will, the temple, with all the furrounding buildings, was reduced to ashes. That magnificent structure had been raifed by Vespasian after the destruction of Jerusalem, and enriched with the spoils and ornaments of the temple of the Jews. The ancients speak of it as one of the most stately buildings in Rome. There men of learning used to hold their affemblies, and lodge their writings, as many others deposited their jewels, and whatever else they esteemed of great value. It was likewife

Pearce.

Peach likewise made use of as a kind of magazine for the fpices that were brought by the Roman merchants out of Egypt and Arabia; fo that many rich perfons were reduced to beggary, all their valuable effects and treasures being consumed in one night, with the temple.

PEACH. See AMYGDALUS, BOTANY and GAR-

DENING Index.

PEACOCK. See PAVO, ORNITHOLOGY Index.

PEAK of DERBYSHIRE, a chain of very high mountains in the county of Derby in England, famous for the mines they contain, and for their remarkable caverns. The most remarkable of these are Pool'shole and Elden-hole. The former is a cave at the foot of a high hill called Coitmoss, so narrow at the entrance that paffengers are obliged to creep on all-fours; but it foon opens to a confiderable height, extending to above a quarter of a mile, with a roof fomewhat re-fembling that of an ancient cathedral. By the petrifying water continually dropping in many parts of the cave are formed a variety of curious figures and reprefentations of the works both of nature and art. There is a column here as clear as alabaster, which is called The Queen of Scots' Pillar, because Queen Mary is faid to have proceeded thus far when the vifited the cavern. It feems the curiofity of that princefs had led her thus far into this dark abode; and indeed there are few travellers who care to venture farther; but others, determined to see the end of all, have gone beyond it. After fliding down the rock a little way, is found the dreary cavity turned upwards: following its course, and climbing from crag to crag, the traveller arrives at a great height, till the rock, closing over his head on all fides, puts an end to any further fubterraneous journey. Just at turning to descend, the attention is caught by chafm, in which is feen a candle glim-mering at a vast depth underneath. The guides say, that the light is at a place near Mary Queen of Scots pillar, and no less than 80 yards below. It appears frightfully deep indeed to look down; but perhaps does not measure any thing like what it is said to do. If a pistol is fired by the Queen of Scots' pillar, it will make a report as loud as a cannon. Near the extremity there is a hollow in the roof, called the Necdle's Eye; in which if a candle is placed, it will represent a star in the firmament to those who are below. At a little distance from this cave is a small clear stream confisting of hot and cold water, so near each other, that the finger and thumb of the fame hand may be put, the one into the hot water and the other into the cold.

Elden-hole is a dreadful chasm in the side of a mountain; which, before the latter part of the last century, was thought to be altogether unfathomable. In the time of Queen Elizabeth, a poor man was let down into it for 200 yards; but he was drawn up in a frenzy, and foon after died. In 1682, it was examined by Captain Collins, and in 1699 by Captain Sturmy, who published their accounts in the Philosophical Transactions. The latter descended by ropes fixed at the top of an old lead-ore pit, four fathoms almost perpendicular, and from thence three fathoms more obliquely, between two great rocks. At the bottom of this he found an entrance into a very spacious cavern, from whence he descended along with a miner for 25 fathoms perpendicular. At last they came to a great river or water, which he found to be 20 fathoms broad and eight fathoms deep. The miner who accompanied him, infifted that this water ebbed and flowed with the fea; but the Captain disproved this affertion, by remaining in the place from three hours flood to two hours ebb, during which time there was no alteration in the height of the water. As they walked by the fide of this water, they observed a hol-low in the rock some feet above them. The miner went into this place, which was the mouth of another cavern; and walked for about 70 paces in it, till he just lost fight of the Captain. He then called to him, that he had found a rich mine; but immediately after came running out and crying, that he had feen an evil fpirit; neither could any perfuafions induce him to return. The floor of these caverns is a kind of white stone enamelled with lead ore, and the roofs are encrusted with shining spar. On his return from this fubterraneous journey, Captain Sturmy was feized with a violent headach, which, after continuing four days, terminated in a fever, of which he died in a short

PEAN of Teneriffe. See TENERIFFE. PEAN, in heraldry, is when the field of a coat of arms is fable, and the powderings or.

PEAR, See Pyrus, Botany and GARDENING

PEAR-Glass. See VITREA Lacryma.

PEARCE, DR, lord bishop of Rochester, was the fon of a distiller in High Holborn. He married Miss Adams, the daughter of a distiller in the same neigh-bourhood, with a confiderable fortune, who lived with him 52 years in the highest degree of connubial happinels. He had his education in Westminster school, where he was diflinguished by his merit, and elected one of the king's scholars. In 1710, when he was 20 years old, he was elected to Trinity College, Cambridge. During the first years of his residence at the university, he sometimes amused himself with lighter compositions, some of which are inserted in the Guardian and Spectator. In 1716, he published his edition of Cicero de Oratore, and, at the defire of a friend, luckily dedicated it to Lord Chief Justice Parker (afterwards Earl of Macclesfield), to whom he was a stranger. This incident laid the foundation of his future fortune; for Lord Parker foon recommended him to Dr Bentley, matter of Trinity, to be made one of the fellows; and the doctor confented to it on this condition, that his lordship would promise to unmake him again as foon as it lay in his power to give him a living. In 1717, Mr Pearce was ordained at the age of 27; having taken time enough, as he thought, to attain a fufficient knowledge of the facred office. In 1718, Lord Parker was appointed chancellor, and invited Mr Pearce to live with him in his house as chaplain. In 1719, he was instituted into the rectory of Stappleford Abbots, in Lifex; and in 1720, into that of St Bartholomew, behind the Royal Exchange, worth 400 l. per annum. In 1723, the lord chancel-lor prefented him to St Martin's in the Fields. His Majesty, who was then at Hanover, was applied to in favour of St Claget, who was then along with him: and the doctor actually kissed hands upon the occafion: but the chancellor, upon the king's return, dif-

puted the point, and was permitted to present Mr Pearce.-Mr Pearce foon atracted the notice and esteem of persons in the highest stations and of the greatest abilities. Beside Lord Parker, he could reckon amongst his patrons or friends, Lord Macclesfield, Mr Pulteney (afterwards Earl of Bath), Archbishop Potter, Lord Hardwicke, Sir Isaac Newton, and other illustrious personages .- In 1724, the degree of doctor of divinity was conferred on him by Archbishop Wake. The same year he dedicated to his patron, the earl of Macclesfield, his edition of Longinus on the Sublime, with a new Latin version and

When the church of St Martin's was rebuilt, Dr Pearce preached a fermon at the confecration, which he afterwards printed, and accompanied with an effay on the origin and progress of temples, traced from the rude stones which were first used for altars to the noble structure of Solomon, which he considers as the first temple completely covered. His observations on that building which is called the Temple of Dagon removes part of the difficulty which prefents itself in the narration of the manner in which Samson destroyed it.

The deanery of Winchester becoming vacant, Dr Pearce was appointed dean in 1739; and in the year 1744 he was elected prolocutor of the lower house of convocation for the province of Canterbury. His friends now began to think of him for the episcopal dignity; but Mr Dean's language rather declined it. However, after feveral difficulties had been started and removed, he confented to accept the bishopric of Bangor, and promifed Lord Hardwicke to do it with a good grace. He accordingly made proper acknowledgments of the royal goodness, and was confecrated Feb. 12. 1748. Upon the declining state of health of Dr Wilcocks, bishop of Rochester, the bishop of Bangor was several times applied to by Archbishop Herring to accept of Rochester, and the deanery of Westminster, in exchange for Bangor; but the bishop then first signified his defire to obtain leave to refign and retire to a private life. His lordship, however, upon being pressed, suffered himself to be prevailed upon .- "My Lord (said he to the duke of Newcastle), your grace offers these dignities to me in so generous and friendly a manner, that I promise you to accept them." Upon the death of Bishop Wilcocks he was accordingly promoted to the fee of Rochester and deanery of Westminster in 1756. Bishop Sherlock died in 1761, and Lord Bath offered his interest for getting the bishop of Rochester appointed to fucceed him in the diocese of London; but the bishop told his lordship, that he had determined never to be bishop of London or archbishop of Canterbury.

In the year 1763, his lordship being 73 years old, and finding himself less fit for the business of his stations as bishop and dean, informed his friend Lord Bath of his intention to refign both, and live in a retired manner upon his private fortune. Lord Bath undertook to acquaint his majesty; who named a day and hour, when the bishop was admitted alone into the clofet. He told the king, that he wished to have some interval between the fatigues of business and eternity; and defired his majesty to consult proper persons about the propriety and legality of his refignation. In about two months the king informed him, that Lord Mansfield faw no objection; and that Lord Northington, who had Pearce. been doubtful, on farther consideration thought that the request might be complied with. Unfortunately for the bishop, Lord Bath applied for Bishop Newton to fucceed. This alarmed the ministry, who thought that no dignities should be obtained but through their hands. They therefore opposed the refignation; and his majesty was informed that the bishops disliked the design. His majesty sent to him again; and at a third audience told him, that he must think no more of resigning. The bishop replied, "Sire, I am all duty and submission;" and then retired.

In 1768 he obtained leave to refign the deanery; in 1773, he lost his lady; and after some months of lingering decay, he died at Little Ealing, June 29. 1774.

This eminent prelate distinguished himself in every part of his life by the virtues proper to his station. His literary abilities, and application to facred and philological learning, appear by his works; the principal of which are, A letter to the clergy of the church of England, on occasion of the bishop of Rochester's commitment to the Tower, 2d edit. 1722. Miracles of Jesus vindicated, 1727 and 1728. A review of the text of Milton, 1733. Two letters against Dr Middleton, occasioned by the doctor's letter to Waterland, on the publication of his treatife, intitled, Scripture Vindicated, 3d edit. 1752. And fince his death, a commentary with notes on the four Evangelists and the Acts of the Apostles, together with a new translation of St Paul's first Epistle to the Corinthians, with a paraphrase and notes, have been published, with his life prefixed, from origi-

nal MSS. in 2 vols. 4to.

The following character of this excellent bishop was published in the Gentleman's Magazine for 1775, and was written, as we are told, by a contemporary and friend. "The world has not lost for many years a more respectable member of society than the late Dr Pearce; nor the clergy a more pious and learned prelate. In his younger days, before he became a graduate, he published that excellent edition of Longinus, still admired and quoted by the best critics. What is said of Longinus himself by our excellent English poet, is as applicable to the editor: 'He is himself the great sublime he draws;' for very few of his order ever arrived at that perfection in eloquence, for which he was so justly celebrated. His diction was fimple, nervous, and flowing; his fentiments were just and sublime; more sublime than the heathen critic, in proportion to the superior sublimity of the Christian revelation. Yet he was never pussed up with the general applauses of the world, but of an humble deportment, refembling the meek Jesus as far as the weakness of human nature can resemble a character without fin. His countenance was always placid, and difplayed the benevolence of his heart, if his extensive charity had not proved it to a demonstration. His thirst of knowledge prompted him to a very studious life, and that rendered both his complexion and constitution delicate; yet it held out by the bleffing of Providence. bebeyond the 85th year of his age; which is the more extraordinary, confidering the midnight lamp had cast a paleness over his complexion: yet with all his learning and knowledge, his humility and modesty restrained him from many publications, which the world may hope for from his executors; one particularly in divinity, which has been the object of his contemplation for many years

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Pearch, past. With a view to complete that work, and to retire from the buftle of the world, he struggled so hard to refign his bishopric, &c. After possessing the esteem and veneration of all who knew him for a long feries of years, either as rector of a very large parish, or as a dignitary of the church, he has left the world in tears; and gone to receive the infinite reward of his piety and virtue."

PEARCH. See Perca, Ichthyology Index.

PEARCH-Glue, the name of a kind of glue, of remarkable strength and purity, made from the skins of

PEARL, in Natural History, a hard, white, shining body, usually roundish, found in a testaceous fish, a species of Mya; which fee, CONCHOLOGY Index.

Pearls, though esteemed of the number of gems and highly valued in all ages, proceed only from a distemper in the animal that produces them, analogous to the bezoars and other stony concretions in several animals of other kinds. For an account of the mode of formation of the pearl, fee Conchology, p. 476; for the history of the pearl fishery in the bay of Condatchy in Ceylon, see CEYLON, p. 363; see also Cordiner's Hi-

flory of that island, 4to.

Mr Bruce mentions a muscle found in the salt springs of the Nubian desert; in many of which he found those excrescences which might be called pearls, but all of them ill formed, foul, and of a bad colour, though of the same consistence, and lodged in the same part of the body as those in the sea. "The muscle, too (says our author), is in every respect fimilar, I think larger. The outer skin or covering of it is of a vivid green. Upon removing this, which is the epidermis, what next appears is a beautiful pink without gloss, and seemingly of a calcareous nature. Below this, the mother-of-pearl, which is undermost, is a white without lustre, partaking much of the blue and very little of the red; and this is all the difference I observed between it and the pearl bearing muscle of the Red sea."

" In Scotland, especially to the northward, in all rivers running from lakes, there are found muscles that have pearls of more than ordinary merit, though feldom of large fize. They were formerly tolerably cheap, but lately the wearing of real pearls coming into fashion, those of Scotland have increased in price greatly beyond their value, and superior often to the price of oriental ones when bought in the east. The reason of this is a demand from London, where they are actually employed in work, and fold as oriental. But the excellency of all glass or paste manufactory, it is likely, will keep the price of this article, and the demand for it, within bounds, when every lady has it in her power to wear in her ears, for the price of fixpence, a pearl as beautiful in colour, more elegant in form, lighter and easier to carry, and as much bigger as she pleases, than the famous ones of Cleopatra and Servilia. In Scotland, as well as in the east, the smooth and perfect shell rarely produces a pearl; the crooked and difforted shell seldom wants one.

The mother-of-pearl manufactory is brought to the greatest perfection at Jerusalem. The most beautiful shell of this kind is that of the peninim already men. tioned; but it is too brittle to be employed in any large pieces of workmanship; whence that kind named dora is most usually employed; and great quantities of this are daily brought from the Red sea to Jerusalem. Of

thefe, all the fine works, the crucifixes, the wafer-boxes, and the beads, are made, which are fent to the Spanish dominions in the New World, and produce a return incomparably greater than the staple of the greatest manu-

factory in the Old.

Very little is known of the natural history of the pearl fish. Mr Bruce fays, that, as far as he has observed, they are all stuck upright in the mud by an extremity; the muscle by one end, the pinna by the small sharp point, and the third by the hinge or square part which projects from the round. "In shallow and clear streams (says Mr Bruce), I have feen fmall furrows or tracks upon the fandy bottom, by which you could trace the muscle from its last station; and these not straight, but deviating into traverses and triangles, like the course of a ship in a contrary wind laid down upon a map, probably in pursuit of food. The general belief is, that the muscle is constantly stationary in a state of repose, and cannot transfer itself from place to place. This is a vulgar prejudice, and one of those facts that are mistaken for want of fufficient pains or opportunity to make more critical observations. Others, finding the first opinion a false one, and that they are endowed with power of changing place like other animals, have, upon the same foundation, gone into the contrary extreme, so far as to attribute swiftness to them, a property furely inconfistent with their being fixed to rocks. Pliny and Solinus fay that the muscles have leaders, and go in flocks; and that their leader is endowed with great cunning to protect himself and his flock from the fishers; and that, when he is taken, the others fall an eafy prey. This, however, we may justly look upon to be a fable; fome of the most accurate obfervers having discovered the motion of the muscle, which indeed is wonderful, and that they lie in beds, which is not at all so, have added the rest, to make their history complete." Our author informs us, that the muscles found in the salt springs of Nubia likewise travel far from home, and are sometimes surprised, by the ceasing of the rains, at a greater distance from their beds than they have strength and moisture to carry them. He affures us, that none of the pearl-fish are eatable; and that they are the only fish he saw in the Red sea that cannot be eaten.

Artificial PEARLS. Attempts have been made to take out stains from pearls, and to render the foul opaque-coloured ones equal in lustre to the oriental. Numerous processes are given for this purpose in books of fecrets and travels; but they are very far from answering what is expected from them. Pearls may be cleaned indeed from any external foulnesses by washing and rubbing them with a little Venice foap and warm water, or with ground rice and falt, with starch and powder blue, plaster of paris, coral, white vitriol and tartar, cuttle-bone, pumice-stone, and other similar substances; but a stain that reaches deep into the substance of pearls is impossible to be taken out. Nor can a number of small pearls be united into a mass similar to

an entire natural one, as some pretend.

There are, however, methods of making artificial pearls, in fuch manner as to be with difficulty distinguished from the best oriental. The ingredient used for this purpose was long kept a secret; but it is now discovered to be a fine filver-like fubstance found upon the under fide of the scales of the blay or bleak fish. The scales, taken off in the usual manner, are washed and Pearl. rubbed with fresh parcels of fair water, and the several liquors fuffered to fettle: the water being then poured off, the pearly matter remains at the bottom, of the confistence of oil, called by the French effence d'orient. A little of this is dropped into a hollow bead of bluish glass, and shaken about so as to line the internal surface; after which the cavity is filled up with wax, to give folidity and weight. Pearls made in this manner are diftinguishable from the natural only by their having fewer blemishes.

Mother-of-PEARL, the shell, not of the pearl oyster, but of the mytilus margaritiferus. See MYTILUS, CON-CHOLOGY Index.

PEARL-ash, a fixed alkaline falt, prepared chiefly in Germany, Russia, and Poland, by melting the falts out of the aihes of burnt wood; and having reduced them again to dryness, evaporating the moisture, and calcining them for a confiderable time in a furnace moderately hot. The goodness of pearl-ashes must be distinguished by a uniform and white appearance: they are nevertheless subject to a common adulteration, not easy to be di-Hinguished by the mere appearance, which is done by the addition of common falt. In order to find out this fraud, take a finall quantity of the suspected falt; and after it has been foftened by lying in the air, put it over the fire in a shovel: if it contains any common salt, a crackling and flight explosion will take place as the falt

Pearl-ashes are much used in the manufacture of glass, and require no preparation, except where very great transparency is required, as in the case of looking-glass, and the best kind of window-glass. For this purpose dissolve them in four times their weight of beiling water: when they are diffolved, let the folution be put into a clean tub, and fuffered to remain there 24 hours or more. Let the clear part of the fluid be then decanted off from the sediment, and put back into the iron pot in which the folution was made; in this let the water be evaporated till the falts be left perfectly dry. Keep those that are not designed for immediate use in stone

jars, well fecured from moisture and air. Mr Kirwan, who inflituted a fet of experiments on the alkaline substances used in bleaching, &c. (see Irish Transact. for 1789), tells us, that in 100 parts of the Dantzick pearl-ash, the vegetable alkali amounted to somewhat above 63. His pearl-ash he prepares by calcining a ley of vegetable ashes dried into a falt to whiteness. In this operation, he says, " particular care should be taken that it should not melt, as the extractive matter would not be thoroughly confumed, and the alkali would form such a union with the earthy parts as could not eafily be diffolved." He has "added this caution, as Dr Lewis and Mr Dossie have inadvertently directed the contrary." We apprehend, however, that here is a little inaccuracy; and that it was not for pearlash, but for the unrefined pot-ash, that these gentlemen directed fusion. The fact is, that the American potashes, examined by them, had unquestionably suffered fusion; which was effected in the same iron pot in which the evaporation was finished, by rather increasing the fire at the end of the process: by this management, one of the most troublesome operations in the whole manufacture, the separation of the hard falt from the vessels with hammers and chiffels, was avoided; and though the extractive matter was not confumed, it was burnt to an in-

diffoluble coal; fo that the falt, though black itself, pro- Pearson, duced a pale or colourless folution, and was uncommonly Peasant. strong. Mr Kirwan has also given tables of the quantities of ashes and salt obtained from different vegetables; and he concludes from them, I. "That in general weeds yield much more ashes, and their ashes much more falt, than woods; and that, confequently, as to falts of the vegetable alkali kind, neither America, Trieste, nor the northern countries, possess any advantage over us. 2. That of all weeds, fumitory produces most falt, and next to it wormwood; but if we attend only to the quantity of falt in a given weight of ashes, the ashes of wormwood contain most. Trifolium sibrinum also produces more ashes and falt than fern." See

PEARSON, John, a very learned English bishop in the 17th century, was born at Snoring in 1613. After his education at Eton and Cambridge, he entered into holy orders in 1639, and was the same year collated to the prebend of Netherhaven in the church of Sarum. In 1640 he was appointed chaplain to the lord keeper Finch, and by him prefented to the living of Torrington in Suffolk. In 1650 he was made minister of St Clement's, East-Cheap, in London. In 1657, he and Mr Gunning had a dispute with two Roman Catholics upon the subject of schisim; a very unfair account of which was printed at Paris in 1658. Some time after, he published at London An Exposition of the Creed, in folio, dedicated to his parishioners of St Clement's East-Cheap, to whom the fubstance of that excellent work had been preached feveral years before, and by whom he had been defired to make it public. The fame year he likewise published The Golden Remains of the ever memorable Mr John Hales of Eton; to which he prefixed a preface, containing, of that great man, with whom he had been acquainted for many years, a character drawn with great elegance and force. Soon after the Restoration, he was presented by Juxon, then bishop of London, to the rectory of St Christopher's in that city; created doctor of divinity at Cambridge, in pursuance of the king's letters mandatory; installed prebendary of Ely, archdeacon of Surry; and made master of Jesus college in Cambridge: all before the end of the year 1668. March 25th 1661, he was appointed Margaret professor of divinity in that university; and, the first day of the ensuing year, was nominated one of the commissioners for the review of the liturgy in the conference at the Savoy. April 14th 1662, he was admitted mafter of Trinity college in Cambridge; and, in August, resigned his rectory of St Christopher's and prebend of Sarum .- In 1667 he was admitted a Fellow of the Royal Society. In 1672 he published at Cambridge, in 4to, Vindiciae Epistolarum S. Ignatii, in answer to Mons. Daillé; to which is subjoined, Isaaci Vossii epistolæ duæ adversus Davidem Blondellum. Upon the death of the celebrated Wilkins, Pearfon was appointed his fuccessor in the sce of Chester, to which he was confecrated February 9th 1672-3. In 1682, his Annales Cyprianici, five tredecim annorum, quibus S. Cyprian. inter Christianos versatus est, historia chronologica, was published at Oxford, with Fell's edition of that Father's works. Pearson was disabled from all public fervice by ill health a confiderable time before his death, which happened at Chester, July 16th 1686.

PEASANT, a hind, one whose business is in rural

Peafant.

wels into Poland,

Russia,

mark.

Sweden.

and Den-

It is amongst this order of men that a philosopher would look for innocent and ingenuous manners. The fituation of the peafantry is fuch as fecludes them from the devastations of luxury and licentiousness; for when the contagion has once reached the recosses of rural retirement, and corrupted the minds of habitual innocence, that nation has reached the fummit of vice, and is hastening to that decay which has always been the effect of vicious indulgence. The peafantry of this country still in a great measure retain that simplicity of manners and rustic innocence which ought to be the characteristic of this order of society; and, in many parts, their condition is fuch as, were all its advantages fufficiently known, would create envy in the minds of those who have toiled through life, amidst the bustle of the world, in quest of that happiness which it could

> O fortunatos nimium, sua si bona norint, Agricolas.

In other countries the peafants do not enjoy the fame liberty as they do in our own, and are confequently not so happy. In all feudal governments they are abject slaves, entirely at the disposal of some petty despot. This was the case in Poland, where the native peafants were subject to the most horrid slavery, though those descended of the Germans, who settled in Poland during the reign of Boleslaus the Chaste and Cassimir the Great, enjoyed very distinguished privileges. Amongst the native slaves, too, those of the crown were in a better condition than those of individuals. See POLAND.

The peafants of Russia (Mr Coxe tells us) are a hardy race of men, and of great bodily strength. Their cottages are constructed with tolerable propriety, after the manner of those in Lithuania; but they are very poorly furnished. The peasants are greedy of money, and, as the same author informs us, somewhat inclined to thieving. They afford horses to travellers, and act the Coxe's Tra- part of coachmen and postilions. " In their common intercourse they are remarkably polite to each other: they take off their cap at meeting; bow ceremoniously and frequently, and usually exchange a falute. They accompany their ordinary discourse with much action, and innumerable gestures; and are exceedingly servile in their expressions of deference to their superiors: in accosting a person of consequence, they prostrate themfelves, and even touch the ground with their heads. We were often struck at receiving this kind of eastern homage, not only from beggars, but frequently from children, and occasionally from some of the peasants

> "The peafants are well clothed, comfortably lodged, and feem to enjoy plenty of wholesome food. Their rye-bread, whose blackness at first disgusts the eye, and whose sourness the taste, of a delicate traveller, agrees very well with the appetite: as I became reconciled to it from use, I found it at all times no unpleasant morsel, and, when feafoned with hunger, it was quite delicious: Vol. XVI. Part I.

they render this bread more palatable, by stuffing it with Peafant. onions and groats, carrots or green corn, and feafoning it with fweet oil. The rye-bread is fometimes white, and their other articles of food are eggs, falt-fish, bacon, and mushrooms; their favourite dish is a kind of hodge podge, made of falt or fometimes fresh meat, groats, rye-flour, highly feafoned with onions and garlick, which latter ingredients are much used by the Russians. Befides, mushrooms are so exceedingly common in these regions, as to form a very effential part of their provifion. I feldom entered a cottage without feeing great abundance of them; and in passing through the markets, I was often aftonished at the prodigious quantity exposed for fale: their variety was no less remarkable than their number; they were of many colours, amongst which I particularly noticed white, black, brown, yellow, green and pink. The common drink of the peasants is quass, a fermented liquor, fomewhat like fweet wort, made by pouring warm water on rye or barley meal; and deemed an excellent antifcorbutic. They are extremely fond of whifky, a spirituous liquor distilled from malt, which the poorest can occasionally command, and which their inclination often leads them to use to great excess."

These people are extremely backward in the mechanic arts, though, where they have much intercourse with other nations, this does not appear, and therefore does not proceed from natural inability; indeed we have already given an instance of one peasant of Russia, who seems to possess very superior talents. See NEVA.

The drefs of these people is well calculated for the climate in which they live: they are particularly careful of their extremities. On their legs they wear one or two pair of thick worsted stockings; and they envelope their legs with wrappers of coarfe flannel or cloth feveral feet in length, and over these they frequently draw a pair of boots, fo large as to receive their bulky contents with ease. The lower fort of people are grossly ignorant; of which we shall give a very furprifing instance in the words of Mr Coxe .-"In many families, the father marries his son while a boy of feven, eight, or nine years old, to a girl of a more advanced age, in order, as it is faid, to procure an able-bodied woman for the domestic service: he cohabits with this person, now become his daughterin-law, and frequently has feveral children by her. In my progress through Russia, I observed in some cottages, as it were, two mistresses of a family; one the peafant's real wife, who was old enough to be his mother; and the other, who was nominally the fon's wife, but in reality the father's concubine. These incestuous marriages, sanctified by inveterate custom, and permitted by the parish-priests, were formerly more common than they are at present; but as the nation becomes more refined, and the priests somewhat more enlightened; and as they have lately been discountenanced by government, they are daily falling into difuse; and, it is to be hoped, will be no longer tolerated (A)."

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⁽A) "The truth of this fact, which fell under my own observation, and which I authenticated by repeated inquiries from all ranks of people, is still further confirmed by the following passage in the Antidote to the Journey into Siberia, although the author gives another reason for those early marriages. 'The peasants and common people

The peafants of Ruffia, like those of Poland, are

divided into those of the crown and those of indivi-

duals; the first of which are in the best condition; but

all of them undergo great hardships, being subject to the despotic will of some cruel overseer. They may obtain freedom, 1. By manumission on the death of

their master, or otherwise: 2. By purchase; and, lastly, By serving in the army or navy. The empress has redressed some of the grievances of this class of her

fubjects. The hardiness of the peasants arises in a great

measure from their mode of education and way of life,

and from the violent changes and great extremes of heat

and cold to which they are exposed.
"The peafants of Finland differ widely from the

Russians in their look and drefs: they had for the most

part fair complexions, and many of them red hair: they

fhave their beards, wear their hair parted at the top, and hanging to a confiderable length over their shoulders (B).

We could not avoid remarking, that they were in gene-

ral more civilized than the Ruffians; and that even in the fmallest villages we were able to procure much better ac-

commodations than we usually met with in the largest

more honest than those in Russia; in better condition,

and possessing more of the conveniencies of life, both

with respect to food and furniture. " They are well

clad in strong cloth of their own weaving. Their

cottages, though built with wood, and only of one

in which the family sleep is provided with ranges of beds in tiers (if I may so express myself), one above the other: upon the wooden testers of the beds in

which the women lie, are placed others for the recep-

tion of the men, to which they ascend by means of

ladders. To a person who has just quitted Germany, and been accustomed to tolerable inns, the Swedish cot-

tages may perhaps appear miferable hovels; to me, who had been long used to places of far inferior accommo-

dation, they feemed almost palaces. The traveller is able to procure many conveniences, and particularly a

feparate room from that inhabited by the family, which

could feldom be obtained in the Polish and Russian vil-

lages. During my course through those two countries, a bed was a phenomenon which seldom occurred, ex-

cepting in the large towns, and even then not always completely equipped; but the poorest huts of Sweden

were never deficient in this article of comfort: an evi-

dent proof that the Swedish peasants are more civilized

than those of Poland and Russia. - After having witness-

ed the flavery of the peafants in those two countries, it

was a pleasing satisfaction to find myself again among

freemen, in a kingdom where there is a more equal di-

flory, are comfortable and commodious.

towns which we had hitherto vifited in this empire."

The peafants of Sweden (Mr Coxe informs us) are

vision of property; where there is no vassalage; where the lowest order enjoy a security of their persons and property; and where the advantages resulting from this right are visible to the commonest observer."

The peasants of Holland and Switzerland are all in

The pealants of Holland and Switzerland are all in a very tolerable condition; not subject to the undisputed controul of a hireling master, they are freemen, and enjoy in their several stations the blessings of freedom. In Bohemia, Hungary, and a great part of Germany, they are legally slaves, and suffer all the miseries attending such a condition. In Spain, Savoy, and Italy, they are little better. In France, their situation was such as to warrant the first Revolution; but by carrying matters too far, they are now infinitely worse than they were at any former period.

PEAT, a well known inflammable fubfiance, used in many parts of the world as fuel. There are two species:

r. A yellowish-brown or black peat, found in moorish grounds in Scotland, Holland, and Germany.—When fresh, it is of a viscid consistence, but hardens by exposure to the air. It consists, according to Kirwan, of clay mixed with calcareous earth and pyrites; fometimes also it contains common falt. While soft, it is formed into oblong pieces for suel, after the pyritaceous and slony matters are separated. By distillation it yields water, acid, oil, and volatile alkali; the ashes containing a small proportion of fixed alkali; and being either white or red according to the proportion of pyrites contained in the substance.

The oil which is obtained from peat has a very pungent tafte; and an empyreumatic fmell, lefs fetid than that of animal fubflances, more fo than that of mineral bitumens: it congeals in the cold into a pitchy mass, which liquefies in a small heat: it readily catches fire from a candle, but burns less vehemently than other oils, and immediately goes out upon removing the external flame: it dissolves almost totally in rectified spirit of wine into a dark brownish red liquor.

2. The fecond species is found near Newbury in Berkshire. In the Philosophical Transactions for the year 1757, we have an account of this species; the substance of which is as follows:

Peat is a composition of the branches, twigs, leaves, and roots of trees, with grass, straw, plants, and weeds, which having lain long in water, is formed into a mass so so so that the colour is a blackish brown, and it is used in many places for firing. There is a stratum of this peat on each side the Kennet, near Newbury in Berks, which is from about a quarter to half a mile wide, and many miles long. The depth below the surface of the ground is from one foot to eight. Great numbers of entire trees

not only marry their fons at 14 and 15 years of age, but even at eight or nine, and that for the fake of having a workwoman the more in the person of the son's wise: By the same rule, they try to keep their daughters single as long as possible, because they don't choose to lose a workwoman. These premature marriages are of little use to the state; for which reason, methods to get the better of this custom have been sought for, and, I hope will soon take place: the bishops are attentive to prevent these marriages as much as possible, and have of late succeeded greatly in their endeavours. It is only the inhabitants of some of the provinces in Russia that still retain this bad custom."

(B) The Russians have generally dark complexions and hair: they also wear their beards, and cut their hair

The room

hort.

arc

are found lying irregularly in the true peat. They are chiefly oaks, alders, willows, and firs, and appear to have been torn up by the roots: many horses heads, and bones of feveral kinds of deer, the horns of the antelope, the heads and tulks of boars, and the heads of beavers, are also found in it. Not many years ago an urn of a light brown colour, large enough to hold about a gallon, was found in the peat-pit in Speen moor, near Newbury, at about 10 feet from the river, and four feet below the level of the neighbouring ground. Just over the fpot where the urn was found, an artificial hill was raifed about eight feet high; and as this hill confifted both of peat and earth, it is evident that the peat was older than the urn. From the fide of the river feveral femicircular ridges are drawn round the hill, with trenches between them. The urn was broken to shivers by the peat-diggers who found it, fo that it could not be critically examined; nor can it be known whether any thing was contained in it.

For the mode of converting moss or peat into a va-

luable manure, see AGRICULTURE Index.

PEAUCIER, in Anatomy, a name given by Winflow, in his Treatife on the Head, and by some of the French writers, to the muscle called by Albinus latissimus colli; and by others detrahens quadratus, and quadratus genæ. Santerini has called the part of this which arises from the cheek musculus riforius novus; and some call the whole platy [ma myoides.

PEBBLES, a trivial name frequently given to different varieties of the agate. See AGATE, MINERALOGY

Index.

Peck.

PECARY, in Zoology. See MAMMALIA Index.

PECCANT, in Medicine, an epithet given to the humours of the body, when they offend either in quantity or quality, i. e. when they are either morbid, or in too great abundance. Most diseases arise from peccant humours, which are either to be corrected by alteratives

and specifics, or else to be evacuated.

PECHEM, in the Materia Medica, a name given by the modern Greek writers to the root called behem by Avicenna and Serapion. Many have been at a loss to know what this root pechem was; but the virtues ascribed to it are the same with those of the behem of the Arabians; its description is the same, and the diviflon of it into white and red is also the same as that of the behem. Nay, the word pechem is only formed of behem by changing the b into a p, which is very common, and the afpirate into χ , or ch, which is as common. Myrepfus, who treats of this root, fays the fame thing that the Arabian Avicenna fays of behem, namely, that it was the fragments of a woody root, much corrugated and wrinkled on the furface, which was owing to its being so moist whilst fresh, that it always shrunk greatly in the drying.

PECHYAGRA, a name given by fome authors to

the gout affecting the elbow.

PECHYS, a name used by some anatomical writers

PECHYTYRBE, an epithet used by some medical writers for the fcurvy.

PECK, a measure of capacity, four of which make a

bushel.

PECK, Francis, a learned antiquarian, was born at Stamford in Lincolnshire, May 4. 1692, and educated at Cambridge, where he took the degrees of B. and M.

A. He was the author of many works, of which the first is a poem, entitled, "Sighs on the Death of Queen Anne;" printed probably about the time of her death in 1714. Two years afterwards he printed " TO YYOE "AFION; or an Exercise on the Creation, and an Hymn to the Creator of the World; written in the express words of the facred Text, as an Attempt to show the Beauty and Sublimity of the Holy Scriptures, 1716, 8vo." In 1721, being then curate of King's Clifton in Northamptonshire, he issued proposals for printing the History and Antiquities of his native town, which was published in 1727, in folio, under the title of " Academia tertia Anglicana; or the Antiquarian Annals of Stamford in Lincoln, Rutland, and Northamptonshires; containing the History of the University, Monasteries, Gilds, Churches, Chapels, Hospitals, and Schools there, &c." inscribed to John duke of Rutland. This work was haftened by " An Essay on the ancient and present State of Stamford, 1726, 4to," written by Francis Hargrave, who, in his preface, mentions the difference which had arisen between him and Mr Peck, on account of the former's publication unfairly forestalling that intended by the latter. Mr Peck is also therein very roughly treated, on account of a small work be had formerly printed, entitled, "The History of the Stamford Bull-running." Mr Peck had before this time obtained the rectory of Godeby near Melton in Leicestershire, the only preferment he ever enjoyed. In 1729, he printed on a fingle sheet, "Queries concerning the Natural History and Antiquities of Leicestershire and Rutland," which were afterwards reprinted in 1740; but although the progress he had made in the work was very confiderable, yet it never made its appearance. In 1732 he published the first volume of " Desiderata Curiosa; or, a Collection of divers scarce and curious Pieces relating chiefly to Matters of English History; confisting of choice tracts, memoirs, letters, wills, epitaphs, &c. transcribed, many of them, from the originals themselves, and the rest from divers ancient MS. copies, or the MS. collations of fundry famous antiquaries and other eminent persons, both of the last and present age: the whole, as nearly as possible, digested into order of time, and illustrated with ample notes, contents, additional discourses, and a complete index." This volume was dedicated to Lord William Manners, and was followed, in 1735, by a fecond volume, dedicated to Dr Reynolds bishop of Lincoln. In 1735 Mr Peck printed in a 4to pamphlet, " A complete catalogue of all the discourses written both for and against popery in the time of King James II. containing in the whole an account of 457 books and pamphlets, a great number of them not mentioned in the three former catalogues; with references after each title, for the more speedy finding a further account of the faid discourses and their authors in fundry writers, and an alphabetical lift of the writers on each fide." In 1739 he was the editor of "Nineteen Letters of the truly reverend and learned Henry Hammond, D. D. (author of the Annotations on the New Testament, &c.) written to Mr Peter Stainnough and Dr Nathaniel Angelo, many of them on curious jubjects, &c." These were printed from the originals, communicated by Mr Robert Marsden archdeacon of Nottingham, and Mr John Worthington. The next year, 1740, produced two volumes in 4to, one of them entitled, "Memoirs of the Life and Ac-L 2

Peck || |Pecquet.

tions of Oliver Cromwell, as delivered in three panegyrics of him written in Latin; the first, as faid, by Don Juan Roderiguez de Saa Meneses, Conde de Penguiao, the Portugal ambassador; the second, as affirmed by a certain Jesuit, the lord ambassador's chaplain; yet both, it is thought, composed by Mr John Milton (Latin secretary to Cromwell), as was the third; with an English version of each. The whole illustrated with a large historical preface; many fimilar passages from the Paradife Loft, and other works of Mr John Milton, and notes from the best historians. To all which is added, a collection of divers curious historical pieces relating to Cromwell, and a great number of other remarkable perfons (after the manner of Defiderata Curiofa, v. i. and ii.)" The other, "New Memoirs of the Life and poetical Works of Mr John Milton; with, first, an examination of Milton's style; and secondly, explanatory and critical notes on divers passages in Milton and Shakespeare, by the editor. Thirdly, Baptistes; a facred dramatic poem in defence of liberty, as written in Latin by Mr George Buchanan, translated into English by Mr John Milton, and first published in 1641, by order of the house of commons. Fourthly, the Parallel, or Archbishop Laud and Cardinal Wolsey compared, a Vision by Milton. Fifthly, the Legend of Sir Nicholas Throckmorton, knt. chief butler of England, who died of poison, anno 1570, an historical poem by his nephew Sir Thomas Throckmorton, knt. Sixth, Herod the Great, by the editor. Seventh, the Refurrection, a poem in imitation of Milton, by a friend. And eighth, a Discourse on the Harmony of the Spheres, by Milton; with prefaces and notes." These were the last publications which he gave the world. When these appeared, he had in contemplation no less than nine different works; but whether he had not met with encouragement for those which he had already produced, or whether he was rendered incapable of executing them by reason of his declining health, is uncertain; but none of them ever were made public. He concluded a laborious, and, it may be affirmed, an useful life, wholly devoted to antiquarian pursuits, Aug. 13. 1743, at the age of 61 years.

PECORA, in Zoology, the fifth order of the class mammalia, in the Linnean system. See Zoology.

PECQUET, JOHN, was a physician in Dieppe, and died at Paris in 1674. He was physician in ordinary to the celebrated Fouquet, whom he entertained at his spare hours with some of the most amusing experiments in natural philosophy. He acquired immortal honour to himself by the discovery of a lacteal vein, which conveys the chyle to the heart; and which from his name is called le Refervoir de Pecquet. This discovery was a fresh proof of the truth of the circulation of the blood; though it met with opposition from many of the learned, particularly from the famous Riolau, who wrote a treatife against the author of it, with this title: Adversus Pecquetum et Pecquetianos. The only works which we have of Pecquet, are, 1. Experimenta nova Anatomica, published at Paris, 1654. 2. A Differtation, De Thoracis Lacteis, published at Amsterdam, 1661. He was a man of a lively and active genius; but his sprightliness sometimes led him to adopt dangerous opinions. He recommended, as a remedy for all diseases, the use of brandy. This remedy, however,

proved fatal to himself, and contributed to shorten his days, which he might have employed to the advantage of the public.

Pecten

Peculium.

PECTEN, the SCALLOP; a species of shell-fish. See

OSTREA, CONCHOLOGY Index.

PECTORAL, a facerdotal habit or vestment, worn by the Jewish high-priest. The Jews called it Hhosehen, the Greeks royse, the Latins rationale and pectorale, and in our version of the Bible it is called breast plate. It consisted of embroidered stuff, about a span square, and was worn upon the breast, set with twelve precious stones, ranged in four rows, and containing the names of the twelve tribes. It was fastened to the shoulder by two chains and hooks of gold. God himself prescribed the form of it. See BREASTPLATE.

PECTORAL, a breaftplate of thin brafs, about 12 fingers fquare, worn by the poorer foldiers in the Roman army, who were rated under 1000 drachmæ. See Lo-

RICA.

PECTORAL, an epithet for medicines good in difeases of the breast and lungs.

PECTORALIS. See ANATOMY, Table of the

Muscles

PECULATE, in Civil Law, the crime of embezzling the public money, by a person intrusted with the receipt, management, or custody thereof. This term is also used by civilians for a thest, whether the thing be

public, fiscal, facred, or religious.

PECULIAR, in the Canon Law, fignifies a particular parish or church that has jurisdiction within itself for granting probates of wills and administrations, exempt from the ordinary or bishop's courts. The king's chapel is a royal peculiar, exempt from all spiritual jurisdiction, and reserved to the visitation and immediate government of the king himself. There is likewise the archbishop's peculiar; for it is an ancient privilege of the see of Canterbury, that wherever any manors or advowsons belong to it, they forthwith become exempt from the ordinary, and are reputed peculiars: there are 57 such peculiars in the see of Canterbury.

Besides these, there are some peculiars belonging to deans, chapters, and prebendaries, which are only exempted from the jurisdiction of the archdeacon: these are derived from the bishop, who may visit them, and

to whom there lies an appeal.

Court of PECULIARS, is a branch of, and annexed to, the court of ARCHES. It has a jurisdiction over all those parishes dispersed through the province of Canterbury in the midst of other dioceses, which are exempt from the ordinary's jurisdiction, and subject to the metropolitan only. All ecclesiastical causes, arising within these peculiar or exempt jurisdictions, are originally cognizable by this court: from which an appeal lay formerly to the pope, but now by the stat. 25. Hen. VIII. c. 19. to the king in chancery.

PECULIUM, the stock or estate which a person, in the power of another, whether male or semale, either as his or her slave, may acquire by his industry. Roman slaves frequently amassed considerable sums in his way. The word properly signifies the advanced price which a slave could get for his master's cattle, &c. above the price fixed upon them by his master, which was the

flave's own property.

In the Romish church, peculium denotes the goods which each religious referves and possesses to himself.

PEDALS

Pedals

PEDALS, the largest pipes of an organ, so called because played and stopped with the foot. The pedals are made square, and of wood; they are usually 13 in number. They are of modern invention, and ferve to carry the founds of an octave deeper than the rest. See ORGAN.

PEDAGOGUE, or Pædagogue, a tutor or master, to whom is committed the discipline and direction of a scholar, to be instructed in grammar and other arts. The word is formed from the Greek maidon aywyos,

puerorum ductor, " leader of boys."

M. Fleury observes, that the Greeks gave the name pædagogus to slaves appointed to attend their children, lead them, and teach them to walk, &c. The Romans gave the same denomination to the slaves who were intrusted with the care and instruction of their children.

PEDANT, a schoolmaster or pedagogue, who professes to instruct and govern youth, teach them the hu-

manities, and the arts. See PEDAGOGUE.

PEDANT is also used for a rough, unpolished man of letters, who makes an impertinent use of the sciences, and abounds in unseasonable criticisms and observations.

Dacier defines a pedant, a person who has more read-

ing than good fense. See PEDANTRY

Pedants are people ever armed with quibbles and fyllogifms, breathe nothing but disputation and chicanery, and pursue a proposition to the last limits of

Malebranche describes a pedant as a man full of false erudition, who makes a parade of his knowledge, and is ever quoting fome Greek or Latin author, or hunting

back to a remote etymology.

St Evremont fays, that to paint the folly of a pedant, we must represent him as turning all conversation to some one science or subject he is best acquainted withal.

There are pedants of all conditions, and all robes, Wicquefort fays, an ambassador, always attentive to formalities and decorums, is nothing else but a political

PEDANTRY, or PEDANTISM, the quality or man-

ner of a pedant. See PEDANT.

To fwell up little and low things, to make a vain show of science, to heap up Greek and Latin, without judgement, to tear those to pieces who differ from us about a passage in Suetonius or other ancient authors, or in the etymology of a word, to stir up all the world against a man for not admiring Cicero enough, to be interested for the reputation of an ancient as if he were our next of kin, is what we properly call pedantry.

PEDARIAN, in Roman antiquity, those senators who fignified their votes by their feet, not with their tongues; that is, such as walked over to the side of those whose opinion they approved of, in divisions of the

fenate.

Dr Middleton thus accounts for the origin of the word. He fays, that though the magistrates of Rome had a right to a place and vote in the senate both during their office and after it, and before they were put upon the roll by the cenfors, yet they had not probably a right to speak or debate there on any question, at least in the earlier ages of the republic. For this feems to have been the original distinction between them and the ancient fenators, as it is plainly intimated in the formule of the confular edict, fent abroad to fummon the fenate, which was addressed to all senators, and to

all those who had a right to vote in the senate. From Pedatara this distinction, those who had only a right to vote were called in ridicule pedarian; because they fignified their votes by their feet, not their tongues, and upon every division of the senate went over to the side of those whose opinion they approved. It was in allusion to this old cuflom, which feems to have been wholly dropt in the latter ages of the republic, that the mute part of the fenate continued still to be called by the name of pedarians, as Cicero informs us, who in giving an account to Atticus of a certain debate and decree of the senate upon it, fays that it was made with the eager and general concurrence of the pedarians, though against the authority of all the confulars.

Pedilu-

PEDATURA, a term used, in Roman antiquity, for a space or proportion of a certain number of feet fet out. This word often occurs in writers on military affairs: as in Hyginus de Castrametatione we meet with meminerimus itaque ad computationem cohortis equitatæ milliariæ pedaturam ad mille trecentos sexaginta dari debere; which is thus explained: The pedatura, or space allowed for a cohors equitata or provincial cohort, confifting of both horse and foot, could not be the same as the pedatura of an uniform body of infantry, of the fame number, but must exceed it by 360 feet; for the proportion of the room of one horseman to one foot foldier he affigns as two and a half to one.

PEDERASTS, the same with Sodomites.

PEDESTAL, in Architecture, the lowest part of an order of columns, being that part which fustains the column, and ferves it as a foot to stand. See COLUMN.

PEDIÆAN, in Grecian antiquity. The city of Athens was anciently divided into three different parts; one on the descent of a hill; another on the sea-shore; and a third in a plain between the other two. The inhabitants of the middle region were called Indians, Pedians, formed from modior, "plain," or "flat;" or as Aristotle will have it, Pediaci: those of the hill, Diacrians; and those of the shore, Paralians.

These quarters usually composed so many different factions. Pifistratus made use of the Pediæans against the Diacrians. In the time of Solon, when a form of government was to be chosen, the Diacrians chose it democratic; the Pediæans demanded an aristocracy;

and the Paralians a mixed government.

PEDICLE, among botanists, that part of a stalk which immediately fustains the leaf of a flower or a fruit, and is commonly called a footstalk.

PEDICULUS, the Louse, a genus of infects belonging to the order of aptera. See ENTOMOLOGY

Index.

PEDILUVIUM, or BATHING of the FEET. The uses of warm bathing in general, and of the pediluvium in particular, are so little understood, that they are often prepofteroully used, and sometimes as injudiciously abstained from.

In the Edinburgh Medical Essays, we find an ingenious author's opinion of the warm pediluvium, notwithstanding that of Borelli, Boerhaave, and Hoffman, to the contrary, to be, That the legs becoming warmer than before, the blood in them is warmed: this blood rarifying, distends the vessels; and in circulating imparts a great degree of warmth to the rest of the mass; and as there is a portion of it constantly passing through the legs, and acquiring new heat there, which heat is in-

Pedilu- the course of circulation communicated to the rest of the blood, the whofe mass rarifying, occupies a larger space, and of consequence circulates with greater force. The volume of the blood being thus increased, every vessel is diffended, and every part of the body feels the effects of it; the diftant parts a little later than those first heat-The benefit obtained by a warm pediluvium is generally attributed to its making a derivation into the parts immerfed, and a revulsion from those affected, because they are relieved; but the cure is performed by the direct contrary method of operating, viz. by a greater force of circulation through the parts affected, removing what was stagnant or moving too sluggishly there-Warm bathing is of no fervice where there is an irrefoluble obstruction, though, by its taking off from a spasm in general, it may seem to give a moment's ease; nor does it draw from the diftant parts, but often hurts by pushing against matter that will not yield with a stronger impetus of circulation than the stretched and diseased vessels can bear: so that where there is any fuspicion of scirrhus, warm bathing of any fort should never be used. On the other hand, where obstructions are not of long standing, and the impacted matter is not obstinate, warm baths may be of great use to resolve them quickly. In recent colds, with flight humoral peripneumonies, they are frequently an immediate cure. This they effect by increasing the force of the circulation, opening the skin, and driving freely through the lungs that lentor which stagnated or moved slowly in them. As thus conducing to the resolution of obstructions, they may be confidered as short and safe fevers; and in using them we imitate nature, which by a fever often carries off an obstructing cause of a chronical aliment. Borelli, Boerhaave, and Hoffman, are all of opinion, that the warm pediluvium acts by driving a larger quantity of blood into the parts immerfed. But arguments must give way to facts: the experiments related in the Medical Essays seem to prove to a demonstration, that the warm pediluvium acts by rarifying the

> A warm pediluvium, when rightly tempered, may be used as a safe cordial, by which circulation can be roused, or a gentle fever raifed; with this advantage over the cordials and fudorifics, that the effect of them may be taken off at pleasure.

> Pediluvia are fometimes used in the fmallpox; but Dr Stevenson thinks their frequent tumultuous operations render that suspected, and at best of very doubtful effect; and he therefore prefers Monf. Martin of Laufanne's method of bathing the skin, not only of the legs, but of the whole body, with a foft cloth dipped in warm water, every four hours, till the eruption; by which means the pultules may become univerfally higher, and confequently more fafe.

PEDIMENT. See ARCHITECTURE.

PEDLAR, a travelling foot-trader. See HAWKERS. In Britain (and formerly in France) the pedlars are despised; but it is otherwise in certain countries. In Spanish America, the business is so profitable, that it is thought by no means dishonourable; and there are many gentlemen in Old Spain, who, when their circumflances are declining, fend their fons to the Indies to retrieve their fortunes in this way. Almost all the commodities of Europe are distributed through the fouthern continent of America by means of these pedlars. They come from Parama to Paita by sea; and in the road from the port last mentioned, they make Peura their first voyage to Lima. Some take the road, through Caxamalia: others through Truxillo, along shore from Lima. They take their passage back to Panama by sea, and perhaps take with them a little cargo of brandy. At Panania they again stock themselves with European goods, returning by fea to Paita, where they are put on shore; there they hire mules and load them, the Indians going with them in order to lead them back. Their traveiling expences are next to nothing; for the Indians are brought under such subjection, that they find lodging for them, and provender for their mules, frequently thinking it an honour done them for their guests to accept of this for nothing, unless the stranger now and then, out of generosity or compassion, makes a fmall recompence.

In Poland, where there are few or no manufactures, almost all the merchandise is carried on by pedlars, who are faid to be generally Scotsmen, and who, in the reign of King Charles II. are faid to have amounted to no fewer than 53,000.

PEDOMETER, or Podometer, formed from #85. pes, "foot," and pelgor, "measure," way-wifer; a mechanical inftrument, in form of a watch, confishing of various wheels with teeth, catching in one another, all disposed in the same plane; which, by means of a chain or string fastened to a man's foot, or to the wheel of a chariot, advance a notch each flep, or each revolution of the wheel; fo that the number being marked on the edge of each wheel, one may number the paces, or meafure exactly the distance from one place to another. There are some of them which mark the time on a dialplate, and are in every respect much like a watch, and are accordingly worn in the pocket like a watch. See PERAMBULATOR.

PEDRO, Don, of Portugal, duke of Coimbra, was the fourth child and fecond furviving fon of King John of Portugal, and was born March the 4th 1394. His father gave him an excellent education, which, joined to strong natural abilities and much application, rendered him one of the most accomplished princes of his time. He was not only very learned himself, but a great lover of learning, and a great patron of learned men. It was chiefly with a view to improve his knowledge that he fpent four years in travelling through different countries in Europe, Asia, and Africa, with a train suitable to his quality; of which travels there is a relation still extant, but so loaded with fabulous circumstances, that it wounds the reputation it was defigned to raife. At his return he espoused Isabella, daughter to the count of Urgel, and grand-daughter to Don Pedro, the fourth king of Portugal, which was effected a very great advancement of his fortune. He was elected into the most noble order of the Garter, April 22. 1417, in the fifth year of the reign of his cousin Henry V. grandson of John of Gaunt, by the father's fide, as our duke of Coimbra was by the mother. In 1440 he was declared regent during the minority of his coufin Don Alonfo V. fon of King Edward, who died by the plague. He found fome difficulty at first in the discharge of his office, both from the queen-mother and others. But, upon the whole, his administration was so mild and so just, that the magistrates and people of Lisbon concurred in demanding his leave to erect a statue to him. The rePedro

gent thanked them, faid he should be unwilling to see a work of their's demolished; and that he was sufficiently rewarded by this public testimony of their affections. The queen dowager wished to raile disturbances in Portugal by aiming to recover the regency to herfelf; but the steadiness of the regent's administration, the attachment of the best part of the nobility to him, and his enjoying, in fo absolute a degree, the confidence of the people, not only fecured the interior tranquillity of the state, but raised the credit likewise of the crown of Portugal to a very great height in the fentiments of its neighbours: for in the course of his regency he had made it his continual study to pursue the public good; to ease the people in general, and the inhabitants of Lisbon in particular, of several impositions; to maintain the laws in their full vigour; to give the king an excellent education; and if that had been at all practicable, to diffuse a perfect unanimity through the court, by affuaging the malice and envy of his enemies. The king when he came of age, and the cortes or parliament, expressed their entire fatisfaction with the regent's administration; and all parties entirely approved of the king's marriage with Donna Isabella, the regent's daughter, which was celebrated in 1446. The enmity of his enemies, however, was not in the least abated by the regent's being out of office. They still persecuted him with their unjust calumnies, and unfortunately made the king hearken to their falsehoods. The unfortunate duke, when ordered to appear before the king, was advised to take with him an eseort of horse and foot. In his passage he was proclaimed a rebel, and quickly after he was furrounded by the king's troops. Soon after he was attacked, and in the heat of action he was killed: nor was the envy of his enemies even then fatiated; his body was forbid burial; and was at length taken away privately by the peasants. His virtue, however hated in courts, was adored by the uncorrupt part of his countrymen. At length, though, by an inspection of his papers, the king faw, when it was too late, the injuftice that had been done the man who had behaved fo well in fo high and difficult an office; and whose papers only discovered figns of further benefit to the king and his dominions. In consequence of these discoveries, the duke's adherents were declared loyal subjects, all profecutions were ordered to cease, and the king defired the body of Coimbra to be transported with great pomp from the castle of Abrantes to the monastery of Batalha; where it was interred in the tomb which he had caused to be erected for himself. The royal name of Don Pedro occurs often in the history of Portugal, and many who bore the name were fingularly diffinguished either for great abilities, or external splendor. See Por-

PEDUNCLE, in Botany. See PEDICLE.

PEEBLES, a royal borough and county town of Peebles-shire or Tweedale, is situated on the banks of the Tweed, 22 miles fouth from Edinburgh. Peebles' was a royal refidence in the time of James I. of Scotland; and here it is supposed, he composed the poem of " Peebles at the Play." Peebles has confiderable woollen manufactures, and is noted for excellent beer. Population in 1793 amounted to 1480 inhabitants.

PEEBLES-SHIRE, or Tweedale, a county of Scotland, extending 36 miles in length and about 10 in breadth. It is bounded on the east by Ettrick Forest,

on the fouth by Annandale, on the west by Clydesdale, Peeblesand on the north by Mid-Lothian. Tweedale is a hilly country, well watered with the Tweed, the Yarrow, and a great number of fmaller streams that fertilize the valleys, which produce good harvests of oats and barley, with some proportion of wheat. All the rivers of any consequence abound with trout and falmon. The lake called West-Water Loch swarms with a prodigious number of eels. In the month of August, when the west wird blows, they tumble into the river Yarrow in such shoals, that the people who wade in to catch them run the risk of being overturned. About the middle of this county is the hill or mountain of Braidalb, from the top of which the sea may be seen on each side of the island. Tweedale abounds with limestone and freestone. The hills are generally as green as the downs in Suffex, and feed innumerable flocks of sheep, that yield great quantities of excellent wool. The country is well shaded with woods and plantations, abounds with all the necesfaries of life, and is adorned with many fine feats and feveral populous villages. The earls of March were hereditary theriffs of Tweedale, which bestows the title of marquis on a branch of the ancient house of Hay, earls of Errol, and hereditary high constables of Scotland. The family of Tweedale is, by the female fide, defeended from the famous Simon de Fraser, proprietor of great part of this county, who had a great share in obtaining the triple victory at Roslin. The chief town in Tweedale, is PEEBLES, a royal borough, and feat of a presbytery, pleasantly situated on the banks of the Tweed, over which there is at this place a stately stone bridge of five arches. In the neighbourhood of Peebles, near the village of Romana, on the river Lene, we see the vestiges of two Roman castella, or stationary forts; and a great many terraces on the neighbouring hills, which perhaps have ferved as itinerary encampments. In the shire of Tweedale there are many ancient and honourable families of the gentry. Among thefe, Douglas of Cavers, who was hereditary sheriff of the county, still preserves the standard and the iron mace of the gallant Lord Douglas, who fell in the battle of Otterburn, just as his troops had defeated and taken Henry Percy, furnamed Hotspur. In the church-yard of Drumelzier, belonging to an ancient branch of the Hay family, the famous Merlin is supposed to lie buried. There was an old traditional prophecy, that the two kingdoms should be united when the waters of the Tweed and the Pansel should meet at his grave. Accordingly, the country people observe that this meeting happened in consequence of an inundation at the accession of James VI. to the crown of England.

The population of this county, in 1801, amounted to 8717. But the following is the population at two dif-

ferent periods, according to its parishes.

Parishes.	Population in 1755.	Population in 1790—1798.
1 Broughton	367	264
Drumelzier	305	270
Eddleftown	679	710
Glenholm	392	300
5 Inverleithen	559	560
Kilbucho	279	362
Kirkurd	310	288
Linton	831	928
		Lyn

Peeblesfhire
||
Peers.

-		L
Parishes.	Population in 1755.	Population in 1790—1798.
Lyne	265	160
10 Mannor	320	229
Newlands	1009	891
Peebles	1896	1920
Skirling	335	234
Stobo	313	318
15 Traquair	651	446
16 Tweedsmuir	397	227
		-
	8908	8107
	8107	
25. (0 4	
Decrease,	801 *	

Statist. Hist. vol. xx.

PEEK, in the fea-language, is a word used in various senses. Thus the anchor is said to be a-peek, when the ship being about to weigh comes over her anchor in such a manner that the cable hangs perpendicularly between the hause and the anchor.

To heave a-peek, is to bring the peek so as that the anchor may hang a-peek. A ship is said to ride a-peek, when lying with her main and foreyards hoisted up, one end of her yards is brought down to the shrouds, and the other raised up on end; which is chiefly done when she lies in rivers, lest other ships falling soul of the yards should break them. Riding a-broad peek, denotes much the same, excepting that the yards are only raised to half the height.

Peek is also used for a room in the hold, extending from the bitts forward to the stern: in this room men of war keep their powder, and merchantmen their victuals.

PEEL, a town in the isle of Man, formerly called Holm-town, has a fort in a small island, and a garrison well supplied with cannon. In it are the ancient cathedral, the lord's house, with some lodgings of the bishops, and other remains of antiquity.

PEER, in general, fignifies an equal, or one of the fame rank and station: hence in the acts of some councils, we find these words, with the consent of our peers, bishops, abbots, &c. Afterwards the same term was applied to the vassals or tenants of the same lord, who were called peers, because they were all equal in condition, and obliged to serve and attend him in his courts; and peers in fiess, because they all held siess of the same lord.

The term peers is now applied to those who are impannelled in an inquest upon a person for convicting or acquitting him of any offence laid to his charge: and the reason why the jury is so called, is because, by the common law and the custom of this kingdom, every person is to be tried by his peers or equals; a lord by the lords, and a commoner by commoners. See the article Juny.

PEER of the Realm, a noble lord who has a feat and vote in the house of lords, which is also called the House of Peers.

There lords are called peers, because though there is a distinction of degrees in our notility, yet in public actions they are equal, as in their votes in parliament, and in trying any nobleman or other person impeached by the commons, &c. See Parliament.

House of PEERS, or House of Lords, forms one of the three estates of parliament. See LORDS and PARLIA-Peeres.

In a judicative capacity, the house of peers is the fupreme court of the kingdom, having at prefent no original jurisdiction over causes, but only upon appeals and writs of error; to rectify any injustice or mistake of the law committed by the courts below. To this authority they succeeded of course upon the dissolution of the Aula Regia. For as the barons of parliament were constituent members of that court, and the rest of its jurisdiction was dealt out to other tribunals, over which the great officers who accompanied those barons were respectively delegated to preside, it followed, that the right of receiving appeals, and fuperintending all other jurifdictions, still remained in that noble affembly, from which every other great court was derived. They are therefore in all cases the last resort, from whose judgement no farther appeal is permitted; but every subordinate tribunal must conform to their determinations: The law reposing an entire confidence in the honour and conscience of the noble persons who compose this important affembly, that they will make themselves masters of those questions upon which they undertake to decide; fince upon their decision all property must finally depend. See LORDS, NOBILITY, &c.

PEERS, in the former government of France, were twelve great lords of that kingdom; of which fix were dukes and fix counts; and of these, fix were ecclesiastics and fix laymen: thus the archbifliop of Rheims, and the bishop of Laon and Langres, were dukes and peers; and the bishops of Chalons on the Marn, Noyons, and Beauvais, were counts and peers. The dukes of Burgundy, Normandy, and Aquitain, were lay peers and dukes; and the counts of Flanders, Champagne, and Toulouse, lay peers and counts. These peers affisted at the coronation of kings, either in person or by their representatives, where each performed the functions attached to his respective dignity: but as the fix lay peerages were all united to the crown, except that of the count of Flanders, fix lords of the first quality were chofen to represent them: but the ecclesiastical peers generally affisted in person. The title of peer was lately beflowed on every lord whose estate was erected into a peerage; the number of which, as it depended entirely on the king, was uncertain.

PEERESS, a woman who is noble by descent, creation, or marriage. For, as we have noblemen of several ranks, so we may have noblewomen; thus King Henry VIII. made Anne Bullen marchioness of Pembroke; King James I. created the lady Compton, wife to Sir Thomas Compton, countess of Buckingham, in the lifetime of her husband, without any addition of honour to him; and also the same king made the lady Finch, viscountess of Maidstone, and afterwards countess of Winchelsea, to her and the heirs of her body; and King George I. made the lady Schulenberg, duchess of Kendal.

If a peerels, by descent or creation, marry a person under the degree of nobility, she still continues noble: but if she obtain that dignity only by marriage, she loses it, on her afterwards marrying a commoner; yet by the courtesy of England, she generally retains the title of her nobility.

A

Pegu.

A counte's or baroness may not be arrested for debt or trefans; for though in respect of their fex, they cannot fit in parliament, they are nevertheless peers of the realm, and shall be tried by their peers, &c.

PEWIT, a species of gull. See LARUS, ORNITHO-

PEGASUS, among the poets, a horse imagined to have wings; being that on which Bellerophon was fabled to be mounted when he engaged the Chimera. See CHI-

The opening of the fountain Hippocrene on Mount Helicen is alcribed to a blow of Pegalus's hoof. It was feigned to have flown away to heaven, where it became a constellation. Hence

.PEGASUS, in Aftronomy, the name of a consellation of the northern hemisphere, in form of a flying horse.

See ASTRONOMY

PEGMARES, a name by which certain gladiators were diffinguished, who fought upon moveable scaffolds called pegmata, which were fometimes unexpectedly raifed, and by this means furprifed the people with gladiators in hot contention. They were fometimes fo fuddealy lifted up as to throw the combatants into the air; and femetimes they were let down into dark and deep holes, and then fet on fire, thus becoming the funeralpiles of those miscrable wretches; and roasting them alive to divert the populare.

PEGU, a very confiderable kingdom of Afia, beyond the Ganges. The country properly fo called is but about 350 miles in length from north to fouth, and as much in breadth from east to wost. It is situated on the castern side of the bay of Bengal, nearly opposite to Arixa, and to the north-east of the coast of Coromandel. It is bounded on the north by the kingdoms of Arrakan and Ava; on the east by the Upper and Lower Siam; on the fouth by part of Siam and the fea; and on the

west by the sea and part of Arrakan.

The kingdom of Pegu is faid to have been founded about 1100 years ago. Its first king was a seaman; concerning whom and his fuccesfors we know nothing till the discovery of the East Indies by the Portuguese in the beginning of the 16th century. In 1518 the throne of Pegu was poffeffed by one Breffagukan, with whom Antony Correa the Portuguese ambassador solemnly concluded a peace in 1519. This monarch was possessed of a very large and rich empire, nine kingdoms being in subjection to him, whose revenues amounted to three millions of gold. We hear no farther account of his transactions after the conclusion of the treaty with the Portuguese. In 1539 he was murdered on the following occasion: Among other princes who were his tributaries was Para Mandera, king of the Eirmans or Barmans. These people inhabited the high lands called Pangavirau, to the northward of the kingdom of Pegu. Their prince, by one of the terms of his vallalage, was obliged to furnish the king of Pegu with 30,000 Birmans to labour in his mines and other public works. As the king used frequently to go and see how his works went forward, and in these journeys took along with him none but his women, the Birmans observing these visits frequently repeated, formed a defign of robbing the queen and all the concubines of their jewels; and pursuant to this defign, the next time the king visited the works, they murdered him, and having stripped the ladies, fled to their own country ...

V.CL. XVI. Fart I.

By this enormity all Pegu was thrown into confufion: but, instead of revenging the death of their king, the people divided everywhere into factions; fo that Dacha Rupi, the lawful heir to the crown, found himfelf unable to maintain his authority. Of these commotions, the king of the Eirmans taking the advantage, not only shook off the yoke, but formed a defign of con-quering the kingdom of Pegu itself.—With this view he invaded the country with an army of more than a million of foot, and 5000 elephants; besides a great seet which he fent down the river Ava towards Bagou or Pegu, the capital of the empire; while he himfelf marched thither by land. Just at this time Ferdinand de Mirales arrived at Pegu from Goa with a large galleon richly laden on account of the king of Portugal. As foon as Dacha Rupi heard of his coming, he fent to defire his affiftance against the enemy. This he obtained by great presents and promises: and Mirales, setting out in a galliot, joined the king's ships. Had the numbers been any thing near an equality, the superior skill of Mirales would undoubtedly have gained the victory: But the fleet of the Birmans covered the whole river, though as large as the Ganges, while that of Dacha Rupi could scarcely be observed in comparison with them. Mirales did every thing that man could do, and even held out alone after the natives had deferted him; but at last, oppressed and overwhelmed with numbers, he was killed, with all his men.

Thus Para Mandara became mafter of all Pegu; after which he attacked the tributary kingdoms. In 1544 he befieged Martavan, the capital of a kingdom of the fame name, then very great and flouristing. The land forces which he brought against it consisted of 700,000 men, while by fea he attacked it with a fleet of 1700 fail; 100 of which were large galleys, and in them 700 Portuguese commanded by John Cayero, who had the reputation of being a valiant and experienced officer. The fiege, however, continued feven months, during which time the Birmans loft 120,000 men; but at lait the befieged king, finding limfelf straitened for want of provisions, and unable to withit and fo great a power, offered terms of capitulation. The befiegers would admit of no terms, upon which the diffteffed king applied to the Portuguese in the service of his enemy; for by their affiftance he doubted not to be able to drive away the Birmans. Accordingly, he fent one Seixas to Cayero, intreating him to receive himfelf, his family, and treafure, on board the four thips he had under his command; offering, on that condition, to give half his riches to the king of Portugal, to become his vaffal, and pay fuch tribute as should be agreed upon. Cayero con-Seixas what he thought the treasure might amount to. Seixas answered, that out of what he had feen, for he had not feen all, two ships might be loaded with gold, and four or five with filver. This proposal was too advantageous to be flighted; but the rest of the officers envying the great fortune which Cayero would make, threatened to difcover the whole to the king of Barma or Birma if he did not reject it. The unhappy king of Martavan had now no other resource but to set fire to the city, make a fally, and die honourably with the few men he had with bim: but even here he was disappointed; for by the defertion of 4000 of his troops the enemy were apprifed of his defign, and prevented it. Thus betrayed,

Pegu.

betrayed, he capitulated with the Barma king for his own life and the lives of his wife and children, with leave to end his days in retirement. All this was readily granted, but the conqueror intended to perform no part of his promise. The city was plundered and burnt, by which above 60,000 persons perished, while at least an equal number were carried into flavery. Six thoufand cannon were found in the place; 100,000 quintals of pepper, and an equal quantity of other spices. The day after this destruction, 21 gibbets were erected on a shill adjoining to the city; on which the queen, her children, and ladies, were executed, by hanging them up alive by the feet : however, the queen expired with anguish before the fuffered such a cruel indignity. The king, with 50 of his chief lords, was cast into the sea, with stones about their necks. This monstrous cruelty so provoked the tyrant's soldiers, that they mutinied, and he was in no fmall danger of fuffering for it : however, he found means to pacify them; after which he proceeded to befiege Prom, the capital of another kingdom. Here he increased his army to 920,000 men. The queen by whom it was governed offered to fubmit to be his vassal; but nothing would fatisfy the Barma monarch less than her furrender at discretion, and putting all her treasure into his hands. This she, who knew his perfidy, refused to do: on which the city was tiercely affaulted, but greatly to the difadvantage of the Barmas, who loft near 100,000 men. However, the city was at last betrayed to him, when Mandara behaved with his usual cruelty. Two thousand children were flain, and their bodies cut in pieces and thrown to the elephants; the queen was firipped naked, publicly whipped, and then tortured, till she died; the young king was tied to her dead body, and both together cast into a river, as were also 300 other people of quality.

While the tyrant was employed in fortifying the city, he was informed, that the prince of Ava had failed down the river Queytor with 400 rowing veffels having 30,000 foldiers on board; but that, hearing of the queen's difaster, he stopped at Meletay, a strong fortress about 12 leagues north of Prom, where he waited to be joined by his father the king of Ava with 80,000 men. On this news the Barma king fent his foster-brother Chaumigrem along the river fide with 200,000 men, while he himself followed with 100,000 more. The prince, in this emergency, burnt his barks, forming a vanguard of the mariners, and, putting his fmall army in the best position he could, expected the enemy. A most desperate engagement ensued, in which 800 only of the prince's army were left, and 115,000 out of 200,000 Barmas who opposed him were killed. The 800 Avans retired into the fort: but Mandara coming up foon after, and being enraged at the terrible havock made in his army, attacked the fortress most violently for seven days; at the end of which time, the 800, finding themfelves unable to hold out any longer, rushed out in a dark and rainy night, in order to fell their lives at as dear a rate as possible. This last effort was so extremely violent, that they broke through the enemy's troops in feveral places, and even pressed so hard on the king himself that he was forced to jump into the river. However, they were at last all cut off, but not before they had destroyed 12,000 of their enemies.

Mandara having thus become mafter of the fort, com-

manded it to be immediately repaired; and failed up the river to the port of Ava, about a league from the capital, where he burnt between 2000 and 3000 veilels, and left in the enterprise about 8000 men. The city itself he did not think proper to invest, as it had been newly fortified, was defended by a numerous garrison, and an army of 80,000 men was advancing to its relief. The king also, apprehensive of Mandara's power, had implored the protection of the emperor of Siam; offering to become his tributary on condition that he would atfift him with his forces in recovering the city of Prom. To this the emperor readily affented; which news greatly alarmed the Barma monarch, fo that he dispatched ambaffadors to the Kalaminham or fovereign of a large territory adjacent, requesting him to divert the emperor from his purpose. On the ambassadors return from this court, it appeared that the treaty had already taken effect; but as the feafon was not yet arrived for invading Ava, Chaumigrem, the king's foster-brother, was sent with 150,000 men to reduce Sebadi or Savadi the capital of a small kingdom about 130 leagues north-east from Pegu. The general, however, failed in his attempt; and afterwards endeavouring to revenge himself on a town in the neighbourhood, he was furprifed by the

town in the neighbourhood, he was furprifed by the enemy and put to flight.

In the meantime, the empire of Siam fell into great distractions; the king, together with the heir to the crown, were murdered by the queen, who had fallen in love with an officer, whom she married after her husband's death. However, both of them were soon after

killed at an entertainment; and the crown was given to a natural brother of the late king, but a coward and a tyrant. On this Mandara refolved to invade the country; and, his principal courtiers concurring in the scheme, he collected an army of 800,000 men, with no fewer than 20,000 elephants. In this army were 1000 Portuguese, commanded by one James Suarez, who already had a pension of 200,000 ducats a-year from the king of Pegu, with the title of his brother, and governor of the kingdom. With this formidable army he fet out in April 1548. His first atchievement was the taking of a fortress on the borders of the enemy's country; before which, being feveral times repulfed, and having lost 3000 of his men, he revenged himself by putting all the women to the fword. He next befreged the capital itself; but though the siege was continued for five months, during which time the most violent attacks were made upon it, the affailants were conftantly repulfed with great lofs. However, it was still resolved to continue the fiege; and a mount of earth was raifed, on which were placed 40 pieces of cannon, ready to batter it anew, when, in October, advice was received of a re-

bellion having broke out in Pegu.

The person who headed the rebels on the present occasion was Shoripam Shay, near akin to the former monarch slain 12 years before. He was a religious person, of great understanding, and esteemed a faint. As he was a famous preacher, he made a sermon, in which he set forth the tyranny of the Birmans in such a manner, that he was immediately taken out of the pulpit, and proclaimed king by the people, who, as a token of sovereignty, gave him the title of Shemindoo. The first act of sovereignty which he exerted was to cut in pieces 15,000 Birmans, and seize on the treasure; and so agreeable was this change of government to all ranks of

people, that in three weeks time all the strongholds of

Pegu fell into his hands.

On this news the king immediately raised the siege in which he was engaged, and in 17 days got to Martavan. Here he was informed, that Shemindoo had posted 500,000 men in different places, in order to intercept his passage; at the same time that he had the mortification to find 50,000 of his best troops deserted. To prevent a greater defertion, after 14 days stay, he departed from Martavan, and foon met Shemindoo at the head of 600,000 men. A desperate engagement followed; in which Shemindoo was entirely defeated, with the loss of 300,000 men. Of the Birman troops were slain 60,000; among whom were 280 Portuguese.

The morning after this victory, the tyrant marched to the city; the inhabitants of which furrendered, on condition of having their lives and effects spared. The kingdom being thus again brought under his subjection, his next step was to punish the principal persons concerned in the rebellion: their heads he cut off, and confifcated their estates, which amounted to no less than ten millions of gold. Others fay, that he put all without distinction to the sword, excepting only 12,000, who took shelter in James Suarez's house; that alone affording an afylum from the general flaughter. The plunder was incredible, Suarez alone getting three millions. All these cruelties, however, were insufficient to secure the allegiance of the tyrant's subjects: for in less than three months news was brought that the city of Martavan had revolted; and that the governor had not only declared for Shemindoo, but murdered 2000 Birmans. Mandara then fummoned all the lords of the kingdom to meet him with their force, within 15 days, at a place called Mouchau, not far from his capital, whither he himself went with 300 men, to wait their arrival. But in the meantime he received intelligence that the shemin or governor of Zatan, a city of some consequence, had fubmitted to Shemindoo, and also lent him a large sum of gold. The shemin was immediately sent for in order to be put to death: but he, suspecting Mandara's defign, excused himself by pretending sickness; after which, having confulted with his friends, he drew together about 600 men; and having with these privately advanced to the place where the king was, he killed him, with the few attendants that were about him at the time. The guards in the court being alarmed with the noise, a skirmish ensued with the shemin's men, in which about 800 were flain on both fides, most of them Birmans. The shemin then retreated to a place called Pontel; whither the people of the country, hearing of the death of the king, who was universally hated, reforted to him. When he had affembled about 5000 men, he returned to feek the troops which the late king had with him; and finding them dispersed in several places, easily killed them all. With the Birmans were flain 80 out of 300 Portuguese. The remainder surrendered, with Suarez their leader; and were spared, on condition of their remaining in the service of the

The shemin, now finding his forces daily increase, asfumed the title of king; and, to render himself the more popular, gave out that he would exterminate the Barmas fo effectually, as not to leave one in all the kingdom. It happened, however, that one of those who were with

the late king at the time he was murdered, escaped the Pegur general flaughter; and, swimming over the river, informed Chaumigrem of the king's death. He had with him 180,000 men, all of them natives of Pegu, exceptting 30,000 Barmas. He knew very well, that if the natives had known that the king was dead, he and all his Barmas would have inftantly been put to the fword. Pretending, therefore, that he had received orders to put garrifons into feveral places, Chaumigrem dispatched all the natives into different parts; and thus got rid of those whom he had so much cause to sear. As soon as they were marched, he turned back upon the eapital, and feized the king's treasure, together with all the arms and ammunition. He then set fire to the magazines, arfenals, palace, fome of whose apartments were ceiled with gold, and 2000 rowing vessels which were on the river. Then destroying all the artillery, he fled with the 30,000 Barmas to his own country, being purfued

in vain by the natives of Pegu.

Thus the shemin of Zatan was left in quiet possession of the kingdom; but, by his repeated acts of tyranny and cruelty, he so disgusted his subjects, that many sled to foreign countries, while others went over to Shemindoo, who began now to gather strength again. In the mean time, James Suarez, the Portuguese whom we have often mentioned, lost his life by attempting to ravish a young woman of distinction; the shemin being unable to protect him, and obliged to give him up to the mob, who stoned him to death. The shemin himfelf did not long furvive him; for, being grown intolerable by his oppressions, most of his followers abandoned him, and he was befieged in his capital by Shemindoo with an army of 200,000 men, and foon after flain in a fally: fo that Shemindoo now scemed to be fully established on the throne. But in the mean time Chaumigrem, the foster brother to the deceased king, hearing that Pegu was very ill provided with the means of defence, invaded the kingdom with an army of 300,000 men. Shemindoo met him with three times their number; but his men, being all natives of Pegu, were inferior in strength, notwithstanding their numbers, to the enemy. The confequence was, that Shemindoo was defeated with prodigious flaughter, and Chaumigrem caused himself to be proclaimed king of Pegu. Shortly after. Shemindoo himself was taken; and, after being treated with the utmost cruelty, was beheaded.

The history of Chaumigrem is very imperfect. However, we know that he was a very great conqueror, and not at all inferior in cruelty to his predecessors. He reduced the empire of Siam and Aracan, and died in 1583; being succeeded by his son named Pranjinoko, then about 50 years of age. When this prince ascended the throne, the kingdom of Pegu was in its greatest height of grandeur; but by his tyranny and obstinacy he lost all that his father had gained. He died in 1599, and after his death the kingdom of Pegu became subject to Aracan. For some time past it has been tributary to the more powerful kingdom of Ava; the fovereigns of which country have hitherto been extremely cautious of permitting Europeans to obtain any fettle-

ment among them.

The air of Pegu is very healthy, and presently recovers fiek strangers. The soil also is very rich and fertile in corn, rice, fruit, and roots; being enriched by the inundations of the river Pegu, which are almost incre-

Plate

tiu.

Peguntium dible, extending above 30 leagues beyond its channel. It produces also good timber of several kinds. The country abounds with clephants, buffaloes, goats, hogs, and other animals, particularly game; and deer is fo plenty in September and October, that one may be bought for threepence or fourpence: they are very flethy, but have no fat. There is store of good poultry; the cocks are very large, and the hens very beautiful. for fith, there are many forts, and well tafted. In Pogu are found mines, not only of gold, iron, tin, and lead, or rather a kind of copper or mixture of copper and lead, but also of rubies, diamonds, and sapphires. The rubies are the' best in the world; but the diamonds are fmall; and it is faid they are formetimes found in the craws of poultry. Befides, only one family has the privilege of felling them; and none dare open the ground to dig for them. The rubies are found in a mountain in the province of Kablan, or Kapelan, between the city of Pegu and the port of Sirian.

But for a fuller account of Pegu, and the Birman empire, see Asia, from p. 740 to p. 760; and for a description of the temple of Shoemadoo, of which we have given an engraving, taken from Syme's Embally

CCCCVII to that kingdom, see also ASIA, p. 751.
PEGUNTIUM, in Ancient Geography, (Ptolemy);

Piguntiæ, (Pliny); a town or citadel of Dalmatia, on the Adriatic, opposite to the illand Brattia, scarcely sive miles off, and 40 miles to the east of Salona. ing to Fortis, a mountain, a large hollow, and fubma-Travels in rine fprings are feen here. "This hollow (fays he) feems to have been excavated by fome ancient river. The fprings which bubble up from under the fea are fo confiderable, that they might pass for the riling again of a river funk under ground. Vrullia has the fame derivation as the word Vril, which in Sclavonian fignifies a fountain; and this etymology, rendering the name of Vrullia the Berullia of Perphyrogenitus analogous to that of Peguntium, fince Tieye and Vril are fynonymous, induces me to believe, that the castle named Peguntium by ancient geographers was fituated in this place, and not at the mouth of the Cettina. No remarkable velliges of antiquity now exist on the spot; yet it is evident, by the quantity of fragments of vafes, tiles, and fepulchral inferiptions now and then dug up, that this tract of coast was well inhabited in the Roman times. The principal cause why the tracts of ancient habitations cannot be discovered about Vrullia, is the steepness of the hill above it, and the quantity of stones brought down from thence by the waters. The mouth of the hollow of Vrullia is dreaded by feamen, on account of the fudden impetuous gusts of wind that blow from thence, and in a moment raife a kind of hurricane in the channel between the Primorie and the island of Brazza, to the great danger of barks furprised by it."

PEINE FORTE ET DURE, (Lat. pæna fortis et dura), fignifies a special punishment inflicted on those who, being arraigned of felony, refuse to put themselves on the ordinary trial, but stubbornly stand mute; it is vulgarly called pressing to death. See Arraignment.

PEIRCE, JAMES, an eminent diffenting minister, was born at Wapping, in London, in the year 1674, and was educated at Utrecht and Leyden; after which he spent some time at Oxford, in order to enjoy the benest of frequenting the Bodleian library. He then for

two years preached the Sunday-evening's ledure at the Petreic. meeting-house in Miles-Lanc, London, and then settled at Cambridge. In 1713 he was removed to a congregation at Exeter, where he continued till the year 1718: when the Calvinists among the differents proposing a fubfcription to articles of faith to be figured by all the diffenting ministers in the kingdom, several articles were proposed to him and Mir John Hallet, another diffenting minuter at Exeter, in order to their subscribing them, they both refused, imagining this proceeding of their differting brethren to be an unworthy imposition on religious liberty and private judgement; and for this they were ejected from their congregation. Upon this, a new meeting was opened for them at Exeter, of which Mr Peirce continued minister till his death, in 1726. He was a man of the firiteft virtue, exemplary piety, and great learning. He wrote, I. Exercitatio philosophica de Homameria Anaxagorea. 2. Thirteen pieces on the Controverfy between the Church of England and the Diffenters. 3. Ten pieces on the Controversy about the Ejectment at Exeter. 4. Six pieces on the Doctrine of the Trinity. 5. A Paraphrase and Notes on the Epittles of St Paul to the Colorhans, Philippians, and Hebrews. 6. An Essay in favour of giving the Eucharist to Chil-

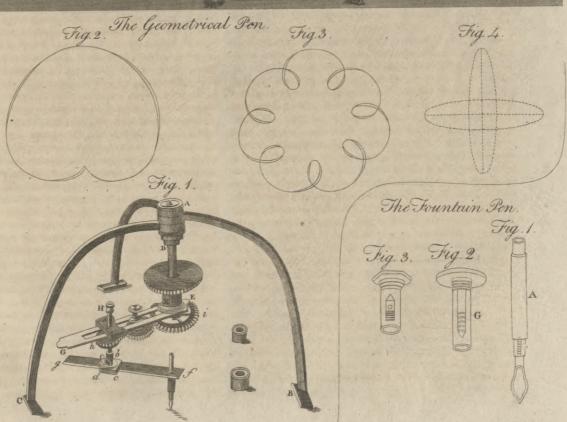
dren. 7. Fourteen Eermons.

PEIRESC, MICOSAS CLAUDE FABRI, born in 1380, was descended from an ancient and noble family, seated originally at Pila in Italy. At ten years of age, he was feut to Avignon, where he spent five years in the Jesuits college, in the fludy of what in Scotland and on the Continent is called humanity. From Avignon he was, in 1595, removed to Aix, and entered upon the study of philosophy. In the interim, he attended the proper mafters for dancing, riding, and handling arms; in all which, though he performed the loftons regularly, it was with reluctance: for this being done only to please an uncle, whose heir he was to be, he never practifed by himself, escerning all the time lost that was not spent in the pursuits of literature. During this period, his father being presented with a medal of the emperor Arcadius, which was found at Belgenser, Peiresc begged the favour of it; and, charmed with deciphering the characters in the exergue, and reading the emperor's name, he carried the medal with a transport of joy to his uncle; who for his encouragement gave him two more, together with some books upon the subject. This is the epoch of his application to antiquities, for which he became afterwards fo famous. In 1596, he was fent to finish his course of philosophy under the Jesuits at Tournon, where he turned his attention particularly to cofmography, as being necessary to the understanding of history, abating, however, nothing of his application to antiquity, in which he was affifted by Petrus Rogerus, one of the profesors, and a skilful medalist: nor did he omit the study of humanity in general, wherein he was the master and instructor of a brother who was with him. But to do all this he was obliged to fit up late at nights; and fo much labour and attention, as he was naturally of a tender constitution, increased the weakness of his stomach formerly contracted, and for which he had used a kind of digestive powder. Being recalled by his uncle in 1597, he returned to Aix, and entered there upon the study of the law; which he prosecuted, however, so as to find leifure to visit and converse frequent-

A.Bell Prin . Wat Sculptor fact .

SHOEMADOO
The great Temple at Peque







Peirefe. 1y with Peter A. R. Bagarr, a moit fkilful antiquary, who was afterwards made mafter of the jewels to Hen-

The following year he went again to Avignon, to carry on his course of law under one Peter David; who, being well skilled likewise in antiquities, was pleased to fee Peirefe join this study to that of the law. But Chibertus of Naples, auditor to Cardinal Aquaviva, fed his curiofity the most, in showing him some rarities, such as tzius's Treatife upon Coins, and advised him to go into Italy, especially to Rome, where he would meet with his brother fet out upon that tour September 1500; and passing through Florence, Bononia, and Ferrara, when he had staid a few days at Venice, he fixed his residence once a quarter, going to Venice to get cash for bills of exchange, he took these opportunities of introducing particularly carefied by F. Contarin, procurator of St. and other antiquities, without knowing the value of them. This was fully shown to him by Peiresc, who likewife explained the Greek infcriptions upon his meat Padua, he fet out for Rome, and arrived there October 1600, in order to be in time for seeing the jubilee : to celebrate which, the Porta Sancta would be opened in this city, viewing the numberless curiofities there, and in cultivating the friendship of Galileo, by whom he was much beloved. This friendship led him to carry his rewas present when Fabricius ab Aquapendente, out of a parcel of eggs upon which a hen was fitting, took one from first to last. From this time it was generally acto his hand, and began to guide the commonwealth of

Having now fpent almost three years in Italy, he began to prepare for his departure; and in the end of 1602, having packed up all the rarities, gems, &c. which he had procured, and put them into the road to Marfeilles, he left Padua, and croffing the Alps to Geneva, went to Lyons; where receiving money he made a handsome present to his governor, who took the route of Paris. From Lyons he went to Montpelier, to improve himself in the law under Julius Parius. From Montpelier he dispatched more rarities to his uncle, who fending for him home, he arrived at Aix in November; but, bringing Parius along with him, he obtained leave to return to Montpelier in a few days. He waited upon Parius back again, under whom he continued purfuing his law studies till the end of 1603, when he returned to Aix, at the earnest request of his uncle, who, having refigned to him his fenatorial dignity, had ever fince the beginning of the year laboured to get the king's patent. The degree of doctor of law was a neceffary qualification for that dignity. Peirefc, therefore, having kept the usual exercise, took that degree Jan. 18. 1604, when the aforefaid patent was given in to the fenate, and ordered to be recorded: yet Peiresc

procured leave not to be prefently entered into the life Peirefor of fenators. The bent of his inclination was not fo much to bufiness as to advance arts and sciences, and to affift all the promoters of learning. For this purpose, he resolved to lead a fingle life; so that when his father had concluded a match for him with a respectable lady, he begged to be excused.

In 1605, he accompanied G. Varius, first president ris; whence, having vifited every thing curious, he croffed the water, in company with the king's ambaffador, 1606, to England. Here he was very graciford, and visited Camlen, Sir Robert Cotton, Sir to Holland; and after vifiting the feveral towns and universities, with the literal in each, he went through Antwerp to Brussels, and thence back to Paris, to see the ceremony of the Dauphin's baptism; which being

1606, being expected for the ordering of the family

and at the folicitation of his uncle, having approved himself before that assembly, he was received a senator on the 1st of July 1607. January 1608 he lost his uncle; and the following year, falling himfelf into a dangerous fever, recovered by eating musk-melons before supper, for which he had conceived a longing. He was ordered by his physician to eat them before his meals without bread, and to drink a glass of pure wine upon them. He continued this method all his life wards them he professed he was unable to matter himfelf. He frequently experienced, that in the musk-melon feafon he was never troubled with the gravel. In 1618, having procured a faithful copy of " the Acts of a fecond edition of that work. As it was written in defence of the royal line of France against Theodoric Piespordius, who had attempted to prove the title of the Austrian family to the French crown by right of fuccession, he was, upon this publication, nominated the fame year, by Louis XIII. abbot of Sancta Maria Aquistriensis. He stayed in France till 1623; when, upon a meffage from his father, now grown old and fickly, he left Paris, where he had fpent feven years and fome months. He arrived at Aix in October; and not long mitting him to continue in the function of his ancient dignity, and to exercise the office of a secular or lay person, notwithstanding that, being an abbot, he had assumed the character of a churchman. To this the court of parliament not affenting, decreed unanimoufly, that, being already admitted into the first rank, he flould abide perpetually therein; not returning, as the cuflom of the court was, to the inferior auditory, wherein trials are usually had of criminal cases. In 1625, he buried his father, who had been long afflicted with the gout. In 1627, he prevailed with the archbishop of Aix to establish a post thence to Lyons, and so to Paris and all Europe; by which the correspondence constantly held with the literati everywhere was much facilitat. ed. In 1629, he began to be much tormented with the

Gassendi's Life of

Lond.

1657.

strangury and hæmorrhoides; and in 1631, having completed the marriage of his nephew Claudius with Margaret Alresia, a noblewoman of the county of Avignon, he bestowed upon him the barony of Rianty, together with a grant of his fenatorial dignity, only referving the function to himself for three years. But the parliament not waiting his furrendry of it, he refented that affront fo heinously, that he procured, in 1635, letters patent from the king to be restored, and to exercise the office for five years longer, which happened to be till his death: for being feized, June 1637, with a fever that brought on a stoppage of urine, this put an end to his life on the 24th of that month, in his 57th

The character of Peiresc may be summed up in a few words. His person was of a middle size, and of a thin habit: his forehead large, and his eyes gray; a little hawk-noled; his cheeks tempered with red; the hair of his head yellow, as also his beard, which he used to wear long; his whole countenance bearing the marks of uncommon and rare courtefy and affability. In his diet he affected cleanliness, and in all things about him; but nothing fuperfluous or costly. His clothes were fuitable to his dignity; yet he never wore filk. In like manner, the rest of his house was adorned according to his condition, and very well furnished; but he neglected his own chamber. Instead of tapestry, there hung the pictures of his chief friends and of famous men, besides innumerable bundles of commentaries, transcripts, notes, collections from books, epittles, and such like papers. His bed was exceedingly plain, and his table continually loaded and covered with papers, books, letters, and other things; as also all the feats round about, and the greatest part of the floor. These were so many evidences of the turn of his mind; in respect to which, the writer of his euloge compares him to the Roman Atticus; and Bayle, considering his univerfal correspondence and general affiltance to all the literati in Europe, dashed it out luckily enough, when he called him " the attorney general of the literary republic." The works which he published are, "Historia provinciæ Galliæ, Narbonensis;" " Nobilium ejusdem provinciæ familiarum Origines, et separatim Fabriciæ;" "Commentarii rerum omnium memoria dignarum sua ætate gestarum;" "Liber de ludicris naturæ operibus;" "Mathematica et astronomica varia;" " Observationes mathematicæ;" " Epistolæ ad S. P. Urbanum VIII. cardinales Barberinos, &c.;" " Authores antiqui Græci et Latini de ponderibus et menfuris;" " Elogia et epitaphia;" " Infcriptiones antiqua et novæ;" " Genealogia domus Austriacæ;" " Catalogus librorum biblioth. reg.;" " Poemata varia;" " Nummi Gallici, Saxonici, Britannici, &c.;" " Linguæ orientales, Hebræa, Samaritana, Arabica, Egyptiaca, et Indices librorum harum linguarum;" "Observationes in varios auctores." It is remarkable, that though Peirefe bought more books than any man of his time, yet his collection left was not large. The reason was, that, as fast as he purchased, he kept continually making prefents of them to such learned men as he knew they would be useful to.

PEKIN, the capital city of the empire of China, in Afia, where the emperor generally refides. It is fituated in a very fertile plain, 20 leagues distant from the great wall. This name, which figuifies the northern

court, is given to it, to distinguish it from another con- Pekin. fiderable city called Nanking, or the fouthern court. The emperor formerly refided in the latter; but the Tartars, a restless and warlike people, obliged this prince to remove his court to the northern provinces, that he might more effectually repel the incursions of those barbarians, by opposing to them a numerous militia which he generally keeps around his person. It is an exact square, and divided into two parts; namely, that which contains the emperor's palace, which is in the new city, or, as it is called, the Tartar's city, because it is inhabited by Tartars ever since they conquered this empire; the other, called the Old City, is inhabited by the Chinese. The circuit of both these together is 52 Chinese lys, each of which contains 240 geometrical paces; being, without the fuburbs, full fix leagues in circumference, according to the most accurate meafurement made by order of the emperor.

Those who have paid attention to the population of this place, reckon the number of inhabitants at 2,000,000; but we learn from Sir George Staunton, in his account of the late embaffy to China, that the population of this

prodigious city is not less than 3,000,000.

Großer tells us, " that the height and enormous Großer's thickness of the walls of the Tartar city excite admi- Description ration; twelve horsemen might easily ride abreast up-of China. on them; they have spacious towers raifed at intervals, a bow-shot distant from one another, and large enough to contain bodies of referve in case of necessity. The city has nine gates, which are lofty and well arched. Over them are large pavilion-roofed towers divided into nine stories, each having several apertures or portholes: the lower story forms a large hall for the use of the foldiers and officers who quit guard, and those appointed to relieve them. Before each gate a space is left of more than 360 feet: this is a kind of place of arms, inclosed by a femicircular wall equal in height and thickness to that furrounding the city. The great road, which ends here, is commanded by a pavilionroofed tower like the first, in such manner, that, as the cannon of the former can batter the houses of the city, those of the latter can sweep the adjacent country. The streets of Pekin are straight, about 120 feet wide, a full league in length, and bordered with shops. It is astonishing to see the immense concourse of people that continually fills them, and the confusion caused by the prodigious number of horses, camels, mules, and carriages, which cross or meet each other. Besides this inconvenience, one is every now and then stopped by crowds, who stand listening to fortune-tellers, jugglers, balladfingers, and a thousand other mountebanks and buffoons, who read and relate stories calculated to promote mirth and laughter, or distribute medicines, the wonderful effects of which they explain with all the eloquence peculiar to them.

" People of distinction oblige all their dependents to follow them. A mandarin of the first rank is always accompanied in his walks by his whole tribunal; and, to augment his equipage, each of the inferior mandarins in his fuit is generally attended by feveral domestics. The nobility of the court, and princes of the blood, never appear in public without being furrounded by a large body of cavalry; and, as their presence is required at the palace every day, their train alone would be sufficient to create confusion in the city. It is very fingular,

Pekin

fingular, that in all this prodigious concourse no women are ever feen: hence we may judge how great the population of China must be, fince the number of females in this country, as well as everywhere elfe, is superior to that of the other fex.

" As there is a continual influx of the riches and merchandize of the whole empire into this city, the number of strangers that refort hither is immense. They are carried in chairs, or ride on horseback; the latter is more common: but they are always attended by a guide, acquainted with the streets, and who knows the houses of the nobility and principal people of the city. They are also provided with a book, containing an account of the different quarters, squares, remarkable places, and of the refidence of thole in public offices. In fummer there are to be seen small temporary shops, where people are ferved with water cooled by means of ice; and one finds everywhere eating-houses, with refrethments of tea and fruits. Each kind of provision has a certain day and place appointed for its being exposed to fale.

"The governor of Pekin, who is a Mantchew Tartar, is flyled Governor of the Nine Gates. His jurifdiction extends not only over the foldiers, but also over the people in every thing that concerns the police. No police can be more active; and it is surprising to fce, among an infinite number of Tartars and Chinese mixed together, the greatest tranquillity prevail. It is rare, in a number of years, to hear of houses being robbed, or people affaffinated. All the principal streets have guard rooms, and foldiers patrole night and day, each having a fabre hanging from his girdle, and a whip in his hand, to correct, without diffinction, those who excite quarrels or cause disorder. The lanes are guarded in the fame manner; and have latticed gates, which do not prevent those from being feen who walk in them: they are always kept shut during the night, and feldom opened even to those who are known; if they are, the person to whom this indulgence is granted must carry a lanthorn, and give a sufficient reason for his going out. In the evening, as foon as the foldiers are warned to their quarters by beat of drum, two centinels go and come from one guard-room to another, making a continual noise with a kind of castanet, to show that they are not asleep. They permit no one to walk abroad in the night-time. They even examine those whom the emperor dispatches on business; and if their reply gives the least cause of suspicion, they have a right to convey them to the guardroom. The foldiers in each of the guard-rooms are obliged to answer every time the centinels on duty

"It is by these wife regulations, observed with the greatest strictness, that peace, silence, and safety reign throughout the whole city. The governor is also obliged to go the round; and the officers stationed on the walls, and in the towers over the gates (in which are kept large kettle-drums that are beat every time the guard is relieved), are continually dispatching subalterns to examine the quarters belonging to the gates where they are posted. The least neglect is punished next morning, and the officer who was on guard is cashiered. This police, which prevents nocturnal asfemblics, would appear no doubt extraordinary in Eutope, and in all probability would not be much relished

by our young men of fortune and ladies of quality. Pekin. But the Chinese think justly: they consider it to be the duty of the magistrates of a city to prefer good order and public tranquillity to vain amusements which generally occasion many attempts against the lives and property of the citizens. It is true, the support of this police costs the emperor a great deal; for part of the soldiess we have mentioned are maintained for this purpose only. They are all infantry, and their pay is generally very high. Their employment confifts not only in watching for those who may occasion disturbance in the day-time, or walk abroad during the night; they must. also take care that the streets are kept clean and swept every day; that they are watered morning and evening in time of dry weather; and that every nuisance is removed. They have orders also to affift in this labour themselves; and to clear the kennels, that the water

may have a free courfe."

The walls of the emperor's palace, including that and the gardens, are about two miles in length. though (fays Grosier) the Chinese architecture has no resemblance to that of Europe, the imperial palace of Pekin does not fail to strike beholders by its extent, grandeur, and the regular disposition of its apartments, and by the fingular structure of its pavilion-roofs, ornamented at each corner with a carved plat-band, the lower extremity of which is turned upwards. Thefe roofs are covered with varnished tiles of so beautiful a yellow colour, that, at a diffance, they make as fplendid an appearance as if they were gilded. Below the upper roof there is another of equal brilliancy, which hangs floping from the wall, supported by a great number of beams, daubed over with green varnish, and interspersed with gilt figures. This fecond roof, with the projection. of the first, forms a kind of crown to the whole edifice. The palace is a small distance from the south gate of the Tartar city. The entrance to it is through a spacious court, to which there is a descent by a marble ftaircase, ornamented with two large copper lions, and a balustrade of white marble. This balustrade runs in the form of a horse-shoe, along the banks of a rivulet, that winds across the palace with a serpentine course, the bridges over which are of marble. At the bottom of this first court arises a façade with three doors: that inthe middle is for the emperor only; the mandarins and nobles pass through those on each side. These doors conduct to a fecond court, which is the largest of the palace: it is about 300 feet in length, and 50 in breadth. An immense gallery runs round it, in which are magazines, containing rich effects, which belong to the emperor as his private property; for the public treasure is entrusted to a sovereign tribunal called Houpou. The first of these magazines is filled with plate and vessels of different metals; the second contains the finest kinds of furs; the third, dresses lined with fable, ermine, mirever, and foxes skins, which the emperor fometimes gives in prefents to his officers; the fourth is the depository of jewels, pieces of curious marble, and pearls fished up in Tartary; the fifth, confishing of two stories, is full of wardrobes and trunks, which contains the filk stuffs used by the emperor and his family; the rest are filled with bows, arrows, and other pieces of armour taken from the enemy or presented by different princes.

"The royal hall, called Tai-hotien, or the Hall of

this celebrated structure came to be viewed by more proper and unbiaffed judges, it appears to have been of little worth as to its ancient machines, and less as to its fituation; and that all that is now valuable in it is owing to the improvements made by Father Verbieft a Flemish Jesuit, who caused a new set of instruments to be made, with extraordinary care, neatness, and pre-

"This fabric stands in a court of a moderate extent. and is built in the form of a fquare tower, contiguous to the city wall on the infide, and raifed but ten or twelve feet above its bulwark. The afcent up to the top is by a very narrow staircase; and on the platform above were placed all the old instruments, which, though but few, took up the whole room, till Father Verbieft introduced his new apparatus, which he disposed in a more convenient order. These are large, well cast, and embellished; and were the neatness of the divisions answerable to the work, and the telescopes faitened to them according to the new method, they would be equal to those of Europe; but the Chinese artificers were, it feems, either too negligent, or incapable of following his directions. As to the old infiruments, they were, by order of the emperor Kang-hi, fet afide as useless, and laid in the hall near the tower, where they may be feen through a cross-barred window, all covered with ruft, and buried in oblivion.

"In this famed observatory there are five mathematicians employed night and day, each in a proper apartment on the top of the tower, to observe all that passes over their heads: one of them is gazing towards the zenith, and the others towards the four points of the compals, that nothing may escape their notice. Their observations extend not only to the motions of the heavenly bodies, but to fires, meteors, winds, rain, thunder, hail storms, and other phenomena of the atmofohere; and these are carefully entered in their journals, and an account of them is brought every morning to the furveyor of the mathematics, and registered in his

office."

PELAGIANS, a Christian feet who appeared about the fifth or end of the fourth century. They maintained the following doctrines: 1. That Adam was by nature mortal, and, whether he had finned or not, would certainly have died. 2. That the confequences of Adam's fin were confined to his own person. 3. That new-born infants are in the fame fituation with Adam before the fall. 4. That the law qualified men for the kingdom of heaven, and was founded upon equal promifes with the gospel. 5. That the general refurrection of the dead does not follow in virtue of our Saviour's refurrection. 6. That the grace of God is given according to our merits. 7. That this grace is not granted for the performance of every moral act; the liberty of the will, and information in points of duly, being fusficient, &cc. The founder of this fect

PELAGIUS, a native of Great Britain; but whether of England, Scotland, or Wales, is as uncertain as it is immaterial (A). He was born towards the close of the fourth century, and educated in the monastery

the Grand Union, is in this fecond court. It is built upon a terrace about 18 feet in height, incrusted with white marble, and ornamented with balustrades of excellent workmanship. Before this hall all the mandarins range themselves, when they go, on certain days, to renew their homage, and perform those ceremonies that are appointed by the laws of the empire. This hall is almost square, and about 130 feet in length. The ceiling is carved, varnished green, and loaded with gilt dragons. The pillars which support the roof within are fix feet in circumference towards the base, and are coated with a kind of mastich varnished red; the floor is partly covered with coarse carpets, after the Turkish manner; but the walls have no kind of ornament, neither tapestry, lustres, nor paintings.

"The throne, which is in 'the middle of the hall, confifts of a pretty high alcove, exceedingly neat. It has no infcription but the character ching, which the authors of this relation have interpreted by the word holy: but it has not always this fignification; for it answers better sometimes to the Latin word eximins, or the English words excellent, perfect, most wife. Upon the platform opposite to this hall stand large vessels of bronze, in which incense is burnt when any ceremony is performing. There are also chandeliers shaped like birds and painted different colours, as well as the waxcandles that are lighted up in them. This platform is extended towards the north, and has on it two leffer halls; one of them is a rotunda that glitters with varnish, and is lighted by a number of windows. It is here that the emperor changes his dress before or after any ceremony. The other is a falcon, the door of which opens to the north: through this door the emperor must pass, when he goes from his apartment to receive on his throne the homage of the nobility; he is then carried in a chair, by officers dreffed in long red robes bordered with filk, and caps ornamented with plumes of feathers. would be difficult to give an exact description of the interior apartments which properly form the palace of the emperor, and are fet apart for the use of his family. Few are permitted to enter them but women and eunuchs."

The temples and the towers of this city are fo numerous, that it is difficult to count them. Previsions all kinds are exceeding plentiful, they being, as well as the merchandifes, brought from other parts by means of canals cut from the rivers, and always crowded with vessels of different fizes, as well as from the adjacent country. An earthquake which happened here in 1731 buried above 100,000 persons in the ruits of the houses which were thrown down. E. Long. 116.

41. N. Lat. 39. 54.
We have already, under the article OBSERVATORY, mentioned the famous observatory in this city, of which we shall give this further account from the Universal Mod. Un. History. "The Chinese had thought nothing in Hist. vol. 7 the universe could equal in magnificence this famous place; and one of the most celebrated mathematicians of the royal academy of Paris hath made no scruple to represent it as one of the greatest prodigies of art and ingenuity, of beauty and magnificence; and yet, when

Pelagius. of Banchor, in Wales, of which he became a monk, and afterwards abbot. In the early part of his life he went over to France, and thence to Rome, where he had the infolence to promulgate certain opinions fomewhat different from those of the infallible church. His morals being irreproachable, he gained many disciples; and the dreadful herefy made so rapid a progress, that, for the falvation of fouls, it became necessary for the pope to exert his power. Pelagius, to avoid the danger, in the year 409 passed over to Sicily, attended by his friend and pupil Celestius. In 411 they landed in Africa, continued fome time at Hippo, and were present at the famous conference between the Catholics and Donatists which was held at Carthage in 412. From thence they travelled into Egypt; and from Egypt, in 415, to Palestine, where they were graciously received by John bishop of Jerusalem. In the same year Pelagius was cited to appear before a council of feventeen bishops, held at Diospolis. They were satisfied with his creed, and absolved him of herefy. The African bishops, however, being displeased with their proceedings, appealed to the Roman pontiff: he first approved, and afterwards condemned, the opinions of Pelagius, who, with his pupil Celestius, was publicly excommunicated; and all the bishops who refused to fubfcribe the condemnation of the Pelagian herely were Vol. XVI. Part I.

immediately deprived. What became of him after this Pelagofa. period is entirely unknown; but it feems very probable that he retired to Banchor, and died abbot of that monastery. He wrote, I. Expositionum in epist. Paulinas, lib. xiv. 2. Epistola ad Demetriadem de virginitate. 3. Explanationis symboli ad Damasum. 4. Epistolæ ad viduam duæ. 5. De libero arbitrio. These and many other fragments are scattered among the works of St Jerome. They are also collected by Garnerius, and published in Append. op. Mercatoris, p. 373. Cave.

PELAGOSA, an island in the Adriatic, which, together with feveral rocks that appear above water near it, are the remains of an ancient volcano. "I will not Travels affure you (fays Fortis) that it was thrown up out of the into Dalfea like feveral other islands in the Archipelago, though matis. there is some ground to suspect this to have been the case; because we find no precise mention of it in the most ancient geographers. It should seem that it ought not to be confused with the Diomedee, from which it is 30 miles distant; yet it is not impossible that they have reckoned it among them. The lava which forms the fubstance of this island, is perfectly like the ordinary lava of Vesuvius, as far as I could discover in passing near it. If a naturalist should land there, and visit on purpose the highest parts of the island, perhaps we might then know whether it has been thrown up by a subma-

is a translation; and that he was born on the 13th of November A. D. 354, the same day with his great antagonift St Augustin. The same learned historian gives us the following account of Pelagius and his great coadjutor Celestius. "He received a learned education in his own country, most probably in the great monastery of Banchor near Chefter, to the government of which he was advanced A. D. 404. He was long effected and loved by St Jerome and St Augustin, who kept up a friendly correspondence with him by letters before they discovered the heretical pravity of his opinions; for Pelagius, being a cautious and artful man, for fome time vented his peculiar notions as the fentiments of others, without discovering that they were his own. At length, however, he threw off the mask, and openly published and defended his doctrines at Rome about the beginning of the fifth cen-This involved him in many troubles, and drew upon him the indignation of his former friends St Jerome and St Augustin, who wrote against him with great acrimony. He is acknowledged, even by his adversaries, to have been a man of good fense and great learning, and an acute disputant, though they load him with the most bitter reproaches for his abuse of these talents. His personal blemistes are painted in very strong colours; and he is represented by these good fathers, in the heat of their zeal, as a very ugly fellow, 'broad shouldered, thick-necked, fat-headed, lame of a leg, and blind of an eye.' Even the most northern parts of this island (Britain) produced fome men of learning in this period. Celeftius, the disciple and friend of Pelagius, was a Scotsman, who made a prodigious noise in the world by his writings and disputations about the beginning of the fifth century. He defended and propagated the peculiar opinions of his mafter Pelagius with fo much learning, zeal, and fuccess, that those who embraced these opinions were frequently called Celestians. Before he became acquainted with these doctrines he wrote feveral books, which were univerfally admired for their orthodoxy, learning, and virtuous tendency. After he had spent his youth in his own country in a studious privacy, he travelled fer his further improvement to Rome, where he became acquainted with Rufinus and Pelagius, and was by them infected with their herefies. From that time he became the most indefatigable and undaunted champion of these herefies, and thereby brought upon himself the indignation of the orthodox fathers of these days, who gave him many very bad names in their writings. St Jerome, whose commentaries on the Ephesians he had prefumed to criticife, calls him, 'an ignorant, flupid fool, having his belly fwelled and diftended with Scots pottage; a great, corpulent, barking dog, who was fitter to kick with heels than to bite with his teeth; a Cerberus, who, with his mafter Pluto (Pelagius), deferved to be knocked on the head, that they might be put to eternal filence.' Such were the flowers of rhetoric which these good fathers employed against the enemies of the orthodox faith! But candour obliges us to observe, that this was perhaps more the vice of the age in which they lived than of the men. Both Pelagius and Celestius were very great travellers; having vifited many different countries of Afia and Africa, as well as Europe, with a view to elude the perfecutions of their enemies, and to propagate their opinions. It is no inconfiderable evidence of their superior learning and abilities, that their opinions gained great ground in all the provinces both of the eastern and western empire, in spite of the writings of many learned fathers, and the decrees of many councils against them. The Pelagian and Celestian heresy (says Photius) not only slourished in great vigour in the West, but was also propagated into the East.'

Pelaiah rine volcano, as the island near Santerini was in our age; or if we ought to believe it the top of some ancient volcanic mountain, of which the roots and fides have been covered by the waters, which divided Africa from Spain, forming the straits of Gibraltar; an invafion that no one can doubt of who has examined the bottoms and shores of our sea. The Lissan fishermen fay, that Pelagosa is subject to frequent and violent earthquakes; and the aspect of the island proves at first fight, that it has fuffered many revolutions; for it is rugged, ruinous, and fubverted."

PELAIAH, a Levite (Nehem. viii. 7. x. 10.). He was one of the principal Levites that returned from captivity, and was one of those that figned the covenant that

Nehemiah renewed with the Lord.

PELALIAH, fon of Amazi and father of Jeroham, of the family of Pashur son of Malchiah, of all whom mention has been made: he was of the race of the priests (Nehem. xi. 12.).

PELASGI. See PELASGIOTIS.

PELASGIA (Pliny; the ancient name of Lefbos; so called from the Pelasgi, its first inhabitants (Diodorus Siculus). Also the ancient name of Peloponnesus, from Pelasgius, a native of the country (Nicolaus Damascenus, Ephorus).

PELASGICUM (Paufanias, Pliny); the north wall of Athens; fo called from the builders, the Pelasgi. There was an execration pronounced on any that should build houses under this wall, because the Pelasgi, while dwelling there, entered into a conspiracy against the

Athenians (Thucydides).

PELASGIOTIS, a third part of Theffaly, (Strabo); fo called from a very ancient people, the Pelafgi, called Pelasgiotæ (Ptolemy); who formerly, together with the Æolians, occupied Thessaly, and thence that part was called Pelasgicum Argos; besides many other parts of Greece. Their name Pelasgi, or Pelargi, denoting storks, was given them from their wandering roving life (Strabo). The poets extend the appellation to Greeks in general. Pelasgus, the epithet. Some of the inhabitants of Crete were called Pelasgi (Homer); who thus also calls the neighbouring people to the Cilicians in Troas. The Pelasgi were originally of Arcadia, (Hefiod); but Æschylus makes Argos, near Mycenæ, their country. The Pelasgiotis was situated between Pieria and Macedonia to the north and west, Thessaliotis to the fouth, and Magnesia to the east, (Strabo, Pliny).

PELATÆ, were free-born citizens, among the Athenians, who by poverty were reduced to the necef-fity of ferving for wages. During their fervitude they had no vote in the management of public affairs, as having no estate to qualify them; but this restriction was removed whenever they had releafed themselves from their fervile fituation, which they were allowed to do when able to support themselves. While they continued fervants, they had also a right to change their masters. We find them sometimes distinguished by the name of *Theta*.

PELATIAH, fon of Hananiah, and father of Ishi, of the tribe of Simeon. He subdued the Amalekites upon the mountain of Seir (1 Chron. iv. 42.). The time of this action is unknown.

PELATIAH, fon of Benaiah, a prince of the people, who lived in the time of Zedekiah king of Judah, and apposed the wholesome advice given by Jeremiah, to

fubmit to King Nebuchadnezzar. Ezekiel (xi, 1, 2, 3, 4.) being a captive in Mcsopotamia, had a vision, in Pelethronii. which he faw five and twenty men at the door of the temple of Jerufalem, among whom were Jaazaniah the fon of Azur, and Pelatiah the fon of Benaiah, who were the most remarkable. Then the Lord faid to him, " Son of man, these are the men that have thoughts of iniquity, and who are forming pernicious defigns against this city, saying, Have not the houses been built a long time? Jerusalem is the pot, and we are the slesh. Thus saith the Lord: You have made great havock in this city, and have filled its streets with dead bodies. These men are the slesh, and the city is the pot. But as for you, I will make you come forth from the middle of this city, and I will make you perish by the hand of your enemies." As he was prophecying in this manner, Pelatiah the fou of Benaiah died.

PELE, (Stephanus). There were two towns of this name in Theffaly; the one fubject to Eurypylus, the other to Achilles; both extinct. Peleus the gentilitious

name (id.)

98

PELEG, fon of Eber, was born in the year of the world 1757. The scripture says his father gave him the name of Peleg, signifying division, because in his time the earth began to be divided (Gen. xi. 16. x. 25); whether it was that Noah had begun to diffribute the earth among his descendants, some years before the building of Babel; or that Peleg came into the world the same year that Babel was begun, and at the division of languages; or that Eber by a spirit of prophecy gave his fon the name of Peleg some years before the tower of Babel was begun, is not absolutely certain. That which here perplexes the interpreters is, first, that Peleg came into the world not above 100 years after the deluge. But it should seem, that the number of men was not then fufficient for fuch an undertaking as that of Babel. Secondly, Joktan the brother of Peleg had already thirteen fons at the time of this dispersion. which happened after the confusion of Babel (Gen. x. 26, 27, 28, &c.). Peleg being born in the thirty-fourth year of Eber (Gen. xi. 16.), it is impossible his brother Joktan should have such a number of children at the birth of Peleg. It feems therefore that he was not born at the time of the dispersion. To this may be answered, that Moses has there enumerated the names of the thirteen fons of Joktan (in Gen. x. 26.) by way of anticipation, though they were not born till a good while after the confusion at Babel; but as they possessed a very large country, it was convenient to take notice of them, and to name them among the other descendants of Noah, who divided the provinces of the east among themselves. However this may have been, at the age of thirty years Peleg begat Reu; and

he dicd at the age of 239.
PELETHITES. The Pelethites and Cherethites were famous under the reign of King David. They were the most valiant men in the army of that prince, and had the guard of his person. See Ezekiel xxv. 16. Zephaniah ii. 5. 1 Samuel xxx. 14. 2 Samuel xv. 18. xx. 7. Patrick's Comm. Pool's Annot. and Delany's Hift:

of the Life of David.

PELETHRONII, a name or epithet given to the Lapithæ, either because they inhabited the town of Pelethronium at the foot of Mount Pelion in Thes Pelethro- faly, or because one of their number bore the name of Pelethronius. It is to them, we are told, that mankind are indebted for the invention of the bit with which they tamed their horses with so much dex-

> PELETHRONIUM (Nicander and Scholiast); a town of Thestaly, situated in a slowery part of Mount Pelion; and hence the appellation throna, fignifying, "flowers." Lucan fays the Centaurs were natives of that place; to whom Virgil affigns Mount Othrys. Most authors, however, ascribe the breaking of horses to the Centaurs. Some make the Lapithæ and Centaurs the fame; others a different people; allowed however to be both of Thessaly. Their story is greatly in-

volved in fable. See LAPITHUS.

PELEUS, in Fabulous History, a king of Theffaly, fon of Æacus and Endeis, the daughter of Chiron. He married Thetis one of the Nereids, and was the only mortal man who ever married an immortal. He was concerned in the murder of his brother Phocus, and was therefore obliged to leave his father's dominions. He fled to the court of Eurytus the fon of Actor, who reigned at Phthia, or according to the opinion of Ovid, the truth of which is questioned, to Ceyx king of Trachinia. He was purified of his murder by Eurytus, with the usual ceremonies, and the king gave him his daughter Antigone in marriage. After this, as Peleus and Eurytus went to the chace of the Calydonian boar, the father-in-law was accidentally killed by an arrow which his fon-in-law had aimed at the beaft. This unfortunate accident obliged him to banish himself from the court of Phthia, and he went to Iolchos, where he was also purified of the murder of Eurytus by Acastus the king of the country. His residence at Lolchos was short: Astydamia the wife of Acastus fell in love with him; but when she found him insensible to her pasfionate declarations, she accused him of attempts upon her virtue. The king her husband partly believed the accusations of his wife; but not willing to violate the laws of hospitality, by putting him instantly to death, he ordered his officers to conduct him to Mount Pelion, on pretence of hunting, and there to tie him to a tree and to leave him a prey to the wild beafts of the place. The orders of Acastus were faithfully obeyed: but Jupiter knowing the innocence of his grandson Peleus, ordered Vulcan to set him at liberty. As foon as he had been delivered from danger, Peleus affembled his friends in order to punish the ill treatment which he had received from Acastus. He took Iolchos by force, drove the king from his possessions, and put to death the wicked Astydamia. On the death of Antigone, Peleus made love to Thetis, of whose superior charms Jupiter himself had been enamoured. His pretenfions were rejected; for as he was but a mortal, the goddess fled from him with the utmost abhorrence, and the more effectually to evade his inquiries, she generally assumed the shape of a bird, or a tree, or of a tygress. Peleus's passion was fanned by refusal: he offered a facrifice to the gods; and Proteus informed him, that to obtain Thetis he must surprise her while she was asleep in her grotto, near the shores of Thessaly. This advice was immediately attended to; and Thetis, unable to escape from the grasp of Peleus, at last consented to marry him. Their nuptials were celebrated with the greatest solemnity, all the

gods attending and making them each the most valuable presents. The goddes of Discord was the only one of the deities who was abfent; and she punished this feeming neglect by throwing an apple in the midst of the assembly of the gods, with the inscription of Detur pulchriori. The celebrated Achilles was the fruit of this marriage, whose education was early entrusted to the Centaur Chiron, and afterwards to Phœnix, the fon of Amyntor. Achilles, it is well known, went to the Trojan war, at the head of his father's troops; and Peleus gloried in having a fon who was fuperior to all the Greeks in valour and intrepidity. His death, however, was the source of great grief to Peleus; but Thetis, to comfort her hutband, promifed him im-mortality, and ordered him to retire into the grottoes of the island of Leuce, where he should see and converse with the manes of his fon. Peleus had a daughter called

Polydora, by Antigone.

PELEW ISLANDS, a cluster of small islands situated between the latitudes of 5° and 7° north, and the longitudes 134° and 136° east. Various conjectures have been formed respecting the time of their first discovery by Europeans. Mr Keate, the editor of the only voyage in which we have any account of their climate, foil, and produce, together with the manners of their inhabitants, thinks they were first noticed by the Spaniards from the Philippines, and by them named Palos from the number of trees growing in them refembling the masts of ships. This conjecture has been vehemently opposed by a critic, who affirms that the whole of Mr Keate's introduction is erroneous, and that the islands in question were first discovered by a French Jesuit named Pere Papin. The Jesuit, he imagines, was directed to them by one of the inhabitants, who had found his way to the Moluccas, where he was baptized. They are faid to have been again noticed by P. Centova in 1724, who faw at Agdane, the capital of the Merian islands, some of the inhabitants; and from their account gives a defcription not very favourable of these harmless islanders. Centova's description is to be found in the 15th volume, and the relation of the discovery by P. Papin in the IIIli volume, of Lettres Edifiantes et Curieuses, published at Paris 1781.

The latest and most authentic account of them, however, is given from the Journals of Captain Wilson of the Antelope, a packet belonging to the East India company, which was wrecked upon one of them in August 1783. This ship was fitted out in England by the court of directors in the summer 1782, as was then generally understood, for a secret expedition. Whatever may have been her destination, as she was proceeding from Macao in squally weather, the man who, on the night of the 10th of August, had the look-out, suddenly called out Breakers! But the found of the word had scarce reached the ears of the officer on deck, before the ship struck and stuck fast; and in less than an hour bulged and filled with water. Having secured the gunpowder, fmall arms, bread, and fuch other provisions as were liable to be spoiled by water, Captain Wilson, after many difficulties, effected a landing. The crew of the Antelope confifted of 33 Europeans besides the captain, and 16 Chinese: and the only possible means by which they could be delivered from an island, which at first appeared to them uninhabited, was by building a ship capable of transporting them to the nearest Euro-

pean settlement in that quarter of the globe. Whilst they were meditating upon this undertaking, the natives appeared on the fecond day after their arrival; and their intercourse with them was facilitated by means which appear as fingular as they were providential. Captain Wilson had a servant recommended to him at Macao, who spoke both the Malay and English languages perfeetly well; and they had not been long at Pelew before they had the good fortune to meet with a Malay, who had been thrown by a tempest upon this very spot about a year before, and had made himfelf acquainted with the language of the country; fo that by this extraordinary event each party had an interpreter who could readily explain their wants and defires, and by that means prevent a number of misconceptions which might have arisen from making use of figns and geftures only.

The natives are all of a deep copper colour, going perfectly naked. They are of a middling stature, very straight, muscular, and well formed; but their legs, from a little above their ancles to the middle of their thighs, are tatooed so very thick, as to appear dyed of a far deeper colour than the rest of their skin. Their hair is of a fine black, long, and rolled up behind, in a simple manner, close to the back of their heads, which appeared both neat and becoming; but sew of them had beards, it being the general custom to pluck them

out by the roots.

They began by firoking the bodies and arms of the English, or rather their waistcoats and coat sleeves, as if they doubted whether the garment and the man were not of the same substance; and as the Malay explained the circumstances to them, our people were greatly surprifed at the quickness with which they seemed to comprehend every information he gave them. The next thing they noticed was our people's white hands, and the blue veins of their wrifts; the former of which they feemed to confider as artificial, and the other as the English manner of tatooing. After being satisfied in this particular, they expressed a further wish to see their bodies; and, among other things, were greatly furprifed at finding hair on their breafts, it being confidered by them as a great mark of indelicacy, as it is their custom to eradicate it from every part of the body in both fexes.

They afterwards walked about, testifying great curiofity at every thing they faw, but at the fame time expressing a fear that they might be thought too intruding. As our people were conducting them to the tents, one of the natives picked up a bullet, which had been cafually dropped on the ground, and immediately expressed his furprise, that a substance so small to the eye should be so very ponderous to the touch; and on their entering the tent, a large Newfoundland dog, and a spaniel, which had been tied up there to prevent their being loft, fet up a most violent barking, and the natives a noise but little less loud, which at first it was not easy to account for. They ran in and out of the tent, and feemed to wish that they might be made to bark again. This the Malay foon explained to be the effect of their joy and furprife, as thefe were the first large animals they had ever feen, there being no quadrupeds of any species on these islands, except a very few grey rats in the woods.

After some time it was agreed on by Captain Wilson

and his people, that fome of the crew should be sent to the king of the place, in order to solicit his friendship, and intreat his permission to build a vessel that might carry them back to their own country. This business was allotted to the captain's brother; and during his absence, Raa Kook, the king's brother, and several of the natives, remained with our people. This amiable chief seemed to place an entire confidence in those he was among; he endeavoured to accommodate himself to their manners; would fit at table as they did, instead of squatting on his hams; and inquired particularly into the principles and causes of every thing he observed about him, lending his personal assistance in all that was going forward, and even desiring the cook to let him aid him in blowing the fire.

In order to conciliate their affections, Captain Wilson had presented Arra Kooker, another of the king's brothers, with a pair of trowsers; but having conceived a greater passion for a white shirt, one was immediately given to him; which he had no sconer put on, than he began to dance and jump about with so much joy, that every body was diverted by his singular gestures, and the contrast which the linen formed with his skin. This prince was about 40, of a short stature, but so plump and fat that he was nearly as broad as he was long. He possessed an abundant share of good humour, and a wonderful turn for mimickry; and had besides a countenance so lively and expressive, that though our people

at this time were strangers to almost all he said, yet his

face and gestures made them accurately comprehend whatever he was describing.

After three or four days, Abba Thulle the king arrived with a great retinue. He was received with every mark of respect by the ship's company, who were exercised before him, and fired three volleys in different positions. The surprise of the natives, their hooting, hallooing, jumping, and chattering, produced a noise almost equal to the discharge of the muskets; and when one of the men shot a bird, which was done to display the effect of their arms, the surprise it occasioned was wonderful. Some of the natives ran for it, and carried it to the king, who examined it with great attention, but was unable to comprehend how it could be wounded, not having seen any thing pass out of the gun.

Raa Kook expressed great impatience to show the king whatever had impressed his own mind; and taking his brother by the hand, led him to a grindstone which was fixed behind one of the tents. He immediately put it in motion, as he had frequently done before; at the rapidity of which the king was greatly associated, particularly when he was informed that it would sharpen iron. Captain Wilson ordered a hatchet to be brought and ground, that they might more readily perceive its operation, when Raa Kook eagerly seized the handle, and began turning it, appearing highly delighted to let his brother see how well he understood it. The whole appeared like something supernatural; but the circumstance which most bewildered their ideas was, how the sparks of fire could come, and how a stone so well wetted could become so soon dry.

The king then visited the different tents, and inquired about every thing he saw: all was novelty, and of course interested his attention. When he got to the tent where the Chinese men were, who had been brought with them from Macao, Raa Kook, whose retentive mind never

loft a fingle trace of any thing he had been informed of, acquainted the king that these were a people quite different from the English, and that he had learnt there were many other nations befides these intersperfed through the world, some of which fought with guns and others with boarding-pikes, an instrument which he held very cheap in comparison with the former.

When the king heard his brother discoursing about a variety of nations, who all fpoke differently, and had before him the example of the Chinese, whose language was not the same with the English, he appeared instantly thoughtful and ferious, as if struck by conceptions which had never before croffed his mind. He remained a while pensive and bewildered; and this circumstance impressed on every one at the time an idea that there was every reason to imagine that there had never been a communication between those people and any other nation: and indeed it is evident, that if Pere Papin did really visit them in 1710, they had before 1783 loft the remembrance of every trace of European manners. This indeed is not furprifing, as they had no other record than knots fimilar to the quipes of Peru at the landing of the Spaniards.

Raa Kook would now flow his brother the kitchen, which was in the hollow of a rock, a little above the cove. It was at the time when the cook was preparing dinner; and though the implements were exceedingly fcanty, an iron pot, a tea kettle, a tin fauce-pan, with a poker, a pair of tongs, and a frying pan, were here of fufficient consequence to excite admiration; nor were the bellows now forgotten by Raa Kook, who taking them up, as he explained their use to the king, seemed ambitious to let his brother fee what an adept he was at blowing. The little bald cook, who was always close shaven, and never wore any thing on his head, was likewife pointed out to the king as an object of merriment

Some time after this the king requested five of Captain Wilfon's men to attend him in a war he was going to make against the inhabitants of a neighbouring island called Cirolong, who, as he faid, had done him an injury. But before this request was made known, he had long struggled with a delicacy of sentiment which no one would have expected to find in regions fo disjoined from the rest of mankind. This was no other than that it might prove a temporary inconvenience to the unfortunate strangers who had fought his protection, and might be confidered by them as an ungenerous proceeding. It was, however, no fooner made known, than Captain Wilson instantly complied; and every face, which had before been clouded with doubt and apprehension, became immediately brightened and gay.

In this enterprise little more was done than braving their enemies, stripping some cocoa-nut trees of their fruit, and carrying off a number of yams and other provisions; but in another, which was undertaken against the island of Artingall, they were more successful, and showed figns of the same sanguinary disposition which fome demon has infused into the whole human race. Nine prisoners of war who had been taken upon this occasion were cruelly put to death; and notwithstanding the English strongly remonstrated against this proceeding, all the arguments they could use were of no avail. In justification of their conduct, they alleged the necessity of doing it for their own security, declaring that they had formerly only detained them as menial fer- Polew vants, but that they always found means to get back to Islands. their own country, and return with fuch a force as fre-

quently made great depredations.

Having given this general account of the character and conduct of these hitherto unknown people, we now proceed to lay before our readers what we have learned of their government, customs, manners, and arts, together with a description of the face of their country. In this the editor of Captain Wilfon's voyage must be our guide; and if our narrative do not fatisfy the man of science, it is to be observed, that the Antelope was not a thip fent out purpofely to explore undifcovered regions, nor were there people on board properly qualified to effimate the manners of a new race of men; they had amongst them no philosophers, botanists, or draughtsmen, experienced in fuch fcientific purfuits as might enable them to examine with judgement every object which presented itself. Distress threw them upon these islands; and while they were there, all their thoughts were occupied on the means of liberating themselves from a fituation of all others the most afflicting to the mind, that of being cut off for ever from the fociety of the rest of the world.

It, however, clearly appears, from their uniform testimony, that at Pelew the king was confidered as the first

person in the government.

"He was looked up to as the father of his people; and though divested of all external decorations of royalty, had every mark of distinction paid to his person. His rupacks or chiefs approached him with the greatelt respect; and his common subjects, whenever they passed near him, or had escation to address him, put their hands behind them, and crouched towards the ground. Upon all occurrences of moment, he convened the rupacks and officers of state; their councils were always held in the open air, where the king first stated the business upon which he had affembled them, and submitted it to their confideration. Each rupack delivered his opinion, but without rifing from his feat; and when the matter before them was fettled, the king standing up put an end to the council.

"When any melfage was brought him, whether in council or elfewhere, if it came by one of the common people, it was delivered at fome distance in a low voice to one of the inferior rupacks, who, bending in an humble manner at the king's fide, delivered it in the fame manner with his face turned afide. His commands appeared to be absolute, though he acted in no important bufiness without the advice of his chiefs; and every day in the afternoon, whether he was at Pelew or with the English, he went to sit in public for the purpose of hearing any requests, or of adjusting any difference or dispute which might have arisen among

his fubjects."

But these, according to our editor, seldom happened; for as their real wants were but few, and they faw nothing to create artificial ones; every one was chiefly occupied with his own humble purfuits; and as far as the ship's crew, who remained among them about three months, could decide, they appeared to conduct themselves towards each other with the greatest civility and benevolence; never wrangling or entering into quarrelfome contentions, as is customary among those who call themselves a polished and enlightened people. Even



when children showed a disposition of this kind, they strongly marked their displeasure, by stissing with rebuke their little animosities.

The character of the king is thus drawn by the editor: "The excellent man who reigned over these sons of nature, showed himself in every part of his conduct firm, noble, generous, and benevolent; there was a dignity in all his deportment, a gentleness in all his manners, and a warmth and fenfibility about his heart, that won the love of all who approached him. Nature had bestowed on him a contemplative mind, which he had improved by those reflections that good fense dictated and observation confirmed. The happiness of his people seemed to be always in his thoughts. In order more effectually to stimulate them to useful labour, he had himself learnt all the few arts they possessed, and was looked on in some of them to be the best workman in his dominions. Placed as he was by Providence in its obscurer scenes, he lived beloved by his chiefs, and revered by his people; over whom, whilft he preferved a dignity which distinguished his superior station, he reigned more as the father than the fovereign. eyes of his subjects beheld their naked prince with as much awe and respect as those are viewed with who govern polished nations, and are decorated with all the dazzling parade and ornaments of royalty; nor was the purple robe or the splendid diadem necessary to point out a character which the masterly hand of nature had rendered fo perfect.

Next in power to the king was his brother Raa Kook, who was official general of all his forces. It was his duty to fummon the rupacks to attend the king for whatever purpose they were wanted. He was also his presumptive heir; the succession of Pelew not going to the king's children till it had passed through his brothers; so that after the demise of Abba Thulle, the so-vereignty would have descended to Raa Kook; on his demise to Arra Kooker; and on the death of this last it would have reverted to Qui Bill, the king's eldest son, when Lee Boo, his second son, of whom we have much to say, would have become the hereditary general.

The office of first minister is described as follows: "The king was always attended by a particular chief or rupack, who did not appear to possess any hereditary office, but only a delegated authority. He was always near the king's person, and the chief who was always sirst consulted; but whether his office was religious or civil, or both, our people could not learn with any certainty. He was not considered as a warrior, or ever bore arms, and had only one wife, whereas the other rupacks had two. The English were never invited to his house, or introduced into it, although they were conducted to those of almost every other chief."

Of the rupacks it is observed, "That they could only be regarded as chiefs or nobles; they were not all of the same degree, as was plain by a difference in the bone (A) they wore: they generally attended the king, and were always ready at his command to accompany him on any expedition with a number of canoes properly manned, and armed with darts and spears, who

were to remain with him till they had his permission to return home with their dependents. In this part of their government we may trace an outline of the feudal system; but from the few opportunities our people had of investigating points of internal government, it appeared that the titles of rupacks were personal badges of rank and distinction; nor did they apprehend they were hereditary honours, unless in the reigning family, who must of necessity be of this class."

As to property, it was understood, "That the people possessed only such as arose from their own work and labour, but no absolute one in the soil, of which the king appeared to be general proprietor. A man's house, furniture, or canoe, was considered as his private property, as was also the land allotted him, as long as he occupied and cultivated it; but whenever he removed with his family to another place, the ground he held reverted to the king, who gave it to whom he pleased, or to those who solicited to cultivate it."

All that part of the island which they had an opportunity of seeing is said to have been well cultivated. It was covered with trees of various kinds and sizes, many of which must have been very large, as they made canoes of their trunks, some of which were capable of carrying twenty-eight or thirty men. Among the timber trees was noticed the ebony, and a tree which when pierced or wounded, yielded a thick white liquor of the consistence of cream. "They had also a species of the manchineel tree, in cutting down of which our people frequently got blistered and swelled; the inhabitants pointed out the cause, saying it was owing to their being sprinkled by the sap. This they reckoned among the unlucky

trees, and advised our people against the use of it."

But the most singular tree noticed at Pelew, was one in its size and manner of branching not unlike our cherry tree, but in its leaves resembling the myrtle. Its peculiarity was, that it had no bark, but only an outward coat of about the thickness of a card, which was darker than the inside, though equally close in texture. Its colour was nearly that of mahogany, and the wood was so extremely hard, that sew of the tools which the English had could work it. They also found cabbagetrees, the wild bread-fruit, and another tree whose fruit something resembled an almond. But yams and cocoanuts, being their principal articles of sustenance, claimed their chief attention.

The island Coorooraa, of which Pelew is the capital, likewise produced plantains, bananas, Seville oranges, and lemons, but neither of them in any considerable quantity. None of the islands which the English visited had any kind of grain. As to birds, they had plenty of common cocks and hens, which, though not domesticated, kept running about near their houses and plantations; and what appears extremely singular is, that the natives had never made any use of them, till our people told them they were excellent eating. Pigeons they accounted a great dainty; but none but those of a certain dignity were permitted to eat of them. The English left them two geese, which were the only remains of their live stock.

From

⁽A) This was a mark of rank worn upon the wrift, with which Captain Wilson was invested by the king; but what animal it came from our people could not learn.

Pelew Islands.

From the description of the country it appears to be very mountainous; but some of the valleys are reprefented as extensive and beautiful, affording many delightful prospects. The foil being very rich produces great abundance of grass, which, as there are no cattle to eat it, grows very high, and was fcorched and burnt up by the fun. Our people faw no river at Pelew; their fupplies of fresh water being obtained from small streams

and ponds, of which there are a great many.

From this account of the scanty produce of these islands, it is evident that no luxury reigned among their inhabitants, whose principal article of food appears to be fish; they had no falt, nor did they make use of sauce or any feafoning in any thing they ate. Their drink was also as simple as their diet: it principally consisted of the milk of the cocoa nut; but upon particular occasions they used a kind of fweet drink and sherbet, which lat-

ter had the addition of some juice of orange.

The islands appeared to be populous, though to what extent could not be afcertained. Their houses were raised about three feet from the ground, upon stones which appeared as if hewn from the quarry. The interior part of them was without any division, the whole forming one great room, which rose in a ridge like our barns, the outfide being thatched thick and close with bamboos or palm leaves. All their implements, utenfils, weapons of war, and canoes, are much of the same kind with those which were found in the South sea islands.

In their marriages they allow a plurality of wives, though not in general more than two. When a woman is pregnant, the utmost attention is paid to her; but upon other occasions no more respect is shown to one fex than the other. "One of our people endeavouring to make himself agreeable to a lady belonging to one of the rupacks, by what we should call a marked assiduity, Arra Kooker, with the greatest civility, gave him to

understand that it was not right to do so."

They have places particularly appropriated to fepulture; their graves being made nearly the same as they are in our country churchyards. The corpse is attended only by women, who at the place of interment make a great lamentation. The men, however, affemble round the body before it is carried to the grave, on which occafion they preserve a solemn silence; "their minds, from principles of fortitude or philosophy, being armed to meet the events of mortality with manly submission, divested of the external testimony of human weakness."

On the article of religion our editor observes, " That among all the race of men whom navigation has brought to our knowledge, few appear to be without a fense of fomething like religion, however it may be mixed with idolatry or superstition. And yet our people, during their continuance with the natives of Peiew, never faw any particular ceremonies, or observed any thing that had the appearance of public worship. But though there was not found on any of the islands they visited any place appropriated to religious rites, it would perhaps be going too far to declare that the people of Pelew had absolutely no idea of religion. Independent of external testimony, there may be such a thing as the religion of the heart, by which the mind may in aweful filence be turned to contemplate the God of Nature; and though unbleffed by those lights which have pointed to the Christian world an unerring path to happiness

and peace, yet they might, by the light of reason only, have discovered the efficacy of virtue, and the temporal Islands.

advantages arising from moral rectitude.

" Superstition is a word of great latitude, and vaguely defined: though it hath in enlightened ages been called the offspring of ignorance, yet in no time hath it existed without having some connection with religion. Now the people of Pelew had beyond all doubt some portion of it, as appeared by the wish expressed by the king when he faw the ship building, that the English would take out of it some particular wood, which he perceived they had made use of, and which he observed was deemed an ill omen, or unpropitious.

"They had also an idea of an evil spirit, that often counteracted human affairs. A very particular instance of this was feen when Mr Barker, a most valuable member in the English society, fell backwards from the side of the veilel, whilft he was on the flocks: Raa Kook, who happened to be present, observed that it was owing to the unlucky wood our people had fuffered to remain in the veffel, that the evil spirit had occasioned this mis-

chief to Mr Barker."

They likewise appeared to entertain a strong idea of divination, as was evident from the ceremonies they practifed before they undertook any enterprise of moment. A few occurrences, which are mentioned in the course of the narrative, would also lead us to believe that they could not be altogether unacquainted with the nature of religious worship; for when they were present at the public prayers of the English, they expressed no furprise at what was doing, but seemed desirous to join in them, and constantly preserved the most profound si-lence. The general even resused to receive a message from the king which arrived during divine fervice. And upon another occasion, when Captain Wilson told Lee Boo, that good men would live again above, he replied, with great earnestness, "All same Pelew; bad men stay in earth; good men go into sky; become very beautiful;" holding his hand up, and giving a fluttering motion to his fingers. Some later voyagers, however, have affirmed, that these people, notwithstanding their superstition, have no notion whatever of a Deity; a circumstance to which it is extremely difficult to give full credit.

The most wonderful circumstances in the history of this people, except that last mentioned, are the acuteness of their understanding, their hospitality, and the implicit confidence which they placed in utter strangers. That their manners were pleafing, and their fociety not difagreeable, is evident from the conduct of Madan Blanchard, one of the feamen, who, when the veffel was built and ready to take her departure with his captain and his companions, was left behind at his own particular request. That they had the fullest confidence in Captain Wilson and his crew, is put beyond a doubt by the behaviour of the king and Raa Kook when their guests were to leave them. Raa Kook solicited his brother's permission to accompany the English, but from prudential motives was refused. The sovereign, however, resolved to entrust his second son Lee Boo to Captain Wilson's care, that he might improve his mind, and learn fuch things as at his return would benefit his-

The instructions which he gave the young man, and the fortitude which he showed upon this occasion,

would have done honour to the most enlightened mind. Charge, he would at their return prefent them with one Upon delivering him to Captain Wilson, he used these or two beads as a reward for their services.

Having no quadrupeds at Pelew, the sneep, goats, of all things which he ought to know, and make him an Englishman. The subject of parting with my son I have frequently revolved; I am well aware that the distant countries he must go through, differing much from his own, may expose him to dangers, as well as difeases, that are unknown to us here, in consequence of which he may die; I have prepared my thoughts to this: I know that death is to all men inevitable; and whether my fon meets this event at Pelew or elfewhere is immaterial. I am fatisfied, from what I have obferved of the humanity of your character, that if he is fick you will be kind to him; and should that happen, which your utmost care cannot prevent, let it not hinder you, or your brother, or your fon, or any of your countrymen, returning here; I shall receive you, or any of your people, in friendship, and rejoice to see you again." How noble! This is the language of a king, a father, and a philosopher, who would have been delighted to see his son with European accomplishments. But, alas! the subsequent history of this amiable youth must force a tear from the eye of every reader whose heart is not callous to the genuine feelings of nature and humanity. As foon as they arrived at Macao, the house into which he first entered, and the different articles of furniture, fixed him in filent admiration; but what struck his imagination most was the upright walls and flat ceilings of the rooms, being utterly unable to comprehend how they could be fo formed. When he was introduced to the ladies of the family, his deportment was so easy and polite, that it could be exceeded by nothing but his abundant good nature; and at his departure, his behaviour left on the mind of every one present the impression, that, however great the surprife might be which the fcenes of a new world had awakened in him, it could hardly be exceeded by that which his own amiable manners and native polith would excite in others.

They were now conducted to the house of an English gentleman, who introduced them into a large hall, which was lighted up, with a table in the middle, covered for fupper, and a fideboard handsomely decorated. Here a new scene burst at once upon Lee Boo's mind; he was all eye, all admiration. The veffels of glass particularly rivetted his attention; but when he furveyed himself in a large pier glass at the upper end of the hall, he was in raptures with the deception. It was in truth, to him, a fcene of magic, a fairy tale.

Soon after the people of the veffel came on shore, fome of them went to purchase things they were in want of; in doing which they did not forget Lee Boo, who was a favourite with them all. Among the trinkets they brought him was a string of large glass beads, the first fight of which almost threw him into an ecstacy : he hugged them with a transport which could not have been exceeded by the interested possessor of a string of oriental pearls. His imagination suggested to him that he held in his hand all the wealth the world could afford him. He ran with eagerness to Captain Wilson to show him his riches, and begged he would get him a Chinese vessel to carry them to the king his father, that he might fee what the English had done for him; adding, that if the people faithfully executed their

and other cattle, which he met with at Macao, were viewed with wonder; but foon after, feeing a man pafs the house on horseback, he was so much astonished, that he wanted every one to go and look at the strange fight. After the matter, however, was explained to him, he was eafily perfuaded to get upon horseback himfelf; and when he was informed what a noble, docile, and useful animal it was, he befought the captain to fend one to his uncle Raa Kook, as he was fure it would be of great fervice to him.

Omitting a number of other particulars of this kind, which excited his curiofity and showed the excellent disposition of his heart, we shall follow him to England, the country from which he was never to return. Here he had not been long before he was fent to an academy to be instructed in reading and writing, which he was extremely eager to attain, and most assiduous in learning. His temper was mild and compassionate in the highest degree; but it was at all times governed by discretion and judgement. If he saw the young asking relief, he would rebuke them with what little English he had, telling them it was a shame to beg when they were able to work; but the intreaties of old age he could never withstand, saying, "Must give poor old man, old man no able to work."

He always addressed Mr Wilson by the name of Captain, but never would call Mrs Wilson by any other name than mother, looking on that as a mark of the greatest respect; and such was the gratitude of his heart for the kindness they showed him, that if any of the family were ill, he always appeared unhappy, would creep foftly up to the chamber, and fit filent by the bedfide for a long time together without moving, peeping gently from time to time between the curtains, to see if they flept or lay still.

He was now proceeding with hafty strides in gaining the English language, writing, and accounts, when he was overtaken by that fatal difease, the smallpox, which the greatest pains had been taken to guard him against; and notwithstanding the utmost care and attention of his physician, he fell a victim to this scourge of the human race.

Upon this trying occasion, his spirit was above complaining, his thoughts being all engroffed by the kindnefs of his benefactors and friends. He told his attendant, that his father and mother would grieve very much, for they knew he was fick. This he repeated feveral times, " and begged him to go to Pelew, and tell Abba Thulle that Lee Boo take much drink to make finallpox go away, but he die; that the captain and mother very kind; all English very good men; much forry he could not fpeak to the king the number of fine things the English had got." Then he reckoned up the prefents which had been given him, defiring that they might be properly distributed among the chiefs, and requesting that particular care might be taken of two glass pedestals, which he begged might be presented to his father.

We have given this short history of Lee Boo, because it exhibits in a strong light the manners of the natives of the Pelew islands, to which we know nothing similar in the history of man from the favage state to that of civilization.

civilization. They appear to have had no communication with any other people, and were yet neither treacherous, cruel, nor cowardly. They are a furking inflance of the weakness of all the philosophic theories by which mankind are usually traced from their origin through the several flages of favagifim, barbarifim, and civilization, down to the period of refinement, ending in

Since the publication of Captain Wilfon's voyage we have fome further accounts of these islands, all confirming what we were first told of the gentleness of the people. Two armed ships were, by order of the court of directors, fitted out at Bombay, for the purpose of furveying the islands of Pelew, and furnishing the natives with domestic animals, and such other things as might add to the comforts of life. Among the prefents to the king were fwords and other European implements of war; of which it is at least possible that he and his people might have been equally happy had they remained for ever in total ignorance. The foundation of a fort was likewise laid on one of the islands, and posfession of it taken in the name of the English; we trust with no remote view of enflaving the people, or of driving them from their native country. It has been likewife announced in a late publication, that Captain M'Cluer, who commanded the armed ships, was so de-lighted with the manners of the king and his subjects, that he has refolved to pass the remainder of his days on those islands at the early age of 34. The following is the fequel of the adventure here alluded to. The two veffels called the Panther and Endeavour, under the command of Captain M'Cluer, were fitted out for a voyage to the Pelew islands, to acquaint Abba Thulle the king with the death of his favourite fon Lee Boo, who went to England with Captain Wilson in the Antelope in 1783, where he died. On the 24th of August 1790 Captain M'Cluer failed from Bombay, having on board Meffrs White and Wedgeborough, who had been shipwrecked with Captain Wilson, and were much esteemed by the king of those islands, at which he arrived in January 1791. Abba Thulle, the king, received them with demonstrations of joy as Englishmen, of whom he had previously found reason to entertain a very favourable opinion. The presents which the company sent to Abba Thulle were landed with all convenient speed. These confifted of a confiderable quantity of live flock, fuch as cows, bulls, ewes, rams, goats, pigs, and poultry, together with arms, ammunition, and packages of hardware, comprising a number of articles which could not fail to be of fingular advantage to the natives. The grateful king was aftonished at the meaning of all this, and being informed that it was a fmall acknowledgement for his generous treatment of the crew of the Antelope when wrecked on his coast, he expressed his regret that it was not in his power to have done more.

With the nature and fituation of these islands, as well as the amiable and engaging manners of the natives, Captain McCluer was so well pleased, that he considered them as a paradise, where he could spend with pleasure the remainder of his days. Soon after these transactions the Panther failed in the month of February from the Pelew islands for China, the Endeavour remaining behind till her return, which happened on the 10th of June the same year. Having visited these islands a third time, after a survey of the coast of New Guinea,

Vol. XVI. Part I.

he figuified to the officers of the Panther his intention of refigning the command of the expedition, and remaining on the illands. To render his new fituation as comfortable as poffible, he requested from Mr Wedgeborough about 20 muskets with bayonets, 12 pitlols, 12 pole-axes, 2 wall-pieces, fuse and pittol amumnition, an anvil, bellows, frame-saw, standing vice, &c. After a consultation with the other officers, it was agreed on to fend him these articles, on condition that they should be accounted for by his attorneys, if the the East India Company should not be satisfied with the measure. This resolution was carried into effect in the month of February 1793.

Scarcely, however had he been 15 months in his new fettlement till he became impatient to abandon it, and he foon after fet fail for Macao. He returned to the Pelew islands in the year 1795; for the purpose of removing his family; and failing from thence to Bombay, he touched at Bencoolen, where he met with a frigate bound for Bombay, into which he put a part of his family with fix Pelew women, failing himself with the other natives towards Bengal, from which last place he fet fail fome time after; but neither he nor any of

his crew have been fince heard of.

PELIAS, in fabulous history, twin-brother of Neleus, was fon of Neptune by Tyro, daughter of Salmoneus. His birth was concealed by his mother, who wished her father to be ignorant of her incontinence. He was exposed in the woods, but his life was preserved by shepherds; and he received the name of Pelias, from a fpot of the colour of lead in his face. Some time after Tyro married Cretheus, fon of Æolus, king of Iolchos, and became mother of three children, of whom Æson was the eldest. Pelias visited his mother, and was received in her family; and after the death of Cretheus, he unjustly seized the kingdom, which belonged not to him, but to the children of Tyro by the deceased king. To strengthen himself in his usurpation, Pelias confulted the oracle; and when he was told to beware of one of the descendants of Æolus, who should come to his court with one foot flood and the other bare, he privately removed the fon of Æson, after he had openly declared that he was dead. These precautions proved vain. Jason, the son of Æson, who had been educated by Chiron, returned to Iolchos, when come to years of maturity; and having lost one of his shoes in croffing the river Anaurus or the Evenus, Pelias immediately perceived that this was the person whom he had so much dreaded. His unpopularity prevented him from acting with violence to a stranger, whose uncommon dress and commanding aspect had raifed admiration in the people. But his aftonishment was greatly excited, when he faw Jason arrive at his palace, with his friends and his relations, and boldly demand the kingdom which he had usurped. Pelias. confcious that his complaints were well founded, endeavoured to divert his attention, and told him that he would voluntarily refign the crown to him, if he went to Colchis to avenge the death of Phryxus, the fon of Athamas, whom Æeres had cruelly murdered. He further declared, that the expedition would be attended with the greatest glory, and that nothing but the infirmities of old age had prevented himself from vindicating the honour of his country, and the injuries of his family, by punishing the affassin. This so warmly recommended, was with equal warmth accepted by the young hero, and his intended expedition was made known all over Greece. While Jason was absent in the Argonautic expedition, Pelias murdered Æson and all his family; but, according to the more received opinion of Ovid, Æson was still living when the Argonauts returned, and he was restored to the slower of youth by the magic of Medea. This change in the vigour and the constitution of Æson assonished all the inhabitants of Iolchos; and the daughters of Pelias, who have received the patronymic of Peliades, expressed their defire to fee their father's infirmities vanish by the same powerful magic. Medea, who wished to avenge the injuries which her husband Jason had received from Pelias, raifed the defires of the Peliades, by cutting an old ram to pieces, and boiling the flesh in a cauldron, and then turning it into a fine young lamb. After they had feen this fuccessful experiment, the Peliades cut their father's body to pieces, after they had drawn all the blood from his veins, on the affurance that Medea would replenish them by her wonderful power. The limbs were immediately put into a cauldron of boiling water; but Medea fuffered the flesh to be totally confumed, and refused to give the promifed affiftance, and the bones of Pelias did not even receive a burial. The Peliades were four in number, Alceste, Pisidice, Pelopea, and Hippothoe, to whom Hyginus adds Medusa. Their mother's name was Anaxibia, the daughter of Bias or Philomache, the daughter of Amphion. After this parricide, the Peliades fled to the court of Admetus, where Acastus, the fon-in-law of Pelias, purfued them, and took their protector prisoner. The Peliades died, and were buried in Arcadia.

PELICAN, a genus of birds belonging to the order

of anseres. See Ornithology Index.

PELICAN, in Chemistry, is a glass alembic confisting of one piece, with a tubulated capital, from which two opposite and crooked beaks pass out, and enter again at the bottom of the cucurbit. This vessel was contrived by the older chemists for a continued distillation, but has gone into disuse.

PELICANUS, a genus of birds belonging to the

order of anseres. See Ornithology Index.

PELION (Diodorus Siculus, &c.), Pelios, mons understood, (Mela, Virgil, Horace, Seneca), a mountain of Thessaly near Ossa, and hanging over the Sinus Pelasgicus or Pegasicus; its top covered with pines, the sides with oaks, (Ovid). Said also to abound in wild ash, (Val. Flaccus). From this mountain was cut the spear of Achilles, called pelias, which none but himself could wield, (Homer). Dicearchus, Aristotle's scholar, found this mountain 1250 paces higher than any other of Thessaly, (Pliny). Pelius, Cicero; Peliacus, (Catullus), the epithet.

PELLA, in Ancient Geography, a town fituated on the confines of Emathia, a diffrict of Macedonia, (Ptolemy); and therefore Herodotus allots it to Bottiæa, a maritime diffrict on the Sinus Thermaïcus. It was the royal refidence, fituated on an eminence, verging to the fouth-west, encompassed with unpassable marshes summer and winter: in which, next the town, a citadel like an island rises, placed on a bank or dam, a prodigious work, both supporting the wall and securing it from any hurt by means of the circumssum water. At a distance, it

feems close to the town, but is separated from it by the Ludias, running by the walls, and joined to it by a bridge, (Livy): distant from the sea 120 stadia, the Ludias being fo far navigable, (Strabo). Mela calls the town Pelle, though most Greek authors write Pella. The birth-place of Philip, who enlarged it; and afterwards of Alexander, (Strabo, Mela). Continued to be the royal refidence down to Perfes, (Livy). Called Pella Colonia, (Pliny); Colonia Julia Augusta, (Coin). It afterwards came to decline, with but few and mean inhabitants, (Lucian). It is now called Ta Hadalorix, the Little Palace, (Holstenius). Pellaus, both the gentilitious name and the epithet, (Lucian, Juvenal, Martial.) -Another Pella, (Polybius, Pliny); a town of the Decapolis, on the other fide the Jordan; abounding in water, like its cognominal town in Maccdonia; built by the Macedonians, (Strabo); by Seleucus, (Eufebius); anciently called Butis, (Stephanus); Apamea, (Strabo); fituated 35 miles to the north-east of Gerasa, (Ptolemy). Thither the Christians, just before the flege of Jerusalem by Titus, were divinely admonished to fly, (Eusebius). It was the utmost boundary of the Percea, or Transjor-

dan country, to the north, (Josephus).

PELLETIER, BERTRAND, a celebrated chemical philosopher, was born at Bayonne in 1761, and very foon discovered a strong predilection for the sciences, to cherith which he had every thing in his father's house that could be reasonably desired, and here he acquired the elements of that art for which he was afterwards fo famous. His subsequent progress he made under Darcet, who admitted him among the pupils attached to the chemical laboratory of France. Five years intense application under such a master, gave him a stock of knowledge very uncommon at his years. As a convincing proof of this, he published, when only 21, a number of valuable observations on arsenic acid, proving, contrary to the opinion of Macquer, that sulphuric acid distilled from the arseniate of potash, disengages the

acid of arfenic

Encouraged by the fuccess which attended his first labours of a chemical nature, he communicated his remarks on the crystallization of sulphur, cinnabar, and the deliquescent salts; the examination of zeolites, particularly the salse zeolite of Freyburg, which he discovered to be merely an ore of zinc. He also made observations on the oxygenated muriatic acid, in reference to the absorption of oxygen; on the formation of ethers, chiefly the muriatic and the acetous; and a number of memoirs on the operation of phosphorus made in the large way; its conversion into phosphoric acid, and its combination with sulphur and most metallic substances.

It was by his operations on phosphorus that he burnt himself so severely as nearly to endanger his life. Immediately on his recovery he began the analysis of different varieties of plumbago from France, England, Germany, Spain, and America, and gave both novelty and interest to his work, even after the labours of Scheele on the same subject had made their appearance. The analysis of the carbonate of barytes led him to make experiments on animals, from which he discovered that this earth is a real poison, in whatever way administered. Strontites was also analysed by this celebrated chemist, which was found to contain a new earth.

Pelletier discovered a process for preparing verditer in the large way, equal, it is faid, in beauty to that

which

Pelufium.

Pelletier which is manufactured in England. He was also among the first who shewed the possibility of refining Peloponne-bell metal, and separating the tin. His first experiments were performed at Paris, after which he went to the foundery at Romilly, to prove their accuracy in the large way. He was foon after this admitted a member of the Academy of Sciences at Paris, and afterwards accompanied Borda and General Daboville to La Fere, to affift in experiments on a new species of gunpowder. Being obliged to pais great part of the day in the open air during a cold and moist feason, in order to render his experiments more decifive, his health, which was naturally delicate, was very much impaired. He partly recovered it, but again fell a victim to his thirst after knowledge, for he was at one time nearly destroyed by inspiring the oxygenated muriatic acid gas, which occafioned a convulfive althma, which at times appeared to abate, but was found to be incurable. The affiftance of art was infufficient to fave him, and he died at Paris on the 21st of July 1797, of a pulmonary confumption, in the flower of his age, being only 36.

PELLETS, in Heraldry, those roundles that are black; called also ogresses and gunstones, and by the

French torteaux de sable.

PELLICLE, among phyficians, denotes a thin film or fragment of a membrane. Among chemists it fignifies a thin furface of crystals uniformly spread over a sa-

line liquor evaporated to a certain degree.

PELLISON, or Pellison Fontanier, Paul. one of the finest geniuses of the 17th century, was the fon of James Pellison counsellor at Castres. He was born at Beziers in 1624, and educated in the Protestant religion. He studied with success the Latin, Greek, French, Spanish, and Italian tongues, and applied himfelf to the reading the best authors in these languages; after which he studied the law at Castres with reputation. In 1652 he purchased the post of secretary to the king, and five years after became first deputy to M. Fouquet. He fuffered by the difgrace of that minister; and in 1661 was confined in the Bastile, from whence he was not discharged till four years after. During his confinement he applied himself to the study of controverfy; and in 1670 abjured the Protestant religion. Louis XIV. bestowed upon him an annual pension of 2000 crowns; and he likewife enjoyed feveral pofts. In 1676 he had the abbey of Giment, and some years after the priory of St Orens at Auch. He died in 1693. His principal works are, I. The History of the French Academy. 2. Reflections on religious Disputes, &c. in 4 vols. 12mo. 3. The History of Louis XIV. 4. Historical Letters and Miscellanies, in 3 vols. 12mo.

PELOPIA, a festival observed by the Eleans in honour of Pelops. A ram was facrificed on the occafion, which both priefts and people were prohibited from partaking of, on pain of excommunication from Jupiter's temple: the neck only was allotted to the officer who provided wood for the facrifice. This officer was called Evis; and white poplar was the only wood

made use of at this solemnity.

PELOPONNESUS, (Dionyfius), a large peninfula to the fouth of the rest of Greece; called, as it were Pelopis nefus, or infula, though properly not an island, but a peninfula; yet wanting but little to be one, viz. the ifthmus of Corinth, ending in a point like the leaf of the platane or plane tree. Anciently called Apia and Pelasgia; a peninsula second to no other country for nobleness; fituated between two seas, the Egean and Ionian, and refembling a platane-leaf, on account of its angular receffes or bays, (Pliny, Strabo, Mela). Strabo adds from Homer, that one of its ancient names was Argos, with the epithet Achaicum, to distinguish it from Theffaly, called Pelasgicum. Divided into fix parts; namely, Argolis, Laconica, Messenia, Elis, Achaia, and Arcadia, (Mela). Now called the Morea.

PELOPS, in fabulous hiftory, the fon of Tantalus king of Phrygia, went into Elis, where he married Hippodamia the daughter of Oenomaus king of that country; and became fo powerful, that all the territory which lies beyond the ishmus, and composes a confiderable part of Greece, was called Peloponnesus, that is, the ifland of Pelops, from his name and the

word Negoc.

PELTA, a fmall, light, manageable buckler, ufed by the ancients. It was worn by the Amazons. The pelta is faid by some to have resembled an ivy leaf in form; by others it is compared to the leaf of an Indian fig tree; and by Serbius to the moon in her first quarter.

PELTARIA, a genus of plants belonging to the tetradynamia class, and in the natural method ranking under the 39th order, Siliquose. See BOTANY

Index.

PELUSIUM, in Ancient Geography, a strong city of Egypt, without the Delta, diftant 20 stadia from the fea; fituated amidit marshes; and hence its name and its strength. Called the key or inlet of Egypt (Diodorus, Hirtius); which being taken, the rest of Egypt lay quite open and exposed to an enemy. Called Sin (Ezekiel). Pelusiacus the epithet (Virgil, Diodorus). From its ruins arose Damietta. E. Long. 32°, N. Lat.

Mr Savary gives us the following account of this place: "The period of its foundation, as well as that Letters on of the other ancient cities of Egypt, is lost in the ob- Egypt.

scurity of time. It flourished long before Herodotus. As it commanded the entrance of the country on the fide of Afia, the Pharaohs rendered it a confiderable fortress; one of them raised a rampart of 30 leagues in length from the walls of this town to Heliopolis. But we find from the hiftory of nations that the long wall of China, those which the weakness of the Greek emperors led them to build round Constantinople, and many others, built at an immense expence, were but feeble barriers against a warlike people: these examples have taught us, that a state, to be in security against a foreign yoke, must form warriors within itself, and that men must be opposed to men. This rampart which covered Pelufium, did not stop Cambyses, who attacked it with a formidable army. The feeble character of the son of Amasis, unable to prevent the desertion of 200,000 Egyptians, who went to found a colony beyond the cataracts, had not force sufficient to oppose that torrent which broke in upon his country. Cambyfes, after a bloody battle, wherein he cut his enemies to pieces, entered Pelufium in triumph. That memorable day, which faw the defertion of one part of the Egyptian militia and the ruin of the other, is the true epoch of the fubjugation of that rich country. Since that period, it has passed under the yoke of the Persians, the Macedonians, the Romans, the Greeks, the Arabs, and the Turks. A

0 2

Pelusium continued slavery of more than 2000 years seems to se-Pembroke. "List I bondage.

"Herodotus, who vifited Pelufium fome years after the conquest of Cambyses, relates an anecdote which I cannot omit: 'I furveyed (says he) the plain where the two armies had fought. It was covered with human bones collected in heaps. Those of the Persians were on one fide, those of the Egyptians on the other, the inhabitants of the country having taken care to separate them after the battle. They made me take notice of a fact which would have appeared very aftonishing to me without their explanation of it. The skulls of the Persians, which were slight and fragile, broke on being lightly struck with a stone; those of the Egyptians, thicker and more compact, refifted the blows of flint. This difference of folidity they attributed to the cufrom the Perfians have of covering their heads from their infancy with the tiara, and to the Egyptian custom of leaving the heads of their children bare and shaved, exposed to the heat of the sun.' This explanation appeared fatisfactory to me.' Mr Savary affures us that the same customs still subsist in Egypt, of which

he frequently had ocular demonstration.

" Pelusium (continues he), after passing under the dominion of Persia, was taken by Alexander. The brave Antony, general of cavalry under Gabinius, took it from his fuccesfors, and Rome restored it to Ptolemy Auletes. Pompey, whose credit had established this young prince on the throne of Egypt, after the fatal battle of Pharfalia took refuge at Pelusium. He landed at the entrance of the harbour; and on quitting his wife Cornelia and his fon, he repeated the two following verses of Sophocles, 'The free man who feeks an afylum at the court of a king will meet with flavery and chains.' He there found death. Scarcely had he landed on the shore, when Theodore the rhetorician, of the isle of Chio, Septimius the courtier, and Achillas the eunuch, who commanded his troops, wishing for a victim to present to his conqueror, stabbed him with their fwords. At the fight of the affaffins Pompey covered his face with his mantle, and died like a Roman. They cut off his head, and embalmed it, to offer it to Cæfar, and left his body naked on the shore. It was thus that this great man, whose warlike talents had procured the liberty of the feas for the Romans, and added whole kingdoms to their extended empire, was basely slain in setting foot on the territory of a king who owed to him his crown. Philip his freedman, collecting together, under favour of the night, the wreck of a boat, and stripping off his own cloak to cover the fad remains of his master, burnt them according to the custom. An old foldier, who had ferved under Pompey's colours, came to mingle his tears with those of Philip, and to affist him in performing the last offices to the manes of his general.-Pelusium was often taken and pillaged during the wars of the Romans, the Greeks, and the Arabs. But in fpite of fo many disasters, she preserved to the time of the Crusades her riches and her commerce. The Christian princes having taken it by storm, facked it. It never again rose from its ruins; and the inhabitants went to Damietta." See

PELVIS, in Anatomy. See ANATOMY Index. PEMBROKE, MARY, COUNTESS OF. See HER-

PEMBROKE, in Pembrokeshire, in England, is the

principal town in the county. It is fituated upon a Pembrokecreek of Milford-Haven, and in the most pleasant part of Wales, being about 256 miles distant from London. It is the county-town, and has two handsome bridges over two fmall rivers which run into a creek, forming the west side of a promontory. It is well inhabited, has feveral good houses, and but one church. There is also a customhouse in it. There are several merchants in it, who, favoured by its situation, employ near 200 fail on their own account; fo that, next to Caermarthen, it is the largest and richest town in South Wales. It has one long straight street, upon a narrow part of a rock; and the two rivers feem to be two arms of Milford-Haven, which ebbs and flows close up to the town. It was in former times fortified with walls, and a magnificent castle seated on a rock at the west end of the town. In this rock, under the chapel, is a natural cavern called Wogan, remarked for having a very fine echo: this is supposed to have been a store-room for the garrison, as there is a staircase leading into it from the castle: it has also a wide mouth towards the river. This structure being burnt a few years after it was erected, it was rebuilt. It is remarkable for being the birth-place of Henry VII. and for the brave defence made by the garrison for Charles I.

PEMBROKESHIRE, a county of Wales, bounded on all fides by the Irish fea, except on the east, where it joins to Caermarthenshire, and on the north-east to Cardiganshire. It lies the nearest to Ireland of any county in Wales; and extends in length from north to fouth 35 miles, and from east to west 29, and is about 140 in circumference. It is divided into feven hundreds; contains about 420,000 acres, one city, eight market-towns, two forests, 145 parishes, about 11,800 houses, and 56,000 inhabitants. It lies in the province of Canterbury, and diocese of St David's. It sends three members to parliament, viz. one for the shire, one for Haverfordwest, and one for the town of Pembroke.

The air of Pembrokeshire, considering its situation, is good; but it is in general better the farther from the fea. As there are but few mountains, the foil is generally fruitful, especially on the sea-coasts; nor are its mountains altogether unprofitable, but produce pasture fufficient to maintain great numbers of sheep and goats. Its other commodities are corn, cattle, pit-coal, marl, fish, and fowl. Among these last are falcons, called here peregrines. Amongst the birds common here are migratory fea-birds, that breed in the isle of Ramsey, and the adjoining rocks called The Bishop and his Clerks. About the beginning of April fuch flocks of fea-birds, of feveral kinds, refort to these rocks, as appear incredible to those who have not feen them.

The inhabitants of this county make a very pleafant durable fire of culm, which is the dust of coal made up into balls with a third part of mud. The county is well watered by the rivers Clethy, Dougledy, Cledhew, and Teive; which last parts it from Cardiganshire. There is a division of the county styled Rhos in the Welch, by which is meant a large green plain. This is inhabited by the descendants of the Flemings, placed there by Henry I. to curb the Welch, who were never able to expel them, though they often attempted it. On the coasts of this county, as well as on those of Glamorganshire and the Severn sea, is found a kind of alga or laver, which is gathered in spring; and of which

the inhabitants make a fort of food, called in Welch Ihavan, and in English black-butter. Having washed it clean, they lay it to fweat between two flat stones, then fhred it fmall, and knead it well, like dough for bread, and then make it up into great balls or rolls, which is by some eaten raw, and by others fryed with oatmeal and butter. It is accounted excellent against many distem-

PEN, a town of Somerfetshire, in England, on the north-east fide of Wincaunton, where Kenwald a West Saxon king fo totally defeated the Britons, that they were never after able to make head against the Saxons; and where, many ages after this, Edmund Ironfide gained a memorable victory over the Danes, who had before, i. e. in 1001, defeated the Saxons in that same

PEN, a little inftrument, usually formed of a quill,

ferving to write withal.

Pens are also sometimes made of filver, brafs, or

Dutch PENS, are made of quills that have passed through hot ashes, to take off the groffer fat and moisture, and render them more transparent.

Fountain PEN, is a pen of filver, brass, &c. contrived to contain a confiderable quantity of ink, and let it flow out by gentle degrees, fo as to supply the writer a long time without being under the necessity of taking

Plate CCCCVII. Fig. 1.

The fountain pen is composed of several pieces. The middle piece, fig. 1. carries the pen, which is screwed into the infide of a little pipe, which again is foldered to another pipe of the same bigness as the lid, fig. 2.; in which lid is foldered a male screw, for screwing on the cover, as also for stopping a little hole at the place and hindering the ink from passing through it. At the other end of the piece, fig. 1. is a little pipe, on the outfide of which the top-cover, fig. 3. may be fcrewed. In the cover there goes a port-crayon, which is to be screwed into the last-mentioned pipe, in order to stop the end of the pipe, into which the ink is to be poured by a funnel. To use the pen, the cover fig. 2. must be taken off, and the pen a little shaken, to make the ink run more freely.

There are, it is well known, some instruments used by practical mathematicians, which are called pens, and which are diffinguished according to the use to which they are principally applied; as for example, the drawing pen, &c. an instrument too common to require a particular description in this place. But it may be proper to take fome notice of the geometric pen, as it is not fo well known, nor the principles on which it de-

pends fo obvious.

The geometric PEN is an instrument in which, by a circular motion, a right line, a circle, an ellipse, and other mathematical figures, may be described. It was first invented and explained by John Baptist Suardi, in a work intitled Nuovo Instromenti per la Descrizzione di diverse Curve Antichi e Moderne, &c. Several writers had observed the curves arising from the compound motion of two circles, one moving round the other; but Suardi first realized the principle, and first reduced it to practice. It has been lately introduced with fuccess into the steam-engine by Watt and Bolton. The number of curves this instrument can describe is truly amazing; the author enumerates not less than 1273, which

(he fays) can be described by it in the simple form. We shall give a short description of it from Adam's Geo- Penance. metrical and Graphical Effays.

Fig. 1. represents the geometric pen; A, B, C, the fland by which it is supported; the legs A, B, C, are CCCCVIL contrived to fold one within the other for the conveni- Fig. 1.

ence of packing. A strong axis D is sitted to the top of the frame; to the lower part of this axis any of the wheels (as i) may be adapted; when screwed to it they are immoveable. EG is an arm contrived to turn round upon the main axis D; two sliding boxes are fitted to this arm; to these boxes any of the wheels belonging to the geometric pen may be fixed, and then flid fo that the wheels may take into each other and the immoveable wheel i; it is evident, that by making the arm EG revolve round the axis D, these wheels will be made to revolve also, and that the number of their revolutions will depend on the proportion between the teeth. Fg is an arm carrying the pencil; this arm flides backwards and forwards in the box cd, in order that the distance of the pencil from the centre of the wheel h may be easily varied; the box cd is fitted to the axis of the wheel h, and turns round with it, carrying the arm fg along with it: it is evident, therefore, that the revolutions will be fewer or greater in proportion to the difference between the numbers of the teeth in the wheels h and i; this bar and focket are easily removed for changing the wheels. When two wheels only are used, the bar fg moves in the same direction with the bar EG; but if another wheel is introduced between them, they move in contrary directions.

"The number of teeth in the wheels, and confequently the relative velocity of the epicycle or arm fg, may be varied in infinium. The numbers we have used are 8, 16, 24, 32, 40, 48, 56, 64, 72, 80,

"The construction and application of this instrument is so evident from the figure, that nothing more need be pointed out than the combinations by which va-rious figures may be produced. We shall take two as examples:

"The radius of EG (fig. 2.) must be to that of fg as 10 to 5 nearly; their velocities, or the number of teeth in the wheels, to be equal; the motion to be in the same direction.

"If the length of fg be varied, the looped figure delineated at fig. 3. will be produced. A circle may be described by equal wheels, and any radius but the bars must move in contrary directions.

" To describe by this circular motion a straight line and an ellipsis. For a straight line, equal radii, the velocity as I to 2, the motion in a contrary direction; the fame data will give a variety of ellipses, only the radii must be unequal; the ellipses may be described in any

direction." See fig. 4.
PEN, or Penflock. See PENSTOCK.

Sea-PEN. See PENNATULA, HELMINTHOLOGY In-

PENANCE, a punishment, either voluntary or imposed by authority, for the faults a person has committed. Penance is one of the feven facraments of the Romish church. Besides fasting, alms, abstinence, and the like, which are the general conditions of penance. there are others of a more particular kind; as the repeating a certain number of ave-marys, pater-nofters,

and credos, wearing a hair-shirt, and giving one's self a certain number of stripes. In Italy and Spain it is usual to fee Christians almost naked, loaded with chains and a crofs, and lashing themselves at every step.

PENATES, in Roman antiquity, a kind of tutelar deities, either of countries or particular houses; in which last sense they differed in nothing from the lares. See

The penates were properly the tutelar gods of the Trojans, and were only adopted by the Romans, who

gave them the title of penates.

PENCIL, an instrument used by painters for laying on their colours. Pencils are of various kinds, and made of various materials; the largest forts are made of boars briftles, the thick ends of which are bound to a stick, bigger or less according to the uses they are defigured for; these, when large, are called brushes. The finer forts of pencils are made of camels, badgers, and squirrels hair, and of the down of swans; these are tied at the upper end with a piece of strong thread, and enclosed in the barrel of a quill.

All good pencils, on being drawn between the lips,

come to a fine point.

Pencil, is also an instrument used in drawing, writing, &c. made of long pieces of black lead or red chalk, placed in a groove cut in a slip of cedar; on which other pieces of cedar being glued, the whole is planed round, and one of the ends being cut to a point, it is fit for use.

Black lead in fine powder, stirred into melted fulphur, unites with it so uniformly, and in such quantity, in virtue perhaps of its abounding with fulphur, that though the compound remains fluid enough to be poured into moulds, it looks nearly like the coarfer forts of black lead itself. Probably the way which Prince Rupert is faid to have had, mentioned in the third volume of Dr Birch's Hiftory of the Royal Society, of making black lead run like a metal in a mould, fo as to ferve for black lead again, confifted in mixing with it fulphur or fulphureous bodies.

On this principle the German black lead pencils are faid to be made; and many of those which are hawked about by certain perfons among us are prepared in the fame manner: their melting or foftening, when held to a candle, or applied to a red hot iron, and yielding a bluish flame, with a strong smell like that of burning brimstone, betrays their composition; for black lead itfelf yields no fmell or fume, and fuffers no apparent alteration in that heat. Pencils made with fuch additions are of a very bad kind; they are hard, brittle, and do not cast or make a mark freely either on paper or wood, rather cutting or feratching them than leaving a colour-

The true English pencils (which Vogel in his mineral fystem, and some other foreign writers, imagine to be prepared also by melting the black lead with some additional substances, and casting it into a mould) are formed of black lead alone fawed into flips, which are fitted into a groove made in a piece of wood, and another flip of wood glued over them: the foftest wood, as cedar, is made choice of, that the pencil may be the cafier cut; and a part at one end, too flort to be conveniently used after the rest has been worn and cut away, is left untilled with the black lead, that there may be no waste of so valuable a commodity. These pencils

are greatly preferable to the others, though feldom fo Pendant perfect as could be wished, being accompanied with fome degree of the same inconveniences, and being very unequal in their quality, on account of different forts of the mineral being fraudulently joined together in one pencil, the fore part being commonly pretty good, and the rest of an inferior kind. Some, to avoid these imperfections, take the finer pieces of black lead itself, which they faw into flips, and fix for use in port crayons: this is doubtless the furest way of obtaining black lead crayons, whose goodness can be depended on.

PENDANT, an ornament hanging at the ear, frequently composed of diamonds, pearls, and other

jewels.

PENDANTS, in Heraldry, parts hanging down from the label, to the number of three, four, five, or fix at most, resembling the drops in the Doric freeze. When they are more than three, they must be specified in bla-

PENDANTS of a Ship, are those streamers, or long colours, which are split and divided into two parts, ending in points, and hung at the head of masts, or at the

yard-arm ends.

PENDENE-Vow, in Cornwall, in England, on the north coast, by Morvath. There is here an unfathomable cave under the earth, into which the fea flows at high water. The cliffs between this and St Ives shine as if they had store of copper, of which indeed there is

abundance within land.

PENDENNIS, in Cornwall, at the mouth of Falmouth haven, is a peninfula of a mile and a half in compass. On this Henry VIII. erected a castle, oppofite to that of St Maw's, which he likewife built. It was fortified by Queen Elizabeth, and ferved then for the governor's house. It is one of the largest castles in Britain, and is built on a high rock. It is stronger by land than St Maw's, being regularly fortified, and having good outworks.

PENDULOUS, a term applied to any thing that

bends or hangs downwards.

PENDULUM, a vibrating body fuspended from a fixed point. For the history of this invention, see the

article CLOCK.

The theory of the pendulum depends on that of the inclined plane. Hence, in order to understand the nature of the pendulum, it will be necessary to premite fome of the properties of this plane; referring, however to Inclined PLANE, and to the article MECHANICS, for the demonstration.

I. Let AC (fig. 1.) be an inclined plane, AB its perpendicular height, and D any heavy body: then CCCCVIII. the force which impels the body D to descend along the inclined plane AC, is to the absolute force of gravity as the height of the plane AB is to its length AC; and the motion of the body will be uniformly accelerat-

II. The velocity acquired in any given time by a body descending on an inclined plane AC, is to the velocity acquired in the fame time by a body falling freely and perpendicularly, as the height of the plane AB to its length AC. The final velocities will be the same; the spaces described will be in the same ratio; and the times of description are as the spaces described.

III. If a body descend along teveral contiguous

Pendulum planes, AB, BC, CD, (fig. 2.) the final velocity, namely, that at the point D, will be equal to the final velocity in descending through the perpendicular AE, the perpendicular heights being equal. Hence, if these planes be supposed indefinitely short and numerous, they may be conceived to form a curve, and therefore the final velocity acquired by a body in defcending through any curve AF, will be equal to the final velocity acquired in descending through the planes AB, BC, CD, or to that in descending through AE, the perpendicular heights being equal.

IV. If from the upper or lower extremity of the vertical diameter of a circle a cord be drawn, the time of descent along this cord will be equal to the time of descent through the vertical diameter; and therefore the times of descent through all cords in the same circle, drawn from the extremity of the vertical diameter, will

V. The times of defcent of two bodies through two planes equally elevated will be in the fubduplicate ratio of the lengths of the planes. If, instead of one plane, each be composed of several contiguous planes fimilarly placed, the times of descent along these planes will be in the same ratio. Hence, also, the times of describing similar arches of circles similarly placed will be in the subduplicate ratio of the lengths of the arches.

VI. The fame things hold good with regard to bodies projected upward, whether they afcend upon inclined planes or along the arches of circles.

The point or axis of suspension of a pendulum is that point about which it performs its vibrations, or from which it is suspended.

The centre of escillation is a point in which, if all the matter in a pendulum were collected, any force applied at this centre would generate the fame angular velocity in a given time as the same force when applied at the centre of gravity.

The length of a pendulum is equal to the diffance between the axis of fuspenfion and centre of ofcilla-

Let PN (fig. 3.) represent a pendulum suspended from the point P; if the lower part N of the pendulum be raifed to A, and let fall, it will by its own gravity descend through the circular arch AN, and will have acquired the same velocity at the point N that a body would acquire in falling perpendicularly from C to F, and will endeavour to go off with that velocity in the tangent ND; but being prevented by the rod or cord, will move through the arch NB to B, where, lofing all its velocity, it will by its gravity defcend through the arch BN, and, having acquired the same velocity as before, will ascend to A. In this manner it will continue its motion forward and backward along the arch ANB, which is called an ofcillatory or vibratory motion; and each fixing is called a vibration.

PROP. I. If a pendulum vibrates in very small circular arches, the times of vibration may be confidered as equal, whatever be the proportion of the arches.

Let PN (fig. 4.) be a pendulum; the time of de-fcribing the arch AB will be equal to the time of defcribing CD; these arches being supposed very small.

Join AN, CN; then fince the times of descent along all cords in the same circles, drawn from one extremity of the vertical diameter, are equal; therefore the cords AN, CN, and confequently their doubles, will be describ-

ed in the fame time; but the arches AN, CN being Pendulum. fupposed very small, will therefore be nearly equal to their cords: hence the times of vibrations in these arches will be nearly equal.

PROP. II. Pendulums which are of the same length vibrate in the same time, whatever be the proportion of

their weights.

This follows from the property of gravity, which is always proportional to the quantity of matter, or to its inertia. When the vibrations of pendulums are compared, it is always understood that the pendulums describe either similar finite arcs, or arcs of evanescent magnitude, unlefs the contrary is mentioned.

PROP. III. If a pendulum vibrates in the fmall arc of a circle, the time of one vibration is to the time of a body's falling perpendicularly through half the length of the pendulum, as the circumference of a circle is to its

diameter.

Let PE (fig. 5.) be the pendulum which defcribes the arch ANC in the time of one vibration; let PN be perpendicular to the horizon, and draw the cords AC, AN; take the arc E e infinitely finall, and draw EFG, efg perpendicular to PN, or parallel to AC; describe the semicircle BGN, and draw er, gs perpendicular to PN. dicular to EG: now let t = time of descending through the diameter 2PN, or through the cord AN: Then the velocities gained by falling through 2PN, and by the pendulum's descending through the arch AE, will be as $\sqrt{2PN}$ and \sqrt{BF} ; and the space described in the time t, after the fall through 2PN, is 4PN. But the times are as the spaces divided by the velocities.

Therefore $\sqrt{\frac{4\text{PN}}{2\text{PN}}}$ or $2\sqrt{2\text{PN}}:t::\sqrt{\frac{\text{E}e}{\text{BF}}}:$ time] of deferibing $Ee = \frac{t \times Ee}{2\sqrt{2PN \times BF}}$. But in the fimilar triangles PEF, Eer, and KGF, Ggs,

As PE=PN: EF:: Ee:er=
$$\frac{\text{EF}}{\text{PN}} \times \text{Ee}$$
;

And
$$KG = KD : FG :: Gg : Gs = \frac{FG}{KD} \times Gg$$
.

But
$$er = Gs$$
; therefore $\frac{^{1}EF}{PN} \times Ee = \frac{FG}{KD} \times Gg$.

Hence E
$$e = \frac{PN \times FG}{KD \times EF} \times Gg$$
.

And by fubfituting this value of Ee in the former equation, we have the time of describing $Ee = \frac{\iota \times \text{PN} \times \text{FG} \times \text{Gg}}{2\text{KD} \times \text{EF} \times \sqrt{\text{BF} \times 2\text{PN}}}$: But by the nature of the

circle FG= VBF x FN, and EF= VPN+PF+ FN. Hence, by substitution, we obtain the time of describing

$$E e = \frac{\iota \times PN \times \sqrt{BF \times FN} \times G_g}{2KD \times \sqrt{PN + PF} \times FN \times \sqrt{BF \times 2PN}} = \frac{\iota \times \sqrt{PN} \times G_g}{2KD \times \sqrt{PN + PF} \times \sqrt{2}} = \frac{\iota \times \sqrt{2PN} \times G_g}{4KD \times \sqrt{PN + PF}} = \frac{\iota \times \sqrt{2PN} \times G_g}{2BN \times \sqrt{2PN - NF}} \times G_g. \quad \text{But NF, in its mean}$$

$$\frac{t \times \sqrt{2PN}}{3N \times \sqrt{2PN-NF}} \times G_g$$
. But NF, in its mean

quantity for all the arches G g, is nearly equal to NK; for if the semicircle described on the diameter BN, which corresponds to the whole arch AN, be divided

Fig. 4.

Fig. 3.

Pendulum. into an indefinite number of equal arches, Gg, &c. the fum of all the lines NF, will be equal to as many times NK, as there are arches in the semicircle equal to Gg;

therefore the time of describing $Ee = \frac{t \times \sqrt{2PN}}{2BN \times \sqrt{2PN} - NK}$ × Gg. Whence the time of describing the arch AED

 $\frac{1}{2BN \times \sqrt{2PN-NK}} \times BGN$; and the time of de-

feribing the whole arch ADC, or the time of one vibration, is = $\frac{t \times \sqrt{2PN}}{2BN \times \sqrt{2PN} - NK} \times 2BGN$. But

when the arch ANC is very fmall, NK vanishes, and then the time of vibration in a very small arc is

 $\frac{t \times \sqrt{2PN}}{2BN \times \sqrt{2PN}} \times 2BGN = \frac{1}{2}t \times \frac{2BGN}{BN}.$ Now if t

be the time of descent through 2PN; then since the fpaces described are as the squares of the times, $\frac{1}{2}t$ will be the time of descent throught ½PN: therefore the diameter BN is to the circumference 2BGN, as the time of falling through half the length of the pendulum is to the time of one vibration.

PROP. IV. The length of a pendulum vibrating feconds is to twice the space through which a body falls in one second, as the square of the diameter of a circle is to the square of its circumference.

Let d = diameter of a circle = 1, c = circumference= 3.14159, &c. t to the time of one vibration, and p the length of the corresponding pendulum; then by the last proposition $c:d::1'':\frac{d}{c}=$ time of falling through

half the length of the pendulum. Let s = space described by a body falling perpendicularly in the first fecond: then fince the spaces described are in the subduplicate ratio of the times of description, therefore

$$1'': \frac{d}{c}: : \sqrt{s}: \sqrt{\frac{1}{2}p}$$
. Hence $c^{3}: d^{2}: : 2s: p$.

It has been found by experiment, that in latitude $51\frac{1}{2}^{\circ}$ a body falls about 16.11 feet in the first second: hence the length of a pendulum vibrating feconds in

that latitude is $=\frac{32.22}{3.14159}|_{3} = 3$ feet 3.174 inches.

PROP. V. The times of the vibrations of two pendulums in fimilar arcs of circles are in a fubduplicate ratio of the lengths of the pendulums.

Let PN, PO (fig. 6.) be two pendulums vibrating in the fimilar arcs AB, CD; the time of a vibration of the pendulum PN is to the time of a vibration of the pendulum PO in a subduplicate ratio of PN to PO.

Since the arcs AN, CO are fimilar and fimilarly placed, the time of descent through AN will be to the time of descent through CO in the subduplicate ratio of AN to CO: but the times of descent through the arcs AN and CO are equal to half the times of vibration of the pendulums PN, PO respectively. Hence the time of vibration of the pendulum PN in the arc AB is to the time of vibration of the pendulum PO in the fimilar arc CD in the fubduplicate ratio of AN to CO: and fince the radii PN, PO are proportional to the fimilar arcs AN, Co, therefore the time of vibration of the pendulum PN will be to the time of vibration of the pendulum PO in a fubdu- Pendulum. plicate ratio of PN to PO.

If the length of a pendulum vibrating seconds be 39.174 inches, then the length of a pendulum vibra-39.174 inches, then the fength of a pendulum vibrating half feconds will be 9.793 inches. For $I'': \frac{\tau}{4}'': \frac{\tau}{4}'': \frac{\tau}{4}'': \frac{\tau}{4}'': \frac{\tau}{4}'': \frac{\tau}{4}'': \frac{\tau}{4}'': \frac{\tau}{4}': \frac{\tau}{4}': \frac{\tau}{4}: \frac{\tau$

the same time, in different places, will be as the forces of gravity.

For the velocity generated in any given time is directly as the force of gravity, and invertely as the quantity of matter. Now the matter being supposed the same in both pendulums, the velocity is as the force of gravity; and the space passed through in a given time will be as the velocity; that is, as the gravity.

Cor. Since the lengths of pendulums vibrating in the fame time in small arcs are as the gravitating forces, and as gravity increases with the latitude on account of the spheroidal figure of the earth and its rotation about its axis; hence the length of a pendulum vibrating in a given time will be variable with the latitude, and the fame pendulum will vibrate flower the nearer it is carried to the equator.

PROP. VII. The time of vibrations of pendulums of the same length, acted upon by different forces of gravity, are reciprocally as the square roots of the forces.

For when the matter is given, the velocity is as the force and time; and the space described by any given force is as the force and square of the time. Hence the lengths of pendulums are as the forces and the squares of the times of falling through them. But these times are in a given ratio to the times of vibration; whence the lengths of pendulums are as the forces and the fquares of the times of vibration. Therefore, when the lengths are given, the forces will be reciprocally as the fguare of the times, and the times of vibration reciprocally as the square roots of the forces.

Cor. Let p = length of pendulum, g = force of gravity, and t = time of vibration. Then fince p = time of vibration

$$g \times t^2$$
. Hence $g = p \times \frac{1}{t^2}$; and $t = \sqrt{p \times \frac{1}{g}}$.

That is, the forces in different places are directly as the lengths of the pendulums, and inverfely as the square roots of the times of vibration; and the times of vibration are directly as the square roots of the lengths of the pendulums, and inverfely as the square roots of the gravitating forces.

PROP. VIII. A pendulum which vibrates in the arch of a cycloid describes the greatest and least vibrations in the same time.

This property is demonstrated only on a supposition that the whole mass of the pendulum is concentrated in a point: but this cannot take place in any really vibrating body; and when the pendulum is of finite magnitude, there is no point given in position which determines the length of the pendulum; on the contrary the centre of oscillation will not occupy the same place in the given body, when describing different parts of the tract it moves through, but will continually be moved in respect of the pendulum itself during its vibration. It may, however, be observed, that Huyghens, aware that Pendulum a pendulum ball suspended at the end of a thread vibrating between cycloids, would not describe a cycloid with its center of oscillation, gave a very beautiful and fimple method of fulpenfion, which fecured its vibrations in that curve. Harrison, whose authority is next, insists on the advantage of wide vibrations, and in his own clocks, he always used cycloidal checks. This circumstance has prevented any general determination of the time of vibration in a cycloidal arc, except in the imaginary case referred to.

There are many other obstacles which concur in rendering the application of this curve to the vibration of pendulums defigned for the measures of time the source of errors far greater than those which by its peculiar property it is intended to obviate; and it is now wholly

disused in practice.

Although the times of vibration of a pendulum in different arches be nearly equal, yet from what has been faid, it will appear, that if the ratio of the least of these arches to the greatest be considerable, the vibrations will be formed in different times; and the difference, though fmall, will become fensible in the course of one or more days. In clocks used for aftronomical purposes, it will therefore be necessary to observe the arc of vibration; which if different from that deferibed by the pendulum when the clock keeps time, there a correction must be applied to the time shown by the clock. This correction, expressed in seconds of time, will be equal to the half of three times the difference of the square of the given arc, and of that of the arc described by the pendulum when the clock keeps time, thefe arcs being expressed in degrees; and so much will the clock gain or lose according as the first of these arches is less or greater than the fecond.

Thus, if a clock keep time when the pendulum vibrates in the arch of 30, it will lose 101 feeonds daily

in an arch of 4 degrees.

For $4^2-3^2 \times \frac{3}{2} = 7 \times \frac{3}{2} = 10^{\frac{7}{2}}$ feconds.

The length of a pendulum rod increases with heat; and the quantity of expansion answering to any given degree of heat is experimentally found by means of a pyrometer +; but the degree of heat at any given time is shown by a thermometer: hence that instrument should be placed within the clock case at a height nearly equal to that of the middle of the pendulum; and its height, for this purpose, should be examined at least onee a day. Now by a table conftructed to exhibit the daily quantity of acceleration or retardation of the clock answering to every probable height of the thermometer, the corresponding correction may be obtained. It is also necessary to observe, that the mean height of the thermometer during the interval ought to be used. In Six's thermometer this height may be easily obtained; but in thermometers of the common construction it will be more difficult to find this mean.

It had been found, by repeated experiments, that a brafs rod equal in length to a fecond pendulum will expand or contract too part of an inch by a change of temperature of one degree in Fahrenheit's thermometer; and fince the times of vibration are in a subduplicate ratio of the lengths of the pendulum, hence an expantion or contraction of Troop part of an inch will answer pearly to one second daily: therefore a change of one degree in the thermometer will occasion a difference in the rate of the clock equal to one fecond daily. VOL. XVI. Part I.

Whence, if the clock be fo adjusted as to keep time Pendulum. when the thermometer is at 55°, it will lofe 10 feconds daily when the thermometer is at 65°, and gain as much when it is at 45°.

Hence the daily variation of the rate of the clock from fuminer to winter will be very confiderable. It is true indeed that most pendulums have a nut or regulator at the lower end, by which the bob may be raifed or lowered a determinate quantity; and therefore, while the height of the thermometer is the fame, the rate of the clock will be uniform. But fince the state of the weather is ever variable, and as it is impossible to be raifing or lowering the bob of the pendulum at every change of the thermometer, therefore the correction formerly mentioned is to be applied. This correction, however, is in some measure liable to a small degree of uncertainty; and in order to avoid it altogether, feveral contrivances have been proposed by constructing a pendulum of different materials, and fo disposing them that their effects may be in opposite directions, and thereby counterbalance each other; and by this means the pen-

dulum will continue of the fame length.

Mercurial PENDULUM. The first of these inventions is that by the celebrated Mr George Graham. In Mercurial this, the rod of the pendulum is a hollow tube, into which Pendulum. a sufficient quantity of mercury is introduced. Mr Graham first used a glass tube, and the clock to which it was applied was placed in the most exposed part of the house. It was kept constantly going, without having the hands or pendulum altered, from the 9th of June 1722 to the 14th of October 1725, and its rate was de-Philof. termined by transits of fixed stars. Another clock Trans. made with extraordinary care, having a pendulum about 1726. 60 pounds weight, and not vibrating above one degree and a half from the perpendicular, was placed befide the former, in order the more readily to compare them with each other, and that they might both be equally exposed. The result of all the observations was this, that the irregularity of the clock with the quickfilver pendulum exceeded not, when greatest, a fixth part of that of the other clock with the common pendulum, but for the greatest part of the year not above an eighth or ninth part; and even this quantity would have been leffened, had the column of mercury been a little shorter: for it differed a little the contrary way from the other clock, going faster with heat and flower with cold. To confirm this experiment more, about the beginning of July 1723 Mr Graham took off the heavy pendulum from the other clock, and made another with mercury, but with this difference, that instead of a glass tube he used a brass one, and varnished the infide to secure it from being injured by the mercury. This pendulum he used afterwards, and found it about the same degree of exactness as the other.

The Gridiron PENDULUM is an ingenious contri-Gridiron vance for the fame purpose. Instead of one rod, this Pendulum. pendulum is composed of any convenient number of rods, as five, feven, or nine; being so connected, that the effect of one fet of them counteracts that of the other set; and therefore, being properly adjusted to each other, the centres of fuspension and oscillation will always be equidiftant. Fig. 7. represents a gridiron Fig. 7. penduluni composed of nine rods, steel and brass alternately. The two outer rods AB, CD, which are of steel, are fastened to the cross pieces A.C, BD by

STRY In-

rometer,

CHEMI-

Pendulum means of pins. The next two rods, EF, GH, are of brass, and are fastened to the lower bar BD, and to the fecond upper bar EG. The two following rods are of fteel, and are fastened to the cross bars EG and IK. The two rods adjacent to the central rod being of brafs, are fastened to the cross pieces IK and LM; and the central rod, to which the ball of the pendulum is attached, is suspended from the cross piece LM, and passes freely through a perforation in each of the cross bars IK, BD. From this disposition of the rods, it is evident that, by the expansion of the extreme rods, the cross piece BD, and the two rods attached to it, will descend a but since these rods are expanded by the same heat, the cross piece EG will consequently be raised, and therefore also the two next rods; but because these rods are also expanded, the cross bar IK will descend; and by the expansion of the two next rods, the piece LM will be raifed a quantity fufficient to counteract the expansion of the central rod. Whence it is obvious, that the effect of the steel rods is to increase the length of the pendulum in hot weather, and to diminish it in cold weather, and that the brass reds have a contrary effect upon the pendulum. The effect of the brafs rods must, however, be equivalent not only to that of the steel rods, but also to the part above the frame and fpring, which connects it with the cock, and to that part between the lower part of the frame and the centre of the ball.

M. Thiout.

Another excellent contrivance for the same purpose is described in a French author on clock-making. It was used in the north of England by an ingenious artist about 40 years ago. This invention is as follows: A bar of the fame metal with the rod of the pendulum, and of the fame dimensions, is placed against the back part of the clock case: from the top of this a part projects, to which the upper part of the pendulum is connected by two fine pliable chains or filken strings, which just below pass between two plates of brais, whose lower edges will always terminate the length of the pendulum at the upper end. These plates are supported on a pedestal fixed to the back of the case. The bar rests upon an immoveable base at the lower part of the case; and is inserted into a groove, by which means it is always retained in the fame position. From this construction, it is evident that the extension or contraction of this bar, and of the rod of the pendulum, will be equal, and in contrary directions. fuppose the rod of the pendulum to be expanded any given quantity by heat; then, as the lower end of the bar rests upon a fixed point, the bar will be expanded upwards, and raise the upper end of the pendulum just as much as its length was increased; and hence its length below the plates will be the same as before.

Of this pendulum, fomewhat improved by Mr Crofthwaite watch and clock maker, Dublin, we have the following description in the Transactions of the Royal Irish Academy, 1788.—" A and B (fig. 8.) are two rods of steel forged out of the same bar, at the same time, of the same temper, and in every respect similar. On the top of B is formed a gibbet C; this rod is firmly supported by a steel bracket D, fixed on a large piece of marble E, firmly set into the wall F, and having liberty to move freely upwards between crofs staples of brass, 1, 2, 3, 4, which touch only in a point in front and rear (the staples having been carefully

formed for that purpose); to the other rod is firmly Pendulum. fixed by its centre the lens G, of 24 pounds weight, although it should in strictness be a little below it. This pendulum is suspended by a short steel spring on the gibbet at C; all which is entirely independent of the clock. To the back of the clock plate I are firmly screwed two cheeks nearly cycloidal at K, exactly in a line with the centre of the verge L. The maintaining power is applied by a cylindrical fleel flud, in the usual way of regulators, at M. Now, it is very evident, that any expansion or contraction that takes place in either of these exactly similar rods, is instantly counteracted by the other; whereas in all compensation pendulums composed of different materials, however just calculation may seem to be, that can never be the case, as not only different metals, but also different bars of the fame metal, that are not manufactured at the fame time, and exactly in the fame manner, are found by a good pyrometer to differ materially in their degrees of expansion and contraction, a very small change affecting one and not the other."

The expansion or contraction of straight grained fir Fir Penduwood lengthwife, by change of temperature, is fo small, lum. that it is found to make very good pendulum rods. The wood called fapadillo is faid to be fill better. There is good reason to believe, that the previous baking, vamishing, gilding, or foaking of these woods in any melted matter, only tends to impair the property that renders them valuable. They should be simply rubbed on the outfide with wax and a cloth. In pendulums of this construction the error is greatly dimi-

nished, but not taken away.

Angular PENDULUM, is formed of two pieces of legs Angular like a fector, and is suspended by the angular point. Pendulum This pendulum was invented with a view to diminish the length of the common pendulum, but at the same time to preserve or even increase the time of vibration. In this pendulum, the time of vibration depends on the length of the legs, and on the angle contained between them conjointly, the duration of the time of vibration increasing with the angle. Hence a pendulum of this construction may be made to oscillate in any given time. At the lower extremity of each leg of the pendulum is a ball or bob as usual. It may be easily shown, that in this kind of a pendulum, the squares of the times of vibration are as the secants of half the angle contained by the legs: hence if a pendulum of this construction vibrates half seconds when its legs are close, it will vibrate whole seconds when the legs are opened, fo as to contain an angle equal to 1510 21/2.

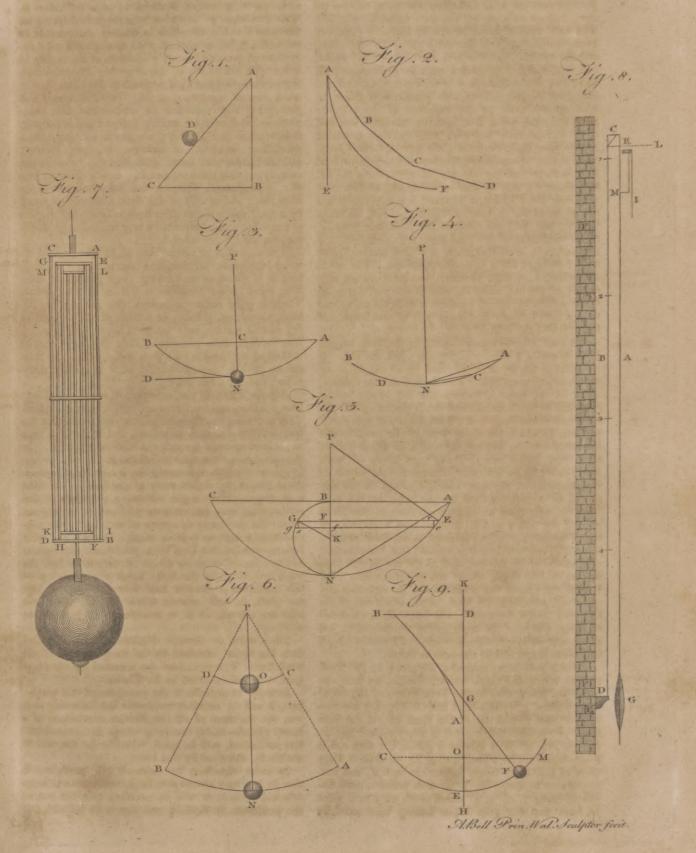
The Conical or Circular PENDULUM, is fo called Conical or from the figure described by the string or ball of the Pendulum. pendulum. This pendulum was invented by Mr Huy-

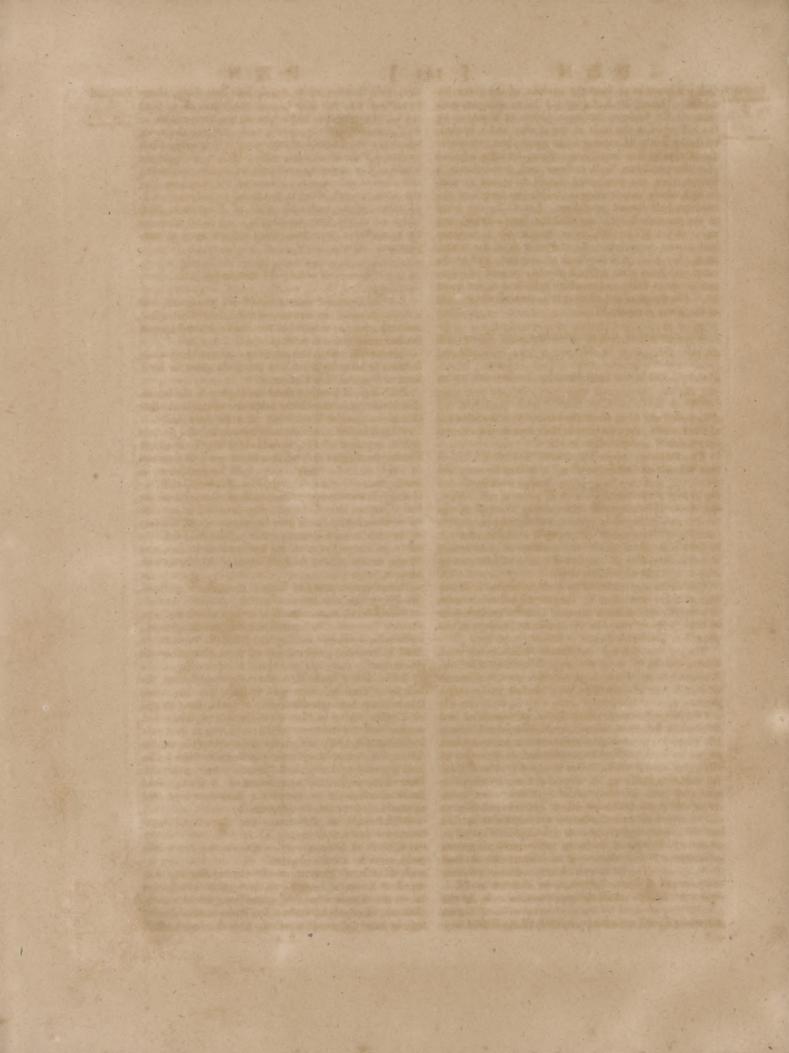
gens, and is also claimed by Dr Hooke.

In order to understand the principles of this pendulum, it will be necessary to premise the following lemma, viz. the times of all the circular revolutions of a heavy globular body, revolving within an inverted hollow paraboloid, will be equal, whatever be the radii of the circle, described by that body.

In order therefore, to construct the pendulum so that its ball may always describe its revolutions in a paraboloid furface, it will be necessary that the rod of the pendulum be flexible, and that it be suspended in

Fig. 8.





Pendulum. fuch a manner as to form the evolute of the given parabola. Hence, let KH (fig. 9.) be an axis perpendicular to the horizon, having a pinion at K moved by the last wheel in the train of the clock; and a hardened steel point at H moving in an agate pivot, to render the motion as free as possible. Now, let it be required that the pendulum shall perform each revolution in a fecond, then the paraboloid furface it moves in must be fuch whose latus rectum is double the length of the common half fecond pendulum. Let O be the focus of the parabola MEC, and MC the iatus rectum; and make AE=MO=1MC=the length of a common half second pendulum. At the point A of the verge, let a thin plate AB be fixed at one end, and at the other end B let it be fastened to a bar or arm BD perpendicular to DH, and to which it is fixed at the point D. The figure of the plate AB is that of the evolute of the given parabola MEC.

> The equation of this evolute, being also that of the femicubical parabola, is $\frac{27}{16}p x^3 = y^3$.—Let $\frac{27}{16}p = P$; then $P x^2 = y^3$, and in the focus P = 2y. In this case $2x^3 = y^3$ $y^3 = \frac{7}{4}P^2$: hence $x^2 = \frac{7}{8}P^2$, and $x = P\sqrt{\frac{7}{8}} = \frac{27}{16}\rho\sqrt{\frac{7}{8}}$ = the distance of the focus from the vertex A .- By assuming the value of w, the ordinates of the curve may be found; and hence it may be eafily drawn.

> The string of the pendulum must be of such a length that when one end is fixed at B, it may lie over the plate AB, and then hang perpendicular from it, fo that the centre of the bob may be at E when at rest. Now, the verge KH being put into motion, the ball of the pendulum will begin to gyrate, and thereby conceive a centrifugal force which will carry it out from the axis to some point F, where it will circulate seconds or half seconds, according as the line AE is 9.8 inches, or $2\frac{\tau}{4}$ inches, and AB answerable to it.

> One advantage possessed by a clock having a pendulum of this construction is, that the second hand moves in a regular and uniform manner, without being subject to those jerks or starts as in common clocks; and the pendulum is entirely filent.

> Theory has pointed out feveral other pendulums, known by the name of Elliptic, Horizontal, Rotulary, &c. pendulums. These, however, have not as yet attained that degree of perfection as to supplant the common

> pendulum. Observing that both the gridiron and mercurial pendulums are subject to many inconveniences and errors, Mr Kater has attempted to construct one possessing such properties in respect of cheapness and accuracy as he thinks might justly give it the preference to any other. As wood possesses a less degree of expansibility by means of heat than any other substance; on this account, if it could be rendered quite impervious to moifure, it would be the best of all substances for the rod of a pendulum; and as it also appears that zinc, above all other metals, possesses the greatest degree of expansibility by means of heat, he considered it the best fubstance which could be employed for a compensation. His next object was to institute a set of delicate experiments, in order to ascertain the precise degree of the expansibility of wood by the application of heat, and he discovered by the use of a pyrometer, that a rod of very

dry, well feafoned white wood, four feet long, three Pendulum fourths of an inch broad, and one-fourth of an inch thick, when exposed in an oven to the temperature of 235°, had contracted. Being again put into the oven, where it was permitted to remain for a long time, till it became a little discoloured, with a view to dissipate the whole of the moisture, it was placed in the pyrometer, and allowed to remain till it reached the temperature of the room, or 49°, when it was found to have contracted 0.0205 of an inch with 186° of Fahrenheit, from which we obtain by proportion 0.0049 of an inch for the expansion of one foot with 1800 difference of temperature. Thus,

$$\frac{0.0205 \times 180}{186} = \frac{0.0198}{4} = 0.0049.$$

But for a general description of this pendulum, and a full account of the manner in which it is constructed, we must refer our readers to the inventor's own paper, Nichol. Jour. vol. xx. p. 214.

Besides the use of the pendulum in measuring time. it has also been suggested as a proper standard for meafures of length. See MEASURE.

PENEA, a genus of plants belonging to the tetrandria class, and in the natural method ranking with those of which the order is doubtful. See BOTANY Index.

PENELOPE, in Fabulous History, the daughter of Icarus, married Ulysses, by whom she had Telemachus. During the absence of Ulysses, who was gone to the siege of Troy, and who staid 20 years from his dominions, feveral princes charmed with Penelope's beauty, told her that Ulyffes was dead, offered to marry her, and preffed her to declare in their favour. She promifed compliance on condition they would give her time to finish a piece of tapettry the was weaving; but at the same time she undid in the night what she had done in the day, and by this artifice eluded their importunity till Ulyffes's re-

PENELOPE, a genus of birds of the order of gallina. See ORNITHOLOGY Index.

PENESTICA, (Antonine), a town of the Helvetii, fituated between the Lacus Laufonius and Salodurum; called Petenisca by Peutinger. Thought now to be Biel, (Cluverius); the capital of a small territory in Swifferland.

PENEUS, (Strabo); a river running through the middle of Theffaly, from west to east, into the Sinus Thermaicus, between Olympus and Offa, near Tempe of Theffaly, rifing in Mount Pindus, (Ovid, Val. Flac-

PENETRALE, a facred room or chapel in private houses, which was set apart for the worship of the household gods among the ancient Romans. In temples also there were penetralia, or apartments of distinguished fanctity, where the images of the gods were kept, and certain folemn ceremonies performed.

PENGUIN, or PINGUIN. See PENGUIN, ORNI-THOLOGY Index.

PENICILLUS, among furgeons, is used for a tent to be put into wounds or ulcers.

PENIEL, or PENUEL, a city beyond Jordan, near the ford or brook Jabbok. This was the occasion of its name. Jacob, upon his return from Mesopotamia, (Gen. xxxii. 24, &c.) made a stop at the brook Jabbok: and very early the next morning, after he had fent all

Peninnah the people before, he remained alone, and behold an Penitence. to appear. Then the angel faid to Jacob, Let me go, for the morning begins to appear. Jacob answered, I fhall not let you go from me till you have given me your blefling. The angel bleffed him then in the same place, which Jacob thence called Peniel, faying, I have feen God face to face, yet continue alive.

In following ages the Ifraelites built a city in this place, which was given to the tribe of Gad. Gideon, returning from the pursuit of the Midianites, overthrew the tower of Peniel, (Judges viii. 17), and put all the inhabitants of the city to death, for having refused fustenance to him and his people, and having answered him in a very infulting manner. Jeroboam the fon of Nebat rebuilt the city of Peniel, (1 King xii. 25.). Josephus says,

that this prince there built himself a palace.

PENINNAH, the fecond wife of Elkanah, the father of Samuel. Peninnah had several children, (I Sam. i. 2, 3, &c.), but Hannah, who afterwards was mother of Samuel, was for a great while barren: Peninnah, inflead of giving the glory to God, the author of fruitfulnefs, was elevated with pride, and infulted her rival Hannah. But the Lord having vifited Hannah, Peninnah was thereupon humbled: and fome interpreters think, that God took away her children from her, or at least that she had no more after this time, according to the words of the fong of Hannah, (1 Sam. ii. 5.), "The barren hath born feven, and she that hath many children is waxed feeble."

PENINSULA, in Geography, a portion or extent of land joining to the continent by a narrow neck or isthmus, the rest being encompassed with water.

PENIS, in Anatomy. See ANATOMY Index.

PENITENCE, is fometimes used for a state of repentance, and fometimes for the act of repenting. See REPENTANCE. It is also used for a discipline, or punishment attending repentance; more usually called penance. It also gives title to several religious orders, confisting either of converted debauchees, and reformed proftitutes, or of persons who devote themselves to the office of reclaiming them. Of this latter kind is the

Order of PENITENCE of St Magdalen, established about the year 1272 by one Bernard, a citizen of Marfeilles, who devoted himfelf to the work of converting the courtezans of that city. Bernard was feconded by feveral others; who, forming a kind of fociety, were at length erected into a religious order by Pope Nicholas III. under the rule of St Augustine. F. Gesnay says, that they also made a religious order of the penitents, or women they converted, giving them the fame rules and

observances which they themselves kept.

Congregation of PENITENCE of St Magdalen at Paris, owed its rife to the preaching of F. Tifferan, a Franciscan, who converted a vast number of courtezans about the year 1492. Louis duke of Orleans gave them his house for a monastery; or rather, as appears by their conflitutions, Charles VIII. gave them the hotel called Bochaigne, whence they were removed to St George's chapel, in 1572. By virtue of a brief of Pope Alexander, Simon bishop of Paris, in 1497, drew up for them a body of statutes, and gave them the rule of St Augustine. It was necessary, before a woman could be admitted, that she had first committed the fin of the flesh. None were admitted who were above 35 years of age.

Till the beginning of the last century, none but peni- Peniterts tents were admitted; but fince its reformation by Mary Alvequin, in 1616, none have been admitted but maids, who, however, still retain the ancient name penitents.

Penitentiary.

PENITENTS, an appellation given to certain fraternities of penitents diffinguished by the different shape and colour of their habits. These are secular societies, who have their rules, statutes, and churches, and make public processions under their particular crosses or banners. Of these there are more than a hundred, the most confiderable of which are as follow: the white penitents, of which there are several different forts at Rome, the most ancient of which was conflicted in 1264; the brethren of this fraternity every year give portions to a certain number of young girls, in order to their being married: their habit is a kind of white fackloth, and on the shoulder is a circle, in the middle of which is a red and white crofs. Black penitents, the most considerable of which are the brethren of mercy, instituted in 1488 by fome Florentines, in order to affift criminals during their imprisonment, and at the time of their death: on the day of execution, they walk in procession before them. finging the feven penitential pfalms and the litanies; and after they are dead, they take them down from the gibbet and bury them; their habit is black fackcloth, There are others whose business it is to bury such perfons as are found dead in the streets: these wear a death's head on one side of their habit. There are alfo blue, gray, red, green, and violet penitents; all of whom are remarkable for little else besides the different colours of their habits.

Mabillon tells us, that at Turin there are a fet of penitents kept in pay to walk through the streets in procession, and cut their shoulders with whips, &c.

PENITENTS, or Converts of the Name of Jesus, a congregation of religious at Seville in Spain, confifting of women who had led a licentious life, founded in 1550. This monastery is divided into three quarters: one for professed religious; another for novices; a third for those who are under correction. When these last give figns of a real repentance, they are removed into the quarter of the novices, where, if they do not behave themselves. well, they are remanded to their correction. They obferve the rule of St Augustine.

PENITENTS of Orvieto, are an order of nuns, inftituted by Antony Simoncelli, a gentleman of Orvieto in Italy. The monastery he built was at first defigned for the reception of poor girls, abandoned by their parents, and in danger of losing their virtue. In 1662 it was erected into a monastery, for the reception of such as, having abandoned themselves to impurity, were willing to take up, and confecrate themselves to God by solemn vows. Their rule is that of the Carmelites.

These religious have this in peculiar, that they undergo no noviciate. All required is, that they continue a few months in the monastery in a secular habit; after which they are admitted to the vows.

PENITENTIAL, an ecclefiaftical book, retained among the Romanists; in which is prescribed what relates to the imposition of penance and the reconciliation of penitents. See PENANCE.

There are various penitentials, as the Roman penitential, that of the venerable Bede, that of Pope Gregory III. &c.

PENITENTIARY, in the ancient Christian church,

a name given to certain profbyters or priefts, appointed Penitenin every church to receive the private confessions of the people, in order to facilitate public discipline, by ac-Penn. quainting them what fins were to be expiated by public penance, and to appoint private penance for fuch private crimes as were not proper to be publicly censured.

PENITENTIARY, at the court of Rome, is an office in which are examined and delivered out the fecret bulls, graces, or dispensations relating to cases of conscience,

confessions, &c.

PENITENTIARY, is also an officer, in some cathedrals, vested with power from the bishop to absolve, in cases referved to him. The pope has at prefent his grand penitentiary, who is a cardinal, and the chief of the other penitentiary priests established in the church of Rome, who confult him in all difficult cases. He prefides in the penitentiary, dispatches dispensations, absolutions, &c. and has under him a regent and 24 proc-

tors, or advocates of the facred penitentiary.

PENMAN-Mawr, a mountain in Caernarvonshire, 1,00 feet high. It hangs perpendicularly over the fea, at fo vait a height, that few spectators are able to look down the dreadful steep. On the fide which is next the fea, there is a road cut out of the fide of the rock, about fix or feven feet wide, which winds up a steep ascent, and used to be defended on one side only by a slight wall, in some parts about a yard high, and in others by only a bank, that scarce rose a foot above the road. The fea was feen dashing its waves 40 fathoms below, with the mountain rifing as much above the traveller's head. This dangerous road was a few years ago fecured by a wall breast-high, to the building of which the city of Dublin largely contributed, it being in the high road to Holyhead.

PENN, WILLIAM, an eminent writer among the Quakers, and the planter and legislator of Penfylvania, was the fon of Sir William Penn, and was born at London in 1644. In 1660, he was entered a gentleman of Christ-Church, in Oxford; but having before received an impression from the preaching of one Thomas Loe a Quaker, withdrew with some other students from the national worthip, and held private meetings, where they preached and prayed amongst themselves. This giving great offence to the heads of the college, Mr Penn, though but 16 years of age, was fined for nonconformity; and continuing his religious exercises, was at length expelled his college. Upon his return home, he was, on the same account, treated with great severity by his father, who at last turned him out of doors; but his refentment afterwards abating, he fent him to France in company with some persons of quality; where he continued a confiderable time, and returned not only well skilled in the French language, but a polite and accomplished gentleman. About the year 1666, his father committed to his care a confiderable estate in Ireland. Being found in one of the Quakers meetings in Cork, he, with many others, was thrown into prison; but on his writing to the earl of Orrery, was foon difcharged. However, his father being informed he still adhered to his opinions, fent for him to England and finding him inflexible to all his arguments, turned him out of doors a fecond time. About the year 1668, he became a public preacher among the Quakers; and that year was committed close prisoner to the Tower, where he wrote several treatises. Being discharged after seven months imprisonment, he went to Ireland, where he also Penn. preached amongst the Quakers. Returning to England, he was in 1670 committed to Newgate, for preaching in Gracechurch-street meeting-house, London; but being tried at the fessions-house of the Old Bailey. he was acquitted. In September the same year, his father died; and being perfectly reconciled to him, left him both his paternal bleffing and a good effate. But his perfecutions were not yet at an end; for in 1671 he was committed to Newgate for preaching at a meeting in Wheeler street, London; and during his imprisonment, which continued fix months, he also wrote feveral treatises. After his discharge, he went into Holland and Germany; and in the beginning of the year 1672, married and fettled with his family at Rickmanfworth in Hertfordshire. The same year he published several pieces; and particularly one against Reeve and Muggleton. In 1677, he again travelled into Holland and Germany in order to propagate his opinions; and had frequent converfations with the prince's Elizabeth, daughter to the queen of Bohemia, and fifter to the princess Sophia, mother to King Geo. I. In 1681, King Charles II. in confideration of the scrvices of Mr Penn's father, and feveral debts due to him from the crown at the time of his decease, granted Mr Penn and his heirs the province lying on the west side of the river Delaware in North America, which from thence obtained the name of Pen-Jylvania. Upon this Mr Penn published a brief account of that province, with the king's patent; and proposing an eafy purchase of lands, and good terms of settlement for fuch as were inclined to remove thither, many went over. These having made and improved their plantations to good advantage, the governor, in order to fecure the planters from the native Indians, appointed commissioners to purchase the land he had received from the king of the native Indians, and concluded a peace with them. The city of Philadelphia was planned and built; and he himself drew up the fundamental constitutions of Pensylvania in 24 articles. In 681, he was elected a member of the Royal Society; and the next year he embarked for Penfylvania, where he continued about two years, and returned to England in August 1684. Upon the accession of King James to the throne, he was taken into a great degree of favour with his majesty, which exposed him to the imputation of being a Papist; but from which he fully vindicated himself. However, upon the Revolution, he was examined before the council in 1688, and obliged to give fecurity for his appearance on the first day of next term, which was afterwards continued. He was feveral times discharged and examined; and at length warrants being issued out against him, he was obliged to conceal himfelf for two or three years. Being at last permitted to appear before the king and council, he represented his innocence so effectually that he was acquitted. In August 1699, he, with his wife and family, embarked for Penfylvania; whence he returned in 1701, in order to vindicate his proprietary right, which had been attacked during his absence. Upon Queen Anne's accession to the crown, he was in great favour with her, and was often at court. But, in 1707, he was involved in a law-fuit with the executors of a person who had been formerly his fleward; and, though many thought him aggrieved, the court of chancery did not think proper to relieve him; upon which account he was obliged to live

within the rules of the Fleet for feveral months, till the Pennant. matter in dispute was accommodated. He died in 1718.

At one period of his life, Penn lodged in a house in Norfolk-street in the Strand. In the entrance to it he had a peeping-hole, through which he could fee any person that came to him. A creditor one day sent in his name, and having been made to wait more than a reafonable time, he knocked for the servant, whom he asked, "Will not thy master see me?" "Friend (answered the fervant) he has feen thee, but he does not like

Mr Penn's friendly and pacific manner of treating the Indians produced in them an extraordinary love for him and his people; fo that they have maintained a perfect amity with the English in Pensylvania ever since. He was the greatest bulwark of the Quakers; in whose defence he wrote numberless pieces. Resides the above works, he wrote a great number of others; the most esteemed of which are, 1. His Primitive Christianity revived. 2. His defence of a paper, intitled Gofpel Truths, against the Exceptions of the Bishop of Cork. 3. His Perfuafive to Moderation. 4. His Good Advice to the Church of England, Roman Catholic, and Protestant Difference. 5. The Sandy Foundation shaken. 6. No Cross, no Crown. 7. The great Case of Liberty of Conscience debated. 8. The Christian Quaker and his Testimony stated and vindicated. 9. A Discourse of the general Rule of Faith and Practice, and Judge of Controversy. 10. England's Present Interest considered.
11. An Address to Protestants. 12. His Resections and Maxims. 13. His Advice to his Children. 14. His Rife and Progress of the People called Quakers. 15. A Treatise on Oaths. Most of these have passed several editions, some of them many. The letters between William Penn and Dr Tillotson, and William Penn and William Popple, Efq. together with Penn's letters to the princess Elizabeth of the Rhine, and the countess of Hornes, as also one to his wife on his going to Penfylvania, are inferted in his works, which were first collected and published in 2 vols. folio; and the parts fince felected and abridged into I vol. folio, are very much

and deservedly admired for the good sense they contain.

PENNANT, THOMAS, Esq. a celebrated naturalist,
was born in Flintshire, about the year 1726. His family had their residence in that country for several hundred years; and he informs us himself, that he acquired the rudiments of his education at Wrexham, from whence he was fent to Fulham. Not long after this he went to the university of Oxford, where his progress in classical knowledge was very considerable; after which he turned his attention to the study of jurisprudence; but it is no where faid that he ever followed the

law as a profession.

We are informed that his taste for natural history, for his knowledge of which he afterwards became so conspicuous, was first excited by the perusal of Willoughby's Ornithology, a copy of which had been fent him in a present. He began his travels at home, which was certainly the most proper step, to acquire a knowledge of the manners, curiofities, and productions of his native country, before he attempted to delineate those of any other nation. He then visited the continent, where he acquired additional knowledge respecting his most favourite studies, and became acquainted with some of the most celebrated literary characters which that period

produced. When he returned home he married and had Pennant. two children; but he was 37 years of age before he gained possession of the family estate, after which he took up

his refidence at Downing.

On the death of his wife he fet out again for the continent, where he became acquainted with Voltaire, Buffon, Pallas, and other eminent characters. Being an author as early as the year 1750 (then only 24 years of age), he had acquired a confiderable degree of reputation in that capacity, by the time he became acquainted with the forementioned philosophers. His reputation as a naturalist was established by his British Zoology in four vols. 4to, and still farther increased by his epistolary correspondence with so great a man as Linnæus. He undertook a tour to Cornwall at an early period of life, and also felt an irrefistible propensity to survey the works of nature in the northern parts of the kingdom. For this purpose he set out for Scotland in 1771, and published an amusing account of his tour in three vols. 4to. which was destined to receive such a share of public favour as to pass through several editions. His Welch tour was published in 1778, and his journey from Chester to London in 1782, in one volume 4to. About 1784 came out his Arctic Zoology, a work which was very much efteemed, both in his own, and in many other countries. He also gave the world a natural history of the parishes of Holywell and Downing, within the latter of which he had refided for more than 50 years. Not long before his death appeared his View of Hindostan, in two vols. 4to, to undertake which it seems he had folicitations from private friends, as well as the wishes of persons entirely unknown to him, which were expressed in the public prints. This was unquestionably a very bold attempt in a man who was turned of 70, a period at which the faculties of the mind must certainly be impaired, especially when exerted with vigour for fuch a number of years before. Notwithstanding his great age, however, the work is executed in an able manner, bearing a strong resemblance to the introduction of his Arctic Zoology.

He also published a letter on the earthquake which was felt at Downing in Flintshire, in the year 1753; another which was inferted in the Philosophical Transactions in 1756; his Synopsis of Quadrupeds in 1771; a pamphlet on the militia; a paper on the turkey, and

a miscellaneous volume.

Almost every species of literary honour was conferred upon him; for he was complimented with the degree of L L. D. by the university in which he was educated; he was also fellow of the Royal Society, and a member of the Society of Antiquaries; a fellow of the Royal Society of Upfal in Sweden; a member of the American Philosophical Society; an honorary member of the Anglo-

Linnæan Society, &c. &c.

He was enabled to exhibit the greatest hospitality at his table, in consequence of the ample fortune which was left him at his father's decease, and he gave the profits arifing from the fale of feveral publications to charitable endowments. By his generous patronage a number of engravers met with great encouragement, and he contributed not a little to the promotion of the fine arts. About the age of 50 he married for the second time, a Miss Mostyn, fister of his neighbour, the late Sir Roger Mostyn of Flintshire. The concluding part of his life was cheerful, and it may be affirmed that he scarcely

Downing in 1798, and in the 72d year of his age.

He inherited from nature a fliong and vigorous conflitation; his countenance was open and intelligent; this difficultion active and cheerful; and his vivacity, both in writing and conversation, made him perpetually entertaining. His heart was kind and benevolent, and in the relations of domestic life his conduct was highly worthy of initation. The distresses in which his poor neighbours were at any time involved gave him unfeigned uneafiness, and he endeavoured to relieve them by every means in his power, He was possessed of candoor, and free from common prejudices, a truth fully evinced in all his publications. The people of Scotland were proud to confess, that he was the first English traveller who had fairly represented their country in its favourable, as well as in its less pleating appearances. His ftyle is lively, and fitted to convey the ideas which he intended to express, but it is not always correct. In zoology his arrangement is judicious, and his descriptions characteristic. If we discover several traces of vanity in those works which he published near the close of life, it ought to be remembered that it is the vanity of an old man, which is feldom difagreeable; and it is also the vanity of one who in the meridian of life gave the world fuch fruits of his labours as will be justly admired in all succeeding ages, while a taste for polite and valuable literature is cheriflied among men.

PENNATULA, or SEA-PEN, a genus of animals belonging to the order zoophyta. See HELMINTHOLOGY

Index.

PENNI, GIOVANNI FRANCISCO, born at Florence in 1488, was the disciple of Raphael, who observing his genius and integrity, intrusted his domestic concerns entirely to his management; by which means he got the appellation of il fatore, or the "fleward," which he retained ever after. The genius of Penni was univerfal; but his greatest pleasure was in painting landscapes and buildings: he was an excellent defigner, and coloured extremely well in oil, distemper, and fresco. He painted portraits in an exquisite style; and had such happy natural talents, that Raphael left him heir to his fortune in partnership with Julio Romano his fellowdisciple. After Raphael's death, Penni painted many pictures at Rome, particularly in the palace of Chigi, To exactly in the style of his master, that they might not undefervedly have been imputed to him: he finithed, in conjunction with Julio and Pierino del Vaga, the celebrated defigns of the battles of Constantine, and others, which Raphael had left imperfect; but differing with them about a copy of the transfiguration, which the pope intended for the king of France, they feparated. Penni went to Naples; but the air of that country disagreeing with his constitution, he died soon after in 1528. He had a brother called Lucca Penni, who worked at Genoa and other parts of Italy in conjunction with Pierino del Vaga, who married his fifter; he went thence to England, where he worked for Henry VIII. and for feveral merchants; was employed by Francis I. at Fontainbleau; but at last quitted the pencil, and devoted himfelf to engraving.

PENNY, or PENY, in commerce, an ancient English coin, which had formerly confiderable currency; but is now generally dwindled into an imaginary money, or

Pennant felt the advances of old age. He died at his feat at money of account. Camden derives the word from the Penny Latin pecunia, "money."

The Ancient English penny, penig, or pening, was the first filver coin struck in England; nay, and the only one current among our Saxon ancestors: as is agreed by Camden, Spelman, Dr Hicks, &cc.

The penny was equal in weight to our three-pence; five of them made one shilling, or scilling Saxon; 30

a mark or mancuse, equal to 7s. 6d.

Till the time of King Edw. I. the penny was struck with a cross, so deeply indented in it, that it might be easily broke, and parted, on occasion, into two parts, thence called half-pennies; or into four, thence called fourthings or farthings .- But that prince coined it without indenture, in lieu of which, he first struck round halfpence and farthings.

He also reduced the weight of the penny to a standard; ordering that it should weigh 32 grains of wheat, taken out of the middle of the car .- This penny was called the penny flerling .- Twenty of these pence were to weigh an ounce; whence the penny became a weight as well as a coin. See STERLING and PENNY-

Weight.

The penny sterling was long disused as a coin; and was scarce known, but as a money of account, containing the twelfth part of a shilling; but of late years it has been introduced into the British current coin.

PENNY, in ancient statutes, &c. is used for all silver money. And hence the ward-penny, aver-penny, hund-

red-penny, tithing-penny, and brothal-penny.

PENNY-Weight, a Troy weight, containing twentyfour grains; each grain weighing a grain of wheat gathered out of the middle of the ear, well dried. The name took its rife hence, that this was anciently the weight of one of our ancient filver pennies. See PENNY.

Twenty of these penny-weights make an ounce

PENRITH, an ancient town of the county of Cumberland in England, feated under a hill called Penrith-Fell, near the rivers Eamont and Lowther. It is a great thoroughfare for travellers; but has little other trade, except tanning, and a fmall manufacture of checks. Formerly it had a castle, but it is now in ruins. In the churchyard is a monument of great antiquity, confifting of two stone pillars II feet 6 inches high, and 5 in circumference in the lower part, which is rounded; the upper is fquare, and tapers to a point; in the fquare part is some fretwork, and the relievo of a cross; and on the interior fide of one is the faint representation of fome animal. But these stones are mortised at their lower part into a round one: they are about 15 feet afunder, and the space between them is inclosed on each fide with two very large but thin femicircular stones; for that there is left between pillar and pillar a walk of two feet in breadth. Two of these lesser stones are plain, the others have certain figures, at prefent scarcely intelligible. Not far from these pillars is another called the giant's thumb, five feet eight inches high, with an expanded head, perforated on both fides; from the middle the stone rifes again into a lesser head, rounded at top; but no part has a tendency to the figure of a cross, being in no part mutilated. The pillars are faid to have been fet up in memory of Sir Owen Cæsarius, a samous war-

Penrith, rior buried here, who killed fo many wild bears, which much infested this county, that the figures of bears, cut out in stone, on each side of his grave, were set there in remembrance of the execution he made among thole beafts; and it is likewife faid his body extended from one pillar to the other. In the market-place there is a town-house of wood, beautified with bears climbing up a ragged staff. There is a memorandum on the north fide of the vestry without, that, in 1598, 2266 persons died here of the plague. There is a charity school in this place for 20 boys, and another for 30 girls, maintained by 55l. a-year, by the sacrament-money and parish-stock. In 1715 the Scotch Highlanders entered this town, and quartered in it for a night, in their way to Preston, without doing much harm; but in the last rebellion, in 1745, they were, it is faid, very rapacious and cruel. Its handsome spacious church has been lately rebuilt, and the roof supported by pillars, whose shafts are of one entire reddish stone, dug out of a neighbouring quarry. On the cast part of the parish, upon the north bank of the river Eamont, there are two caves or grottoes, dug out of the folid rock, and fufficient to contain 100 men. The passage to them is very narrow and dangerous; and it is possible that its perilous access may have given it the name of *Isis Parlis*; though the vulgar tell strange stories of one Isis, a giant, who lived there in former times, and, like Cacus of old, used to feize men and cattle, and draw them into his den to devour them. But it is highly probable, that these subterraneous chambers were made for a fecure retreat in time of fudden danger; and the iron gates, which were taken away not long ago, seem to confirm that supposition. W. Long. 3. 16. N. Lat. 54. 35.

PENROSE, THOMAS, was the fon of the reverend Mr Penrose, rector of Newbury, Berks, a man of high character and abilities, descended from an ancient Cornish family, beloved and respected by all who knew him. Mr Penrose, jun. being intended for the church, purfued his studies with success, at Christ-church, Oxon, until the fummer of 1762, when his eager turn to the naval and military line overpowering his attachment to his real interest, he left his college, and embarked in the unfortunate expedition against Nova Colonia, in South America, under the command of Captain Machamara. The issue was fatal. The Clive (the largest vessel) was burnt; and though the Ambuscade escaped (on board of which Mr Penrole, acting as lieutenant of marines, was wounded), yet the hardships which he afterwards sustained in a prize floop, in which he was flationed, utterly ruined his constitution. Returning to England with ample testimonials of his gallantry and good behaviour, he finished, at Hertford College, Oxon, his course of fludies; and having taken orders, accepted the curacy of Newbury, the income of which, by the voluntary fubscription of the inhabitants, was considerably augmented. After he had continued in that flation about nine years, it feemed as if the clouds of disappointment, which had hitherto overshadowed his prospects, and tinctured his poetical effays with gloom, were clearing away; for he was then prefented by a friend, who knew his worth and honoured his abilities, to a living worth near 500l. per annum. It came, however, too late; for the state of Mr Penrose's health was now such as left little hope, except in the affistance of the waters of Briftol. Thither he went; and there he died in 1779, aged

36 years. In 1768 he married Miss Mary Slocock of Penrose Newbury, by whom he had one child, Thomas, who Penfacola, was educated at Winton College.

Mr Peurole was respected for his extensive erudition, admired for his eloquence, and equally beloved and effected for his focial qualities. By the poor, towards whom he was liberal to his utmost ability, he was vencrated to the highest degree. In oratory and composition his talents were great. His pencil was ready as his pen, and on subjects of humour had uncommon merit. To his poetical abilities the public, by their reception of his Flights of Fancy, &c. have given a favourable testi-

PENRYN, a town of Cornwall, in England, feated on a hill at the entrance of Falmouth-haven by Pendennis castle. It consists of about 300 houses; and the ffreets are broad and well paved. There are fo many gardens and orchards in it, that it refembles very much a town in a wood. It is well watered with rivulets, and has an arm of the fea on each fide of it, with a good customhouse and quay, and other neat buildings. It drives a confiderable trade in pilchards, and in the Newfoundland fishery. It was anciently governed by a portreeve; but James I. made it a corporation, confifting of a mayor, 11 aldermen, 12 common-council-men, with a recorder, steward, &c. an office of record every three weeks, with a prison, and power to try felons in their jurisdiction. And he granted, that the mayor and two aldermen should be justices of the peace, and that they should have a guildhall. There was once a monastery in this place, which was a cell to Kirton; and there are still to be seen a tower, and part of the garden walls, the ruins of a collegiate church. It has neither church nor chapel, but belongs to the parish of Gluvias, a quarter of a mile off. It has fent members to parliament ever fince the first year of Queen Mary; and James II. granted it a new charter, whereby their election was vested in the magistracy only; but it was never made use of, all the inhabitants that pay scot and tot, who are not much above 100, being the electors. Mr Rymer gives a very remarkable account how Penryn was once faved by a company of firolling players. He fays, that towards the latter end of the 16th century the Spaniards were landing to burn the town just as the players were fetting Samfon upon the Philiftines; which performance was accompanied with fuch drumming and shouting, that the Spaniards thought some ambush was laid for them, and fcampered back to their ships. Queen Elizabeth founded a frec-school in this place.

W. Long. 5. 35. N. Lat. 50. 23. PENSACOLA, a fettlement in North America, fituated at the mouth of a river on the gulf of Mexico. It was established by the French, and ceded to Great Britain in 1763. Its first discoverer was Sebastian Cabot in 1497.

The year 1781, so eventful to Britain in many respects, was also remarkable for the reduction of Pensacola by the Spaniards under Don Bernardo Galvez. Great preparations for this expedition had been making at the Havannah; but it was for some time retarded by a dreadful hurricane which attacked the Spanish fleet, and by which four ships of the line, besides others of inferior note, were loft, together with the people on board, to the amount of more than 2000. By this difaster the remainder were obliged to put back to the Havannah to Penfacola. repair; but as foon as the fleet was again judged capable of putting to fea, an embarkation was made of near 8000 men, with Don Bernardo at their head, together with five ships of the line, who arrived at Pensacola on the 9th of March 1781. This force was soon augmented by ten ships of the line and fix frigates; while General Campbell, the British governor, could oppose such a formidable armament with few more than 1000 men, confifting of some regulars and seamen, with the inhabitants. The entrance of the harbour, which was the principal object of defence, was guarded by two small armed vessels, but they were insufficient to second the batteries that had been erected for its protection; and these, without the affistance of some ships of force, were incapable of refisting a vigorous attack. Notwithstanding this prodigious odds, however, the Spaniards met with the most determined opposition. Every inch of ground was disputed with the greatest resolution. The harbour was not forced without the greatest difficulty, nor could the vessels be taken that defended it; the companies belonging to them, after fetting them on fire, retired on shore.

The Spaniards, now in possession of the harbour, invested the place in form, and made their approaches in a cautious and regular manner; while, on the other hand, the befieged were no less active and vigilant in their own defence. Sallies were made occasionally with great fuccess, at the same time that an uninterrupted fire was kept up in fuch a manner as not only greatly to annoy, but even to strike the besiegers with astonishment. This incenfed the Spanish general the more, as he knew that the garrison could expect no relief, and therefore that all their efforts could only prolong the date of their furrender. The resistance was the more mortifying, as he was perfectly conscious of the bravery of his troops; and he had artillery fit, as his officers expressed themfelves, " to be employed against Gibraltar." With all these advantages, however, so resolute was the defence of the garrison, that after the siege had continued for two months, very little hope could be entertained of its speedy termination. As they despaired therefore of making any effectual impression by means of their cannon, they erected a battery of mortars, with which they bombarded a redoubt that commanded the main avenue to the place; and in this they were favoured by an unexpected accident. On the 8th of May a shell burst open the door of the powder magazine under the redoubt, by which it was blown up, with the lofs of near 100 men killed and wounded. Fortunately for the garrison, however, two flank-works still remained entire, from both which so heavy a fire was kept up, that though an affault was immediately given, the affailants were repulfed with great flaughter. This afforded leifure to the garrison to carry off the wounded men, with fome of the artillery, and to spike up the rest. As the enemy, however, foon recovered themselves, and prepared for a general storm, it was thought proper to abandon the flank-works, and retire into the body of the place. The possession of these outworks, however, gave the enemy fuch advantages, that the place was no longer tenable. Their fituation, on a rifing ground, enabled them to command the battery opposite to their chief approach with small arms, and to single out the men at their guns. A capitulation therefore became absolutely necessary, which was obtained on honourable terms. Vol. XVI. Part I.

The town, with the whole province of West Florida, Pensance, was confirmed to the Spaniards by the treaty of 1783. W. Long. 87. 20. N. Lat. 30. 22. PENSANCE, a town of Cornwall, in England, at

the bottom of Mountsbay, about ten miles from the Land's End. It was burnt in 1595 by the Spaniards, who, with four galleys, furprifed this part of the coast, and fet fire to feveral villages and farms: but it was foon after rebuilt, made one of the coinage towns, and has now a confiderable trade. It lies in the parish of Madern, noted for its restorative spring, very effectual in the cure of lameness as well as the cholic, &c. It is well built and populous, and has many ships belonging to it. The shore abounds so with lead, tin, and copper ore, that the veins thereof appear on the utmost extent of land at low-water mark.

PENSILES HORTI, Hanging Gardens, in antiquity.

See BABYLON, No 5.

PENSILVANIA, late one of the principal British colonies in North America, had its name from the famous Quaker William Penn, son of Sir William, commander of the English fleet in Oliver Cromwell's time, and in the beginning of Charles II.'s reign, who obtained a grant of it in the year 1679; is bounded on the east by Delaware bay and river, and the Atlantic ocean; on the north by the country of the Iroquois, or five nations; and on the fouth and west by Maryland. Its extent from north to fouth is about 200 miles; but its breadth varies greatly, from 15, and even less, to

The air in Penfilvania is fweet and clear. The fall, or autumn, begins about the 20th of October, and lasts till the beginning of December, when the winter sets in, which continues till March, and is fometimes extremely cold and fevere; but the air is then generally dry and healthy. The river Delaware, though very broad, is often frozen over. From March to June, that is, in the spring, the weather is more inconstant than in the other feafons. In the months of July, August, and September, the heats would be almost intolerable, if they were not mitigated by frequent cool breezes. The wind during the fummer is generally fouth-west; but in the winter blows for the most part from the north-west, over the snowy frozen mountains and lakes of Canada. which occasions the excessive cold during that season. On the whole, the climate of this state differs not materially from that of Connecticut, except that on the west fide of the mountains the weather is much more regular. The inhabitants never feel those quick transitions from cold to heat, by a change of the wind from north to fouth, as those so frequently experience who live eastward of the mountains and near the sea. The hot southwardly winds get chilled by paffing over the long chain of Allegany mountains.

Longevity, when tolerably afcertained, is doubtless the truest mark of the healthiness of any country; but this state, which has not been settled above 100 years, is not sufficiently old to determine from facts the state of longevity. Among the people called Quakers, who are the oldest settlers, there are instances of longevity, occasioned by their living in the old cultivated counties, and the temperance imposed on them by their religion. There are fewer long-lived people among the Germans than among other nations, occasioned by their excess of labour and low diet. They live chiefly upon vegetables

Penfilvania and watery food, that affords too little nourishment to repair the waste of their strength by hard labour. Nearly one half of the children born in Philadelphia die under two years of age, and chiefly with a difease in the stomach and bowels. Very few die at this age in the

As to the face of this country, towards the coast, like the adjacent colonies, it is flat, but rifes gradually to the Apalachian mountains on the west. As much as nearly one third of this state may be called mountainous; particularly the counties of Bedford, Huntingdon, Cumberland, part of Franklin, Dauphin, and part of Bucks and Northampton, through which pass, under various names, the numerous ridges and spurs, which collectively form what we choose to call, for the sake of clearmefs, the great range of Allegany mountains. There is a remarkable difference between the country on the east and west side of the range of mountains we have just been describing. Between these mountains and the lower falls of the rivers which run into the Atlantic, not only in this, but in all the fouthern states, are several ranges of stones, fand, earths, and minerals, which lie in the utmost confusion. Beds of stone, of vast extent, particularly of limestone, have their several layers broken in pieces, and the fragments thrown confusedly in every direction. Between these lower falls and the ocean is a very extensive collection of fand, clay, mud, and shells, partly thrown up by the waves of the sea, partly brought down by floods from the upper county, and partly produced by the decay of vegetable fubstances. The country westward of the Allegany mountains, in these respects, is totally different. It is very irregular, broken, and variegated, but there are no mountains; and when viewed from the most western ridge of the Allegany, it appears to be a vast extended plain. All the various strata of stone appear to have lain undiflurbed in the fituation wherein they were first formed. The layers of clay, fand, and coal, are nearly horizontal. Scarcely a fingle inflance is to be found to the contrary. Every appearance, in short, tends to confirm the opinion, that the original crust, in which the stone was formed, has never been broken up on the west side of the mountains, as it evidently has been eastward of them.

The chief rivers are three, Delaware, Sufquehanna, and Skoolkil. The Delaware, rifing in the country of the Iroquois, takes its course southward; and after dividing this province from that of New Jersey, falls into the Atlantic ocean between the promontories or capes May and Henlopen, forming at its mouth a large bay, called from the river Delaware Bay. This river is navigable above 200 miles. The Sufquelianna rifes also in the country of the Iroquois, and running fouth through the middle of the province, falls into the bay of Chefapeake, being navigable a great way for large thips. The Skoolkil has its fource in the fame country as the other two, and also runs south, almost parallel to them; till at length, turning to the eastward, it falls into the Delaware at the city of Philadelphia. It is navigable for boats above 100 miles. These rivers, with the numerous creeks and harbours in Delaware bay, capable of containing the largest fleets, are extremely fayourable to the trade of this province.

As to the foil, produce, and traffic of Penfilvania, we refer the reader to the articles NEW-YORK and the

JERSEYS, fince what is there faid on those heads is Pensilvania, equally applicable to this province; and if there is any difference, it is on the fide of this province. They have fome rice here, but in no great quantities; and fome tobacco, but it is not equal to that of Virginia. From the premiums offered by the fociety of arts in London, it appears that the foil and climate of this province are looked upon as proper for the cultivation of some species of vines. The trade carried on from hence and the other colonies to the French and Dutch islands and Surinam, was greatly to the disadvantage of Britain, and very destructive to the sugar-colonies: for they take molasses, rum, and other spirits, with a great many European goods, from these foreigners; carrying them horses, provisions, and lumber in return; without which the French could not carry on their fugar-manufactures to

that advantage they do.

New York, the Jerfeys, and Penfilvania, were difcovered, with the rest of the continent of North America, in the reign of Henry VII. by Sebastian Cabot, for the crown of England; but Sir Walter Raleigh was the first adventurer that attempted to plant colonies on thefe shores, in the reign of Queen Elizabeth; and, in honour of that princels, gave all the eastern coast of North America the name of Virginia. Mr Hudson, an Englishman, failing to that part of the coast which lies between Virginia and New England, in the beginning of the reign of James I. and being about to make a fettlement at the mouth of Hudson's river, the Dutch gavehim a fum of money to dispose of his interest in this country to them. In the year 1608 they began to plant it; and, by virtue of this purchase, laid claim to all those countries which are now denominated New York, New Jersey, and Pensilvania; but there remaining some part of this coast which was not planted by the Hollanders, the Swedes fent a fleet of ships thither, and took possession of it for that crown; but the Dutch having a fuperior force in the neighbourhood, compelled the Swedes to fubmit to their dominion, allowing them, however, to enjoy the plantations they had fettled. The English not admitting that either the Dutch or Swedes had any right to countries first discovered and planted by a fubject of England, and part of them at that time possessed by the subjects of Great Britain, under charter from Queen Elizabeth and King James I.; King Charles II. during the first Dutch war in 1664, granted the countries of New York, the Jerseys, and Pensilvania, of which the Dutch had usurped the possession, to his brother James duke of York; and Sir Robert Carr being fent over with a fquadron of men of war and land forces, and summoning the Dutch governor of the city of New Amsterdam, now New York, to surrender, he thought fit to obey the fummons, and yield that capital to the English: the rest of the places in the possession of the Dutch and Swedes followed his example; and these countries were confirmed to the English by the Dutch at the next treaty of peace between the two nations. The duke of York afterwards parcelled them out to under proprietors; felling, in particular, to William Penn the elder, in 1683, the town of Newcassle, alias Delaware, and a district of 12 miles round the fame; to whom, his heirs and affigns, by another deed of the same date, he made over all that tract of land from 12 miles fouth of Newcastle to the Whore-hills, otherwise called Cape Henlopen, now divided into the two

Penfilvania counties of Kent and Suffex, which, with Newcastle di- prietors Thomas and Richard Penn, with his majesty's Penfilvania. strict, are commonly known by the name of the Three Lower Counties upon Delaware River. All the rest of the under-proprietors, some time after, surrendered their charters to the crown; whereby New York and the Jerseys became royal governments; but Penn retained that part of the country which had been fold to him by the duke of York, together with what had been granted to him before in 1680-1, which now constitutes the province of Penfilvania. As foon as Penn had got his patent, he began to plant the country. Those who went over from England were generally Diffenters and Quakers, whose religion is citablished by law here, but with a toleration of all other Protestant sects. Dutch and Swedes, who were fettled here before Mr Penn became proprietor, choosing still to reside in this country, as they did in New York and the Jerseys, obtained the same privileges as the rest of his majesty's subjects; and their descendants are now in a manner the fame people with the English, speaking their language, and being governed by their laws and customs. Penn, however, not fatisfied with the title granted him by King Charles II. and his brother, bought the lands also of the Indians for a valuable consideration, or what they eftcemed fuch (though 20 miles were purchased, at first, for less than an acre about Philadelphia would pay now), paying them in cloth, tools, and utenfils, to their entire satisfaction; for they had not hands to cultivate the hundredth part of their lands, and if they could have raifed a product, there was nobody to buy:

Penfilvania is one of the most flourishing colonies in North America, having never had any quarrel with the natives. Whenever they defire to extend their fettlements, they purchase new lands of the sachems, never taking any by force; but the Indians now fet a very high price upon their lands, in comparison of what they did at first, and will hardly part with them at any rate. In an estimate of the proprietary estate of the province, published above 40 years ago, we find, that the proprietaries, who alone can purchase lands here from the natives, had bought feven millions of acres for no more than 750l. sterling, which the proprietaries afterwards fold at the rate of 15l. for every 100 acres. The Indian council at Onandago, however, disapproved of their deputies parting with so much land; and, in the year 1755, obliged the proprietaries to reconvey great part of the same to the Indians.

the purchase, therefore, was all clear gain to them;

and, by the coming of the English, their paltry trade

became so profitable, that they soon found their condition much altered for the better; and are now as well

clothed and fed as the European peafantry in many

places.

A dispute subsisted a long time between the proprietaries of this province and Lord Baltimore, proprietary of Maryland, about the right to certain lands; which was at last amicably adjusted, though greatly in favour of the Penns.

About the year 1704 there happened some alteration in the constitution of the province. The establishment that took place, and subfifted till the American war broke out, confifted of a governor, council, and affembly, each with much the same power and privileges as in the neighbouring colony of New York. The lieutenant-governor and council were appointed by the proapprobation; but if the laws enacted here were not repealed within fix months after they had been prefented to the king for his approbation or difallowance, they were not repealable by the crown after that time.

By the present constitution of Pensilvania, which was established in September 1776, all legislative powers are lodged in a fingle body of men, which is styled, The general affembly of representatives of the freemen of Penfilvania. The qualification required to render a person eligible to this affembly is, two years refidence in the city or county for which he is chosen. The qualifications of the electors are, full age, and one year's refi-dence in the state, with payment of public taxes during that time. But the fons of freeholders are intitled to vote for representatives, without any qualification except full age. No man can be elected as a member of the affembly more than four years in feven. The reprefentatives are chosen annually on the second Tuesday in October, and they meet on the fourth Monday of the fame month. The supreme executive power is lodged in a prefident, and a council confisting of a member from each county. The prefident is elected annually by the joint ballot of the affembly and council, and from the members of council. A vice-prefident is chosen at the same time. The counsellors are chosen by the freemen every third year; and having ferved three years, they are ineligible for the four fucceeding years. The appointments of one-third only of the members expire every year; by which rotation no more than one-third can be new members.

Manufactures of different kinds are numerous in this state, and rapidly on the increase. There are 16 furnaces and 37 forges, the latter of which it is supposed, will prepare annually 6290 tons of iron. Here also they make every implement of husbandry and kitchen utenfils. Penfilvania contains 52 mills for the manufacturing of paper, the annual product of which has been valued at 25,000 dollars. About 300,000 hats of wool and fur are annually made; and the mills for making gunpowder are 25 in number. Glauber's falts and fal ammoniac have also begun to be manufactured of late to a confiderable extent; and there are water-works near the falls of Trenton which grind grain, roll and flit iron, and pound gypsum or plaster of Paris. The number of militia is estimated at upwards of 90,000. For people of almost every religious persuasion there are about 384 places of public worship. The expence of the government of this state amounts to about 32,2801. sterling annually.

With respect to population, Morse informs us, that in 1787 the inhabitants in Pensilvania were reckoned at 360,000. It is probable they are now more numerous, perhaps 400,000. If we fix them at this, the population for every square mile will be only nine; by which it appears that Pensilvania is only one-fifth as populous as Connecticut. But Connecticut was fettled nearly half a century before Penfilvania; fo that in order to do justice to Pensilvania in the comparison, we must anticipate her probable population 50 years hence. By a census taken in 1790, the population amounted to 434,000. These inhabitants consist of emigrants from England, Ireland, Germany, and Scotland. The Friends and Episcopalians are chiefly of English extraction, and compose about one third of the inhabitants. They live

principally

Penfilvania. principally in the city of Philadelphia, and in the counties of Chester, Philadelphia, Bucks, and Montgomery. The Irish are mostly Presbyterians. Their ancestors came from the north of Ireland, which was originally fettled from Scotland; hence they have been fometimes called Scotch Irish, to denote their double descent. But they are commonly and more properly called Irish, or the descendants of people from the north of Ireland. They inhabit the western and frontier counties, and are numerous. The Germans compose one quarter at least, if not a third, of the inhabitants of Pensilvania. They inhabit the north parts of the city of Philadelphia, and the counties of Philadelphia, Montgomery, Bucks, Dauphin, Lancaster, York, and Northampton; mostly in the four last. They consist of Lutherans (who are the most numerous sect), Calvinists, Moravians, Mennonists, Tunkers (corruptly called Dunkers), and Swingfelters, who are a species of Quakers. These are all distinguished for their temperance, industry, and economy. The Germans have usually 15 of 69 members in the affembly; and some of them have arisen to the -first honours in the state, and now fill a number of the higher offices. Yet the lower class are very ignorant and superstitious. It is not uncommon to see them going to market with a little bag of falt tied to their horses manes, for the purpose, they say, of keeping off the witches.

The Baptists (except the Mennonist and Tunker Baptists, who are Germans) are chiefly the descendants of emigrants from Wales, and are not numerous. A proportionate affemblage of the national prejudices, the manners, customs, religions, and political fentiments of all these, will form the Pensilvania character. As the leading traits in this character, thus constituted, we may venture to mention industry, frugality bordering in some instances on parsimony, enterprise, a taste and ability for improvements in mechanics, in manufactures, in agriculture, in commerce, and in the liberal sciences; temperance, plainness, and simplicity in dress and manners; pride and humility in their extremes; inoffensiveness and intrigue; in regard to religion, variety and harmony; liberality, and its opposites, superstition and bigotry; and in politics an unhappy jargon. Such appear to be the distinguishing traits in the collective Pen-

filvanian character.

Of the great variety of religious denominations in Penfilvania, the Friends or Quakers are the most numerous. They were the first fettlers of Pensilvania in 1682 under William Penn, and have ever fince flourished in the free enjoyment of their religion. They neither give titles nor use compliments in their converfation or writings, believing that whatfoever is more than yea, yea, and nay, nay, cometh of evil. They confcientiously avoid, as unlawful, kneeling, bowing, or uncovering the head to any person. They discard all superfluities in dress or equipage; all games, sports, and plays, as unbecoming the Christian. Swear not at all, is an article of their creed literally observed in its utmost extent. They believe it unlawful to fight in any case whatever; and think that if their enemy smite them on the one cheek, they ought to turn to him the other also. They are generally honest, punctual, and even punctilious in their dealings; provident for the necessities of their poor; friends to humanity, and of course enemies

to flavery; strict in their discipline; careful in the ob-Pensilvania. fervance even of the punctilios in drefs, speech, and manners, which their religion enjoins; faithful in the education of their children; industrious in their several occupations. In short, whatever peculiarities and mistakes those of other denominations have supposed they have fallen into, in point of religious doctrines, they have proved themselves to be good citizens. Next to the Quakers, the Presbyterians are the most numerous. There are upwards of 60 ministers of the Lutheran and Calvinist religion, who are of German extraction, now in this flate; all of whom have one or more congregations under their care; and many of them preach in fplendid and expensive churches; and yet the first Lutheran minister, who arrived in Pensilvania about 40 years ago, was alive in 1787, and probably is still, as was also the second Calvinistical minister. The Lutherans do not differ in any thing effential from the Episcopalians, nor do the Calvinists from the Presbyte-

The Moravians are of German extraction. Of this religion there are about 1300 fouls in Penfilvania, viz. between 500 and 600 in Bethlehem, 450 in Nazareth, and upwards of 300 at Litiz in Lancaster county. They call themselves the United Brethren of the Protestant Episcopal Church. They are called Moravians, because the first settlers in the English dominions were chiefly migrants from Moravia. See HERNHUTTERS, and UNI-TAS Fratrum; and for the Mennonites, fee MENNON-ITES. They were introduced into America by Count Zinzendorff, and fettled at Bethlehem, which is their principal fettlement in America, as early as 1741. For the Tunkers, fee TUNKERS.

There are a great many literary, humane, and other useful societies in Pensilvania; more, it is said, than in any of the United Provinces. There are several univerfities and colleges at Philadelphia and other places: See PHILADELPHIA. Lancaster, Carlisle, and Pittsburgh,

are the chief towns after Philadelphia.

Penfilvania is divided into feven counties; four of which are called the Upper, and three the Lower. Of the upper, viz. Buckingham, Philadelphia, Chester, and Lancaster, the three first are the lands included in King Charles II.'s grant, and defigned Penfilvania; the low-er, viz. those of Newcastle, Kent, and Suffex, were called Nova Belgia before the duke of York fold them, as we observed above, to Mr Penn. The upper counties end at Marcus Hook, four miles below Chester town, where the lower begin, and run along the coast near 100 miles. Each of these counties had a sheriff, with a quarterly and monthly fession, and assizes twice a

In the Philosophical Transactions for 1757, there is an account of a spring in Pensilvania, which rises from a copper mine, and yields 800 hogsheads in twenty-four hours. The water is of a pale green colour, of an acid, fweet, auftere, inky, and naufeous tafte. The faline matter which it holds in folution is probably fulphate of copper; for a piece of polished iron immersed in it is foon covered with a crust of metallic copper. It contains also, it is said, copperas or sulphate of iron.

Among the other curiofities of this province may be reckoned another spring, about 14 feet deep, and about 100 square in the neighbourhood of Reading. A full

Pensilvania, mill stream flows from it. The waters are clear, and Pension. full of fishes. From appearances it is probable that this fpring is the opening or outlet of a very confiderable river, which, a mile and a half or two miles above this place, finks into the earth, and is conveyed to this outlet in a subterranean channel. In the northern parts of Penfilvania there is a creek, called Oil creek, which empties into the Alleghany river. It issues from a fpring, on the top of which floats an oil fimilar to that called Barbadoes tar, and from which one man may gather feveral gallons in a day. The troops fent to guard the western posts halted at this spring, collected some of the oil, and bathed their joints with it. This gave them great relief from the rheumatic complaints with which they were affected. The waters, of which the troops

drank freely, operated as a gentle purge.

There are three remarkable grottoes or caves in this state; one near Carlisle in Cumberland county; one in the township of Durham, in Bucks county; and the other at Swetara in Lancaster county. Of the two former there are no particular descriptions. The latter is on the east bank of Swetara river, about two miles above its confluence with the Sufquehannah. Its entrance is fpacious, and descends so much as that the surface of the river is rather higher than the bottom of the cave. The vault of this cave is of a folid limestone rock, perhaps 20 feet thick. It contains feveral apartments, some of them very high and spacious. The water is incessantly percolating through the roof, and falls in drops to the bottom of the cave. These drops petrify as they fall, and have gradually formed folid pillars, which appear as fupports to the roof. Thirty years ago there were ten fuch pillars, each fix inches in diameter, and fix feet high; all so ranged that the place they enclosed resembled a fanctuary in a Roman church. No royal throne ever exhibited more grandeur than this *lufus nature*. The refemblances of feveral monuments are found indented in the walls on the fides of the cave, which appear like the tombs of departed heroes. Suspended from the roof is the bell (which is nothing more than a stone projected in an unusual form), so called from the found that it occasions when struck, which is similar to that of a bell. Some of the stalactites are of a colour like sugarcandy, and others resemble loaf sugar; but their beauty is much defaced by the country people. The water, which percolates through the roof, so much of it as is not petrified in its course, runs down the declivity, and is both pleafant and wholesome to drink. There are feveral holes in the bottom of the cave, descending perpendicularly, perhaps into an abyss below, which renders it dangerous to walk without a light. At the end of the cave is a pretty brook, which, after a short course loses itself among the rocks. Beyond this brook is an outlet from the cave by a very narrow aperture. Through this the vapours continually pass outwards with a strong current of air, and ascend, resembling at night the smoke of a furnace. Part of these vapours and fogs appear on ascending to be condensed at the head of this great alembic, and the more volatile parts to be carried off, through the aperture communicating with the exterior air before mentioned, by the force of the air in its passage.

PENSION, a fum of money paid annually for fervices or confiderations already past. The yearly pay-

ment of each member to the houses of the inns of courts Pensionary are likewise named pensions; and the yearly assembly of Pensioner. the fociety of Gray's Inn, to confult on the affairs of the house, is also called a pension.

PENSIONARY, or PENSIONER, a person who has an appointment or yearly fum, payable during life, by way of acknowledgement, charged on the estate of a

prince, company, or particular person.

Grand PENSIONARY, an appellation formerly given to the first minister of the states of Holland. The grand pensionary was chairman in the assemblies of the states of that province; he proposed the matters to be consulted on; collected the votes; formed and pronounced the resolutions of the states; opened letters; conferred with foreign ministers, &c. His business was also to inspect the finances, to maintain the authority of the states, and to fee that the laws were observed; and he was perpetual deputy of the states general of the United Provinces. His commission was, however, only given him for five years; after which it was deliberated whether or not it should be renewed; but there was no instance of its being revoked; therefore death only put an end to the functions of this important minister.

PENSIONARY was also the first minister of the regency of each city in Holland. His office was to give his advice in affairs relating to the government, either of the flate in general, or of the city in particular; and in affemblies of the states of the province, he was speaker in behalf of his city. The function, however, of these pensionaries was not everywhere alike; in some cities they only gave their advice, and were never found in affemblies of the magistrates, except when expressly called hither: in others they attended constantly; and in others they made the propositions on the part of the burgomasters, drew up their conclusions, &c. They were called pensionaries, because they received an ap-

pointment or penfion.

PENSIONER, in general, denotes a person who receives a pension, yearly salary, or allowance. Hence, The Band of Gentlemen PENSIONERS, the noblest

fort of guard to the king's person, consists of 40 gentle-

men, who receive a yearly pension of 100l.

This honourable band was first instituted by King Henry VIII. and their office is to attend the king's person, with their battle-axes, to and from his chapel royal, and to receive him in the presence chamber, or coming out of his privy lodgings; they are also to attend at all great folemnities, as coronations, St George's feast, public audiences of ambassadors, at the sovereign's going to parliament, &c.

They are each obliged to keep three double horses and a fervant, and so are properly a troop of horse. They wait half at a time quarterly; but on Christmasday, Easter-day, Whitsunday, &c. and on extraordinary occasions, they are all obliged to give their attendance. They have likewise the honour to carry up the sovereign's dinner on the coronation-day and St George's feast; at which times the king or queen usually confer the honour of knighthood on two fuch gentlemen of the band as their captain presents.

Their arms are gilt battle-axes; and their weapons, on horseback, in time of war, are cuirassiers arms, with fword and pistols. Their standard in time of war is, argent, a cross gules. Their captain is always a noble-

Pentagraph.

man, who has under him a lieutenant, a standard-bearer, a clerk of the check, secretary, paymaster, and har-

PENSIONER, in the univerfity of Cambridge and in that of Dublin, has a very peculiar meaning; for those students, either under-graduates or bachelors of arts, are called pensioners who live wholly at their own expence, and who receive no emolument whatever from the college of which they are members. They are divided into two kinds, the greater and the less; the former of which are generally called fellow-commoners, because they eat with the fellows of their college; the latter are always called pensioners, and eat with the scholars, who are those students of the college, either under-graduates or bachelors who are upon the foundation, who receive emoluments from the fociety, and who are capable of being elected fellows. See SERVITOR and SIZAR.

PENSTOCK, a fluice or flood-gate, ferving to retain or let go at pleasure the water of a mill-pond, or

PENTACHORD (compounded of merre five, and xoedn string), an ancient musical instrument with five strings. The invention of the pentachord is referred to the Scythians; the strings were of bullocks leather, and they were struck with a plectrum made of goats horn.

PENTACROSTIC, in Poetry, a fet of verses so disposed, as that there are always five acrostics of the fame name, in five divisions of each verse. See A-CROSTIC

PENTADACTYLON, FIVE FINGERS, in Botany, a name given by some authors to the ricinus or palma

Christi, from the figure of its leaf.

PENTADACTYLOS PISCIS, the five-fingered fish, the trivial name of a fish common in all the seas of the East Indies, and called by the Dutch there viif vinger visch.

PENTAGON, in Geometry, a figure of five fides

and five angles. See GEOMETRY.

In fortification, pentagon denotes a fort with five baftions.

PENTAGRAPH, PANTOGRAPH, or PANTOGRA-PHER, an instrument defigned for drawing figures in what proportion you please, without any skill in the

The instrument is otherwise called a parallelogram. The following is the description of this instrument by

Mr Adams.

Geomet. and Gra-

P. 374.

phic Esays, " It is an instrument (fays Mr Adams) as useful to the experienced draftsman, as to those who have made but little progress in the art. It saves a great deal of time, either in reducing, enlarging, or copying of the fame fize, giving the outlines of any drawing, however crooked or complex, with the utmost exactness; nor is it confined to any particular kind, but may with equal facility be used for copying figures, plans, sea-charts, maps, profiles, landscapes, &c.

" Description and use of the Pantographer .- I have not been able to afcertain who was the inventor of this useful instrument. The earliest account I find is that of the Jesuit Scheiner, about the year 1631, in a small tract entitled Pantographice, five ars nova delineandi. The principles are felf-evident to every geometrician; the mechanical construction was first improved and

brought to its present state of perfection by my father, Pentaabout the year 1750. It is one, among many other graph. fcientific improvements and inventions completed by him, that others have ingloriously, and many years after, assumed to themselves.

"The pantographer is usually made of wood, or brass, and confiits of four flat rules, two of them long, and two short. The two longest are joined at the end A, by a double pivot, which is fixed to one of the rules, and GCCCIX. works in two small holes placed at the end of the other. Under the joint is an ivory castor, to support this end of the instrument. The two smaller rules are fixed by pivots at E and H, near the middle of the larger rules, and are also joined together at their other end, G.

By the construction of this instrument, the four rules always form a parallelogram. There is a sliding box on the longer arm, and another on the shorter arm. These boxes may be fixed at any part of the rules by means of their milled nuts; each of these boxes is furnished with a cylindric tube, to carry either the tracing point or crayon or fulcrum.

The fulcrum or support K, is a leaden weight inclofed in a mahogany box, on this the instrument moves when in use; there are two moveable rollers, to support and facilitate the motions of the pantographer, their fituation may be varied as occasion requires.

The graduations are placed on two of the rules, on each of them are two scales, the fiducial edges of the boxes are to be fet to these, according to the work to be

performed by the instrument.

"The crayon, the tracer, and fulcrum, must in all cases be in a right line, fo that when they are set, if a string be stretched over them, and they do not coincide with it, there is an error either in the fetting or graduations

"The long tube which carries the pencil or crayon, moves easily up or down another tube; there is a string affixed to the long or inner tube, passing afterwards through the holes in the three fmall knobs to the tracing point, where it may, if necessary, be fastened. By pulling this string, the pencil is lifted up occasionally, and thus prevented from making false or improper marks

" To use this instrument when the copy is to be of the same size as the original .- Place the instrument upon a large table, and fet the fliding boxes B and D, to the divisions marked 12. Put the crayon into the box B, place the box D upon the fulcrum or leaden foot; the tracing point at C. Then lay a piece of paper under the crayon, and the original drawing under the tracer, and move the tracing point over the principal strokes of the original, and the crayon will form the required

"To reduce a drawing, &c. to half the fixe of the original.—Set the boxes B and D, to the divisions marked one-half, place the fulcrum at B, the crayon at

D, and the tracer at C.

" To reduce a drawing, &c. to less than one-half the original .- Suppose one-third, one-fourth, one fifth, &c. Place the fulcrum at B, crayon at D, and tracer at C. and flide the boxes B and D, to the divisions marked one-third, one-fourth, one-fifth, &c. on the langer feales. It may be proper to observe here, that if the copy be

less than one-half the original, or when it is required greater than the original, the longer scales are to be ufed.

" For greater than one-half the original drawing. Suppose it be required to make a drawing, two-thirds, three-fourths, four-fifths, &c. Set the boxes B and D, to corresponding divisions, as two-thirds, three-fourths, four-fifths, &c. on the shorter scales, place the fulcrum at D, the crayon at B, and tracer at C.

"When the original drawing is to be enlarged .-Suppose one-eighth, one-fixth, &c. set the boxes B and D, to one-eighth, one-fixth, &c. on the longer scales, place the fulcrum at D, the crayon at C, and tracer

"Where the copy is required of a fixe differing from the fractional parts laid down on the instrument .- For this purpose there are two scales laid down, containing 100 unequal parts, one scale numbered from 10 to 80, the other from 50 to 100.

" If the copy is to be under one-half the original fixe, place the boxes B and D, to any two corresponding divisions under 50, the fulcrum at B, and crayon

" If the copy is to be larger than one-half the original, place the boxes B and D, to corresponding divisions between 50 and 100; the fulcrum at B, and crayon

"To change the situation of the pantographer.-Copy first as much as the pantographer will take in; then make three points on the original, and as many corre-fponding points on the copy. Then remove the fulcrum to another fituation, but fo, that when the tracing point is applied to the three points marked on the original, the crayon may exactly coincide with the other three points on the copy, and proceed as before; and fo on for every change in the fituation of your instrument, and by this means a pantographer of two feet and a half in length will copy a drawing of any fize whatfo-

PENTAMETER, in ancient poetry, a kind of verse, confisting of five feet, or metres, whence the name. The two first feet may be either dactyls or spondees at pleasure; the third is always a spondee; and the two last anapestes: such is the following verse of Ovid.

Carmini bus vi ves tem pus in om ne meis.

A pentameter verse subjoined to an hexameter, con-

Mitutes what is called elegiac. See ELEGIAC.

PENTANDRIA (from mevre five, and avne a man or husband); the name of the fifth class in Linnæus's fexual method, confifting of plants which have hermaphrodite flowers, with five stamina or male organs. See BOTANY Index.

PENTAPETALOUS, an appellation given to

flowers which confift of five petals or leaves.

PENTAPETES, a genus of plants belonging to the monadelphia class, and in the natural method ranking under the 37th order, Columniferæ. See BOTANY Index.

PENTAPOLIS. This name is given to the five cities, Sodom, Gomorrah, Adamah, Zeboim, and Zoar (Wisdom x. 6.). They were all five condemned to utter destruction, but Lot interceded for the preservation of Zoar, otherwise called Bala. Sodom, Gomorrah, Adamah, and Zeboim, were all confumed by fire Pentapolis, from heaven, and in the place where they flood was Pentateuch. made the lake Asphaltites, or the lake of Sodom.

PENTAPOLIS (Ptolemy), a district of Cyrenaica; fituated on the Mediterranean; denominated from its five cities; namely, Berenice, Arfinoe, Ptolemais, Cyrene, and Apollonia.

PENTAPOLIS of the Philistines, (Josephus); taking name from five principal cities, Gaza, Gath, Afcalon,

Azotus, and Ekron.

PENTATEUCH. This word, which is derived from the Greek Mevlarevxos, from nevte five, and revxos an instrument or volume, fignifies the collection of the five instruments or books of Moses, which are Genesis, Exodus, Leviticus, Numbers, and Deuteronomy: each of which books we have given an account of under their feveral names.

There are fome modern critics who have difputed Moses's right to the pentateuch. The observe that the author speaks always in the third person. " Now the man Mofes was very meek above all the men which were upon the face of the earth. The Lord spake unto Moses, saying, &c. Moses said to Pharaoh, &c." Thus they think he would never have spoken of himself; but would at least sometimes have mentioned himself in the first person. Besides this, say they, the author of the pentateuch fometimes abridges his narration like a writer who collected from fome ancient memoirs. Sometimes he interrupts the thread of his discourse; for example, he makes Lamech the bigamist to say (Gen. iv. 23.), "Hear my voice, ye wives of Lamech, hearken unto my speech; for I have slain a man to my wounding, and a young man to my hurt," without informing us before-hand to whom this is related. These observations, for example (Gen. xii. 6.), " And the Canaanite was then in the land," cannot be reconciled to the age of Moses, fince the Canaanites continued to be the masters of Palestine all the time of Moses. The passage out of the book of the wars of the Lord, quoted in the book of Numbers (xxi. 14.), feems to have been clapped in afterwards, as also the first verses of Deuteronomy. The account of the death of Moses, which is at the end of the fame book, cannot certainly belong to this legislator; and the same judgement may be made of other passages, wherein it is said, that the places mentioned lay beyond Jordan; that the bed of Og was at Ramah to this day; that the havoth of Jair, or the cities of Jair, were known to the author, though probably they had not that name till after Moses's time (Numb. xxxii. 41. Deut. iii. 14.).

It is observed also in the text of the Pentateuch, that there are some places that are defective; for example, in Exodus (xii. 8.), we see Moses speaking to Pharaoh, where the author omits the beginning of his discourse. The Samaritan inferts in the fame place what is wanting in the Hebrew. In other places, the same Samaritan copy adds what is deficient in the Hebrew text; and what it contains more than the Hebrew feems fo well connected with the rest of the discourse, that it would be difficult to feparate them. Laftly, they believe that they observe certain strokes in the pentateuch which can hardly agree with Moses, who was born and bred in Egypt; as what he fays of the earthly paradife, of the rivers that watered it, and ran through it; of the cities of Babylon, Erech, Resen, and Calneh; of the

gold

* Yenkin's

Reasona-bleness of

Christia-

Pentathion gold of Pison, of the bdellium, of the stone of Sohem, Penthorum These particulars, observed with such curiosity, seem to prove, that the author of the pentateuch lived beyond the Euphrates. Add what he fays concerning the ark of Noah, of its construction, of the place where it rested, of the wood wherewith it was built, of the bitumen of Babylon, &c. But in answer to all these objections, we may observe in general, from an eminent writer * of our own country, that these books are by the most ancient writers ascribed to Moses; and it is confirmed by the authority of heathen writers themselves, that they are of his writing: besides this, we have the unanimous testimony of the whole Jewish nation, ever fince Moses's time, from the first writing of them. Divers texts of the pentateuch imply that it was written by Moses; and the book of Joshua, and other parts of scripture, import as much; and though some passages have been thought to imply the contrary, yet this is but a late opinion, and has been fufficiently confuted by feveral learned men. The Samaritans receive no other scriptures but the pentateuch, rejecting all the other books which are still in the Jewish canon.

PENTATHLON, in antiquity, a general name for the five exercises performed at the Grecian games, viz. wrestling, boxing, leaping, running, and playing at the difcus.

PENTECOST, a solemn festival of the Jews; so called, because it was celebrated on the 50th day after the 16th of Nisan, which was the second day of the passover. The Hebrews called it the feast of weeks, because it was kept seven weeks after the passover. They then offered the first fruits of the wheat harvest, which was then completed: besides which they presented at the temple feven lambs of that year, one calf, and two rams, for a burnt offering; two lambs for a peace offering; and a goat for a fin offering (Levit. xxiii. 15, 16. Exod. xxxiv. 22. and Deut. xvi. 9, 10.). The feast of the pentecost was instituted among the Israelites, first to oblige them to repair to the temple of the Lord, there to acknowledge his absolute dominion over the whole country, and to offer him the first-fruits of their harvest; and, secondly, that they might call to mind, and give thanks to God, for the law which he had given them from Mount Sinai, on the 50th day after their coming out of Egypt.

The modern Jews celebrate the pentecost for two days. They deck the fynagogue and their own houses with garlands of flowers. They hear a fermon or oration in praise of the law, which they suppose to have been delivered on this day. The Jews of Germany make a very thick cake, confifting of feven layers of paste, which they call Sinai. The seven layers represent the seven heavens, which they think God was obliged to reascend from the top of this mountain. See Leo of Modena and Buxtorf's fynag. Jud.

It was on the feast of pentecost that the Holy Ghost miraculously descended on the apostles of our Lord, who were affembled together after his afcenfion in a house at Jerusalem (Acts ii.).

PENTHESILEA, queen of the Amazons, succeeded Orythia, and gave proofs of her courage at the fiege of Troy, where she was killed by Achilles. Pliny says that she inverted the battle-axe.

PENTHORUM, in Botany, a genus of the penta-

gynia order, belonging to the pentandria class of plants. Pentland The calyx is quinquefid; there are either five petals or none; the capfule is five-pointed and quinquelo-

PENTLAND or PICTLAND FRITH, is a narrow strait of fix miles between the mainland of Scotland and the Orkney isles. This strait is the great thoroughfare of shipping between the eastern and western seas, the terror of mariners, and has been the grave of thousands. The navigation of this frith was formerly extremely dangerous by the island of Stroma, and two rocks called the Skerries, lying near the middle of it; but it is now greatly improved, and comparatively fafe, in confequence of a lighthouse erected on the Skerries.

PENULA, among the ancient Romans, was a coarfe garment or cloak worn in cold or rainy weather. It was shorter than the lacerna, and therefore more proper for travellers. It was generally brown, and fucceeded the toga after the state became monarchical. Augustus abolished the custom of wearing the penula over the toga, confidering it as too effeminate for Romans; and the ædiles had orders to fuffer none to appear in the circus or forum with the lacerna or penula. Writers are not agreed as to the precise difference between these two articles of drefs; but we are told that they were chiefly worn by the lower orders of people. See LA-CERNA

PENULTIMA, or PENULTIMATE Syllable, in Grammar, denotes the last syllable but one of a word; and hence the antepenultimate fyllable is the last but two, or that immediately before the penultima.

PENUMBRA, in Astronomy, a partial shade obferved between the perfect shadow and the full light in an eclipse. It arises from the magnitude of the sun's body: for were he only a luminous point, the shadow would be all perfect; but, by reason of the diameter of the fun, it happens, that a place which is not illuminated by the whole body of the fun, does yet receive rays from a part thereof.

PEON, in the language of Hindostan, means a foot foldier, armed with fword and target. In common use it is a footman, fo armed, employed to run before a palanquin. Piaaah is the proper word; from which peon is a corruption.

PEOR, a famous mountain beyond Jordan, which Eusebius places between Heshbon and Livias. mountains Nebo, Pifgah, and Peor, were near one another, and probably made but the same chain of mountains. It is very likely that Peor took its name from some deity of the same name, which was worshipped there; for Peor, Phegor, or Baal-peor, was known in this country. See Numb. xxv. 3. Deut. iv. 3. Pfal.

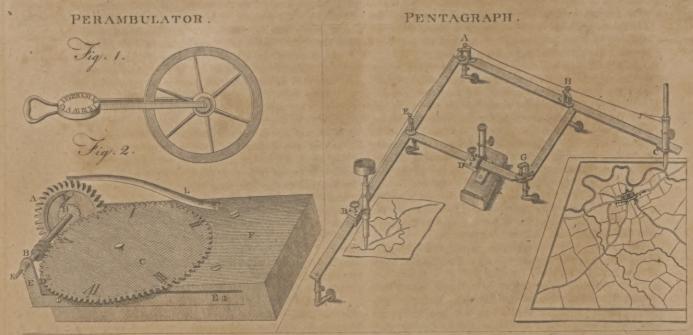
PEOR, was a city of the tribe of Judah, which is not read in the Hebrew, nor in the Vulgate, but only in the Greek of the Septuagint (Josh. xv. 60.). Eusebius says it was near Bethlehem, and Jerome adds, that in his time it was called Paora.

PEPIN DE HERISTAL, or LE GROS, mayor of the palace under Clovis III. Childebert, and Dagobert. The power of these mayors in France was so great, that they left the fovereign only the empty title, and in the end feized on the throne itself.

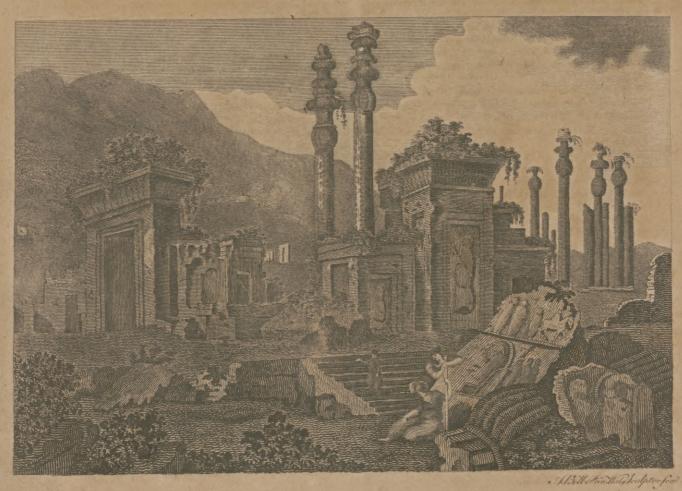
PEPIN le Bref, or le Petit, grandson to Pepin the Gros, and first king of the second race of French mo-

narchs.





PERSEPOLIS



Pepper-

narchs, was mayor of the palace to Childeric III. a weak prince: he contrived to confine him and his fon Thierri in different monasteries; and then, with the affiftance of Pope Stephen III. he usurped the sovereign power. He died in 763, aged 54.

PEPLIS, a genus of plants belonging to the hexandria class, and in the natural method ranking under the 17th order, Calycanthemæ. See BOTANY Index.

PEPLUS, a long robe worn by the women in ancient times, reaching down to the feet, without fleeves, and fo very fine, that the shape of the body might be feen through it. The Athenians used much ceremony in making the peplus, and dreffing the statue of Minerva with it. Homer makes frequent mention of the peplus of that goddess.

PEPPER, PIPER, in Natural History, an aromatic berry of a hot quality, chiefly used in seasoning. We have three kinds of pepper at present used in the shops, the black, the white, and the long pepper.

Black pepper is the fruit of the piper, and is brought from the Dutch settlements in the East Indies. See PIPER, BOTANY Index.

The common white pepper is factitious, being prepared from the black in the following manner: they steep this in sea-water, exposed to the heat of the sun for feveral days, till the rind or outer bark loofens; they then take it out, and, when it is half dry, rub it till the rind falls off; then they dry the white fruit, and the remains of the rind blow away like chaff. A great deal of the heat of the pepper is taken off by this process, so that the white kind is more fit for many purposes than the black. However, there is a fort of native white pepper produced on a species of the same plant; which is much better than the factitious, and indeed little inferior to the black.

The long pepper is a dried fruit, of an inch or an inch and a half in length, and about the thickness of a large goose quill: it is of a brownish gray colour, cylindrical in figure, and faid to be produced on a plant of the same genus.

Pepper is principally used by us in food, to affift digestion: but the people in the East Indies esteem it as a stomachic, and drink a strong infusion of it in water by way of giving them an appetite: they have also a way of making a fiery spirit of fermented fresh pepper with water, which they use for the same purposes. They have also a way of preserving the common and long pepper in vinegar, and eating them afterwards at meals.

Jamaica PEPPER, or Pimento. See LAURUS, Bo-TANY Index.

PEPPER-Mint. See MENTHA, BOTANY and MA-TERIA MEDICA Index.

PEPPER-Pot. See CAPSICUM, BOTANY Index.

PEPPER-Water, a liquor prepared in the following manner, for microscopical observations: Put common black pepper, grossly powdered, into an open vessel so as to cover the bottom of it half an inch thick, and put to it rain or river water, till it covers it an inch; shake or stir the whole well together at the first mixing, but never disturb it afterwards: let the vessel be exposed to the air uncovered; and in a few days there will be seen a pellicle or thin skin swimming on the surface of the liquor, looking of several colours.

This is a congeries of multitudes of small animals; VOL. XVI. Part I.

and being examined by the microscope, will be seen all Pepperin motion: the animals, at first fight, are so small as not mint-tree to be diffinguishable, unless to the greatest magnifiers; Perambulabut they grow daily till they arrive at their full fize. Their numbers are also continually increasing, till the whole surface of the liquor is full of them, to a considerable depth. When disturbed, they will sometimes all dart down to the bottom; but they foon after come up to the surface again. The skin appears soonest in warm weather, and the animals grow the quickest: but in the feverest cold it will succeed, unless the water freezes.

About the quantity of a pin's head of this fcum, taken up on the nib of a new pen, or the tip of a hairpencil, is to be laid on a plate of clear glass; and if applied first to the third magnifier, then to the second, and finally to the first, will show the different animalcules it contains, of feveral kinds and shapes as well as

PEPPERMINT-TREE. See EUCALYPTUS, BOTANY Index.

PERA, one of the suburbs of Constantinople, where ambassadors and Christians usually reside. See Constan-

PERAMBULATOR, in furveying, an infrument for measuring distances, called also odometer, pedometer,

way-wifer, and furveying-wheel.

It confifts of a wheel AA, fig. 1, two feet seven inches and a half in diameter; consequently half a pole, or eight feet three inches, in circumference. On one end of the axis is a nut, three quarters of an inch in diameter, and divided into eight teeth; which, upon moving the wheel round, fall into the eight teeth of another nut c, fixed on one end of an iron-rod Q, and thus turn the rod once round in the time the wheel makes one revolution. This rod, lying along a groove in the fide of the carriage of the instrument, under the doted line, has at its other end a square hole, into which is fitted the end b of a small cylinder P. This cylinder is disposed under the dial-plate of a movement, at the end of the carriage B, in fuch a manner as to be moveable about its axis: its end a is cut into a perpetual screw, which falling into the 32 teeth of a wheel perpendicular thereto, upon driving the inftrument forward. that wheel makes a revolution each 16th pole. On the axis of this wheel is a pinion with fix teeth, which falling into the teeth of another wheel of 60 teeth, carries it round every 160th pole, or half a mile.

This last wheel, carrying a hand or index round with it over the divisions of a dial-plate, whose outer limb is divided into 160 parts, corresponding to the 160 poles, points out the number of poles passed over. Again, on the axis of this last wheel is a pinion, containing 20 teeth, which falling into the teeth of a third wheel which hath 40 teeth, drives it once round in 320 poles, or a mile. On the axis of this wheel is a pinion of 12 teeth, which, falling into the teeth of a fourth wheel having 72 teeth, drives it once round in 12 miles.

This fourth wheel, carrying another index over the inner limb of the dial-plate, divided into 12 for miles, and each mile subdivided into halves, quarters, and furlongs, ferves to register the revolutions of the other hand, and to keep account of the half miles and miles passed over as far as 12 miles.

The use of this instrument is obvious from its construction. Its proper office is in the surveying of roads

and

Plate CCCCIX. Fig. 2.

Perambala and large diffances, where a great deal of expedition, and not much accuracy, is required. It is evident, that driving it along and observing the hands, has the same effect as dragging the chain and taking account of the chains and links.

Its advantages are its hardiness and expedition; its contrivance is fuch, that it may be fitted to the wheel of a coach, in which state it performs its office, and meafures the road without any trouble at all.

The following is a description of an instrument invent-

ed by Mr Edgeworth for the fame purpole.

"This odometer," fays Mr Edgeworth, "is more fimple than any which I have feen, is lefs liable to be out of order, and may be cafily attached to the axle-tree bed of a post-chaife, gig, or any other carriage.

" One turn and a half of a fcrew is formed round the nave of one of the hinder wheels by a flip of iron three quarters of an inch broad and one-eighth of an inch thick; this is wound round the nave, and fastened to it by ferews paffing through five or fix cocks, which are turned up at right angles on the flip of iron. The helix fo formed on the nave of the carriage wheel acts as a worm or ferew upon the teeth of the wheel A, fig. 2. upon the arbor of which another screw of brass B is formed, which acts upon the brafs wheel C. This wheel C ferves also as a dial-plate, and is divided into miles, halves, quarters, and furlongs; the figures indicating the miles are nearly three quarters of an inch long, fo as to be quite diffinct; they are pointed out by the index D, which is placed as represented in the plate, in such a manner as to be eafily feen from the carriage.

"These two brass wheels are mounted by the irons EE upon a block of wood F, eight inches long, two inches thick; and five inches broad. This block may be screwed upon the axle-tree-bed by two strong squareheaded wood screws. If the carriage permits, this block fhould be fixed obliquely on the axle-tree-bed, fo that the dial-plate may be raifed up toward the eye of the

person looking out from the carriage. "H is a ratchet wheel attached to the arbor of the wheel A, which, by means of the click I, allows the wheel to be fet with a key or handle fitted to the squared end of the arbor at K. L is a long fpring screwed on the block; it presses on the wheel A, to prevent it from shaking by the motion of the carriage. A small triangular spring is put under the middle of the dial-plate wheel for the same purpose.

" If the wheel of the carriage is exactly five feet three inches in circumference, the brass-toothed wheel which it turns should have twenty teeth, and that which serves as a dial-plate should have eighty; it will then count five miles. If the carriage wheel is either larger or fmaller, a mile should be carefully measured on a smooth road, and the number of turns which the carriage wheel makes in going this mile may eafily be counted by tying a piece of fine packthread to one of the spokes, and letting the wheel, as it moves flowly forward, wind up the packthread on its nave. When the wheel has proceeded a half or a quarter of a mile, unwind the string and count the number of turns which it has made.

"By the addition of another wheel of eighty-one teeth placed under the dial-plate wheel and moved by the screw C, with a proper hand fitted to it, and proper figures on the did plate, this machine would count four hundred miles."

It has been supposed that the ancient Romans were acquainted with an instrument of this kind. The foundation of this opinion is an expression of Julius Capitolinus in his life of the emperor Pertinax. The words are, " Et alia (vehicula), iter metientia, et horas monstrantia." " Carringes for measuring the length of the road, and marking the time of the journey."

Perca

PERCA, the Perch; a genus of fishes belonging to the order of thoracici. See ICHTHYOLOGY Index.

PERCEPTION, is a word which is fo well underflood, that it is difficult for the lexicographer to give any explanation of it. It has been called the first and most simple act of the mind by which it is conscious of its own ideas. This definition, however, is improper, as it confounds perception with confciousness; although the objects of the former faculty are things without us, those of the latter the energies of our own minds. Perception is that power or faculty by which, through the medium of the fenfes, we have the cognizance of objects diffinct and apart from ourselves, and learn that we are but a fmall part in the fystem of nature. what process the senses give us this information, we have endeavoured to show elfewhere, (fee METAPHYSICS, Part I. chap. i.); and we should not again introduce the subject, but to notice a fingular opinion of a very able writer, whole work has been given to the public fince our article alluded to had issued from the prets.

Dr Sayers has endeavoured to prove that no man can perceive two objects, or be conscious of two ideas at the same instant. If this be true, not only our theory of time (fee METAPHYSICS, Part II. chap. vii.) is grossly abfurd, but even memory itself feems to be an imaginary faculty. If a man be not confcious of his prefent existence, at the very inflant when he thinks of a past event, or reviews a scries of past transactions, it is difficult, to us indeed impossible, to conceive what idea he can have of time, or what he can mean when he fays that he remembers a thing. But let us examine the reasoning by which the ingenious author endeavours to establish his opinion.

" If we reflect (fays he +) upon the furprifing velocity + Difquifiwith which ideas pass through the mind, and the remark-tions Metaable rapidity with which the mind turns itfelf, or is di-thyfical rected from one object of contemplation to another, this , ary. might alone give us fome fuspicion that we may probably be mistaken in supposing ideas to be synchronously perceived. Other arguments, may be adduced to firengthen this fuspicion. It will be granted, I believe, that the mind, whether immaterial or the refult of organization, has certainly a wholeness or unity belonging to it, and that it is either not composed of parts, or that no one of the parts from which it originates is it!elf mind: in this case, it is difficult to conceive how two ideas should be impressed upon the mind at the same instant: for this would be supposing that part of the mind could receive one idea, and part another, at the same time; but if the parts do not perceive fingly, this is evidently impossible. If, on the other hand, this felf-division of the mind does not take place, then if two ideas are nevertheless to be perceived at the same inflant, it would seem that those ideas must be so blended with each other, that neither of them could appear diffinct. If we examine the manner in which a complex idea is perceived, we shall find very clearly, that the whole of fuch an idea is never prefent to the mind at once. In thinking of a centaur, for in-

* Nich. Four. 15. Perception stance, can we at the same moment be thinking of the parts of a man and the parts of a horse? Can we not almost detect the gliding of the mind from the one to the other? In contemplating the complex idea of gold, are the ideas of its colour, ductility, hardness, and weight, all present to the mind at the same instant? I think, if we accurately attended to it, we shall find a perceptible time has elapfed before this complex idea has been perfeetly formed in our mind: but if all the parts of a complex idea cannot be recalled at the fame inflant, is it not reasonable to infer that these parts are also singly impresfed, and not all originally perceived at the same instant?"

This reasoning is plausible, but perhaps not convin-Surely we have all been confcious of bodily pain or pleasure with our eyes open, and been offended by difagreeable fmells at the very inflant that we looked at objects beautifully coloured. That our ideas pass through the mind with great velocity, and that the mind can rapidly turn itself from one subject of contemplation to another, are truths which cannot be controverted; but instead of leading us to suppose that two or more objects cannot be synchronously perceived, or two or more ideas functionoully apprehended, they appear to furnish a complete proof of the reverse of all this. For we beg leave to ask how we come to know that ideas pass with velocity through the mind, if we be not all the while confcious of fomething that is permanent? If we can contemplate but one idea at once, it is plainly impossible that two or more can be compared together; and therefore we cannot possibly fay that any particular train has passed through the mind with a degree of velocity greater or less than that which we have usually experienced; nay, we cannot fay that we have ever experienced a train of ideas at all, or even been conscious of a single idea, besides the immediate object of present apprehension. That the mind is an individual, we most readily grant; but that it should therefore be incapable of having two ideas funchronously excited in it, is a proposition for which the author has brought no evidence. That it is difficult to conceive how this is done, we acknowledge; but not that it is more difficult than to conceive how a fingle idea is excited in the mind; for of the mode in which mind and matter mutually operate on each other, we can form no conception. We know that objects make an impression on the organs of sense; that this impression is by the nerves communicated to the brain, and that the agitation of the brain excites fenfation in the mind: but in what way it excites fenfation we know not; and therefore have no reason to suppose that two or more different agitations may not excite two or more fynchronous fenfations, as well as one agitation excites one fensation. That the agitation given to the brain operates on the mind, is known by experience; but experience gives us no information respecting the mode of that operation. If the mind be, as our author and we fuppose, one individual, it cannot, as mind, be either divisible or extended; and therefore it is certain that the operation in question cannot be, in the proper sense of the word, impression. Hence we have no right to infer, if two objects be perceived at once, either that the idea of the one must be impressed on a part of the mind different from that which receives the impression of the other, or that the two impressions must be so blended with each other, that neither of them could appear distinct; for this would be to reason from one

mode of operation to another; with which, upon ac- Perception knowledged principles, it can have nothing in com-

By far the greater part of our ideas are reliefts of visible sensations; and of every thing which we can actually fee at once, we at once contemplate the idea. That we could at once perceive a centaur, if fuch a being were prefented to us, cannot furely be doubted by any one who has ever looked at a man on horseback; and therefore that we can at the same moment contemplate the whole idea of a centaur, is a fact of which consciousness will not permit us to doubt .- If, indeed, we choose to analyze this complex idea into its component parts, it is felf-evident that the mind must glide from the one to the other, because the very analysis consists in the separation of the parts, of which, if after that process we think of them, we must think in succession: but that we may have at the same instant, either an actual or ideal view of all the parts of the centaur united, is a proposition fo evident as to admit of no other proof than an appeal to experience. In contemplating what the author calls the complex idea of gold, it cannot be denied that the ideas of its colour, ductility, hardness, and weight, are never all present to the mind at the same instant : but the reason is obvious. These are not all ideas, in the proper sense of the word, but some of them are ideas, and some notions, acquired by very different processes and very different faculties. Colour is an idea of fensation, immediately fuggested through the organ of fight; ductility is a relative notion, acquired by repeated experiments; and gold might be made the object of every fense, without suggesting any such notion. The writer of this article never faw an experiment made on the ductility of gold, and has therefore a very obscure and indistinct notion of that property of the metal; but he is conscious, that he can perceive, at the same inflant, the yellow colour and circular figure of a guinea, and have a very distinct, though relative notion, of its hardness.

We conclude, therefore, that the mind is capable of two or more fynchronous perceptions, or fynchronous ideas; that, during every train which passes through it, it is conscious of its own permanent existence; and that if it were limited to the apprehension of but one idea at once, it could have no remembrance of the patt, or anticipation of the future, but would appear to itself, could it make any comparison, to pass away like a flash of

PERCH, in land-measuring, a rod or pole of 165 feet in length, of which 40 in length and 4 in breadth make an acre of ground. But, by the cultoms of icveral counties, there is a difference in this measure. In Staffordihire it is 24 feet; and in the forest of Sherwood 25 feet: the foot being there 18 inches long; and in Herefordshire a perch of ditching is 21 feet, the perch of walling 16 teet, and a pole of denshiered ground is 12 feet, &c.

PERCH, a fish. See PERCA, ICHTHYOLOGY Index.

PERCHE, a territory of Orleannois in France, 35 miles long, and 30 broad; bounded on the north by Normandy; on the fouth, by Maine and Dunois; on the east, by Beauce; and on the west, by Maine. It takes its name from a forest, and is pretty fertile. The inhabitants carry on a pretty good trade; and the principal town is Bellefme.

Percolation

PERCOLATION, a chemical operation which is the fame with FILTRATION.

PERCUSSION, in Mechanics, the impression a body makes in falling or striking upon another; or the shock of two bodies in motion. See DYNAMICS and MECHANICS.

PERDICIUM, a genus of plants, belonging to the fyngenefia class; and in the natural method ranking under the 49th order, Compositæ. See BOTANY Index.

PERDIX, the partridge. See TETRAO, ORNITHO-

LOGY Index.

Perfume.

PEREASLAW, a strong populous town of Poland, in the palatinate of Kiovia, fituated on the river Tribecz.;

in E. Long. 32. 44. N. Lat. 49. 46.

PERENNIALS, or PERENNIAL FLOWERS, in Botany, a term applied to those plants whose roots abide many years, whether they retain their leaves in winter or not. Those which retain their leaves are called evergreens; but fuch as cast their leaves are named deciduous or perdifols.

PERFECT, fomething to which nothing is wanting, or that has all the requifites of its nature and

kind.

PERFECT Cadence, in Music. Sec GADENCE. PERFECT Tenfe, in Grammar. See PRETERITE.

PERFECTION, the state or quality of a thing PER-

Perfection is divided, according to Chauvinus, into

physical, moral, and metaphysical.

Phylical or natural perfection, is that whereby a thing has all its powers and faculties, and those too in full vigour; and all its parts both principal and fecondary, and those in their due proportion, constitution, &c. in which sense man is said to be perfect when he has a found mind in a found body. This perfection is by the schools frequently termed everyntian, because a thing is enabled thereby to perform all its operations.

Moral perfection is an eminent degree of virtue or moral goodness, to which men arrive by repeated acts of piety, beneficence, &c. This is usually subdivided into absolute or inherent, which is actually in him to whom we attribute it; and imputative, which exists in

fome other, and not in him it is attributed to.

Metaphysical, transcendental, or effection, is the possession of all the essential attributes, or of all the parts necessary to the integrity of a substance; or it is that whereby a thing has or is provided of every thing belonging to its nature. This is either absolute, where all imperfection is excluded, fuch is the perfection of God; or fecundum quid, and in its kind.

PERFORANS, MANUS. PERFORANS Pedis. See ANATOMY, Table PERFORATUS Manus. of the Muscles. PERFORATUS Pedis.

PERFUME, denotes either the volatile effluvia from any body affecting the organ of fmelling, or the fubstance emitting those effluvia; in which last sense the word is most commonly used. The generality of perfumes are made up of musk, ambergris, civet, rose and cedar woods, orange-flowers, jessamines, jonquils, tuberoses, and other odoriferous flowers. Those drugs commonly called aromatics, fuch as storax, frankincense, benzoin, cloves, mace, &c. enter the composition of a

perfume; fome are also composed of aromatic herbs or Persume leaves, as lavender, marjoram, fage, thyme, hystop, &c.

The use of persumes was frequent among the He-Pergamum. brews, and among the orientals in general, before it was known to the Greeks and Romans. In the time of Moses perfumes must have been known in Egypt, since he fpeaks of the art of the perfumer, and gives the composition of two kinds of perfumes (Exod. xxx. 25.), of which one was to be offered to the Lord upon the golden altar which was in the holy place; and the other was appointed for the anointing of the high priest and his sons (ibid. 34, &c.), as also of the tabernacle, and all the veffels that were used in divine fervice.

The Hebrews had also perfumes which they made use of in embalming their dead. The composition is not known, but it is certain that they generally made use of myrrh, aloes, and other strong and astringent drugs, proper to prevent putrefaction (John xix. 49.).

See the article EMBALMING.

Besides the persumes for these purposes, the Scripture mentions other occasions whereon the Hebrews used perfumes. The spouse in the Canticles (i. 3.) commends the fcent of the perfumes of her lover; and her lover in neturn fays, that the scent of the perfumes of his spoule surpasses the most excellent odours (id. iv. 10-14.). He names particularly the spikenard, the calamus, the cinnamon, the myrrh, and the aloes, as making a part of these perfumes. The voluptuous woman described by Solomon (Frov. vii. 17.) fays, that fhe had perfumed her bed with myrrh, aloes, and cinnamon. The epicures in the book of Wildom (ii. 7.) encourage one another to the luxuriant use of odours and coftly perfumes.

Isaiah (lvii. 9.) reproaches Judea, whom he describes as a fpouse faithless to God, with being painted and perfumed to please strangers, "Thou wentest to the king with ointment, and didst increase thy perfumes." Ezekiel (xxiii. 41.) feems to accuse the Jews with having profaned the odours and perfumes, the use of which was referved to facred things, by applying them to their own

They came afterwards to be very common among the Greeks and Romans, especially those composed of musk, ambergris, and civet. The nardus and malobathrum were held in much estimation, and were imported from Syria. The unguentum nardinum was variously prepared, and contained many ingredients. Malobathrum was an Indian plant. Perfumes were alfo used at facrifices to regale the gods; at feasts, to increase the pleasures of sensation; at funerals, to overpower cadaverous fmclls, and please the manes of the dead; and in the theatres, to prevent the offenfive effluvia, proceeding from a crowd, from being per-

Since people are become fensible of the harm they do to the head, perfumes are generally difused among us; however, they are still common in Spain and Italy.

PERGAMA, (Virgil), the citadel of Troy; which, because of its extraordinary height, gave name to all high buildings (Servius). Others say the walls of Troy were called Pergama.

PERGAMUM, (Pliny); called also Pergamea, (Virgil); Pergamia, (Plutarch); a town of Crete,

Pergamum, built by Agamemnon in memory of his victory, (Vel-Pergamus. leius). Here was the burying-place of Lycurgus (Aristoxenus, quoted by Plutarch). It was fituated near Cydonia (Servius); to what point not faid: but Scylax helps him out, who places the Dactynnean temple of Diana, which stood near Cydonia (Strabo), to the north of the territory of Pergamia. - Another PERGAMUM (Pliny, Strabo); a town of Mysia, situated on the Caïcus, which runs by it. It was the royal residence of Eumenes, and of the kings of the Attali (Livy). There an ancient temple of Æsculapius stood; an asylum (Tacitus). The ornament of Pergamum was the royal library, vying with that of Alexandria in Egypt; the kings of Pergamum and Egypt rivalling each other in this respect (Pliny). Strabo ascribes this rivalry to Eumenes. Plutarch reckons up 200,000 volumes in the library at Pergamum. Here the membranæ pergamenæ, whence the name parchment, were invented for the use of books, (Varro, quoted by Pliny). The country of Galen, and of Oribahus chief physician to Julian the Apostate (Eunapius), called by some the ape of Galen. Here P. Scipio died (Cicero). Attalus fon of Eumenes dying without issue, bequeathed his kingdom to the Roman people, who reduced it to a province, (Strabo). Pergameus, the epithet (Martial). Here was one of the nine conventus juridici, or affemblies of the Asia Romana, called Pergamenus, and the ninth in order (Pliny); which he also calls jurisdictio Perga-

> PERGAMUS, an ancient kingdom of Afia, formed out of the ruins of the empire of Alexander the Great. It commenced about the year 283. The first fovereign was one Philetærus an eunuch, by birth a Paphlagonian, of a mean descent, and in his youth a menial fervant to Antigonus one of Alexander's captains. He afterwards ferved Lysimachus king of Macedon and Thrace, who appointed him keeper of his treasures lodged in Pergamus. While he held this employment, having fallen under the displeasure of Arfinoe wife to Lyfimachus, she sound means to make a quarrel between him and his master; upon which Philetærus seized on the castle of Pergamus, together with the treasures entrusted to his care, amounting to 90,000 talents. At first he offered his service, together with his treasure, to Seleucus king of Syria: but both Seleucus and Lysimachus dying soon after, he kept possession of the town and treasure also till his death; which happened 20 years after his revolt from Lysimachus.

> Philetærus left the city of Pergamus to his brother. or, according to some, to his brother's fon Eumenes I. and he, laying hold of the opportunity offered by the diffensions among the Seleucidæ, possessed himself of many strong-holds in the province of Asia; and having hired a body of Galatians, defeated Antiochus, as he was returning from a victory gained over his brother Seleucus Callinicus. By this victory he obtained possession of the greater part of Asia: however, he did not long enjoy his acquisitions; for he died next year of immoderate drinking, a vice to which he was greatly addicted.

> Eumenes was fucceeded by Attalus I. nephew of Philetærus, and the first who took upon him the title of king of Pergamus. He defeated the Gauls, who were defirous of fettling in his territory; and, accor-

ding to Livy, was the first of the Asiatic princes who Pergamus refused to pay a contribution to these barbarians. When Seleucus Ceraunus was engaged in other wars, he invaded his territorics, and conquered all the provinces on this fide of Mount Taurus; but was foon driven out of his new acquifitions by Seleucus and his grandfather Achæus, who entering into an alliance against him, deprived him of all his newly acquired territories, and even besieged him in his capital. Upon this Attalus invited to his affistance the Gauls who had fettled in Thrace: and with their help not only obliged the enemy to raife the fiege of Pergamus, but quickly recovered all the provinces he had loft. After this he invaded Ionia and the neighbouring provinces, where feveral cities voluntarily submitted to him. The Teians, Colophonians, with the inhabitants of Egea and Lemnos, fent deputies declaring themselves ready to acknowledge him fc. their fovereign; the Carfenes, on the other fide the river Lycus, opened their gatesto him, having first expelled the governor set over them by Achæus. From thence he advanced to Apia, and encamping on the banks of the river Megithus, received homage from the neighbouring nations. But here the Gauls, being frightened by an eclipse of the moon, refused to proceed farther; which obliged Attalus to return to the Heilespont, where he allowed his allies to fettle, giving them a large and fruitful territory, and promifing that he would always affift and protect them to the utmost of his power.

Attalus having thus fettled his affairs with equal honour and advantage to himself, entered into an alliance with Rome, and afterwards joined them in their war against Philip king of Macedon. Here he had the command of the Rhodian fleet; with which he not only drove the Macedonians quite out of the scas, but having landed his men, he, in conjunction with the Athenians, invaded Macedon, and obliged Philip to raife the fiege of Athens, which he had greatly diffressed; for which fervices the Athenians not only heaped on him all the favours they could, but called one of their tribes by his name; an honour they had never bestowed on any

foreigner before. Attalus, not contented with all he had yet done against Philip, attempted to form a general confederacy of the Greeks against him. But while he was haranguing the Bœotians to this purpose, and exhorting them with great vehemence to enter into an alliance with the Romans against their common enemy, he fell down speechless. However, he came to himself again, and defired to be carried by fea from Thebes to Pergamus, where he died foon after his arrival, in the 72d year of his age and 43d of his reign.

This prince was a man of great generofity, and fuch an enthufiast in learning and learned men, that he caused a grammarian named Daphidas to be thrown into the sea from the top of a high rock, because he fpoke difrespectfully of Homer.

Attalus was succeeded by his eldest son Eumenes II. He was exceedingly attached to the Romans, infomuch that he refused the daughter of Antiochus the Great in marriage, left he should thus have been led into a difference with that people. He also gave notice to the Roman fenate of the transactions of Ariarathes king of Cappadocia, who was making great preparations both by sea and land. Nor did Eumenes stop here; for Pergamus, when he faw the war about to break out between Antiochus and the Romans, he fent his brother Attalus to Rome to give information of the proceedings of Antiochus. The fenate heaped honours both on Eumenes and his brother; and in the war which followed, gave the command of their fleet to the king of Pergamus in conjunction with C. Livius Salinator. The victory gained on this occasion was in a great measure owing to Eumenes, who boarded some of the enemy's ships in person, and during the whole action behaved with uncommon bravery. Some time afterwards Eumenes, entering the territories of Antiochus with a body of 5000 men, ravaged all the country about Thyatira, and returned with an immense booty. But in the mean time Antiochus invading Pergamus in his turn, ravaged the whole country, and even laid fiege to the capital. Attalus, the king's brother, held out with a handful of men till the Achaeans, who were in alliance with Eumenes, fent 1000 foot and 100 horse to his affistance. As this small body of auxiliaries were all chosen men, and commanded by an experienced officer, they behaved with fuch bravery that the Syrians were obliged to raise the siege. At the battle of Magnesia, too, Eumenes behaved with the greatest bravery: not only fustaining the first attack of the enemy's elephants, but driving them back again on their own troops, which put the ranks in diforder, and gave the Romans an opportunity of giving them a total defeat by attacking them opportunely with their horse. In consequence of this defeat, Antiochus was obliged to conclude a peace with the Romans on fuch terms as they pleafed to pretcribe; one of which was, that he should pay Eumenes 400 talents, and a quantity of corn, in recompence for the damage he had done him.

> Eumenes now thought of obtaining some reward from the Romans equivalent to the fervices he had done them. Having gone to Rome, he told the fenate, that he was come to beg of them that the Greek cities which had belonged to Antiochus before the commencement of the late war, might now be added to his dominions; but his demand was warmly opposed by the ambaffadors from Rhodes, as well as by deputies from all the Greek cities in Asia. The senate, however, after hearing both parties, decided the matter in favour of Eumenes, adding to his dominions all the countries on this fide of Mount Taurus which belonged to Antiochus; the other provinces lying between that mountain and the river Mæander, excepting Lycia and Caria, were bestowed on the Rhodians. All the cities, which had paid tribute to Attalus, were ordered to pay the same to Eumenes; but such as had been tributary to Antiochus were declared free.

Soon after this Fumenes was engaged in a war with Prusias king of Bithynia, who made war upon him by the advice of Hannibal the celebrated Carthaginian general. But Eumenes, being affified by the Romans, defeated Prusias in an engagement by sea, and another by land; which so disheartened him, that he was ready to accept of peace on any terms. However, before the treaty was concluded, Hannibal found means to draw Philip of Macedon into the confederacy, who fent Philocles, an old and experienced officer, with a confiderable body of troops to join Prusias. Hereupon Eumenes fent his brother Attalus to Rome with a

golden crown, worth 15,000 talents, to complain of Pergamus. Prufias for making war on the allies of the Roman people without any provocation. The fenate accepted the prefent, and promifed to adjust every thing to the fatisfaction of their friend Eumenes, whom they looked upon to be the most steady ally they had in Asia. But in the mean time Prufias, having ventured another fea fight, by a contrivance of Hannibal's, gained a complete victory. The Carthaginian commander advited him to fill a great many earthen veffels with various kinds of ferpents and other poisonous reptiles, and in the heat of the fight to throw them into the enemies thips to as to break the pots and let the ferpents loofe. All the foldiers and feamen were commanded to attack the ship in which Eumenes was, and only to defend themselves as well as they could against the rest; and that they might be in no danger of neiftaking the ship, a herald was fent before the engagement with a letter to the king. As foon as the two fleets drew near, all the ships of Prusias, singling out that of Eumenes, discharged such a quantity of ferpents into it, that neither foldiers nor failors could do their duty, but were forced to fly to the shore, lett they should fall into the enemy's hands. The other ships, after a faint resistance, followed the king's example, and were all driven ashore with great slaughter, the foldiers being no less annoyed by the stings of the ferpents, than by the weapons of the enemy. The greatest part of the ships of Eumenes were burnt, several taken, and the others fo much shattered that they became quite unserviceable. The same year Prusias gained two remarkable victories over Eumenes by land, both of which were entirely owing to ftratagems of Hannibal. But, while matters were thus going on to the disadvantage of Eumenes, the Romans interfered, and by their deputies not only put an end to the differences between the two kings, but prevailed on Prutias to betray Hannibal; upon which he poisoned himself, as hath been related under the article HANNIBAL.

Eumenes being thus freed from fuch a dangerous enemy, engaged in a new war with the kings of Cappadocia and Pontus, in which also he proved victorious. His friendship for the Romans he carried to such a degree of enthusiasm, that he went in person to Rome to inform them of the machinations of Perses king of Macedon. He had before quarrelled with the Rhodians, who fent ambassadors to Rome to complain of him. But as the ambaffadors happened to arrive while the king himfelt was prefent in the city, the Rhodian ambaffadors could not obtain any hearing, and Eumenes was difmiffed with new marks of favour. This journey, however, had almost proved fatal to him; for, on his return, as he was going to perform a facrifice at Delphi, two affashins, fent by Perfes, rolled down two great stones upon him as he entered the straits of the mountains. With one he was dangerously wounded on the head, and with the other on the shoulder. He fell with the blows from a sleep place, and thus received many other bruises; fo that he was carried on board his ship when it could not well be known whether he was dead or alive. His people, however, foon finding that he was still alive, conveyed him to Corinth, and from Corinth to Ægina, having caused their vessels to be carried over the isthmus.

Eumenes remained at Ægina till his wounds were cured, Pergamus, cured, which was done with fuch fecreey, that a report of his death was spread all over Asia, and even believed home; nay, his brother Attalus was so convinced of the truth of this report, that he' not only affumed the government, but even married Stratonicc the wife of Eumenes. But in a flort time Eumenes convinced them both of his being alive, by returning to his kingdom. On the receipt of this news, Attalus refigned the fovereignty in great hafte, and went to meet his brother; carrying a halberd, as one of his guards. Lumenes received both him and the queen with great tenderness, nor did he ever say any thing which might tend to make them uneasy; only it is faid he whispered in his brother's ear when he first faw him, "Be in no haste to marry my wife again till you are sure that I am

dead." The king being now more than ever exasperated against Perses, joined the Romans in their war against him; but during the course of it he suddenly cooled in his affection towards these allies whom he had hitherto ferved with fo much zeal, and that to fuch a degree, that he admitted ambaffadors from Perfes, and offered to fland neuter if he would pay him 1000 talents, and for 1500, to influence the Romans to grant him a fafe and honourable peace. But these negociations were broke off without effect, by reason of the distrust which trust Perfes unless he paid him the money beforehand; while, on the other hand, Perfes did not care to part with the money before Eumenes had performed what he promifed; neither could be be induced to pay the fam in quellion, though the king of Pergamus offered to give hollages for the performance of his promise. What the reason of such a sudden change in the disposition of Eumencs was, is nowhere told; however, the fact is certain. The negociations above mentioned were concealed from the Romans as long as possible; but they foon came to be known: after which the republic began to entertain no small jealousy of their old friend, and therefore heaped favours on his brother Attalus, without taking any notice of the king himself. Eumenes had fent him to Rome to congratulate the fenate on the happy iffue of the war with Perfes, not thinking that his practices had been discovered. However, the fenate, without taking any notice of their difaffection to Eumenes at first, entertained Attalus with the greatest magnificence; then feveral of the fenators who vifited him proceeded to acquaint him with their fuspicions of the king, and defired Attalus to treat with them in his own name, affuring him, that the kingdom of Pergamus would be granted him, if he demanded it, by the fenate. There speeches had at first some effect; but Attalus, being of an honest disposition, and affisted by the advice of a physician called Stratius, a man of great probity, refolved not to comply with their defire When he was admitted to the fenate, therefore, he first congratulated them on the happy iffue of the Macedonian war, then modestly recounted his own fervices; and lastly, acquainted them with the motive of his journey; intreated them to fend ambassadors to the Gauls, who by their authority might fecure his brother from any danger of their hostilities; and he requested them also, that the two cities of Ænus and Maronca might be beflowed on himself. The senate, imagining that Attalus defigned to choose some other day to sue for his brother's kingdom, not only granted all his requests, but Pergamus. fent him richer and more magnificent prefents than they had ever done before. Upon this Attalus immediately fct out on his return to Pergamus; which fo provoked the fenators, that they declared the cities free which they had promifed to Attalus, thus rendering ineffectual their promife which they were ashamed openly to revoke; and as for the Gauls, who were on all occasions ready to invade the kingdom of Pergamus, they feat ambassadors to them, with instructions to behave in such a manner as would rather tend to encourage them in

their defign than diffuade them from it.

Eumenes, being alarmed at those proceedings, refolved to go in person to Rome, in order to justify himself. But the fenate, having already condemned him in their own minds, refolved not to hear his vindication. For this reason, as scon as they heard of his design, they made an act that no king should be permitted to enter the gates of Rome. Eumenes, however, who knew nothing of this act, fet forward on his journey, and landed at Brundufium; but no fooner did the Reman fenate get intelligence of his arrival there, than they fent a quæstor acquainting him with the decree of the fenate; and telling him at the fame time, that if he had any bufiness to transact with the senate, he was appointed to hear it, and transmit it to them; but if not, that the king must leave Italy without delay. To this Eumenes replied, that he had no business of any consequence to transact, and that he did not stand in need of any of their affiftance; and without faying a word more, went on board his ship, and returned to Pergamus.

On his return home, the Gauls, being encouraged by the cold reception which he had met with at Rome, invaded his territories, but were repulfed with great los. by the king, who afterwards invaded the dominions of Prufias, and poffessed himself of several cities. This produced new complaints at Rome; and Eumenes was accused, not only by the ambassadors of Prusias, but also by those of the Gauls and many cities in Asia, of keeping a fecret correspondence with Perses king of Macedon. This last charge was confirmed by some letters which the Romans themselves had intercepted; so that Eumenes found it impossible to keep up his credit any longer at Rome, though he fent his brothers Athenœus and Attalus thither to intercede for him. The fenators, in fhort, had conceived the most implacable hatred against him, and scemed absolutely bent on his destruction, when he died, in the 39th year of his reign, leaving his kingdom and his wife to his brother Attalus. He left one son, but he was an infant, and incapable of governing the kingdom; for which reason Eumenes chose rather to give the present possession of the crown to his brother, referving the fuccession to his fon, than to endanger the whole by committing the management of affairs to his fon's tutors.

Attalus, in the beginning of his reign, found himfelf greatly diffressed by Prusias king of Bithynia, who not only overthrew him in a pitched battle, but advanced to the very walls of Pergamus, ravaging the country as he marched along; and at last reduced the royal city itself. The king, however, saved himself by a timely slight, and dispatched ambassadors to Rome, complaining of the bad usage of Prusias. The latter endeavoured to defend himself, and to throw the blame on Atta-

Pergamus. lus. But, after a proper inquiry was made into the matter; Prufias was found to be entirely in the wrong; in confequence of which, he was at last obliged to conclude a peace with his adverfary on the following terms. 1. That he should immediately deliver up to Attalus 20 ships with decks. 2. That he should pay 500 talents to Attalus within the space of 20 years. 3. That he should pay 100 talents to some of the other Asiatic nations by way of reparation for the damages they had fustained from him. And, 4. Both parties should be content with what they had before the beginning of the

> Some time after this, Prufias having made an unnatural attempt on the life of his fon Nicomedes, the latter rebelled, and, with the affiftance of Attalus, drove his father from the throne, and, as is faid, even murdered him in the temple of Jupiter. The Romans took no notice of these transactions, but showed the same kindness to Attalus as formerly. The last enterprise in which we find Attalus engaged, was against Andrifeus the pretended fon of Perfes king of Macedon, where he affifted the Romans; after which he gave himself up entirely to eafe and luxury, committing state affairs entirely to his ministers; and thus continued to his death, which happened in the 82d year of his age, about 138 B. C.

Attalus II. was fucceeded by Attalus III. the fon of Eumenes; for the late king, confidering that he only held the crown as a trust for his nephew, passed by his own children in order to give it to him, though he appears to have been by no means worthy of it. He is faid to have been deprived of his fenfes through the violence of his grief for his mother's death; and indeed, throughout his whole reign, he behaved more like a madman than any thing elfe. Many of his fubjects of the highest quality were cut off with their wives and children, upon the most groundless suspicions; and for thefe executions he made use of mercenaries hired out from among the most barbarous nations. Thus he proceeded till he had cut off all the best men in the kingdom; after which he fell into a deep melancholy, imagining that the ghofts of those whom he had murdered were perpetually haunting him. On this he shut himfelf up in his palace, put on a mean apparel, let his hair and beard grow, and fequestered himself from all mankind. At last he withdrew from the palace, and retired into a garden, which he cultivated with his own hands, and filled with all forts of poisonous herbs. These he used to mix with wholesome pulse, and fend packets of them to fuch as he fuspected. At last, being weary of this amusement, and living in solitude, because nobody durst approach him, he took it in his head to follow the trade of a founder, and make a brazen monument. But, while he laboured at melting and casting the brass, the heat of the fun and furnace threw him into a fever, which in feven days put an end to his tyranny, after he had fat on the throne five years.

On the death of the king, a will was found, by which he left the Roman people heirs of all his goods; upon which they feized on the kingdom, and reduced it to a province of their empire by the name of Afia Proper. But Aristonicus, a son of Eumenes by an Ephelian courtefan, reckoning himfelf the lawful heir to the crown, could by no means be fatisfied with this ufurpation of the Romans, and therefore affembled a confiderable army to maintain his pretenfions. The people in Pergamusgeneral, having been accustomed to a monarchy, dreaded a republican form of government; in confequence of which, they affifted Ariftonicus, and foon put him in a condition to reduce the whole kingdom. The news, however, were foon carried to Rome; and Licinius Craffus, the pontifex maximus, was fent into the east, with orders to enforce obedience to the king's will. Historians take no notice of any forces which were fent along with this commander; whence it is supposed, that he depended on affiltance from the Afiatics, who were in alliance with Rome, or from the Egyptians. But when he came thither, he found both the Syrians and Egyptians fo reduced, that he could not expect any affiftance from them. However, he was foon fupplied with troops in plenty by the kings of Pontus, Bithynia, Cappadocia, and Paphlagonia; but managed matters fo ill, that he was entirely defeated and taken prifoner. Those who took him, defigned to carry him to Aristonicus; but he, not able to endure the difgrace, would have laid violent hands on himself if he had not been difarmed. However, being allowed to keep a rod for managing the horse on which he sat, he struck a Thracian foldier who stood near him fo violently with it, that he beat out one of his eyes; upon which the other drew his fword, and run him through on the spot. His head was brought to Aristonicus, who exposed it to public view; but the body was honourably bu-

Aristonicus had no great time to enjoy the fruits of his victory. Indeed he behaved very improperly after it; for, instead of preparing to oppose the next army, which he might have been affured the Romans would fend against him, he spent his time in feasting and revelling. But he was foon roused out of his lethargy by Perpenna the new conful, who having affembled with incredible expedition the troops of the allies, came unexpectedly upon him, obliged him to venture an engagement at a disadvantage, and entirely defeated him. Aristonicus fled to a city called Stratonice, but was so closely purfued by the conqueror, that the garrison, having no method of fupplying themselves with provisions, delivered up their leader, as well as a philosopher named Blofius, who had been the companion and counfellor of Aristonicus. The philosopher behaved with great resolution after being taken, and openly defended his fiding with Aristonicus, because he thought his cause just. He exhorted the latter to prevent the difgrace and mifery of captivity by a voluntary death; but Aristonicus, looking upon death as a greater mifery than any captivity, fuffered himfelf to be treated as his conquerors pleafed.

In the mean time, a new conful, named Manius Aquilius, being arrived from Rome, fent a most haughty message to Perpenna, requiring him immediately to deliver up Aristonicus, as a captive belonging to his tri-umph when the war should be ended. With this demand Perpenna refused to comply, and his refusal had almost produced a civil war. However, this was prevented by the death of Perpenna, which happened foon after the difpute commenced. The Pergamenians, notwithstanding the defeat and captivity of their leader, still held out with fuch obstinacy, that Aquilius was obliged to befiege, and take by force, almost every city in the kingdom. In doing this, he took a very effecPerianthium.

Pergunnah tual, though exceeding cruel method. Most of the cities in the kingdom had no other water than what was brought from a confiderable diffance in aqueducts. These Aquilius did not demolish, but poisoned the water, which produced the greatest abhorrence of him throughout all the east. At last, however, the whole country being reduced, Aquilius triumphed, the unhappy Aristonicus was led in chains before his chariot, and probably ended his miserable life in a dungeon. The country remained subject to the Romans while their empire lasted, but is now in the hands of the Turks. The city is half ruined, and is still known by the name of Pergamus. It is inhabited by about 3000 Turks, and a few families of poor Christians. E. Long. 27. 27.

N. Lat. 30. 3. PERGUNNAH, in the language of Hindostan, means the largest subdivision of a province, whereof the revenues are brought to one particular head Cutchery, from whence the accounts and cash are transmitted to

the general Cutchery of the province.

PERIAGOGE, in Rhetoric, is used where many things are accumulated into one period which might have been divided into feveral.

PERIAGUA, a kind of large canoe made use of in the Leeward islands, South America, and the gulf of Mexico. It is composed of the trunks of two trees hollowed and united together; and thus differs from

the cance, which is formed of one tree.

PERIANDER, tyrant of Corinth and Corcyra, was reckoned among the feven wife men of Greece; though he might rather have been reckoned among the most wicked men, since he changed the government of his country, deprived his countrymen of their liberty, usurped the sovereignty, and committed the most shocking crimes. In the beginning of his reign he behaved with mildness; but after his having sent to the tyrant of Syracuse to consult him on the safest method of government, he abandoned himfelf to cruelty. The latter, having heard Periander's envoys, took them into a field, and, instead of answering them, pulled up before them the ears of corn which exceeded the rest in height. Periander, on being told of this action, understood what was meant by it. He first secured himself by a good guard, and then put the most powerful Corinthians to death. He abandoned himself to the most enormous crimes; committed incest with his mother, kicked to death his wife Melifia, daughter of Procles king of Epidaurus, notwithstanding her being with child; and was so enraged at Lycophron, his fecond fon, for lamenting his mother's death, that he banished him into the island of Corcyra. Yet he passed for one of the greatest politicians of his time; and Heraclides tells us, that he forbade voluntuoufness; that he imposed no taxes, contenting himself with the custom arising from the sale and the import and export of commodities; that, tho' wicked himself, he hated the wicked, and caused all pimps to be drowned; lastly, that he established a fenate, and fettled the expence of its members. He died

PERIANTHIUM, (from reg, " round," and robos " the flower,") the flower cup properly fo called, the most common species of calyx, placed immediately under the flower, which is contained in it as in

a cup. See BOTANY Index.

VOL. XVI. Part I.

PERICARDIUM, in Anatomy, a membranous bag Pericardifilled with water, which contains the heart in man and many other animals. It is formed by a duplicature Perigraphe. of the mediastinum, or membrane which divides the thorax into two unequal parts. See ANATOMY, no

PERICARPIUM, (from meg: " round," and nagmos " fruit,") the feed-veffel; that organ of a plant containing the feeds, which it discharges when ripe. The feedveffel is in fact the developed feed-bud, and may very properly be compared to the fecundated ovary in animals; for it does not exist till after the fertilizing of the feeds by the male-dust, and the consequent fall of the flower. All plants, however, are not furnished with a feed-veffel; in fuch as are deprived of it, the receptacle or calyx performs its functions by inclosing the feeds, as in a matrix, and accompanying them to perfect maturity

PERICHORUS, in antiquity, a name given by the Greeks to their profane games or combats, that is, to fuch as were not confecrated to any of the gods.

PERICLES, was one of the greatest men that ever flourished in Greece. He was educated with all imaginable care; and beside other masters, he had for his tutors Zeno, Eleates, and Anaxagoras. He learned from the last of these to fear the gods without superstition, and to account for an eclipfe from a natural cause. Many were unjust enough to suspect him of atheism, because he had perfectly studied the doctrine of that philosopher. He was a man of undoubted courage; and of fuch extraordinary eloquence, supported and improved by knowledge, that he gained almost as great an authority under a republican government as if he had been a monarch; but yet he could not escape the fatirical strokes of the comic poets. His diffoluteness with women was one of the vices with which he was chiefly charged. He died the third year of the Peloponnesian war, after long sickness, which had weakened his understanding. Afpasia, Pericles's favourite, was a learned woman of Miletus: she taught Socrates rhetoric and politics. As Pericles cared not much for his wife, he willingly gave her up to another, and married Afpafia, whom he paffionately loved.

PERICRANIUM, in Anatomy, a thick folid coat

or membrane covering the outside of the cranium or

skull. See ANATOMY, no 4.

PERIGEE, in Astronomy, that point of the sun or moon's orbit wherein they are at the least distance from the earth; in which fense it stands opposed to

PERIGORD, a province of France, which makes part of Guienne, bounded on the north by Angoumois and a part of Marche, and on the east by Quercy and Limofin; on the fouth by Agenois and Bazadois; and on the west, by Bourledois, Angoumois, and a part of Saintonge. It is about 83 miles in length, and 60 in breadth. It abounds in iron mines, and the air is pure and healthy. Perigueux is the capital town.

PERIGORD-Stone, is supposed to be an ore of manga-

nese, of a dark grey colour, like basalt.

PERIGRAPHE, a word usually understood to express a careless or inaccurate delineation of any thing; but in Vefalius it is used to express the white lines or impressions that appear on the musculus rectus of the abdomen.

PERIGUEUX, an ancient town of France, capital of the province of Perigord, feated on the river Ide, in E. Long. 0. 33. N. Lat. 45. 18. It is remarkable for the ruins of the temple of Venus, and an am-

PERIHELIUM, in Astronomy, that part of a planet or comet's orbit wherein it is in its least distance from the fun; in which fense it stands in opposition to

aphelium.

PERIMETER, in Geometry, the bounds or limits of any figure or body. The perimeters of furfaces or figures are lines; those of bodies are surfaces. In circular figures, instead of perimeter, we say circumserence, or periphery.

PERINÆUM, or PERINEUM, in Anatomy, the space between the anus and the parts of generation, divided into two equal lateral divisions by a very distinct line, which is longer in males that in females.

PERIOD, in Astronomy, the time taken up by a flar or planet in making a revolution round the fun; or the duration of its course till it return to the same part of its orbit. See PLANET.

The different periods and mean distances of the seve-

ral planets are as follows:

1						77.0
		Days.	h.	/	11	mean Dist.
Hersche	1	30737	18			190835,2
Saturn		10759	1	51	II	954072
Jupiter		4332	14	27	10	520279
Mars		636	23	30	35	152369
Earth		365	6	9	I 2-	100000
Venus		224	16	49	10	72333
Mercur	у	87	23	15	43	38710

There is a wonderful harmony between the distances of the planets from the fun, and their periods round him; the great law whereof is, that the squares of the periodical times of the primary planet, are to each other as the cubes of their distances from the sun: and likewife, the squares of the periodical times of the fecondaries of any planet are to each other as the cubes of their diffances from that primary. This harmony among the planets is one of the greatest confirmations of the Copernican hypothesis. See Astro-NOMY, p. 100 and 101.

For the periods of the moon, fee Moon, ASTRONOMY

The periods of feveral comets are now pretty well

ascertained. See ASTRONOMY, no 306. Perion, in *Chronology*, denotes a revolution of a certain number of years, or a feries of years, whereby, in different nations, and on different occasions, time is measured; fuch are the following.

Calippic PERIOD, a system of seventy-six years. See

CALIPPIC, and ASTRONOMY, no 11, &c.

Dionysian PERIOD, or Victorian Period, a system of 532 lunæ-folar and Julian years; which being elapsed, the characters of the moon fall again upon the same day and feria, and revolve in the same order, according to the opinion of the ancients.

This period is otherwife called the great pafchal cycle, because the Christian church first used it to find the true time of the pascha or easter. The sum of these years arises by multiplying together the cycles of the

fun and moon.

Hipparchus's PERIOD, is a feries of 304 folar years, Period. returning in a constant round, and restoring the new and full moons to the fame day of the folar year, according to the fentiment of Hipparchus. This period arises by multiplying the Calippic period by four .-Hipparchus assumed the quantity of the solar year to be 365 days 5 hours 55' 12"; and hence concluded, that in 104 years Calippus's period would err a whole day. He therefore multiplied the period by four, and from the product cast away an entire day. But even this does not restore the new and full moons to the same day throughout the whole period; but they are fometimes anticipated 1 day 8 hours 23' 29" 20". See ASTRONOMY, no 14.

Julian PERIOD. See JULIAN.

PERIOD, in Grammar, denotes a finall compass of discourse, containing a perfect sentence, and distinguished at the end by a point, or full stop, thus (.); and in members or divisions marked by commas, colons, &c.

Father Buffier observes two difficulties in the use of the period, or point; i. e. in distinguishing it from the colon, or double point; and in determining juftly the end of a period, or perfect sentence. It is remarked, that the supernumerary members of a period, separated from the rest by colons and semicolons, usually commence with a conjunction : yet it is true these same conjunctions fometimes rather begin new periods than fupernumerary members of old ones. It is the fense of things, and the author's own discretion, that must make the proper distinction which of the two in effect it is. No rules will be of any fervice, unless this be admitted as one, that when what follows the conjunction is of as much extent as what precedes it, it is usually a new period; otherwise not.

The fecond difficulty arises hence, that the sense appears perfect in feveral short detached phrases, wherein it does not feem there should be periods; a thing frequent in free discourse : as, We are all in Suspense : make your proposals immediately: you will be to blame for detaining us longer. Where it is evident, that simple phrases have perfect senses like periods, and ought to be marked accordingly; but that the shortness of the discourse making them easily comprehended, the pointing

De Colonia defincs period a short but perfect sentence, confisting of certain parts or members, depending one on another, and connected together by some common vinculum. The celebrated definition of Aristotle is, a period is a discourse which has a beginning, a middle, and an end, all visible at one view. Rhetoricians confider period, which treats of the structure of fentences, as one of the four parts of composition. The periods allowed in oratory are three: A period of two members, called by the Grecks disolos, and by the Latins bimembris; a period of three members, tricolos, trimembris; and a period of four, quadrimembris, tetracolos. See PUNCTUATION.

PERIOD, in numbers, is a distinction made by a point or comma, after every fixth place, or figure; and is used in numeration, for the readier distinguishing and naming the feveral figures or places; which fee under NUMERA-

PERIOD, in Medicine, is applied to certain diseases which have intervals, and returns, to denote an entire courfe

Peripatetics.

course or circle of such disease; or its progress from any state through all the rest till it return to the same again.

Galen describes period as a time composed of an intension and remission; whence it is usually divided into two parts, the paroxysm or exacerbation, and remis-

In intermitting fevers, the periods are usually stated and regular; in other diseases, as the epilepsy, gout, &c. they are vague or irregular.

PERIOD, in Oratory. See there, no 47

PERIODIC, or PERIODICAL, fomething that terminates and comprehends a period; fuch is a periodic month; being the space of time wherein the moon di-

fpatches her period.
PERIOECI, περιοικοι, in Geography, fuch inhabitants of the earth as have the fame latitudes, but opposite longitudes, or live under the same parallel and the same meridian, but in different femicircles of that meridian, or in opposite points of the parallel. These have the fame common feafons throughout the year, and the fame phenomena of the heavenly bodies; but when it is noonday with the one, it is midnight with the other, there being twenty-four hours in an east or west direction. These are found on the globe by the hour-index, or by turning the globe half round, that is, 180 degrees either

PERIOSTEUM, or Periostium, in Anatomy, a fense, immediately surrounding, in every part, both the internal and external furfaces of all the bones in the body, excepting only so much of the teeth as stand above the gums, and the peculiar places on the bones, in which the muscles are inserted. It is hence divided into the external and internal periosteum; and where it externally furrounds the bones of the skull, it is generally called the pericranium. See ANATOMY Index.

PERIPATETICS, philosophers, followers of Aristotle, and maintainers of the peripatetic philosophy; called also Ariflotelians. Cicero says, that Plato left two excellent disciples, Xenocrates and Aristotle, who founded two fects, which only differed in name: the former took the appellation of Academics, who were those that continued to hold their conferences in the Academy, as Plato had done before; the others, who followed Aristotle, were called Peripatetics, from περιπασεω, " I walk ;" because they disputed walking in the Lyceum.

Ammonius derives the name Peripatetic from Plato himself, who only taught walking; and adds, that the disciples of Aristotle, and those of Xenocrates, were equally called Peripatetics; the one Peripatetics of the Academy, the other Peripatetics of the Lyceum: but that in time the former quitted the title Peripatetic for that of Academic, on account of the place where they affembled; and the latter retained fimply that of Peripatetic. The greatest and best part of Aristotle's philosophy was borrowed from Plato. Serranus afferts, and fays he could demonstrate, that there is nothing exquifite in any part of Aristotle's philosophy, dialectics, ethics, politics, physics, or metaphysics, but is found in Plato. And of this opinion are many of the ancient authors, fuch as Clemens Alexandrinus, &c. Gale attempts to show, that Aristotle borrowed a good deal of his philosophy, both physical, about the first matter,

and metaphyfical about the first being, his affections, Peripatetruth, unity, goodness, &c. from the Scriptures; and adds from Clearchus, one of Aiistotle's scholars, that he made use of a certain Jew, who assisted him there-

Aristotle's philosophy preserved itself in puris naturalibus for a long time: in the earlier ages of Christianity, the Platonic philosophy was generally preferred; but this did not prevent the doctrine of Arithotle from forcing its way into the Christian church. Towards the end of the fifth century, it rose into great credit; the Platonics interpreting in their schools some of the writings of Aristotle, particularly his dialectics, and recommending them to young perfons. This appears to have been the first step to that universal dominion which Aristotle afterwards obtained among the learned, which was at the fame time much promoted by the controver-fies which Origen had occasioned. This father was zealously attached to the Platonic fystem; and therefore, after his condemnation, many, to avoid the imputation of his errors, and to prevent their being counted among the number of his followers, openly adopted the philosophy of Aristotle. Nor was any philosophy more proper for furnishing those weapons of subtle distinctions and captious fophisms, which were used in the Nestorian, Arian, and Eutychian controversies. About the end of the fixth century, the Aristotelian philosophy, as well as science in general, was almost universally decried; and it was chiefly owing to Boethius, who explained and recommended it, that it obtained a higher degree of credit among the Latins than it had hitherto enjoyed. Towards the end of the feventh century, the Greeks abandoned Plato to the monks, and gave themselves up entirely to the direction of Aristotle; and in the next century, the Peripatetic philosophy was taught everywhere in their public schools, and propagated in all places with confiderable fuccefs. John Damascenus very much contributed to its credit and influence, by composing a concise, plain, and comprehensive view of the dostrines of the Stagirite, for the instruction of the more ignorant, and in a manner adapted to common capacities. Under the patronage of Photius, and the protection of Bardas, the study of philosophy for some time declined, but was revived again about the end of the ninth century. About the middle of the 11th century, a revolution in philosophy commenced in France; when feveral famous logicians, who followed Aristotle as their guide, took nevertheless the liberty of illustrating and modelling anew his philosophy, and extending it far beyond its ancient limits. In the 12th century, three methods of teaching philosophy were in use by the different doctors: the first was the ancient and plain method, which confined its refearches to the philosophical notions of Porphyry, and the dialectic fystem, commonly attributed to St Augustine, and in which was laid down this general rule, that philosophical inquiries were to be limited to a small number of subjects, lest by their becoming too extensive, religion might suffer by a profane mixture of human fubtilty with its divine wifdom. The fecond method was called the A. ristotelian, because it confisted in explications of the works of that philosopher, several of whose books, being translated into Latin, were almost everywhere in the hands of the learned. The third was termed the free method, employed by fuch as were bold enough to fearch

Perjury.

Peripaton after truth, in the manner the most adapted to render their inquiries fuccessful, without rejecting the fuccours Perinhan of Arittotle and Plato. A reformed fystem of the Peripatetic philosophy was first introduced into the schools in the university of Paris, from whence it soon spread throughout Europe; and has subsisted in some universities even to this day, under the name of school philosophy. The foundation thereof is Aristotle's doctrine, often mifunderstood, but oftener misapplied: whence the retainers thereto may be denominated Reformed Peripatetics. Out of these have sprung, at various times, several branches; the chief are, the THOMISTS, SCOTISTS, and Nominalists. See these articles.

The Peripatetic fystem, after having prevailed with great and extensive dominion for many centuries, began rapidly to decline towards the close of the 17th, when the disciples of Ramus attacked it on the one hand, and it had still more formidable adversaries to encounter in Descartes, Gassendi, and Newton. See Phi-

PERIPATON, in antiquity, the name of that walk in the Lyceum where Arittotle taught, and whence the name of Peripatetics given to his followers.

PERIPETIA, in the drama, that part of a tragedy wherein the action is turned, the plot unravelled, and

the whole concludes. See CATASTROPHE. PERIPHERY, in Geometry, the circumference of a

circle, ellipsis, or any other regular curvilinear figure. See GEOMETRY.

PERIPHRASIS, circumlocution, formed of ases, " about," and peak, " I fpeak ;" in rhetoric, a circuit or tour of words, much affected by orators, to avoid common and trite manners of expression. The periphrasis is of great use on some occasions; and it is often necessary to make things be conceived which are not proper to name. It is fometimes polite to suppress the names, and only intimate or defign them. These turns of expression are also particularly serviceable in oratory; for the sublime admitting of no direct citations, there must be a compass taken to infinuate the authors whose authority is borrowed. A periphrafis, by turning round a proper name to make it understood, amplifies and raifes the discourse; but care must be taken it be not too much fwelled, nor extended mal à propos; in which case it becomes flat and languid .- See CIRCUMLOCUTION and ORATORY

PERIPLOCA, Virginian filk: a genus of plants belonging to the pentandria class; and in the natural method ranking under the 30th order, Contortæ. Sce

BOTANY Index

PERIPNEUMONY, Περιπνευμονία, formed from περι "about," and πυτυμών "lungs," in Medicine, an inflammation of fome part of the thorax, properly of the lungs; attended with an acute fever, and a difficulty of

breathing. See MEDICINE, no 184.

PERIRRHANTERIUM, a vessel of stone or brass which was filled with holy water, and with which all those were sprinkled who were admitted by the ancients to their facrifices. Beyond this vessel no profane person was allowed to pass. We are told by some, that it was placed in the adytum, or inmost recess of the temple; others fay it was placed at the door, which indeed feems to be the most likely opinion. It was used both by Greeks and Romans, and has been evidently borrowed, like many other Pagan ceramonies, by the church

of Rome. The Hebrews also had a vessel for purifica- Perifeit

PERISCII, in Geography, the inhabitants of either frigid zone, between the polar circles and the poles, where the fun, when in the fummer figns, moves only round about them, without fetting; and confequently their shadows in the same day turn to all the points of

PERISTALTIC, a vermicular frontaneous motion of the intestines, performed by the contraction of the circular and longitudinal fibres of which the fiethy coats of the intettines are composed; by means whereof the chyle is driven into the orifices of the lacteal veins, and the fæces are protruded towards the anus.

PERISTYLE, in Ancient Architecture, a building encompassed with a row of columns on the inside.

PERITONÆUM, in Anatomy, is a thin, fmooth; and lubricous membrane, investing the whole internal furface of the abdomen, and containing most of the vifcera of that part as it were in a bag. See ANATOMY

PERITROCHIUM, in Mechanics, denotes a wheel, or circle, concentric with the base of a cylinder, and moveable together with it about its axis. See ME-

PERJURY, in Law, is defined by Sir Edward Coke to be a crime committed when a lawful oath is adminiftered, in fome judicial proceeding, to a perfon who fwears wilfully, abfolutely, and falfely, in a matter ma-terial to the iffue or point in question. In ancient times it was in some places punished with death; in others it made the false swearer liable to the punishment due to the crime he had charged the innocent person with; in others a pecuniary mulch was imposed. But though it escaped human, yet it was thought, amongst the ancients in general, that the divine vengeance would most certainly overtake it; and there are many fevere inflictions from the hand of God upon record, as monuments of the abhorrence in which this atrocious crime is held by the Deity. The fouls of the deceased were supposed to be employed in punishing perjured persons. Even the inanimate creation was thought to take revenge for this crime. The Greeks supposed that no person could swear falfely by Styx without some remarkable punishment; and that no perion guilty of perjury could enter the cave of Palæmon at Counth without being made a memorable example of divine justice. In Sicily, at the temple of the Palici, there were fountains called Delli, from which iffued boiling water, with flames and balls of fire; and we are told that if any person swore falsely near them, he was infantly flruck dumb, blind, lame, or dead, or was fwallowed up by the waters. But although perjury was thus held in general abhorrence, notwithstanding the credit which was given to such accounts of divine inflictions, it was so much practifed by the Greeks, that Græca fides became a proverb. Lovers perjuries, however, were supposed to pass unnoticed, or to be very flightly punished with blackness of the nails, a decayed tooth, or fome fmall diminution of

The ancient philosophers, however, were so afraid of perjury, that even an oath before a judge was never admitted but for want of other proof. Plato's precept was, " Not to administer an oath wantonly, but on deep grounds, and with the firictest caution." Ulpian gives

Perjury. his opinion thus: "Some are forward to take oaths from a contempt of religion; others, from an extraordinary awe of the Divine Majesty, carry their fear to an unreasonable superstition; so make an equitable decision of a judge necessary." "No man will perjure himself (fays Aristotle) who apprehends vengeance from Heaven and difgrace among men." Clinias was fo very ferupulous, that rather than take an oath (though lawfully), he suffered the loss of three talents. Perjury, in the time of Philo Judeus, was abominated and capitally punished among the Jews; though fince they have much degenerated, having been poisoned with the books of the Talmud, which fays, "He who breaks his promiffory oath, or any vows he enters into by the year, if he has a mind that they should be ineffectual and invalid, let him rise the last day of the year, and say, Whatever promifes, oaths, and vows I may think fit to make in the year following, let them be null, void, and of no effect." Tract. iii. part 3. of the Talmud, in the treatife Nedharim, ch. 4. And the modern Jews use the same artifice, thinking they may then lawfully deceive the Christians. See Hieron. ex Dictis Talmud, c. 3. and Magister Joannes de Concor. Legum, tit. iv. c. 7.

In our law, no notice is taken of any perjury but fuch as is committed in some court of justice having power to administer an oath; or before some magistrate or proper officer invested with a similar authority, in some proceedings relative to a civil suit or a criminal profecution: for it effects all other oaths unnecessary at least, and therefore will not punish the breach of them. For which reason it is much to be questioned, how far any magistrate is justifiable in taking a voluntary affidavit in any extrajudicial matter, as is now too frequent upon every petty occasion; since it is more than poslible that, by fuch idle oaths, a man may frequently, in foro conscientiæ, incur the guilt, and at the fame time evade the temporal penalties of perjury. The perjury must also be corrupt (that is, committed malo animo), wilful, positive, and absolute; not upon surprise, or the like: it also must be in some point material to the qualtion in dispute; for if it only be in some trifling collateral circumstance, to which no regard is paid, it is no more penal than in the voluntary extrajudicial oaths before mentioned. Subornation of perjury is the offence of procuring another to take fuch a falle oath, as constitutes perjury in the principal. The punishment of perjury and fubornation, at common law, has been various. It was anciently death; afterwards banishment, or cutting out the tongue; then forfeiture of goods; and now it is fine and imprisonment, and never more to be capable of bearing tellimony. But the statute 5 Elif. c. 9. (if the offender be profecuted thereon) inflicts the penalty of perpetual infamy, and a fine of 401. on the fuborner; and in default of payment, imprisonment for fix months, and to stand with both ears nailed to the pillory. Perjury itself is thereby punished with fix months imprisonment, perpetual infamy, and a fine of 201. or to have both ears nailed to the pillory. But the profecution is usually carried on for the offence at common law; especially as, to the penalties before inflicted, the statute 2 Geo. II. c. 25. superadds a power for the court to order the offender to be fent to the house of correction for a term not exceeding seven years, or to be transported for the same period; and makes it felony, without benefit of clergy, to return or

escape within the time. It has sometimes been wished, Perjury that perjury, at least upon capital accusations, whereby another's life has been or might have been destroyed, was also rendered capital, upon a principle of retaliation; as it was univerfally by the laws of France. And certainly the odiousness of the crime pleads strongly in behalf of the French law. But it is to be confidered, that there they admitted witnesses to be heard only on the fide of the profecution, and used the rack to extort a confession from the accused. In such a constitution, therefore, it was necessary to throw the dread of capital punishment into the other scale, in order to keep in awe the witnesses for the crown; on whom alone the prisoner's fate depended: so naturally does one cruel law beget another. But corporal and pecuniary punishments, exile, and perpetual infamy, are more fuited to the genius of the English law; where the fact is openly discussed between witnesses on bothfides, and the evidence for the crown may be contradicted and disproved by those of the prisoner. Where indeed the death of an innocent person has actually been the consequence of such wilful perjury, it falls within the guilt of deliberate murder, and deferves an equal punishment; which our ancient law in fact inflicted. But the mere attempt to destrey life by other means not being capital, there is no reason that an attempt by perjury should; much less that this crime should, in all judicial cases, be punished with death. For to multiply capital punishments lessens their effect, when applied to crimes of the deepest dye; and, detestable as perjury is, it is not by any means to be compared with fome other offences, for which only death can be inflicted; and therefore it feems already (except perhaps in the instance of deliberate murder by perjury) very properly punished by our present law; which has adopted the opinion of Cicero, derived from the law of the twelve tables, Perjurii pana divina, exitium; humana, dedecus. See OATH.
PERIWIG. See PERRUKE.

PERIZONIUS, JAMES, a learned and laborious writer, was born at Dam in 1651. He became profeffor of history and eloquence at the university of Franeker, when, by his merit and learning, he made that university flourish. However, in 1693, he went to Leyden, where he was made professor of history, eloquence, and the Greek tongue; in which employment he continued till his death, which happened in 1715. He wrote many Differtations, and other learned and curious works, particularly Origines Babylonica et Egyptiaca, 2 vols 8vo, &c. But the part of his labours which is the most generally known, and perhaps the most useful, is the notes which he wrote upon Sanchii Minerva. That work, as published by Perizonius, certainly fuggested the idea of Harris's Hermes; and we helitate not to fay, that our countryman has made hardly any improvement on the fystem of his master.

PERIZZITES, the ancient inhabitants of Palestine, mingled with the Canaanites. There is also great probability that they themselves were Canaanites; but having no fixed habitations, fometimes dispersed in one country and fometimes in another, they were for that reason called Perizzites, which signifies scattered or dispersed. Pherazoth Rands for hamlets or villages. The Perizzites did not inhabit any certain portion of the land of Canaan; there were fome of them on both fides

the river Jordan, in the mountains, and in the plains. In several places of Scripture the Canaanites and Perizzites are mentioned as the two chief people of the country. It is faid, for example, that in the time of Abraham and Lot the Canaanite and Perizzite were in the land (Gen. xiii. 7.). The Ifraelites of the tribe of Ephraim complained to Joshua that they were too much pent up in their possession (Josh. xvii. 15.): he bid them go, if they pleased, into the mountains of the Pcrizzites, and Rephaims or giants, and there clearing the land, to cultivate and inhabit it. Solomon subdued the remains of the Canaanites and Perizzites which the children of Ifrael had not rooted out, and made them tributary to him (I Kings ix. 20, 21. and 2 Chr. viii. 7.). There is still mention made of the Perizzites in the time of Ezra (ix. 1.), after the return from the captivity of Babylon; and feveral Ifraelites had married wives from that nation.

PERKIN, a beverage prepared from pears. See CY-

DERKIN, under AGRICULTURE, Nº 656.

PERMEABLE, a term applied to bodies of fo loose a texture as to let something pass through them

PERMSKI, or PERMIA, a town of the Ruffian empire, and capital of a province of the same name, feated on the river Kama between the Dwina and the Oby; E. Long. 55. 50. N. Lat. 70. 26. The province is bounded on the north by the Samoiedes, on the west by Zirania and Ulatka, and on the east by Si-

PERMUTATION, in Commerce, the same with bartering. In the canon-law, permutation denotes the

actual exchange of one benefice for another.

PERNAMBUCO, a province of Brazil, in South America, bounded on the north by Tamera, on the east by the ocean, on the fouth by Seregippa, and on the west by Tapuyers. It is about 200 miles in length and 150 in breadth. The Dutch became masters of it in 1630, but the Portuguese soon after retook it. It produces a great quantity of fugar, cotton, and the best

PERNIO, a kibe or chilblain, is a little ulcer, occashoned by cold in the hands, feet, heels, nose, and lips. It will come on when warm parts are too fuddenly exposed to cold, or when parts from being too cold are fuddenly exposed to a confiderable warmth; and has always a tendency to gangrene, in which it frequently terminates. It most commonly attacks children of a fanguine habit and delicate constitution; and may be prevented or removed by fuch remedies as invigorate the fystem, and are capable of removing any tendency to gangrene in the constitution.

PERONÆUS, in Anatomy, is an epithet applied to fome of the muscles of the perone or fibula. See ANA-

TOMY, Table of the Muscles.

PERONES, a fort of high shoes which were worn not only by country people, but by men of ordinary rank at Rome. In the early times of the commonwealth they were worn even by fenators; but at last they were disused by persons of figure, and confined to ploughmen and labourers. They were very rudely formed, confifting only of hides undreffed, and reaching to the middle of the leg. Virgil mentions the perones as worn by a company of ruftic foldiers on one foot only.

PERONNE, a strong town of France, in Picardy, ca- Peronne pital of Santerre. It is faid never to have been taken, Perquifite. though often besieged. It is seated on the river Somme,

in E. Long. 3. 1. N. Lat. 44. 50. PERORATION, in *Rhetoric*, the epilogue or last part of an oration, wherein what the orator had infifted on through his whole discourse is urged afresh with greater vehemence and passion. The peroration confifts of two parts. 1. Recapitulation; wherein the fubstance of what was diffused throughout the whole fpeech is collected briefly and curforily, and fummed up with new force and weight. 2. The moving the passions; which is so peculiar to the peroration, that the masters of the art call this part sedes affectuum. The passions to be raised are various, according to the various kinds of oration. In a panegyric, love, admiration, emulation, joy, &c. In an invective, hatred, contempt, &c. In a deliberation, hope, confidence, or fear. The qualities required in the peroration are, that it be very vehement and paffionate, and that it be short; because, as Cicero observes, tears soon dry up. These qualities were well observed by Cicero, who never had an equal in the management of this part of an orator's province; for peroration was his mafterpiece.

"Concerning peroration (fays Dr Blair), it is needless to say much, because it must vary so considerably, according to the strain of the preceding discourse. Sometimes the whole pathetic part comes in most properly at the peroration. Sometimes, when the discourse has been entirely argumentative, it is fit to conclude with fumming up the arguments, placing them in one view, and leaving the impression of them full and strong on the mind of the audience. For the great rule of a conclusion, and what nature obviously suggests, is, to place that last on which we choose that the strength of

our case should rest.

" In all discourses, it is a matter of importance to hit the precise time of concluding, so as to bring our discourse just to a point; neither ending abruptly and unexpectedly, nor disappointing the expectation of the hearers when they look for the close, and continuing to hover round and round the conclusion till they become heartily tired of us. We should endeavour to get off with a good grace; not to end with a languishing and drawling fentence, but to close with dignity and spirit, that we may leave the minds of the hearers warm, and difmiss them with a favourable impression of the subject and of the speaker."

PEROTIS, a genus of plants belonging to the triandria class, and in the natural method ranking under the 4th order, Gramina. See BOTANY Index.

PERPENDICULAR, in Geometry, a line falling directly on another line, fo as to make equal angles on each fide. See GEOMETRY.

PERPETUAL, fomething that endures always, or

lasts for ever. PERPETUAL Motion. See MOVEMENT.

PERPIGNAN, a confiderable town of Roufillon, in France, with a strong citadel, an university, and a bishop's see. It is seated on the river Tet; over which there is a handsome bridge. E. Long. 0. 43. N. Lat.

PERQUISITE, in a general fense, something gained by a place over and above the fettled wages.

PERQUISITE,

Perquifite Perron.

Perquisite, in Law, is any thing gotten by a man's own industry, or purchased with his money; in contradistinction to what descends to him from his father or other ancestor.

PERRAULT, CLAUDE, the fon of an advocate in parliament, was born at Paris in 1613; and was bred a physician, though he never practifed but among his relations, friends, and the poor. He discovered early a particular tafte for the sciences and fine arts; of which he acquired a confummate knowledge without the affistance of a master : he excelled in architecture, painting, sculpture, mathematics, physics, and all those arts that relate to defigning and mechanics. The entrance into the Louvre, which was defigned by him, is, according to the judgement of Voltaire, one of the most august monuments of architecture in the world. M. Colbert put him upon translating Vitruvius into French; which he performed, and published it in 1673, folio, with figures from his own drawings; which are faid to have been more exactly finished than the plates themfelves. When the academy of sciences was established, he was one of its first members, and was chiefly depended on for mechanics and natural philosophy. His works are, Memoires pour servir à l'Histoire naturelle des Animaux, folio, 1676, with figures; Estais de Physique, 4 vols. 12mo, 1688; Recueil des plusieurs machines de nouvelle invention, 4to, 1700, &c. He died

PERRAULT, Charles, the brother of Claude, was born at Paris in 1626, with as great a genius for arts, and a greater for letters, than his brother. Colbert chose him first clerk of the buildings, of which he was superintendant, and afterward made him comptroller-general of the finances under him. He was one of the first members of the academy of the belles lettres and inscriptions, and was received into the French academy in 1671. His poem, La Peinture, printed in 1688, was universally admired : that entitled La fiecle de Louis le Grand, in which he exalted the modern authors above the ancient, was a prelude to a war with all the learned. After he had disengaged himself from this contest, he applied himself to draw up elogies of several great men of the 17th century, with their portraits, of which he has collected 102. There are other esteemed works of Perrault.—Besides these there were two other brothers, Peter and Nicholas, who made themselves known in the literary world.

PERRON, JAMES DAVY DU, a cardinal, distinguished by his abilities and learning, was born in the canton of Bern in 1556. He was educated by Julian Davy, his father, a learned Calvinist, who taught him Latin and the mathematics; after which, he by himself became acquainted with the Greek and Hebrew, philofophy, and the poets. Philip Desportes, abbot of Tyron, made him known to Henry III. king of France, who conceived a great esteem for him. Some time after, Du Perron abjured Calvinism, and afterwards embraced the ecclefiaftical function; and having given great proofs of his wit and learning, he was chosen to pronounce the funeral oration of Mary queen of Scots. After the murder of Henry III. he retired to the house of Cardinal de Bourbon, and took great pains in bringing back the Protestants to the church of Rome. Among others he gained over Henry Spondanus, afterwards bishop of Pamiers. He also chiefly contributed

to engage Henry IV. to change his religion; and that Perron prince fent him to negotiate his reconciliation to the holy fee, in which he succeeded. Du Perron was confecrated bishop of Evreaux while he resided at Rome. On his return to France, he wrote, preached, and difputed against the reformed; particularly against Du Pleffis Mornay, with whom he had a public conference in the presence of the king at Fontainbleau. He was made cardinal in 1604 by Pope Clement VIII. at the folicitation of Henry IV. who afterwards nominated him to the archbishopric of Sens. The king at length fent him to Rome with Cardinal Joyeuse, in order to terminate the disputes which had arisen between Paul V. and the Venetians. It is faid that this pope had fuch a high opinion of the address of the cardinal Du Perron, that he used to say, " Let us pray to God to inspire the cardinal Du Perron, for he will persuade us to do whatever he pleases." After the death of Henry IV. he retired into the country, where he put the last hand to his work; and, fetting up a printing-house, corrected every sheet himself. He died at Paris in 1618. His works were collected after his death, and published

at Paris in 3 vols. folio.

PERROT, Nicholas, Sieur d'Ablancourt, one of the first geniuses of his age, was born at Chalons in 1606. After studying philosophy about three years, he was sent to Paris to follow the law. At eighteen years of age he was admitted advocate of parliament, and frequented the bar; but he foon conceived a diftaste for it, and therefore discontinued his practice. This displeased an uncle, but whose favour he recovered by quitting the Protestant religion. He could not however, be prevailed upon to take orders in the Romish church; and some years after, he had a defire to return to the religion he had abjured. But, that he might not do any thing rashly, he resolved to study philosophy and divinity. For that purpose he chose for his master Mr Stuart a Scotsman and Lutheran, a man of great learning. Almost three years he fpent in the most assiduous study; and then set out from Paris to Champagne, where he abjured the Roman Catholic, and once more embraced the Protestant religion. In 1637 he was admitted a member of the French academy; a little after which he undertook a translation of Tacitus. Whilst he was engaged in that laborious task, he retired to his small estate of Ablancourt, and lived there till his death in 1664. He was a man of fine understanding, of great piety and integrity, and of univerfal learning. Moreri has given a catalogue of his works, the greatest part of which confift of translations, which seemed rather ori-

PERRUKE, PERUKE, or Periwig, was anciently a name for a long head of natural hair; fuch, particularly, as there was care taken in the adjusting and trimming of. Menage derives the word rather fancifully from the Latin pilus " hair." It is derived, according to this critic, thus, pilus, pelus, pelutus, peluticus, pelutica, peru-tica, peruca, perruque. The Latins called it coma; whence part of Gaul took the denomination of Gallia Comata, from the long hair which the inhabitants were as a fign of freedom. An ancient author fays, that Ab.

falom's perruke weighed 200 shekels.

The word is now used for a set of false bair, curled, buckled, and fewed together on a frame or cawl; anPerrule, ciently called capillamentum or " false perruke." It is doubted whether or not the use of perrukes of this kind was known among the ancients. It is true, they used false hair: Martial and Juvenal make merry with the women of their time, for making themfelves look young with their borrowed hair; with the men who changed their colours according to the feafons; and with the dotards, who hoped to deceive the Destinies by their white hair. But these seem to have scarce had any thing in common with our perrukes; and were at best only composed of hair painted, and glued together. Nothing can be more ridiculous than the description Lampridius gives of the emperor Commodus's perruke: it was powdered with fcrapings of gold, and oiled (if we may use the expression) with glutinous perfumes for the powder to hang by. In effect, the use of perrukes, at least in their present mode, is not much more than 160 years old; the year 1629 is reckoned the epocha of long perrukes, at which time they began to appear in Paris; from whence they fpread by degrees through the rest of Europe. At first it was reputed a fcandal for young people to wear them, because the loss of their hair at that age was attributed to a difease the very name whereof is a reproach; but at length the mode prevailed over the fcruple, and perfons of all ages and conditions have worn them, foregoing without any necessity the conveniences of their natural hair. It was, however, fome time before the ecclefiaftics came into the fashion: the first who affumed the perruke were fome of the French clergy, in the year 1660; nor is the practice yet well authorized. Cardinal Grimaldi in 1684, and the bishop of Lavaur in 1688, prohibited the use of the perruke to all priefts without a dispensation or necessity. M. Thiers has an express treatise, to prove the perruke indecent in an ecclesiastic, and directly contrary to the decrees and canons of councils. A priest's head, embellished with artificial hair curioufly adjusted, he esteems a monfler in the church; nor can he conceive any thing fo fcandalous as an abbot with a florid countenance, heightened with a well-curled perruke.

PERRY, CAPTAIN JOHN, was a famous engineer, who refided long in Rushia, having been recommended to the czar Peter while in England, as a person capable of ferving him on a variety of occasions relating to his new defign of establishing a fleet, making his rivers navigable, &c. His falary in this fervice was 300l. per annum, besides travelling expences and subfistence money on whatever fervice he should be employed, together with a further reward to his fatisfaction at the conclusion of any work he should finish. After some conversation with the czar himself, particularly respecting a communication between the rivers Volga and Don, he was employed on that work for three fummers fucceffively; but not being well fupplied with men, partly on account of the ill fuccess of the czar's arms against the Swedes at the battle of Narva, and partly by the discouragement of the governor of Astracan, he was ordered at the end of 1707 to flop, and next year was employed in refitting the ships at Veronife, and 1700 in making the river of that name navigable; but after repeated difappointments, and a variety of fruitless applications for his falary, he at last quitted the kingdom, under the protection of Mr Whitworth, the English ambassador, in 1712: (See

his narrative in the Preface to The State of Ruffia). In Perry, 1721 he was employed in stopping with fuccess the Perfecution breach at Dagenham, in which feveral other undertakers had failed; and the fame year about the harbour at Dublin, to the objections against which he then publithed an Answer. He was author of The State of Russia, 1716, 8vo, and An Account of the stopping of Dagenham Breach, 1721, 8vo; and died Feb. 11.

1733.
PERRY, the name of a very pleafant and wholesome liquor extracted from pears, in the fame manner as cyder is from apples. See CYDER and AGRICULTURE Index

The best pears for perry, or at least the forts which have been hitherto deemed the fittett for making this liquor, are of a tart and harth quality. Of these the Bosbury pear, the Bareland pear, and the horse pear, are the most esteemed for perry in Worcestershire, and the fquash pear, as it is called, in Gloucestershire; in both which counties, as well as in some of the adjacent parts, they are planted in the hedge-rows and most common fields. There is this advantage attending peartrees, that they will thrive on land where apples will not fo much as live, and that fome of them grow to fuch a fize, that a fingle pear-tree, particularly of the Bosbury and the fquash kind, has frequently been known to yield, in one feafon, from one to four hogsheads of perry. The Bosbury pear is thought to yield the most lasting and most vinous liquor. The John pear, the Harpary pear, the Drake pear, the Mary pear, the Lullum pear, and feveral others of the harshest kinds, are esteemed the best for perry, but the redder or more tawney they are. the more they are preferred. Pears, as well as apples, should be full ripe before they are ground.

Dr Beale, in his general advertisements concerning cyder, fubjoined to Mr Evelyn's Pomona, difapproves of Palladius's faying, that perry will keep during the winter, but that it turns four as foon as the weather begins to be warm; and gives, as his reasons for being of a contrary opinion, that he had himself tasted at the end of fummer, a very brifk, lively, and vinous liquor, made of horse pears; that he had often tried the juice of the Bosbury pear, and found it both pleasanter and richer the fecond year, and fill more fo the third, though kept only in common hogsheads, and in but indifferent cellars, without being bottled; and that a very honest, worthy, and ingenious gentleman in his neighbourhood, affured him, as of his own experience, that it will keep a great while, and grow much the stronger for keeping, if put into a good cellar and managed with due care. He imputes Palladius's error to his possibly speaking of common eatable pears, and to the perry's having been made in a very hot country: but he would have ascribed it to a more real cause, perhaps, had be pointed out the want of a thorough regular fermentation, to which it appears plainly that the ancients were entire ftrangers; for all their vinous liquors were medicated by boiling before they were laid up in order to be kept.

PERSECUTION, is any pain or affliction which a person defignedly inflicts upon another; and in a more reftrained fenfe, the fufferings of Christians on account of their religion.

Historians usually reckon ten general perfecutions, the first of which was under the emperor Nero, 31 years after our Lord's ascension; when that emperor having

Perfecution, fet fire to the city of Rome, threw the odium of that ex-Persees, ecrable action on the Christians, who under that pretence were wrapped up in the skins of wild beasts, and worried and devoured by dogs; others were crucified, and others burnt alive. The fecond was under Domitian, in the year 95. In this perfecution St John the apostle was sent to the isle of Patmos, in order to be employed in digging in the mines. The third began in the third year of Trajan, in the year 100, and was carried on with great violence for feveral years. The fourth was under Antoninus the philosopher, when the Christians were banished from their houses, forbidden to show their heads, reproached, beaten, hurried from place to place, plundered, imprisoned, and stoned. The fifth began in the year 197, under the emperor Severus. The fixth began with the reign of the emperor Maximinus in 235. The seventh, which was the most dreadful persecution that had ever been known in the church, began in the year 250, in the reign of the emperor Decius, when the Christians were in all places driven from their habitations, stripped of their estates, tormented with racks, &c. The eighth began in the year 257, in the fourth year of the reign of the emperor Valerian. The ninth was under the emperor Aurelian, A. D. 274; but this was very inconfiderable: and the tenth began in the 19th year of Dioclesian, A. D. 303. In this dreadful persecution, which lasted ten years, houses filled with Christians were fet on fire, and whole droves were tied together with ropes and thrown into the fea. See TOLERATION.

PERSEES, the descendants of a colony of ancient Persians, who took refuge at Bombay, Surat, and in the vicinity of those cities, when their own country was conquered 1100 years ago by the Mahometan They are a gentle, quiet, and industrious people, loved by the Hindoos, and living in great harmony among themselves. The consequence is, that they multiply exceedingly, whilst their countrymen in the province of Keman are visibly diminishing under the yoke of the Mahometan Persians. Of the manners and customs of this amiable race, we have the following account in Heron's elegant translation of Niebuhr's

"The Persees (says he) make common contributions for the aid of their poor, and fuffer none of their number to ask alms from people of a different religion. They are equally ready to employ their money and credit to fcreen a brother of their fraternity from the abuses of justice. When a Persee behaves ill, he is expelled from their communion. They apply to trade, and exercise

all forts of professions.

"The Persees have as little knowledge of circumcision as the Hindoos. Among them, a man marries only one wife, nor ever takes a fecond, unless when the first happens to be barren. They give their children in marriage at fix years of age; but the young couple continue to live separate, in the houses of their parents, till they attain the age of puberty. Their dress is the fame as that of the Hindoos, except that they wear under each ear a tuft of hair, like the modern Persians. They are much addicted to aftrology, although very little skilled in astronomy.

"They retain the fingular custom of exposing their dead to be eaten by birds of prey, instead of interring or burning them. I faw (continues our author) on a hill

Vol. XVI. Part I.

at Bombay a round tower, covered with planks of wood, on which the Persees lay out their dead bodies. When Perseolis the flesh is devoured, they remove the bones into two

chambers at the bottom of the tower.

"The Persees, followers of the religion of Zerdust or Zoroaster, adore one God only, eternal and almighty. They pay, however, a certain worship to the sun, the moon, the stars, and to fire, as visible images of the invisible divinity. Their veneration for the element of fire induces them to keep a facred fire constantly burning, which they feed with odoriferous wood, both in the temples and in the houses of private persons, who are in easy circumstances. In one of their temples at Bombay, I saw a fire which had burnt unextinguished for two centuries. They never blow out a light, lest their breath should soil the purity of the fire.

"The religion of the Persees enjoins purifications as strictly as that of the Hindoos. The disciples of Zerdust are not, however, obliged to abstain from animal food. They have accustomed themselves to refrain from the flesh of the ox, because their ancestors promised the Indian prince who received them into his dominions never to kill horned cattle. This promise they continue to observe under the dominion of Christians and Mahometans. The horse is by them considered as the most impure of all animals, and regarded with extreme aversion.

"Their festivals, denominated Ghumbars, which return frequently, and last upon each occasion five days, are all commemorations of some part of the work of creation. They celebrate them not with splendour, or with any particular ceremonies, but only dress better during those five days, perform some acts of devotion in

their houses, and visit their friends."

The Persees were till lately but very little known: the ancients speak of them but seldom, and what they fay feems to be dictated by prejudice. On this account Dr Hyde, who thought the subject both curious and interesting, about the end of the 17th century attempted a deeper investigation of a subject which till then had been but very little attended to. He applied to the works of Arabian and Persian authors, from whom, and from the relations of travellers, together with a variety of letters from persons in India, he compiled his celebrated work on the religion of the Persees. Other accounts have been given by different men, as accident put information in their way. But the most distinguished is by M. Anquetil du Perron, who undertook a voyage to discover and translate the works attributed to Zoroaster. Of this voyage he drew up an account himself, and read it before the Royal Academy of Sciences at Paris in May 1761. A translation of it was made and published in the Gentleman's Magazine for 1762, to which we refer our readers. The account begins at page 373, and is concluded at page 614. Remarks were afterwards made on Du Perron's account by a Mr Yates. See the same Magazine for 1766,

PERSEPOLIS, formerly the capital of Persia, situated in N. Lat. 30. 30. E. Long. 84. 0. now in ruins, but remarkable for the most magnificent remains of a palace or temple that are to be found throughout the world .- This city stood in one of the finest plains in Persia, being 18 or 19 leagues in length, and in some

Persepolis. places two, in some four, and in others six leagues in breadth. It is watered by the great river Araxes, now Bendemir, and by a multitude of rivulets besides. Within the compass of this plain, there are between 1000 and 1500 villages, without reckoning those in the mountains, all adorned with pleafant gardens, and planted with shady trees. The entrance of this plain on the west fide has received as much grandeur from nature, as the city it covers could do from industry or art. It confifts of a range of mountains steep and high, four leagues in length, and about two miles broad, forming two flat banks, with a rifing terrace in the middle, the fummit of which is perfectly plain and even, all of native rock. In this there are fuch openings, and the terraces are fo fine and fo even, that one would be tempted to think the whole the work of art, if the great extent, and prodigious elevation thereof, did not convince one that it is a wonder too great for aught but nature to produce. Undoubtedly these banks were the very place where the advanced guards from Persepolis took post, and from which Alexander found it so difficult to dislodge them. One cannot from hence descry the ruins of the city, because the banks are too high to be overlooked; but one can perceive on every fide the ruins of walls and of edifices, which heretofore adorned the range of mountains of which we are speaking. On the west and on the north this city is desended in the like manner: fo that, confidering the height and evenness of these banks, one may fafely fay, that there is not in the world a place fo fortified by nature.

The mountain Rehumut, in the form of an amphitheatre, encircles the palace, which is one of the nobleft and most beautiful pieces of architecture remaining of all antiquity. Authors and travellers have been exceedingly minute in their descriptions of those ruins; and yet some of them have expressed themselves so differently from others, that, had they not agreed with respect to the latitude and longitude of the place, one would be tempted to suspect that they had visited different ruins. These ruins have been described by Gercias de Silva Figueroa, Pietro de la Valle, Chardin, Le Brun, and Mr Francklin. We shall adopt the description of an intelligent traveller. The afcent to the columns is by a grand staircase of blue stone containing

104 steps. The first object that strikes the beholder on his entrance, are two portals of stone, about 50 feet in height each; the fides are embellished with two sphinxes of an immense fize, drefled out with a profusion of bead-work, and, contrary to the usual method, they are represented standing. On the sides above are infcriptions in an ancient character, the meaning of which no one hitherto has been able to decypher.

" At a small distance from these portals you ascend another flight of steps, which lead to the grand hall of columns. The fides of this staircase are ornamented with a variety of figures in baffo relievo; most of them have vessels in their hands: here and there a camel appears, and at other times a kind of triumphal car, made after the Roman fashion; besides these are several led horses, oxen, and rams, that at times intervene and diverlify the procession. At the head of the staircase is another basio relievo, representing a lion feizing a bull; and close to this are other inscriptions in ancient characters. On getting to the top of this

flaircafe, you enter what was formerly a most magni- Persepolis, ficent hall; the natives have given this the name of Perfevechehul minar, or forty pillars; and though this name is often used to express the whole of the building, it is more particularly appropriated to this part of it. Although a vast number of ages have elapsed since the foundation, 15 of the columns yet remain entire; they are from 70 to 80 feet in height, and are mafterly pieces of masonry: their pedestals are curiously worked, and appear little injured by the hand of time. The shafts are enfluted up to the top, and the capitals are adorned with a profusion of fretwork.

" From this hall you proceed along eastward, until you arrive at the remains of a large square building, to which you enter through a door of granite. Most of the doors and windows of this apartment are still standing; they are of black marble, and polified like a mirror: on the fides of the doors, at the entrance, are bas-reliefs of two figures at full length; they represent a man in the attitude of stabbing a goat ; with one hand he seizes hold of the animal by the horn, and thrusts a dagger into his belly with the other; one of the goat's feet rests upon the breast of the man, and the other upon his right arm. This device is common throughout the palace. Over another door of the fame apartment is a representation of two men at full length; behind them stands a domestic holding a spread umbrella: they are supported by large round staffs, appear to be in years, have long beards, and a profusion of

hair upon their heads. "At the fouth-west entrance of this apartment are two large pillars of stone, upon which are carved four figures; they are dreffed in long garments, and hold in their hands spears 10 feet in length. At this entrance also the remains of a staircase of blue stone are still vifible. Vast numbers of broken pieces of pillars, shafts, and capitals, are feattered over a confiderable extent of ground, some of them of such enormous size, that it is wonderful to think how they could have been brought whole, and fet up together. Indeed, every remains of these noble ruins indicate their former grandeur and magnificence, truly worthy of being the residence of a great and powerful monarch."

These noble ruins are now the shelter of beasts and birds of prey. Befides the infcriptions above mentioned, there are others in Arabic, Persian, and Greek, Dr Hyde observes, that the inscriptions are very rude and clumfy; and that fome, if not all of them, are in praife of Alexander the Great; and therefore are later than that conqueror. See the article RUINS.

PERSEVERANCE, in Theology, a continuance in a state of grace to a state of glory.

About this subject there has been much controversy in the Christian church. All divines, except Unitarians, admit, that no man can be ever in a state of grace without the co-operation of the spirit of God; but the Calvinists and Arminians differ widely as to the nature of this co-operation. The former, at least fuch as call themselves the true disciples of Calvin, believe, that those who are once under the influence of divine grace can never fall totally from it, or die in mortal fin. The Arminians, on the other hand, contend, that the whole of this life is a state of probation; that without the grace of God we can do nothing that is good; that the Holy Spirit affifts, but does not overpower, our natural faculties ; faculties; and that a man, at any period of his life, may resist, grieve, and even quench, the spirit. See THEO-

PERSEUS was the most ancient of all the Greek heroes. He founded the city of Mycenæ, of which he became afterwards king, and where he and his posterity reigned for 100 years. He flourished, according to most chronologists, 1348 B. C.; but, according to Sir Isaac Newton, only 1028.
Perseus. See Astronomy Index.

Extent of Persia.

perly the

name of

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empire.

PERSIA, a most ancient and celebrated empire of Asia, extending in length from the mouth of the river Araxes to that of the river Indus, about 1840 of our miles, and in breadth from the river Oxus, to the Perfian gulf, about 1080 of the same miles. It is bounded on the north by the Caspian sea, the river Oxus, and Mount Caucasus; on the east, by the river Indus and the dominions of the Great Mogul; on the south, by the Persian gulf and the Indian ocean; and on the west,

by the dominions of the Grand Signior.

We learn from Sir William Jones, the illustrious pre-Perfia profident of the Afiatic Society, that Persia is the name of only one province of this extensive empire, which by the prefent natives, and all the learned Muffulmans who province of reside in the British territories in India, is called Iran. It has been a practice not uncommon in all ages to denominate the whole of a country from that part of it with which we are best acquainted; and hence have the Europeans agreed to call Iran by the name of that province of which Shirauz is the capital: See SHIRAUZ. The fame learned writer is confident that Iran, or Perfia in its largest extent, comprehended within its outline the lower Asia, which, fays he, was unquestionably a part of the Persian, if not of the old Affyrian empire. "Thus may we look on Iran as the noblest peninsula on this habitable globe; and if M. Bailly had fixed on it as the Atlantis of PLATO, he might have supported his opinion with far stronger arguments than any that he has adduced in favour of Nova Zembla. If, indeed, the account of the Atlantis be not purely an Egyptian fable, I should be more inclined, fays Sir William, to place them in Iran than in any region with which I am acquainted."

The most ancient name, however, of this country was that of Elam, or, as some write it, Ælam, from Elam the fon of Shem, from whom its first inhabitants are defcended. Herodotus calls its inhabitants Cephenes; and in very ancient times the people are faid to have called themselves Artæi, and the country where they dwelt Artæa. In the books of Daniel, Esdras, &c. it is called by the names of Pars, Pharas, or Fars, whence the modern name of Persia; but whence those names have

been derived, is now uncertain.

That Persia was originally peopled by Elam the fon of Shem, has been very generally admitted; but the truth is, that of the ancient history of this distinguished empire very little is perfectly known. For this ignorance, which at first feems strange, fatisfactory reasons may easily be assigned; of which the principal are the fuperficial knowledge of the Greeks and Jews, and the lofs of Persian archives or historical compositions. "That the Grecian writers before XENOPHON had no acquaintance with Persia, and that their accounts of it are wholly fabulous, is a paradox too extravagant to be feriously mentioned; but (fays Sir William Jones) their connection with it in war or peace had been generally Perfecconfined to bordering kingdoms under feudatory princes; and the first Persian emperor, whose life and character they feem to have known with tolerable accuracy, was the great Cyrus." Our learned author, however, is fo far from confidering Cyrus as the first Persian monarch, that he thinks it evident a powerful monarchy had fublished in Iran for ages before the accession of that hero; that this monarchy was called the Mahébédian dynasty; and that it was in fact the oldest monarchy in the world. The evidence upon which the prefident rests this opinion, is the work of a Mahometan traveller, compiled from the books of fuch Persians as sled from their country upon the innovation in religion made by Zoroaster: and if these books, of which a few still remain, be genuine, and the Mahometan a faithful compiler, facts of which Sir William has not the smallest doubt, the evidence is certainly sufficient to bear the superstructure which he has raifed upon it.

If the Persian monarchy was thus ancient, it is natu- Perhaps the ral to suppose that Persia or Iran was the original seat original of the human race, whence colonies were fent out or feat of the emigrated of themselves to people the rest of the habitable globe. This supposition is actually made by our race. table globe. This supposition is actually made by our ingenious author, who strongly confirms it by remarks on the most ancient language of Persia, which he shows to have been the parent of the Sanferit, as well as of the Greek, Latin, and Gothic (fee PHILOLOGY). therefore holds, as a proposition firmly established, "that Iràn or Persia, in its largest fense, was the true centre of population, of knowledge, of languages, and of arts; which instead of travelling westward only, as it has been fancifully supposed, or eastward, as might with equal reason have been afferted, were expanded in all directions to all the regions of the world." He thinks it is from good authority that the Saxon Chronicle brings the first inhabitants of Britain from Armenia; that the Goths have been concluded to come from Perfia; and that both the Irish and old Britons have been supposed to have proceeded from the borders of the Caf-

pian: for all these places were comprehended within the

ancient Iran.

Of this first Persian monarchy we have no historical accounts; and must therefore, after having thus mentioned it, descend at once to the era of Cyrus. This Accounts of prince is celebrated both by facred and profane hifto the birth, rians; but the latter are at no finall variance concern- &c. of Cying his birth and accession to the throne. According rus, to Herodotus, Aftyages, the last king of the Medes, being warned in a dream, that the fon who was to be born of his daughter Mandane, should one day be lord of Asia, resolved to marry her, not to a Mede, but to a Persian. Accordingly he chose for her husband one Cambyfes, a man of a peaceable difpolition, and of no very high station. However, about a year after they were married, Aftyages was frightened by another dream, which made him refolve to dispatch the infant as foon as it should be born. Hereupon the king fent for his daughter, and put her under confinement, where fhe was foon after delivered of a fon. The infant was committed to the care of one Harpagus, with strict orders to destroy it in what manner he thought proper. But he, having acquainted his wife with the command he had received, by her advice gave it to a shepherd desiring him to let it perish by exposing it. But the T 2

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Persia. shepherd, out of compassion, exposed a still-born child which his wife happened to be then delivered of, and brought up the fon of Mandane as his own, giving him the name of CYRUS.

When the young prince had attained the age of ten years, as he was one day at play with other children of the same age, he was chosen king by his companions; and having, in virtue of that dignity, divided them into feveral orders and classes, the son of Artembares, a lord of eminent dignity among the Medes, refused to obey his orders; whereupon Cyrus caufed him to be feized, and whipped very feverely. The boy ran crying to his father; and he immediately hastened to the king's palace, loudly complaining of the affront his fon had received from the fon of a flave, and intreating Astyages to revenge, by some exemplary punishment, the indignity offered to him and his family. Astyages, commanding both the herdsman and his son to be brought before him, asked the latter, how he, who was the son of fo mean a man, had dared to abuse the son of one of the chief lords of the kingdom? Cyrus replied, that he had done no more than he had a right to do; for the boys of the neighbourhood having chosen him king, because they thought him most worthy of that dignity, and performed what he, vested with that character, had commanded, the fon of Artembares alone had flighted his orders, and for his disobedience had suffered the punishment he deserved. In the course of this conversation Astyages happening to recollect, that his grandson, whom he had ordered to be destroyed, would have been about the same age with Cyrus, began to question the shepherd concerning his supposed son, and at last obtained from him a confession of the whole truth.

Astyages having now discovered Cyrus to be his grandson, sent for Harpagus, who also confessed that he had not seen Mandane's son destroyed, but had given him to the shepherd; at which Astyages was so much incensed, that, having invited Harpagus to an entertainment, he caused him to be served with the slesh of his own fon. When he had done, the king asked him whether he liked his victuals; and Harpagus answering, that he had never tasted any thing more delicious, the officers appointed for that purpose brought in a basket, containing the head, hands, and feet of his fon, defiring him to uncover the basket, and take what he liked best. He did as they defired, and beheld the mangled remains of his only child without betraying the least concern, so great was the command which he had over his passions. The king then asked him, whether he knew with what kind of meat he had been entertained. Harpagus replied, that he knew very well, and was always pleased with what his sovereign thought fit to ordain; and having thus replied, with a furprifing temper he collected the mangled parts of his innocent fon, and went home.

Astyages having thus vented his rage on Harpagus, began next to confult what he should do with Cyrus. The magi, however, eased him of his fears with regard to him, by affuring him, that as the boy had been once chosen king by his companions, the dream had been already verified, and that Cyrus never would reign in any other fense. The king, being well pleased with this answer, called Cyrus, and, owning how much he had been wanting in the affection which he ought to have had towards him, defired him to prepare for a journey

into Persia, where he would find his father and mother Persia. in circumstances very different from those of the poor shepherd and his wife with whom he had hitherto lived. Cyrus, on his arrival at his father's house, was received with the greatest joy. When he grew up, he soon became popular on account of his extraordinary parts; till at last his friendship was courted by Harpagus, who had never forgot the cruel treatment he received from Astyages. By his means a conspiracy was formed against Astyages; who being overthrown in two successive engagements, was taken prisoner and confined

The account given by Xenophon of the rife of Cyrus is much more confonant to Scripture; for he tells us, that Babylon was conquered by the united forces of the Medes and Perfians. According to him, Cyrus was the fon of Cambyses king of the Medes, and Mandane the daughter of Aftyages king of Persia. He was born a year after his uncle Cyaxares, the brother of Mandane. He lived till the age of twelve with his parents in Perfia, being educated after the manner of the country, and inured to fatigues and military exercises. At this age he was taken to the court of Astyages, where he refided four years; when the revolt of the Medes and Perfians from the Babylonians happened, and which ended in the destruction of the Babylonish empire, as related under the article BABYLON.

While Cyrus was employed in the Babylonish war, His war before he attacked the metropolis itself, he reduced all with the the nations of Asia Minor. The most formidable of Lydians. these were the Lydians, whose king Croesus affembled a very numerous army, composed of all the other nations in that part of Asia, as well as of Egyptians, Greeks, and Thracians. Cyrus being informed of these vast preparations, augmented his forces to 196,000 men, and with them advanced against the enemy, who were affembled near the river Pactolus. After long marches, he came up with them at Thymbra, not far from Sardis, the capital of Lydia. Besides the horse and foot, which amounted to 196,000, as already observed, Cyrus had 300 chariots armed with scythes, each chariot drawn by four horses abreast, covered with trappings that were proof against all forts of missive weapons: he had likewise a great number of chariots of a larger size, upon each of which was placed a tower about 18 or 20 feet high, and in each tower were lodged 20 archers. These towers were drawn by 16 oxen yoked abreast. There was moreover a confiderable number of camels, each mounted by two Arabian archers, the one looking towards the head, and the other towards the hinder part of the camel. The army of Croefus confifted of 420,000 men. The Egyptians, who alone were 120,000 in number, being the main strength of the army, were placed in the centre. Both armies were drawn up in an immense plain, which gave room for the extending of the wings on either fide; and the defign of Cræfus, upon which alone he founded his hopes of victory, was to furround and hem in the enemy's army.

When the two armies were in fight of each other, The battle Croefus, observing how much his front exceeded that of of Thym-Cyrus, made the centre halt, but commanded the two bra. wings to advance, with a defign to inclose the Persian army, and begin the attack on both fides at once. When the two detached bodies of the Lydian forces were fufficiently extended, Croefus gave the fignal to the

Sardis ta-

empire

thrown.

Persa. main body, which marched up to the front of the Perfian army, while the two wings attacked them in flank; fo that Cyrus's army was hemmed in on all fides, and, as Xenophon expresses it, was inclosed like a small fquare drawn within a great one. This motion, however, did not at all alarm the Persian commander; but, giving his troops the fignal to face about, he attacked in flank those forces that were going to fall upon his rear so vigorously, that he put them into great disorder. At the same time a squadron of camels was made to advance against the enemy's other wing, which consisted mostly of cavalry. The horses were so frightened at the approach of these animals, that most of them threw their riders, and trod them under foot; which occasioned great confusion. Then Artageses, an officer of great valour and experience, at the head of a small body of horse, charged them so briskly, that they could never afterwards rally; and at the fame time the chariots, armed with scythes, being driven in among them, they were entirely routed. Both the enemy's wings being thus put to flight, Cyrus commanded his chief favourite Abradates to fall upon the centre with the large chariots above mentioned. The first ranks, confisting mostly of Lydians, not being able to stand so violent a charge, immediately gave way; but the Egyptians, being covered with their bucklers, and marching fo close that the chariots had not room to penetrate their ranks, a great flaughter of the Perfians enfued. Abradates himself was killed, his chariot overturned, and the greatest part of his men were cut in pieces. Upon his death, the Egyptians, advancing boldly, obliged the Persian infantry to give way, and drove them back quite to their engines. There they met with a new shower of darts and javelins from their machines; and at the same time the Persian rear advancing sword in hand, obliged their spearmen and archers to return to the charge. In the mean time Cyrus, having put to flight both the horse and foot on the left of the Egyptians, pushed on to the centre, where he had the misfortune to find his Perfians again giving ground; and judging that the only way to stop the Egyptians, who were pursuing them, would be to attack them in the rear, he did so; and at the same time the Persian cavalry coming up to his affiftance, the fight was renewed with great flaughter on both fides. Cyrus himself was in great danger; for his horse being killed under him, he fell among the midst of his enemies: but the Perfians, alarmed at the danger of their general, threw themselves headlong on their opponents, rescued him, and made a terrible flaughter; till at last Cyrus, admiring the valour of the Egyptians, offered them honourable conditions: letting them know at the same time, that all their allies had abandoned them. They accepted the terms offered them; and having agreed with Cyrus that they should not be obliged to carry arms against Croesus, they engaged in the service of the conqueror, and continued faithful to him ever after.

The next morning Cyrus advanced towards Sardis, ken, and the Lydian and Cræsus marched out to oppose him at the head of the Lydians only; for his allies had all abandoned him. Their strength confisted mostly in cavalry; which Cyrus being well apprised of, he ordered his camels to advance; by whom the horses were so frightened, that they became quite ungovernable. However, the Lydians difmounted, and for fome time made a vigorous refistance on foot; but were at last driven into the city, Persia. which was taken two days after: and thus the Lydian empire was totally destroyed.

After the conquest of Sardis, Cyrus turned his arms Reduces against Babylon itself, which he reduced in the manner Babylon. related under that article. Having fettled the civil government of the conquered kingdoms, Cyrus took a review of all his forces, which he found to confift of 600,000 foot, 120,000 horse, and 2000 chariots armed with fcythes. With these he extended his dominion all over the nations to the confines of Ethiopia, and to the Red sea; after which he continued to reign peaceably over his vast empire till his death, which happened about 529 before Christ. According to Xenophon, he His deathdied a natural death; but others tell us, that, having engaged in a war with the Scythians, he was by them overthrown and cut in pieces with his whole army, amounting to 200,000 men. But this is very improbable, feeing all authors agree that the tomb of Cyrus was extant at Pasargada in Persia in the time of Alexander the Great; which it could not have been if his body had remained in the poffession of the Scythians, as these authors affert.

In the time of Cyrus, the Persian empire extended from the river Indus to the Ægean sea. On the north it was bounded by the Euxine and Caspian seas, and on the south by Ethiopia and Arabia. That monarch kept his refidence for the feven cold months at Babylon, by reason of the warmth of that climate; three months in the spring he spent at Susa, and two at Ecbatan during the heat of fummer. On his deathbed he appointed his fon Cambyfes to fucceed him in the empire; and to his other fon, Smerdis, he gave feveral confiderable governments. The new monarch immediately fet about the conquest of Egypt; which he accomplished in the manner related in the history of that country.

Having reduced Egypt, Cambyses next resolved to Cambyses turn his arms against the Carthaginians, Hammonians, conquers and Ethiopians. But he was obliged to drop the first Egypt. of these enterprises, because the Phænicians resused to fupply him with ships against the Carthaginians, who where a Phœnician colony. However, he fent ambaffadors into Ethiopia with a defign to get intelligence of the state and strength of the country. But the Ethiopiam monarch, being well apprifed of the errand on which they came, treated them with great contempt. In return for the presents sent him by Cambyses, he fent his own bow; and advised the Persians to make war upon the Ethiopians when they could bend fuch a strong bow as easily as he did, and to thank the gods that the Ethiopians had no ambition to extend their dominious beyond their own country.

Cambyfes was no fooner informed of this answer by His unfuehis ambassadors than he slew into a violent passion; and cessful exordered his army immediately to begin their march, pedition without confidering that they were neither furnished exthiopia with provisions nor any other necessary. When he ar-and the rived at Thebes in Upper Egypt, he detached 50,000 Hammomen, with orders to destroy the temple of Jupiter Am-nians, mon: but all these perished in the desert; not a single person arriving either at the oracle, or returning to Thebes. The rest of the army, led by Cambyses himfelf, experienced incredible hardships; for, not being provided with any necessaries, they had not marched a fifth part of the way when they were obliged to kill and

Persia. eat their beasts of burthen. When these failed, the soldiers fed on grafs and roots, as long as any could be found; and at last were reduced to the dreadful necesfity of eating one another; every tenth man, on whom the lot fell, being condemned to ferve as food for his companions. The king, however, obstinately perfished in his defign; till, being apprehensive of the danger he himself was in, he retreated to Thebes, after having lost the greatest part of his army.

He murders his brother.

Cambyses was a man of a very cruel and suspicious temper, of which he gave many instances; and the following proved indirectly the cause of his death .- We have already observed that the king of Ethiopia sent his bow in return for the prefents brought to him by the ambassadors of Cambyses. The only man in the Perfian army who could bend this bow was Smerdis the king's brother; and this instance of his personal strength fo alarmed the tyrant, that, without any crime alleged, he caused him to be murdered. This gave occasion to one Smerdis, a magian, who greatly refembled the other Smerdis in looks, to assume the name of the deceased prince, and to raise a rebellion against Cambyses, who was generally hated for his cruelty; and this he could the more eafily do, as the chief management of affairs had been committed to this Smerdis during the king's absence. Cambyses, on receiving the news of this revolt, immediately ordered his army to march, in order to suppress it; but as he was mounting his horse, his fword, flipping out of its feabbard, wounded him in the thigh. On this accident, he asked the name of the city where he was; and being told that it was Ecbatan, he faid in the presence of all his attendants, " Fate has decreed that Cambyles the fon of Cyrus shall die in this place." For, having confulted the oracle of Butus, which was very famous in that country, he was told that he should die at Ecbatan. This he had always understood of Ecbatan in Media, and had therefore resolved to avoid it. Being now, however, convinced that his end approached, he affembled the chief Persian lords who ferved in the army, and having told them that his brother was certainly dead, he exhorted them never to fubmit to the impostor, or fuffer the sovereignty again to pass from the Persians to the Medes, to which nation Smerdis belonged, but to use their utmost endeavours to place one of their own blood on the

His death.

16 Reign of magian.

As the king's wound mortified, he lived but a few , days after this; but the affembly supposing that he had spoken only out of hatred to his brother, quietly submitted to the impostor, who was thus for a time esta-blished on the throne. Indeed, from his conduct during the short time which he enjoyed the kingdom, he appears to have been not at all undeferving of a crown. He began with granting to all his subjects an exemption Smerdisthe from taxes and military service for three years, and treated all of them in the most beneficent manner. To fecure himself on the throne the more effectually, he married Atoffa the daughter of Cyrus; thinking, that in case of a discovery he might hold the empire by her title. She had before been married to her brother Cambyses, on a decision of the magi that a king of Persia might do as he pleased; and by virtue of this decision Smerdis also married her as her brother. The extreme caution of Smerdis, however, promoted the discovery of

his imposture. He had married all his predecessor's Persa. wives, among whom was one Phedyma, the daughter of Otanes a Persian nobleman of the first rank. Otanes, His impowho suspected that the king was not Smerdis the son of sture disco-Cyrus, fent a trufty meffenger to his daughter, defiring vered. to know whether he was fo or not; but Phedyma, having never feen this Smerdis, could not give any answer. Her father then defired her to inquire at Atoffa, who could not but know her own brother. However, he was again disappointed; for Phedyma acquainted him that all the king's wives were lodged in diffinct and feparate apartments, without being allowed to fee each other. This greatly increased the suspicions of Otanes; upon which he fent his daughter a third meffage, defiring her, the next time she should be admitted to the king's bed, to take an opportunity of feeling whether he had ears or not: for Cyrus had formerly caufed the ears of Smerdis the magian to be cut off for some crime of which he had been guilty; fo that, if the king had ears, the might then be affured that he was Smerdis the fon of Cyrus. The event showed that the suspicions of Otancs were just; and Phedyma having acquainted her father that the king had no ears, a conspiracy was immediately formed against him. While the conspira- A conspitors were debating about the proper means of carrying racy formed their defigns into execution, Darius the fon of Hystaspes him. happening to arrive at Sufa where his father was governor, they all agreed to make him privy to their defign. He told them, at their first meeting, that he thought nobody in the empire but himself had known that Smerdis the fon of Cyrus was dead, and the throne usurped by one of the magi; that he had come with a defign to kill the usurper, without imparting his defign to any one, that the glory of such an action might be entirely his own. But fince others were apprifed of the impofture, he infifted that the usurper should be dispatched without delay. Otanes, on the other hand, was for putting off the enterprise till some better opportunity offered; but Darius protested, that if they did not make the

In the mean time, Smerdis and his brother had by great promifes prevailed on Prenaspes (the executioner of the true Smerdis) to bind himself by an oath not to discover the fraud they had put on the Persians, and even to make a public speech, declaring that the prefent king of Persia was really the son of Cyrus. At the time appointed, he began his discourse with the genealogy of Cyrus, putting his hearers in mind of the great favours the nation had received from that prince. After having extolled Cyrus and his family, to the great aftonishment of all present, he confessed the whole transaction with regard to the death of Smerdis; telling the people, that the apprehensions of the danger he must inevitably run by publishing the imposture had constrained him to conceal it fo long; but now, not being able any longer to act fuch a dishonourable part, he acknowledged that he had been compelled by Cambyfes to put his brother to death with his own hand, and that the person who possessed the throne was Smerdis the magian. He then begged pardon of the gods and men for the crime he had committed; and fulminating many imprecations against the Persians if they failed to reco-

attempt that very day, he would prevent any one from accusing him, by disclosing the whole matter to the im-

postor himself.

He is kil-led.

ver the fovereignty, he threw himfelf headlong from the transactions were his expeditions against Babylon; a. Persa. top of the tower on which he stood, and died on the ipot.

In the mean time the conspirators, who were advancing towards the palace, were informed of what had happened; and Otanes was again for deferring the execution of their enterprise: but Darius infifting upon the danger of delay, they proceeded boldly to the palace; and being admitted by the guards, who did not suspect them, they killed both the usurper and his brother; after which they exposed their heads to the people, and declared the whole imposture. The Persians at this were to enraged, that they fell on the whole fect, and killed every one of the magi they could meet with; and had not the flaughter been stopped by night, not one of the order would have been left alive. The day on which this flaughter happened was afterwards eelebrated by the Perfians with the greatest solemnity, and called by the name of Magophonia, or the flaughter of the Magi. On that festival the magi durst not appear abroad, but were obliged to shut themselves up in their houses. Smerdis the magian reigned only eight months.

When the tumult was a little subsided, the conspirators, who were feven in number, met together in order to elect a new king, or to determine what form of government they should next introduce. Otanes was for a republic; but being overruled by the rest, he declared, that as he was determined not to be a king, neither would he be ruled by one; and therefore infifted that he and his family should ever afterwards remain free from fubjection to the royal power. This was not only granted, but it was further agreed by the other fix, that whoever was chosen should every year present Otanes with a Median vest, a mark of great distinction among the Persians, because he had been the ehief author of the enterprise. They further agreed to meet at a certain place next morning at funrile on horseback, and Darius Hy- that he whose horse first neighed should be king. This staspes cho- being overheard by Oebores, who had the eare of Darius's horses, he led a mare over-night to the place, and brought his mafter's horse to her. The next morning, the horse remembering the place, immediately neighed for the mare; and the five lords difmounting, faluted Darius as their king.

Darius Hystaspes was elected king of Persia in the year 522 B. C. Immediately after his accession, he promoted the other fix conspirators to the first employments in the kingdom, married the two daughters of Cyrus, Atoffa and Artystona, Parmys the daughter of the true Smerdis, and Phedyma the daughter of Otanes, who had detected the imposture of the magian. He then divided the whole empire into 20 fatrapies or governments, and appointed a governor over each division, ordering them to pay him an annual tribute. The inhabitants of Colchis, with some others, were enjoined only to make annual prefents, and the Arabians to furnish every year fuch a quantity of frankincense as equalled the weight of 1000 talents. Thus Darius received the yearly tribute of 14,560 Eubœie talents, upwards of 260,000 pounds sterling.

Under Darius, the building of the temple of Jerusalem, which had been obstructed by Cambyses and Smerdis, went on successfully, and the Jewish state was entirely reftored. The most remarkable of Darius's other

gainst Scythia, India, and Greece. The expedition against Babylon took place in the year 517 B. C. when Revolt of the people, unable to bear the oppression of the Persians, the Babyand likewise discontented because the seat of government lonians. was removed from their city to Susa in Persia, took the opportunity of the troubles which happened in the reigns of Cambyles and Smerdis, to store their city with all kinds of provisions sufficient to serve them for many years; after which they broke out into an open rebellion, and this quickly brought upon them Darius with all his forces. The Babylonians perceiving themselves fhut up by so numerous an army, turned all their thoughts towards the supporting of a long siege, which they imagined would tire out the king's troops. To prevent the confumption of their provisions, they took the most barbarous and cruel resolution that ever was put in execution by any nation. They agreed among themselves to get rid of all unnecessary mouths; and therefore, gathering together all the old men, women, and children, they strangled them without distinction; every one being allowed only to keep the wife he liked best, and a maid-servant to do the work of the house. The fiege continued for a year and eight months; nor was there any likelihood of its being ended, when Zopyrus, one of Darius's chief commanders, put him in possession of it by the following stratagem. He cut off his nofe and ears, and having mangled his body with stripes in a most eruel manner, he sled to the Babylonians thus disfigured, pretending that he had been so treated by Darius for advising him to raise the siege. Being intrusted with the command of some forces, he cut off several parties of the Persian army, whom Darius thus facrificed in order to raife the character of Zopyrus the higher among the Babylonians. In this manner he fo much established his credit, that at last he was made eommander in chief of all the Babylonish forces, and the guard of the city committed entirely to his care; and no fooner was this done than he delivered it up to Darius, who, to prevent their rebelling a fecond time, beat down the walls of that metropolis to the height of 50 cubits. Three thousand of the most active in the rebellion were impaled; the rest pardoned. As they had destroyed most of their women, the neighbouring nations were commanded to furnish them with wives, and 50,000 women were fent to that city, by which means it was prevented from being depopulated. Zopyrus was rewarded with the highest honours, and had the whole revenues of Babylon bestowed on him for life.

After the reduction of Babylon, Darius undertook a His unfuc-Scythian expedition, directed against those nations which cessful exlie between the Danube and the Tanais. His pretext pedition for this war was, to revenge the ealamities which these Scythians. nations had brought upon Asia about 120 years before, when they invaded and fubdued Media; keeping it in subjection for the space of 28 years, as we have related under that article. In this expedition he was attended with an army of 700,000 men. With these he marched to the Thracian Bosphorus; which having passed on a bridge of boats, he reduced all Thrace. From Thrace he advanced to the Danube, where he had appointed his fleet to meet him. This river he paffed on another bridge of boats, and entered Seythia. His enemies, however, were too wife to oppose such a formidable power in the open field; and therefore religid before him, wafting

Persa. the country as they went along, till at last the king, fensible of the danger he was in, resolved to give over the enterprise and return home. In order to do so with fafety, he lighted a great number of fires in the nighttime, and decamped; leaving behind him the old men and the fick, who fell into the hands of their enemies. The Scythians perceiving that Darius was gone, detached a confiderable body to the bridge over the Danube; and as they were well acquainted with the roads, they got thither before the Persians. The Scythians had fent expresses before-hand to persuade the Ionians, whom Darius had left to guard the bridge, to break it down and retire to their own country; and this they preffed the more earnestly, that as the time prescribed by Darius was now expired, they were at liberty to return home, without breaking their word or being wanting in their duty. Miltiades, prince of the Chersonesus of Thrace, was for embracing fo favourable an opportunity of cutting off Darius's retreat, and shaking off the Perfian yoke at once: all the other commanders agreed with him, except Hystiæus prince of Miletus; who represented to the Ionian chiefs, that their power was connected with that of Darius, fince it was under his protection that each of them was lord in his own city; and that the cities of Ionia would not fail to depose them and recover their liberty, if the Persian power should fink or decline. This speech made a deep impression on the rest, and it was at last determined that they should wait for Darius; and in order to deceive the Scythians, they began to break down the bridge, but advised them to return back and defeat Darius. They did so, but missed him; and he having thus fafely escaped so great a danger, immediately repassed the Bosphorus, and took up his winter quarters at Sardis, leaving Megabyzus, one of his chief generals, to complete the conquest of Thrace.

23

The king having fufficiently refreshed his troops who quers India. had fuffered extremely in the Scythian expedition, began to think of extending his dominions eastward; and in · order to facilitate his defign, refolved in the first place to discover those countries. With this view, he caused a fleet to be built and equipped at Caspatyrus, a city on the river Indus. The command of this fleet he gave to one Scylax, a Grecian of Caryandia a city of Caria, who was well versed in maritime affairs. Him he ordered to fail down the current, and make the best discoveries he could of the countries lying on either fide of the river, till he arrived at the fouthern ocean; from whence he was to steer his course westward, and that way return to Perfia. Scylax, having exactly observed his instructions, and failed down the river Indus, entered the Red fea by the straits of Babelmandel, and on the 30th month from his first setting out, landed at the same place from whence Nechu king of Egypt formerly fent out the Phœnicians who circumnavigated Africa. From hence Scylax returned to Susa, where he gave a full account of his discoveries; upon which Darius, marching into India at the head of a powerful army, reduced that large country, and made it a province of the Persian empire, drawing from thence an annual tribute of 360 talents of gold.

Revolt of

Soon after the expedition of Darius against India hapthe Ionians, pened the revolt of the Ionians, which gave occasion to his expedition into Greece; an account of which is given under the articles ATTICA, GREECE, SPARTA, &c. The ill fuccess which attended him here, however, was so far Persia. from making him drop the enterprise, that it only made him the more intent on reducing the Grecians; and he resolved to head his army in person, having attributed his former bad fuccess to the inexperience of his generals. But while he was employed in making the necesfary preparations for this purpose, he received intelligence that the Egyptians had revolted, fo that he was obliged to make preparations for reducing them also; and before this could be done, the king died, after having reigned 36 years, leaving the throne to his fon

This prince ascended the throne of Persia in the year Expeditions 485 B. C.; and his first enterprise was to reduce the of Xerxes Egyptians; which he effectually did, bringing them into against Egypt and a worse state of slavery than they ever had experienced Greece. before. After this he refolved on an expedition into Greece; the unfortunate event of which is related under the article ATTICA. By his misfortunes in the Grecian expedition, he became at last so dispirited, that he thenceforth abandoned all thoughts of war and conquests; but growing tyrannical, and oppressing his subjects, he was murdered in his bed, in the year 464 B. C. and 21st of his reign; and was fucceeded by his third fon Artaxer-Xerxes fucxes, furnamed Longimanus on account of the great length ceeded by

This prince is named Ahafuerus in Scripture, and is Longimathe fame who married Esther, and during the whole of his reign showed the greatest kindness to the Jewish nation. In the beginning of his reign he was opposed by Hystaspes the second son of Xerxes, whom, however, he overcame, though not without confiderable difficulty. After this he applied himself to the settlement of the affairs of government, and reforming many abuses which had crept in; and then, being fully established on the throne, he appointed feasts and rejoicings to be made for 180 days in the city of Susa; at one of which he re-folved to divorce his queen for disobedience; and afterwards married Esther, as we find it recorded in the sacred writings.

In the fifth year of the reign of Artaxerxes the Egyptians revolted anew, and, being affifted by the Athenians, held out for fix years; but were again obliged to submit, and continued in subjection during the whole of his reign. Nothing else remarkable happened during the life of Artaxerxes Longimanus, who died in the 41st year of his reign; and was succeeded by Xerxes II. the only Xerxes II. fon he had by his queen, though by his concubines he had 17. Xerxes having drunk immoderately at an entertainment immediately after his accession, retired to a chamber in order to refresh himself with sleep; but here he was murdered by Sogdianus, the fon of Artaxerxes by one of his concubines, after he had reigned 45 days.

Sogdianus was fcarce feated on the throne when he Sogdianus. put to death Bagorazus, the most faithful of all his father's eunuchs; by which, and the murder of his fovereign, he became generally odious. Upon this, fenfible of the dangerous fituation in which he was, he fent for one of his brothers named Ochus, whom he suspected, with a defign to murder him the moment he arrived. Ochus, however, understanding his design, put off, by Ochus. feveral pretences, his coming, till he had drawn together a powerful army, with which he advanced to the confines of Persia. Here he openly declared, that his design was to revenge his brother's death; which brought over

to him many of the nobility and governors of provinces. by whom he was immediately proclaimed king. Sogdianus, feeing himfelf thus deferted, contrary to the advice of all his friends, came to an accommodation with Ochus; who no fooner had him in his power than he caused him to be suffocated among ashes; a punishment

invented on purpose for him.

Ochus being firmly fettled on the throne by the death of Sogdianus, changed his name to Darius; and is by historians commonly called Darius Nothus, or The Baftard. But Arfites, another of the brothers, feeing in what manner Sogdianus had got the better of Xerxes, and been afterwards driven out by Ochus, began to entertain thoughts of treating him in the same manner. He was not, however, fo fuccessful; for, being defeated in an engagement, he furrendered himself in hopes of mercy, but was immediately put to death by fuffocation in ashes. Several other persons were executed: but these severities did not procure him the repose which he expected; for his whole reign was diffurbed with violent commotions in various parts of the empire. One of the most dangerous was raised by Pisuthna governor of Lydia; but he being deferted by his Greek mercenaries, was at last overcome, and put to death: however, his fon Amorgas continued to infest the maritime provinces of Afia Minor for two years; till he also was taken prifoner by Tiffaphernes, the new governor of Lydia, who put him to death. Other infurrections quickly followed this: but the greatest misfortune which befel Darius during the whole course of his reign was the revolt of the Egyptians, who could not be reduced. Before his death he invested Cyrus his youngest fon with the supreme government of all the provinces of Afia Minor. This was done through the perfuafions of his mother Paryfatis, who had an abfolute fway over her husband; and she procured this command for him, that he might thereby be enabled to contend for the kingdom after his father's death. She even infifted that the king should declare him heir to the crown before he died; but this he could not by any means be induced to do. He died in the year 405 B. C. and was succeeded by his fon Artaxerxes, by the Greeks furnamed Mnemon on account of his extraordinary memory.

The most remarkable transaction which happened during the reign of this prince was the revolt of his brother Cyrus. This young prince had been raifed to fo great power through the interest of his mother, on purpose that he might revolt, as we have already feen. He began with gaining over the cities under the government of Tiffaphernes; which quickly produced a war with that governor. Cyrus then began to affemble troops, which he pretended were defigned only against Tiffaphernes. As he had given great affiftance to the Lacedemonians in their wars against the Athenians, he now in return demanded affiftance from them; which request they very readily complied with, ordering their fleet immediately to join him, and to obey in every thing the commands of Tamos his admiral. At last Cyrus, having collected an army of 13,000 Greek mercenaries and 100,000 regular troops of other nations, fet out from Sardis, directing his march towards Upper Afia; the army being entirely ignorant of the expedition on which they were going. When they arrived at Tarfus, the Greeks, suspecting that they were marching against the king, refused to proceed any further; but Cyrus having

Vol. XVI. Part I.

gained them over with presents and promises, they foon Persa. went on with satisfaction. Having arrived at Cunaxa in the province of Babylon, Cyrus found his brother Battle of with 900,000 men ready to engage him. Whereupon, Cunaxa. leaping out of his chariot, he commanded his troops to stand to their arms and fall into their ranks; which was done with great expedition, no time being allowed the foldiers to refresh themselves. Clearchus, the commander of the Peloponnesian troops, advised Cyrus not to charge in person, but to remain in the rear of the Greek battalions; but this advice he rejected with indignation, faying, that he should thus render himself unworthy of the crown for which he was fighting. As the king's army drew near, the Greeks fell upon them with fuch a fury, that they routed the wing opposite to them almost at the first onset; upon which Cyrus was with loud shouts proclaimed king by those who stood next to him. But he, in the mean time, perceiving that Artaxerxes was wheeling about to attack him in flank, advanced against him with 600 chosen horse, killed Artageses captain of the king's guards with his own hand, and put the whole body to flight. In this encounter, discovering his brother, he spurred on his horse, and, coming up to him, engaged him with great fury; which in some degree turned the battle into a fingle combat. Cyrus killed his brother's horse, and wounded him on the ground; but he immediately mounted another horse, when Cyrus attacked him again, gave him a fecond wound, and had already lifted up his hand to give him a third, when the guards, perceiving the danger in which their king was, discharged their arrows at once against his antagonist, who at the same time throwing himself headlong upon his brother, was pierced through by his javelin. He fell dead upon the spot; and all the chief lords of his court, refolving not to furvive him, were flain in the fame place.

In the mean time, the Greeks having defeated the enemy's left wing commanded by Tiffaphernes, and the king's right wing having put to flight Cyrus's left, both parties, being ignorant of what had passed elsewhere, imagined that they had gained the victory. But Tiffa-phernes acquainting the king that his men had been put to flight by the Greeks, he immediately rallied his troops, in order to attack them. The Greeks, under the command of Clearchus, eafily repulfed them, and purfued them to the foot of the neighbouring hills. As night was drawing near, they halted at the foot of the hill much furprifed that neither Cyrus himfelf, nor any messenger from him, had appeared; for as yet they knew nothing of his death and the defeat of the rest of the army. They determined therefore to return to their camp, which they did accordingly; but found there that the greatest part of their baggage had been plundered, and all their provisions taken, which obliged them to pass the night in the camp without any fort of refreshment. The next morning, as they were still expecting to hear from Cyrus, they received the news of his death, and the defeat of that part of the army. Whereupon they fent deputies to Ariæus, who was commander in chief of all the other forces of Cyrus, offering him, as conquerors, the crown of Persia. Ariæus rejected the offer, and acquainting them that he intended to set out early in the morning on his return to Ionia, advised Retreat

them to join him in the night. They followed his ad- of ten vice, and, under the conduct of Clearchus, began their thousand march.

30 Artaxerxes Mnemon.

Revolt of

Cyrus the Younger.

march, atriving at his camp about midnight, whence they fet out on their return to Greece. They were at a vast distance from their own country, in the very heart of the Persian empire, surrounded by a victorious and numerous army, and had no means of retreat but by forcing their way through an immense tract of the enemy's country. But their valour and resolution mastered all these disticulties; and, in spite of a powerful army, which purfued and haraffed them all the way, they made good their retreat for 2325 miles through the provinces belonging to the enemy, and got fafe to the Greek cities on the Euxine fea. This retreat (the longest that was ever made through an enemy's country) was conducted at first by Clearchus; but he being cut off through the treachery of Tiffaphernes, Xenophon was chosen in his room, who at last brought his men safe into Greece: but for a full account of that famous retreat, fee the article XENO-

War with monians.

The war with Cyrus was fearcely ended, when anothe Lacede-ther broke out with the Lacedemonians, on the following account. Tistaphernes being appointed to fucceed Cyrus in all his power, to which was added all which he himself possessed formerly, began to oppress the Greek cities in Asia in a most cruel manner. On this they fent ambaffadors to Sparta, defiring the affiftance of that powerful republic. The Spartans having ended their long war with the Athenians, willingly laid hold of the prefent opportunity of breaking again with the Persians, and therefore sent against them an army under the command of Thimbro, who, being strengthened by the forces which returned under Xenophon, took the field against Tissaphernes. But Thimbro being foon recalled upon fome complaints, Dercyllidas, a brave officer and experienced engineer, was appointed to fucceed him; and he carried on the war to much more advantage than his predecessor. On his arrival in Asia, finding that Tissaphernes was at variance with another governor named Pharnabazus, he concluded a truce with the former, and marching against Pharnabazus, drove him quite out of Æolis, and took feveral cities in other parts. The latter, however, immediately repaired to the Persian court, where he made loud complaints against Tiffaphernes, but gave the king a most falutary advice, which was to equip a powerful fleet, and give the command of it to Conon the Athenian, the best sea-officer of his time, by which means he would obstruct the passage of further recruits from Greece; and thus foon put an end to the power of the Lacedemonians in Afia. This advice being approved of, the king ordered 500 talents for the equipment of a fleet, with directions to give Conon the command of it.

In the mean time, Dercyllidas, with all his valour and skill, fuffered himself to be drawn into fuch a difadvantageous fituation, that he must inevitably have been destroyed with his whole army, had it not been through the cowardice of Tiffaphernes, who having experienced the Grecian valour at the battle of Cunaxa, could not by any means be induced to attack them. The Laccdemonians, however, having heard that the Persian monarch was fitting out a great fleet against them, resolved to push on the war as vigorously as possible; and for this purpose sent over Agesilaus one of their kings, and a most experienced commander, into Afia. This expedition was carried on Perfa. with fuch fecrecy that, Agefilaus arrived at Ephefus before the Persians had the least notice of his designs. Here he took the field with 10,000 foot and 4000 horse, and falling upon the enemy while they were totally unprepared, carried every thing before him. Tiffaphernes deceived him into a truce till he had leifure to affemble his forces, but gained little by his treachcry; for Agefilaus deceived him in his turn, and while Tiflaphernes marched his troops into Caria, the Greeks invaded and plundered Phrygia.

Early in the fpring, Ageillaus gave out that his defign was to invade Lydia; but Tiffaphernes, who remembered the last year's stratagem, now taking it for granted that Agefilaus would really invade Caria, made his troops again march to the defence of that province. But Agefilaus now led his army into Lydia as he had given out, and approached Sardis; upon which Tiffaphernes recalled his forces from their former route, with a defign to relieve the place. But Caria being a very mountainous country, and unfit for horse, he had marched thither only with the foct, and left the horfe behind on the borders of that province. Whence, on their marching back to the relief of Sardis, the horse being some days march before the foot, Agefilaus took the advantage of fo favourable an opportunity, and fell upon them before the foot could come to their affishance. The Persians were routed at the very first onset; after which Agestlaus overran the whole country, enriching both himself and his army with the spoils of the conquered Persians.

By this continued ill fortune Artaxerxes was fo much provoked against Tiffaphernes, that he soon after caused

him to be put to death.

On the death of Tissaphernes, Tithraustes, who was appointed to succeed him, sent large presents to Agefilaus, in hopes of perfuading him to abandon his conquests; but finding that commander was not by any means to be induced to relinquish the war, he fent Timocrates of Rhodes into Greece, with large fums of money to corrupt the leading men in the cities, and rckindle a war against the Lacedemonians. This strata- Agefilans gem produced the intended effect; for the citics of obliged to Thebes, Argos, Corinth, and others, entering into a con-leave Asia. federacy, obliged them to recal Agefilians to the defence

of his own country. After the departure of Agefilaus, which happened Lacedemoin the year 354 B. C. the Lacedemonian power re-nians deceived a fevere blow at Cnidos, where their fleet was feated, entirely defeated by that of Artaxerxes under Conon, 50 of their ships being taken in the engagement; after which, Conon and Pharnabazus being masters of the fea, failed round the islands and coasts of Asia, taking the cities there which had been reduced by the Lacedemonians. Seftos and Abydos only held out, and refifted the utmost efforts of the enemy, though they had been befieged both by fea and land.

Next year Conon having affembled a powerful flect, again took Pharnabazus on board, and reduced the island of Melos, from whence he made a descent on the coasts of Lycaonia, pillaging all the maritime provinces, and loading his fleet with an immense booty. After this, Conon obtained leave of him to repair to Athens with 80 ships and 50 talents, in order to rebuild the walls of that city; having first convinced

to make

the Per-

sians.

Pharnabazus, that nothing could more effectually contribute to the weakening of the power of Sparta than putting Athens again in a condition to rival its power. He no sooner arrived at Piræus the port of Athens, but he began to work; which, as he had a great number of hands, and was feconded by the zeal of all those that were well inclined to the Athenians, was foon completed, and the city not only restored to its sormer splendor, Are obliged but rendered more formidable than ever. The Lacedemonians were now reduced to the necessity of accepting fuch terms of peace as they could procure. The terms were, that all the Greek cities in Afia should be subject to the king of Persia, as also the islands of Cyprus and Clazomena; that the islands of Scyros, Lemnos, and Imbros, should be restored to the Athenians, and all the cities of Greece, whether fmall or great, should be declared free; and by the same treaty, Artaxerxes engaged to join those who accepted the terms he proposed, and to affilt them to the utmost of his power against such

38 Cyprus reduced.

as should reject them. Artaxerxes, being now disengaged from the Grecian war, turned his arms against Evagoras king of Cyprus. This man was descended from the ancient kings of Salamine the capital city of the island of Cyprus. His ancestors had held that city for many ages in quality of fovereigns; but were at last driven out by the Persians, who, making themselves masters of the whole island, reduced it to a Persian province. Evagoras, however, being a man of an enterprifing genius, foon became weary of living in subjection to a foreign power, drove out the Persian governor, and recovered his paternal kingdom. Artaxerxes attempted to drive him out of it; but, being diverted by the Greek war, was obliged to put off the enterprize. However, Conon, by means of Ctefias chief physician to Artaxerxes, got all differences accommodated, and Artanerxes promifed not to molest him in the possession of his small kingdom. But Evagoras foon becoming discontented with such a narrow possesfion, gradually reduced under his subjection almost the whole of the island. Some, however, there were, who held out against him, and these immediately applied to Artaxerxes for affiftance; and he, as foon as the war with Greece was at an end, bent all his force against Evagoras, intending to drive him quite out of the island. The Athenians, however, notwithstanding the favours lately conferred upon them by the king of Persia, could not forbear affifting their old ally in fuch a dreadful emergency. Accordingly, they fent him ten men of war under the command of Philocrates; but the Lacedemonian fleet, commanded by Talentias brother to Agefilaus, falling in with them near the isle of Rhodes, furrounded them so that not one ship could escape. The Athenians, determined to assist Evagoras at all events, fent Chabrias with another fleet and a confiderable body of land forces; and with the affistance of these he quickly reduced the whole island. But in a short time, the Athenians being obliged, in consequence of the treaty concluded with the Persians, to recal Chabrias, Artaxerxes attacked the island with an army of 300,000 men, and a fleet of 300 ships. Evagoras applied to the Egyptians, Libyans, Arabians, Tyrians, and other nations, from whom he received Supplies both of men and money; and fitted out a fleet, with which he ventured an engagement with that of Artaxerxes. But being defeated, and obliged to shut

himself up in Salamine, he was closely besieged by sea Persiaand land. Here at last he was obliged to capitulate, and abandon to the Persians the whole of the island except Salamine, which he held as a king tributary to Artaxerxes.

The Cyprian war being ended, Artaxerxes turned

his arms against the Cadusians, whose country lay between the Euxine and Caspian seas. But these nations Unsuccesswere too well accustomed to war to be overcome by the ful expeditions. Persians; and therefore the king was obliged to aban-against the don the project, after having lost a great number of his Cadusians. troops and all the horses which he took out with him. and Egyp-In his Egyptian expedition, which happened immeditians. ately after the Cadusian war, he was attended with little better fuccess; which, however, was owing to the bad conduct of his general Pharnabazus. This commander being entrusted with the management of the Egyptian war, fent an ambassador to Athens, complaining that Chabrias had engaged in the service of an enemy of the king of Persia, with whom the state of Athens was in alliance, and threatening the republic with his mafter's resentment if proper satisfaction was not given: at the same time he demanded Iphicrates, another Athenian, and the best general of his time, to command the Greek mercenaries in the Perfian service. This the Athenians complied with; and Iphicrates having mustered his troops, so exercised them in all the arts of war, that they became afterwards very famous among the Greeks under the name of Iphicratefian foldiers. Indeed he had sufficient time to instruct them; for the Persians were so slow in their preparations, that two whole years elapsed before they were ready to take the field. At the same time Artaxerxes, that he might draw the more mercenaries out of Greece, fent ambaffadors to the different states in it, declaring it to be his will and pleasure that they should live at peace with each other, on the terms of the treaty lately concluded: which declaration was received with pleasure by all the states except Thebes, who aspired at the sovereignty of Greece; and accordingly refused to conform to it. All things, however, at last being ready for the expedition, the troops were mustered at the city then called Ace. and fince Ptolemais; where they were found to confift of 200,000 Persians under the command of Pharnabazus, and 20,000 Greeks led by Iphicrates. The fleet confifted of 300 galleys, befides a vaft number of other vessels which followed with provisions. The fleet and army began to move at the same time; and that they might act in concert, they separated as little as possible. It was proposed, that the war should begin with the fiege of Pelufium; but Nectanebus, the revolted king of Egypt, had provided fo well for the defence of the place, that it was thought expedient to drop the enterprize, and make a descent at one of the mouths of the Nile. In this they fucceeded: for the Egyptians not expecting them at that place, had not taken fuch care to fortify it as at Pelusium. The fortress of consequence was eafily taken, and all the Egyptians in it put to the fword. After this, Iphicrates was for embarking the troops without loss of time, and attacking Memphis the capital of Egypt. Had this opinion been followed before the Egyptians recovered from the consternation into which they were thrown, it is highly probable that the whole country might have been reduced at once: out Pharnabazus would undertake nothing before the rest of the forces were come up. Iphicrates then, in

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Perha the utmost vexation at losing so favourable an opportunity, pressed Pharnabazus to allow him to attack the place with the Greek mercenaries only; but he refused this also, from a mean jealousy of the honour which Iphicrates might acquire; and in the mean time the Egyptians recovered sufficient courage to put themselves in fuch a posture of desence, that they could not be attacked with any probability of success; and at the same the Nile overflowing as usual, obliged them to return to Phœnice. The expedition was again undertaken 12 years after, but without fuccess.

40 Ochus fucceeds Artaxerxes.

The last years of the reign of Artaxerxes were greatly disturbed by distensions in his family; which at last broke his heart, and he died in the 94th year of his age, and 46th of his reign. He was succeeded by one of his fons named Ochus, who behaved with fuch cruelty, that almost one half of his dominions revolted as foon as he came to the throne. But, by reason of the diffensions of the rebels among themselves, all of them were reduced, one after another; and among the rest, the Sidonians, finding themselves betrayed, burnt themfelves to the number of 40,000, together with their wives and children.

AI Reduces Egypt.

Ochus, having quelled all the infurgents, immediately fet himself about reducing Egypt, and for this purpose procured a reinforcement of other 10,000 mercenaries from Greece. On his march, he lost a great number of his men drowned in the lake Serbonis, which lies between Phœnice and Egypt, extending about 30 miles in length. When the fouth wind blows, the whole furface of this lake is covered with fand, in fuch a manner that no one can distinguish it from the firm land. Several parties of Ochus's army were lost in it for want of proper guides; and it is faid that whole armies have fometimes perished in the same place. When he arrived in Egypt, he detached three bodies to invade the country in different parts; each being commanded by a Persian and a Greek general. The first was led by Lachares the Theban, and Rosaces governor of Lydia and Ionia: the fecond by Nicostratus the Theban and Aristazanes; the third by Mentor the Rhodian and Bagoas an eunuch. The main body of the army he kept with himself, and encamped near Pelufium, with a defign to watch the events of the war there. The event was fuccessful, as we have related under the article EGYPT; and Ochus having reduced the whole country, difmantled their strongholds, plundered the temples, and returned to Rabylon loaded with

The king, having ended this war with fuch fuccess, conferred very high rewards on his mercenaries and others who had diftinguished themselves. To Mentor the Rhodian he gave 100 talents, and other presents to a great value; appointing him also governor of all the coasts of Asia, and committing to his care the whole management of the war which he was still carrying on against some provinces that had revolted in the beginning of his reign; and all these either by stratagems, or by force, he at last reduced; restoring the king's authority in all these places .- Ochus then, finding himself free from all troubles, gave his attention to nothing but his pleasures, leaving the administration of affairs entirely to Bagoas the eunuch, and to Mentor. These two agreed to share the power between them; in consequence of which the former had the provinces of Upper Afia, and the latter all the rest. Ba- Persia. goas, being by birth an Egyptian, had a great zeal for the religion of his country, and endeavoured, on the conquest of Egypt, to influence the king in favour of the Egyptian ceremonies; but, in spite of all his endeavours, Ochus not only refused to comply, but killed the facred bull, the emblem of the Egyptian god Apis, plundered the temples, and carried away their facred records. This Bagoas supposed to be the highest guilt which a human creature could commit; and there-Ochusmurfore poisoned his master and benefactor in the 21st year Bagoas. of his reign. Nor did his revenge stop here; for he kept the king's body, caufing another to be buried in its stead; and because the king had caused his attendants eat the flesh of Apis, Bagoas cut his body in pieces, and gave it so mangled to be devoured by cats, making handles for fwords of his bones. He then placed Arfes the youngest of the deceased king's sons on the throne, that he might the more eafily preferve the whole power

Arfes did not long enjoy even the shadow of power which Bagoas allowed him, being murdered in the fecond year of his reign by that treacherous eunuch, who now conferred the crown on Darius Codomannus, Darius Coa distant relation of the royal family. Neither did he domannus. incline to let him enjoy the crown much longer than his predecessor; for, finding that he would not suffer himself to be guided by him in all things, the treacherous Bagoas brought him a poisonous potion, but Darius got rid of him by his own artifice, caufing him to drink the poison which he brought. This established Darius in the throne as far as security from internal enemies could do so; but in a very little time his dominions were invaded, and, we may say, the same moment conquered, by Alexander the Great. The parti-Persia conculars of that hero's conquest are related under the ar-quered by ticle MACEDON; we shall therefore here only take Alexander notice of the fate of Darius himself, with which the Perfian empire concluded for many ages. After the battle of Arbela, which was decifive in favour of Alexander, the latter took and plundered Perfepolis, from whence he marched into Media, in order to purfue Darius, who had fled to Ecbatan the capital of that province. This unhappy prince had still an army of 30,000 foot, among whom were 4000 Greeks, who continued faithful to the last. Besides these, he had 4000 slingers and 3000 horse, most of them Bactrians, and commanded by Bes-fus governor of Bactria. When Darius heard that Alexander was marched to Echatan, he retired into Bactria, with a defign to raife another army; but foon after, changing his mind, he determined to venture a battle with the forces he still had left. On this Beffusgovernor of Bactria, and Nabarzanes a Persian lord of great distinction, formed a conspiracy against him, proposing to seize his person, and, if Alexander pursued them, to gain his friendship and protection by betraying their master into his hands; but if they escaped, their defign was to murder him, and usurp the crown. The troops were eafily gained over, by representing to them the desperate situation of Darius's affairs; but Darius himself, though informed of their proceedings, and solicited to trust his person among the Greeks, refused to give credit to the report, or follow such a falutary coun-Darius seifel. The confequence of this was, that he was in a few zed by his days feized by the trailors; who out of refuel to the cwn fubdays seized by the traitors; who, out of respect to the jects,

royal dignity, bound him with golden chains, and shutting him up in a covered cart, fled with him towards Bactria. The cart was covered with skins, and strangers appointed to drive it without knowing who the prisoner was. Bessus was proclaimed commander in chief in the room of Darius by the Bactrian horse; but Artabazus and his fons, with the forces they commanded, and the Greeks, under the command of one Patron, retired from the body of the army under Beffus, and marched over the mountains towards Parthiene. In the mean time Alexander arriving at Ecbatan, was informed that Darius had left the place five days before. He then difpatched orders to Clitus, who had fallen fick at Sufa, to repair, as foon as he recovered, to Ecbatan, and from thence to follow him into Parthia with the cavalry and 6000 Macedonians, who were left in Ecbatan. Alexander himself with the rest of the army pursued Darius; and the 11th day arrived at Rhages, having marched in that space of time 3300 furlongs. Most of those who accompanied him died through the fatigue of so long a march; insomuch that, on his arrival at Rhages, he could scarcely muster 60 horsemen. Finding that he could not come up with Darius, who had already passed the Caspian straits, he staid five days at Rhages, in order to refresh his army and settle the affairs of Media. From thence he marched into Parthia, and encamped at a small distance from the Caspian straits, which he passed the next day without opposition. He had scarce-Ty entered Parthia, when he was informed that Bessus and Nabarzanes had conspired against Darius, and defigned to feize him. Hereupon, leaving the main body of the army behind with Craterus, he advanced with a fmall troop of horse lightly armed; and having marched day and night without ever halting, except for a few hours, he came on the third day to a village where Beffus with his Bactrians had encamped the day before. Here he understood that Darius had been seized by the traitors; that Bessus had caused him to be shut up in a close cart, which he had sent before, that he might be the more fure of his person; and that the whole army except Artabazus and the Greeks, who had taken another route, obeyed Bessus. Alexander therefore taking with him a small body of light-armed horse, for the others could not possibly proceed further, at last came in fight of the barbarians, who were marching in great confusion. His unexpected appearance struck them, though far fuperior in number, with fuch terror, that they immediately betook themselves to slight; and because Darius resused to follow them, Bessus and those who were about him discharged their darts at the unfortunate prince, leaving him wallowing in his blood. After this they all fled different ways, and were purfued with great flaughter by the Macedonians. In the mean time the horses that drew the cart in which Darius was, stopped of their own accord, for the drivers had been killed by Beffus, near a village about four furlongs from the highway. Thither Polystratus a Macedonian, being pressed with thirst in the pursuit of the enemy, was directed by the inhabitants to a fountain to refresh himfelf, not far from the place where they stopped. As he was filling his helmet with water, he heard the groans of a dying man; and looking round him, discovered a cart with a team of horses, unable to move by reason of the many wounds they had received. When he drew

near, he perceived Darius lying in the cart, and very Persia; near his end, having feveral darts sticking in his body. However, he had itrength enough left to call for some water, which Polystratus readily brought him. Darius, after drinking, turned to the Macedonian, and with a faint voice told him, that, in the deplorable state to which he was reduced, it was no fmall comfort to him that his last words would not be lost: he then charged him to return his hearty thanks to Alexander for the kindness he had shown to his wife and family, and to acquaint him, that, with his last breath, he befought the gods to prosper him in all his undertakings, and make him fole monarch of the universe. He added, that it did not fo much concern him as Alexander to purfue and bring to condign punishment those traitors who had treated their lawful fovereign with fuch cruelty, that being the common cause of all crowned heads. Then, taking Polystratus by the hand, "Give Alexander your hand, fays he, as I give you mine, and carry him, in my name, the only pledge I am able to give, in this condition, of my gratitude and affection." Having uttered these words, he expired in the arms of Polystratus. Alexander coming up a few minutes after, bewailed his death, and caused his body to be interred with the highest honours. The traitor Bessus being at last reduced His murto extreme difficulties, was delivered up by his own men derers purnaked and bound into the hands of the Macedonians; fued. on which Alexander gave him up to Oxathres the brother of Darius, to fuffer what punishment he should think proper. Plutarch tells us that he was executed in the following manner: Several trees being by main force bent down to the ground, and one of the traitor's limbs tied to each of them, the trees, as they were fuffered to return to their natural position, flew back with fuch violence, that each carried with it the limb that was tied to it.

Thus ended the empire of Persia, 209 years after it Revolt of had been founded by Cyrus. After the death of A- the Parlexander the Persian dominions became subject to Se-thians. leucus Nicator, and continued subject to him for 62 years, when the Parthians revolted, and conquered the greatest part of them. To the Parthians they continued subject for 475 years; when the sovereignty was again restored to the Persians, as related under the article PARTHIA.

The restorer of the Persian monarchy was Arta-Persian emxerxes, or Artaxares, who was not only a private per-pire again fon, but of fpurious birth. However, he possessed restored by great abilities, by which means he executed his ambi-Artaxerxes, tious projects. He was no fooner feated on the throne than he took the pempous title of king of kings, and formed a defign of restoring the empire to its ancient glory. He therefore gave notice to the Roman governors of the provinces bordering on his dominions, that he had a just right, as the successor of Cyrus, to all the Lesser Asia; which he therefore commanded them immediately to quit, as well as the provinces on the frontiers of the ancient Parthian kingdom, which were already his. The confequence of this was a war with Alexander Severus the Roman emperor. Concerning the event of this war there are very different accounts. It is certain, however, that, on account of his exploits against Artaxares, Alexander took the titles of Parthicus and Perficus; though, it would feem, with no

46 and murdered.

great reason, as the Persian monarch lost none of his do- bers, employed them continually in skirmishes; which Persia.

Succeeded by Sapor, who takes Valerian the Roman priioner;

and treats

minions, and his fuccessors were equally ready with himfelf to invade the Roman territories.

Artaxares dying after a reign of 12 or 15 years, was succeeded by his fon Sapor; a prince of great abilities both of body and mind, but fierce, haughty, untractable, and cruel. He was no fooner feated on the throne than he began a new war with the Romans. In the beginning he was unfuccefsful: being obliged, by the young emperor Gordian, to withdraw from the Roman dominions, and was even invaded in his turn; but, in a short time, Gordian being murdered by Philip, the new emperor made peace with him upon terms very advantageous to the Perfians. He was no fooner gone than Sapor renewed his incursions, and made such alarming progress, that the emperor Valerian, at the age of 70, marched against him in person with a numerous army. An engagement enfued, in which the Romans were defeated, and Valerian taken prisoner. purfued his advantages with fuch infolence of cruelty, that the people of the provinces took arms, first under Calliftus a Roman general, and then under Odenatus prince of Palmyrene. Thus they not only protected themselves from the insults of the Persians, but even gained many great victories over them, and drove Sapor with difgrace into his own dominions. In his march he is faid to have made use of the bodies of his unfortunate prisoners to fill up the hollow roads, and to facilitate the passage of his carriages over such rivers as lay in his way. On his return to Persia, he was solicited by the kings of the Cadufians, Armenians, Bactrians, and other nations, to fet Valerian at liberty; but to no purpose. On the contrary, he used him the him cruelly worse; treated him daily with indignities, set his foot upon his neck when he mounted his horse, and, as is affirmed by fome, flayed him alive after fome years confinement; and caused his skin to be tanned, which he kept as a monument of his victory over the Romans. This extreme infolence and cruelty was followed by an uninterrupted course of misfortune. Odenatus defeated him in every engagement, and even feemed ready to overthrow his empire; and after him Aurelian took ample vengeance for the captivity of Valerian. Sapor died in the year of Christ 273, after having reigned 31 years; and was fucceeded by his fon Hormisdas, and he by Varanes I. Concerning both these princes we know nothing more than that the former reigned a year and ten days, and the latter three years; after which he left the crown to Varanes II. who feems to have been fo much awed by the power of the Romans, that he durst undertake nothing. The rest of the Per-fian history, to the overthrow of the empire by the Saracens, affords nothing but an account of their contimued invafions of the Roman empire, which more properly belongs to the history of ROME: and to which The Persian therefore we refer. The last of the Persian monarchs, of the line of Artaxares, was Isdigertes, or Jezdegerd, overthrown as he is called by the Arabian and Persian historians, who was cotemporary with Omar the fecond caliph after Mahomet. He was fcarcely feated on the throne, when he found himself attacked by a powerful army of Saracens under the command of one Sad, who invaded the country through Chaldea. The Perfian general took all imaginable pains to harafs the Arabs on their march; and having an army superior to them in num-

were fometimes favourable to him and fometimes other-But Sad, perceiving that this lingering war would destroy his army, determined to hasten forward, and force the enemy to a general engagement. The Persians declined this for a long time; but at length, finding a convenient plain where all their forces might act, they drew up in order of battle, and resolved to wait for the Arabs. Sad having disposed his men in the best order he could, attacked the Persians with the utmost fury. The battle lasted three days and three nights; the Persians retiring continually from one post to another, till at last they were entirely defeated; and thus the capital city, and the greatest part of the dominions of Persia, fell into the hands of the Arabs. The conquerors feized the treasures of the king; which were fo wast, that according to a Mahometan tradition, their prophet gave the Saracen army a miraculous view of those treasures before the engagement, in order to encourage them to fight.

After the lofs of this battle, Jezdegerd retired into Chorafan, where he maintained himself as king, having under his subjection two other provinces, named Kerman and Segestan. But after he had reigned in this limited manner for 19 years, one of the governors of the few towns he had left betrayed it, and called in the Turks. This place was called Merou, feated on the river Gihon or Oxus. Jezdegerd immediately marched against the rebels and their allies. The Persians were defeated; and the unfortunate monarch, having with much difficulty reached the river, found there a little boat, and a fisherman to whom it belonged. The king offered him a bracelet of precious stones; but the fellow, equally brutal and stupid, told him that his fare was five farthings, and that he would neither take more nor less. While they disputed, a party of the rebel horse came up, and knowing Jezdegerd, killed him, in the

year 652. Jezdegerd left behind him a fon named Firouz, and a daughter named Dara. The latter espoused Bostenay, whom the rabbinical writers have dignified with the title of the head of the captivity; and who, in fact, was the prince of the Jews fettled in Chaldea. As for Virouz, he still preserved a little principality; and when he died, left a daughter named Mah Afrid, who married Walid the fon of the caliph Abdalmalek, by whom the had a fon named Yezid, who became caliph, and confequently fevereign of Persia; and so far was this prince from thinking himself above claiming the title derived from his mother, that he constantly styled himself the fon of Khofrou king of Perfia, the descendant of the caliph Maroan, and among whose ancestors on the side of the mother were the Roman emperor and the khacan.

Perfia continued to be subject to the Arabs till the State of decline of the Saracen empire, when it was feized by Perfia unvarious usurpers, till the time of Jenghis Khan, who Mogul conquered it as well as almost all the rest of Asia. Af-princes. ter his death, which happened in the year 1227, Persia, together with the neighbouring countries, were governed by officers appointed by his fuccessors, who reigned at Kærakorom, in the eaftern parts of Tartary, till the year 1253, when it became once more the feat of a mighty empire under Hulaku the Mogul, who in 1256 abolished the caliphate, by taking the city of BAGDAD, as related under that article. After the death of Hu-

Persia. laku, his son Abaka succeeded to his extensive dominions; and his first care was to shut up all the avenues of his empire against the other princes of the race of Jenghiz Khan, who reigned in different parts of Tartary. His precautions, however, were of little avail; for in the very beginning of his reign he was invaded by Barkan Khan, of the race of Jagatay the fon of Jenghiz Khan, from Great Bukharia, with an army of 300,000 men. Abaka was but indifferently prepared to oppose such a formidable power; but, happily for him, his antagonist died before the armies came to an engagement, upon which the invaders dispersed and returned to Tartary. In the year 1264, Armenia and Anatolia were ravaged by the Mamlucks from Egypt, but they were obliged to fly from Abaka; who thus feemed to be established in the possession of an empire almost as extensive as that of the ancient Persian kings. His tranquillity, however, was of hort duration; for, in 1268, his dominions were invaded by Borak Khan, a prince likewise of the race of Jagatay, with an army of 100,000 men. He quickly reduced the province of Chorafan, where he met with little opposition, and in 1269 advanced as far as Aderbijan, where Abaka had the bulk of his forces. A bloody battle enfued; in which Abaka was victorious, and Borak obliged to fly into Tartary, with the loss of all his baggage and great part of his army. Abaka died in 1282, after a reign of 17 years, not without suspicion of being poisoned; and was succeeded by his brother Ahmed Khan. He was the first of the family of Jenghiz Khan who embraced Mahometanism; but neither he nor his successors appear to have been in the least versed in the arts of government; for the Persian history, from this period, becomes only an account of infurrections, murders, rebellions, and poisonings, till the year 1335, when it fplit all to pieces, and was possessed by a great number and his fuc- of petty princes; all of whom were at perpetual war with each other till the time of Timur Beg, or Tamerlane, who once more reduced them all under one

jurisdiction.

merlane

by limael Sefi.

After the death of Tamerlane, Persia continued to be governed by his fon Shah Rukh, a wife and valiant prince: but immediately after his death fell into the fame confusion as before; being held by a great number of petty tyrants, till the beginning of the 16th century, when it was conquered by Shah Ismael Safi, or Sefi; of whose family we have the following account. 55 Conquered His father was Sheykh Hayder or Haydr, the fon of Sultan Juneyd, the fon of Sheykh Ibrahim, the fon of Sheykh Ali, the fon of Sheykh Musa, the son of Sheykh Seft, who was the 13th in a direct line from Ali the fonin-law of the prophet Mahomet. When Tamerlane returned from the defeat of Bajazet the Turkish fultan, he carried with him a great number of captives out of Caramania and Anatolia, all of whom he intended to put to death on some remarkable occasion; and with this refolution he entered Ardebil, or Ardevil, a city of Aderbijan, about 25 miles to the east of Taurus, where he continued for fome days. At this time lived in that city the Sheykh Safi, or Sefi, above mentioned. reputed by the inhabitants to be a faint; and, as fuch. much reverenced by them. The fame of Safi's fanctity so much moved Tamerlane, that he paid him frequent vifits; and, when he was about to depart, promifed to grant whatever favour he should ask. Sheykh

Safi, who had been informed of Tamerlane's defign to Perfia. put the captives to death, requested of the conqueror that he would spare the lives of those unfortunate men. Tamerlane, desirous of obliging him, not only granted this request, but delivered them up to him to be disposed of as he thought fit; upon which the Sheykh furnished them with clothes and other necessaries as well as he could, and fent them home to their respective countries. This generous action proved very beneficial to the family; for the people were fo much affected with fuch an extraordinary instance of virtue, that they repaired in great numbers to Safi, bringing with them confiderable prefents; and this so frequently, that few days pasfed in which he was not visited by many. Thus the descendants of the Sheykh made a conspicuous figure till the year 1486, when they were all destroyed by the Turcomans except Ifinael, who fled to Ghilan, where he lived under the protection of the king of that country; after which he became confpicuous on the following occasion.

There was at that time, among the Mahometans, a vast number of people dispersed over Asia; and among these a particular party who followed that of Haydr the father of Ismael, which Sheykh San, one of his anceftors, had brought into great reputation. Ifmael, who had affumed the furname of Sofi, or Sage, finding that Persia was all in confusion, and hearing that there was a great number of the Hayderian fect in Caramania, removed thither. There he collected 7000 of his party, all devoted to the interest of his family; and while he was yet only 14 years of age, conquered Shirwan. 'After this he purfued his conquests; and as his antagonifts never united to oppose him, had conquered the greatest part of Persia, and reduced the city of Bagdad by the year 1510. However, his conquests on the west side were soon stopped by the Turks; for, in 1511, he received a great defeat from Selim I. who took Tauris; and would probably have crushed the empire of Ismael in its infancy, had he not thought the conquest of Egypt more important than that of Persia. After his defeat by Selim, Ismael never undertook any thing of consequence. He died in 1523, leaving the crown to his eldest fon Thamasp I.

The new shah was a man of very limited abilities. and was therefore invaded by the Turks almost instantly on his accession to the throne. However, they were obliged to retreat by an inundation, which overflowed their camp, and which frightened them with its red colour, probably arifing from the nature of the foil over which it passed. Thamasp, however, reduced Georgia to a province of the Persian empire; that country being in his time divided among a number of petty princes, who, by reason of their divisions, were able to make little opposition.

The reigns of the fucceeding princes afford nothing Reign of remarkable till the time of Shah Abbas I. furnamed the Shah Ab-Great. He ascended the throne in the year 1584; and bas the his first care was to recover from the Turks and Tartars the large provinces they had feized which formerly bclonged to the Persian empire. He began with declaring war against the latter, who had seized the finest part of Chorafan. Accordingly, having raifed a powerful army, he entered that province, where he was met by Abdallah Khan the chief of the Usbeck Tartars. The two armies lay in fight of each other for fix months;

but

but at length Abbas attacked and defeated his enemies, forcing them, for that time, to abandon Chorafan. Here he continued for three years; and on his leaving that place, fixed the feat of government at Ispahan, where it has continued ever fince. His next expedition was against the Turks. Understanding that the garrifon of Tauris was in no expectation of an enemy, he formed a defign of furprifing the place; and having privately affembled a few forces, he marched with fuch celerity, that he reached a pass called Shibli very near Tauris, in fix days, though it is usually 18 or 20 days journey for the caravans. Here the Turks had posted a few soldiers, rather for the purpose of collecting the customs on fuch commodities as were brought that way, than of defending the pass against an enemy. Before they came in fight of this pass, Abbas and some of his officers left the rest of the army, and rode briskly up to the turnpike. Here the fecretary of the customhouse, taking them for merchants, demanded the usual duties. Abbas replied, that the person who had the purse was behind, but at the same time ordered some money to be given him. But while the fecretary was counting it, he was fuddenly stabbed by the Shah's order; and the officers who were with him fuddenly falling upon the few foldiers who were there, obliged them to fubmit; after which he entered the pass with his army. The governor of Tauris marched out with all the troops he could collect on fo flort a warning; but being inferior to the Perfians, he was utterly defeated, and himself taken prisoner; after which the city was obliged to submit, as also a number of places in the neighbourliood. One city only called *Orumi*, being very ftrongly fituated, refifted all the efforts of Abbas; but was at last taken by the assistance of the Curds, whom he gained over by promifing to share the plunder of the place with them. But instead of this, he formed a design to cut them all off at once; fearing that they might at another time do the Turks a service of the same nature that they had done to him just now. For this reason he invited their chiefs to dine with him; and having brought them to a tent, the entrance to which had feveral turnings, he stationed on the infide two executioners, who cut off the heads of the guests as soon as they entered.

After this Shah Abbas confiderably enlarged his dominions, and repelled two dangerous invafions of the Turks. He attempted also to promote commerce, and civilize his subjects; but stained all his great actions by his abominable cruelties, which he practifed on every one who gave him the least cause of offence; nay, frequently without any cause at all. He took the isle of Ormus from the Portuguese, who had kept it since 1507, by the affiftance of some English ships in 1622;

and died fix years after, aged 70.

The princes who fucceeded Shah Abbas the Great, were remarkable only for their cruelties and debaucheries, which occasioned a revolution in 1716, when the Shah Huffein was dethroned by the Afghans, a people inhabiting the country between Persia and India; who being oppressed by the ministers, revolted under the conduct of one Mereweis. The princes of the Afghan race continued to enjoy the fovereignty for no more Khan. than 16 years, when Ashraff the reigning shah was de-* See Pat. throned by one of his officers *. On this Thamasp, tans. otherwise called Prince Thamas, the only survivor of

the family of Abbas, affembling an army, invited into Perfiz. his fervice Nadir Khan, who had obtained great reputation for his valour and conduct. He was the fon of a Persian nobleman, on the frontiers of Usbeck Tartary; and his uncle, who was his guardian, keeping him out of possession of the castle and estate which was his inheritance, he took to robbing the caravans; and, having increased his followers to upwards of 5000 men, became the terror of that part of the country, and especially of his uncle, who had feized his estate. His uncle therefore resolved to make his peace with him, and with that view invited him to the castle, where he entertained him in a splendid manner; but Nadir Khan ordered his throat to be cut next night, and all his people to be turned out of the castle. No sooner had Nadir Khan got the command of the Perfian army, than he attacked and defeated the usurper Esriff, put him to death, and recovered all the places the Turks and Russians had made themselves masters of during the rebellion; and then Prince Thamas seemed to be established on the throne: but Nadir Khan, to whom Thamas had given the name of Thamas Kouli Khan, that is, the Slave of Thamas, thinking his fervices not fufficiently rewarded, and pretending that the king had a defign against his life, or at least to set him afide, conspired against his fovereign, and put him to death, as is supposed: after which, he usurped the throne, styling himself Shah Nadir

or King Nadir.

He afterwards laid fiege to Candahar, of which a fon of Mereweis had possessed himself. During this siege, the court of the Great Mogul being distracted with factions, one of the parties invited Shah Nadir to come to their affiftance, and betrayed the Mogul into his hands. He thereupon marched to Delhi, the capital of India, and fummoned all the viceroys and governors of provinces to attend him, and bring with them all the treasures they could raise; and those that did not bring as much as he expected, he tortured and put to death. Having thus amassed the greatest treasure that ever prince was master of, he returned to Persia, giving the Mogul his liberty, on condition of his refigning the provinces on the west side of the Indus to the crown of He afterwards made a conquest of Usbeck Tartary, and plundered Bochara the capital city. Then he marched against the Daghestan Tartars; but lost great part of his army in their mountains, without fighting. He defeated the Turks in feveral engagements; but laying siege to Bagdad, was twice compelled to raise the siege. He proceeded to change the religion of Persia to that of Omar, hanged up the chief priests, put his own fon to death, and was guilty of fuch cruelty, that he was at length affaffmated by his own relations, anno 1747. A contest upon this ensued between these relations for the crown, which has rendered Persia a scene of the most horrible confusion for upwards of 40 years.

The reader will form some notion of the troubles of Different this unhappy country from the following feries of pre-pretenders tenders to the throne between the death of Nadir and to the the accession of Kerim Khan. We give it from Franck-Persia. lin's Observations. " 1st, Adil Shah .- 2d, Ibraheem Shah .- 3d, Shah Rokh Shah .- 4th, Suleeman Shah .-5th, Ismaeel Shah .- 6th, Azad Khan Afghan .- 7th, Hoffun Khan Kejar .- 8th, Ali Merdan Khan Bukhtea-

ri.-9th, Kerim Khan Zund. " Their

57 History of Khouli

ment.

"Their reigns, or more properly the length of time they respectively governed with their party, were as follows: Adil Shah, nine months. Ibraheem Shah, fix months. Shah Rokh Shah, after a variety of revolutions, at length regained the city of Meschid: he is now alive (1787), and above 80 years of agc, reigning in Chorafan, under the direction of his fon Nuffir Ullah Meerza. Suleeman Shah, and Ifmaeel Shah, in about forty days were both cut off, almost as soon as they were elevated. Azad Khan Afghan, one of Kerim Khan's most formidable rivals and competitors, was subdued by him, brought prisoner to Shirauz, and died there a natural death. Hoffun Khan Kejar, another of Kerim Khan's competitors, was befieging Shirauz, when his army fuddenly mutinicd and deferted him. The mutiny was attributed to their want of pay. A party fent by Kerim Khan took him prisoner. His head was instantly cut off, and presented to Kerim Khan. His family were brought captives to Shirauz. They were well treated, and had their liberty given them foon after, under an obligation not to quit the city. Ali Merdan Khan was killed by a musket shot as he was walking on the ramparts of Meschid encouraging his men. Kerim Khan Zund, by birth a Curdiftan, was a most favourite officer of Nadir Shah, and at the time of his death was in the fouthern provinces. Shirauz and other places had declared for him. He found means at last, after various encounters with doubtful fuccess, completely to fubdue all his rivals, and finally to establish himself as ruler of all Persia. He was in power about 30 years; the latter part of which he governed Persia under the appellation of vakeel or regent, for he never would receive the title of Shah. He made Shirauz the chief city of his residence, in gratitude for the assistance he had received from its inhabitants and those of the fouthern provinces. He died in the year 1779, regretted by all his fubjects, who efteemed and honoured him as the

60 Twenty feffion of the citadel.

Kerim

joyed a

reign of

near 30

years.

Khan en-

бг Zikea Khan.

62 Befieges

Employs means to entice the and was successful.

glory of Persia. "When the death of Kerim Khan was announced in two officers the city, much confusion arose; two and twenty of the principal officers of the army, men of high rank and family, took possession of the ark, or citadel, with a refolution to acknowledge Abul Futtah Khan (the eldest son of the late vakeel) as their sovereign, and to defend him against all other pretenders; whereupon Zikea Khan, a relation of the late vakeel by the mother's fide, who was possessed of immense wealth, enlisted a great part of the army into his pay, by giving them very confiderable bounties. Zikea Khan was of the tribe of Zund (or the Lackeries); a man remarkably proud, cruel, and unrelenting. Having affembled a large body the citadel. of troops, he immediately marched them to the citadel, and laid close fiege to it for the space of three days; at the expiration of which, finding he could not take it by force, he had recourse to treachery. To each of the treacherous principal khans he sent a written paper, by which he fwore upon the Koran, that if they would come out and officers out, submit to him, not a hair of their heads should be touched, and that they should have their effects secured to them. Upon this a confultation was held by them; and it appearing that they could not fubfift many days longer, they agreed to furrender themselves, firmly relying on the promises that had been made them. Zikea Khan, in the mean time, gave private orders, for the khans to be feized, and brought separately before him as Vol. XVI. Part I.

they came out of the citadel. His orders were strictly Perfia. obeyed, and these deluded men were all massacred in his presence: he was seated the whole time, feasting his eyes on the cruel spectacle.

"Zikea Khan's tyranny became foon intolerable, and Murdered. he was cut off by his own body guard, when Abul Futtah Khan, who was at the time in the camp, was proclaimed king by the unanimous voice of the troops, whom he immediately led back to Shirauz. On his arrival he was acknowledged as fovereign by all ranks of people, and took quiet possession of the govern-

" Mahomed Sadick Khan, only brother of the late Mahomed Kerim Khan, who had during that prince's life filled Sadick the high office of beglerbeg of Fars, and had been tempts to appointed guardian of his fon Abul Futtah Khan, was feize the at this period governor of the city of Bassora, which governhad been taken by the Persians, previous to the vakeel's ment; death. Upon hearing the news of his brother's decease he became ambitious of reigning alone, and from that instant formed schemes for the destruction of his nephew; but as it was necessary for him to be on the fpot for the advancement of his views, he determined to withdraw the Persian garrison from Bassora, who were all devoted to his interest: accordingly he evacuated that place, and marched immediately for Shi-

"The news of Sadick Khan's approach threw the inhabitants of Shirauz into the greatest consternation: their minds were variously agitated on the occasion; fome, from his known public character, expected he would honeftly fulfil the commands of his deceafed brother; others, who had been witnesses to the confusion of former times, on similar occasions, rightly imagined that he would fet up for himfelf; and indeed this proved to be the case: for having entered Shirauz a very few days after, he caused Abul Futtah Khan to be feized, deprived of fight, and put into close confine-

" After this event, Sadick Khan openly affumed the which he government. As foon as the intelligence reached Ali effects. Murad Khan, who was at Ifpahan, that lord instantly rebelled: deeming himself to have an equal right to the government with Sadick Khan, as in fact he had, he could ill brook the thought of being obedient to him, and openly declared himfelf a competitor for the empire. Persia was by this means again involved in all the horrors of a civil war. Ali Murad Khan indeed took possession of Shirauz, assumed the government, and gave to the empire the flattering prospect of being settled under the government of one man; but this prospect was soon obscured by the power and credit acquired by Akau Mahomed Khan."

On the night following Kerim Khan's death, this Akau Maman found means to make his escape from Shirauz, and homed man found means to make his eleape from Shiratte, and Khan col-fled to the northward, where collecting fome troops, he Khan collects troops, foon made himself master of Mazanderan and Ghilan, and is proand was proclaimed nearly about the time that Ali Mu-claimed at rad Khan had taken Shirauz. "It is remarkable (fays Mazandeour author), that from his first entering into competition ran and for the government, he has been fuccessful in every bat. Ghilan. tle which he has fought. He is an eunuch, having been made so whilst an infant, by the command of Nadir

Ali Murad Khan, hearing of the fuccess of Akau Mahomed

Shah, but possesses great personal bravery.

Pertia. Mahomed Khan, determined to go against him; but as he was previously proceeding to Ispahan to suppress a rebellion, he fell fuddenly from his horse and expired on

68 Jaafar Khan afferts his pretentions to the government.

by Akau

Mahomed

Khan.

"At this period, Jaafar Khan, the eldest and only furviving fon of Sadick Khan, was governor of Khum: he deemed this a favourable opportunity to affert his pretentions to the government, and immediately marched with what few troops he had to Ispahan: soon after his arrival he was joined by the greater part of the malcontents, who were then in arms. In this fituation he remained fome time; but Akau Mahomed Khan coming down upon him with his army, he was obliged to rifk his fate in a battle, and, being defeated, fled with the fmall remains of his troops, taking the road to Shirauz. Soon after finding himself strengthened by an increase of his army, he determined to venture a fecond engage-Is defeated ment with his opponent Akau Mahomed Khan; and for this purpole marched with his army towards Ifpahan: the two armies met near Yezdekhaft, when a battle enfued, and Akau Mahomed Khan's superior fortune again prevailing, Jaafar Khan was defeated, and retired to Shirauz, which he quitted on the 25th of June 1787, and shortly after marched his army to the northward, but returned in October without having effected any thing." Such was the state of Persia in 1788. Mr Francklin, from whose excellent Observations on a Tour made in the years 1786-7 these particulars are mostly extracted, says that Jaafar Khan is the most " likely, in case of success against his opponent, to restore the country to a happy and reputable state: but it will require a long space of time to recover it from the calamities into which the different revolutions have brought it :-- a country, if an oriental metaphor may be allowed, once blooming as the garden of Eden, fair and flourishing to the eye ;-now, fad reverse! despoiled and leafless by the cruel ravages of war, and desolating conten-

Air and climate of Perfia.

As to the air and climate of this country, considering the great extent thereof, it cannot but be very different, according to the fituation of its feveral parts; fome being frozen with cold, whilst others are burnt with heat at the same time of the year. The air, wherever it is cold is dry; but where it is extremely hot, it is sometimes moift. All along the coast of the Persian gulf, from west to east, to the very mouth of the river Indus, the heat for four months is so exceffive, that even those who are born in the country, unable to bear it, are forced to quit their houses, and retire to the mountains; so that such as travel in these parts, at that feafon, find none in the villages, but wretched poor creatures, left there to watch the effects of the rich, at the expence of their own health. The extreme heat of the air, as it is unsupportable, so it makes it prodigiously unwholesome; strangers frequently falling fick there, and feldom escaping. The eastern provinces of Persia, from the river Indus to the borders of Tartary, are subject to great heats, though not quite so unwholesome as on the coasts of the Indian ocean and the Persian gulf; but in the northern provinces, on the coast of the Caspian sea, the heat is full as great, and, though attended with moisture, as unwholesome as on the coast before mentioned: From October to May, there is no country in the world more pleafant than this; but the people carry inde-

lible marks of the malign influence of their fummers, Persia. looking all of them of a faint yellow, and having neither firength nor spirits; though, about the end of April, they abandon their houses, and retire to the mountains, which are 25 or 30 leagues from the fea. But this moistness in the air is only in these parts; the rest of Persia enjoys a dry air, the sky being persectly ferene, and hardly fo much as a cloud feen to fly therein. Though it feldom rains, it does not follow that the heat admits of no mitigation: for in the night, notwithstanding there is not a cloud to be seen, and the fky is fo clear, that the flars alone afford a light fufficient to travel by, a brifk wind springs up, which lasts until within an hour of the morning, and gives such a coolness to the air, that a man can bear a tolerable warm garment. The feafons in general, and particularly in the middle of this kingdom, happen thus: the winter, beginning in November, and lasting until March, is very fharp and rude, attended with frost and fnow; which last descends in great flakes on the mountains, but never in the plains. The climate of Shirauz, the climate of capital of Perha Proper, is represented by a traveller Shirauz. who lately vifited it, as one of the most agreeable in the world, the extremes of heat and cold being feldom felt. " During the fpring of the year the face of the country appears uncommonly beautiful. The flowers, of which they have a great variety, and of the brightest hues, the fragrant herbs, shrubs, and plants, the rose, the sweet bafil, and the myrtle, all here contribute to refresh and perfume the natural mildness of the air. The nightingale of the garden (called by the Perfians boolbul hezar deflaan), the goldfinch, and the linnet, by their melodious warblings at this delightful feafon of the year, ferve to add to the satisfaction of the mind, and to inspire it with the most pleasing ideas. The beauties of nature are here depicted in their fullest extent; the natural hiflorian and the botanist would here meet with ample scope for pursuing their favourite investigations. With fuch advantages, added to the falubrity of the air, how can it be wondered at that the inhabitants of Shiranz should so confidently affert the pre-eminence of their own city to any other in the world ?- or that fuch beauties thould fail of calling forth the poetical exertions of a Hafiz, a Sadi, or a Jami? Their mornings and evenings are cool, but the middle of the day is very pleafant. In fummer the thermometer feldom rifes above 73 in the day time, and at night it generally finks as low as 62. The autumn is the worst season of the year, that being the time when the rains begin to fall, and during the autumnal months it is confidered by the natives as the most unhealthy; colds, fluxes, and fevers being very general. In winter a vast deal of snow falls, and very thick, but ice is rarely to be found, except on the fummits of the mountains, or towards Ispahan, and the more northern parts of Persia. One thing which is most to be effecmed in this country, and renders it preferable to any other part of the world, is their nights, which are always clear and bright: and the dew, that in most places is of fo pernicious and dangerous a nature, is not of the least ill consequence here: there is none at all in fummer, and in the other feafons it is of fuch a nature, that if the brightest scimitar should be exposed to it all the night, it would not receive the least rust; a circum-flance I have myself experienced. This dryness in the

air causes their buildings to last a great while, and is

undoubtedly

Persia. undoubtedly one of the principal reasons that the celebrated ruins of Persepolis have endured for so many ages, and, comparatively speaking, in so persect a state." The great dryness of the air exempts Persia from thunder and earthquakes. In the spring, indeed, there sometimes falls hail; and, as the harvest is then pretty far advanced, it does a great deal of mischief. The rainbow is feldom feen in this country, because there rife not vapours sufficient to form it; but in the night there are feen rays of light shooting through the firmament, and followed as it were by a train of smoke. The winds, however brisk, seldom swell into storms or tempests; but, on the other hand, they are fometime poisonous and infectious on the shore of the Gulf, as all travellers agree. M. Tavernier fays, that at Gombroon people often find themselves struck by a fouth wind, in such a manner, that they cry, " I burn !" and immediately fall down dead. M. le Brun tells us, that he was affured while he was there, that the weather was fometimes fo excessively fultry as to melt the seals of letters. At this time the people go in their thirts, and are continually fprinkled with cold water; and some even lie several hours naked in the water. Among the inconveniences consequent from this malign disposition of the air, one of the most terrible is the engendering, in the arms and legs, a kind of long small worms, which cannot be extracted without great danger of breaking them; upon which a mortification enfues.

The foil of Persia is in general stony, sandy, barren, and everywhere fo dry, that, if it be not watered, it produces nothing, not even grafs; but, where they can turn the water into their plains or valleys, it is not unfruitful. There is a great difference in point of fertility in the different provinces of the empire; and those of Media, Iberia, Hyrcania, and Bactria, are now in a great measure what they were formerly, and surpass most of the others in their productions. All along the Persian gulf, the foil is still more barren, cattle less plenty, and every thing in a worfe condition than anywhere

else.

Soil. 72

Produce.

Though there is fcarcely a province in Persia which does not produce wine, yet the wine of some provinces is much more esteemed than that of others; but Schiras, or, as it is written by Mr Francklin, Shirauz, wine is univerfally allowed to be the very best in Persia; infomuch, that it is a common proverb there, That to live happily one must eat the bread of Yezd, and drink the wine of Schiras.

The grain most common in Persia is wheat; which is wonderfully fair and clean. As for barley, rice, and millet, they only make bread of them in some places, as in Courdestan, when their wheat bread is exhausted before the return of harvest. They do not cultivate in this country either oats or rye; except where the Armenians are settled, who make great use of the latter in Lent. Rice is the universal aliment of all forts of people in Persia; for this reason they are extremely careful in its cultivation; for, after they have sown it in the same manner as other grain, they in three months time transplant it, root by root, into fields, which are well watered, otherwise it would never attain that perfection in which we find it there; fince it is fofter, fooner boiled, and more delicious, than the same grain in any other part of the world. Perhaps its taste is, in some measure, heightened by a practice which they

follow to give it a glossy whiteness, viz. by cleansing Persta it, after it is beaten out of the husks, with a mixture of flour and falt. Corn ripens exceedingly in this country; fo that in some parts they have a threefold crop in the year. The Persian bread is generally very thin, white, and good; and commonly cheap enough.

Metals of all forts have been found in Periia. Since the reign of Shah Abbas the Great, iron, copper, and lead, have been very common; but there are no gold or filver mines open at present; though, as Persia is a very mountainous country, fuch might very probably be found, if pains were taken to fearch them out. There are filver mines in Kerman and Mazanderan, and one not far from Spauhawn; but they cannot be worked for want of wood. Minerals are also found in Persia in abundance; especially sulphur, saltpetre, salt, and alum. Nothing is more common in this country than to meet with plains, fometimes 10 leagues in length, covered entirely with falt, and others with fulphur or alum. In some places salt is dug out of mines, and even used in building houses. Marble, freestone, and flate are found in great plenty about Hamadan. The marble is of four colours, viz. white, black, red and black, and white and black. Persia yields two forts of petroleum or naphtha; namely, black and white. In the neighbourhood of Tauris they find azure; but it is not to good as that brought from Tartary. Among the most valuable productions of Persia are the precious stones called turquoifes, of which there are feveral rocks or mines.

The horses of Persia are the most beautiful of the East, though they are not so much estcemed as those of Arabia; so great, however, is the demand for them, that the finest ones will fetch from 901. to 4501. sterling. They are higher than the English saddle horses; ftraight before, with a fmall head, legs wonderfully flender, and finely proportioned; they are mighty gentle, good travellers, very light and fprightly, and do good fervice till they are 18 or 20 years old. The great numbers of them fold into Turkey and the Indies, though none can be carried out of the kingdom without special license from the king, is what makes them fo dear. Next to horfes we may reckon mules, which are much esteemed here, and are very fine; and next to these we may justly place affes, of which they have in this country two forts; the first bred in Persia, heavy and doltish, as affes in other countries are; the other originally of an Arabian breed, the most docile and useful creature of its kind in the world. They are used wholly for the faddle; being remarkable for their easy manner of going, and are very fure footed, carrying their heads lofty, and moving gracefully. Some of them are valued at 201. sterling. The mules here are also very fine; they pace well, never fall, and are feldom tired. The highest price of a mule is about 451. sterling. Camels are also numerous in Persia, and very ferviceable; they call them kechty-krouch-konion, i. c. "the ships of the land;" because the inland trade is carried on by them as the foreign is by ships. Of these camels there are two forts, the northern and fouthern: the latter, which is much the smaller, but swifter, will carry a load of about 700 weight, and trot as fast as a horse will gallop; the other will travel with a load of 1200 or 1300 weight; both are profitable to their masters, as costing little or nothing to keep. They

Persia. travel without halter or reins; grazing on the road from time to time, notwithstanding their load. They are managed entirely by the voice; those who direct them making use of a kind of song, and the camel moving brifker, or at its ordinary pace, as they keep a quicker or flower time. The camels shed their hair fo clean in the fpring, that they look like fcalded fwine: but then they are pitched over, to keep the flies from stinging them. The camels hair is the most profitable fleece of all the tame beafts: fine stuffs are made of it; and in Europe, hats, with a mixture of a little beaver.

As beef is little caten in Persia, their oxen are generally employed in ploughing, and other forts of labour. Hogs are nowhere bred in Persia, if we except a province or two on the borders of the Caspian sea. Sheep and deer are very common throughout all Per-

Of wild beafts, the number is not great in that country, because there are few forests; but where there are any, as in Hyrcania, now called Tabrislan, abundance of lions, bears, tygers, leopards, porcupines, wild boars, and wolves, are to be found; but the last are not fo

numerous as any of the other species.

There are but few infects in this country; which may be afcribed to the dryness of the climate. In some provinces, however, there is an infinite number of locusts or grashoppers, which sly about in such clouds as to darken the air. In certain parts of the Persian dominions they have large black fcorpions, fo venomous, that fuch as are stung by them die in a few hours. In others they have lizards frightfully ugly, which are an ell long, and as thick as a large toad, their skins being as hard and tough as that of the fea-dog; they are faid to attack and kill men fometimes; but that may be doubted. The fouthern provinces are infested with gnats; fome with long legs, like those we call midges; and fome white, and as small as sleas, which make no buzzing, but sting suddenly, and so smartly, that the fling is like the prick of a needle. Among the reptiles is a long square worm, called by the inhabitants hazar-pey, i. e. "thousand feet," because its whole body is covered with feet; it runs prodigiously fast; and its bite is dangerous, and even mortal if it gets into the

There are in Persia all the several forts of fowls, which we have in Europe, but not in fuch great plenty; excepting, however, wild and tame pigeons, of which vast numbers are kept all over the kingdom, chiefly on account of their dung: which is the best manure for melons. It is a great diversion among the lower fort of people in town or country to catch pigeons, though It be forbidden: for this purpose they have pigeons so taught that flying in one flock, they furround fuch wild ones as they find in the field, and bring them back with them to their masters. The partridges of this country are the largest and finest in the world, being generally of the fize of our fowls. Geefe, ducks, cranes, herons, and many other forts of water fowl, are common here; as are likewise nightingales, which are heard all the year, but chiefly in the spring; martlets, which learn whatever words are taught them; and a bird called noura, which chatters inceffantly, and repeats whatever it hears. Of birds of a larger fize, the most remarkable is the pelican, by the Persians called tacab, i. e. "water-carrier;" and also mise, i. e. "sheep," be-Persia. cause it is as large as one of these animals *. There are in Persia various birds of prey. Some of their falcons canus, ORarc the largest and finest in the world: the people take NITHOLOgreat pains to teach them to fly at game; the Persian GY Index. lords being great lovers of falconry, and the king having generally 800 of this fort of birds, each of which has a person to attend it.

There is perhaps no country in the world which, ge-Mountains, nerally speaking, is more mountainous than Persia; rivers, and but many of them yield neither fprings nor metals, leas. and but few of them are shaded with trees. It is true, fome of the chief of them are fituated on the frontiers, and ferve as a kind of natural ramparts, or bulwarks, to this vast empire. Among the latter are the mountains of Caucasus and Ararat, sometimes called the mountains of Daghestan, which fill all the space between the Euxinc and Caspian seas: those called Taurus, and the feveral branches thereof, run through Perha from Natolia to India, and fill all the middle of the coun-

As to rivers, except the Araxes, which rifes in the mountains of Armenia, and falls into the Kur or Cyrus before it reaches the Caspian sea, there is not one navi-gable stream in this country. The Oxus divides Persia on the north-east from Usbeck Tartary. The Indus also may now be reckoned among the rivers of Persia, as the provinces lying to the west of that river arc now in posfession of that crown: this river is said to run a course of more than 1000 miles, and overflows all the low

grounds in April, May, and June.

The feas on the fouth of Persia are, the gulf of Persia. or Baffora, the gulf of Ormus, and the Indian ocean. The only fea on the north is the Caspian or Hyrcanian fea; which is more properly a lake, having no communication with any other fea. These feas, together with the lakes and rivers, supply Persia with plenty of sish. The Caspian sea contains very finc fish on one side; and the Persian gulf on the other is believed to have more. fish than any other sea in the world. On the coasts of this gulf is taken a fort of fish, for which they have no particular name: its flesh is of a red colour, very delicious, and fome of them weigh 200 or 300 pounds. The river fish are chiefly barbels; but far from being good. Those of the lakes are carps and shads. In the river at Spauhawn are a great number of crabs, which crawl up the trees, and live night and day under the leaves, whence they are taken; and are esteemed very delicious food.

In his voyage from Gombroon up the Persian gulf, Mards, &c. Mr Ives makes mention of several islands, named Kisme, in the Per-Polloar, Kyes, Inderabie, Shittewar, and Bushcel. Some san gulf. of these were quite barren; on others there were a few trees and bushes, with little fishing towns, and a few small vessels lying along shore. The date trees were thinly fcattered among the hills; but though a finall portion of green might here and there be discovered, yet fuch was the barrenness of these islands in general, that it was for some time a matter of surprise how sheep and goats could possibly subsist upon them. On closer examination, however, it was found, that the soil produced a kind of small leaved juicy mallows, on which these animals principally feed. The Persian coast, as they failed along, afforded a most romantic prospect, appearing at first to be one continued rock, rent and torn

76 Trade.

Persia. asunder by earthquakes; but it was afterwards discovered, that some part of it was only fand hardened by the rains and fun.

Narban Point terminates in a long and low piece of land, which runs off into the gulf from the foot of the Perfian hills. Between this point and the main land is a channel, in which a ship of 900 tons burden might eafily ride. The Portuguese had formerly a settlement here, the remains of which are still to be seen. A large river empties itself into the sea at this place; and Mr Ives observes, that " Providence seems here to have allotted a spot of ground amidst unhospitable rocks and deferts, capable of affording the kind production of vegetables for man and beaft." The adjacent country is

fubject to the Arabs.

Through all the Persian gulf Mr Ives remarks, that the fpring water on the islands is much better than that on the continent; and the water nearest the sea on the islands has greatly the advantage over that which is found in the middle parts. This holds good, however, only in those parts which are near the sea; for about 12 miles up the country, both on the Persian and Arabian fide of the gulf, the water is very good. At the island called Bareen or Baharen, divers go down to the bottom of the fea, at certain known depths, and come up again with their veffels filled with fresh water. This fresh water is found in holes or little natural wells, fome fathoms below the furface of the fea. The Arabs have certain marks on the island to teach them where to dive for the fresh water. Mr Ives was assured by an Arabian merchant, that he himself had discovered a spring upon the shore, by which one of these wells are served. He put into this spring a bit of heavy stick; and in two or three days an Arabian diver brought it to him again from the

bottom of one of these holes.

The English and other nations, trade with the Perfians feveral ways, particularly by the gulf of Ormus at Gombroon, and by the way of Turkey. A trade also was not many years fince opened by the English with Persia through Russia and the Caspian sea; but that is now discontinued, having been prohibited by the court of Russia, who were apprehensive that the English would teach the Perfians to build ships, and dispute the navigation of the Caspian sea with them. The principal commodities and manufactures of Persia are raw and wrought filks, mohair camblets, carpets, leather; for which, and fome others the European merchants exchange chiefly woollen manufactures; but the trade is carried on altogether in European shipping, the Persians have scarce any ships of their own, and the Russians the sole navigation of the Caspian sea. There is not a richer or more profitable trade in the world, than that which is carried on between Gombroon and Surat in the East Indies; and the English East India Company frequently let out their ships to transport the merchandise of the Banians and Armenians from Persia to India. The shah or fovereign of Persia, is the chief merchant; and he usually employs his Armenian subjects to traffic for him in every part of the world. The king's agents must have the refusal of all merchandise, before his subjects are permitted to trade. It is computed that Perfia produces yearly upwards of 22,000 bales of filk, chiefly in the provinces of Ghilan and Mazanderan, each bale weighing 263 pounds. Vast quantities of Persian silk uled to be imported into Europe, especially by the

Dutch, English, and Russians, before the civil wars Persia. began. The goods exported from Persia to India are, tobacco, all forts of fruits, pickled and preserved, especially dates, marmalade, wines, distilled waters, horses, Persian feathers, and Turkey leather of all forts and colours, a great quantity whereof is also exported to Muscovy and other European countries. The exports to Turkey are, tobacco, galls, thread, goats hair, stuffs, mats, box-work, and many other things. As there are no posts in the east, and trading by commission with the use of bills of exchange, is little known, traffic must proceed in a very awkward heavy manner, in comparison of that of Europe.

The most current money of Persia are the abasses, Money. worth about 1s. 4d. sterling; they are of the finest filver. An abassee is worth two mahmoudes; a mahmoude, two shahees; and a shahee, ten single or sive double casbeghes: these last pieces are of brass, the others of filver; for gold is not current in trade. shahees are not very common; but mahmoudes and casheghes are current everywhere. Horses, camels, houses, &c. are generally fold by the toman, which is an imaginary coin, worth 200 shahees, or 50 abasses; and they usually reckon their estates that way. Such a one, they fay, is worth fo many tomans, as we fay

pounds in England.

Persia is an absolute monarchy, the lives and estates Governof the people being entirely at the disposal of their ment. The king has no council established, but is advised by such ministers as are most in favour; and the resolutions taken among the women of the haram frequently defeat the best laid designs. The crown is hereditary, excluding only the semales. The sons of a daughter are allowed to inherit. The laws of Persia exclude the blind from the throne; which is the reason that the reigning prince usually orders the eyes of all the males of the royal family, of whom he has any jealoufy, to be put out. The king has generally a great many wives, which it would be death for any one befides the eunuchs, who have the superintendance of them, to look at, or even fee by accident; wherefore, when he travels, notice is given to all men to quit the road, may their very houses, and to retire to a great distance.

The prime minister is called attemact doulet, which fignifies the director of the empire, and also vizir azem, or the great supporter of the empire; as he alone almost sustains the whole weight of the administration. This minister's chief study is to please his master, to secure to himself an ascendant over his mind, and to avoid whatever may give him any uneafiness or umbrage. With this view, he never fails to flatter him, to extol him above all the princes upon earth, and to throw a thick veil over every thing that might help to open his eyes, or discover to him the weakness of the state. He even takes particular care to keep the king in utterignorance; to hide from him, or at least to soften, all unwelcome news; and, above all, to exalt immoderately every the least advantage he obtains over his enemies. As he takes these methods, which indeed are and must be taken, more or less, by the ministers of every despotic prince, to secure the favour and confidence of his master; so the inferior officers and governors of provinces are obliged to employ all the means in their power to secure the prime minister's, they depending no less upon him than he does upon the king.

There is a gradation of despotism and slavery, down from the prime minister to the lowest retainer to the court, or dependent on the government. Children are fometimes in Persia required by the king to cut off the ears and nofe, and even to cut the throats of their parents; and these orders cannot be objected to, without endangering their own lives. Indeed their basencss and mercenariness are such, that they will perpetrate such atrocious deeds without the least scruple or difficulty, when they have a promife or expectation of possessing their posts. The prime ministers, notwithstanding the precarious footing on which they fland, in effect of their abilities or good fortune, fometimes continue in their employments during life, or, if removed, are only banished to fome city, where they are allowed to spend the remainder of their days in a private station.

Next to the prime minister are the nadir, or grandmafter of the household; the mehter, or groom of the chambers, who is always a white eunuch; the mirakbor bashe, or matter of the horse; the mir-shikar bashe, or great huntiman and falconer; the divanbeggi, or chief justice, to whom there lies an appeal from the deroga, or the lieutenant of police, in every town; the vacka nuviez, or recorder of events, or first secretary of state; the muslau-she-elmenaleck, or master of the accounts and finances of the kingdom; the numes humbashes, or the king's chief physicians; the shickada-sibashe, or inspector of the palace, and regulator of rank at court; and the khans, or governors of provinces, under whom are other governors, called foltans, appointed also by the

Civil matters are all determined by the cazi, and ecclefiaftical ones (particularly divorces) by the sheick-elfelleum, or head of the faith; an officer answering to the mufti among the Turks; under him are the sheick-elfelom, and cadi, who decide in all matters of religion, and make all contracts, testaments, and other public deeds, being appointed by the king in all the principal towns; and next to these are the pichnamas, or directors of the prayers; and the moullahs, or doctors of the

Justice is carried on in Persia in a very summary manner; the fentence, whatever it may be, being always put into execution on the fpot. Theft is generally punished with the loss of nose and ears; robbing on the road, by ripping up the belly of the criminal, in which fituation he is exposed upon a gibbet in one of the most public parts of the city, and there left until he expires in torment.

There is no nobility in Persia, or any respect shown to a man on account of his family, except to those who are of the blood of their great prophet or patriarchs; but every man is esteemed according to the post he postesfes; and when he is dismissed, he loses his honour, and

he is no longer diftinguished from the vulgar.

With respect to the forces of Persia, their two bodies, called the Kortshies and Goulans, that serve on horseback, are well kept and paid, and may amount, the former to about 22,000, and the latter to about 18,000. The Kortshies are descended from an ancient but foreign race; and the Goulans are either Georgian renegadoes or flaves, or the children of flaves of all nations. The infantry, called Tangtchies, are picked out from among the most robust and vigorous of the peasants, and compole a body of 40,000 or 50,000. The Perfians have

few fortified towns, and had no ships of war, till Kouli Khan built a royal navy, and among them had a man of war of 80 guns; but fince the death of that usurper, we hear no more of their fleet.

The arms of the king of Persia are a lion couchant, looking at the fun as he rifes over his back. His usual title is Shaw or Pat/haw, the "disposer of kingdoms." They add also to the king's titles those of fultan, and chan or cham, which is the title of the Tartar fovereigns. To acts of state the Persian monarch does not fubscribe his name; but the grant runs in this manner, viz. This act, or edict, is given by him whom the universe

The ancient Persians are known to have been exceed-Manners, ingly voluptuous and effeminate. After the conquest of &c. the empire by Alexander, the Greek discipline and martial spirit being in part communicated to them, they became much more formidable; and hence the Parthians were found to be a match not only for the Syro-Macedonian princes, but even for the Romans. Of their manners we know little or nothing, but that to their valour and military skill they joined in a furprising degree all the luxury and diffipation of the ancient Per-

The modern Perfians, like the Turks, plundering all the adjacent nations for beauties to breed by, are men of a good stature, shape, and complexion; but the Gaures, or ancient Perfians, are homely, ill-shaped, and clumfy, with a rough skin, and olive complexions. In some provinces, not only the complexions but the conftitutions of the inhabitants, fuffer greatly by the extreme heat and unwholesomeness of the air. The Persian women, too, are generally handsome and well-shaped, but much inferior to those of Georgia and Circassia. The men wear large turbans on their heads, fome of them very rich, interwoven with gold and filver; a veft, girt with a fash; and over it a loose garment, something shorter; with fandals, or flippers, on their feet. When they ride, which they do every day, if it be but to a house in the same town, they wear pliant boots of yellow leather; the furniture of their horses is extremely rich, and the stirrups generally of filver: whether on horseback or on foot, they wear a broad fword and a dagger in their fath. The dress of the women does not differ much from that of the men; only their vests are longer, and they wear stiffened caps on their heads, and their

With respect to outward behaviour, says an intelligent traveller, "The Persians are certainly the Pari-stans of the East. Whilst a rude and insolent demeanor peculiarly marks the character of the Turkish nation towards foreigners and Christians, the behaviour of the Perfians would, on the centrary, do honour to the most civilized nations: they are kind, courteous, civil, and obliging, to all strangers, without being guided by those religious prejudices so very prevalent in every other Mahometan nation; they are fond of inquiring after the manners and customs of Europe, and in return very readily afford any information in respect to their own country. The practice of hospitality is with them so grand a point, that a man thinks himself highly honoured if you will enter his house and partake of what the family affords; whereas, going out of a house without smoking a calean, or taking any other refreshment, is deemed in Perfia a high affront."

Perfia.

Their usual drink is water and sherbet, as in other Mahometan countries, wine being prohibited; but of all Mahometan nations they pay the least regard to this prohibition. Many of them drink wine publicly, and almost all of them in private (excepting those who have performed the pilgrimage to Mecca, and ecclefiaflics): they also are very liable to be quarrelsome when inebriated, which is often attended with fatal confequences. They eat opium, but in much less quantities than the Turks; and indeed in every thing they fay or do, eat or drink, they make a point to be as different from this nation as possible, whom they detest to a man, beyond measure; esteeming Jews and Christians superior to them, and much nearer to falvation.

80 Anecdotes ligion.

Every one knows, that the religion of the Persians is of their re- Mahometan; and that they are of the feet of Ali, for whom they entertain the most extravagant veneration. Mr Francklin heard one of his guides on the road reprove another for the expression O God! O Ali! "No, no, (faid his zealous companion), Ali first, God second!" This attachment is the fource of their hatred to the Turks, and of many strange customs among themselves, which we have not room to enumerate; a few, however, must be mentioned.

> "Their mode of living is as follows: They always rife at daybreak, in order to perform their devotions. Their first prayer is denominated numaz foobh, or the morning prayer; it is faid before funrife, after which they eat a flight meal called nà/hta or breakfast; this confifts of grapes, or any other fruits of the feason, with a little bread, and cheese made of goats milk; they afterwards drink a cup of very strong coffee without milk or sugar; then the calean or pipe is introduced. The Perfians, from the highest to the lowest ranks, all smoke

> "Their fecond hour of prayer is called numaz zohur, or mid-day prayer, and is always repeated when the fun declines from the meridian. Their dinner, or chaffet, which is foon after this prayer, confifts of curds, bread, and fruits of various kinds; animal food not being usual at this meal.

> "The third hour of prayer is called numaz afur, or the afternoon prayer, faid about four o'clock.

"The fourth hour of prayer is numaz sham, or evening prayer, which is faid after funfet; when this is finished, the Persians eat their principal meal, called shàmi or supper. This generally consists of a pilau, dreffed with rich meat fauces, and highly feafoned with various spices: sometimes they eat kibaab or roast meat. When the meal is ready, a fervant brings notice thereof, and at the same time presents a ewer and water; they then wash their hands, which is an invariable cufrom with the Perfians both before and after eating. They eat very quick, conveying their food to their mouths with their fingers; the use of knives and forks being unknown in Persia. Sherbets of different forts are introduced, and the meal concludes with a defert of delicious fruits. The supper being finished, the family sit in a circle, and entertain each other by relating pleafant stories (of which they are excessively fond), and also by repeating passages from the works of their most favourite poets, and amufing themselves at various kinds of games. The fifth and last prayer is styled numaz akhir, the last prayer; or sometimes numaz shèb,

or the night prayer, repeated about an hour after sup-

The most remarkable law among the Persians respects marriage. A man may divorce his wife when he chooses, without affigning any other reason for the divorce than Remarkthat it is his pleasure. If he should change his mind, able law he may again marry her, divorce her a fecond time, and respecting a third time marry her; but here this privilege floor a third time marry her; but here this privilege flops. No man is allowed to marry the woman whom he has thrice divorced. A widow is obliged to mourn four months for her deceased husband before she can be married to another; but a concubine may form a new con-

nection the infant that her keeper expires.

At the naming of children in Persia, Mr Francklin Ceremony informs us that the following ceremony is observed: of naming "The third or fourth day after the child is born, the their chilfriends and relations of the woman who has lain-in af-dren. femble at her house, attended by music and dancing girls hired for the occasion; after playing and dancing fome time, a mullah or priest is introduced, who, taking the child in his arms, demands of the mother what name the chooses the infant should be called by; being told, he begins praying, and after a fhort time applies his mouth close to the child's ear, and tells him distinctly three times (calling him by name) to remember and be obedient to his father and mother, to venerate his Koran and his prophet, to abstain from those things which are unlawful, and to practife those things which are good and virtuous. Having repeated the Mahometan profession of faith, he then redelivers the child to his mother; after which the company are entertained with fweetmeats and other refreshments, a part of which the females present always take care to carry away in their pockets, believing it to be the infallible means of their having offspring themselves."

The Persians excel more in poetry than any other fort Intellectual of literature; and astrologers are now in as great repu- excellence. tation in Persia as the magi were formerly. Their books are all manuscripts, the art of printing having not yet been introduced among them: they excel indeed in writing, and have eight different hands. They write from the right hand to the left, as the Arabs do. In their short hand, they use the letters of the alphabet; and the same letters, differently pointed, will have 20 different fignifications. In thort, the Persians are born with as good natural parts as any people in the East, but make a bad use of them; being great diffemblers, cheats, liars, and flatterers, and having a strong propensity to voluptuousness, luxury, idleness, and indolence; vices indeed to which the Asiatics in general are much addicted.

PERSIAN WHEEL. See HYDRODYNAMICS.

PERSICA, the PEACH, is by Linnaus referred to the fame class and genus with amygdalus. There is a great variety of peach trees planted in the gardens, fome of which are preserved only for the beauty of their flowers, but most of them for the sake of the fruit. Of those remarkable for the beauty of their flowers the principal are, 1. The vulgaris, or common peach-tree, with double flowers, which is a very great ornament in gardens, producing very large double flowers of a beautiful red or purple colour, and growing to a confiderable fize. 2. The humilis, or dwarf-almond. 3. The africana. or double-flowering dwarf-almond. These

Perfica.

Perlis

Person.

Perfimon.

Perficaria two reach not above the height of three or four feet, though their flowers are of equal beauty with the former.

Of the peach-trees cultivated for the fake of their fruit there is a great number. They are raifed from the stones of the fruit, which should be planted in autumn on a bed of light dry earth, about three inches deep and four inches afunder. In the winter the beds should be covered with mulch to protect them from the frost. In this bed they should remain for a year; when they are to be taken up and planted in a nurfery, where they are to remain one or two years; after which they must be removed to the places where they are to continue.

PERSICARÍA. See Polygonum, Botany Index. PERSICUS SINUS, in Ancient Geography, (Mela, Pliny); a part of the sea which the Romans called Mare Rubrum, and the Greeks Mare Erythræum; washing Arabia Felix on the east, between which and Carmania, entering into the land, it washes Persia on the fouth. Its large mouth confifts of straight fides, like a neck, and then the land retiring equally a vaft way, and the sea surrounding it in a large compass of fhore, there is exhibited the figure of a human head (Mela). Theophrastus calls this bay Sinus Arabicus, a a name it equally claims with Perficus, only for diffinc-

tion fake Perficus is appropriated to it by others.

PERSIMON. See DIOSPYROS, BOTANY Index.-From the perfimon is made a very palatable liquor in the following manner: As foon as the fruit is ripe, a fufficient quantity is gathered, which is very easy, as each tree is well stocked with them. These persimon apples are put into a dough of wheat or other flour, formed into cakes, and put into an oven, in which they continue till they are quite baked and fufficiently dry, when they are taken out again: then, in order to brew the liquor, a pot full of water is put on the fire, and fome of the cakes are put in: thele become foft by degrees as the water grows warm, and crumble in pieces at last; the pot is then taken from the fire, and the water in it well ftirred about, that the cakes may mix with it: this is then poured into another vessel, and they continue to fleep and break as many cakes as are necessary for a brewing: the malt is then infused, and they proceed as usual with the brewing. Beer thus prepared is reckoned much preferable to other beer. They likewise make brandy of this fruit in the following manner: having collected a fufficient quantity of perfimons in autumn, they are altogether put into a vessel, where they lie for a week till they are quite foft: then they pour water on them, and in that state they are left to ferment of themfelves, without promoting the fermentation by any addi-The brandy is then made in the common way, and is faid to be very good, especially if grapes (in particular of the fweet fort), which are wild in the woods, be mixed with the persimon fruit. Some persimons are ripe at the end of September, but most of them later, and fome not before November and December, when the cold first overcomes their acrimony. The wood of this tree is very good for joiners inftruments, fuch as planes, handles to chifels, &c. but if after being cut down it lies exposed to funshine and rain, it is the first wood which rots, and in a year's time there is nothing left but what is useless. When the persimon trees get once into a field, they are not eafily got out of it again, as they spread much.

PERSIS, a Roman lady, whom St Paul falutes in his epiftle to the Romans (xvi. 12.), and whom he calls his beloved fifter. He fays the has laboured much for the Lord, and still labours. Nothing else of her life is come to our knowledge, nor do we know that she is honoured by any church; which is fomething fin-

PERSIUS FLACCUS, AULUS, a Latin poet in the reign of Nero, celebrated for his fatires. He was born, according to some, at Volterra in Tuscany; and according to others, at Tigulia, in the gulf Della Specia, in the year 34. He was educated till 12 years old at Volterra; and afterwards continued his studies at Rome under Palæmon the grammarian, Virginius the rhetorician, and Cornutus the Stoic philosopher, who contracted a friendship for him. Persius consulted that illustrious friend in the composition of his verses. Lucian also studied with him under Cornutus; and appeared fo charmed with his verses, that he was incessantly breaking out into acclamations at the beautiful passages in his fatires: an example rarely feen in poets of equal rank. He was a steady friend, a good son, an affectionate brother and parent. He was chafte, meek, and modest: which shows how wrong it is to judge of a man's morals by his writings; for the fatires of Perfius are not only licentious, but sharp and full of bitterness. He wrote but feldom; and it was some time before he applied himself regularly to it.

Perfius was of a weak constitution, and troubled with a bad stomach, which was the cause of his death in the 30th year of his age. Six of his fatires remain; in their judgements of which the critics have been much divided, excepting as to their obscurity, Persius being indeed the most obscure of all the Latin poets. As a poet, he is certainly inferior to Horace and Juvenal; and all the labours of Isaac Casaubon, who has written a most learned and elaborate commentary upon him, cannot make him equal to either of them as a fatirift, though in virtue and learning he exceeded them both. He was a professed imitator of Horace; yet had little of Horace's wit, ease, and talent at ridicule. His style is grand, figurative, poetical, and fuitable to the dignity of the Stoic philosophy: and hence he shines most in recommending virtue and integrity: here it is that fatire becomes him. He was too grave to court the muses with fuccess: but he had a great foul, susceptible of noble fentiments, which give a grace but to indifferent poetry. His cotemporaries thought highly of him. Quintilian allows, that Perfius, although he wrote but one book of fatires, acquired a great deal of true glory, Multum et veræ gloriæ quamvis uno libro Persus meruit: and Martial says much the same thing, Sæpius in libro memoratur Persius uno, &c.

PERSON, an individual fubstance of a rational intelligent nature. Thus we fay, an ambaffador reprefents the person of his prince; and that, in law, the father and fon are reputed the fame person.

The word person, persona, is thought to be borrowed à personando, from personating or counterfeiting; and is supposed to have first fignified a mask: because, as Boethius informs us, in larva concava fonus volvatur: and hence the actors who appeared masked on the stage were fometimes called larvati and fometimes perfonati. He likewise says, that as the several actors represented each a fingle individual person, viz. Oedipus, or Chremes,

Perfora.

or Hecuba, or Medea; for this reason, other people, who were at the same time distinguished by something in their form, character, &c. whereby they might be known, came likewise to be called by the Latins personæ, and by the Greeks προσωπα. Again, as actors rarely represented any but great and illustrious characters, the word came at length to import the mind, as being that whose dispositions constitute the character. And thus men, angels, and even God himself, were called persons. Things merely corporeal, as a stone, a plant, or a horse, were called hypostases or supposita, but never persons. Hence the learned suppose, that the same name person came to be used to signify some dignity, whereby a person is distinguished from another; as a father, husband, judge, magistrate, &c. In this sense we are to understand that of Cicero: "Cæsar never speaks of Pompey, but in terms of honour and respect: he does many hard and injurious things, however, against his

perion."

Person we have already defined to mean an individual fubstance of a reasonable nature. Now a thing may be individual two ways: 1. Logically, because it cannot be predicated of any other; as Cicero, Plato, &c. 2. Physically; in which sense a drop of water, separated from the ocean, may be called an individual. Person is an individual nature in each of these senses; logically, according to Boethius, because person is not spoken of universals, but only of fingulars and individuals; we do not fay the person of an animal or a man, but of Cicero and Plato: and phyfically, fince Socrates's hand or foot are never confidered as perfons. This last kind of individual is denominated two ways: positively, when the person is said to be the whole principle of acting; for to whatever thing action is attributed, that the philosophers call a person: and negatively, as when we say, with the Thomists, &c. that a person consists in this, that it does not exist in another as a more perfect being. Thus a man, though he confifts of two different things, viz. body and fpirit, is not two persons; because neither part of itself is a complete principle of action, but one person, since the manner of his consisting of body and spirit is such as constitutes one whole principle of action; nor does he exist in any other as a more perfect being; as, for example, Socrates's foot does in Socrates, or a drop of water in the ocean.

Person, in *Grammar*, a term applied to fuch nouns or pronouns as, being either prefixed or understood, are the nominatives in all inflections of a verb; or it is the agent or patient in all finite or personal verbs. See

GRAMMAR.

PERSONAL, any thing that concerns, or is restrained to, the person: thus it is a maxim in ethics, that all faults are personal.

PERSONAL Action, in Law, is an action levied directly and folely against the person; in opposition to a real or mixed action. See Action.

PERSONAL Goods, or Chattels, in Law, fignifies any moveable thing belonging to a person, whether alive or dead. See Chattels.

PERSONAL Identity. See METAPHYSICS, Part III. Chap. iii.

PERSONAL Verb, in Grammar, a verb conjugated in all the three persons; thus called in opposition to an impersonal verb, or that which has the third person only.

Vol. XVI. Part I.

PERSONALITY, in the fchools, is that which Perfonality constitutes an individual a distinct person.

PERSONATÆ, is the name of the 40th order in Linnæus's Fragments of a Natural Method, confifting of a number of plauts whose flowers are furnished with an irregular gaping or grinning petal, which in figure somewhat resembles the snout of an animal. The bulk of the genera of this natural order arrange themselves under the class and order didynamia angiospermia of the Sexual Method.

The rest, although they cannot enter into the artificial class just mentioned, for want of the classic character, the inequality of the stamina; yet, in a natural method, which admits of greater latitude, may be arranged with those plants which they resemble in their habit and general appearance, and particularly in the circumstances expressed in that title.

PERSONIFYING, or Personalizing, the giving an inanimate being the figure, fentiments, and language

of a person

Dr Blair, in his Lectures on Rhetoric, gives this account of personification. "It is a figure, the use of which is very extensive, and its foundation laid deep in human nature. At first view, and when considered abstractly, it would appear to be a figure of the utmost boldness, and to border on the extravagant and ridiculous. For what can feem more remote from the track of reasonable thought, than to speak of itones and trees, and fields and rivers, as if they were living creatures, and to attribute to them thought and fensation, affections and actions? One might imagine this to be no more than childish conceit, which no person of taste could relish. In fact, however, the case is very different. No fuch ridiculous effect is produced by personification when properly employed; on the contrary, it is found to be natural and agreeable, nor is any very uncommon degree of passion required in order to make us relish it. All poetry, even in its most gentle and humble forms, abounds with it. From prose it is far from being excluded; nay, in common conversation, very frequent approaches are made to it. When we fay, the ground thirsts for rain, or the earth smiles with plenty; when we speak of ambition's being restless, or a disease being deceitful; fuch expressions show the facility with which the mind can accommodate the properties of living creatures to things that are inanimate, or to abstract conceptions of its own forming.

" Indeed, it is very remarkable, that there is a wonderful proneness in human nature to animate all objects. Whether this arises from a fort of assimilating principle. from a propension to spread a resemblance of ourselves over all other things, or from whatever other cause it arises, so it is, that almost every emotion which in the least agitates the mind bestows upon its object a momentary idea of life. Let a man, by an unwary step, fprain his ankle, or hurt his foot upon a stone, and in the ruffled discomposed moment he will sometimes feel himself disposed to break the stone in pieces, or to utter passionate expressions against it, as if it had done him an injury. If one has been long accustomed to a certain fet of objects, which have made a strong impression on his imagination; as to a house, where he has passed many agreeable years; or to fields, and trees, and mountains, among which he has often walked with the greatest delight; when he is obliged to part with them, espe-

cially

Ferfonily- cially if he has no prospect of ever seeing them again, he can scarce avoid having somewhat of the same feeling as when he is leaving old friends. They seem endowed with life. They became objects of his affection; and, in the moment of his parting, it scarce seems absurd to him to give vent to his feeling in words, and to take a formal adieu.

> "So strong is that impression of life which is made upon us, by the more magnificent and striking objects of nature especially, that I doubt not in the least of this having been one cause of the multiplication of divinities in the heathen world. The belief of dryads and naiads, of the genius of the wood and the god of the river, among men of lively imaginations, in the early ages of the world, easily arose from this turn of mind. When their favourite rural objects had often been animated in their fancy, it was an easy transition to attribute to them fome real divinity, fome unfeen power or genius which inhabited them, or in some peculiar manner belonged to them. Imagination was highly gratified, by thus gaining somewhat to rest upon with more stability; and when belief coincided fo much with imagination, very flight causes would be sufficient to establish it.

> "From this deduction may be easily feen how it comes to pals that personification makes so great a figure in all compositions where imagination or passion have any concern. On innumerable occasions it is the very language of imagination and passion; and therefore deserves to be attended to, and examined with peculiar care. There are three different degrees of this figure, which it is necessary to remark and distinguish, in order to determine the propriety of its use. The first is, when some of the properties or qualities of living creatures are ascribed to inanimate objects; the second, when those inanimate objects are introduced as acting like fuch as have life; and the third, when they are represented either as speaking to us, or as listening to what we say

The ingenious professor goes on to investigate the na-

ture of personification at considerable length. We shall Personify. give his caution for the use of it in prose compositions, in which he informs us this figure requires to be used with great moderation and delicacy. "The fame liberty is not allowed to the imagination there as in poetry. The same assistances cannot be obtained for raifing passion to its proper height by the force of numbers and the glow of style. However, addresses to inanimate objects are not excluded from profe; but have their place only in the higher species of oratory. A public speaker may on some occasions very properly address religion or virtue; or his native country, or some city or province, which has fuffered perhaps great calamities, or been the scene of some memorable action. But we must remember, that as such addresses are among the highest efforts of cloquence, they should never be attempted unless by persons of more than ordinary genius: for if the orator fails in his defign of moving our paffices by them, he is fure of being laughed at. Of all frigid things, the most frigid are the aukward and unfeafonable attempts fometimes made towards fuch kinds of personification, especially if they be long continued. We see the writer or speaker toiling and labouring to express the language of some passion which he neither feels himself nor can make us feel. We remain not only cold, but frozen; and are at full leifure to criticife on the ridiculous figure which the personified object makes, when we ought to have been transported with a glow of enthusiasm. Some of the French writers, particularly Boffuet and Flechier, in their fermons and funeral orations, have attempted and executed this figure not without warmth and dignity. Their works are exceedingly worthy of being confulted for instances of this and of several other ornaments of flyle. Indeed the vivacity and ardour of the French genius is more fuited to this bold fpecies of oratory, than the more correct but less animated genius of the British, who in their profe works very rarely attempt any of the high figures of eloquence."

PERSPECTIV

DERSPECTIVE is the art of drawing on a plane furface true resemblances or pictures of objects, as the objects themselves appear to the eye from any di-

Rance and fituation, real or imaginary

It was in the 16th century that Perspective was revived, or rather reinvented. It owes its birth to painting, and particularly to that branch of it which was employed in the decorations of the theatre, where landscapes were properly introduced, and which would have looked unnatural and horrid if the fize of the objects had not been pretty nearly proportioned to their diffance from the eye. We learn from Vitruvius, that Agatharchus, instructed by Æschylus, was the first who wrote upon this subject; and that afterwards the principles of the art were more distinctly taught by Democritus and Anaxagoras, the disciples of Agatharchus. Of the theory of this art, as described by them, we know nothing; fince none of their writings have escaped the general wreck that was made of ancient literature in the dark ages of Europe. However, the revival of painting in Italy was accompanied with a revival of this

The first person who attempted to lay down the rules of perspective was Pietro del Borgo, an Italian. He supposed objects to be placed beyond a transparent tablet, and endeavoured to trace the images which rays of light, emitted from them, would make upon it. But we do not know what fuccess he had in this attempt, because the book which he wrote upon the subject is not now extant. It is, however, very much commended by the famous Egnazio Dante; and, upon the principles of Borgo, Albert Durer constructed a machine, by which he could trace the perspective appearance of

Balthazar Peruffi studied the writings of Borgo, and endeavoured to make them more intelligible. To him we owe the discovery of points of distance, to which all lines that make an angle of 45 degrees with the ground-line are drawn. A little time after, Guido Ulbalni, another Italian, found that all the lines that are parallel to one another, if they be inclined to the groundline, converge to some point in the horizontal line; and that through this point also, a line drawn from the eye, parallel to them, will pass. These principles put together enabled him to make out a pretty complete theory of perspective.

Great improvements were made in the rules of perspective by subsequent geometricians; particularly by Professor Gravesende, and still more by Dr Brooke Taylor, whose principles are in a great measure new, and

far more general than any before him.

In order to understand the principles of perspective, it will be proper to confider the plane on which the representation is to be made as transparent, and interpoled between the eye of the spectator and the object to be represented. Thus, suppose a person at a window looks through an upright pane of glass at any object beyond it, and, keeping his head fleady, draws the figure of the object upon the glass with a black lead pencil, as if the point of the pencil touched the object itself; he would then have a true representation of the object in perspective as it appears to his

In order to this two things are necessary: first, that the glass be laid over with strong gum-water, which, when dry, will be fit for drawing upon, and will retain the traces of the pencil: and, fecondly, that he looks through a small hole in a thin plate of metal, fixed about a foot from the glass, between it and his eye, and that he keeps his eye close to the hole; otherwise he might thift the position of his head, and consequently make a

false delineation of the object.

Having traced out the figure of the object, he may go over it again with pen and ink; and when that is dry, put a sheet of paper upon it, and trace it thereon with a pencil: then taking away the paper and laying it on a table, he may finish the picture by giving it the colours, lights, and shades, as he sees them in the object itself; and then he will have a true refemblance of the

To every person who has a general knowledge of the principles of optics, this must be self-evident: For as vision is occasioned by pencils of rays coming in straight lines to the eye from every point of the visible object, it is plain that, by joining the points in the transparent plane, through which all those pencils respectively pass, an exact representation must be formed of the object, as it appears to the eye in that particular position, and at that determined distance: and were pictures of things to be always first drawn on transparent planes, this fimple operation, with the principle on which it is founded, would comprise the whole theory and practice of perspective. As this, however, is far from being the case, rules must be deduced from the sciences of optics and geometry for drawing representations of visible objects on opaque planes; and the application of these rules constitutes what is properly called the art of perspective.

Previous to our laying down the fundamental principles of this art, it may not be improper to observe, that when a person stands right against the middle of one end of a long avenue or walk, which is straight and equally broad throughout, the fides thereof feem to approach nearer and nearer to each other as they are further and further from his eye; or the angles, under which their different parts are feen, become less and less according as the distance from his eye increases; and if the avenue be very long, the fides of it at the farthest end will feem to meet: and there an object that would cover the whole breadth of the avenue, and be of a height equal to that breadth, would appear only to be a mere point.

Having made these preliminary observations, we now proceed to the practice of perspective, which is built up-

on the following

(Fundamental) THEOREM I.

Let a b c d (fig. 1.) represent the ground-plan of the Plate figure to be thrown into perspective, and efgh the CCCCX. transparent plane through which it is viewed by the eye at E. Let these planes intersect in the straight line KL. Let B be any point in the ground plan, and BE a straight line, the path of a ray of light from that point to the eye. This will pass through the plane efgh in some point b; or B will be seen through that point, and b will be the picture, image, or representation

If BA be drawn in the ground-plan, making any angle BAK with the common interfection, and EV be drawn parallel to it, meeting the picture-plane or perspective-plane in V, and VA be drawn, the point b is in the line VA so situated that BA is to EV as b A

For fince EV and BA are parallel, the figure BAbVEbB is in one plane, cutting the perspectiveplane in the straight line VA; the triangles BAb, EVb, are fimilar, and BA : EV = bA : bV.

Cor. 1. If B be beyond the picture, its picture b is above the intersection KL; but if B be between the eye and the picture, as at B', its picture b' is below KL.

2. If two other parallel lines BA', ES, be drawn, and A', S, be joined, the picture of B is in the interfection of the lines AV and A'S.

3. The line BA is represented by bA, or bA is the picture of BA; and if AB be infinitely extended, it will be represented by AV. V is therefore called the vanishing point of the line AB.

4. All lines parallel to AB are represented by lines converging to V from the points where these lines interfect the perspective plane; and therefore V is the vanishing point of all such parallel lines.

5. The pictures of all lines parallel to the perspective Fig. 2 plans are parallel to the lines themselves.

6. If through V be drawn HVO parallel to KL, the

angle EVH is equal to BAK.

Remark. The proposition now demonstrated is not limited to any inclination of the picture plane to the ground-plane; but it is usual to confider them as perpendicular to each other, and the ground-plane as horizontal. Hence the line KL is called the ground line, and OH the horizon line; and OK, perpendicular to both, is called the height of the eye.

If ES be drawn perpendicular to the picture-plane, it will cut it in a point S of the horizon-line directly opposite to the eye. This is called the point of fight, or

principal point.

7. The

7. The pictures of all vertical lines are vertical, and the pictures of horizontal lines are horizontal, because these lines are parallel to the perspective

8. The point of fight S is the vanishing point of all

lines perpendicular to the perspective plane.

The above proposition is a sufficient foundation for the whole practice of perspective, whether on direct or inclined pictures, and ferves to fuggest all the various practical constructions, each of which has advantages which fuit particular purpofes. Writers on the subject have either confined themselves to one construction, from an affectation of simplicity or fondness for system; or have multiplied precepts, by giving every conftruction for every example, in order to make a great book, and give the subject an appearance of importance and difficulty. An ingenious practitioner will avoid both extremes, and avail himself of the advantage of each construction as it happens to fuit his purpose. We shall now preceed to the practical rules, which require no confideration of interfecting planes, and are all performed on the perspective plane by means of certain substitutions for the place of the eye and the original figure. The general fubititution is as follows:

Let the plane of the paper be first supposed to be the ground-plan, and the spectaior to stand at F (fig. 3.). Let it be proposed that the ground-plan is to be represented on a plane surface, standing perpendicularly on the line GKL of the plan, and that the point K is immediately opposite to the spectator, or that FK is perpendicular to GL: then FK is equal to the distance of the spectator's eye from the

picture.

Fig. 3.

Now suppose a piece of paper laid on the plan with its straight edge lying on the line GL; draw on this paper KS perpendicular to GL, and make it equal to the height of the eye above the ground-plan. This may be much greater than the height of a man, because the spectator may be standing on a place much raifed above the ground-plan. Observe also that KS must be measured on the same scale on which the ground-plan and the distance FK were measured. Then draw HSO parallel to GL. This will be a horizontal line, and (when the picture is fet upright on GL) will be on a level with the spectator's eye, and the point S will be directly opposite to his eye. It is therefore called the principal point, or point of fight. The distance of his eye from this point will be equal to FK. Therefore make SP (in the line SK) equal to FK, and P is the projecting point or substitute for the place of the eye. It is fometimes convenient to place P above S, fometimes to one fide of it on the horizontal line, and in various other fituations; and writers, ignorant of, or inattentive to, the principles of the theory, have given it different denominations, such as point of distance, point of view, &c. It is merely a substitute for the point E in fig. 1. and its most natural situation is below, as in this

The art of perspective is conveniently divided into ICHNOGRAPHY, which teaches how to make a perspective draught of figures on a plane, commonly called the ground-plan; and Scenography, which teaches how to draw folid figures, or fuch figures as are raifed above this plan.

Fundamental PROB. I. To put into perspective any given point of the ground-plan.

First general construction.

From B and P (fig. 3.) draw any two parallel lines BA, PV, cutting the ground-line and horizon-line in A and V, and draw BP, AV, cutting each other in b; b is the picture of B.

For it is evident that BA, PV, of this figure are analogous to BA and EV of fig. 1. and that BA: PV=

If BA' be drawn perpendicular to GL, PV will fall on PS, and need not be drawn. A'V will be A'S .-This is the most easy construction, and nearly the same with Ferguson's.

Second general construction.

Draw two lines BA, BA", and two lines PV, PD, parallel to them, and draw AV, A"D, cutting each other in b: b is the picture of B by Cor. 2.—This construction is the foundation of all the rules of perspective that are to be found in the books on this subject. They appear in a variety of forms, owing to the ignorance or inattention of the authors to the principles. The rule

most generally adhered to is as follows:

Draw BA (fig. 4.) perpendicular to the ground- Fig. 4. line, and AS to the point of fight, and fet off AB equal to BA. Set off SD equal to the distance of the eye in the opposite direction from S that & is from A, where B and E of fig. 1. are on opposite sides of the picture; otherwise set them the same way. D is called the point of distance. Draw & D, cutting AS in b. This is evidently equivalent to drawing BA' and PS perpendicular to the ground-line and horizon-line, and BA" and PD (fig. 3.) making an angle of 45° with these lines, with the additional puzzle about the way of fetting off A'A" and SD, which is avoided in the construction here given.

This usual construction, however, by a perpendicular and the point of distance, is extremely simple and convenient; and two points of distance, one on each fide of S, serve for all points of the ground plan. But the first general construction requires still fewer lines, if BA be drawn perpendicular to GL, because PV will then coin-

cide with PS.

Third general construction.

Draw BA (fig. 4.) from the given point B perpendicular to the ground-line, and AS to the point of fight. From the point of distance D set off D d equal to BA. on the same or the contrary side as S, according as B is on the same or the contrary fide of the picture as the eye. Join d, A, and draw D b parallel to dA. b is the picture of B. For SD, Dd, are equal to the distances of the eye and given point from the picture, and SD: Dd =bS:bA.

This construction does not naturally arise from the original lines, but is a geometrical consequence from their position and magnitude; and it is of all others the most generally convenient, as the perpendicular distances of any number of points may be arranged along SD without confusion, and their direct situations transferred to the ground-line by perpendiculars fuch as BA; and nothing

nothing is easier than drawing parallels, either by a parallel ruler or a bevel-square, used by all who practise drawing.

Fig. 5. PROB. 2. To put any fraight line BC (fig. 5.) of the ground plan in perspective.

Find the pictures b, c, of its extreme points by any of the foregoing constructions, and join them by the straight line b c.

Perhaps the following construction will be found very

generally convenient.

Produce CB till it meet the ground-line in A, and draw PV parallel to it; join AV, and draw PB, PC, cutting AV in b, c. V is its vanishing point, by Cor. 3. of the fundamental theorem.

It must be lest to the experience and sagacity of the drawer to select such circumstances as are most suitable to the multiplicity of the sigures to be drawn.

PROB. 3. To put any rectilineal figure of the ground-plan in perspective.

Put the bounding lines in perspective, and the problem is solved.

The variety of constructions of this problem is very great, and it would fill a volume to give them all. The most generally convenient is to find the vanishing points of the bounding lines, and connect these with the points of their intersection with the ground-line. Fig. 6. For example, to put the square ABCD (fig. 6.) into perspective.

Draw from the projecting point PV, PW, parallel to AB, BC, and let AB, BC, CD, DA, meet the ground-line, in $\alpha, \kappa, \delta, \beta$, and draw $\alpha V, \delta V, \kappa W, \beta W$, cutting each other in abcd, the picture of the square ABCD.

The demonstration is evident.

This construction, however, runs the figure to great distances on each fide of the middle line, when any of the lines of the original figure are nearly parallel to the ground-line.

The following construction (fig. 7.) avoids this in-

convenience.

Fig. 7.

Let D be the point of distance. Draw the perpendiculars $A \,\omega$, $B \,\beta$, $C \,\varkappa$, $D \,\delta$, and the lines $A \,e$, $B \,f$, $C \,g$, $D \,h$, parallel to PD. Draw $S \,\omega$, $S \,\beta$, $S \,\varkappa$, $S \,\delta$, and $D \,e$, $D \,f$, $D \,g$, $D \,h$, cutting the former in a, b, c, d, the angles of the picture.

It is not necessary that D be the point of distance, only the lines A e, B f, &c. must be parallel to PD.

Remark. In all the foregoing constructions the necessary lines (and even the sinished picture) are frequently confounded with the original figure. To avoid this great inconvenience, the writers on perspective direct us to transpose the figure; that is, to transfer it to the other side of the ground-line, by producing the perpendiculars $A \, \alpha$, $B \, \beta$, $C \, \alpha$, $D \, \delta$, till $\alpha \, A'$, $\beta \, B'$, &c. are respectively equal to $A \, \alpha$, $B \, \beta$, &c.; or, instead of the original figure, to use only its transposed substitute A'B'C'D'. This is an extremely proper method. But in this case the point P must also be transposed to P' above S, in order to retain the first or most natural and simple construction, as in fig. 8.; where it is evident, that when BA = AB', and SP = SP', and B'P' is drawn, cutting AS in b, we have $b \, A : b \, S = B'A : P'S, = BA : PS, and <math>b$ is the picture of B: whence follows the truth of

all the fubsequent constructions with the transposed figure.

PROB. 4. To put any curvilineal figure on the groundplan into perspective.

Put a sufficient number of its points in perspective by the foregoing rules, and draw a curve line through them.

It is well known that the conic fections and fome other curves, when viewed obliquely, are conic fections or curves of the fame kinds with the originals, with different positions and proportions of their principal lines, and rules may be given for describing their pictures founded on this property. But these rules are very various, unconnected with the general theory of perspective, and more teclious in the execution, without being more accurate than the general rule now given. It would be a useless affectation to insert them in this elementary treatife.

We come in the next place to the delineation of figures not in a horizontal plane, and of folid figures. For this purpose it is necessary to demonstrate the foliations.

lowing

THEOREM II.

The length of any vertical line standing on the ground plane is to that of its picture as the height of the eye to the distance of the horizon line from the picture of its foot.

Let BC (fig. 2.) be the vertical line flanding on B, and let EF be a vertical line through the eye. Make BD equal to EF, and draw DE, CE, BE. It is evident that DE will cut the horizon line in fome point d, CE will cut the picture plane in c, and BE will cut it in b, and that bc will be the picture of BC, and is vertical, and that BC is to bc as BD to bd, or as EF to bd.

Cor. The picture of a vertical line is divided in the fame ratio as the line itself. For BC: BM = b c : b m.

PROB. 5. To put a vertical line of a given length in perfpective standing on a given point of the picture.

Through the given point b (fig. 9.) of the picture, draw SbA from the point of fight, and draw the vertical line AD, and make AE equal to the length or height of the given line. Join ES, and draw bc parallel to AD, producing bc, when necessary, till it cut the horizontal line in d, and we have bc:bd,—AE: AD, that is, as the length of the given line to the height of the eye, and bd is the distance of the horizon-line from the point b, which is the picture of the foot of the line. Therefore (Theor. 2.) bc is the required picture of the vertical line.

This problem occurs frequently in views of architecture; and a compendious method of folving it would be peculiarly convenient. For this purpose, draw a vertical line XZ at the margin of the picture, or on a separate paper, and through any point V of the horizon-line draw VX. Set off XY, the height of the vertical line, and draw VY. Then from any points b, r, on which it is required to have the pictures of lines equal to XY, draw b s, r t, parallel to the horizon-line, and draw the

F1g. 2

Fig. 9

verticals

Fig. 8.

verticals su, tv: these have the lengths required, which may be transferred to b and r. This, with the third general construction for the base points, will save all the confufion of lines which would arife from constructing each line apart.

PROB. 6. To put any floping line in perspective.

From the extremities of this line, suppose perpendiculars meeting the ground plane in two points, which we shall call the base points of the sloping line. Put these base points in perspective, and draw, by last problem, the perpendiculars from the extremities. Join these by a straight line. It will be the picture re-

PROB. 7. To put a square in perspective, as seen by a person not standing right against the middle of either of its fides, but rather nearly even with one of its cor-

In fig. 10. let ABCD be a true square, viewed by an Fig. 10. observer, not standing at o, directly against the middle of its fides AD, but at O almost even with its corner D, and viewing the fide AD under the angle AOD; the angle A o D (under which he would have feen AD from o) being 60 degrees.

Make AD in fig. 11. equal to AD in fig. 10. and Fig. II. draw SP and Oo parallel to AD. Then, in fig. 11. let O be the place of the observer's eye, and SO be perpendicular to SP; then S shall be the point of fight in the horizon SP.

Take SO in your compasses, and set that extent from S to P; then P shall be the true point of distance, taken according to the foregoing rules.

From A and D draw the straight lines AS and DS; draw also the straight line AP, intersecting DS

Lastly, through the point of intersection C draw BC parallel to AD; and ABCD in fig. 11. will be a true perspective representation of the square ABCD in fig. 10. The point M is the centre of each square, and AMC and BMD are the diagonals.

PROB. 8. To put a reticulated square in perspective, as feen by a person standing opposite to the middle of one

A reticulated square is one that is divided into se-Fig. 12. veral little squares, like net-work, as fig. 12. each fide of which is divided into four equal parts, and the whole furface into four times four (or 16) equal

Having divided this square into the given number of leffer squares, draw the two diagonals A & C and

Fig. 13. Make AD in fig. 13. equal to AD in fig. 12. and di-

vide it into four equal parts, as A e, eg, gi, and iD.

Draw SP for the horizon, parallel to AD, and, through the middle point g of AD, draw OS perpendicular to AD and SP .- Make S the point of fight, and O the place of the observer's eye.

Take SP equal to SO, and P shall be the true point of distance.-Draw AS and DS to the point of fight, and AP to the point of distance, intersecting DS in C: then draw BC parallel to AD, and the outlines of the reticulated square ABCD will be finished.

From the division points e, g, i, draw the straight lines

ef, gh, ik, tending towards the point of fight S; and draw BD for one of the diagonals of the square, the other diagonal AC being already drawn.

Through the points r and s, where these diagonals cut ef and ik, draw Im parallel to AD. Through the centre-point a, where the diagonals cut gh, draw no parallel to AD .- Laftly, through the points v and w. where the diagonals cut ef and ik, draw pq parallel to AD; and the reticulated perspective square will be finished.

This fquare is truly represented, as if seen by an obferver standing at O, and having his eye above the horizontal plane ABCD on which it is drawn; as if OS was the height of his eye above that plane: and the lines which form the small squares within it have the fame letters of reference with those in fig. 12. which is drawn as it would appear to an eye placed perpendicularly above its centre x.

PROB. Q. To put a circle in perspective.

If a circle be viewed by an eye placed directly over its centre, it appears perfectly round, but if it be obliquely viewed, it appears of an elliptical shape. This is plain by looking at a common wine-glass set upright

Make a true reticulated fquare, as fig. 12. of the fame diameter as you would have the circle; and fetting one foot of your compasses in the centre a, describe as large a circle as the fides of the fquare will contain. Then, having put this reticulated square into perspective, as in fig. 13. observe through what points of the cross lines and diagonals of fig. 12. the circle passes; and through the like points in fig. 13. draw the ellipfis, which will be as true a perspective representation of the circle, as the square in fig. 13. is of the square in fig. 12.

This is Mr Ferguson's rule for putting a circle in perspective; but the following rules by Wolf are perhaps more univerfal.

If the circle to be put in perspective be small, describe a square about it. Draw first the diagonals of the square, and then the diameters ha and de (fig. 14.) cutting one another at right angles; draw the straight lines fg and he parallel to the diameter de. Through b and f, and likewife e and g, draw straight lines meeting DE, the ground line of the picture in the points 3 and 4. To the principal point V draw the straight lines IV, 3V, 4V, 2V, and to the points of distance L and K, 2 L and 1 K. Lastly, join the points of intersection, a, b, d, f, h, g, e, c, by the arcs a b, b d, df, and a b df h geca will be the circle in perspective.

If the circle be large fo as to make the foregoing practice inconvenient, bifect the ground line AB, de-fcribing, from the point of bifection as a centre, the femicircle AGB (fig. 15.), and from any number of points in the circumference C, F, G, H, I, &c. draw to the ground line the perpendiculars C 1, F 2, G 3, H 4, I 5, &c. From the points A, 1, 2, 3, 4, 5, B, draw straight lines to the principal point or point of fight V, likewise straight lines from B and A to the points of distance L and K. Through the common intersections draw straight lines as in the preceding case; and you will have the points a, c, f, g, h, i, b, representatives of A, C, F, G, H, I, B. Then join the points a, c, f, &c. as formerly directed, and you have the perspective circle acfghibihgfca.

Fig. 12.

Hence

Hence it is apparent how we may put not only a circle but also a pavement laid with stones of any form in perspective. It is likewise apparent how useful the iquare is in perspective; for, as in the second case, a true fquare was described round the circle to be put in perspective, and divided into several smaller squares, to in this third case we make use of the semicircle only for the fake of brevity inflead of that fquare and.

PROB. 10. To put a reticulated square in perspective, as feen by a person not standing right against the middle of either of its sides, but rather nearly even with one of its corners.

Fig. 16.

In fig. 16. let O be the place of an observer, viewing the square ABCD almost even with its corner D .-Draw at pleasure SP for the horizon, parallel to AD, and make SO perpendicular to SP: then S shall be the point of fight, and P the true point of distance, if SP

be made equal to SO.

Draw AS and DS to the point of fight, and AP to the point of distance, intersecting DS in the point C; then draw BC parallel to AD, and the outlines of the perspective square will be finished. This done, draw the lines which form the leffer squares, as taught in Prob. 8. and the work will be completed.—You may put a perspective circle in this square by the same rule as it was done in fig. 13.

PROB. 14. To put a cube in perspective, as if viewed by a person standing almost even with one of its edges, and feeing three of its sides.

Fig. 17.

In fig. 17. let AB be the breadth of either of the fix equal square fides of the cube AG; O the place of the observer, almost even with the edge CD of the cube, S the point of fight, SP the horizon parallel to AD, and P the point of distance taken as before.

Make ABCD a true square; draw BS and CS to the point of fight, and BP to the point of distance, interfecting CS in G .- Then draw FG parallel to BC, and the uppermost perspective square side BFGC of the

cube will be finished.

Draw DS to the point of fight, and AP to the point of distance, intersecting DS in the point I: then draw GI parallel to CD; and, if the cube be an opaque one, as of wood or metal, all the outlines of it will be finished; and then it may be shaded as in the

But if you want a perspective view of a transparent glass cube, all the fides of which will be feen, draw AH toward the point of fight, FH parallel to BA, and HI parallel to AD: then AHID will be the square base of the cube, perspectively parallel to the top BFGC; ABFH will be the square side of the cube, parallel to CGID, and FGIH will be the fquare fide

parallel to ABCD.

As to the shading part of the work, it is such mere children's play, in comparison of drawing the lines which form the shape of any object, that no rules need be given for it. Let a person fit with his left side to-ward a window, and he knows full well, that if any folid body be placed on a table before him, the light will fall on the left-hand fide of the body, and the right-hand fide will be in the shade.

PROB. 15. To put any folid in perspective.

Put the base of the solid, whatever it be, in perspective by the preceding rules. From each bounding point of the base, raise lines representing in perspective the altitude of the object; by joining these lines and shading the figure according to the directions in the preceding problem, you will have a scenographic representation of the object. This rule is general; but as its application to particular cases may not be apparent, it will be proper to give the following example

PROB. 16. To put a cube in perspective as seen from one of its angles.

Since the base of a cube standing on a geometrical plane, and feen from one of its angles, is a square feen from one of its angles, draw first such a perspective fquare: then raife from any point of the ground-line DE (fig. 18) the perpendicular HI equal to the fide of the square, and draw to any point V in the horizontal line HR the straight lines VI and VH. From the angles $d_r b$, and c, draw the dotted lines d 2 and c 1 parallel to the ground line DE. Perpendicular to those dotted lines, and from the points I and 2, draw the straight lines L 1 and M 2. Lastly, since HI is the altitude of the intended cube in a, L 1 in c and b, M 2 in d, draw from the point a the straight line fa perpendicular to a E, and from the points b and c, bg and ce, perpendicular to bc 1, and abdc being according to rule, make af = H 1, bg = ec = L 1, and hd = M 2. Then, if the points g, h, e, f, be joined, the whole cube will be in perspective.

Prob. 17. To put a square pyramid in perspective, as standing upright on its base, and viewed obliquely.

In fig. 19. let AD be the breadth of either of the four fides of the pyramid ATCD at its base ABCD; and M'I'its perpendicular height. Let O be the place of the observer, S his point of fight, SE his horizon, parallel to AD and perpendicular to OS; and let the proper point of distance be taken in SE produced toward the left hand, as far from S as O is from S.

Draw AS and DS to the point of fight, and DL to the point of distance, intersecting AS in the point B. Then, from B, draw BC parallel to AD; and ABCD shall be the perspective square base of the py-

Draw the diagonal AC, interfecting the other diagonal BD at M, and this point of interfection shall be the centre of the square base.

Draw MT perpendicular to AD, and of a length equal to the intended height of the pyramid: then draw the straight outlines AT, CT, and DT; and the outlines of the pyramid (as viewed from O) will be finished; which being done, the whole may be so shaded

as to give it the appearance of a folid body.

If the observer had stood at o, he could have only feen the fide ATD of the pyramid; and two is the greatest number of sides that he could see from any other place of the ground. But if he were at any height above the pyramid, and had his eye directly over its top, it would then appear as in fig. 20. and he Fig. 20. would fee all its four fides E, F, G, H, with its top t just over the centre of its square base ABCD; which

Fig.

would be a true geometrical and not a perspective

PROB. 18. To put two equal squares in perspective, one of which shall be directly over the other, at any given distance from it, and both of them parallel to the plane of the horizon.

In fig. 21. let ABCD be a perspective square on a horizontal plane, drawn according to the foregoing rules, S being the point of fight, SP the horizon (parallel to AD), and P the point of distance.

> Suppose AD, the breadth of this square, to be three feet; and that it is required to place just such another fquare EFGH directly above it, parallel to it and two

> Make AE and DH perpendicular to AD, and two thirds of its length: draw EH, which will be equal and parallel to AD; then draw ES and HS to the point of fight S, and EP to the point of distance P. intersecting HS in the point G: this done, draw FG parallel to EH; and you will have two perspective squares ABCD and EFGH, equal and parallel to one another, the latter directly above the former, and two feet distant from it; as was required.

> By this method shelves may be drawn parallel to one another, at any distance from each other in proportion to their length.

PROB. 19. To put a truncated pyramid in perspective.

Let the pyramid to be put in perspective be quinquangular. If from each angle of the furface whence the top is cut off, a perpendicular be supposed to fall upon the base, these perpendiculars will mark the bounding points of a pentagon, of which the fides will be parallel to the fides of the base of the pyramid, within which it is infcribed. Join these points, and the interior pentagon will be formed with its longest fide parallel to the longest side of the base of the pyramid. From the ground line EH (fig. 22.) raise the perpendicular IH, and make it equal to the altitude of the intended pyramid. To any point V draw the flraight lines IV and HV, and by a process similar to that in Prob. 16. determine the scenographical altitudes a, b, c, d, e. Connect the upper points f, g, h, i, k, by straight lines; and draw lk, fm, gn, and the perspective of the

truncated pyramid will be completed.

Cor. If in a geometrical plane two concentric circles be described, a truncated cone may be put in perspective in the same manner as a truncated pyra-

PROB. 20. To put in perspective a hollow prism lying on one of its sides.

Fig. 23. Let ABDEC (fig. 23.) be a fection of fuch a prism. Draw HI parallel to AB, and distant from it the breadth of the fide on which the prism rests; and from each angle internal and external of the prism let fall perpendiculars to HI. The parallelogram will be thus -divided by the ichnographical process below the groundline, fo as that the fide AB of the real prism will be parallel to the corresponding side of the scenographic view of it.—To determine the altitude of the internal Fig. 24. and external angles. From H (fig. 24.) raise HI perpendicular to the ground-line, and on it mark off the true altitudes H 1, H 2, H 3, H 4, and H 5. Then if from any point V in the horizon be drawn the flraight lines VH, VI, V2, V3, V4, V5 or VI; by a process similar to that of the preceding problem, will be determined the height of the process of the vertical angles, viz. I= $a \ a$, $2=b \ b$, $4=d \ d$; and of the external angles, $3=c \ c$, and 5=ee; and when these angles are formed and put in their proper places, the scenograph of the prism is

PROB. 21. To put a square table in perspective, standing on four upright square legs of any given length with respect to the breadth of the table.

In fig. 21. let ABCD be the square part of the floor Fig. 25. on which the table is to stand, and EFGH the surface of the square table, parallel to the floor.

Suppose the table to be three feet in breadth, and its height from the floor to be two feet; then two thirds of AD or EH will be the length of the legs i and k; the other two (l and m) being of the same length in perspective.

Having drawn the two equal and parallel fquares ABCD and EFGH, as shown in Prob. 18. let the legs be square in form, and fixed into the table at a distance from its edges equal to their thickness. Take A a and D d equal to the intended thickness of the legs, and a b and dc also equal thereto. Draw the diagonals AC and BD, and draw straight lines from the points a, b, c, d, towards the point of fight S, and terminating at the fide BC. Then, through the points where these lines cut the diagonals, draw the straight lines n and o, p and q, parallel to AD; and you will have formed four perspective squares (like ABCD in fig. 19.) for Fig. 19. the bases of the four legs of the table: and then it is eafy to draw the four upright legs by parallel lines, all perpendicular to AD; and to shade them as in the

To represent the intended thickness of the tableboard, draw eh parallel to EH, and HG toward the point of fight S: then shade the spaces between these lines, and the perspective figure of the table will be finished.

PROB. 22. To put five square pyramids in perspective, standing upright on a square pavement composed of the surfaces of 81 cubes.

In fig. 25. let ABCD be a perspective square drawn Fig. 25. according to the foregoing rules; S the point of fight, P the point of distance in the horizon PS, and AC and BD the two diagonals of the square.

Divide the fide AD into 9 equal parts (because 9 times 9 is 81) as Aa, ab, bc, &c. and from these points of division, a, b, c, d, &c. draw lines toward the point of fight S, terminating at the furthermost fide BC of the square. Then, through the points where these lines cut the diagonals, draw straight lines parallel to AD, and the perspective square ABCD will be subdivided into 81 leffer squares, representing the upper furfaces of 81 cubes, laid close to one another's fides in a fquare form.

Draw AK and DL, each equal to A a, and perpendicular to AD; and draw LN toward the point of Aght S: then draw KL parallel to AD, and its distance from AD will be equal to A a .- This done, draw al, bm, cn, do, ep, fq, gr, and hs, all parallel to AK; and the space ADLK will be subdivided

into nine equal fquares, which are the outer upright furfaces of the nine cubes in the fide AD of the fquare ABCD.

From the points where the lines, which are parallel to AD in this square, meet the side CD thereof, draw short lines to LN, all parallel to DL, and they will divide that side into the outer upright surfaces of the nine cubes which compose it: and then the outsides of all the cubes that can be visible to an observer, placed at a proper distance from the corner D of the square, will be smished.

As taught in Prob. 17. place the pyramid AE upright on its fquare base Atva, making it as high as you please; and the pyramid DH on its square base huwD, of equal height with AE.

Draw EH from the top of one of these pyramids to the top of the other; and EH will be parallel to AD.

Draw ES and HS to the point of fight S, and HP to the point of distance P, intersecting ES in F.

From the point F, draw FG parallel to EH; then draw EG, and you will have a perspective square EFGH (parallel to ABCD) with its two diagonals EG and FH, intersecting one another in the centre of the square at I. The sour corners of this square, E, F, G, H, give the perspective heights of the sour pyramids AE, BF, CG, and DH; and the intersection I of the diagonals gives the height of the pyramid MI, the centre of whole base is the centre of the perspective square ABCD.

Lastly, place the three pyramids BF, CG, MI, upright on their respective bases at B, C, and M; and the required perspective representation will be finished, as in the figure.

PROB. 23. To put upright pyramids in perspective, on the sides of an oblong square or parallelogram; so that their distances from one another shall be equal to the breadth of the parallelogram.

In most of the foregoing operations we have considered the observer to be so placed, as to have an oblique view of the perspective objects: in this, we shall suppose him to have a direct view of sig. 26. that is, standing right against the middle of the end AD which is nearest to his eye, and viewing AD under an angle of 60 degrees.

Having cut AD in the middle, by the perpendicular line S s, take S therein at pleasure for the point of fight, and draw ES for the horizon, parallel to AD.—Here S s must be supposed to be produced downward, below the limits of the plate, to the place of the observer; and SE to be produced towards the left hand beyond E, far enough to take a proper point of distance therein, according to the foregoing rules.

Take Ad at pleasure, and Dg equal to Ad, for the breadths of the square bases of the two pyramids AE and DF next the eye: then draw AS and dS, and likewise DS and gS, to the point of sight S; and DG on to the point of distance, intersecting AS in G: then, from G draw GI parallel to AD, you will have the sirst perspective square AGID of the parallelogram ABCD.

From I draw IH to (or toward) the point of diftance, interfecting AS in H: then, from H draw Vol. XVI. Part I.

HK parallel to AD, and you will have the fecond perfpective fquare GHKI of the parallelogram.—Go on in this manner till you have drawn as many perfpective fquares up toward S as you please.

Through the point e, where DG interfect g S, draw bf parallel to AD; and you will have formed the two perspective square bases Abcd and efDg of the two pyramids at A and D.

From the point f (the upper outward corner of ef Dg) draw fh toward the point of distance, till it meets AS in h; then, from this point of meeting, draw hm parallel to GI, and you will have formed the two perspective squares Ghik and lmIn, for the square bases of the two pyramids at G and I.

Proceed in the same manner to find the bases of all the other pyramids, at the corners of the rest of the perspective squares in the parallelogram ABCD, as shown by the sigure.—Then,

Having placed the first two pyramids at A and D upright on their square bases, as shown in Prob. 9. and made them of any equal heights at pleasure, draw ES and FS from the tops of these pyramids to the point of sight S: place all the rest of the pyramids upright on their respective bases, making their tops touch the straight lines ES and FS; and all the work, except the shading part, will be sinished.

PROB. 24. To put a square pyramid of equal sized cubes in perspective.

Fig. 27. represents a pyramid of this kind; confist-Fig. 27. ing as it were of square tables of cubes, one table above another; 81 in the lowest, 49 in the next, 25 in the third, 9 in the fourth, and 1 in the fifth or uppermost. These are the square numbers of 9, 7, 5, 3, and 1.

If the artist is already master of all the preceding operations, he will find less difficulty in this than in attending to the following description of it: for it cannot be described in a few words, but may be executed in a very short time.

In fig. 28. having drawn PS for the horizon, and ta-Fig. 26. ken S for the point of fight therein (the observer being at O) draw AD parallel to PS for the fide (next the eye) of the first or lowermost table of cubes. Draw AS and DS to the point of fight S, and DP to the point of distance P, intersecting AS in the point B. Then, from B, draw BC parallel to AD, and you will have the surface ABCD of the first table.

Divide AD into nine equal parts, as A a, a b, b c, c d, &c. then make AK and DL equal to A a, and perpendicular to AD. Draw KL parallel to AD, and from the points of equal division at a, b, c, &c. draw lines to KL, all parallel to AK. Then draw h S to the point of fight S, and from the division points a, b, c, &c. draw lines with a black lead pencil, all tending towards the point of fight, till they meet the diagonal BD of the fquare.

From these points of meeting draw black lead lines to DC, all parallel to AD; then draw the parts of these lines with black ink which are marked 1, 2, 3, 4, &c. between h E and DC.

Having drawn the first of these lines βq with black ink, draw the parts ai, bk, cl, &c. (of the former lines which met the diagonal BD) with black ink also; and rub out the rest of the black lead lines, which

Fig. 26.

would otherwise confuse the following part of the work. Then, draw LF toward the point of fight S; and, from the points where the lines 1, 2, 3, 4, &c. meet the line DC, draw lines down to LF, all parallel to DL; and all the visible lines between the cubes in the first table will be sinished.

Make i G equal and perpendicular to β i, and q M equal and parallel to i G: then draw GM, which will be equal and parallel to iq. From the points k, l, m, n, &cc. draw k n, l o, m p, &cc. all parallel to i G, and the outfides of the feven cubes in the fide G q of the fecond

table will be finished.

Draw GS and MS to the point of fight S, and MP to the point of distance P, intersecting GS in H; then, from the point of intersection H, draw HI parallel to AD; and you will have the surface GHIM of the second table of cubes.

From the points n, o, p, q, &c. draw black lead lines toward the point of fight S, till they meet the diagonal MH of the perspective square surface GHIM; and draw SM, with black ink, toward the point of

fight.

From those points where the lines drawn from n, o, p, q, &c. meet the diagonal MH, draw black lead lines to MI, all parallel to AD; only draw the whole first line γ I with black ink, and the parts 2, 3, 4, &c. and nt, ou, pv, &c. of the other lines between y N and MI, and GM and γ I, with the same; and rub out all the rest of the black lead lines, to avoid further confusion. Then, from the points where the short lines I, 2, 3, &c. meet the line MI, draw lines down to q E, all parallel to Mq, and the outer surfaces of the seven cubes in the side ME will be sinished; and all these last lines will meet the former parallels 2, 3, 4, &c. in the line q E.

Make t O equal and perpendicular to γt , and y P equal and parallel to t O; then draw OP, which will be equal and parallel to t y.—This done, draw OS and PS to the point of fight S, and PP to the point of diftance P in the horizon. Laftly, from the point Q, where PP interfects OS, draw QR parallel to OP; and you will have the outlines OQRP of the furface of the

third perspective table of cubes.

From the points u, v, w, x, draw upright lines to OP, all parallel to t O, and you will have the outer furfaces of the five cubes in the fide O y of this third

table.

From the points where these upright lines meet OP, draw lines toward the point of sight S, till they meet the diagonal PQ; and from these points of meeting draw lines to PR, all parallel to OP, making the parts 2, 3, 4, 5, of these lines with black ink which lie between ZY and PR. Then, from the points where these lines meet PR, draw lines down to yN; which will bound the outer surfaces of the five cubes in the side PN of the third table.

Draw the line & r with black ink; and, at a fourth part of its length between & and Z, draw an upright line to S, equal in length to that fourth part, and another equal and parallel thereto from Z to V: then draw SV parallel to & Z, and draw the two upright and equidificant lines between & Z and SV, and you will have the outer furfaces of the three cubes in the fide SZ of the

Draw SS and VS to the point of fight S in the ho-

rizon, and VP to the point of distance therein, intersecting SS in T; then draw TU parallel to SV, and you have STUV, the surface of the fourth table, which being reticulated or divided into 9 perspective small squares, and the uppermost cube W placed on the middlemost of the squares, all the outlines will be sinished; and when the whole is properly shaded, as in fig. 27. the work will be done.

PROB. 25. To represent a double cross in perspective.

In fig. 29. let ABCD and EFGH be the two per-fig fpective squares, equal and parallel to one another, the uppermost directly above the lowermost, drawn by the rules already laid down, and as far asunder as is equal to the given height of the upright part of the cross; S being the point of fight, and P the point of distance, in the horizon PS taken parallel to AD.

Draw AE, DH, and CG; then AEHD and DHGC shall be the two visible sides of the upright part of the cross; of which, the length AE is here

raade equal to three times the breadth EH.

Divide DH into three equal parts, HI, IK, and KD. Through these points of division, at I and K, draw MO and PR parallel to AD: and make the parts MN, IO, PQ, KR, each equal to HI: then draw MP and OR

parallel to DH.

From M and O, draw MS and OS to the point of fight S; and from the point of distance P draw PN cutting MS in T: from T draw TU parallel to MO, and meeting OS in U; and you will have the uppermost furface MTUO of one of the cross pieces of the figure.

From R, draw RS to the point of fight S; and from U draw UV parallel to OR; and OUVR shall be the perspective square end next the eye of that cross part.

Draw PMX (as long as you please) from the point of distance P, through the corner M; lay a ruler to N and S, and draw XN from the line PX:—then lay the ruler to I and S, and draw YZS.—Draw XY parallel to MO, and make XW and YB equal and perpendicular to XY: then draw WB parallel to XY, and WXYB shall be the square visible end of the other

cross part of the figure.

Draw BK toward the point of fight S; and from U draw UP to the point of distance P, intersecting YS in Z: then, from the intersection Z, draw Za parallel to MO, and Zb parallel to HD, and the whole delineation will be finished.

This done, shade the whole, as in fig. 30. and you Fig. 30. will have a true perspective representation of a double

Crois

PROB. 26. To put three rows of upright square objects in perspective, equal in size, and at equal distances from each other, on an oblong square plane, the breadth of which shall be of any assigned proportion to the length thereof.

Fig. 31. is a perspective representation of an oblong Fig. 31. square plane, three times as long as it is broad, having a row of nine upright square objects on each side, and one of the same number in the middle; all equally high, and at equal distances from one another, both long-wise and cross-wise, on the same plane.

In fig. 32. PS is the horizon, S the point of fight, P Fig. 32.

the

the point of distance, and AD (parallel to PS) the

breadth of the plane.

Draw AS, NS, and DS, to the point of fight S; the point N being in the middle of the line AD: and draw DP to the point of distance P, intersecting AS in the point B: then, from B draw BC parallel to AD, and you have the perspective square ABCD.

Through the point i, where DB interfects NS, draw a e parallel to AD; and you will have fubdivided the perspective square ABCD into four lesser squares, as A

aiN, NieD, aBki, and ik Ce.

From the point C (at the top of the perspective square ABCD) draw CP to the point of distance P, interfecting AS in E; then, from the point E draw EF parallel to AD; and you will have the fecond perspective square BEFC.

Through the point I, where CE interfects NS, draw bf parallel to AD; and you will have subdivided the square BEFC into the sour squares Bblk, klfC,

b E m l, and l m F f

From the point F (at the top of the perspective fquare BEFC) draw FP to the point of diffance P, interfecting AS in I; then from the point I draw IK parallel to AD; and you will have the third perspective fquare EIKF.

Through the point n, where FI interfects NS, draw eg parallel to AD; and you will have fubdivided the square EIKF into four lesser squares, Ecnm, mng F,

clon, and no Kg.

From the point K (at the top of the third perspective fquare EIKF) draw KP to the point of distance P, interfecting AS in L; then from the point L draw LM parallel to AD; and you will have the fourth perspective square ILMK.

Through the point p, where KL interfects NS, draw dh parallel to AD; and you will have subdivided the square ILMK into the four lesser squares I dpo, op hK,

d Lqp, and pq M h.

Thus we have formed an oblong square ALMD, whose perspective length is equal to four times its breadth, and it contains 16 equal perspective squares.—If greater length was still wanted, we might proceed further on

Take A 3, equal to the intended breadth of the fide of the upright square object AQ (all the other sides being of the same breadth), and AO for the intended height. Draw O 18 parallel to AD, and make D 8 and 4 7 equal to A 3; then draw 3 S, 4 S, 7 S, and 8 S to the point of fight S; and among them we shall have the perspective square bases of all the 27 upright objects on the plane.

Through the point 9, where DB interfects 8 S, draw I 10 parallel to AD, and you have the three perspective square bases A 1 2 3, 4 5 6 7, 8 9 10 D, of the three upright square objects at A, N, and D.

Through the point 21, where eb interfects 8 S, draw 14, 11 parallel to AD; and you will have the three perspective squares a 14 15 16 17 18 19 20, and 21 11 e 22, for the bases of the second cross row of objects; namely, the next beyond the first three at A,

N, and D.

Through the point w, where CE interfects 8 S, draw a line parallel to BC; and you will have three perspective squares, at B, k, and C, for the bases of the third row of objects; one of which is fet up at B.

Through the point &, where fc interfects 8 S, draw a line parallel to bf; and you will have three perspective squares, at b, l, and x, for the bases of the sourth cross row of objects.

Go on in this manner, as you fee in the figure, to find the rest of the square bases, up to LM; and you will have 27 upon the whole oblong square plane, on which you are to place the like number of objects, as

in fig. 31.

Having assumed AO for the perspective height of the three objects at A, N, and D (fig. 32.) next the observer's eye, and drawn O 18 parallel to AD, in order to make the objects at N and D of the same height as that at O; and having drawn the upright lines 4 15, 7 W, 8 X, and D 22, for the heights at N and D; draw OS and RS, 15 S and WS, XS and 22 S, all to the point of fight S: and these lines will determine the perspectively equal heights of all the rest of the upright objects, as shown by the two placed at a and B.

To draw the square tops of these objects, equal and parallel to their bases, we need only give one example, which will ferve for all.

Draw 3 R and 2 Q parallel to AO, and up to the line RS; then draw PQ parallel to OR, and OPOR shall be the top of the object at A, equal and parallel to its square base A 1 2 3.—In the same easy way the tops of all the other objects are formed.

When all the rest of the objects are delineated, shade them properly, and the whole perspective scheme will

have the appearance of fig. 31.

PROB. 27. To put a square box in perspective, containing a given number of leffer square boxes of a depth equal to their width.

Let the given number of little square boxes or cells Fig. 33, be 16, then 4 of them make the length of each fide of the four outer fides ab, bc, cd, da, as in fig. 33. and the depth af is equal to the width ae. Whoever can draw the reticulated square, by the rules laid down towards the beginning of this article, will be at no lois about putting this perspective scheme in practice.

PROB. 28. To put Stairs with equal and parallel steps in perspective.

In fig. 34. let ab be the given breadth of each step, Fig. 34. and ai the height thereof. Make bc, cd, de, &c. each equal to ab; and draw all the upright lines ai, bl, cn, dp, &c. perpendicular to ah (to which the horizon sS is parallel); and from the points i, l, n, p, r, &c. draw the equidifiant lines iB, lC, nD, &c. parallel to a h; these distances being equal to that of i B from a h.

Draw x i touching all the corner-points l, n, p, r, tv; and draw 2 16 parallel to xi, as far from it as you

want the length of the steps to be.

Toward the point of fight S draw the lines a 1, i 2, k 3, 14, &c. and draw 16 15, 14 13, 12 11, 10 9, 8 7, 65, 43, and 21, all parallel to Ah, and meeting the lines w 15, u 13, s 11, &c. in the points 15, 13, 11, 9, 7, 5, 3, and 1: then from these points draw 15 14, 1312, 1110, 98, 76, 54, and 32, all parallel to ha; and the outlines of the steps will be finished. From the point 16 draw 16 A parallel to ha, and A x 16 will be part of the flat at the top of the uppermost step.

Fig. 35.

This done, shade the work as in fig. 35. and the whole will be finished.

PROB. 29. To put stairs with flats and opening in perspective, standing on a horizontal pavement of squares.

Fig. 36.

In fig. 36. having made S the point of fight, and drawn a reticulated pavement AB with black lead lines, which may be rubbed out again; at any distance from the fide AB of the pavement which is nearest to the eye, and at any point where you choose to begin the stair at that distance, as a, draw Ga parallel to BA, and take a b at pleasure for the height of each step.

Take a b in your compasses, and set that extent as many times upward from F to E as is equal to the first required number of steps O, N, M, L, K; and from these points of division in EF draw 1 b, 2 d, 3 f, 4 h, and E k, all equidistant from one another, and parallel to Fa: then draw the equidiffant upright lines ab, td, uf, vh, wk, and Im, all perpendicular to Fa: then draw m b, touching the outer corners of these steps at m, k, h, f, d, and b; and draw n s parallel to m b, as far from it as you want the length of the steps K, L, M, N, O to be.

Towards the point of fight S drawn mn, 15, ko, i6, hp, fq, dr, and bs. Then (parallel to the bottomline BA) through the points n, o, p, q, r, s, draw n 8; 5, 14; 6, 15; 7, 16; 1, 17; and 2 s: which done, draw n 5 and o 6 parallel to l m, and the outlines of the steps K, L, M, N, O will be finished.

At equal distances with that between the lines marked 8 and 14, draw the parallel lines above marked 9 10 11 12 and 13; and draw perpendicular lines upwards from the points n, o, p, q, r, s, as in the figure.

Make H m equal to the intended breadth of the flat above the square opening at the left hand, and draw HW toward the point of fight S, equal to the intended length of the flat; then draw WP parallel to Hm, and the

cutlines of the flat will be finished.

Take the width of the opening at pleasure, as from F to C, and draw CD equal and parallel to FE. Draw GH parallel to CD, and the short lines marked 33, 34, &c. just even with the parallel lines 1, 2, &c. From the points where these short lines meet CD draw lines toward the point of fight S till they meet DE; then from the points where the lines 38, 39, 40, &c. of the pavement meet Cy, draw upright lines parallel to CD; and the lines which form the opening will be finished.

The steps P, Q, R, S, T, and the flat U above the arch V, are done in the same manner with those in fig. 34. as taught in Prob. 28. and the equidiftant parallel lines marked 18, 19, &c. are directly even with those on the left-hand side of the arch V, and the upright lines on the right-hand fide are equidiffant with those on the left.

From the points where the lines 18, 19, 20, &c. meet the right-hand fide of the arch, draw lines toward the point of fight S; and from the points where the pavement lines 29, 30, 31, 32, meet the line drawn from A towards the point of fight, draw upright lines toward the top of the arch.

Having done the top of the arch, as in the figure, and the few steps to the right hand thereof, shade the whole as in fig. 37. and the work will be finished.

PROB. 30. To put upright conical objects in perspective, as if standing on the sides of an oblong square, at distances from one another equal to the breadth of the ob-

In fig. 38. the bases of the upright cones are per-Fig. 38. spective circles inscribed in squares of the same diameter; and the cones are fet upright on their bases by the same rules as are given for pyramids, which we need not repeat here.

In most of the foregoing operations we have considered the observer's eye to be above the level of the tops of all the objects, as if he viewed them when standing on high ground. In this figure, and in fig. 41. and fig. 42. we shall suppose him to be standing on low ground, and the tops of the objects to be above the level of his eye.

In fig. 38. let AD be the perspective breadth of the Fig. 32. oblong square ABCD; and let A a and D d (equal to Λ a) be taken for the diameters of the circular bases of the two cones next the eye, whose intended equal heights

shall be AE and DF.

Having made S the point of fight in the horizon parallel to AD, and found the proper point of distance therein, draw AS and aS to contain the bases of the cones on the left-hand fide, and DS and dS for those on

the right.

Having made the two first cones at A and D of equal height at pleasure, draw ES and FS from their tops to the point of fight, for limiting the perspective heights of all the rest of the cones. Then divide the parallelogram ABCD into as many equal perspective squares as you please; find the bases of the cones at the corners of these squares, and make the cones thereon, as in the figure.

If you would represent a ceiling equal and parallel to ABCD, supported on the tops of these cones, draw EF, then EFGH shall be the ceiling; and by drawing ef parallel to EF, you will have the thickness of the floor-boards and beams, which may be what you

This shows how any number of equidistant pillars may be drawn of equal heights to support the ceiling of a long room, and how the walls of fuch a room may be represented in perspective at the backs of these pillars. It also shows how a street of houses may be drawn in perspective.

PROB. 31. To put a square hollow in perspective, the depth of which shall bear any assigned proportion to its

Fig. 41. is the representation of a square hollow, Fig. 41. of which the depth AG is equal to three times its width AD; and S is the point of fight over which the observer's eye is supposed to be placed, looking perpendicularly down into it, but not directly over the

Draw AS and DS to the point of fight S; make ST the horizon parallel to AD, and produce it to such a length beyond T that you may find a point of distance therein not nearer S than if AD was seen under an angle of 60 degrees.

Draw DU to the point of distance, intersecting AS in B; then from the point B draw BC parallel to AD;

Fig. 37.

and you will have the first perspective square ABCD,

equal to a third part of the intended depth.

Draw CV to the point of distance, intersecting AS in E; then from the point E draw EF parallel to AD; and you will have the second perspective square BEFC, which, added to the former one, makes two-thirds of the intended depth.

Draw FW to the point of distance, intersecting AS in G; then from the point G draw GH parallel to AD; and you will have the third perspective square EGHF, which, with the former two, makes the whole depth AGHD three times as great as the width AD,

in a perspective view.

Divide AD into any number of equal parts, as suppose 8; and from the division-points a, b, c, d, &c. draw lines toward the point of fight S, and ending at GH; then through the points where the diagonals BD, EC, GF, cut these lines, draw lines parallel to AD; and you will have the parallelogram AGHD reticulated, or divided into 192 small and equal perspective squares.

Make AI and DM equal and perpendicular to AD; then draw IM, which will be equal and parallel to AD;

and draw IS and MS to the point of fight S.

Divide AI, IM, and MD, into the same number of equal parts as AD is divided; and from these points of division draw lines toward the point of sight S, ending respectively at GK, KL, and LH.

From those points where the lines parallel to AD meet AG and DH draw upright lines parallel to AI and DM; and from the points where these lines meet IK and LM draw lines parallel to IM; then shade the work, as in the figure.

Prob. 32. To reprefent a femicircular arch in perspective, as if it were standing on two upright walls, equal in height to the height of the observer's eye.

After having gone through the preceding operation, this will be more easy by a bare view of fig. 42. than it could be made by any description; the method being so much like that of drawing and shading the square hollow.—We need only mention, that a T b EA and DF ctd are the upright walls on which the semicircular arch is built; that S is the point of sight in the horizon Tt, taken in the centre of the arch; and d in fig. 41. is the point of distance; and that the two perspective squares ABCD and BEFC make the parallelogram AEFD of a length equal to twice its breadth AD.

Prob. 33. To represent a square in perspective, as viewed by an observer standing directly even with one of its corners.

In fig. 43. let A 9 BC be a true square, viewed by an observer standing at some distance from the corner C, and just even with the diagonal C 9.

Let ρ SP be the horizon, parallel to the diagonal AB; and S the point of fight, even with the diagonal C9. Here it will be proper to have two points of distance ρ and P, equidistant from the point of fight S.

Draw the straight line 1 17 parallel to AB, and draw A 8 and B 10 parallel to CS. Take the distance between 8 and 9 in your compasses, and set it off all the way in equal parts from 8 to 1, and from 10 to 17.—The line 1 17 should be produced a good way further

both to right and left hand from 9, and divided all the way in the fame manner.

From these points of equal division, 8, 9, 10, &c. draw lines to the point of fight S, and also to the two points of distance ρ and P, as in the figure.

Now it is plain, that acbg is the perspective representation of AgBC, viewed by an observer even with the corner C and diagonal Cg.—But if there are other such squares lying even with this, and having the same position with respect to the line 117, it is evident that the observer, who stands directly even with the corner C of the first square, will not be even with the like corners G and K of the others; but will have an oblique view of them, over the sides FG and IK, which are nearest his eye: and their perspective representations will be egf6 and hkig, drawn among the lines in the sigure: of which the spaces taken up by each side lie between three of the lines drawn toward the point of distance p, and three drawn to the other point of distance p.

PROB. 34. To represent a common chair, in an oblique perspective view.

The original lines to the point of fight S, and points Fig 432 of distance p and P, being drawn as in the preceding operation, choose any part of the plane, as lmn13, on which you would have the chair L to stand.—There are just as many lines (namely two) between l and l or l and l or l and l drawn toward the point of distance l at the left hand, as between l and l and l and l as l or l and l and l as l and l as l and l

From the four corners l, m, n, 13, of this square raise the four legs of the chair to the perspective perpendicular height you would have them: then make the seat of the chair a square equal and parallel to lmn 13, as taught in Prob. 18. which will make the two sides of the seat in the direction of the lines drawn toward the point of distance p, and the fore and back part of the seat in direction of the lines drawn to the other point of distance p. This done, draw the back of the chair leaning a little backward, and the cross bars therein tending toward the point of distance p. Then shade the work as in the figure; and the perspective chair will be sinished.

PROB. 35. To present an oblong square table in an oblique perspective view.

In fig. 43. M is an oblong square table, as seen by Fig. 432 an observer standing directly even with C 9 (see Prob. 33.), the side next the eye being perspectively parallel to the side ac of the square abc 9.—The forementioned lines drawn from the line 1 17 to the two points of distance p and P, form equal perspective squares on the ground plane.

Choose any part of this plane of squares for the feet of the table to stand upon; as at p, q, r, and s, in direction of the lines op and rs for the two long sides, and ts and qr for the two ends; and you will have the oblong square or parallelogram qrst for the part of the floor or ground plane whereon the table is to stand: and the breadth of this plane is here taken in proportion to the length as 6 to 10; so that, if the length of the table be ten feet, its breadth will be six.

On the four little perspective squares at q, r, s, and

Fig. 42.

Fig. 43.

200

t, place the four upright legs of the table, of what height you please, so that the height of the two next the eye, at o and p, shall be terminated by a straight line uv drawn to the point of distance P. This done, make the leas M of the table an oblong square, perspectively equal and parallel to the oblong square qrst on which the feet of the table stands. Then shade the whole, as in the sigure, and the work will be sinish-

If the line 1 17 were prolonged to the right and left hand, and equally divided throughout (as it is from 1 to 17), and if the lines which are drawn from p and P to the right and left hand fides of the plate were prolonged till they came to the extended line 1 17, they would meet it in the equal points of division. In forming large plans of this fort, the ends of slips of paper may be pasted to the right and left edges of the sheet on which the plan is to be formed.

Of the Anamorphofis, or reformation of distorted images.

By this means pictures that are so missapen, as to exhibit no regular appearance of any thing to the naked eye, shall, when viewed by reflection, present a regular and beautiful image. The inventor of this ingenious device is not known. Simon Stevinus, who was the first that wrote upon it, does not inform us from whom he learned it. The principles of it are laid down by S. Vauzelard in his Perspective Conique et Cylindrique; and Gaspar Schott professes to copy Marius Bettinus in his description of this piece of artificial magic.

It will be fufficient for our purpose to copy one of the simplest figures of this writer, as by this means the mystery of this art will be sufficiently unfolded. Upon the cylinder of paper, or patteboard, ABCD, fig. 44. draw whatever is intended to be exhibited, as the letters IHS. Then with a needle make perforations along the whole outline; and placing a candle, G, behind this cylinder, mark upon the ground plane the shadow of them, which will be distorted more or less, according to the position of the candle or the plane, &c. This being done, let the picture be an exact copy of this difforted image, let a metallic speculum be substituted in the place of the cylinder, and let the eye of the spectator have the same position before the cylinder that the candle had behind it. Then looking upon the speculum, he will see the differted image restored to its proper shape. The reformation of the image, he fays, will not eafily be made exact in this method, but it will be fufficiently fo to anfwer the purpose.

Other methods, more exact and geometrical than this, were found out afterwards: fo that these pictures could be drawn by certain rules, without the use of a candle. Schott quotes one of these methods from Bettinus, another from Herigonius, and another from Kircher, which may be scen in his Magia, vol. i. p. 162, &c. He also gives an account of the methods of reforming pictures by speculums of conical and other sigures.

Instead of copying any of these methods from Schott or Bettinus, we shall present our readers with that which Dr Smith hath given us in his Optics, vol. i. p. 250, as, no doubt, the best, and from which any person may easily make a drawing of this kind. The same description answers to two mirrors, one of which, sig. 39 is convex, and the other, sig. 40 is concave.

In order to paint upon a plane a deformed copy ABCDEKIHGF of an original picture, which shall appear regular, when feen from a given point O, elevated above the plane, by rays reflected from a polithed cylinder, placed upon the circle / np, equal to its given base; from the point R, which must be suppofed to lie perpendicularly under O, the place of the eye. draw two lines Ra, Re; which thall either touch the base of the cylinder, or else cut off two small equal fegments from the fides of it, according as the copy is intended to be more or less deformed. Then, taking the eye, raifed above R, to the given height RO, fomewhat greater than that of the cylinder, for a luminous point, describe the shadow aekf (of a square, fig. 39. or parallelogram standing upright upon ae Fig. 39. as a base, and containing the picture required) anywhere behind the arch Inp. Let the lines drawn from R to the extremities and divisions of the base a, b, c, d, e, cut the remotest part of the shadow in the points f, g, h, i, k, and the arch of the base in l, m, n, o, p; from which points draw the lines /AF, m BG, n CH, o DI, p EK, as if they were rays of light that came from the focus R, and were reflected from the base /np; so that each couple, /A, /R, produced, may cut off equal segments from the circle. Lastly, Transfer the lines laf, mbg, &c. and all their parts in the same order, upon the respective lines /AF; m BG, &c. and having drawn regular curves, by estimation, through the points A, B, C, D, E, through F, G, H, I, K, and through every intermediate order of points; the figure ACEKHF, fo divided, will be the deformed copy of the fquare, drawn and divided upon the original picture, and will appear fimilar to it, when feen in the polished cylinder, placed upon the base Inp, by the eye in its given place O.

The practical methods of drawing these images seem to have been carried to the greatest perfection by J. Leopold, who, in the Acta Lipsiensia for the year 1712, has described two machines, one for the images to be viewed with a cylindrical, and the other with a conical mirror. The person possessed of this instrument has nothing to do but to take any print he pleases, and while he goes over the outlines of it with one pen, another traces the anamorphosis.

By methods of this kind, groves of trees may be cut, so as to represent the appearance of men, horses, and other objects from some one point of view, which are not at all discernible in any other. This might easily be effected by one person placing himself in any particular situation, and giving directions to other persons what trees to lop, and in what manner. In the same method it has been contrived, that buildings of circular and other forms, and also whole groups of buildings confisting of walls at different distances and with different positions to one another, should be painted so as to exhibit the exact representation of particular objects, which could only be perceived in one situation. Bettinus has illustrated this method by drawings in his Apiaria.

It may appear a bold affertion to fay, that the very short sketch now given of the art of perspective is a sufficient foundation for the whole practice, and includes all the expeditious rules peculiar to the problems which most generally occur. It is, however, true, and the intelligent

Fig. 44.

Fig. 39. and 40.

telligent reader will fee, that the two theorems on which the whole rests, include every possible case, and apply with equal facility to pictures and originals in any position, although the examples are felected of perpendicular pictures, and of originals referred to horizontal planes, as being the most frequent. The scientific foundation being so simple, the structure need not be complex, nor fwell into fuch volumes as have been published on the fubject: volumes which by their fize deter from the perufal, and give the fimple art the appearance of intricate mystery; and by their prices, defeat the defign of their authors, viz. the differination of knowledge among the practitioners. The treatifes on perspective acquire their bulk by long and tedious discourses, minute explanations of common things, or by great numbers of examples; which indeed do make some of these books valuable by the variety of curious cuts, but do not at all instruct the reader by any improvements made in the art itself. For it is evident that most of those who have treated this subject have been more conversant in the practice of defigning than in the principles of geometry; and therefore when, in their practice, the cases which have offered have put them on trying particular expedients, they have thought them worth communicating to the public as improvements in the art; and each author, fond of his own little expedient, (which a scientific person would have known for an easy corollary from the general theorem), has made it the principle of a practical fystem—in this manner narrowing instead of enlarging the knowledge of the art; and the practitioner tired of the bulk of the volume, in which a fingle maxim is tediously spread out, and the principle on which it is founded kept out of his fight, contents himself with a remembrance of the maxim (not underflood), and keeps it flightly in his eye to avoid gross errors. We can appeal to the whole body of painters and draughtsmen for the truth of this affertion; and it must not be considered as an imputation on them of remissness or negligence, but as a necessary consequence of the ignorance of the authors from whom they have taken their information. This is a strong term, but it is not the less just. Several mathematicians of eminence have written on perspective, treating it as the subject of pure geometry, as it really is; and the performances of Dr Brook Taylor, Gravefande, Wolf, De la Caille, Emerson, are truly valuable, by presenting the art in all its perspicuous simplicity and universality. The works of Taylor and Emerson are more valuable. on account of the very ingenious and expeditious constructions which they have given, suited to every poffible case. The merit of the first author has been univerfally acknowledged by all the British writers on the fubject, who never fail to declare that their own works are composed on the principle of Dr Brook Taylor; but any man of science will see that these authors have either not understood them, or aimed at pleasing the public by fine cuts and uncommon cases; for without exception, they have omitted his favourite constructions, which had gained his predilection by their universality, and attached themselves to inferior methods, more usually expedient perhaps, or inventions (as they thought) of their own. What has been given in this article is not professed to be according to the principles of Dr Brook Taylor, because the principles are not peculiar to him, but the necessary results of the theory itself, and inculcated by every mathematician who had taken the trouble to consider the subject. They are sufficient not only for directing the ordinary practice but also for suggesting modes of construction for every case out of the common track. And a person of ingenuity will have a laudable enjoyment in this, without much stretch of thought, inventing rules for himself; and will be better pleased with such fruits of his own ingenuity, than in reading the tedious explanation of examples devised by another. And for this purpose we would, with Dr Taylor, "advise all our readers not to be contented with the scheme they sind here; but, on every occasion, to draw new ones of their own, in all the variety of circumstances they can think of. This will take up more time at first, but they will find the vast benefit and pleasures of the extensive notions it will give them of

the nature of the principles."

The art of perspective is necessary to all arts where there is any occasion for defigning; as architecture, fortification, carving, and generally all the mechanical arts; but it is more particularly necessary to the art of painting, which can do nothing without it. A figure in a picture, which is not drawn according to the rules of perspective, does not represent what is intended, but fomething else. Indeed we hesitate not to say, that a picture which is faulty in this particular, is as blameable, or more fo, than any composition in writing which is faulty in point of orthography, or grammar. It is generally thought very ridiculous to pretend to write a heroic poem, or a fine discourse, upon any subject, without understanding the propriety of the language in which we write; and to us it feems no lefs ridiculous for one to pretend to make a good picture without understanding perspective: Yet how many pictures are there to be feen, that are highly valuable in other respects, and yet are entirely faulty in this point? Indeed this fault is fo very general, that we cannot remember that we ever have feen a picture that has been entirely without it; and what is the more to be lamented, the greatest ma-sters have been the most guilty of it. Those examples make it to be the less regarded; but the fault is not the less, but the more to be lamented, and deserves the more care in avoiding it for the future. The great occasion of this fault, is certainly the wrong method that is generally used in educating of persons in this art: for the young people are generally put immediately to drawing; and when they have acquired a facility in that, they are put to colouring. And these things they learn by rote, and by practice only; but are not at all instructed in any rules of art. By which means, when they come to make any defigns of their own, though they are very expert at drawing out and colouring every thing that offers itself to their fancy; yet for want of being instructed in the strict rules of art, they do not know how to govern their inventions with judgement, and become guilty of fo many gross mistakes; which prevent themfelves, as well as others, from finding that fatisfaction they otherwise would do in their performances. To correct this for the future, we would recommend it to the masters of the art of painting, to consider if it would not be necessary to establish a better method for the education of their scholars, and to begin their instructions with the technical parts of painting, before they let them loofe to follow the inventions of their own uncultivated imaginations,.

The art of painting, taken in its full extent, confifts of two parts; the inventive, and the executive. The inventive part is common with poetry, and belongs more properly and immediately to the original defign (which it invents and disposes in the most proper and agreeable manner) than to the picture, which is only a copy of that defign already formed in the imagination of the artist. The perfection of this art of painting depends upon the thorough knowledge the artist has of all the parts of his subject; and the beauty of it confists in the happy choice and disposition that he makes of it: And it is in this that the genius of the artist discovers and shows itfelf, while he indulges and humours his fancy, which here is not confined. But the other, the executive part of painting, is wholly confined and strictly tied to the rules of art, which cannot be difpenfed with upon any account; and therefore in this the artist ought to govern himself entirely by the rules of art, and not to take any liberties whatfoever. For any thing that is not truly drawn according to the rules of perspective, or not truly coloured or truly shaded, does not appear to be what the artist intended, but something else. Wherefore, if at any time the artist happens to imagine that his picture would look the better, if he should swerve a little from these rules, he may affure himself, that the fault belongs to his original defign, and not to the strictness of the rules; for what is perfectly agreeable and just in the real original objects themselves, can never

appear defective in a picture where those objects are exactly copied.

Therefore to offer a short hint of thoughts we have fome time had upon the method which ought to be followed in instructing a scholar in the executive part of painting: we would first have him learn the most common effections of practical geometry, and the first elements of plain geometry and common arithmetic. When he is sufficiently perfect in these, we would have him learn perspective. And when he has made some progress in this, so as to have prepared his judgement with the right notions of the alterations that figures must undergo, when they come to be drawn on a flat, he may then be put to drawing by view, and be exercised in this along with perspective, till he comes to be sufficiently perfect in both. Nothing ought to be more familiar to a painter than perspective; for it is the only thing that can make the judgement correct, and will help the fancy to invent with ten times the ease that it could do without it.

We earnestly recommend to our readers the careful perusal of Dr Taylor's Treatife, as published by Colson in 1749, and Emerson's published along with his Op-They will be furprifed and delighted with the instruction they will receive; and will then truly estimate the splendid volumes of other authors and see their fri-

P E R

Peripec-

PERSPECTIVE is also used for a kind of picture or painting, frequently seen in gardens, and at the ends of galleries; defigned expressly to deceive the fight by representing the continuation of an alley, a building, land-

fcape, or the like.

Aerial PERSPECTIVE, is sometimes used as a general denomination for that which more restrictedly is called aerial perspective, or the art of giving a due diminution or degradation to the strength of light, shade, and colours of objects, according to their different distances, the quantity of light which falls upon them, and the medium through which they are feen; the chiaro obscuro, or clair obscure, which consists in expressing the different degrees of light, shade, and colour of bodies, arifing from their own shape, and the position of their parts with respect to the eye and neighbouring objects, whereby their light or colours are affected; and keeping, which is the observance of a due proportion in the general light and colouring of the whole picture, fo that no light or colour in one part may be too bright or flrong for another. A painter, who would fucceed in aerial perspective, ought carefully to fludy the effects which distance, or different degrees or colours of light, have on each particular original colour, to know how its hue or strength is changed in the several circumstances that occur, and to represent it accordingly. As all objects in a picture take their measures in proportion to those placed in the front, so, in aerial perspective, the strength of light, and the brightness of the colours of objects close to the picture, must serve as a measure, with respect to which all the same colours at several di-

E R

stances must have a proportional degradation in like cir- Perspec-

Bird's eye view in PERSPECTIVE, is that which supposes the eye to be placed above any building, &c. as in the air at a confiderable distance from it. This is applied in drawing the representations of fortifications, when it is necessary not only to exhibit one view as seen from the ground, but so much of the several buildings as the cye can possibly take in at one time from any situation. In order to this, we must suppose the eye to be removed a confiderable height above the ground, and to be placed as it were in the air, fo as to look down into the building like a bird that is flying. In representations of this kind, the higher the horizontal line is placed, the more of the fortification will be feen, and vice versa.

PERSPECTIVE Machine, is an instrument by which any person, without the help of the rules of art, may delineate the true perspective figures of objects. Mr Ferguson has described a machine of this fort of which

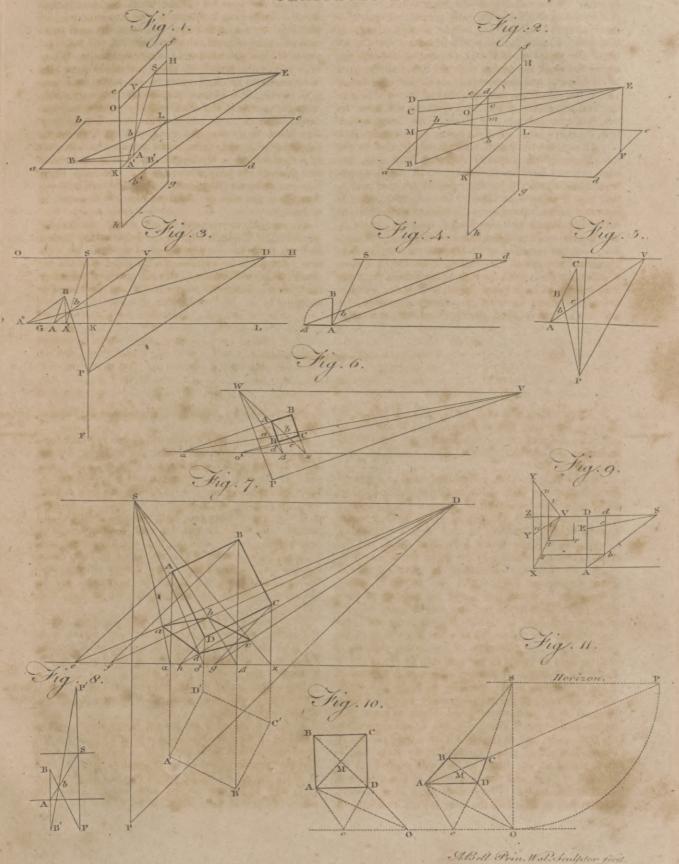
he ascribes the invention to Dr Bevis.

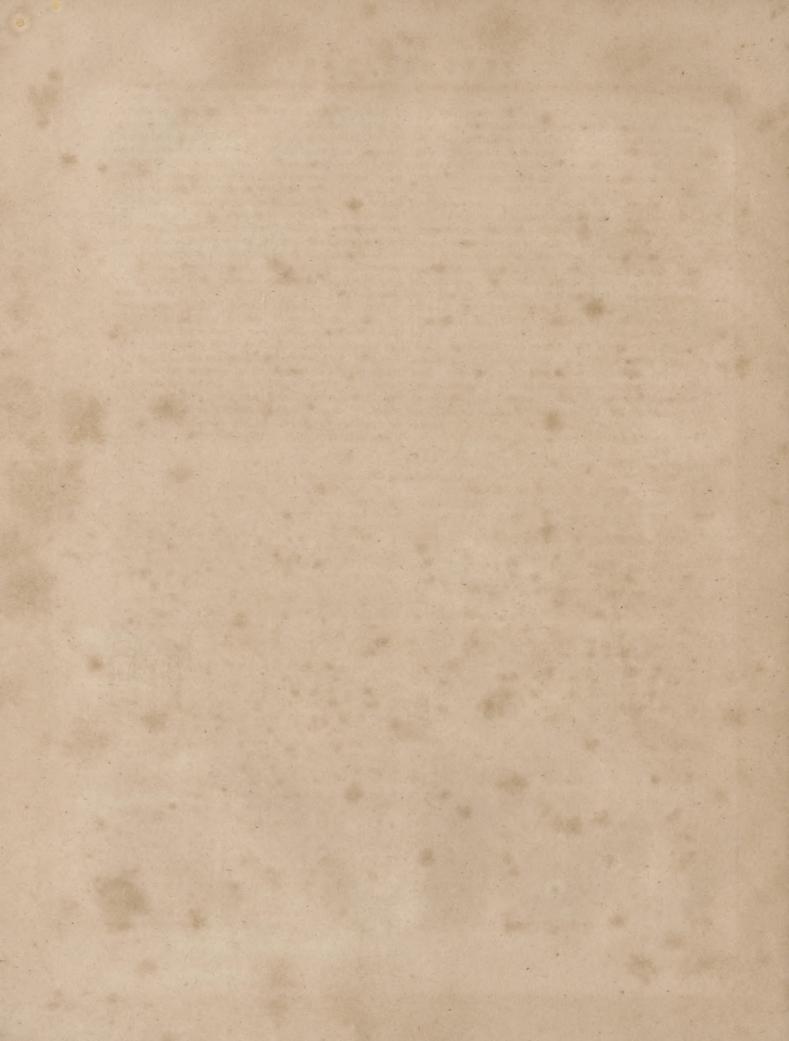
Fig. 45. is a plan of this machine, and fig. 46. is a Fig. 45. representation of it when made use of in drawing distant and 46.

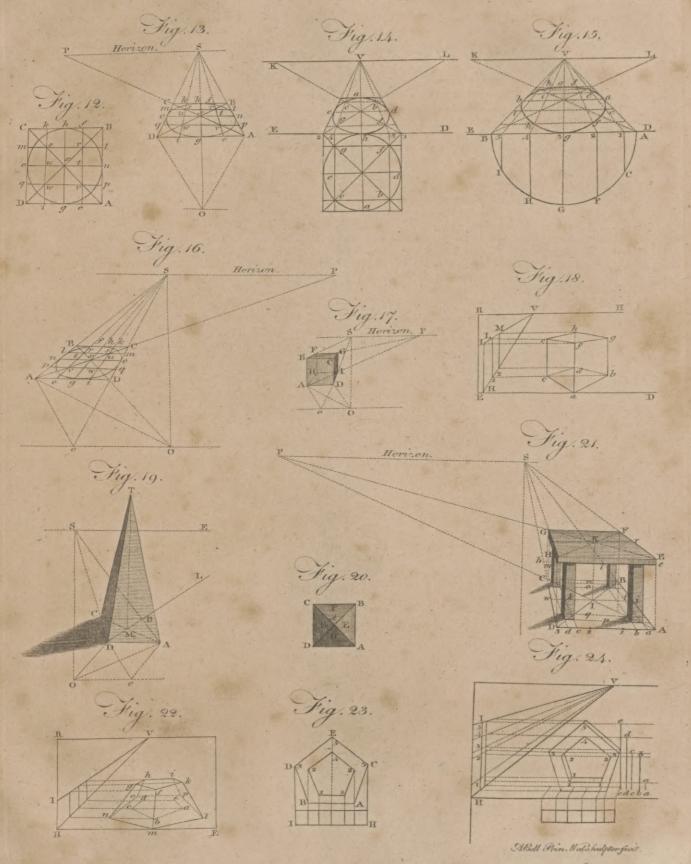
objects in perspective.

In fig. 45. abef is an oblong fquare board, repre-fented by ABEF in fig. 46. κ and y (X and Y) are two hinges on which the part c / d (CLD) is moveable. This part confifts of two arches or portions of circles cml (CML) and dnl (DNL) joined together at the top l (L), and at bottom to the cross bar dc (DC), to which one part of each linge is fixed, and the other

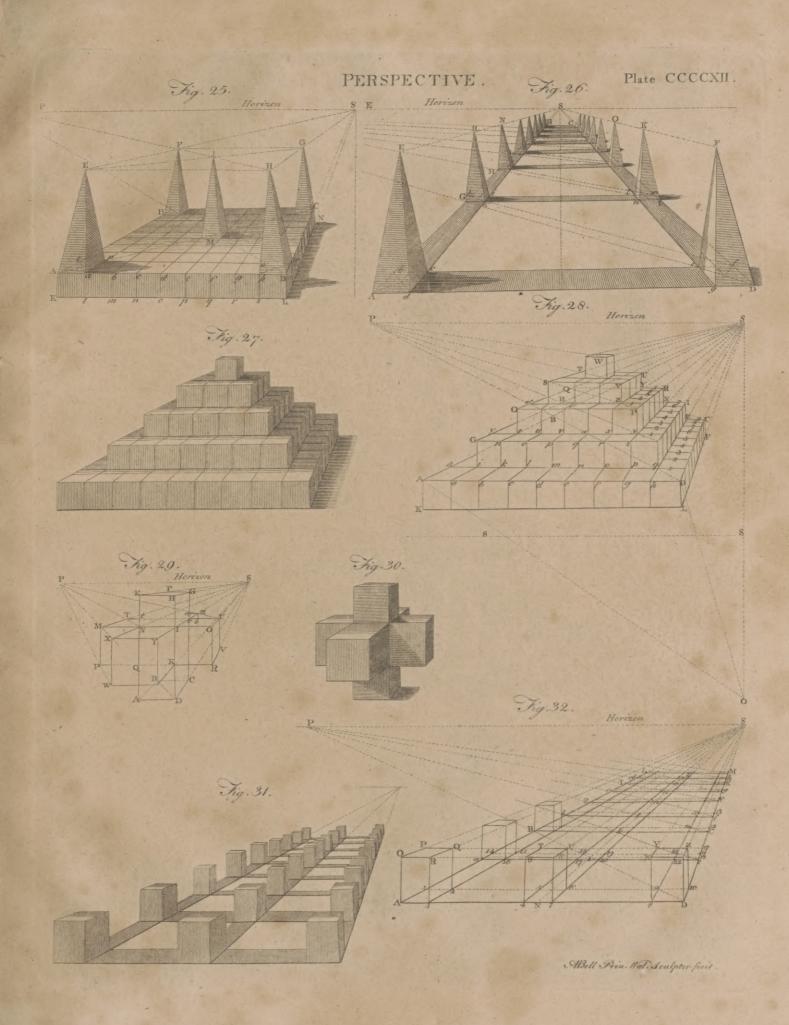
enamobilizate



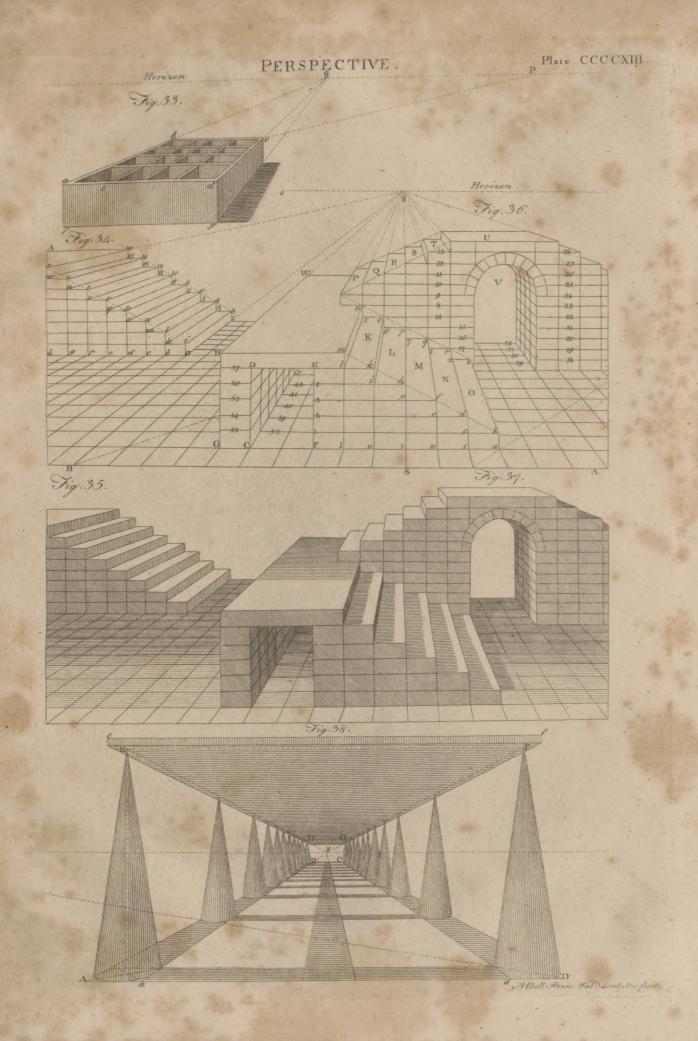




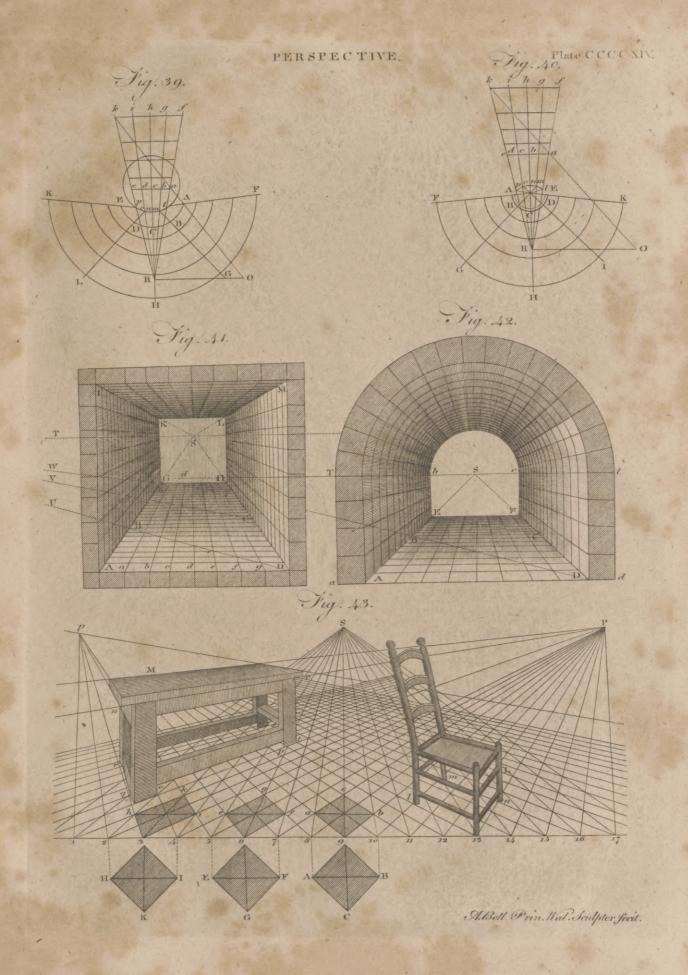




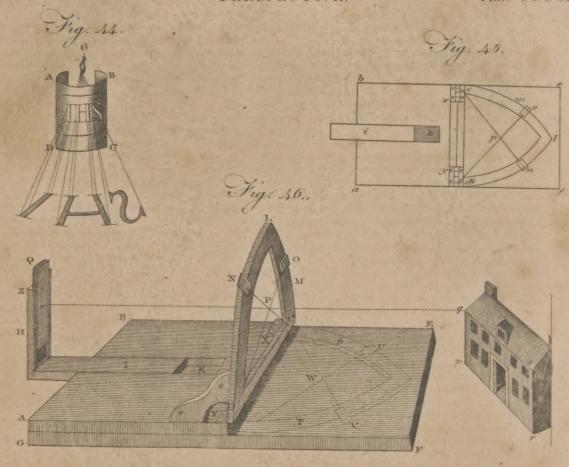


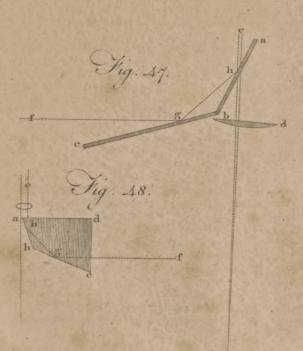






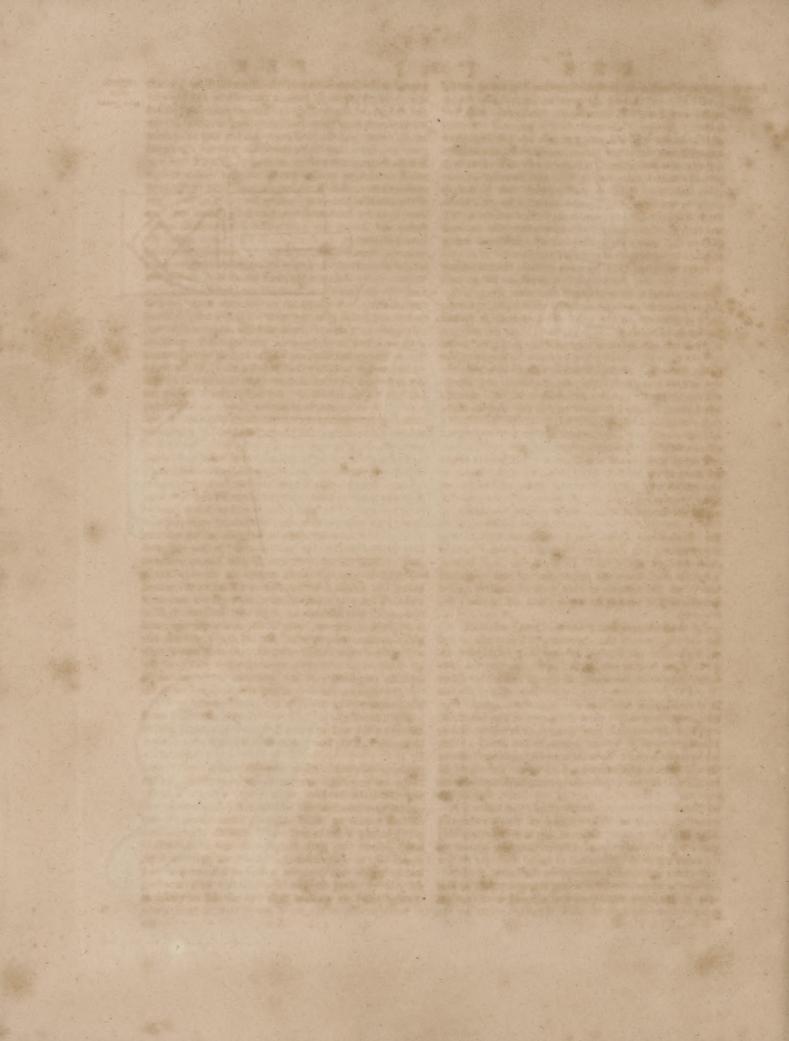








ABell Prin. Wal. Soulptor feed.



part to a flat board, half the length of the board a bef (ABEF), and glued to its uppermost side. The centre of the arch cml is at d, and the centre of the arch dnl

On the outer fide of the arch dnl is a sliding piece n (much like the nut of the quadrant of altitude belonging to a common globe), which may be moved to any part of the arch between d and l: and there is fuch another slider o on the arch cml, which may be set to any part between c and l.-A thread cpn (CPN) is firetched tight from the centre c(C) to the flider n(N), and fuch another thread is stretched from the centre d (D) to the flider o (O); the ends of the thread being fastened to these centres and sliders.

Now it is plain, that, by moving these sliders on their respective arches, the intersection p (P) of the threads may be brought to any point of the open space within the arches.—In the groove k (K) is a straight sliding bar i (1), which may be drawn further out, or pushed

further in at pleasure.

To the outer end of this bar I (fig. 46.) is fixed the upright piece HZ, in which is a groove for receiving the fliding piece Q. In this flider is a small hole r for the eye to look through, in using the machine: and there is a long flit in HZ, to let the hole r be feen through when the eye is placed behind it, at any height of the hole above the level of the bar I.

How to delineate the perspective figure of any distant

object or objects, by means of this machine.

Suppose vou wanted to delineate a perspective reprefentation of the house qsrp (which we must imagine to be a great way off, without the limits of the plate), place the machine on a steady table, with the end EF of the horizontal board ABEF toward the house, so that, when the Gothic-like arch DLC is fet upright, the middle part of the open space (about P) within it may be even with the house when you place your eye at Z and look at the house through the small hole r. Then fix the corners of a square piece of paper with four wafers on the furface of that half of the horizontal board which is nearest the house; and all is ready for drawing.

Set the arch upright, as in the figure; which it will be when it comes to the perpendicular fide t of the upright piece st fixed to the horizontal board behind D. Then place your eye at Z, and look through the hole r at any point of the house, as q, and move the sliders N and O till you bring the intersection of the threads at P directly between your eye and the point q: then put down the arch flat upon the paper on the board, as at ST, and the intersection of the threads will be at W. Mark the point W on the paper with the dot of a black lead pencil, and fet the arch upright again as before: then look through the hole r, and move the fliders N and O till the interfection of the threads comes between your eye and any other point of the house, as p: then put down the arch again to the paper, and make a pencil mark thereon at the interfection of the threads, and draw a line from that mark to the former one at W; which line will be a true perspective representation of the corner pq of the house.

Proceed in the same manner, by bringing the interfection of the threads fuccessively between your eye and other points of the outlines of the house, as r, s, &c. and put down the arch to mark the like points on the

Vol. XVI. Part I.

paper, at the interfection of the threads: then connect Perfuecthese points by straight lines, which will be the perspective outlines of the house. In like manner find points for the corners of the door and windows, top of the house, chimneys, &c. and draw the finishing lines from point to point: then shade the whole, making the lights and shades as you see them on the house itself, and you will have a true perspective figure of it .-- Great care must be taken, during the whole time, that the position of the machine be not shifted on the table; and to prevent fuch an inconvenience, the table should be very strong and steady, and the machine fixed to it either by icrews or clamps.

In the same way, a landscape, or any number of objects within the field of view through the arch, may be delineated, by finding a fufficient number of perspective points on the paper, and connecting them by straight or curved lines as they appear to the eye. And as this makes every thing in perspective equally easy, without taking the trouble to learn any of the rules for drawing, the operations must be very pleasing and agreeable. Yet as science is still more so, we would by all means recommend it to our readers to learn the rules for drawing particular objects; and to draw landscapes by the eye, for which, we believe, no perspective rules can be given. And although any thing may be very truly drawn in perspective by means of this machine, it cannot be faid that there is the least degree of science in

going that way to work.

The arch ought to be at least a foot wide at bottom, that the eye at Z may have a large field of view through it: and the eye should then be, at least, 101 inches from the intersection of the threads at P when the arch is set upright. For if it be nearer, the boundaries of view at the fides near the foot of the arch will subtend an angle at Z of more than 60 degrees, which will not only strain the eye, but will also cause the outermost parts of the drawing to have a difagreeable appearance. To avoid this, it will be proper to draw back the fliding bar I, till Z be 141 inches distant from P; and and then the whole field of view, through the foot wide arch, will not subtend an angle to the eye at Z of more than 45 degrees; which will give a more eafy and pleasant view, not only of all the objects themselves, but also of their representations on the paper whereon they are delineated. So that, whatever the width of the arch be, the distance of the eye from it should be in this proportion: As 12 is to the width of the arch, fo is 141 to the distance of the eye (at Z) from it.

If a pane of glass, laid over with gum water, be fixed into the arch, and fet upright when dry, a person who looks through the hole r may delineate the objects upon the glass which he sees at a distance through and beyond it, and then transfer the delineation to a paper put upon the glass, as mentioned in the beginning of the

article PERSPECTIVE.

Mr Peacock likewife invented three fimple instruments for drawing architecture and machinery in perspective, of which the reader will find sketches and descriptions in the 75th volume of the Philosophical Transactions. These descriptions are not inserted here, because we do not think the instruments superior to that described by Ferguson, and because we wish that our readers who have occasion to draw may make themselves fo much mafters of the art of perspective, as to be above

Perspect the aid of such mechanical contrivances. But for the fake of those whose opportunities of improvement in the art do not enable them to practife it without fuch helps, we annex the following description of an instrument invented for this purpose by Dr Wollaston, to which he

has given the name of Camera Lucida.

"Having a short time since (says the author) amused myself with attempts to sketch various interesting views, without an adequate knowledge of the art of drawing, my mind was naturally employed in facilitating the means of transferring to paper the apparent relative pofitions of the objects before me; and I am in hopes that the instrument, which I contrived for this purpose, may be acceptable even to those who have attained to greater proficiency in the art, on account of the many advantages it possesses over the camera obscura.

"The principles on which it is constructed will probably be most distinctly explained by tracing the succesfive steps, by which I proceeded in its formation.

"While I look directly down at a sheet of paper on my table, if I hold between my eye and the paper a piece of plain glass, inclined from me downwards at an angle of 45°, I fee by reflection the view that is before me, in the same direction that I see my paper through the glass. I might then take a sketch of it; but the

position of the objects would be reversed.

"To obtain a direct view, it is necessary to have two reflections. The transparent glass must for this purpose be inclined to the perpendicular line of fight only the half of 45°, that it may reflect the view a fecond time from a piece of looking-glass placed beneath it, and inclined upwards at an equal angle. The objects now appear as if feen through the paper in the same place as before; but they are direct instead of being inverted, and they may be difcerned in this manner fufficiently

well for determining the principal positions.

"The pencil, however, and any object, which it is to trace, cannot both be feen distinctly in the same state of the eye, on account of the difference of their distances, and the efforts of successive adaption of the eye to one or to the other, would become painful if frequently repeated. In order to remedy this inconvenience, the paper and pencil may be viewed through a convex lens of such a focus, as to require no more effort than is necessary for seeing the distant objects distinctly. These will then appear to correspond with the paper in distance as well as direction, and may be drawn with facility, and with any defired degree of precision.

"This arrangement of glaffes will be best understood from inspecting fig. 47. ab in the transparent glass; bc the lower reflector; bd a convex lens (of 12 inches focus); e the position of the eye; and fghe the course

of the rays.

" In some cases a different construction will be preferable. Those eyes, which without affistance are adapted to feeing near objects alone, will not admit the use of a convex glass; but will on the contrary require one that is concave to be placed in front, to render the distant objects distinct. The frame for a glass of this construction is represented at ik, (fig. 49.) turning upon the same hinge at h with a convex glass in the frame I m, and moving in such a manner, that either of the glaffes may be turned alone into its place, as may be necessary to suit an eye that is long or short-sighted.

Those persons, however, whose fight is nearly perfect, Perspec-

may at pleasure use either of the glasses.
"The instrument represented in that figure differs moreover in other respects from the foregoing, which I have chosen to describe first, because the action of the reflectors there employed would be more generally understood. But those who are conversant with the science of optics will perceive the advantage that may be derived in this inflance from prismatic reflection; for when a ray of light has entered a folid piece of glass, and falls from within upon any furface, at an inclination of only twenty-two or twenty-three degrees, as above supposed, the refractive power of the glass is fuch as to fuffer none of that light to pass out, and the furface becomes in this case the most brilliant reflector that can be employed.

" Fig. 48. reprefents the fection of a folid prismatic piece of glass, within which both the reflections requifite are effected at the furfaces ab, bc, in fuch a manher that the ray fg, after being reflected first at g, and again at h, arrives at the eye in a direction he at right

angles to fg.

"There is another circumstance in this construction necessary to be attended to, and which remains to be explained. Where the reflection was produced by a piece of plain glass, it is obvious that any objects behind the glass (if sufficiently illuminated) might be seen through the glass as well as the reflected image. But when the prismatic reflector is employed, fince no light can be transmitted directly through it, the eye must be so placed that only a part of its pupil may be intercepted by the edge of the prism, as at e, fig. 48. The distant objects will then be feen by this portion of the eye, while the paper and pencil are seen past the edge of the prism by the remainder of the pupil.

"In order to avoid inconvenience that might arise from unintentional motion of the eye, the relative quantities of light to be received from the object, and from the paper, are regulated by a small hole in a piece of brass, which by moving on a centre at c, fig. 49. is capable of adjustment to every inequality of light that is

likely to occur.

" Since the fize of the whole instrument, from being fo near the eye, does not require to be large, I have on many accounts preferred the fmallest fize that could be executed with correctness, and have had it constructed on fuch a scale, that the lenses are only three fourths of an inch in diameter.

"Though the original defign, and principal use of this instrument is to facilitate the delineation of objects in true perspective, yet this is by no means the sole purpose to which it is adapted; for the same arrangement of reflectors may be employed with equal advantage for copying what has been already drawn, and may thus affift a learner in acquiring at least a correct outline of any subject.

" For this purpose the drawing to be copied should be placed as nearly as may be at the same distance before the instrument that the paper is beneath the eye-hole. for in that case the fize will be the same, and no lens will be necessary either to the object, or to the pencil.

" By a proper use of the same instrument, every purpose of the pentagraph may also be answered; as a painting may be reduced in any proportion required, by plaPerspec- cing it at a distance in due proportion greater than that of the paper from the instrument. In this case a lens becomes requisite for enabling the eye to see at two unequal diffances with equal diffinctness, and in order that one lens may fuit for all these purposes, there is an advantage in carrying the height of the stand according to the proportion in which the reduction is to

> "The principles on which the height of the stem is adjusted will be readily understood by those who are accustomed to optical considerations. For as in taking a perspective view the rays from the paper are rendered parallel, by placing a lens at the distance of its principal focus from the paper, because the rays received from the distant objects are parallel; so also when the object seen by reflection is at fo short a distance that the rays received from it are in a certain degree divergent, the rays from the paper should be made to have the same degree of divergency in order that the paper may be feen distinctly by the same eye; and for this purpose the lens must be placed at a distance less than its principal focus. The stem of the instrument is accordingly marked at certain distances to which the conjugate foci are in the feveral proportions of 2, 3, 4, &c. to 1, fo that distinct vision may be obtained in all cases, by placing the painting proportionally more distant.

> "By transposing the convex lens to the front of the instrument and reversing the proportional distances, the artist might also enlarge his smaller sketches with every desirable degree of correctness, and the naturalist might delineate minute objects in any degree magnified."

PERSPECTIVE Glass, or Graphical Perspective. See

DIOPTRICS.

PERSPIRATION, in Physiology, the excretion of a fluid through the pores of the skin. Perspiration is diftinguished into fensible and infensible; and here fensible perspiration is the same with sweating, and insensible

perfpiration that which escapes the notice of the senses.

PERSPICUITY, properly signifies the property which any thing has of being easily seen through; hence it is generally applied to fuch writings or discourses as

are easily understood.

PERSPICUITY, in composition. See ORATORY, No

PERTH, a county of Scotland, including Menteith, Braidalbin, Athol, Stratherne, part of Gowrie, and Perth Proper; is bounded by Badenoch and Lochaber on the north and north-west; by Marr on the northeast; by Argyle and Lennox on the west and southwest; having Clackmannanshire, part of Stirlingshire, and the Forth to the fouth; the shires of Kinross and Fife to the fouth-east, and Angus' to the east. It extends above 70 miles in length, and near 60 at its greatest breadth, exhibiting a variety of Highlands and Lowlands; mountains, hills, dales, and straths, diversified with pasture grounds, corn fields, and meadows; rivers, lakes, forests, woods, plantations, inclosures, towns, villages, and a great number of elegant feats, beautifully fituated, belonging to noblemen and gentlemen. The chief rivers of Perthshire are the Tay, the Teith, and the Erne, besides a great number of subordinate streams. The river Tay is famous for its falmon-fishery. The river Erne rifes from Loch Erne, a lake seven miles long, in the mountainous country of Stratherne: this river, after a course of 34 miles from west to east, during which it receives many streams and rivulets, falls Perth. into the Tay at Abernethy.

"The Tay (fays a late traveller), on the fouthern Heron's bank of which the city of Perth stands, is truly a noble Tour, 1792. river. It rifes in Braidalbin, on the frontiers of Lorne. Before it has advanced many miles from its fource, its stream is considerably augmented by the accession of several fmall rills. Soon after, it diffuses its waters into a fmall lake called Loeh Dochart; and indeed the river itself there bears rather the name of the Dochart. Continuing its course from Loch Dochart, it soon again expands into another lake. Out of this it proceeds to Killin, still bearing, if I remember right, the name of the Dochart. Here it meets with another river which flows hither by a more north-easterly course. The waters are diffused into the famous Loch Tay, 16 miles in length. Issuing from this spacious lake at Kenmore, the Tay is foon after increased by the accession of the Lyon. It proceeds onward in an eastern direction through Athol, receiving as it advances all the waters in the country, till at Logierait it is joined by the large river of Tummel. Here it bends to the fouth, and advancing about eight miles reaches Dunkeld; whence taking a more northern direction, it continues its course towards Perth; being as it advances still augmented by the accession of various tributary streams, the most considerable of which is the Almond. At Perth it turns to the fouth-east, and receiving as it proceeds the waters of the Erne, passes by Abernethy, once the capital of the Pictish kingdom. Soon after this, it expands itself to the breadth of three miles. Contracting its breadth, as it approaches Dundee, it there opens into the German ocean.

"Such is the noble river; on the fouthern bank of which, where it has increased into a vast body of water, and not a great many miles above where it difcharges itself into the ocean, Perth is advantageously fituated. A person acquainted with the general character of great rivers, and with their influence in determining the aspect and the fertility of the districts through which they pass, might readily, without farther knowledge of the local circumstances than what is conveyed in this account of the course of the Tay, and of the fituation of Perth upon it, conclude the city to stand amid delightful scenery, and to enjoy most of the advantages which natural circumstances afford, for the

promotion of trade and industry."

Freestone, lead, iron, and copper ores, with some lapis calaminaris, are found in different parts of Perthshire. The foil, being generally rich and well manured, produces excellent wheat, and all kinds of grain. The hilly country abounds with pasture for the black cattle, horses, sheep, goats, and deer. The heaths, woods, and forests, are stored with variety of game; the rivers teem with falmon and trout; the gardens and orchards are stored with all kinds of herbs, roots, apples, pears, cherries, plums, and almost every species of fruit found in South Britain. The houses and attire, even of the commonalty, are neat and decent; and every peafant can produce a good quantity of linen, and great store of blankets, made in his own family. Indeed, this is the case through all the Lowlands of Scotland. Flax is reared by every husbandman; and being dressed at home, is fpun by the females of his family into thread for linen; this is woven by country weavers, of whom there is a great number through all the Low Country, and after-

Parishes.

Dron

Dull

25 Dumbarnie

Dumblane

Dunkeld, Little

Dunkeld

Dunning

Forteviot

Fortingal

Fosfaway

35 Foulis, Wester

Glendovan

Kilmadock

Kilfpindie

Kincardine

Kinfauns

Kinloch

Kinnaird

Kinnoul

50 Kirkmichael

Lecropt

Lethendy

Logierait

55 Longforgan

Logie

Inchture

Gask

40 Kenmore

Killin

45 Kinclaven

Foulis, Easter

Forgandenny

30 Errol

Population

in 1755.

598

5748

764

2728

1208

2919

1491

2229

1295

1164

3859

1765

1706

586

385

220

893

3067

1968

2730

1250

828

993

639

331

1163

2689

577

346

1985

2487

1285

Population in

1790-1798.

450

4676

1250

2750

1773

1600

2685

978

970

3914

1505

1224

648

486

240

1000

3463

2360

3209

718

2068

1150

628

372

404

1465

2200

420

367

1500

2200

1526

Perth.

wards heached or whitened by the good-wife and her fervants; fo that the whole is made fit for use at a very fmall expence. They likewife wash, card, spin, and weave their wool into tartan for plaids, kerfies, and coarse russet-cloth, for common wearing, besides great part of it which is knit into caps, stockings, and mitts. Plaids, made of the finest worsted, are worn either plain or variegated, as veils, by women of the lower, and even of the middle rank; nay, fome years ago, ladies of fashion wore filken plaids with an undress: this is a loose piece of drapery, gathered about the head, flioulders, and waift, on which it is croffed, fo as to leave the hands at liberty, and produces a very good effect to the eye of the spectator. The Lowlanders of Perthshire are civilized, hospitable, and industrious: the commerce of the country confifts chiefly in corn, linen, and black cattle: there are, moreover, fome merchants who trade to foreign countries.—For an account of the different divifions of this county above-mentioned, fee the articles as they occur in the order of the alphabet.

PERTH Proper, stretching 20 miles in length, and at fome places 15 in breadth, is bounded on the north-east, by the Carse of Gowrie; on the east, by Angus; on the west, by Stratherne; on the north, by Athol; and on the south, by the frith of Tay. This is likewise a fruitful country, populous and well cultivated, abounding with gentlemen who possess opulent estates; with farmers who understand agriculture; and with manufacturers who turn their industry to great account. Northeastward from Perth to Brechin lies the vale of Strathmore, one of the most fertile districts in Scotland, which gives the title of Earl to the noble family of Lyon.

The population of this county in 1801 amounted to 126,366 (A).

The following table shows the state of the population,

ccording to its parishes at two different periods.					Maderty	796	631	
					Meigle	1285	1148	
P	arishes.	Population	Population in		Methven	1790	1786	
1.6	wi bjiscs.	in 1755.	1790-1798.		Monedie	1492	1320	
1	Aberdalgy	320	523	60	Monivaird	1460	1025	
	Aberfoil	895	790		Monzie	1192	1136	
	Abernethy	1490	1415		Moulin	2109	1749	
	Abernyte	258	345		Muckhart	535	526	
- 5	Alyth	2680	2723		Muthil	2902	2948	
~	Arngask	736	554	. 65	Perth	9019	19,871	
	Auchterarder	1194	1670		Port	1865	1765	
	Auchtergaven	1677	1784		Rattray	751	500	
	Balquhidder	1592	1300		Redgorton	1074	2123	
IO	Blackford	1681	1360		Rhind	498	495	
	Blair Athol	3257	3120	70	St Madoes	189	300	
	Blairgowrie	1596	1651		St Martins	1083	1090	
	Bendothy	1293	878		Scone	889	1442	
	Callander	1750	2100		Tippermuir	988	1280	
15	Caputh	2048	2045		Trinity Gask	913	795	
1	Cargill	1897	1720	10	Tulliallan	1321	2430	
. '	Clunie	905	1037	76	Weem	1295	1364	
	Collace	499	473				-	
	Comrie	2546	3000			118,903	133,274	
20	Crieff	1414	2640				118,903	
	Culrofs	1695	1442				-	
Cupar		1491	2076		Increase, 14,371			
Perth								

⁽A) It is supposed that there is some error in the statement of the population in 1801, by which it appears to be less than in 1790 and 1798. But by the return of the population of the town of Perth, the amount in 1801 is only 14,878; and in 1791 it was nearly 20,000, which will account for the difference.

PERTH, the capital of the county of that name, is an agreeable, populous town, fituated 20 miles within land, on the fouch bank of the river Tay. It was otherwise called St Johnston's, from a church dedicated to St John, as the patron of the place. It is a royal borough, fecond in dignity to the metropolis, the feat of a large prefbytery, and gave the title of Earl to the family of Drummond, which is now forfeited. James Drummond, 4th earl, was created duke of Perth by James II. for adhering to whose interests he was outlawed. His two grandfours were attainted in 1745. No less than 14 national councils have been held at Perth between 1201 and 1459. But the oldest was at Scone, A. D. 906. Perth, in the reign of Edward I. of England, was possessed by the English, who fecured it with fortifications: but after an obstinate resistance, they were expelled by Robert Bruce. In the year 1715, the rebels made it a place of arms, and retired to it, after the battle of Dumblane; but they were in a little time dislodged by the duke of Argyle, and retreated northwards with the pretender. They possessed it also in 1745. The pretender was proclaimed king, new magistrates were appointed, and an attempt was made to fortify it. The town is populous and handsome; the streets are well paved, and tolerably clean at all times; and the houses, though not stately, make a very decent appearance. Both the streets and houses are, for the greater part, disposed in a regularity of plan, which proves them not to be of the most remote antiquity. It is indeed true, that the level fituation, being fingularly favourable to regularity, might, even from the first, give this an advantage over many of our old boroughs. Several streets run in a direction parallel with the river, as far as a right line can bear this relation to a curve line, nearly between east and west: these are again interfected by others extending between north and fouth. It should seem that anciently particular streets were inhabited, each by a particular class of artifans. The names still preserved seem to indicate as much. The shop-keepers or merchants occupied one street; the hammermen a fecond; and other crafts occupied, in the fame manner, cach a separate street. Many of the houses in that street called the Water-gate, seem to be very old buildings. Towards the fouth end of the Water-gate stands the famous palace of the Gowrie family. The house, and the very room, where the attempt of the Gowries to seize or affassinate the king was supposed to have been made, is now converted into barracks for a train of artillery; but the back-stair, down which the Ruthvens were thrown, is pulled down. This strange event, however magnified or attested by contemporary writers, is made up of fo many improbabilities, or circumftances for which no reason can be assigned, that Sir David Dalrymple, in republishing the account printed by authority, 1600, preparatory to his further observations on it, feems justified in absolutely discrediting a fact which passed for problematical with so many persons at the very time. Dr Robertson supposes it a plot of Elizabeth to get James into her power. Mr Cant having discussed the whole story of the conspiracy in his Muse's Threnodie, p. 185-261, concludes, "that as this would have been a very impolitic measure, the best way of accounting for it is by James's known hatred to the Puritans, and wish to get rid of two popular characters." The king had been feized and forced from his

favourites by the father of the Ruthvens 12 years before

(1582), and though he affected to forgive him, took the first opportunity to condemn and execute him as a traitor, 1584. Mr Camden was too good a courtier to speak with impartiality of any part of this weak monarch's conduct. Though the name of Gourie was abolished, the title of Rushven was revived in the person of Sir Thomas Ruthven of Freeland, whom Charles II. 1651, created Lord Ruthven: but the honour, on the death of his son David in 1704, devolved on Isabel, surviving daughter of his second sitter, who married Sir Francis Ruthven, and was succeeded, 1732, by his son James.

The castle of Perth stood near the red bridge, which terminated the narrow street called Skinner-gate. At the end of the Castle-street another narrow street leads west to the Black-friars, called Couvre-feu-row, where the curseu bell was. The kings of Scotland before James II. were crowned at Scone, and resided at Perth as the metropolis of the nation. James resided and was educated in the castle of Edinburgh, and was crowned there 1437. The parliaments and courts of justice were removed from Perth to Edinburgh, but Perth kept its priority till 22 James III. 1482.

The church in which John Knox harangued is still standing, and is now divided into three; named the cast, the middle, and the west kirks. The east kirkwas lately very handsomely modernised within. There is an old hospital, a considerable building, the founding of which is ascribed to James VI. The townhouse shuts up the eastern end of the High-street. A monastery of Carthusians was here established by King James I. of Scotland, who loft his life on the very spot, by the treachery of Athol and his accomplices. The king was buried in a very stately monument in this place, which was called monasterium vallis virtutis, one of the most magnificent buildings in the kingdom, which with the rest was destroyed by the populace. James VI. created George Hay commendator of the Carthusian priory, giving him all its emoluments, with a vote and feat in parliament; but these not being sufficient to support the title, he furrendered it back to the king. The only remains of this magnificent structure is to be seen in the carved stones with which the south-east porch of St John's church is built, now greatly decayed. The king's garment full of stabs was preserved here after the reformation.

The town was anciently provided with a stone bridge over the river, which an inundation fwept away; but a new and very fine one has lately been built, the most beautiful structure of the kind in North Britain, and was defigned and executed by Mr Smeaton. Its length is 900 feet; the breadth (the only blemish) 22 within the parapets. The piers are founded 10 feet beneath the bed of the river, upon oaken and beechen piles, and the stones laid in puzzolano, and cramped with iron. There are nine arches, of which the centre is 75 feet in diameter. This noble work opens a communication with all the different great roads of the kingdom, and was completed at the expence of 26,000l. Of this the commissioners of forfeited estates, by his majesty's permission, gave 11,000l; Perth 2000l.; private subscribers 4756l. the royal boroughs 500l. But still this great work would have met with a check for want of money, had not the earl of Kinnoul, with his characteristic public spirit, advanced the remaining sum, and taken the se-

Heron's

Gough's Camden.

curity of the tolls, with the hazard only to himself. The whole expence has now been defrayed, and the toll has

This town has but one parish, which has two churches, besides meetings for separatists, who are very numerous. One church, which belonged to a monastery, is very ancient: not a veilige of the last is now to be seen; for the disciples of Knox made a general desolation of every edifice that had given shelter to the worshippers of the church of Rome: it being one of his maxims, to pull down the nefts, and then the rooks would fly away.

The flourishing state of Perth is owing to two accidents: the first, that of numbers of Cromwell's wounded officers and foldiers choosing to reside here, after he left the kingdom, who introduced a spirit of industry among the people; the other cause was the long continuance of the earl of Marr's army here in 1715, which occasioned vail sums of money being spent in the place. But this town, as well as all Scotland, dates its profperity from the year 1745; the government of this part of Great Britain having never been fettled till a little after that time.

That this town does not owe its origin to William I. 1210, as Boethius fays, is evident from its being mentioned as a confiderable place in the foundation charter of Holyroodhouse by David I. 1128.

The population of Perth in 1791 is said to have been nearly 20,000; but it is supposed that it has since increafed to 22,000.

The trade of Perth is confiderable. It exports annually 150,000l. worth of linen, from 24,000 to 30,000 bolls of wheat and barley to London and Edinburgh, and a very large quantity of cured falmon. That fish is taken there in vast abundance; 3000 have been caught in one morning; weighing, one with another, 16 pounds; the whole capture 48,000 pounds. The fishery begins on St Andrew's day, and ends August 26th old style. The rents of the fisheries amount to confiderably upwards of 3000l. per. annum. Smelts come up this river in May and June. W. Long. 3. 27. N. Lat. 56. 22,

PERTH Amboy. See New JERSEY.
PERTINAX, was an illustrious Roman emperor after the death of Commodus. He was descended of a mean family; and like his father, who was either a flave or the fon of a manumitted flave, he for fome time followed the employment of drying wood and making charcoal. His poverty did not, however, prevent him from receiving a liberal education. For fome time he was employed in teaching a number of pupils the Greek and the Roman languages in Etruria. He left this laborious profession and became a soldier, and by his valour and intrepidity gradually rofe to offices of the highest trust in the army, and was made conful by M. Aurelius for his fervices. He was afterwards entrusted with the government of Moesia, and at length he presided over the city of Rome as governor. When Commodus was murdered, Pertinax was univerfally chosen to succeed to the imperial dignity; and his refusal, on the plea of old age and increasing infirmities, did not prevent his being faluted emperor and Augustus. He complied with reluctance; but his mildness, his economy, and popularity, convinced the fenate and the people of the prudence and the justice of their choice. He forbade his name to be inscribed on such places or estates as were part of the

imperial domains, and afferted that they belonged not Pertinax. to him but to the public. He melted all the filver statues which had been raifed to his predecessor, and he exposed to fale all his concubines, horses, arms, and all the instruments of his pleasure and extravagance. With the money raised from these relics he enriched the empire, and was enabled to abolish all the taxes which Commodus had laid on the rivers, ports, and highways, through the empire. These patriotic actions gained him the affection of the worthiest and most discerning of his subjects; but the extravagant, luxurious, and vicious, raifed their clamours against him; and when the emperor attempted to introduce among the pretorian guards fuch discipline as was absolutely necessary to preserve the peace and tranquillity of Rome, the flames of rebellion were kindled, and the minds of the foldiers totally alienated. Pertinax was apprized of their mutinying, but he refused to fly at the hour of danger. He scorned the advice of fuch of his friends as wished him to withdraw from the impending florm; and he unexpectedly appeared before the feditious troops, and without fear or concern boldly asked them, whether they who were bound by duty to defend the person of their prince and emperor, were come to betray him and to shed his blood? His undaunted courage and intrepidity would have had the defired effect, and the foldiers had begun to retire, when one of the most seditious of them advanced and darted his javelin at the emperor's breast, exclaiming The foldiers fend you this. The rest instantly followed the example; and Pertinax, muffling up his head, and calling upon Jupiter to avenge his death, remained unmoved, and was immediately dispatched. His head was cut off and carried upon the point of a spear in triumph to the camp. This abominable murder happened in the 103d year of the Christian era.

It was no fooner known that Pertinax had been murdered, than the enraged populace flocked from all quarters of the city; and uttering dreadful menaces against the authors of his death, ran up and down the streets in quest of them. The senators were no less concerned for his death than the people; the more, because they were now convinced, that the foldiers would fuffer none to reign but tyrants. However, as they had more to lofe than the common people, they did not offer to revenge his death; but either shut themselves up in their own houses, or in those of the soldiers of their acquaintance, thinking themselves there most safe. Such was the unfortunate and much-lamented end of Publius Helvius Pertinax, after he had lived 66 years 7 months and 26 or 28 days; and reigned, according to Dio Cassius, 87 days, that is, from the 1st of January to the 28th of March. His body, together with his head, was interred with great pomp by Didius Julianus, his fucceffor, in the burying place of his wife's family. The emperor Septimius Severus, with the title of emperor, assumed the name of Pertinax, which he knew would above any thing else recommend him to the army in Illyricum, and to the Roman people. He punished with great feverity all those who had been accessary to his death, disbanded the prætorian guards, honoured his memory with a most magnificent funeral, at which was carried the effigies of the deceased prince, pronounced his pane-gyric, and caused him to be ranked in the number of the gods, appointing the fon chief priest to his father. The day of his accession to the empire was yearly celebrated

How dif-

covered

niards.

by the Spa

Pertinent, with the Circenfian games; and his birthday, for many years after, with other sports. He performed great things, fays Herodian, during his short administration, and would have restored the empire to its former lustre, had he been indulged with a longer reign.

PERTINENT OF LANDS, in Scots Law. See LAW,

Nº clxvii. 6. p. 670.

PERU, a country of South America, is bounded on the north by Popayan, on the east by Amazonia, on the fouth by Chili, and on the west by the Pacific ocean; extending from 1° 40' north to 26° 10' fouth latitude, and between 56° and 81° west longitude from Greenwich; being about 1800 miles in length, but its

greatest breadth does not much exceed 390.

This country was discovered by the Spaniards; and the first intelligence they had of it was on the following occasion. Nunez de Balboa having been raised to the government of the finall colony at Santa Maria in Darien by the fuffrages of his companions, was very defirous of having that authority confirmed by the court of Spain. For this purpose he endeavoured to recommend himself to the Spanish ministry by some important fervice; that is, by extorting from the Indians as much gold and filver as he could. He therefore made frequent introads into the adjacent country, fubdued feveral of the caciques or petty princes, and collected a confiderable quantity of gold. In one of these expeditions, the Spaniards contended fo violently about the division of some gold which they had taken, that they were on the point of coming to blows with one another. A young cacique who was prefent, aftonished at fuch contention about a thing of which he knew not the use, tumbled the gold out of the balance with indignation, and turning to the Spaniards, told them, that fince they valued gold fo very highly, he would conduct them to a country where the most common utenfils were made of that metal. The Spaniards eagerly catched at this hint; and upon further questioning the cacique, were informed, that at the distance of fix days journey, towards the fouth, from the place where they were at that time, they should discover another ocean, near which this defirable country was fituated; but if they intended to attack that powerful state, they must affemble a much greater number of forces than had hitherto appeared on the continent.

Balboa was transported at the news. He immediately concluded, that the ocean mentioned by the cacique was that which Columbus had so long sought for in vain, and that the rich territory described to him must be part of the East Indies. He was therefore impatient till he should arrive at that happy country, in comparison with the discovery of which all former exploits almost vanished into nothing. In order therefore to procure a force fufficient to ensure success in his enterprise, he first secured the friendship of the neighbouring caciques, and then dispatched some of his officers to Hispaniola, with a large quantity of gold as a proof of his past success, and an earnest of what he expected. By this means he fecured the friendship of the governor, and procured a considerable reinforcement. But though he now imagined himself sufficiently strong to attempt the discovery, there were still prodigious difficulties to be surmounted.

Difficulties The ifthmus of Darien, though not above 60 miles in they had to breadth, has a chain of lofty mountains running through overcome, its whole extent. Being fituated between two vast

oceans, the Atlantic and Pacific, the climate is exceffively moift, infomuch that it rains for two-thirds of the year. In confequence of this the valleys are marshy, and fo frequently overflowed, that the inhabitants find it necessary in some places to build their houses upon trees, in order to be elevated at some distance from the damp foil, and the odious reptiles engendered in the waters. There are also many large rivers very difficult to be croffed; and as the country at that time was only inhabited by a few wandering favages, the enterprise of Balboa was looked upon as the most difficult that had been undertaken by any Spanish adventurer.

On this arduous talk Balboa fet out on the 1st day of September 1513, about the time that the periodical rains began to abate. He had only 190 Spaniards along with him; but all of them were hardy veterans, inured to the climate of America, and very much attached to their leader. A thousand Indians attended in order to carry their provisions and other necessaries; and they had along with them some of those fierce dogs

fo terrible to the natives of America.

Balboa proceeded by fea, and without difficulty, to the territories of a cacique whose friendship he had gained; but as foon as he began to advance into the interior parts of the country, he met with all the difficulties above-mentioned. Some of the caciques also, at his approach, fled with all their people to the mountains, carrying off or destroying whatever could afford fubfishence to an army. Others collected their force in order to oppose him: however, Balboa continued unmoved in spite of all difficulties, and at last, Balboa first after a most painful journey of 25 days, he arrived at gets a light the South sea; when, with the most extravagant transf- of the ports of joy, he went into it up to the middle, and took possession of the ocean in his master's name, vowing to

defend it against all the enemies of Spain.

That part of the South sea which Balboa now difcovered, he called the Gulf of St Michael; which name it still retains, and is situated to the east of Panama. From fome of the neighbouring caciques he extorted provisions and gold by force; others sent him presents voluntarily; and he had the satisfaction to hear, that the adjacent coasts abounded with pearl-oysters. The inhabitants were also unanimous in declaring, that there was to the fouthward a very rich and populous country, where the people had tame animals, which they endeavoured to describe to him, meaning the Peruvian sheep. But, however impatient he might be to visit this empire, he considered it as highly improper to venture thither with a handful of men exhausted by labour and disease. He therefore led back his followers to Santa Maria, in order to refresh them after their fatigues; and from thence he fent an account to the court of Spain of the important discovery he had made, demanding a reinforcement of 1000 men, in order to conquer the country he had newly discovered. But here his hopes were all blasted at once. The He is de-king indeed determined to prosecute the discovery, but prived of

refused to continue Balboa in his government, appointing his com-Pedrarias Davila to superfede him, and giving him the mand, command of 15 flout vessels, with 1200 foldiers, to en-

fure his fuccess.

Balboa, though much mortified by his difgrace, fubmitted to the king's pleasure without repining. It was not long, however, before he met with an addi-

tional !

tional misfortune; the new governor tried him for fome pretended irregularities committed before his arrival, and fined him of almost all he was worth. In the mean time the Spaniards, paying no regard to the treaties concluded by Balboa with the Indians, plundered and deftroyed all indifcriminately, infomuch that the whole country, from the gulf of Darien to the lake Nicaragua, was defolated. The new comers had also arrived at the most unlucky time of the year, namely, about the middle of the wet feafon, when the exceffive rains produced the most violent and fatal diseases. To this was joined an extreme scarcity of provisions; so that in the space of a month above 600 Spaniards perished in the utmost miscry.

Balboa failed not to fend violent remonstrances to Spain against the conduct of the new governor; and he, on the other hand, accused his antagonist of having deceived the king by false accounts of the country, and magnifying his own exploits beyond measure. At last the king, sensible of his error in superseding Balboa, appointed him adelantado, or lieutenant-governor of the countries on the South fea, with very extensive privileges and authority; enjoining Pedrarias to support him in all his enterprises, and to consult with him in every thing which he himself undertook. It was impossible, however, to extinguish the envy of Pedrarias; and therefore, though a reconciliation took place in appearance, even fo far, that Pedrarias agreed to give his daughter in marriage to Balboa, yet he And put to foon after had him condemned and executed on pretence of difloyalty, and an intention to revolt from the

> On the death of Balboa, the thoughts of conquering Peru were for a time laid afide; however, it still remained an object of defire to all the Spanish adventurers in America. Accordingly, feveral armaments were fitted out with a defign to explore and take possession of the countries to the east of Panama; but, either through the difficulties which attended the undertaking itself, or the bad conduct of the adventurers, all of them proved unfuccefsful, until at last it became a general opinion, that Balboa's scheme had been

entirely visionary.

6 A new ex-

death.

Still, however, there were three persons settled at pedition fet Panama, on whom the common opinions made fo little impression, that they determined to go in quest of this country, looked upon to be chimerical by the generality of their neighbours. Their names were Francisco Pizarro, Diego de Almagro, and Hernando Luque. Pizarro and Almagro were foldiers of fortune, and Luque was an ecclefiastic, who acted both as priest and schoolmaster at Panama. Their confederacy was authorifed by Pedrarias governor of Panama; and each engaged to employ his whole fortune in the adventure. Pizarro, being the least wealthy of the three, engaged to take upon himself the greatest share of the fatigue and danger, and to command in person the armament which was to go first upon the discovery. Almagro offered to conduct the supplies of provisions and reinforcements of troops which might be necessary; and Luque was to remain at Panama, in order to negociate with the governor, and to superintend whatever was carrying on for the general interest.

In 1524, Pizarro fet fail from Panama with a fingle veffel of small burthen and 112 men; and so little was

he or his countrymen at that time acquainted with the climate of America, that the most improper season of the whole year was chosen for his departure: the periodical winds, which were then fet in, being directly opposite to the course which he proposed to theer. The consequence of this was, that, after beating about for 70 days with much danger and fatigue, he had advanced scarce as far to the fouth-east as a skilful navigator will now make in three days. He touched at feveral places of Terra Firma; but finding that country exceedingly inhospitable and unhealthy, he was obliged to retire to Chuchama, opposite to the Pearl islands, where he hoped to receive some reinforcements from Panama. Here he was found by Almagro, who had fet out in quest of him with a reinforcement of 70 men, and had suffered distresses very much resembling those of Pizarro himself. In particular, he had loit an eye in combat with the Indians. However, he had advanced as far as the river of St Juan in the province of Popayan, where the country showing a better aspect, and the inhabitants more friendly, our projectors again began to indulge themselves in hopes, and determined by no means to abandon their scheme.

Almagro returned to Panama, in hopes of recruiting their shattered troops. But the bad accounts of the fervice gave his countrymen fuch an unfavourable idea of it, that Almagro could levy no more than 80 men, and these with great difficulty. Slender as this reinforcement was, however, the adventurers did not hefitate at renewing their enterprise. The disasters and difappointments they met with in this new attempt, were fcarcely inferior to those they had already experienced, when part of the armament at last reached the bay of St Matthew on the coast of Quito, and landed at Tacamez to the fouth of the river of Emeralds, where they met with a more fertile and champaign country than any they had yet feen; the natives also were more civilized, and clothed in garments of cotton or woollen stuff, adorned with trinkets of gold and filver. But notwithstanding these savourable appearances, Pizarro did not think fit to attack fuch a powerful empire with an handful of foldiers already exhausted; and therefore retired to a small island called Gallo, with part of the troops; from whence he dif-patched Almagro to Panama, in hopes of obtaining a

The reception which Almagro met with was by no means agreeable. Some of the adventurers had informed their friends of the many dangers and loffes which they had fustained; which not only disheartened people from engaging in the fervice, but weighed fo much with Pedro de los Rios, the successor of Pedrarias, that he prohibited the raifing of new recruits, and even dispatched a vessel to bring home Pizarro and his companions from the island of Gallo. Almagro and Luque, though much mortified with this disappointment, privately advised Pizarro not to relinquish an enterprise on which they had built all their hopes. He therefore positively refused to obey the orders of the governor, and employed all his address in perfuading his men not to abandon him. But the calamities to which they had Pizarro been exposed had such an effect upon them, that when abandoned he drew a line upon the fand with his fword, telling by all his fuch or wished to return that they will be men but fuch as wished to return that they might pass over it, thirteen. only 13 had resolution to remain with him.

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Pizarro with his little troop now fixed their refidence on the isle of Gorgona, which they considered as a safer retreat than Gallo, as being farther removed from the coast, and uninhabited, so that they might with the greater fecurity wait for fupplies. Here they continued five months in the most unwholesome climate imaginable, and at last had come to a resolution of committing themselves to sea on a float, when a vessel arrived from Panama to their relief. This was the effect of the continued folicitations of Almagro and Luque; who, though they could not prevail upon the governor to favour the undertaking, had fucceeded fo far as to induce him to fend a fmall vessel to the relief of Pizarro and his unfortunate affociates. However, the more effectually to show his disapprobation of Pizarro's scheme, the governor refused to allow one landman to go on board of theship which he fent .- The hopes of the adventurers were now again revived, and Pizarro eafily induced them to refume their scheme. Instead of returning to Panama, therefore, they failed to the fouth-east, and in 20 days after the discovery of Gorgona, they discovered the coast of Peru. Having touched at some places of less note, they at length arrived at Tumbez, remarkable for its stately temple, and a palace of the incas or sovereigns of the country. Here they found that what had been told them concerning the riches of the country was true; not only ornaments and facred veffels being made of gold and filver, but even fuch as were for common use. Yet to attempt the conquest of this opulent empire with their flender force, would have been madness; they contented themselves therefore with viewing it, procuring two of the beafts of burthen called llamas, to which they gave the name of sheep, some vessels of gold and filver, and two young men, whom they proposed to instruct in the Castilian language. With these Pizarro arrived at Panama in the year 1527, near three years after he had fet out from that place on his ex-

Hiftory of

The empire of Peru, thus discovered, is faid to have the Incas of been originally possessed by independent tribes, justly Peru. reckoned among the most savage even in America; living more like wild beafts than men. For feveral ages they lived in this manner, when fuddenly there appeared on the banks of a lake called Titiaca, a man and woman of majestic form, and clothed in decent garments. They declared themselves to be the children of the fun, fent by their beneficent parent to instruct and reclaim mankind.

> The names of these two extraordinary personages were Manco Capar and Mama Ocla. At their perfuafion, feveral of the difperfed favages united, and, receiving their commands as heavenly injunctions, followed them to Cuzco, where they fettled, and began to lay the foundations of a city. Manco Capac instructed the men in agriculture, and other ufeful arts; while Mama Ocla taught the women to fpin and weave; after which Manco turned his attention towards the introduction of proper laws and regulations into his new

> Thus, according to the Indian tradition, was founded the empire of the Incas, or lords of Peru. At first its extent was small, the territory of Manco Capac reaching not above eight leagues from Cuzco his capital. Within these narrow limits, however, he exercifed the most perfect despotism, and the same was VOL. XVI. Part I.

maintained by his fuccessors, all of whom were not Peruonly obeyed as monarchs, but reverenced as deities. Their blood was held to be facred, and, by prohibiting intermarriages with the people, was never contaminated by mixing with that of any other race. The family, thus feparated from the rest of the nation, was distinguished by peculiarities in dress and ornaments, which it was unlawful for others to assume. Among the Peruvians, however, it is faid, that this high degree of veneration was made use of by the monarchs only to promote the good of their subjects. If we may believe the accounts given by their countrymen, the Peruvian monarchs extended their empire not with a view to increase their own power and wealth, but from a defire of diffusing the bleffings of civilization, and the knowledge of the arts which they possessed, among the barbarous people whom they reduced, and, during a fuccession of 12 monarchs, not one deviated from this character.

The Peruvians were taught by Manco to adore the Carver's Creator of heaven and earth, whom they denominated Modern Paca Camac, that intelligence which animated the General world. They feldom built temples or offered facrifices Traveller. to him, but worshipped him in their hearts. One Religion of temple, however, dedicated to The unknown God, the the Peru-Spaniards found at their arrival, erected in a valley, vians. thence named the valley of Paca Camac. The facrifices instituted in honour of the fun consisted chiefly of lambs; besides which they offered all forts of cattle. fowls, and corn, and even burnt their finest cloths on the altar by way of incense. They had also drink offerings made of maize or Indian corn, steeped in water. Nor were those oblations the only acts of adoration in general use among them. When they first drank after their meals, they dipped the tip of their finger into the cup, and lifting up their eyes with great devotion, gave the fun thanks for their liquor. before they prefumed to take a draught of it.

Besides the worship of the sun, they paid some kind of veneration to the images of feveral animals and vegetables that had a place in their temples. These were generally the images brought from the conquered nations, where the people worshipped all forts of creatures, animate or inanimate; it being the custom, when a province was fubdued, to remove all their idols to the temple of the fun at Cuzco.

Exclusive of the solemnities at every full moon, four grand festivals were celebrated annually. The first of those, called Raymi, was held in the month of June, immediately after the fummer folflice, and was kept not only in honour of the fun, but of their first Inca, Manco Capac, and Coya Mama Ocla, his wife and fifter, whom the Incas confidered as their first parents, descended immediately from the sun, and sent by him into the world to reform and polish mankind. At this festival, all the viceroys, generals, governors, and nobility, were affembled at the capital city of Cuzco; and the emperor, or Inca, officiated in person as high-priest; though on other occasions the facerdotal function was discharged by the regular pontiff, who was usually either the uncle or brother of the Inca.

The morning of the festival being come, the Inca, accompanied by his near relations, drawn up in order according to their feniority, went barefoot in procession, at break of day, to the market-place, where they re-Bb

mained looking attentively towards the east in expectation of the rising fun. The luminary no fooner appeared, than they tell proftrate on their faces in the most profound veneration, and univerfally acknowledged it to

be their god and father.

The vaffal princes, and nobility, that were not of the blood royal, affembled in another square, and performed the like ceremony. Out of a large flock of sheep the priests then chose a black lamb, which they offered in facrifice, first turning its head towards the cast. From the entrails of the victim, on this occasion, they superfittionally drew prognostics relating to peace and war, and other public events.

That the Peruvians believed in the immortality of the foul, appears from the practice of the Incas, who constantly inculcated to the people, that, on leaving this world, they should enter into a state of happiness provided for them by their god and father the fun.

Before the arrival of the Spaniards in America, the They were Peruvians were acquainted with some points of aftroacquainted nomy. They had observed the various motions of with aftro- the planet Venus, and the different phases of the moon. fore the ar- The common people divided the year only by the feaival of the fons; but the Incas, who had discovered the annual re-Spaniards. volution of the fun, marked out the fummer and winter folftices by high towers, which they erected on the east and west of the city of Cuzco. When the sun came to rife directly opposite to four of those towers, on the east fide of the city, and to fet against those of the west, it was then the fummer folftice; and in like manner, when it rose and set against the other towers, it was the winter folftice. They had also erected marble pillars in the great court before the temple of the fun, by which they observed the equinoxes. This observation was made under the equator, when the fun being directly vertical, the pillars cast no shade. At those times they crowned the pillars with garlands of flowers and odoriferous herbs, and celebrating a festival, offered to their adored luminary rich prefents of gold and precious ftones.

They diffinguished the months by the moon, and their weeks were called quarters of the moon; but the days of the week they marked only by the ordinal numbers, as first, second, &c. They were astonished at the eclipses of the fun and moon. When the former hid his face, they concluded it was on account of their fins, imagining that this phenomenon portended famine, war, and peftilence, or fome other terrible calamity. In a fimilar state of the moon, they apprehended that fhe was fick, and when totally obscured, that she was dying. At this alarming crifis they founded their trumpets, and endeavoured by every kind of noise to rouse the lunar planet from her supposed lethargy; teaching their children to cry out, and call upon mama quilla, or "mother moon," that she would not die and

leave them to perish.

They made no predictions from any of the stars, but confidered dreams, and the entrails of beafts which they offered in facrifice, as inftructive objects of divination. When they faw the fun fet, they imagined that he plunged into the ocean, to appear next morning

in the eaft.

Among a people wholly void of letters, the speculative essays of the understanding must have been very teachers of rude and imperfect. They had, however, among them morality; amentas, or philosophers, who delivered moral precepts,

and likewife cultivated poetry. Comedies and tragedies Peru. composed by those bards were acted on their festivals before the king and the royal family, the performers being the great men of the court, and the principal officers of the army. The amentas also compofed fongs and ballads; but if we may judge from the rudeness of the music with which they are said to have been accompanied, they were far from being agreeable to a polished ear.

That the Peruvians were not unacquainted with painting and statuary, appears from the furniture and orna- And were ments of their temples and palaces; but in all the im-not unacplements of mechanic arts they were extremely defi-with paintcient. Though many goldsmiths were constantly em-ing and ployed, they had never invented an anvil of any me-flatuary. tal, but in its flead made use of a hard stone. They beat their plate with round pieces of copper in place of hammers; neither had they any files or graving tools. Instead of bellows for melting their metals, they used copper pipes, of a yard long, almost of the form of a trumpet. Having no tongs to take their heated metal out of the fire, they made use of a stick or copper bar. Their carpenters had no other tools than hatchets made of copper or flint; nor had they learned the use of iron; though the country affords mines of that metal. Inflead of nails, they fastened their timber with cords or the tough twigs of trees. A thorn, or a small bone, served them for a needle; and instead of thread, the finews of animals, or the fibres of some plant. Their knives were made of flint or copper.

When the Spaniards first visited this country, they found it agitated by a civil war. Huana Capac, the Progress of 12th monarch from the founder of the state, was feat-the Spaed on the throne; who is represented as a prince no niards faciless conspicuous for his abilities in war than for his litated by a pacific virtues. By him the kingdom of Quito was civil war fubdued, which almost doubled the extent of the do-natives; minions and power of the Peruvian empire. Notwithftanding the ancient and fundamental law against polluting the blood of the Inca with any foreign alliance, Huana married the daughter of the conquered monarch, by whom he had a fon named Atahualpa, commonly written Atabalipa, to whom, at his death in 1529, he left the kingdom of Quito, bestowing the rest of his dominions upon Huascar his eldest son by a mother of the royal race. This produced a civil war, in which Atabalipa proved victorious, and afterwards attempted to fecure himself on the throne by putting to death all the descendants of Manco Capac, styled the children of the fun, whom he could feize either by force or stratagem; however, from a political motive, he spared the life of his rival Huascar, who had the misfortune to be taken prisoner in an engagement, that, by issuing out orders in his name, he might more easily eftablish his own authority, and cover the illegality of his

This contest had so much engaged the attention of the Peruvians, that they never once attempted to check the progress of the Spaniards. It was some time, however, before Pizarro was informed of this contest, so much in his favour. The first intelligence which he received of it was a message from Huascar, asking his affiftance against Atabalipa, whom he represented as a rebel and an usurper. Pizarro perceived the importance of the intelligence, and therefore determined

to push forward, while intestine discord put it out of cific disposition, and to desire an interview with the the power of the Peruvians to attack him with their whole force. Being obliged to divide his troops, in order to leave a garrison in St Michael, which might ferve for a place of retreat in case of a disaster, he began his march with only 62 horsemen and 102 footfoldiers, 20 of whom were armed with cross-bows, and only three with muskets. He directed his course towards Caxamalca, a small town at the distance of 12 days march from St Michael, where Atabalipa was encamped with a confiderable body of troops. Before he had proceeded far, an officer dispatched by the Inca met him with a valuable present from that prince, accompanied with a proffer of his alliance, and his affurances of a friendly reception at Caxamalca. Pizarro, according to the usual artifice of his countrymen in America, pretended to come as the ambassador of a powerful monarch, and declared that he was now advancing with intention to offer Atabalipa his aid against those enemies who disputed his title to the

And by their ignothe Spaniards.

As the object of the Spaniards in entering their country was altogether incomprehenfible to the Perurance of the vians, they had formed various conjectures concerning it, without being able to decide whether they should confider their new guests as beings of a superior nature, who had visited them from some beneficent motive, or as formidable avengers of their crimes, and enemies to their repose and liberty. The continual professions of the Spaniards, that they came to enlighten them with the knowledge of truth, and lead them in a way of happiness, favoured the former opinion; the outrages which they committed, their rapaciousness and cruelty, were awful confirmations of the latter. While in this state of uncertainty, Pizarro's declaration of his pacific intentions fo far removed all the Inca's fears, that he determined to give him a friendly reception. In confequence of this refolution, the Spaniards were allowed to march in tranquillity across the fandy defert between St Michael and Motupe, where the most feeble effort of an enemy, added to the unavoidable distresses which they suffered in passing through that comfortless region, must have proved fatal to them. From Motupe they advanced towards the mountains which encompass the low country of Peru, and passed through a defile fo narrow and inaccessible, that a few men might have defended it against a numerous army. But here likewise, from the same inconsiderate credulity of the Inca, the Spaniards met with no opposition, and took quiet possession of a fort erected for the fecurity of that important station. As they now approached near to Caxamalca, Atabalipa renewed his professions of friendship; and, as an evidence of his fincerity, fent them prefents of greater value than the former.

On entering Caxamalca, Pizarro took possession of a large court, on one fide of which was a house which the Spanish historians call a palace of the Inca, and on the other a temple of the fun, the whole furrounded with a strong rampart or wall of earth. When he had posted his troops in this advantageous station, he dispatched Hernando Soto, and his brother Ferdinand. to the camp of Atabalipa, which was about a league distant from the town. He instructed them to confirm the declaration which he had formerly made of his paInca, that he might explain more fully the intention of the Spaniards in vifiting his country. They were treated with all the respectful hospitality usual among the Peruvians in the reception of their most cordial friends, and Atabalipa promifed to vifit the Spanish commander next day in his quarters. The decent deportment of the Peruvian monarch, the order of his court, and the reverence with which his subjects approached his person and obeyed his commands, aftonished those Spaniards, who had never met in America with any thing more dignified than the petty cacique of a barbarous tribe. But their eyes were still more powerfully attracted by the vast profusion of wealth which they observed in the Inca's camp. The rich ornaments worn by him and his attendants, the vessels of gold and filver in which the repast offered to them was ferved up, the multitude of utenfils of every kind formed of those precious metals, opened prospects far exceeding any idea of opulence that a European of the 16th century could form.

On their return to Caxamalca, while their minds were yet warm with admiration and defire of the wealth which they had beheld, they gave fuch, a description of it to their countrymen, as confirmed Pizarro in a resolution which he had already taken. From his own observation of American manners during his long fervice in the New World, as well as from the advantages which Cortes had derived from feizing Montezuma, he knew of what confequence it was to have the Inca in his power. For this purpose, he formed a plan as daring Persidious as it was perfidious. Notwithstanding the character he scheme of had affumed of an ambaffador from a powerful monarch, Pizarro to who courted an alliance with the Inca, and in violation Inca. of the repeated offers which he had made to him of his own friendship and assistance, he determined to avail himself of the unsuspicious simplicity with which Atabalipa relied on his professions, and to seize his person during the interview to which he had invited him. He prepared for the execution of his scheme with the same deliberate arrangement, and with as little compunction, as if it had reflected no difgrace on himfelf or his country. He divided his cavalry into three small squadrons, under the command of his brothers Ferdinand, Soto, and Benalcazar; his infantry was formed into one body, except 20 of most tried courage, whom he kept near his own person to support him in the dangerous service which he referved for himself; the artillery, confisting of two field-pieces, and the cross-bow men, were placed opposite to the avenue by which Atabalipa was to approach. All were commanded to keep within the square, and not to move until the signal for action was given.

Early in the morning the Peruvian camp was all in motion. But as Atabalipa was folicitous to appear with the greatest splendour and magnificence in his first interview with the strangers, the preparations for this were so tedious, that the day was far advanced before he began his march. Even then, left the order of the procession should be deranged, he moved so slowly, that the Spaniards became impatient and apprehensive that some sufpicion of their intention might be the cause of this delay. In order to remove this, Pizarro dispatched one of his officers with fresh assurances of his friendly disposition. At length the Inca approached. First of all appeared

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400 men in an uniform drefs, as harbingers to clear the way before him. He himfelf, fitting on a throne or couch, adorned with planes of various coleurs, and almost covered with plates of gold and filver enriched with precious stones, was carried on the shoulders of his principal attendants. Behind him came some chief officers of his court carried in the same manner. Several bands of singers and dancers accompanied this cavalcade; and the whole plain was covered with troops, amounting to more than 20,000 men.

As the Inca drew near the Spanish quarters, Father Vincent Valverede, chaplain to the expedition, advanced with a crucifix in one hand, and a breviary in the other, and in a long discourse explained to him the doctrine of the creation, the fall of Adam, the incarnation, the fufferings and refurrection of Jesus Christ, the appointment of St Peter as God's vicegerent on earth, the transmission of his apostolical power by for cession to the popes, the donation made to the king of Castile by Pope Alexander of all the regions in the New World. In consequence of all this, he required Atabalipa to embrace the Christian faith, to acknowledge the fupreme jurisdiction of the pope, and to submit to the king of Castile as his lawful sovereign; promising, if he complied instantly with this requisition, that the Castilian monarch would protect his dominions, and permit him to continue in the exercise of his royal authority; but if he should impiously refuse to obey his summons, he denounced war against him in his master's name, and threatened him with the most dreadful effects of his

This strange harangue, unfolding deep mysteries, and alluding to unknown facts, of which no power of eloquence could have conveyed at once a diffinct idea to an American, was so lamely translated by an unskilful interpreter, little acquainted with the idiom of the Spanish tongue, and incapable of expressing himself with propriety in the language of the Inca, that its general tenor was altogether incomprehenfible to Atabalipa. Some parts in it, of more obvious meaning, filled him with attonishment and indignation. His reply, however, was temperate. He began with observing, that he was lord of the dominions over which he reigned by hereditary fuccession; and added, that he could not conceive how a foreign priest should pretend to dispose of territories which did not belong to him; that if such a preposterous grant had been made, he, who was the rightful possessor, refused to confirm it; that he had no inclination to renounce the religious institutions established by his ancestors; nor would he forsake the fervice of the fun, the immortal divinity whom he and his people revered, in order to worship the God of the Spaniards, who was subject to death; that with respect to other matters contained in his discourse, as he had never heard of them before, and did not now understand their meaning, he defired to know where he had learned things fo extraordinary. " In this book," answered Valverede, reaching out to him his breviary. The Inca opened it eagerly; and turning over the leaves, lifted it to his ear: "This (fays he) is filent; it tells me nothing;" and threw it with disdain to the ground. The enraged monk, running towards his countrymen, cried out, "To arms, Christians, to arms; the word of God is infulted; avenge this profanation on those impious dogs.32

Pizzaro, who during this long conference had with difficulty reftrained his foldiers, eager to feize the rich fpoils of which they had now fo near a view, immediately gave the fignal of affault. At once the martial music struck up, the cannon and muskets began to fire, the horse sallied out fiercely to the charge, the infantry rushed on sword in hand. The Peruvians, associated at the fuddenness of an attack which they did not expect, and difmayed with the destructive effects of the firearms, and the irrefiltible impression of the cavalry, fled with universal consternation on every fide, without attempting either to annoy the enemy or to defend themfelves. Pizarro, at the head of his chofen band, advanced directly towards the Inca; and though his nobles crowded around him with officious zeal, and fell in Atabalipa numbers at his feet, while they vied one with another feized by in facrificing their own lives, that they might cover the Pizarro. facred person of their sovereign, the Spaniards soon penetrated to the royal feat: and Pizarro feizing the Inca by the arm, dragged him to the ground, and carried him as a prisoner to his quarters. The fate of the monarch increased the precipitate flight of his followers. The Spaniards purfued them towards every quarter, and, with deliberate and unrelenting barbarity, continued to flaughter wretched fugitives, who never once offered at refiftance. The carnage did not cease until the close of day. Above 4000 Peruvians were killed. Not a fingle Spaniard fell, nor was one wounded but Pizarro himself, whose hand was slightly hurt by one of his own foldiers, while struggling eagerly to lay hold on the Inca.

The plunder taken on this occasion was immense, but He offers the Spaniards were still unsatisfied; which being obser-an imved by the Inca, he endeaveured to apply himself to mense sure their ruling passion, avarice, in order to obtain his liber for his lity: and therefore offered such a ransom as associated them, even after all they knew concerning the opulence of the country. The apartment in which he was confined was 22 feet in length and 16 in breadth; and all this space he engaged to fill with vessels of gold as high as he could reach. This proposal was eagerly caught by Pizarro, and a line was drawn upon the walls to mark the stipulated height.

Atabalipa, charmed with the thoughts of liberty, immediately fet about performing his part of the agreement, and dispatched messengers into all parts of the empire, in order to collect the immense quantity of gold which he had promised; and though the unfortunate monarch was now in the hands of his enemies, such was the veneration which his subjects had for him, that his orders were obeyed with as great alacrity as though he had been at full liberty; while he, in the mean time, flattering himself with the hopes of being soon released, made no preparations for expelling the invaders from his dominions.

In a short time Pizarro received intelligence that Almagro was arrived at St Michael with a reinforcement equal to the force he had with him. This was a matter of great joy to the Spaniards, and no small vexation to Atabalipa, who now considered his kingdom as in danger of being totally overrun by these strangers, whose force he neither knew, nor the means they had of transporting themselves. For this reason he determined to put his brother Huascar to death, less the should join the strangers against him. To this he was the rather inclined

clined, as he had got information that the captive prince had been making applications to them, and had offered them a much larger fum than what was stipulated for the Inca's ransom; and in consequence of this determination the unfortunate prince lost his

In the mean time the Indians daily arrived at Caxamalca with vast quantities of treasure; the fight of which fo'much inflamed the Spaniards, that they infifted upon an immediate division: and this being complied with, there fell to the share of each horseman 8000 pelos, at that time not inferior to the value of as many pounds fterling in the present century, and half as much to each foot soldier, Pizarro and his officers receiving shares proportionable to their dignity. A fifth part was referved for the emperor, together with some vessels of curious workmanship as a present. In consequence of this immense acquisition of wealth, many of the Spaniards became clamorous for their discharge; which was readily granted by their general, as well knowing that the display of their riches would not fail to allure adventurers more hardy, though lefs opulent, to his stan-

20 Pizarro refolves to put the Inca to death.

After this division of the spoil, Atabalipa was very importunate with Pizarro in order to recover his liberty; but the Spaniard, with unparalleled treachery and cruelty, had now determined to put him to death. To this he was urged by Almagro's foldiers, who, though they had received an equal share with the rest, were still unsatisfied. The Inca's ransom had not been completed; and they were apprehensive, that whatever sums might afterwards be brought in, the troops of Pizarro would appropriate them to themselves as part of that ransom. They infifted with Pizarro, therefore, to put him to death, that all the adventurers might for the future be on an equal footing. Accounts were likewise received that troops were affembling in the remote provinces of the empire, which Pizarro suspected to be done by the Inca's orders. These accounts were heightened by one Philipillo an Indian interpreter, who had conceived a passion for one of the unhappy monarch's wives; and for that reason wished to have him put to death. Atabalipa himself, too, had the misfortune to hasten his own ruin by his conceiving a contemptuous notion of Pizarro, which he had not the precaution to conceal. He had, fince they were first discovered by him, admired the European arts of reading and writing, and wished much to know whether he should regard it as a natural or acquired talent. In order to determine this, he defired one of the foldiers who guarded him to write the name of God upon the nail of his thumb. This he showed to feveral Spaniards fuccessively, asking its meaning; and to his surprise, they all returned the same answer. At length Pizarro entered; and, on presenting it to him, he blushed, and was obliged to own his ignorance; which inspired the Inca with the contemptuous notion of him above-mentioned.

In order, however, to give some show of justice to Atabalipa accused and such a detestable action, and that he might be exempted condemn- from standing singly as the perpetrator, Pizarro resolved to accuse the Inca of some capital crime, and institute a court of judicature for the purpose of trying him. For this purpose, he appointed himself and Almagro, with two affiftants, as judges, with full powers to acquit or condemn: an attorney-general was named to carry on

the profecution in the king's name; counfellors were chosen to assist the prisoner in his defence; and clerks were ordained to record the proceedings of court. Before this strange tribunal a charge was exhibited still more amazing. It confifted of various articles: that Atabalipa, though a baftard, had dispossessed the lawful owner of the throne, and usurped the regal power; that he had put his brother and lawful fovereign to death; that he was an idolater, and had not only permitted, but commanded the offering up of human facrifices; that he had a great number of concubincs; that fince his imprisonment, he had wasted and embezzled the royal treasures, which now belonged of right to the conquerors; and that he had excited his subjects to take up arms against the Spaniards. On these heads of accusation they proceeded to try the fovereign of a great empire, over whom they had no jurisdiction. To all these charges the Inca pleaded not guilty. With respect to the death of his brother, he alleged, that the Spaniards could take no cognizance of the fact. With regard to the taxes which he had levied, and the wars he had carried on, they were nothing to the Spaniards; and as to the conspiracy against the Spaniards, he utterly denied it. He called heaven and earth to witness the integrity of his conduct, and how faithfully he had performed his engagements, and the perfidy of his accurers. He defired to be fent over to Spain to take his trial before the emperor; but no regard was paid to his intreaties. He was condemned to be burnt alive; which cruel and fentence was mitigated, as a great favour, to strang grangled ling; and the unhappy monarch was executed without

The death of the Inca was followed by a revolution in the Spanish affairs, who now became generally odious. Hideous cries were fet up by his women as the funeral procession passed by their apartment; many offered to bury themselves alive with him; and on being hindered, strangled themselves out of grief and vexation. The A general whole town of Caxamalca was filled with lamentation, revolt of which quickly extended itself over the whole kingdom. the revians. Friends and enemies accused the Spaniards of inhumanity and treachery. Loads of gold that were coming to Caxamalca by order of the deceased Inca were now stopped; and the loss of the treasure was the first unfortunate consequence which the Spaniards felt from their late iniquitous conduct. The two factions of Indians united against Pizarro; and many of the Spaniards not only exclaimed against the cruelty of the judges, but would even have mutinied, had not a fense of the impending danger kept them quiet. At Cuzco the friends of the emperor Huafcar proclaimed Manco Capac the legitimate brother of the late Inca, determining to support him to the last against all the machinations of his enemies. Pizarro, in the mean time, fet up Taparpa, the fon of Atabalipa, causing him to be treated with all the honours due to an emperor. Immediately he fet out for Cuzco, the gaining of which was absolutely necessary for his defign. An army of Indians occupied the passes, and refolved to dispute his progress. The contest, however, was foon decided; the Spanish cavalry bore down every thing before them, and great numbers of Indians were flain. The conquerors gained a confiderable booty; and Pizarro dispatched Almagro to reduce Cuzco, while he himself founded a new colony in the fruitful valley of Xauna; which, however, was not permanent,

being afterwards removed to the place where Lima now

While Pizarro was thus employed, another commander, named Ferdinando Soto, was detached with 60 horse to make the best of his way to Cuzco, and clear the road for the march of the remainder of the army. He was opposed by a formidable collection of Indians, who had fortified themselves in order to defend a pass against him: for which reason, fearing left his strength might be unequal, he fent a message to Pizarro, desiring that the Inca might join him, thinking that his presence would awe the Peruvians, and prevent the further effufion of blood; but his expectations were frustrated by the death of the Inca, which happened about this time; fo that there was now a necessity for having recourse to arms; for as the Spaniards fet up no person in his room, the title of Manco Capac was univerfally acknow-

In the mean time, a new fupply of foldiers arriving from Spain, Benalcazar, governor of St Michael, undertook an expedition against Quito, where, according to the report of the natives, Atabalipa had left the greatest part of his treasure. He accomplished his purpose with very great difficulty, having a country covered with rocks and mountains to pass, and being opposed by large bodies of the natives. But when he got possession of the city, to his extreme mortification, he found that the inhabitants had carried off all their gold and filver; for they being now acquainted with the ruling passion of the Spaniards, had taken care to disappoint it, by removing the treasures which they knew very well had been the cause of the expedition.

Chili inva-

About the same time Alvarado governor of Guatimala, invaded the province of Chili. In this expedided by Altion his troops endured fuch hardships, and suffered fo much from the cold among the Andes, that a fifth part of the men and all the horses died, and at the fame time the rest were so much dispirited and ema-. ciated, that they became quite unfit for fervice. What was worst of all, when they had arrived at the end of their journey, they met with a body of Spaniards drawn up in hostile array to oppose them. These had been sent against him by Pizarro, who claimed Chili as part of his jurisdiction, and were now joined by Benalcazar, with the troops under his command. Alvarado, however, advanced boldly to the attack; but on the interpolition of fome moderate men in each party, the difference was accommodated. Alvarado engaged to return to his government, upon his being paid 100,000 pelos to defray the expence of his armament. However, most of his followers remained in the country, and enlifted in the service of Pizarro.

In the mean time Ferdinand Pizarro, the brother of the general, had landed in Spain, where he produced fuch immense quantities of gold and filver as aftonished the court, even after all they had feen of the wealth of their new discovered territories. The general's authority was confirmed to him, with new powers and privileges, and the addition of 70 leagues extending along the coast, to the southward of the territory granted in his former patent. Almagro had the title of adelantado or governor conferred upon him, with jurisdiction over 200 leagues of a country lying fouthward from the pro-

vince alloted to Pizarro; he himself was made a knight Perm of the order of St Jago.

Of these transactions some accounts were received at Peru before the arrival of Ferdinand Pizarro himfelf; and no fooner did Almagro hear that he had obtained the royal grant of an independent government, than, pretending that Cuzco, the capital of all Peru, lay within his jurisdiction, he attempted to seize it. Pizarro was no less ready to oppose him; and a very dangerous civil war was about to take place, when the quarrel was made up, on condition that Almagro should attempt the conquest of Chili; and if he did not find there an establishment equivalent to his expectations, Pizarro should yield up to him part of

By this reconciliation Pizarro was left at liberty to fettle the internal policy of his province, which, though little qualified for a legislator, he attempted, by dividing the country into various districts, appointing magistrates to preside in each, and establishing fuch regulations concerning the administration of justice, the royal revenue, &c. as occurred to him. The feat of government he removed from Cuzco to Lima, which he named Ceudad des los Reyes, and which name it still retains among the Spaniards in all legal and formal deeds. Its other name, Lima, is a corruption of Rimac, the name of the valley in which the

city stands. In the mean time Almagro had fet out on his expedition to Chili; the event of which has been related under the article CHILI; and while he was thus employed, Pizarro encouraged some of his most distinguished officers to invade those provinces of the empire which had not yet been visited by the Spaniards. This he did with a view to keep them employed, and prevent tumults; but it was attended with very terrible confequences. No fooner did Manco Capac the Inca perceive the security of the Spaniards in thus dividing their forces, than he feized the opportunity of making one vigorous effort to redrefs the wrongs of himself and his countrymen, and expel the invaders, who had tyrannized in fuch a cruel manner. Though strictly guarded by the Spaniards, he found means to communicate his intentions to the chief men of his nation, whom he joined in the year 1536, under pretence of celebrating a festival which he had obtained liberty from Pizarro to attend. Upon this the standard of war was immediately A dreadful erected, and a most formidable army, according to the insurrection Spanish historians, of 200,000 men collected. Many of the Pe-Spaniards were maffacred in their habitations, and feve-ruvians. ral detachments entirely cut off; and while this vast army laid siege to Cuzco, another formidable body invested Lima, and kept the governor closely shut up. The greatest effort, however, was made against Cuzco, which was defended by Pizarro and his two brothers, with only 170 men. The fiege lasted nine months; many of the Spaniards were killed; among whom was Juan Pizarro, the general's brother, and the bost beloved of them all. The rest were reduced to the most desperate fituation, when Almagro appeared fuddenly in the neighbourhood of Cuzco. He had received fuch accounts of the infurrection in Peru, as would at any rate have determined him to return to the affistance of Pizarro; but besides this, he had now received the royal

He is obliged by Pizarro to abandon the enterprize.

varado.

Honours conferred on Pizarro by the court of Spain.

28 They are defeated, and difperfed.

patent, creating him governor of Chili, and deemed it certain beyond all contradiction, that Cuzco lay within his jurisdiction; for which reason he hastened to prevent it from falling into the hands of the Peruvians. On his arrival his affiftance was folicited by both parties. The Inca made many advantageous proposals; but at length despairing of obtaining any cordial union with a Spaniard, he attacked him in the night by furprife with a great body of chosen troops. But the Spanish valour and discipline prevailed against all the numbers of their enemies; and the Peruvians were repulfed with fuch flaughter, that a great part of the remainder dispersed, and Almagro advanced to the gates of Cuzco without opposition. Pizarro's brothers took measures to oppose his entrance; but prudence for the present restrained both parties from entering into a civil war while they were furrounded with enemies; and therefore each leader endeavoured to corrupt the followers of his antagonist. In this Almagro had the advantage; and so many of Pizarro's troops deferted in the night, that Almagro was encouraged to advance towards the city, where he furprised the centinels; and investing the house where the two brothers were lodged, he compelled them, after an obstinate defence, to surrender at discretion; and Almagro's authority over Cuzco was immediately recognized

Civil war between Pizarro and Almagro.

In this fray only two or three persons were killed; but matters soon began to wear a more serious aspect. Francis Pizarro, having dispersed the Peruvians who invested Lima, and received considerable reinforcements from other provinces, ordered 500 men under the command of Alonso de Alvarado to march to Cuzco, in hopes of relieving his brothers, if they were not already cut off. They advanced to a finall distance from the capital, before they knew that they had a more formidable enemy than the Indians to encounter. When they faw their countrymen drawn up on the banks of a river to oppose them, they were greatly surprised; however, Almagro, who wished rather to gain them than to fight, began with attempting to feduce their leader. Alvarado could not by any means be gained over; but being inferior in military skill, Almagro attacked him by furprife, entirely defeated and dispersed his army, taking himself and some of his principal officers pri-

This victory feemed decifive; and Almagro was advised to make it so by putting to death Gonzalo and Ferdinand Pizarro, Alvarado, and fome others whom he could not hope to gain. This advice, however, he declined from motives of humanity, and a defire of making his adversary appear the aggressor. For these reasons, instead of marching directly against Pizarro, he retired quietly to Cuzco; which gave his adversary time to recollect himself from the disorder into which the news of fo many difasters had thrown him. He began again to practife upon Almagro those arts which had before proved fuccessful; and Almagro again suffered himself to be deceived by pretended offers of pacification. The negotiations for this purpose were protracted for several months; and while Almagro was employed in detecting and eluding the fraudulent intentions of the governor, Gonzalo Pizarro and Alvarado found means to corrupt the foldiers who guarded them, and not only made their own escape, but persuaded 60 of

Almagro's men to accompany them. There now remained only Ferdinand Pizarro in the hands of Almagro; and he was delivered by another act of treachery. The general proposed that all points of controversy should be submitted to the decision of their sovereign: and that Ferdinand Pizarro should be instantly set at liberty, and return to Spain, together with some officers whom the general proposed to fend over to show the justice of his claims. Though the intention of Pizarro by making this proposal was evident, Almagro was deceived by it, and released those whom Pizarro wanted: which he had no fooner done, than the latter threw off all difguife, and openly declared, that arms alone must now decide the matter between them. He therefore immediately fet out for Cuzco with an army of 700 men, to which Almagro had only 500 to oppose. From the weakness of his forces, probably, Almagro did not attempt to guard some strong passes, through which Pizarro had to march, but waited patiently for his adverfary in a plain open country.

In the mean time, Pizarro advanced without any Almagro obstruction from his enemy; and an engagement soon defeated happened, in which Almagro was defeated and taken and taken prisoner. The conquerors behaved with great cruel-prisoner.

ty, massacring a great number of officers, and treating Almagro himself with great severity. The Indians had affembled in great numbers to fee the battle, with an intention to join the vanquished party; but were fo much overawed by the Spaniards, that they retired quietly after the battle was over, and thus lost the only opportunity they ever had of expelling their tyrants. Almagro, after having for some months languished in prison, was at length formally tried, and condemned to die by Pizarro. Notwithstanding his consummate bravery, for which he was remarkable, this hardy veteran could not bear the deliberate approach of death, but condescended to use intreaties to save his life. The Pizarros, however, continued inflexible; and he was first ftrangled in prison, and then publicly beheaded. He and 31 left one fon by an Indian woman, whom he appointed ftrangled. his fuccessor, by virtue of a power granted him by the

As during these dissensions all intercourse with Spain ceased, it was some time before the accounts of the civil war were received at court. The first intelligence was given by some of Almagro's foldiers, who had left America on the ruin of their cause; and they did not fail to represent the injustice and violence of Pizarro in the strongest colours, which strongly prejudiced the emperor against him. In a short time, however, Ferdinand Pizarro arrived, and endeavoured to give matters a new turn. The emperor was uncertain which of them he ought to believe; and therefore thought it necessary to send over some person with ample powers to inquire into the merits of the cause, and to determine certainly who was in the wrong. If he found the governor still alive, he was to assume only the title of judge, in order to have the appearance of acting in concert with him; but if he was dead, the vicerov might then produce his commission appointing him Pizarro's successor in the government. This complaisance to Pizarro, however, proceeded more from a dread of his power than from any other thing; for in the mean time, his brother Ferdinand was arrested at Madrid, and con-

fined 3

fined to a prifon, where he remained above 20 years. The person nominated to this important trust was Christoval Vaca de Castro.

Peru divided by among his associates.

While this gentleman was preparing for his voyage, Pizarro, considering himself as the unrivalled master of Peru, proceeded to parcel out its territories among the conquerors; and had this division been made with any degree of impartiality, the extent of country which he had to bestow was sufficient to have gratified his friends, and to have gained his enemies. But Pizarro conducted this transaction, not with the equity and candour of a judge attentive to discover and to reward merit, but with the illiberal spirit of a party-leader. Large districts, in parts of the country most cultivated and populous, were fet apart as his own property, or granted to his brothers, his adherents, and favourites. To others, lots less valuable and inviting were affigned. The followers of Almagro, amongst whom were many of the original adventuters, to whose valour and perfeverance Pizarro was indebted for his fuccess, were totally excluded from any portion in those lands, towards the acquisition of which they had contributed so largely. As the vanity of every individual sets an immoderate value upon his own fervices, and the idea of each, concerning the recompence due to them, rose gradually to a more exorbitant height in proportion as their conquests extended, all who were disappointed in their expectations exclaimed loudly against the rapaciousness and partiality of the governor. The partisans of Almagro murmured in secret, and meditated re-

Rapid as the progress of the Spaniards in South America had been fince Pizarro landed in Pcru, their avidity of dominion was not yet fatisfied. The officers to whom Ferdinand Pizarro gave the command of different detachments, penetrated into feveral new provinces; and though some of them were exposed to great hardships in the cold and barren regions of the Andes, and others fuffered diftress not inferior amidst the woods and marshes of the plains, they made discoveries and conquefts which extended their knowledge of the country, as well as added to their power. Pedro de Valdivia re-affumed Almagro's scheme of invading Chili; and, notwithstanding the fortitude of the natives in defending their possessions, made such progress in the conquest of the country, that he founded the city of St Jago, and gave a beginning to the establishment of the Spanish dominion there. But of all the enterprises undertaken about this period, that of Expedition Gonzales Pizarro was the most remarkable. The goof Gonzales vernor, who feems to have refolved that no person in Peru should possess any station of distinguished eminence or authority but those of his own family, had deprived Benalcazar, the conqueror of Quito, of his command in that kingdom, and appointed his brother Gonzales to take the government of it. He instructed him to attempt the discovery and conquest of the country to the east of the Andes; which, according to the information of the Indians, abounded with cinnamon and other valuable spices. Gonzales, not inferior to any of his brothers in courage, and no less ambitious of acquiring distinction, eagerly engaged in this difficult service. He set out from Quito at the head of 340 foldiers, near one half of whom were horfemen, with 4000 Indians to carry their provisions. In for-

cing their way through the defiles, or over the ridges Pers. of the Andes, excess of cold and fatigue, to neither of which they were accustomed, proved fatal to the greater part of the wretched attendants. The Spaniards, though more robust, and inured to a variety of climates, suffered confiderably, and lost some men; but when they descended into the low country, their distress increased. During two months it rained inceffantly, without any interval of fair weather long enough to dry their clothes. The vast plains upon which they were now entering, either altogether without inhabitants, or occupied by the rudest and least industrious tribes in the New World, yielded little subsistence. They could not advance a step but as they cut a road through woods, or made it through marshes. Such incessant toil, and continual fcarcity of food, feem more than fufficient to have exhausted and dispirited any troops. But the fortitude and perseverance of the Spaniards in the 16th century were insuperable. Allured by frequent but false accounts of rich countries before them, they perfitted in struggling on, until they reached the banks of the Coca or Napo, one of the large rivers whose waters pour into the Maragnon, and contribute to its grandeur. There, with infinite labour, they built a bark, which they expected would prove of great utility, both in conveying them over rivers, in procuring provisions, and in exploring the country. This was manned with 50 foldiers, under the command of Francis Orellana, the officer next in rank to Pizarro. The stream carried them down with fuch rapidity, that they were foon far a-head of their countrymen, who followed flowly and with difficulty by land.

At this distance from his commander, Orellana, a Orellana young man of an aspiring mind, began to fancy himselffails down independent; and, transported with the predominant the river passion of the age, he formed the scheme of distinguish-Maraging himself as a discoverer, by following the course of deserts Pithe Maragnon until it joined the ocean, and by sur-zarro. veying the vast regions through which it flows. This scheme of Orellana's was as bold as it was treacherous. For, if he be chargeable with the guilt of having violated his duty to his commander, and with having abandoned his fellow-foldiers in a pathless desert, where they had hardly any hopes of fuccess, or even of safety, but what were founded on the service which they expected from the bark, his crime is, in some measure, balanced by the glory of having ventured upon a navigation of near 2000 leagues, through unknown nations, in a veffel haftily constructed with green timber, and by very unskilful hands, without provisions, without a compass, or a pilot. But his courage and alacrity supplied every defect. Committing himself fearlessly to the guidance of the stream, the Napo bore him along to the fouth, until he reached the great channel of the Maragnon. Turning with it towards the coast, he held on his course in that direction. He made frequent descents on both sides the river, sometimes feizing by force of arms the provisions of the fierce favages feated on its banks, and fometimes procuring a supply of food by a friendly intercourse with more gentle tribes. After a long feries of dangers, which he encountered with amazing fortitude, and of diffresses which he supported with no less magnanimity, he reached the ocean, where new perils awaited him. These he likewise surmounted, and got safe to

Pizarro.

the Spanish settlement in the island Cubagua; from thence he failed to Spain. The vanity natural to travellers who vifit regions unknown to the rest of mankind, and the art of an adventurer, folicitous to magnify his own merit, concurred in prompting him to mingle an extraordinary proportion of the marvellous in the narrative of his voyage. He pretended to have discovered nations so rich, that the roofs of their temples were covered with plates of gold; and described a republic of women fo warlike and powerful, as to have extended their dominion over a confiderable tract of the fertile plains which he had visited. Extravagant as those tales were, they gave rife to an opinion, that a region abounding with gold, distinguished by the name of El Dorado, and a community of Amazons, were to be found in this part of the New World; and fuch is the propenfity of mankind to believe what is wonderful, that it has been flowly, and with difficulty, that reason and observation have exploded those fables. The voyage, however, even when stripped of every romantic embellishment, deserves to be recorded, not only as one of the most memorable occurrences in that adventrous age, but as the first event that led to any certain knowledge of those immense regions that stretch eastward from the Andes to the ocean.

No words can describe the consternation of Pizarro, when he did not find the bark at the confluence of the Napo and Maragnon, where he had ordered Orellana to wait for him. He would not allow himself to sufpect that a man, whom he had entrusted with such an important command, could be so base and so unfeeling as to defert him at fuch a juncture. But imputing his absence from the place of rendezvous to some unknown accident, he advanced above 50 leagues along the banks of the Maragnon, expecting every moment to fee the bark appear with a fupply of provisions. At length he came up with an officer whom Orellana had lest to perish in the desert, because he had the courage to remonstrate against his perfidy. From him he learned the extent of Orellana's crime; and his followers perceived at once their own desperate situation, when deprived of their only resource. The spirit of the stout-Extreme di- est hearted veteran sunk within him; and all demanded to be led back inflantly. Pizarro, though he affumed an appearance of tranquillity, did not oppose their inclination. But he was now 1200 miles from Quito; and in that long march the Spaniards encountered hardships greater than those they had endured in their progress outward, without the alluring hopes which then foothed and animated them under their fufferings. Hunger compelled them to feed on roots and berries, to eat all their dogs and horses, to devour the most loathsome reptiles, and even to gnaw the leather of their faddles and fword-belts. Four thousand Indians, and 210 Spaniards, perished in this wild and disaftrous expedition, which continued near two years: and as 50 men were aboard the bark with Orellana, only 80 got back to Quito. These were naked like savages, and fo emaciated with faminc, or worn out with fatigue, that they had more the appearance of spectres than of

But, instead of returning to enjoy the repose which his condition required, Pizarro, on entering Quito, reagainst the ceived accounts of a fatal event that threatened calagovernor; mities more dreadful to him than those through which

Vol. XVI. Part I.

he had passed. From the time that his brother made that partial division of his conquests which has been mentioned, the adherents of Almagro, confidering themfelves as profcribed by the party in power, no longer entertained any hope of bettering their condition. Great numbers in despair resorted to Lima, where the house of young Almagro was always open to them: and the flender portion of his father's fortune, which the governor allowed him to enjoy, was spent in affording them subsistence. The warm attachment with which every person who served under the elder Almagro devoted himself to his interests, was quickly transferred to his fon, who was now grown up to the age of manhood, and possessed all the qualities which captivate the affections of foldiers. Of a graceful appearance, dexterous at all martial exercises, bold, open, generous, he feemed to be formed for command; and as his father, conscious of his own inseriority from the total want of education, had been extremely attentive to have him instructed in every science becoming a gentleman, the accomplishments which he had acquired heightened the respect of his followers, as they gave him distinction and eminence among illiterate adventurers. In this young man the Almagrians found a point of union which they wanted; and looking up to him as their head, were ready to undertake any thing for his advancement. Nor was affection for Almagro their only incitement; they were urged on by their own diffresses. Many of them, destitute of common necessaries, and weary of loitering away life, a burden to their chief, or to fuch of their affociates as had faved fome remnant of their fortune from pillage and confifcation, longed impatiently for an occasion to exert their activity and courage, and began to deliberate how they might be avenged on the author of all their mifery. Their frequent cabals did not pass unobserved; and the governor was warned to be on his guard against men who meditated some desperate deed, and had resolution to execute it. But, either from the native intrepidity of his mind, or from contempt of persons whose poverty rendered their machinations of little consequence, he difregarded the admonitions of his friends. " Be in no pain (faid he carelefsly) about my life; it is perfectly fafe, as long as every man in Peru knows that I can in a moment put him to death who dares to harbour a thought against it." This security gave the Almagrians full leifure to digest and ripen every part of their scheme; and Juan de Herrada, an officer of great abilities, who had the charge of A1magro's education, took the lead in their confultations, with all the zeal which that connection inspired, and with all the authority which the ascendant that he was known to have over the mind of his pupil gave him.

On Sunday, the 26th of June, at midday, the feafon who is of tranquillity and repose in all sultry climates, Her-murdered. rada, at the head of 18 of the most determined conspirators, sallied out of Almagro's house in complete armour; and drawing their fwords, as they advanced hastily towards the governor's palace, cried out, "Long live the king, but let the tyrant die." Their associates, warned of their motions by a fignal, were in arms at different stations ready to support them. Though Pizarro was usually surrounded by such a numerous train of attendants as fuited the magnificence of the most opulent subject of the age in which he lived, yet as he was, just rifen from table, and most of his own domestics had

Peru.

retired to their own apartments, the conspirators passed through the two outer courts of the palace unobserved. They were at the bettom of the staircase, before a page in waiting could give the alarm to his mafter, who was converfing with a few friends in a large hall. The governor, whose steady mind no form of danger could appal, ftarting up, called for arms, and commanded Francisco de Chaves to make fast the door. But that officer, who did not retain fo much presence of mind as to obey this prudent order, running to the top of the flaircafe, wildly asked the conspirators what they meant, and whither they were going? Instead of answering, they stabbed him to the heart, and burst into the hall. Some of the perfons who were there threw themselves from the windows; others attempted to fly; and a few drawing their fwords, followed their leader into an inner apartment. The conspirators, animated with having the object of their vengcance now in view, rushed forward after them. Pizarro, with no other arms than his fword and buckler defended the entry, and, supported by his half-brother Alcantara and his little knot of friends, maintained the unequal contest with intrepidity worthy of his past exploits, and with the vigour of a youthful combatant. "Courage (eried he), companions, we are yet enow to make those traitors repent of their audacity." But the armour of the conspirators protected them, while every thrust they made took effect. Aleantara fell dead at his brother's feet; his other defendants were mortally wounded. The governor, fo weary that he could hardly wield his fword, and no longer able to parry the many weapons furiously aimed at him, received a deadly thrust full in his throat, sunk to the ground, and expired.

As foon as he was slain, the assassins ran out into the streets, and waving their bloody swords, proclaimed the death of the tyrant. Above 200 of their associates having joined them, they conducted young Almagro in solemn procession through the city; and assembling the magistrates and principal citizens, compelled them to acknowledge him as lawful successor to his sather in his government. The palace of Pizarro, together with the houses of several of his adherents, were pillaged by the foldiers; who had the satisfaction at once of being avenged on their enemies, and of enriching themselves by the spoils of those through whose hands all the wealth

of Peru had passed.

The new governor marehed into the heart of the empire, in order to reduce fuch places as refused to acknowledge his authority. A multitude of ruffians joined him on his march. His army breathed nothing but vengeance and plunder: every thing gave way before it. If the military talents of the general had equalled the ardour of his troops, the war had ended here. Unhappily for Almagro, he had loft his eon-ductor John de Herrada. His inexperience made him fall into the snares that were laid for him by Pedro Alvares, who had put himself at the head of the opposite party. He lost, in attempting to unravel his plots, that time that he ought to have employed in fighting. In these circumstances, an event, which no one could have foreseen, happened to change the face of affairs.

The licentiate Vaca di Castro, who had been fent from Europe to try the murderers of old Almagro, arrived at Peru. As he was appointed to assume the government in case Pizarro was no more, all who had not fold themselves to the tyrant hastened to acknowledge him. Uncertainty and jealousy, which had for too long a time kept them dispersed, were no longer an obstacle to their re-union. Castro, who was as resolute as if he had grown old in the service, did not suffer their impatience to languish, but instantly led them against the enemy. The two armies engaged at Chapas on the 16th of September 1542, and sought with inexpressible obttinacy. Victory, after having wavered a He is delong time, at the close of the day decided in favour of seated by that party whose cause was the most just. Those among Vaca dithe rebels who were most guilty, dreading to languish under disgraceful tortures, provoked the conquerors to murder them, crying out, like men in despair, It was I who killed Pizarro. Their chief was taken prisoner, and died on the season

While these scenes of horrors were transacting in A-merica, the Spaniards in Europe were employed in finding out expedients to terminate them; though no measures had been taken to prevent them. Peru had only been made subject to the audience of Panama, which was too remote to superintend the maintenance of good order, and had too little influence to make its decrees respected. A supreme tribunal was then established at Lima for the dispensation of justice, which was to be invested with authority sufficient to enforce and to reward a due obedience to the laws. Blasco Nunez Vela, who presided in it as viceroy, arrived in 1544, attended by his subordinates in office, and found every thing in the most dreadful disorder.

To put an end to those tumults which now subsisted, would have required a profound genius, and many other qualities which are seldom united. Nuncz had none of these advantages. Nature had only given him probity, firmness, and ardour; and he had taken no pains to improve these gifts. With these virtues, which were almost desects in his situation, he began to sulfil his commission, without regard to places, persons, or circumstances.

Contrary to the opinion of all intelligent persons, Bad conwho wished that he should wait for fresh instructions duct of the from Europe, he published ordinances, which declared viceroy Nuthat the lands the conquerors had feized should not nez Vela. pass to their descendants, and which dispossessed those who had taken part in the civil commotions. All the Peruvians who had been enflaved by monks, bisheps, and perfons belonging to the government, were de-Those who belonged to other mafters elared free. were to be freed from their shackles at the death of their oppressors. They could no longer be compelled to bury themselves in the mines, nor could any kind of labour be exacted from them without payment. Their tribute was fixed. The Spaniards who travelled on foot were deprived of the right of taking three Indians to carry their baggage; and those who travelled on horseback, of the right of taking five. The caciques were discharged from the obligation of furnishing the traveller and his retinue with provisions gratis. Other tyrannical establishments also would soon have been proscribed; and the conquered people were on the eve of being sheltered under the protection of laws, which would at least have tempered the rigours of the right of conquest, if even they had not entirely repaired

Young Almagro heads the rebels.

He is over-

come and

killed by

Gonzales

Pizarro.

repaired the injustice of them; but it should feem that the Spanish government was only to be unfortunate in

the good it attempted to effect.

A change so unexpected filled those with consternation who faw their fortunes wrested from them, or who lost the flattering hope of transmitting them to their posterity. Even those who were not affected by these interested views, being accustomed to look upon the Indians as the inftruments and victims of their avarice, had no conception that any other ideas could prevail concerning them. From aftonishment they proceeded to indignation, murmuring, and fedition. viceroy was degraded, put in irons, and banished to a defert island, till he could be conveyed to Spain.

Gonzales Pizarro was then returned from his hazardous expedition, which had employed him long enough to prevent him from taking a part in those revolutions which had fo rapidly fucceeded each other. The anarchy he found prevailing at his return, inspired him with the idea of feizing the supreme authority. His fame and his forces made it impossible that this should be refused him; but his usurpation was marked with fo many enormities, that Nunez was regretted. He was recalled from exile, and foon collected a fufficient number of forces to enable him to take the field. Civil commotions were then renewed with extreme fury by both parties. No quarter was asked or given on either fide. The Indians took part in this as they had done in the preceding wars; fome ranged themselves under the standard of the viceroy, others under the banners of Gonzales. From 15,000 to 20,000 of these unhappy wretches, who were fcattered about in each army, dragged up the artillery, levelled the roads, carried the baggage, and destroyed one another. Their conquerors had taught them to be fanguinary. After a variety of advantages for a long time alternately obtained, fortune at length favoured the rebellion under the walls of Quito in the month of January, in the year 1545; and Nunez with the greatest part of his men were mas-

Pizarro took the road of Lima, where they were deliberating on the ceremonies with which they should receive him. Some officers wished that a canopy should be carried for him to march under, after the manner of kings. Others, with adulation still more extravagant, pretended that part of the walls of the town, and even fome houses, must be pulled down; as was the custom at Rome, when a general obtained the honours of a triumph. Gonzales contented himself with making his entrance on horseback, preceded by his lieutenant, who marched on foot. Four bishops accompanied him, and he was followed by the magistrates. The streets were strewn with flowers, and the air refounded with the noise of bells and various mufical inftruments. This homage totally turned the head of a man naturally haughty, and of confined ideas. He spoke and acted in the most defpotic manner.

Had Gonzales possessed judgement and the appearance of moderation, it would have been possible for him to render himself independent. The principal perfons of his party wished it. The majority would have beheld this event with indifference, and the rest would have been obliged to confent to it. Blind cruelties, infatiable avarice, and unbounded pride, altered thefe dispositions. Even those, whose interests were connected with those of the tyrant, wished for a deli-

Such a deliverer arrived from Europe in the person An end put of the licentiate Pedro di la Gasca. The squadron and to the trouthe provinces of the mountains immediately declared for bles by a person who was invested with a lawful authority to Pedro di la govern them. Those who lived concealed in deferts, caverns, and forests, quitted their retreats to join him. Gonzales, who saw no resource left to support him but in some great atchievement, took the road of Cuzco, with a resolution to give battle. At some leagues distance from this place he met the royal army, and attacked it on the 9th of June 1548. One of his lieutenants, feeing him abandoned at the first charge by his best foldiers, advised him to throw himself into the enemy's battalions, and perish like a Roman: but this weak man chose rather to surrender, and end his life on a scaffold. Carvajal, a more able warrior, and more ferocious than himself, was quartered. This man, when he was expiring, boafted that he had maffacred with his own hand 1400 Spaniards and 20,000

Such was the last scene of a tragedy, of which every act has been marked with blood. The government was moderate enough not to continue the profcriptions; and the remembrance of the horrid calamities they had fuffered kept the Spaniards in the bounds of fubjection. What still remained of that commotion that had been raised in their minds, insensibly sunk into a calm; and the country hath remained in quiet

With regard to the Peruvians, the most cruel mea- Hard fate fures were taken to render it impossible for them to re-of the Pebel. Tupac Amaru, the heir of their last king, had ruvians. taken refuge in some remote mountains, where he lived There he was fo closely surrounded by the troops which had been fent out against him, that he was forced to furrender. The viceroy Francis de Toledo caused him to be accused of several crimes that he had not committed, and for which he was beheaded in 1571. All the other descendants of the Incas shared the same fate, under pretence that they had conspired against their conquerors. The horror of these enormities excited so univerfal an indignation both in the Old and the New World, that Philip II. thought himself obliged to difavow them; but the infamous policy of this prince was to notorious, that no credit was given to this appearance of his justice and humanity.

The empire of Peru, at the time it was subdued, ex-Extent of tended along the South sea, from the river of Emeralds the empire. to Chili, and on the land fide to Popayan, according to some geographers. It contained within its extent that famous chain of mountains which rifes in the Terra Magellanica, and is gradually lost in Mexico, in order to unite, as it should seem, the southern parts of America with the northern.

It is now divided into three grand divisions or audi-Payne's ences; Quito, Lima or Los Reyes, and Los Charcos. Geography. As to its climate, mines, foil, and produce, they differ greatly in different parts of the country.

The extensive province of Quito is bounded on the Province of north by Popayan, and includes a part of that govern-Quito. ment, also by Santa Fe de Bogota; on the fouth by the governments of Piura and Chachapoyas; on the cast it extends over the whole government of Maynas C c 2 and

and the river of the Amazons to the meridian, which divides the Spanish from the Portuguese dominions; and on the west it is bounded by the South sea; extending, according to Antonio de Ulloa, 600 leagues in length, and about 200 in its greatest breadth; but this greatly exceeds the computation of all other geographers. He however observes, that it must be owned a great part of those vast dominions are either inhabited by nations of Indians, or have not hitherto been fufficiently peopled by the Spaniards, if indeed they have been thoroughly known; and that all the parts that can properly be faid to be peopled, and actually subject to the Spanish government, are those intercepted by the two Cordilleras of the Andes, which, in comparison to the extent of the country, may be termed a street or lane, 15 leagues, or fometimes more, from east to west; to this must be added several detached governments, separated by the very extensive tracts inhabited by free Indians.

Climate,

The climate of Quito differs from all others in the ieasons, &c same parallel, since even in the centre of the torrid of this pro- zone, or although under the equinoctial, the heat is not only very tolerable, but even in some places the cold is painful; while others enjoy all the advantages of a perpetual fpring, the fields being constantly covered with verdure, and enamelled with flowers of the most lively colours. The mildness of the climate, free from the extremes of heat and cold, and the constant equality of the day and night, render this country, which from its fituation might be thought to be parched by the constant heat of the fun, and scarcely inhabitable, both pleafant and fertile; for nature has here dispensed her blesfings with fo liberal a hand, that this country in feveral respects surpasses those of the temperate zones, where the viciffitudes of winter and fummer, and the change from heat to cold, cause the extremes of both to be more fensibly felt. However, in different parts of the country, the air is very different; in one part are mountains of a stupendous height and magnitude, with their fummits covered with snow. The plains are temperate, the valleys hot, and, according to the high or low fituation of the country, are found all the variety of gradations in temperature possible to be conceived between the extremes of heat and cold.

Quito, the capital, in 13' fouth latitude, and 77° 50' west longitude from Greenwich, is so happily situated, that neither heat nor cold are troublesome, though both may be felt in its neighbourhood; and what renders this equality more delightful is, that it is constant throughout the whole year, the difference between the feafons being scarce perceptible. Indeed the mornings are cool, the remainder of the day warm, and the nights

of an agreeable temperature. See QUITO.

The winds, which are pure and falubrious, blow for the most part from north to fouth, but never with any violence, though they fometimes shift their quarters, but without any regard to the feason of the year. Such fignal advantages refulting from the climate, foil, and aspect of this country, would be sufficient to render it the most enviable spot upon earth, as it is supposed to be the most elevated, if, whilst enjoying these delights, the inhabitants were not haraffed by terror, and expofed to continual danger; for here tremendous tempests of thunder and lightning prevail, which are sufficient to appal the stoutest heart; whilst earthquakes frequently

fpread universal apprehensions, and sometimes bury cities Peru.

The distinction of winter and summer consists in a very minute difference; the interval between the month of September and those of April, May, or June, is here called the winter feafon, and the other months compose the fummer. In the former feafon the rain chiefly prevails, and in the latter the inhabitants frequently enjoy whole days of fine weather; but whenever the rains are discontinued for above a fortnight, the inhabitants are in the utmost consternation, and public prayers are offered up for their return. On the other hand, when they continue a short time without intermission, the like fears prevail, and the churches are again crowded with supplicants to obtain fine weather; for a long drought produces dangerous difeases, and a continual rain, without intervals of funshine, destroys the fruits of the earth. The city of Quito, however, enjoys one peculiar advantage, in being free from musketoes and other troublesome insects, such as sleas and venomous reptiles, except the nigua or pique, which is a very small infect shaped like a flea, but hardly visible to the fight.

The fertility of the foil here is incredible, for the Soil, profruits and beauties of the feveral feafons are visible at duce, &c. the fame time; and the curious European observes with a pleafing admiration, that while some herbs of the field are fading, others of the same kind are springing up; while fome flowers lofe their beauty, others blow to continue the enamelled prospect: thus, when the fruits of the trees have attained their maturity, and the leaves begin to change their colour, fresh leaves blossom, and fruits are feen in their proper gradations in fize and ripeness on the same tree. The same incessant fertility is conspicuous in the corn, both reaping and sowing being carried on at the same time: so that the declivities of the neighbouring hills exhibit all the beauties of the four feafons in one affemblage. Though all this is generally feen, yet there is a fettled time for the grand harvest: yet sometimes the most favourable season for fowing in one place is a month or two after that of another, though their distance does not exceed three or four leagues. Thus in different spots, and sometimes in one and the same, sowing and reaping are performed throughout the whole year, the forwardness or retardment naturally arising from the different situations, such as mountains, rifing grounds, plains, and valleys; and the temperature being different in each, the best times for performing the feveral operations of husbandry must

also differ. The chirimoya is confidered as one of the most delicious fruits in the world. Its dimensions are various, being from one to five inches in diameter. Its figure is imperfectly round, flatted towards the stalk, where it forms a kind of navel; but all the other parts are nearly circular. It is covered with a thin foft shell, which adheres fo closely to the pulp as not to be separated from it without a knife. The outward coat is green, variegated with prominent veins, forming all over it a kind of net-work. The pulp is white, and contains a large quantity of juice refembling honey, of a sweet taste, mixed with a gentle acid of a most exquisite flavour. The feeds are formed in feveral parts of the pulp, and are somewhat flat. The tree is high and tufted, the stem large and round, but with some ine-

Peru.

qualities, full of elliptic leaves, terminating in a point. The bloffom differs little from the colour of the leaves, which is a darkith green; and though far from being beautiful, is remarkable for its incomparable fragrance.

The granadilla in its shape resembles an hen's egg, but is larger. The outside of the shell is smooth, glossy, and of a faint carnation colour, and the inside white and soft. The shell contains a viscous liquid substance, full of very small and delicate grains, less hard than those of the pomegranate. This medullary substance is separated from the shell by a fine and transparent membrane. Its fruit has a delightful sweetness blended with acidity, very cordial and refreshing, and so wholesome, that there is no danger of eating to excess.

The frutilla, or Peruvian strawberry, is very different from that of Europe in size; though they are here generally not above an inch in length, they are much larger in other parts of Peru; but their taste, though juicy, and not unpalatable, is not equal to those in Eu-

48 rope.
Inhabitants. Th

The country is observed to abound more in women than in men, which is the more remarkable, as those causes which induce men to leave their country, as travelling, commerce, and war, naturally bring over more men from Europe than women. But there are many families in which there are a number of daughters, without one son among them. The women enjoy a better state of health than the men, which may be owing in some measure to the climate, and more particularly to the early intemperance and voluptuousness of the

The Creoles are well made, of a proper stature, and of a lively and agreeable countenance. The Mestizos are also in general well made, often taller than the ordinary fize, very robust, and have an agreeable air. The Indians, both men and women, are commonly low of stature, though strong and well proportioned; but more natural defects are to be found among them than in any of the rest. Some are remarkably short, some idiots, dumb, or blind. Their hair is generally thick and long, which they wear loofe on their shoulders; but the Indian women plait theirs behind with a ribbon, and cut that before a little above the eyebrows, from one ear to the other. The greatest disgrace that can be offered to an Indian of either fex is to cut off their hair; for whatever corporal punishment their masters think proper to inflict on them, they bear with patience; but this affront they never forgive; and accordingly the government has interposed, and limited this punishment to the most enormous crimes. The colour of the hair is generally a deep black: it is lank, harsh, and as coarse as that of a horse. On the contrary, the male Mestizos, in order to diftinguish themselves from the Indians, cut off their hair; but the females do not adopt that custom.

Their dress.

The Mestizos in general wear a blue cloth, manufactured in this country; but though they are the lowest class of Spaniards, they are very ambitious of distinguishing themselves as such, either by the colour or fashion of the clothes they wear.

The Mestizo women affect to dress in the same manrer as the Spanish, though they cannot equal the ladies

in the richness of their stuffs. The meaner fort wear no shoes; but like the men of the same rank go barefooted.

The dress of the Indians consists of white cotton drawers, which hang down to the calf of the leg, where they are loofe, and edged with a lace fuitable to the stuff. The use of a shirt is supplied by a black cotton frock, made in the form of a fack, with three openings at the top, one in the middle for the head, and others at the corners for the arms; thus covering their naked bodies down to the knees. Over this is a ferge cloak, with a hole in the middle for putting the head through, and a hat made by the natives. This is their general drefs, which they never lay afide, even while they fleep; and they have no additional clothing for their legs or feet. The Indians, who have acquired fome fortune, particularly the barbers and phlebotomists, distinguish themselves from their countrymen by the fineness of their drawers, and by wearing a shirt, which, though without sleeves, has a lace four or five fingers in breadth, fastened round like a kind of ruff or band. They are fond of filver or gold buckles to their shoes, though they wear no stockings; and instead of a mean ferge cloak, wear one of fine cloth, which is often adorned with gold or filver lace.

There are two kinds of dresses worn by the Indianwomen, made in the same plain manner with those worn by the men in general, the whole consisting of a short petticoat and a veil of American baize. But the dress of the lowest class of Indian women is only a bag of the same make and stuff as that of the men, which they fasten on their shoulders with two large pins: it reaches down to the calf of the leg, and is fastened round the waist with a kind of girdle. Instead of a veil, they wear about the neck a piece of the same coarse stuff dyed black; but their arms and legs are

naked

The people have dishes unknown in Europe; but are Food and particularly fond of cheese; and have excellent butter drink, & in the neighbourhood of Quito. Sweetmeats are very much admired.

Rum is commonly drank here by perfons of all ranks, but their favourite liquor is brandy. The diforders arifing from the exceffive use of spirituous liquors are chiefly seen among the Mestizos; and the lower class of women, both among the Creoles and Mestizos, are also extremely addicted to the same species of debauchery.

Another liquor much used in this country is mate, which is made of an herb known in all these parts of America by the name of Paraguay, as being the produce of that country. Some of it is put into a calabash tipped with silver, called here mate, with sugar and fome cold water. After it has continued there fome time, the calabash is filled with boiling water, and they drink the liquor through a pipe fixed in the calabash. It is also usual to squeeze into the liquor a small quantity of the juice of lemons or Seville oranges, mixed with some perfumes from odoriferous slowers. This is their usual drink in the morning fasting, and many use it also at their evening regale. The manner of drinking it appears very indelicate, the whole company taking it successively through the same pipe, it being carried feveral times round the company till all are fatisfied. This among the Creeles is the highest enjoyment: so,

that when they travel, they never fail to carry with them a fufficient quantity of it, and till they have taken their dose of mate they never eat.

The vice of gaming is here carried to an extrava-gant height, to the ruin of many families, some losing their stocks in trade, others the very clothes from their backs, and afterward those belonging to their wives, which they hazard, itimulated by the hope of recovering

The common people, the Indians, and even the domestics, are greatly addicted to stealing. The Mestizos, though arrant cowards, do not want audacity in this way; for though they will not venture to attack any one in the street, it is a common practice to snatch off a person's hat, and immediately seek their safety in flight. This acquisition is sometimes of considerable value; the hats worn by perfons of rank, and even by the wealthy citizens when dreffed, being of white beaver, worth fifteen dollars, befide the hatband of gold or filver lace, fastened with a gold buckle set with diamonds or emeralds. Robberies on the highway are feldom heard of.

Language.

FF 52

paid the .

Honour

dead.

In Quito, and all the towns and villages of its province, different dialects are spoken, Spanish being no less common than the Inga, the language of the country. The Creoles use the latter as much as the former, but both are confiderably adulterated by borrowed words and expressions. The first language generally spoken by children is the Inga; for the nurses being Indians, many of them do not understand a word of Spanish, and thus they afterward learn a jargon composed of both languages.

The fumptuous manner of performing the last offices for the dead, demonstrates how far the power of habit is capable of prevailing over reason and prudence, for their oftentation is so great in this particular, that many families of credit are ruined by preposterously endeavouring to excel others; and the people here may be faid to toil and scheme to lay up wealth, to enable their fucceffors to lavish honours upon a body infensible of all

pageantry.

The commerce of the province of Quito is chiefly carried on by Europeans fettled here, and others who occasionally arrive. The manufactures of this province are only cottons, some white and striped baize, and cloths, which meet with a good market at Lima, for fupplying the inward provinces of Peru. The returns are made partly in filver, and partly in fringes made of gold and filver thread, and wine, brandy, oil, copper, tin, lead, and quickfilver. On the arrival of the galleons at Carthagena, these traders resort thither to purchase European goods, which, at their return, they confign to their correspondents all over the province. The coasts of New Spain supply this province with indigo, of which there is a very large confumption at the manufactures, blue being univerfally the colour which this people adopt for their apparel. They also import, by

way of Guayaquila, iron and steel both from Europe Peru. and the coast of Guatemala.

The disposition of the Indians in the province of Disposition Quito is extremely remarkable, and they appear to have of the inno refemblance to the people found there by those who habitants. first discovered the country. They at present possess a tranquillity not to be disturbed either by fortunate or unfortunate events. In their mean apparel they are as contented as a prince clothed in the most splendid robes. They show the same difregard to riches; and even the authority and grandeur within their reach is fo little the object of their ambition, that to all appearance it feems to be the same to an Indian whether he be created an alcalde, or obliged to perform the office of a common executioner.

Their floth is fo great that scarcely any thing can induce them to work. Whatever therefore is necessary to be done is left to the Indian women, who are much more active; they spin and make the half shirts and drawers which form the only apparel of their husbands; they cook the provisions, grind barley, and brew the beer called chicha; while the husband fits fquatting on his hams, the usual posture of the Indians, locking at his bufy wife. The only domestic service they do is to plough their little fpot of land, which is fowed by the wife. When they are once feated on their hams, no reward can induce them to stir; fo that if a traveller has loft his way, and happens to come to one of their cottages, they charge their wives to fay that they are not at home. Should the passenger alight and enter the cottage, the Indian would still be safe; for having no light but what comes through a hole in the door, he could not be discovered; and should the stranger even fee the Indian, neither entreaties nor rewards would prevail on him to stir a step with him.

They are lively only in parties of pleasure, rejoicings, entertainments, and especially dancing; but in all these the liquor must circulate briskly, and they continue drinking till they are entirely deprived both of fense and motion.

It is remarkable that the Indian women, whether maids or married, and Indian young men before they are of an age to contract matrimony, are never guilty of this vice: it being a maxim among them, that drunkenness is the privilege of nonc but masters of families, who, when they are unable to take care of themselves, have others to take care of them.

The women present the chicha (A) to their husbands in calabashes, till their spirits are raised; then one plays on a pipe and tabor, while others dance. Some of the best voices among the Indian women fing longs in their own language, and those who do not dance, squat down in the usual posture till it comes to their turn. When tired with intemperance, they all lie down together, without regarding whether they be near the wife of another or their own fifter or daughter. These festivities fometimes continue three or four days, till the priest coming

⁽A) This is a liquor made from maize by the following process. The maize, after being foaked in water till it begin to grow, is dried in the fun, then parched a little, and at last ground. The flour, after it has been well kneaded, is put with water into a large veffel, and left for two or three days to ferment. Its tafte is nearly that of the most indifferent kind of cyder. It is a refreshing, neurishing, and aperitive liquer; but it will not keep above eight days without turning four.

coming among them, throws away all the chicha, and differences the Indians, left they should procure more.

Their funerals are likewise folemuized with excessive

drinking. The house is filled with jugs of chicha, for the folace of the mourners and other visitors; the latter even go out into the streets, and invite all of their nation who happen to pass by to come in and drink to the honour of the deceased. This ceremony lasts four or five days, and fometimes more, ftrong liquor being their fupreme enjoyment.

Their mantracting

marriages.

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country in

The Indians in the audience of Quito are faid to act ner of con- contrary to all other nations in their marriages; for they never make choice of a woman who has not been first enjoyed by others, which they confider as a certain indication of her perional attractions. After a young man has made choice of a woman, he asks her of her father, and having obtained his confent, the begin to cohabit together as man and wife, and affift the fatherin-law in cultivating the land. At the end of three or four months, and frequently of a year, the husband leaves his bride or wife without any ceremony; and perhaps expostulates with his father-in-law for endeavouring to deceive him, by imposing upon him his daughter, whom nobody else had thought worthy of making a bedfellow. But if no disgust arises in the man on this account or any other, after passing three or four months in this commerce, which they call amanarfe, or to habituate one's felf, they then marry. This custom is still very common, though the whole body of the clergy have used all their endeavours to put a slop to it. Accordingly they always absolve them of that fin beforc they give them the nuptial benediction.

It has been observed, that the dependencies of the jurisdictions of Quito are seated between the two Cordilleras of the Andes, and that the air is more or less cold, and the ground more or less sterile, according to the height of the mountains. These barren tracts are called deferts; for though all the Cordilleras are dry, fome are much more fo than others; and the continual fnow and frosts render some parts of them incapable of producing a fingle plant, and confequently they are un-

inhabitable by man or beaft.

Some of these mountains, which appear to have their bases resting on other mountains, rise to a most astonishing height, and, reaching far above the clouds, are herc, although in the midst of the torrid zone, covered with perpetual fnow. From experiments made with a barometer on the mountain of Cotopaxi, it appeared that its fummit was elevated 6252 yards above the furface of the fea, fomething above three geographical miles, which greatly exceeds the height of any other mountain in the known world.

Cotopaxi became a volcano about the time when the Spaniards first arrived in this country. A new cruption happened in 1743, which had been for fome days preceded by a continual interior rumbling noise; after which an aperture was made in its fummit, as also three others near the middle of its declivity; their parts, when the eruption commenced, were buried under prodigious masses of snow. The ignited substances which were ejected being mingled with a considerable quantity of fnow and ice, melting amidst the flames, were carried down with fuch amazing rapidity, that the plain from Callo to Latacunga was overflowed, and all the houses with their wretched inhabitants were swept away

in one general and inflantaneous destruction. The river of Latacunga was the receptacle of this dreadful flood, till becoming fwollen above its banks, the torrent rolled over the adjacent country, continuing to fweep away houses and cattle, and rendered the land near the town of the same as the river one vast lake. Here, however, the inhabitants had fufficient warning to fave their lives by flight, and retreated to a more elevated fpot at some distance. During three days the velcano ejected cinders, while torrents of lava with melted ice and fnow poured down the fides of the mountain. The eruption continued for feveral days longer, accompanied with terrible roarings of the wind, rushing through the craters which had been opened. At length all was quiet, and neither smoke nor fire were to be seen; until in May 1744 the flames forced a passage through several other parts on the fides of the mountain; fo that in clear nights the flames, being reflected by the transparent ice, exhibited a very grand and beautiful illumination. On the 13th of November following, it ejected fuch prodigious quantities of fire and lava, that an inundation equal to the former foon enfucd, and the inhabitants of the town of Latacunga for fome time gave themselves over for loft.

The most fouthern mountain of the Cordilleras is that of Mecas or Sangay, which is of a prodigious height, and the far greatest part of it covered with fnow; yet from its fummit iffues a continual fire, attended with explosions which are plainly heard at 40 leagues diffance. The country adjacent to this volcano is entirely barren, being covered with cinders ejected from its mouth. In this mountain rifes the river Sangay, which being joined by the Upano, forms the Payra, a large river which discharges itself into the Ma-

Pichincha, though famous for its great height, is 1278 yards lower than the perpendicular height of Cotopaxi, and was formerly a volcano, but the mouth or crater on one of its fides is now covered with fand and calcined matter; fo that at prefent neither fmoke nor fire iffue from it. When Don George Juan and Don Antonio de Ulloa were stationed on it for the purpose of making astronomical observations, they found the cold on the top of this mountain extremely intense, the wind violent, and they were frequently involved in fo thick a fog, or, in other words, a cloud, that an object at fix or eight paces distance was scarcely discernible. The air grew clear, by the clouds moving nearer to the earth, and on all fides furrounding the mountain to a vast distance, representing the sea with the mountain ftanding like an island in the centre. When this happened, they heard the dreadful noise of the tempetts that discharged themselves on Quito and the neighbouring country. They faw the lightning iffue from the clouds, and heard the thunder roll far beneath them. While the lower parts were involved in tempests of thunder and rain, they enjoyed a delightful ferenity; the wind was abated, the fky clear, and the colivening rays of the fun moderated the feverity of the cold. But when the clouds rose, their thickness rendered respiration difficult: fnow and hail fell continually, and the wind returned with all its violence; fo that it was impossible entirely to overcome the fear of being, together with their hut, blown down the precipice on whofe edge it was built, or of being buried in it by the conflant

Peru.

stant accumulations of ice and snow. Their fears were likewise increased by the fall of enormous fragments of rocks. Though the smallest crevice visible in their hut was stopped, the wind was so piercing that it penetrated through; and though the hut was small, crowded with inhabitants, and had several lamps constantly burning, the cold was so great, that each individual was obliged to have a chasing-dish of coals, and several men were constantly employed every morning to remove the snow which fell in the night. By the severities of such a climate their feet were swelled, and so tender that walking was attended with extreme pain, their hands covered with chilblains, and their lips so swelled and chopt that every motion in speaking drew blood.

Province of Lima.

every motion in fpeaking drew blood.

The next division of Peru is the audience of Lima, which is bounded on the north by Quito, on the east by the Cordilleras of the Andes, on the fouth by the audience of Los Charcos, and on the west by the Pacific ocean, it being about 770 miles in length from north to fouth, but of an unequal breadth.

Climate, foil, &c. in this province.

The climate and foil of this country is uncommonly various; in some places it is exceedingly hot, in others insupportably cold, and in the city of Lima, where rain never falls, it is always temperate. The feasons vary within the compass of a few miles, and in certain parts of the audience all the vicistitudes of weather are experienced in 24 hours. It is extremely remarkable that no rains fall or rivers flow on the sea coasts, though the country is refreshed by thick fogs, and the heat abated by dense clouds that never condense into showers. This phenomenon has drawn the attention of many naturalists, without their being able satisfactorily to account for it.

Spring begins toward the close of the year, that is about the end of November or the beginning of December, when the vapours which fill the atmosphere during the winter fubfide, and the fun, to the great joy of the inhabitants, again appears, and the country then begins to revive, which, during the absence of his rays, had continued in a state of languor. This is succeeded by fummer, which, though hot from the perpendicular direction of the fun's rays, is far from being insupportable; the heat, which indeed would otherwife be exceffive, being moderated by the fouth winds, which always blow at this feafon, though with no great force. ter begins at the latter end of June or the beginning of July, and continues till November or December, when the fouth winds begin to blow stronger, and to produce a certain degree of cold, not indeed equal to that in countries where ice and fnow are known, but so keen that the light dreffes are laid by, and cloth or other warm stuffs worn. During the winter the earth is covered with fo thick a fog, as totally to intercept the rays of the fun; and the winds, by blowing under the shelter of this fog, retain the particles they contracted in the frozen zone. In this feafon only the vapours diffolve into a very fmall dew, which everywhere equally moistens the earth; by which means all the hills, which during the other parts of the year offer nothing to the fight but rocks and wastes, are clothed with verdure and enamelled with flowers of the most beautiful colours. These dews never fall in such quantities as to impair the roads or incommode the traveller; a very thin stuff will not soon be wet through; but the continuance of the mifts during the whole winter, without

being exhaled by the fun, fertilizes every part of the Peru.

From a table of meteorological observations made in the city of Lima, from the month of March 1791, to March 1792, it appears that the thermometer was lowest during the month of September, when it descended to 62°, and that it was highest in the month of March, when it rose as high as 84°. These temperatures denote the extremes of heat and cold in the winter and summer of this climate.

Lima is as free from tempests as from rain; so that those of the inhabitants who have neither visited the mountains nor travelled into other parts, are absolute strangers to thunder and lightning, and are therefore extremely terrified when they first hear the former or see the latter. But it is very remarkable, that what is here entirely unknown should be so common 30 leagues to the east of Lima; it being no farther to the mountains, where violent rains and tempests of thunder and

lightning are as frequent as at Quito.

But though the capital is freed from the terror of these tempests, it is subject to what is much more dread-Earthquakes happen here fo frequently, that the inhabitants are under continual apprehensions of being, from their fuddenness and violence, buried in the ruins of their own houses: yet these earthquakes, though so fudden, have their prefages, one of the principal of which is a rumbling noise in the bowels of the earth about a minute before the shocks are felt, that seems to pervade all the adjacent fubterraneous part; this is followed by difmal howlings of the dogs, who feem to prefage the approaching danger. The beafts of burden paffing the streets stop, and by a natural instinct spread open their legs, the better to fecure themselves from falling. On these portents the terrified inhabitants fly from their houses into the streets with such precipitation, that if it happens in the night they appear quite naked; the urgency of the danger at once banishing all sense of delicacy or fliame. Thus the streets exhibit fuch odd and fingular figures as might afford matter of diversion, were it possible to be diverted in so terrible a moment. This fudden concourse is accompanied with the cries of children waked out of their fleep, blended with the la-mentations of the women, whose agonizing prayers to the faints increase the common fear and confusion. The men are also too much affected to refiain from giving vent to their terror; fo that the whole city exhibits a dreadful scene of consternation and horror.

The earthquakes that have happened at the capital are very numerous. The first since the establishment of the Spaniards was in 1582; but the damage was much less considerable than in some of the succeeding. Six years after Lima was again vifited by another earthquake, fo dreadful, that it is still folemnly commemorated every year. In 1609 another happened, which overturned many houses. On the 27th of November 1630, fuch prodigious damage was done in the city by an earthquake, that, in acknowledgement of its not having been entirely demolished, a festival on that day is annually celebrated. Twenty-four years after, on the 3d of November, the most stately edifices in the city, and a great number of houses, were destroyed by an earthquake; but the inhabitants retiring, few of them perished. Another dreadful one happened in 1678; but one of the most terrible was on the 28th of October

1687. It began at four in the morning, and destroyed many of the finest public buildings and houses, in which a great number of the inhabitants perished; but this was little more than a prelude to what followed; for two hours after, the shock returned with such impetuous concussions, that all was laid in ruins, and the inhabitants felt themselves happy in being only spectators of the general devastation, by having faved their lives, though with the lofs of all their property. During this fecond shock, the sea retiring considerably, and then returning in mountainous waves, entirely overwhelmed Callao, which is at five miles distance from Lima, and all the adjacent country, together with the miferable inhabitants. From that time fix earthquakes have happened at Lima previous to that of 1746. This last was on the 28th of October, at half an hour after ten at night, when the concussions began with such violence, that in little more than three minutes the greatest part, if not all the buildings in the city, were destroyed, burying under their ruins those inhabitants who had not made sufficient haste into the streets and squares, the only places of fafety. At length the horrible effects of the first shock ceased; but the tranquillity was of short duration, the concussions swiftly succeeding each other. The fort of Callao also sunk into ruins; but what it suffered from the earthquake in its building was inconfiderable, when compared to the dreadful catastrophe which followed; for the fea, as is usual on such occasions, receding to a confiderable diffance, returned in mountainous waves, foaming with the violence of the agitation, and fuddenly buried Callao and the neighbouring country in its flood. This, however, was not entirely effected by the first swell of the waves; for the sca retiring farther, returned with still greater impetuosity, and covered both the walls and other buildings of the place; fo that whatever had escaped the first inundation was totally overwhelmed by those succeeding mountainous waves. Twenty-three ships and vessels, great and small, were then in the harbour, 19 of which were sunk, and the other 4, among which was a frigate named St Fermin, were carried by the force of the waves to a confiderable distance up the country. This terrible inundation and earthquake extended to other parts on the coast, and several towns underwent the same fate as the city of Lima; where the number of persons who perished within two days after it began, amounted, according to the bodies found, to 1300, beside the maimed and wounded, many of whom lived only a short time in great torture. The present population of this city, taken from accurate

fources, amounts to 52,627.

The country of Lima enjoys great fertility, producing all kinds of grain and a prodigious variety of fruit. Here industry and art supply that moisture which the clouds withhold. The ancient incas of Peru caused small canals to be formed, in order to condust the waters of the rivers to every part of the country. The Spaniards, sinding these useful works executed to their hands, had only to keep them in order; and by these are watered spacious sields of barley, large meadows, plantations, vineyards, and gardens, all yielding uncommon plenty. Lima differs from Quito, where the fruits of the carth have no determined season; for here the harvest is gathered in, and the trees drop their leaves in

the proper feafon.

Although the fummer here is hot, yet venomous crea-Vol. XVI. Part I.

tures are unknown; and the same may be said of the territory called *Valles*, though here are some ports, as 'Tumbez and Piura, where the heat is almost as great as that of Guayaquil. This singularity can therefore proceed from no other cause than the natural drought of the climate.

The audience of Lima is divided into four bishoprics, Divisions Truxillo, Guamanga, Cusco, and Arequipa. The dio. of the aucese of Truxillo lies to the north of the archiepiscopal dience of diocese of Lima, and like all the others is divided into several jurisdictions. The city of Truxillo is seated in 8° 6′ fouth latitude, in a pleasant situation, though in a sead of the field.

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In the diocese of Guamanga is a rich quicksilver mine, from which the inhabitants of a neighbouring town procure their whole subsistence; the coldness of the air in that place checking the growth of all kinds of grain and fruit, so that they are obliged to purchase them from their neighbours. The quicksilver mines wrought here supply all the filver mines in Peru with that necessary mineral, and notwithstanding the prodigious quantities already extracted, no diminution is perceived.

Cusco, which gives name to another diocese, is the most ancient city of Peru, being of the same date with the empire of the incas, and was founded by them as the capital of the empire. On the mountain contiguous to the north part of the city are the ruins of a famous fort built by the incas; whence it appears that their design was to inclose the whole mountain with a prodigious wall, of such construction as to render its ascent absolutely impracticable to an enemy, in order to prevent all approach to the city. This wall was entirely of freestone, and strongly built, some of the stones being of a prodigious magnitude. The city of Cusco is nearly equal to that of Lima. See Cusco.

In this bishopric are several mines of gold and filver,

that are extremely rich.

The fourth diocese of the audience of Lima is Arequipa, which contains the city of the same name, one of the largest in Peru. It is delightfully situated in a plain; the houses are well built of stone, and are generally lofty, commodious, finely decorated on the outside, and neatly surnished within. The temperature of the air is extremely agreeable, the cold being never excessive, or the heat troublesome; so that the fields are always clothed with verdure, and enamelled with slowers, as in a perpetual spring. But these advantages are allayed by its being frequently exposed to dreadful earthquakes; for by these convulsions of nature it has been four times laid in ruins. The city is, however, very populous, and among its inhabitants are many noble families.

In this bishopric are feveral gold and filver mines, and in some parts are large vineyards, from which confiderable quantities of wine and brandy are made. Among the other productions is Guinea pepper, in which the jurisdiction of Arica in this diocese carries on a very advantageous trade, the annual produce of these plantations bringing in no less than 60,000 dollars per annum. The pods of this pepper are about a quarter of a yard in length, and when gathered are dried in the sun and packed up in bags of rushes, each bag containing an aroba or a quarter of a hundred weight, and thus they are exported to all parts. Other places of

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60 The audience of

Charcas.

61

Divisions.

audience.

feru. This jurisdiction are famous for vast quantities of large and excellent olives, far exceeding the finest produced in Europe, being nearly, it is faid, the fize of a hen's

egg.

The audience of Charcas, the last division of Peru, is equal in extent to that of Lima; but many of its parts are not fo well inhabited, some being full of vast deserts and impenetrable forests, while others have extensive plains intercepted by the stupendous height of the Cordilleras: the country is inhabited only in fuch parts as are free from those inconveniences. It is bounded on the north by the diocese of Cusco, and reaches southward to Buenos Ayres; on the cast it extends to Brasil; and on the west it reaches to the Pacific ocean, particularly at Atacama. The remainder of the province borders on the kingdom of Chili.

This audience is divided into the archbishopric of &c. of this Plata, and five bithoprics. We shall begin with the former.

> The famous mountain of Potofi is known all over the commercial world for the immense quantity of filver it has produced. The discovery of this amazing treasure happened at the commencement of the year 1545, by a mere accident, which we shall mention afterwards. At a fmall distance from it are the hot medicinal baths, called Don Diego, whither some resort for health and others for amusement.

62 How the country was at first fettled by the Spamiards.

At the time when the first conquests were made, when emigrations were most frequent, the country of the Incas had a much greater reputation for riches than New Spain; and, in reality, for a long time much more confiderable treasures were brought away from it. The defire of partaking of them must necessarily draw thither, as was really the case, a greater number of Castilians. Though almost all of them went over thither with the hope of returning to their country to enjoy the fortune they might acquire, yet the majority fettled in the colony. They were induced to this by the foftness of the climate, the falubrity of the air, and the goodness of the provisions. Mexico presented not the same advantages, and did not give them reason to expect so much independence as a land infinitely more remote from the mother-country.

Cusco attracted the conquerors in multitudes. They found this capital built on a ground that was very irregular, and divided into as many quarters as there were provinces in the empire. Each of the inhabitants might follow the usages of his native country; but every body was obliged to conform to the worship established by the founder of the monarchy. There was no edifice that had any grandeur, elegance, or convenience; because the people were ignorant of the first elements of architecture. The magnificence of what they called the palace of the sovereign, of the princes of the blood, and of the great men of his empire, consisted in the profusion of the metals that were lavished in decorating them. The temple of the Sun was diftinguished above all other edifices; its walls were incrusted or sheathed with gold and filver, ornamented with divers figures, and loaded with the idols of all the nations whom the Incas had enlightened and fubdued.

As it was not a folicitude for their own preservation which occupied the Spaniards at first, they had no sooner pillaged the immense riches which had been amassed at Cusco for four centuries, than they went in great numbers in 1534, under the order of Sebastian de Benalcazar, to undertake the destruction of Quito. The other towns and fettlements of the empire were overrun with the same spirit of rapine; and the citizens and the temples were plundered in all parts.

Those of the conquerors, who did not take up their refidence in the fettlements which they found already formed, built towns on the fea coasts, where before there were none: for the sterility of the foil had not permitted the Peruvians to multiply much there; and they had not been induced to remove thither from the extremity of their country, because they failed very little. Paita, Truxillo, Callao, Pifca, and Arica, were the roads which the Spaniards deemed most convenient for the communication they intended to establish among themselves and with the mother-country. The different positions of these new cities determined the degree of their prosperity.

Those which were afterwards built in the inland parts of the country were not erected in regions which prefented a fertile foil, copious harvests, excellent pastures, a mild and salubrious climate, and all the conveniences of life. These places, which had hitherto been so well cultivated by a numerous and flourishing people, were now totally difregarded. Very foon they exhibited only a deplorable picture of a horrid defert; and this wildness must have been more melancholy and hideous than the dreary aspect of the earth before the origin of societies. The traveller, who was led by accident or curiofity into these desolate plains, could not forbear abhorring the barbarous and bloody authors of fuch devastations, while he reflected that it was not owing even to the cruel illufions of glory, and to the fanaticism of conquest, but to the stupid and abject desire of gold, that they had facrificed fo much more real treasure, and fo numerous a population.

This infatiable thirst of gold, which neither tended to fubfishence, safety, nor policy, was the only motive for establishing new settlements, some of which have been kept up, while feveral have decayed, and others have been formed in their stead. The fate of them all has corresponded with the discovery, progress, or declenfion, of the mines to which they were subordi-

Fewer errors have been committed in the means of Manner of procuring provisions. The natives had hitherto lived living of hardly on any thing else but maize, fruits, and pulse, the natives. for which they had used no other feasining except falt and pimento. Their liquors, which were made from different roots, were more diversified: of these the chicha was the most usual; but the conquerors were not fatisfied either with the liquors or with the food of the people they had fubdued. They imported vines from the Old World, which foon multiplied fufficiently in the fands of the coasts at Ica, Pisca, Nasca, Moquequa, and Truxillo, to furnish the colony with the wine and brandy it wanted. Olives fucceeded still better; and yielded a great abundance of oil, which was much fuperior to that of the mother-country. Other fruits were transplanted with the same success. Sugar succeeds fo well, that none of any other growth can be compared to that which is cultivated in those parts, where it never rains. In the inland country wheat and

64 Manufac-

tures, &cc.

barley were fown; and at length all the European quadrupeds were foon found grazing at the foot of the

This was a confiderable step; but there still remained much more to be done. After they had provided for a better and a greater choice of subfishence, the next care of the Spaniards was to have a drefs more commodique and more agreeable than that of the Peruvians. These were, however, better clothed than any other American nation. They owed this superiority to the advantage which they alone poffeffed, of having the LLAMA and PACOS, domestic animals which served them for this use.

See CAMELUS, MAMMALIA Index.

After the conquest, all the Indians were obliged to wear clothes. As the oppression under which they groaned did not allow them to exercise their former industry, they contented themselves with the coarser cloths of Europe, for which they were made to pay an exorbitant price. When the gold and filver which had escaped the rapacity of the conquerors were exhausted, they thought of re establishing their national manufactures. These were some time after prohibited, on account of the deficiency which they occasioned in the exports of the mother-country. The impossibility which the Peruvians found of purchasing foreign stuffs and paying their taxes, occasioned permission to be given at the cnd of ten years for their re-establishment. They have not been discontinued since that time; and have been brought to as great a degree of perfection as it was poffible they could be under a continual tyranny.

With the wool of the vicuna, a species of wild pacos, they make, at Cufco and in its territory, flockings, handkerchiefs, and fcarfs. These manufactures would have been multiplied, if the spirit of destruction had not fallen on animals as well as on men. The same wool, mixed with that of the sheep imported thither from Europe, which have exceedingly degenerated, ferves for carpets, and makes also tolerably fine cloth. Fleeces of inferior quality are employed in ferges, druggets, and

in all kinds of coarse stuffs.

The manufactures subservient to luxury are established at Arequipa, Cusco, and Lima. In these three towns is made a prodigious number of gold toys and plate, for the use of private persons, and also for the churches. All these manufactures are but coarsely wrought, and mixed with a great deal of copper. We feldom discover more taste in their gold and silver laces and embroideries which their manufactures also produce. This is not altogether the case in regard to their lace, which, when mixed with that of Europc, looks very beautiful. This last manufacture is commonly in the hands of the nuns, who employ in it the Peruvian girls, and the young Mestees of the towns, who for the most part before marriage pass some years in the convent.

Other hands are employed in painting and gilding leather for rooms, in making with wood and ivory pieces of inlaid work and fculpture, and in drawing figures on the marble that is found at Cucuca, or on linen imported from Europe. These different works, which are almost all manufactured at Cusco, serve for ornaments for houses, palaces, and temples: the drawing of them is not bad, but the colours are neither exact nor permanent. If the Indians, who invent nothing, but are cxcellent imitators, had able mafters and excellent models, they would at least make good copyists. At the close of the last century, some works of a Peruvian painter, named Michael de St Jacques, were brought to Rome; and the connoisseurs discovered marks of genius in

Though the Peruvians were unacquainted with coin, of the they knew the use of gold and silver; for they employ mines of ed them in different kinds of ornaments. Independent filver, of what the torrents and accident procured them of these metals, some mines had been opened of little depth. The Spaniards have not transmitted to us the manner in which these rich productions were drawn from the bofom of the earth. Their pride, which has deprived us of fo much ufeful knowledge, undoubtedly made them think, that, in the inventions of a people whom they called barbarous, there was nothing that was worthy to

be recorded.

The difference as to the manner in which the Peruvians worked their mines, did not extend to the mines themselves. The conquerors opened them on all sides. At first the gold mines tempted the avarice of the greater number. Fatal experience discouraged those whom passion had not blinded. They clearly saw, that, for some enormous fortunes raised in this manner, great numbers, who had only moderate fortunes, were totally ruined. These mines sunk into such discredit, that, in order to prevent them from being abandoned, the government was obliged to take the 20th part of their produce, instead of the fifth which it at first received.

The mines of filver were more common, more equal, and richer. They even produced filver of a fingular fpecies, rarely found elfewhere. Towards the feacoast, great lumps of this metal are found in the

There are a great number of other mines which are infinitely more important, and are found in the rocks. and on the mountains. Several of them gave false hopes. Such, in particular, was that of Ucuntaya, discovered in 1713. This was only an incruftation of almost massive filver, which at first yielded several millions, but was foon exhausted.

Others which were deeper have been alike deferted. Their produce, though equal to what it was originally, was not sufficient to support the expence of working them, which augmented every day. The mines of Quito, Cusco, and Arequipa, have experienced that revolution which awaits many of the rest.

There are greater numbers of very rich mines which the waters have invaded. The disposition of the ground, which from the fummit of the Cordilleras goes continually shelving to the South sea, must necessarily render these events more common at Peru than in other places. This inconvenience, which with greater care and skill might often have been prevented or diminished, has been in some instances remedied.

Joseph Salcedo, about the year 1660, had discovered. not far from the town of Puna, the mine of Laycacota. It was fo rich, that they often cut the filver with a chisel. Prosperity had so elevated the mind of the proprietor, that he permitted all the Spaniards who came to feek their fortune in this part of the New World, to work fome days on their own account, without weighing or taking any account of the presents he made them. This generofity drew around him an infinite number of.

celebrated. Millions of flambeaux are continually kept

Peru.

Perugia.

people, whose avidity made them quarrel with each other, and the love of money made them take up arms and fall upon one another; and their benefactor, who had neglected no expedient to prevent and extinguish their fanguinary contentions, was hanged as being the author of them. Whilft he was in prison, the water got possession of his mine. Superstition soon made it imagined that this was a punishment for the horrid act they had perpetrated against him. This idea of divine vengeance was revered for a long time; but at last, in 1740, Diego de Bacna affociated with other opulent people to avert the springs which had deluged so much treasure. The labours which this difficult undertaking required, were not finished till 1754. The mine yields as much now as it did at first. But mines still richer than this have been discovered. Such, for example, is that of Potofi, which was found in the fame country where the Incas worked that of Porco.

An Indian, named Hualpa, in 1545, purfuing some deer, in order to climb certain steep rocks laid hold of a buth, the roots of which loofened from the earth, and brought to view an ingot of filver. The Indian had recourse to it for his own use; and never failed to return to his treasure every time that his wants or his desires solicited him to it. The change that had happened in his fortune was remarked by one of his countrymen, and he discovered to him the secret. The two friends could not keep their counsel and enjoy their good fortune. They quarrelled; on which the indifcreet confidant difcovered the whole to his master, Villaroell, a Spaniard who was fettled in the neighbourhood. Upon this the mine became known, and was worked; and a great number of them were found in its vicinity; the principal of which are in the northern part of the mountain, and their direction is from north to fouth. The most intelligent people of Peru have observed, that this is in general the direction of the richest mines.

The fame of what was passing at Potosi soon spread abroad; and there was quickly built at the foot of the mountain a town, consisting of 60,000 Indians and 10,000 Spaniards. The sterility of the soil did not prevent its being immediately peopled. Corn, fruit, stocks, American stuffs, European luxuries, arrived there from every quarter. Industry, which everywhere follows the current of money, could not search for it with so much success as at its source. It evidently appeared that in 1738 these mines produced annually near 978,000l. without reckoning the silver which was not registered, and what had been carried off by fraud. From that time the produce has been so much diminished, that no more than one-eighth part of the coin which was formerly struck is now made.

At the mines of Potofi, and all the mines of South America, the Spaniards, in purifying their gold and filver, use mercury, with which they are supplied from Guança Velica. The common opinion is, that this mine was discovered in 1564. The trade of mercury was then still free: it became an exclusive trade in 1571. At this period all the mines of mercury were shut; and that of Guança Velica alone was worked, the property of which the king reserved to himself. It is now found to diminish. This mine is dug in a prodigiously large mountain, 60 leagues from Lima. In its profound abyse are seen streets, squares, and a chapel, where the mysteries of religion on all festivals are

Private people at their own expence work the mine of Guança Velica. They are obliged to deliver to government, at a stipulated price, all the mercury they extract from it. As soon as they have procured the quantity which the demands of one year require, the work is suspended. Part of the mercury is sold on the spot, and the rest is fent to the royal magazines throughout all Peru; from whence it is delivered out at the same price it is fold for in Mexico. This arrangement, which has occasioned many of the mines to drop, and prevented others from being opened, is inexcusable in the Spanish system. The court of Madrid, in this respect, merits the same reproaches as a ministry in other countries would incur, that would be blind enough to lay a duty on the implements of agriculture.

The mine of Guança Velica generally affects those who work in it with convulsions: this and the other mines, which are not less unhealthy, are all worked by the Peruvians. These unfortunate victims of an insatiable avarice are crowded together and plunged naked into these abysses, the greatest part of which are deep, and all excessively cold. Tyranny has invented this resinement in crucity, to render it impossible for any thing to escape its restless vigilance. If there are any wretches who long survive such barbarity, it is the use of cocoa that preserves them.

In the Cordilleras, near the city of Paz, is a mountain of remarkable height, called *Illimani*, which doubtlefs contains immenfe riches; for a crag of it being fome years ago fevered by a flash of lightning, and falling on a neighbouring mountain, such a quantity of gold was found in the fragments, that for some time that metal was fold at Paz for eight pieces of eight per ounce; but its summit being perpetually covered with ice and snow, no mine has been opened in the mountain.

The city of La Paz is of a middling fize, and from its fituation among the breaches of the Cordilleras, the ground on which it stands is unequal, and it is also surrounded by mountains. When the river Titicaca is increased, either by the rains, or the melting of the snow on the mountains, its current forces along large masses of rocks with some grains of gold, which are sound after the slood has subsided. Hence some idea may be formed of the riches inclosed in the bowels of these mountains; a remarkable proof of which appeared in the year 1730, when an Indian, washing his feet in the river, discovered so large a lump of gold, that the marquis de Castel Fuerte gave twelve thousand pieces of eight for it, and sent it as a present to the king of Spain.

In a period of ten years, the Peruvian mines, without including those of Quito and Buenos Ayres, yielded 35,359 marks of gold, 22 carats fine, and 3,739,763 marks of filver. This has been estimated at 7,703,5451 sterling. The above period is included between the years 1780 and 1790.

Balfam of PERU. See MYROXILON, BOTANY and MATERIA MEDICA Index.

PERUGIA, a town of Italy, in the pope's territories, and capital of Perugino. It is an ancient, handfome, populous, and large city, with a strong citadel, an university, and a bishop's see. The churches, and

Petal

Petau.

Perugino many other buildings, as well public as private, are very handsome. It is seated on a hill, in E. Long. 12. 20. Petaguel.

PERUGINO, a province of Italy, in the territory of the church, bounded on the west by Tuscany, on the fouth by Orvietano, on the east by the duehies of Spoleto and Urbino, and on the north by the county of Citta Castellana. It is one of the smallest provinces in the territory of the church. The air is very pure, and the foil fertile in corn and good wine; besides, the lake Perugia supplies them with plenty of fish. The eapital town is Perugia. The lake is eight miles from the city, and is almost round, being about five miles in diameter; in it there are three islands. This province is about 25 miles in length, and near as much in breadth.

PERUGINO. See MONTANINI. PERUKE. See PERRUKE.

PERUVIAN BARK. See CINCHONA, and JESUITS

Bark, MATERIA MEDICA Index.

PERUVIANA, a general name given to that vast peninfula, extending itself from the isthmus of Darien to Cape Horn, in the form of a triangle, of which the Terra Magellanica and the cape form the vertex. It includes the whole of South America, although, as is well known, all the countries included within thefe limits do not acknowledge the dominion of the crown

of Spain. See TERRA Firma.

PESARO, a town of Italy, in the territory of the pope, and duchy of Urbino, with a bishop's see. It is a large place, whose streets are paved with bricks. The callle is very well fortified, the harbour excellent, and the eathedral church magnificent. The environs are remarkable for producing good figs, of which they fend large quantities to Venice. It is feated on an eminence at the mouth of the river Fogha, on the gulf of Venice. E. Long. 13. o. N. Lat. 43. 56.

PESCARA, a very ftrong town in the kingdom of Naples, and in the Hither Abruzzo; feated at the mouth of a river of the same name, which falls into the gulf of Venice. E. Long. 15. 2. N. Lat. 42. 27.

PESCENIUS NIGER. See NIGER.

PESCHIERA, a fmall but strong town of Italy, in the Veronese, with a castle, and a strong fort; feated on the river Mincio or Menzo, which proceeds from the lake Garda. E. Long. 11. 4. N. Lat. 45. 27.

PESENAS, an ancient town of France, in Languedoc, and in the diocese of Agde; delightfully seated on the river Pein, 12 miles north-east of Besseirs, and eight north of Agde. E. Long. 3. 34. N. Lat. 43. 28.

PESSARY, in Medicine, a folid substance composed of wool, lint, or linen, mixed with powder, oil, wax, &c. made round and long like a finger, in order to be introduced into the exterior neck of the matrix, for the cure of feveral uterine diforders.

PEST, a town of Upper Hungary, and eapital of a county of the same name, seated on the Danube, in a fine plain, over-against Buda, 85 miles south-east of Presburg. E. Long. 18. 25. N. Lat. 47. 24.

PESTILENCE, in Medicine, the same with the

PLAGUE.

PETAGUEL, a territory of South America, in Brafil, bounded on the north by Dele; on the east by the sea; on the south by the captainship of Rio Grande; and on the west by Tupuya. It contains mines of fil-

PETAL, in Botany, one of the coloured leaves which compose the flower.

PETALISM, a mode of deciding on the guilt of citizens, fimilar to the Athenian OSTRACISM. It was introduced in Syracuse about the year before Christ 460, in order to prevent the tyranny of the richer citizens, who had often about that time aimed at the diadem. To prevent, therefore, the evils daily arifing from thence, and to bring down the aspiring minds of the wealthy citizens, the Syraculans were forced to make a law not unlike that of the Athenian oftracism; for as at Athens every citizen was to write on a shell the name of the person whom they conceived to be the most likely, on account of his wealth and adherents, to afpire to the crown; fo at Syracufe they were to write on a leaf the names of fuch as they apprehended powerful enough to usurp the fovereignty. When the leaves were counted, he who had the most suffrages against him was, without any further inquiry, banished for five years. This new-contrived method of impairing the effates, and weakening the interest of the overgrown citizens, was called petalism, from the Greek word petalon, which fignifies " a leaf." This law was attended with many evil confequences; for those who were most capable of governing the commonwealth were driven out, and the administration of public affairs committed to the meanest of the people; nay, many of the chief citizens, who were able to render their country great fervice, fearing to fall under penalties of this law, withdrew from the city, and lived private in the country, not concerning themselves with public affairs: whence all the employments being filled with men of no merit or experience, the republic was on the brink of ruin, and ready to fall into a state of anarchy and confusion. The law therefore of petalism, upon more mature deliberation, was repealed foon after it had been first enacted, and the reins of government were again put into the hands of men who knew how to manage them.

PETARD, in the art of war. See GUNNERY.

PETAU, DENIS, or Dionysius PETAVIUS, a French Jesuit of great erudition, was born at Orleans in 1583. His father was a man of literature, and observing strong parts and an excellent genius for letters in his fon, he took every means in his power to improve them. used to tell his son, that he ought to qualify himself so, as to be able to attack and confound "the giant of the Allophylæ;" meaning that most ominent scholar Joseph Scaliger, whose abilities and learning were allowed to have done great honour and much service to the reformed. Young Petavius feems to have entered readily into his father's views; for he studied most intensely, and afterwards levelled much of his erudition against Scaliger. He joined the study of the mathematics to that of the belles lettres; and afterwards applied himself to a course of philosophy, which he began in the college of Orleans, and finished at Paris. He afterwards maintained theses iu Greek, which was as familiar to him as Latin; and the Latin, it is faid, he understood better than he did his own native language. When he was pretty well advanced, he had free access to the king's library, which he often visited on account of the Latin and Greek manufcripts. Among other advantages which accompanied his literary pursuits, was the friendship of Isaae Casaubon, whom Henry IV. called to Paris in 1600. It was at Cafaubon's inftigation, that Petavius, though then but very young, undertook an edition of The Works of Synefius. In this edition he corrected the Greek from the manuferipts, translated that part which yet remained to be translated into Latin, and wrote notes upon the whole. He was but 10 years of age when he was made profellor of philosophy in the university of Bourges; and he spent the two following years in studying the ancient philosophers and mathematicians. In 1604, when Morel, professor of Greek at Paris, published the Works of Chrysoftom, some part of Petavius's labours on Synesus were added to them: from the title of which we learn, that he then took the name of Petaus, which he afterwards changed into Petavius. His own edition of The Works of Synesus did not appear till 1612.

He entered into the fociety of the Jesuits in 1605, and did great credit to it by his vast and profound erudition. He became a zealous advocate for the church of Rome; and there was no way of ferving it more agreeable to him than that of criticifing and abusing its adverfarics. He was most bitter against Scaliger; nor did he even spare his friend Casaubon whenever he came in his way .- Petavius excelled particularly in the dark science of chronology; the learned world in general being obliged to him for some exact and nice disquifitions on this subject. His chief work, which is in great repute to this day, he intitled, Rationarium Temporum. It is an abridgement of universal history, from the earlieft times to 1632, in chronological order, with references to proper authorities. It was improved, and feveral additions made to it, by Perizonius, and others after his death. This eminent father, after a very laborious life, died at Paris in the end of the year 1652, aged 60. Gaffendus, in his life of Percschius, fays he was the most confummate scholar the Jesuits ever had; an opinion very likely to be true, when we confider that he often contended fuccefsfully with Scaliger, Salmafius, and others, whose abilities have been universally acknowledged. His judgement, however, was not equal to his erudition, and his controverfial writings are full of fourness and spleen. We have the following character of a great work of Petavius by an author of much celebrity, but who perhaps is as much biaffed on the fide of infidelity as he thinks this learned Jesuit was in favour of the church of Rome. The Dogmata Theologica of Petavius are a work of incredible labour and compass: the volumes which relate folely to the incarnation (two folios, 5th and 6th, of 837 pages) are divided into 16 books—the first of his history, the remainder of controverfy and doctrine. The Jefuit's learning is copious and correct; his Latinity is pure, his method clear, his argument profound and well connected; but he is the flave of the fathers, the fcourge of heretics, and the enemy of truth and candour, as often as they are inimical to the Catholic cause.

PETAW, an ancient town of Germany, in the circle of Auftria, and in Stiria. It is a handfome place, and is feated on the river Drave, 35 miles north-eaft of Cilley, and 109 fouth of Vienna. E. Long. 15. 36. N.

PETCHELI, a province of Afia, in China, and the chief in the whole empire; bounded on the east by the fea, on the north by the great wall, on the weft by Chanfa, and on the fouth by Chantong and Honan. "This province contains nine cities of the first class, which have several others under their jurisdiction; these are about 40 in number, less confiderable indeed, but all

furrounded with walls and ditches. Petcheli has few mountains. Its foil is fandy, and produces very little trice; but all other kinds of grain abound there, as well as the greater part of the fruit-trees we have in Europe. It pays an annual tribute to the emperor, which, according to Father Martini, confifts of 601,153 bags of rice, wheat, and millet; 224 pounds of linfeed; 45,133 of fpun filk; 13,748 of cotton; 8,737,248 truffes of itraw for the horfes belonging to the court, and 180,870 meafures of falt, each containing 124 pounds; which is proportionably much inferior to that paid by other provinces. The population of this province is estimated at 38,000,000.

"It is remarked that the people of this province have not the same aptitude for acquiring the sciences as those who inhabit the southern provinces of the empire; but they are more robust and warlike; and better calculated to endure the hardships and satigue of war. This is the case with the Chinese of all the other

northern countries.

"The face of the country here being flat and level, permits the use of a kind of carriage, the construction of which appears to be rather fingular. Father Martini, one of the first missionaries in China, thus describes it: 'They use, in the province of Petcheli, a kind of chariot with one wheel, and constructed in fuch a manner, that there is room in the middle for only one person, who fits as if on horseback; the driver pushes behind, and, by means of wooden levers, makes the chariot advance with fafety and expedition. This has perhaps given rife to the report of chariots driven in that country by the wind, which the Chinese direct over land with fails, as they do ships at fea. A French missionary, who traversed this province in 1768, feems to have made use of the same kind of carriage. 'We quitted the canal (fays he) to travel in carts, which is customary in this part of China; but it is difagreeable beyond description. The cart is amazingly clumfy, and has a great refemblance to the carriage of a gun: there is room in it for only one person, who is frequently obliged to fit cross-legged, as our taylors do in Europe; it jolts prodigiously; and, while the traveller is exposed to the fcorching rays of the fun, fuch clouds of dust sometimes arise as almost fuffocate him.'

"The temperature of the air of this province does not feem to agree with its latitude. Although Petcheli extends no farther than to the 42d degree of north latitude, yet all the rivers there are fo much frozen during four months in the year, that horses and waggons with the heaviest loads may safely pass them. It deserves to be remarked, that the whole body of ice is formed in one day, and that feveral are necessary to thaw only the furface. What may appear no less extraordinary is, that during these severe frosts one does not feel that sharp and pinching cold which accompanies the production of ice in Europe. These phenomena cannot be accounted for, but by attributing them to the great quantity of nitre which is found dispersed throughout this province, and to the ferenity of the fky, which, even during winter, is feldom obfcured by a cloud. The phyfical explanation, which we have given of this fingular temperature, is fully confirmed by experiments lately made by Father Amiot at Peking, which convinced him, that in this capital and neighbourhood, as far as feven or

Petcheh. eight leagues around, the water, air, and earth, equally

abound with nitre.

" With regard to the water, the facility with which it freezes, the folidity of the ice and its duration, evilently appounce the presence of nitre. A tub filled with water, placed near one of Reaumur's thermometers, had its surface immediately frozen, when the mercury flood only one degree above the freezing point; and when it flood three degrees below freezing, the water became a folid mass of ice, if the diameter of the vessel did not exceed a foot and a half, and the depth of the water four or five inches. This water, when the weather was fine, continued in the same state of congelation as long as the mercury in the thermometer did not rife higher than three degrees above 0; when the mercury role higher, it then began to diffolve, but fo flowly, that two or three days were fcarcely sufficient to restore it to its former sluidity." Grofier goes on to relate other experiments of Father Amiot, which were made with a view to discover the cause of the water's freezing so in this temperate climate; and he then proceeds to tell us, that " if the waters of the province of Petcheli contain much nitre, it is no less certain, that the air which one breathes there is abundantly impregnated with it. The following are indubitable proofs of it: 1st, Notwithstanding unwholesome food, such as the flesh of the greater part of domestic animals that have died of old age or difeafe, which the people of this province greedily devour, notwithstanding filth and all the inconveniences resulting from low, damp, and confined lodgings, where all the individuals of the same family are, as it were, heaped one upon another, the plague never makes its appearance in Petcheli; and the people are feldom attacked by any of those epidemical distempers which are fo common in Europe. 2dly, Provisions of every kind may be kept at Peking a long while, without being fubject to corruption. Raifins are eaten there fresh even in May, apples and pears till midfummer; wild boars, stags, deer, roebucks, rabbits, hares, pheafants, ducks, geese, and all kinds of game, brought from Tartary to Peking after the commencement of winter; fish of every species, transported from the rivers of Leaotong-will keep without the affistance of falt, in their state of congelation, for two or three months, although they are exposed every day in the markets, carried from the markets to private houses, and from private houses brought back to the markets until they are all fold, which does not happen before the end of March. It is certain that these facts announce an antiseptic quality in the air, which must undoubtedly proceed from the great quantity of nitre contained in it-

" 3dly, The earth which forms the foil of Petcheli abounds no less with nitre; whole fields may be seen in the neighbourhood of Peking which are covered with it. Every morning at funrife, the country in certain cantons appears white as if sprinkled by a gentle fall of fnow. If a quantity of this fubstance be swept together, a great deal of kien, nitre, and falt, may be extracted from it. The Chinese pretend that this falt may be fubstituted for common salt; however this may be, it is certain, that, in the extremity of the province towards Siuen-hoa-fou, poor people, and the greater part of the peafants, make ufe of no other. With regard to the kien procured from the earth, they use it for washing

linen as we do soap. Although the land of Petcheli be Petechize replete with nitrous particles, it does not, however, form dry deferts; it is cultivated with care, and becomes. fruitful by incessant labour. The earth is frozen in winter to the depth of two or three feet, and does not become foft before the end of March. This may fufficiently explain why the frost kills plants in the neighbourhood of Pekin, which Linnæus raifed in Sweden, although it is 20 degrees farther north than the capital of the Chinese empire."

PETECHIÆ, in Medicine, a name given to those fpots, whether red or of any other colour, which appear

in malignant fevers.

PETELIA. See STRONGOLI. PETER, St. the apostle, born at Bethsaida, was fon of John, Jona, or Joana, and brother of St Andrew (John i. 42. 43.). His first name was Simon or Simeon; but when our Saviour called him to the apoftleship, he changed his name into Cephas, that is, in Syriac, a flone or a rock; in Latin petra, whence Peter. He was a married man; and had his house, his mother-in-law, and his wife, at Capernaum upon the lake of Gennesareth (Blark i. 29. Watth. viii. 14. Luke iv. 38.). St Andrew having been first called by Jesus Christ, met his brother Simon, and told him (John i. 41.) we have found the Messiah, and then brought him to Jesus. Jefus beholding him, faid to him, You are Simon fon of Jona; henceforth you shall be called *Crophas*, that is, *flone* or *rock*. After having passed one day with our Saviour, they returned to their ordinary occupation, which was fishing. Yet it is thought they were present with him at the marriage of Cana in Galilee. This happened in the 30th year of the vulgar Christian

Towards the end of the same year, Jesus Christ being on the shore of the lake of Gennesareth, saw Peter and Andrew bufy about their fishery, and washing their nets, (Luke v. 1, 2, 3.). He entered into their boat, and bid Peter throw out his nets into the sea, in order to fish. Peter obeyed him, though he had already fished the whole night without catching any thing. They took fo many fishes at this draught, that their own vessel, and that of James and John, sons of Zebedee, were filled with them. Then Peter threw himself at the feet of Jesus, and said to him, Depart from me, Lord, for I am a sinner. Then Jesus said to them, Follow me, and I will make you fishers of men. He faid the fame thing to James and John; and immediately they quitted their boats and nets, and followed our Saviour.

Some time after, Jesus coming to Capernaum entered into the house of St Peter, where his mother-in-law lay fick of a fever. He immediately healed her, and she began to minister to him (Luke iv. 38, and Mat. viii. 14.). A little while before the feast of the passover of the following year, being the 32d of the vulgar era, after Jesus returned into Galilee, he made choice of twelve apostles, among which St Peter has always the first place (Mat. x. 2. Luke vi. 13.). One night that Jesus Christ walked upon the waters of the lake of Gennefareth, St Peter asked him leave to come and meet him (Mat. xiv. 28, 29.). Jesus gave him leave; but he feeing a great wave coming, was afraid, and therefore began to fink. Then Jesus held him up, and faid, O man of little faith, why was you afraid? Af-

terwards:

terwards landing on the other fide of the lake, and the multitude that he had fed the day before beyond the lake being come to him at Capernaum, he fpoke to them of his body and of his blood which he was to give to his disciples to eat and drink. This so offended the multitude, that several of them quitted him thereupon. He therefore asked his apostles if they also would leave him; to which Peter replied, To whom shall we go, Lord; for thou hast the words of eternal life (John vi. 53, 54, &c.). One day, as our Saviour was near Cæfarea Philippi, he asked his apostles whom the world took him for? they answered, that some said he was John the Baptist; others, Elias; and others Jeremiah, or one of the prophets. But whom do you say I am? fays Jesus Christ. Simon Peter answered, Thou art Christ, the son of the living God. Jesus then said unto Peter, Bleffed art thou, Simon Barjona; for fleih and blood hath not revealed it unto thee, but my father which is in heaven (Mat. xvi. 13, 14, &c.). And I fay unto thee, that, as thou art Peter, fo upon this rock will I build my church, and the gates of hell shall not prevail against it; and I will give unto thee the keys of the kingdom of heaven, and whatfoever thou shalt bind on earth shall be bound in heaven, and whatsoever thou shalt loofe upon earth shall be loofed in heaven. About fix or eight days after this, our Saviour taking Peter, James, and John, up a high mountain, apart from the other disciples, showed them a glimpse of his glory, and was transfigured before them (Mat. xvii. 1, 2, &c. and Luke ix. 28.). Whereupon Peter, fccing Moses and Elias together with Jesus, cried out to them in an ecstacy, Lord, it is good for us to be here! if you please, we will make three tents; one for you, one for Moses, and one for Elias.

Jesus returning from thence to Capernaum, those who gathered the tribute money came to Peter, and faid, Does not your master pay tribute? Whereupon Jesus ordered Peter to throw his line into the fea, and that he should find wherewith to pay the toll for them two in the mouth of the first fish he should take. Peter obeyed; and finding a piece of money in the mouth of the fish, he gave it to the tribute-gatherers, as he was directed. One day, as Jesus was discoursing concerning the forgiveness of injuries (Mat. xviii. 21, 22.), St Peter asked him, how often they must forgive, and whether it was sufficient to pardon an offender seven times? Jesus told him, I say, you must pardon not only as far as seven times, but even seventy-times seven. Upon another occasion (Mat. xix. 27-29.), as our Saviour was speaking of the danger of riches, Peter said to him, Lord, we have left all things to follow thce; what reward shall we have for it? Jesus answered him, I tell you in truth, that you who have left all things to follow me shall receive an hundred fold even in this world, and in the other eternal life; and at the last day, when the Son of man shall come to judge the world, you shall fit upon twelve thrones to judge the twelve tribes of Ifrael.

On the Tuesday before our Saviour's passion, Peter showed him the fig-tree he had curfed the evening bcfore, which was now dried up and withered (Mark xi. 12-21.); and the day following, as they fat upon the mountain of Olives, he, with the other apostles, asked Jesus when the temple was to be destroyed (Mat. xxiv. 1, 2, &c. Mark xiii. 1, 2, &c. Luke xxii.). On

Thursday he was fent with St John to prepare all things Peter. for the paffover; and at evening, when Jesus was come into the city with his apostles, and, being set down at table, began to speak of him that should betray him, Peter made figns to John to ask him who this should be (John xiii. 24.). After fupper, the disciples entered into dispute which should be the greatest among them: whereupon Jesus Christ, laying aside his garments, betook himself to wash their feet, to give them an example of humility in his own person. St Peter at first made fome difficulty, and would not fuffer his mafter to wash his feet: but Jesus telling him, that if he did not wash his feet, he could have no part in him; St Peter replied, Lord, wash not only my feet, but my hands and head also (John xiii. 6-10.).

Some time after, Jesus said to him (Luke xxii. 31, 32, &c.), Peter, Satan has defired to fift you as men fift wheat; but I have prayed for you, that your faith may not fail: and when you are converted, confirm your brethren. By this he warned St Peter of his fall, that was just at hand, and of his renouncing him; from which, by the affiftance of God, he was afterwards to recover. St Peter then asked him, where he was going? and faid, he was ready to follow him everywhere, not only to prison, but to death itself. But Christ declared to him, that he would be fo far from following him to death that he would abjure him three times that very night before the cock should crow, or before break of day. When supper was ended, he went to the garden of Olives, where, taking Peter, James, and John, he went with them apart, that they might be witnesses of his agony. Peter, though before he had showed so much refolution, yet fell afleep with the rest; which occafioned Jesus to say to him, Do you sleep, Simon? Could you not watch with me one hour? (Mark xiv.

37. Mat. xxvi. 40, &c.).

Judas being come with the foldiers to feize Jesus, Peter drew his fword, and cut off the right ear of one called Malchus, who was fervant to the high-prieft: but Jesus bid him put up his sword into the scabbard, and told him, that all those who fought with the fword should perish by the sword: and at the same time healed Malchus's ear (John xviii. 10, &c.). Peter followed Jesus afar off, as far as the house of Caiaphas, and was let in by means of another disciple, who was known in the family. The foldiers and fervants that had brought Jefus, having lighted a fire in the middle of the hall, Peter mingled among them to warm himfelf alfo; when a maid-fervant, having looked earneftly upon him, faid, Surely this man was with Jefus of Nazareth. But Pcter made answer, I know not what you fay, for I do not so much as know the man. Prefently after he went out into the porch, when immediately the cock crew. A little while after another maid faid to those that were present, This man was with Jesus of Nazareth. But Peter denied it with an oath. About an hour after, one of the company affirmed that Peter was a disciple of Jefus. Others infifted upon the fame thing; and faid, that furely he was one of them, for his very speech betrayed him to be a Galilean. Lastly, one of them, being a kinfinan of Malchus whose ear Peter had cut off, affirmed the same thing; and asked him, Did not I see you with him in the garden? Peter again denied it with an oath, protesting that he did not know the man. And at the same time the cock crowed the sccond

Then Jesus, being in the same hall, and not far from Peter, looked upon him; and Peter then remembering what Jesus had faid to him, that before cock-crow he should deny him thrice, he went out of Caiaphas's house, and wept bitterly (Mat. xxvi. 73, 75. Mark xiv.

34, 72.).
Very probably he remained in fecret, and in tears, all the time of our Saviour's passion, that is, all Friday and Saturday following; but on Sunday morning, Jesus being rifen, and Mary having been at the tomb, and not finding the body of Jesus, the came in haste into the city, to tell Peter and John that they had taken away their master, and that she could not find where they had put him. Peter and John made haste thither, and John coming first, did not go into the sepulchre. Peter then coming up to him, prefently stooped down, and faw the linen clothes wherein the body had been wrapt. He went then into the sepulchre, and John with him; after which they returned to Jerufalem, not knowing what had come to pass. But soon after Jesus appeared to the holy women, who had come first to the sepulchre, and bid them give his apostles notice of his resurrection. And the same day our Saviour also appeared to Peter, to comfort him, and affure him that his repentance had been acceptable to him.

Some days after, St Peter being returned into Galilee as Jesus had commanded him, and going to fish in the sea of Galilee, or in the lake of Gennesareth, with some other of the apostles, Jesus appeared to them on the shore, and bid them throw out their nets on the right fide of the veffel. They threw them out, and took fuch a multitude of fishes that they could not draw up their nets again. Then St John faid to Peter, It is the Lord. Peter immediately girded up himself, for he was naked, and swimming to shore he came to Jesus: then drawing their nets to shore, Jesus dined with them. After dinner, Jesus, said to Peter, Simon, son of Jona, do you love me more than these? He answered, Yea, Lord, you know that I love you. Jefus fays to him, Then feed my lambs. He put the same question to him again; and Peter making the same answer, our Lord said to him again, Feed my sheep. This he repeated a third time; at which St Peter was troubled, and faid, You know, Lord, that I love you. Jesus replied to him, "Feed my fheep. I tell you for a truth, that when you were young, you girded yourfelf, and went where you pleafed: but now you are old, another shall gird you, and lead you where you would not go." This he said to let him know what death he was to die. At the same time, Peter feeing St John the Evangelist, said to our Saviour, Lord, what must become of him? Jesus anfwered, " If I will that he tarry till I come, what does that concern you? Do you follow me." Thus he refused to declare in what manner St John should end his

After that Jesus Christ had ascended into heaven, and that the apostles had been witnesses of his ascenfion, they returned to Jerusalem, to wait there for the Holy Ghost, whom our Saviour had promised to fend them; and being affembled together in a house, they continued there in prayer, and in the union of charity, till the time that the Holy Ghost descended upon them, in the form of tongues of fire. During this interval, St Peter proposed to the apostles, and to the rest of the assembly, to fill up the place that the trai-Vol. XVI. Part I.

tor Judas had left vacant in the apostleship. The pro- Peter: posal was agreed to by all; and two persons were proposed, Joseph Barsabas and Matthias: upon this last the lot fell; and from that time he was admitted one of the apostles. The tenth day after the ascension of our Saviour, being the day of Pentecost, the Holy Ghost having descended upon the apostles, and upon all the faithful that were affembled with them, and having replenished them with supernatural gifts, and especially with the gift of tongues, all those who were witnesses of this miracle expressed their admiration at it; and there being upon that day at Jerusalem a great many Jews from several provinces of the east, they could not comprehend by what means these men, who were Galileans, should speak the languages of all these pagan nations (Acts ii. 1, 2, &c.). Some of them faid, that the apostles were full of new wine. But St Peter standing up, told them, that what they heard and faw was not the effect of drunkenness, but was the completion of the promife that the Holy Ghost had made by the prophet Joel (ii. 28.), to fend his spirit upon all flesh, and to give the spirit of prophecy to young and old, to men and women. He afterwards spoke to them of Jesus Christ, and told them that he was the true Messiah, that he was risen from the dead as the scripture had foretold he should; declaring that himself and the other apostles were witnesses of his resurrection; of his ascension into heaven, and of the mission of the Holy Ghost, the visible effects of which they saw with their own eyes in the gifts of languages wherewith they

had been replenished.

Then those that heard him were touched with compunction, and asked the apostles, Brethren, what shall we do? Peter answered them, Repent, and be baptized, and you shall receive the Holy Ghost. Then he instructed them, baptized them, and that very day three thousand persons were added to the church (Acts iii. 1, 2, &c.). Some days after, St Peter and John, going to the temple at the hour of prayers, met at a gate of the temple a man who had been lame from his birth, fo that he was carried about. This man feeing Peter and John, asked alms of them: upon which Peter faid to him, Silver or gold I have not; but fuch as I have I give thee: In the name of Jesus of Nazareth, rife up and walk. Presently the man got up, and went into the temple along with them, lifting up his voice, and glorifying God. He held St Peter, telling the people then affembled all that had happened unto him. Then Peter, taking this occasion, told the people, that it was not by his own power that he had performed the miracle they fo much wondered at, but that it was by the power of Jesus Christ that this man was healed. He then laid before them the great crime they had committed, in putting Jesus Christ to death, who was the Saviour of the world, and the Messiah; and after he had shewn them by all the prophecies that Christ was to die thus, he exhorted them to repentance, and to make a proper use of the death of Christ.

He was thus speaking to the people, when the priests and Sadducees coming upon them, laid hold on Peter and John, and put them in prison, until the day following, it being now late (Acts iv. 1, 2, &c.). But. the number of those that were converted this day at the fecond preaching of St Peter was about five thoufand. The day following, the rulers, magistrates, and

Peter, chief priests being affembled on this occasion, ordered the apostles to be brought before them; and then asked them, by whose authority they performed the mi-racle of healing the lame man? St Peter answered, that it was in the name of Jesus of Nazareth, whom they had crucified, and whom God raifed again from the dead. The affembly were furprifed at the boldnels of the apostles upon this occasion: but came to a refolution to ditin is them, charging them at the fame time to teach no more in the name of Jefus; and threatening them if they should persist in disobedience to these orders. The two apostles returned to their brethren, and related to them all that had paffed; which having heard, the brethren raifed their voices to heaven, begging God to give them strength and courage to declare his word with perfect liberty; and having finished their prayers, the place shook wherein they were affembled, and they were again filled with the Holy Ghoft.

At this time many of the faithful fold their estates, and brought the money to the apostles (id. v. 1, 2, &c.). Of this number was a man called Ananias, with his wife Sapphira, who, by a private agreement between themselves, concealed a part of the money for which they had fold their land, and brought the rest to St Peter, as if it were the whole sum. Ananias came first; and St Peter faid to him, Ananias, how came Satan to seduce you, and to prevail with you to lie to the Holy Ghost, by concealing part of the price of your land? It is not men that you thought to impose on, but God. Immediately Ananias fell down dead, and they carried him out and buried him. About three hours after his wife Sapphira came in, and St Peter faid to her almost the same things he had before said to her husband, and immediately she fell down also, and gave up the ghost. This affair infused a great awe in the whole church, and amongst all those that heard of it. (See

The number of believers confiderably increased every day: fo that they even brought out the fick into the streets, and laid them where Peter was to pass, that at least his shadow might cover some of them, by which means they were healed of their distempers. Then the high-priest and his associates, that is, the Pharisees, caused the apostles to be apprehended and put into prifon. But an angel brought them forth, and bid them go into the temple, and there boldly declare all the words of life which God had taught them. This they performed: upon which the princes and priests caused them to be brought before them; and having demanded why they had disobeyed their orders, in continuing to speak still in the name of Jesus Christ, Peter and the apostles auswered, that it was more necessary to obey God than man. This answer provoked them very much, and they were going to condemn them to death, when Gamaliel prevailed with them to change their resolution, by representing to them, that if this matter proceeded from God, it was in vain for them to oppose it; but if otherwise, then it should foon vanish of itself. So they dismissed the apostles, after giving them 39 stripes apiece, and charged them to speak no more in the name of Jesus Christ.

After the martyrdom of St Stephen, a perfecution was carried on against the faithful at Jerusalem, and they were obliged to take shelter in several places. The

apostles alone continued at Jerusalem (Acts viii. 1, 2, Piter. 3, &c.). St Philip the deacon going to Samaria, the Samaritans received the word of the Lord, and feveral of them were baptized. Then St Peter and St John repaired thither also, to give them the Holy Ghoat; which St Philip, being only a deacon, had not power to do. Simon the magician was also baptized among others; and admiring the power that the apostles had, of conferring the Holy Ghost, would have bought the same power of the apostles, and accordingly offered money to St Peter. But Peter with indignation replied to him, Thy money and thou perish together, who thinkest the gifts of God can be bought with money! Thou hast no part with us, nor hast any pretentions to this ministry, for thy heart is not right before God. Repent therefore of this wickedness, and pray to God if perhaps he will pardon the wicked thoughts of thy heart. After this Peter and John returned again to Jerusalem. See Acts viii.

The fire of perfecution being now pretty well extinguished, St Peter departed from Jerusalem (Acts ix. 32, &c.), and visiting the disciples from city to city, he came also to see the saints that dwelt at Lydda. Here he found a man called Æneas, who had been paralytic for eight years. St Peter faid to him, Æneas, rife up; Jesus Christ the Lord cures you. He presently got up; and all that dwelt at Lydda that faw the miracle were converted to the Lord. There was also at Joppa a certain holy woman, named Tabitha, who happening to die while St Peter was at Lydda, the disciples sent to defire him to come to them. Whereupon St Peter came, and entering into the chamber where Tabitha lay dead, he caused every body to go out, and betook himself to prayers. Then turning himself towards the corpfe, he faid, Tabitha, arise. At which instant she opened her eyes, and feeing St Peter, she fat up. This miracle was much famed at Joppa, and was the occa-fion that many were converted. St Peter stayed there a good while, taking up his lodging with one Simon a tanner.

Now there was at Cæsarea of Palestine a centurion called Cornelius, a man that feared God (Acts x. 1, 2, 3.), and to whom it was revealed by an angel, that he should fend to Joppa to Peter, who should tell him what he had to do. Cornelius immediately fent two of his fervants; and while they were upon the road, the Lord fent a vision to Peter, to prepare him to go to this man without any scruple, although he was not a Jew; for as yet the door of the gospel had not been opened to the Gentiles. St Peter, then being at the top of the house, fell into a trance, and faw, as it were, a great sheet of linen let down from heaven, which was full of all kinds of animals and reptiles, both clean and unclean. He had this vision three times, and heard a voice, faying, Arife Peter, kill and eat. But Peter answered, Lord, I have never eaten any thing unclean. The voice replied, Call not that unclean which God has purified. After which the sheet was again taken up into heaven. At the same time, the men came in that had been sent by Cornelius. They acquainted him with what had happened to their master, and defired him to go along with them to Cæfarea. The day following St Peter fet out thither, and was accompanied by some of the brethren of Joppa. (See Acts x.).

Peter.

When Peter was returned to Jerusalem, the faithful of the circumcifion faid to him, why have you gone unto the uncircumcifed, and why did you eat with them? but Peter having related to them all that passed, they were fatisfied, and glorified God who had given the gift of repentance leading to life as well to the Gentiles as to the Jews. It is thought, that a little after this Peter went to Antioch, where he founded the Christian church of which he was bishop (Gal. ii. 11.). It is believed that he continued here feven years, though not constantly: for during this time, he went to Jerusalem, and to the provinces of Afia Minor, to Bithynia, Cappadocia, and Pontus, as is concluded from the epiftle that he afterwards addressed to the faithful of these provinces. From thence he went to Rome, in the 42d year of the Christian era; and it is thought that at his leaving Antioch he there fixed St Ignatius in his place. Eusebius thinks, that the chief occasion of his going to Rome was to oppose Simon Magus, who by his deceits had perverted a great number of persons. However, the presence of St Peter, and the true miracles that he opposed to the tricks of Simon, ruined, or much diminished, the reputation of this impostor.

St Peter, leaving Rome, came to Jerusalem at the passover, in the 44th year of the Christian era, when Herod Agrippa began to perfecute the church. That prince put St James the Greater, brother of John, to the fword (Acts xii. 1, &c.); and perceiving that his death was agreeable to the Jews, he moreover caused Peter to be apprehended and put in prison, with a defign of executing him publicly after the paffover. But the very night that Herod thought of putting him to death, as Peter, loaded with chains, was afleep between two foldiers, the angel of the Lord awakened him, broke off his chains, opened the prison door, and brought him out the length of a street. Then the angel leaving him, he came to the house of Mary the mother of John, where many of the faithful were affembled at prayers; and having knocked at the door, a damfel named Rhoda came to open it; but when she heard Peter's voice, instead of opening the door, she ran in a transport of joy to acquaint the family that Peter was at the door. Those who heard her could not believe it, and faid, it was his angel, and not himfelf: but continuing to knock, and being let in, he informed them of what had happened to him.

He then left Jerusalem; but we are not told what became of him till the time of the council held at Jerusalem in the year 51. It is thought that before this time he made his second journey to Rome, from whence he wrote his first epistle.

St Peter was obliged to leave Rome in the year 51 by order of the emperor Claudius, who had banished all Jews from thence, because of the tumults they continually raifed there, excited by one Chrestus, as Suetonius fays, meaning probably by this name Jesus Christ. The apostle then returned into Judea, where was held the council of Jerusalem; in which, after a strict examination of the matter proposed to Peter and the apostles, he spoke to them with much wisdom, faying (Acts xv. 7, 8, &c.), that God having given his Holy Ghost and the gift of faith to the Gentiles as well as to the Jews, they ought not to impose the yoke of the legal observances on the new converts, which (as he fays) neither we nor our fathers have been able to bear.

But we believe, that it is through the grace of Jesus Peter-Christ that both we and they thall be faved. St James the Less, bishop of Jerusalem, seconded this opinion of St Peter; and the council came to this conclusion, That no new obligation should be imposed on the Gentiles, but only that they should be required to abstain from fornication, from the use of blood, and from meats offered to idols. The resolution of this council was written to the faithful of Antioch, because it was there this question was first started.

Some time after, St Peter coming to Antioch (Gal. ii. 11. &c.), he eat and drank with the Gentiles, without regarding that distinction of meats enjoined by the law. But after that, when some of the faithful of Jerusalem came to Antioch, being converted Jews, St Peter, out of fear to offend them, separated himself from the converted Gentiles, and would no longer eat with them as before. St Paul, fearing that what St Peter did might be interpreted, as if he had a defire to oblige the Gentiles to judaize, and to fubmit themselves to the yoke of the law, and fo to revoke and annul what he himself had determined in the council of Jerusalem, he withstood Peter to his face, and openly expostulated with him, telling him, he was much in the wrong to endeavour to oblige the Gentiles, at least tacitly by his own manner of acting, to live as the Jews do; and St Peter received this reprehension with silence and hu-

The particulars of St Peter's life are little known from the 51st year of the vulgar era, in which the council of Jerusalem was held, till his last journey to Rome, which was some time before his death. Then being acquainted by revelation that the time of his death was not far off (2 Pet. i. 14.), he had a mind to write to the faithful that had been converted by him, to put them in mind of the truths he had before taught them. He fent them therefore his fecond epistle.

St Peter and St Paul came to Rome about the same time, in the year of Christ 65, where they performed many miracles, and made many converts. Simon Magus by his tricks continued here to deceive the people, pretending himself to be the Messiah, and even attempting to ascend into heaven; for having caused himself to be carried up into the air by his dæmons, in a fiery chariot, St Peter and St Paul betook themselves to their prayers; and then the impostor, being forfaken by his dæmons, fell down upon the ground, which fall some time afterwards occasioned his death. See SIMON MAGUS.

Soon after this, St Peter was taken up and thrown into prison, where it is said he continued for nine months; at last he was crucified at Rome in the Via Ostia; with his head downwards, as he himself had defired of his executioners. This he did out of a fense of humility, for fear it should be thought, as St Ambrose says, that he affected the glory of Jesus Christ, and the more to augment the pain of his execution.

It is faid, that the body of St Peter was at first buried in the catacombs, two miles from Rome, from whence it was afterwards transported to the Vatican, where it has lain ever fince. His festival is celebrated with that of St Paul on the 20th of June. St Peter died in the 66th year of the vulgar era, after having been bishop of Rome for about 24 or 25 years. His age might be about 74 or 75 years. It is generally E e 2 agreed, agreed, that St Lims was his fuccessor. The following is the portraiture that Nicephorus gives us of St Peter, which he has probably taken from the ancient pictures that were preserved of this apostle. He was not fat, but pretty tall and upright, having a fair and palish countenance. The hair of his head and beard was thick, frizzled, and not long. His eyes were black, and blood fhot; his eyebrows protuberant and lofty; his nofe fomething long, and rather flat than

The two epistles of St Peter are addressed to those Jewish converts who were scattered throughout Pontus, Galatia, &c. not only upon the perfecution raifed at Jerusalem, but upon former dispersions of the Jews into those places on several other occasions. The first epistle is principally defigned to comfort and confirm them under those hery trials and manifold temptations they were then subject to, and to direct and instruct them how to behave in the feveral states and relations both of the civil and the Christian life, that they might not be engaged in those rebellions against Casar and his officers, then fomented among the Jews; and that they might stop the mouths of those who spoke against them as evil doers. In the fecond epiftle, he profecutes the fame subject, to prevent their apottafy from the faith, on account of any perfecutions they were liable to. He likewise gnards them against the corrupt principles of the Gpoffics, and those who scoffed at the promife of Christ's coming, as if it would never be ve-

St Peter's style, fays a modern author, expresses the SacredClaf-noble vehemence and fervour of his spirit, the full firs defend-knowledge he had of Christianity, and the strong assurance he had of the truth and certainty of his doctrine; and he writes with the authority of the first man in the college of the apostles. He writes with that quickness and rapidity of thyle, with that noble neglect of some of the formal confequences and nicetics of grammar, still preferving its true reason and natural analogy (which are always marks of a fublime genius), that you can scarce perceive the pauses of his discourse and diflinction of his periods. The great Joseph Scaliger calls St Peter's first epistle majestic; and we hope he was more judicious than to exclude the fecond, though he did not name it.

> A noble majesty, and becoming freedom, is what distinguishes St Peter; a devout and judicious person cannot read him without folemn attention and awful concern. The conflagration of this lower world, and future judgement of angels and men, in the third chapter of the fecond, is described in such strong and terrible terms, fuch awful circumstances, that in the description we see the planetary heavens and this our earth wrapped up with devouring flames, hear the groans of an expiring world, and the crashes of nature tumbling into universal

The authority of the fecond epiftle of St Peter was for some time doubted of, as Origen, Eusebius, St Jerome and others have observed. What made the ancients call it in question, is the difference of its style from the first. The third chapter, which describes the catastrophe of the visible world, made Grotius think this epiftle was wrote after the taking of Jerusalem; because that was not to happen till after the destruction of shat city; upon which he conjectures, that Simeon bi-

shop of Jerusalem is the author of this epistle, and that Peter. the infcription which carries St Peter's name is corrupted. But the best critics admit this epistle to be the genuine work of St Peter, who discovers himself, where he fays, that he was present at our Lord's transfiguration; and where he tells the Jews, this was the fecond letter he had written to them. The reader may fee this question fully discussed, and the authority of this epistle established beyond all doubt, by the learned Dr Sherlock, in his Differtation on the authority of the Second Epistle of St Peter.

St Peter has been made the author of feveral books; fuch were, his Acts, his Gospel, his Revelation, his work about preaching, and another about judgement. There is extant a large history of St Peter, called the Recogni-

tions, ascribed to St Clement.

PETER of Blois, a learned man of the 12th century, was born about the year 1120, at the city of Blois in France, from whence he derived his name. His parents, being opulent, gave him a learned education. In his youth, when he studied in the university of Paris, he was excessively fond of poetry; and when he was a little further advanced in life, he became no less fond of rhetoric, to the study of which he applied with the greatest ardour. From Paris he removed to Bononia in Italy, to acquire the civil and canon law; in the knowledge of both which he very much excelled. He appears from his writings to have cultivated medicine, and feveral branches of the mathematics, with no little care and fuccess. The study of theology was the chief delight and business of his life, in which he spent the greatest part of his time, and made the greatest progress. But unfortunately it was that scholastic theology, which confilted in vain attempts to prove and explain the many abfurd opinions which then prevailed in the church, by the subtleties of Aristotelian logic. In attempting to explain in this manner the most abfurd of all opinions that ever existed amongst mankind, he was the very first person who employed the famous word transubstantiation, which was foon after adopted by the church of Rome, and hath ever fince made so great a noise. Being appointed preceptor to William II. king of Sicily in 1167, he obtained the custody of the privy seal; and, next to the archbishop of Palermo, the prime minister, had the greatest influence in all affairs. But his power was not of long duration; for the archbishop being banished in 1168, our author soon after left the court of Sicily, and returned into France. He was not long, however, without a royal patron, being invited into England by Henry II. who employed him as his private fecretary, made him archdeacon of Bath, and gave him fome other benefices. When he had fpent a few years at court, he conceived a difgust at that way of life (of which he hath drawn a very unpleasing picture in one of his letters), and retired into the family of Richard archbishop of Canterbury, who had made him his chancellor about the year 1176. In this station he continued to the death of the archbishop in 1183, enjoying the highest degree of favour with that prelate, though he used much freedom in reproving him for his remissiness in the government of the church. Our author remained in the same station in the family of Archbishop Baldwin, who fucceeded Richard, acting both as his fecretary and chancellor. He was also fent by that prelate on an embaffy to Rome in 1187, to plead his cause bePeter.

fore Pope Urban III. in the famous controverfy between him and the monks of Canterbury about the church of Hackington. After the departure of his friend and patron Baldwin for the Holy Land in 1190, our author was involved in various troubles in his old age, the caufes of which are not distinctly known; and died about the end of the 12th century. He appears from his works, which may be justly reckoned among the most valuable monuments of the age in which he flourished, to have been a man of great integrity and fincere piety, as well as of a lively inventive genius and uncommon eradition. His printed works confift of 134 letters, which he collected together at the defire of Henry II.; of 65 fermons, delivered on various occasions; and of 17 tracts on different subjects. PETER the Hermit. See CROISADE and HERMIT.

PETER I. justly styled Peter the Great, czar, and afterwards emperor, of Russia, founder of the Russian empire; for though the country was well known, and -of great antiquity, yet it had no extent of power, of political influence, or of general commerce, in Europe, till his time, He was born in 1672; and was proclaimed czar when but ten years of age, in exclusion of John his elder brother, who, being of a fickly conflitution, was at the same time very weak in his understanding. The prince's Sophia, his half-sister, made an infurrection in favour of John; and to put an end to the civil war, it was at last agreed that the two brothers should jointly share the imperial dignity. Peter had been very ill brought up, not only through the general defects of the Ruffian education, but likewife through the arts of the princess Sophia, who surrounded him with every thing that might stille his natural defire of knowledge, deprave his mind, and enervate it with pleasures. Notwithstanding this, his inclination for mi-

litary exercises discovered itself in his tenderest years.

He formed a company of 50 men, commanded by foreign officers, clothed and excreifed after the German manner.

He entered himself into the lowest post, that of a drum-

mer; and never rose otherwise than as a soldier of for-

tune. Herein his defign was to teach his nobility, that merit, not birth, was the only title to military employ-

ments. He reinforced his company with several others,

till at last he had got together a considerable body of foldiers. As he then had no war on his hands, he exer-

cifed them in all forts of mock engagements, and by this means fecured to himfelf a body of well-disciplined

troops. The fight of a Dutch veffel, which he had met

with on a lake belonging to one of his pleasure-houses,

made fuch an impression on his mind, that he conceived the almost impracticable defign of forming a navy. His first eare was to get some Hollanders to build some fmall veffels at Mofcow; and he paffed two fuccesfive fummers on board English or Dutch ships, which set out from Archangel, that he might instruct himself in every branch of naval affairs (A). In 1696 czar Jehn died, and Peter was now fole master of the empire. In 1608 he fent an embaffy to Holland; and went incognito in the retinuc, and vifited England, as well as Holland, in order to inform himfelf fully in the art of ship-building. At Amsterdam he worked in the yard as a private ship-earpenter, under the name of Peter Michaelof; but he has been often heard to fay, that if he had never gone to England, he had full remained ignorant of that art. In 1700 he had got together a body of standing forces, confishing of 30,000 foot; and now the vast project he had formed displayed itfelf in all its parts. He opened his dominions, which till then had been shut up, having first fent the chief nobility of his empire into foreign countries to improve themselves in knowledge and learning. He invited into Russia all the foreigners he could meet with, who were capable of instructing his subjects in any manner, and offered them great encouragement to fettle in his dominions. This raifed many discontents; and the despotic authority he exerted on that occasion was fcarcely powerful enough to suppress them. In 1700, being strengthened by the alliance of Augustus king of Poland, he made war on Charles XII. king of Sweden. His first ill success did not deter him; for he used to fay, I know that my armies must be overcome for a great while; but even this will at last teach them to conquer. He afterwards gained confiderable advantages; and founded Petersburg in 1703. In 1709 he gained a complete victory over the Swedes at Pultowa. In 1712 he was inclosed by the Turks on the banks of the Pruth; and feemed inevitably loft, had not the czarina Catherine bribed the grand vifir, and the czar's prudence completed his deliverance. In 1716 he made a tour through Germany and Holland, and visited the royal academy of sciences at Paris. It would be endless to enumerate all the various establishments for which the Russians are obliged to him. He formed an army according to the manner of the politest and most experienced nations: he fitted out fleets in all the four feas which border upon Ruffia: he caused many strong fortresses to be raised after the bost plans; and made convenient harbours: he introduced

(A) The following circumstance, it is said, in some measure determined Peter to attempt those reformations which he afterwards accomplished. Great events have been sometimes the effect of little causes; and it is at least possible, that without the occurrence we are going to relate, Russia might still have been in a state of barbarism. A young Genevele, called Le Fort, about 1695, went to Moscow with the Danish ambassador. The czar Peter, who was then 19 years old, fell in company with this Genevele, who had foon learnt the Russian tongue, and spoke almost all the tongues of Europe. Le Fort ingratiated himself with the prince, entered into his service, and foon afterwards into his familiarity. He made him comprehend that there was a different manner of living and reigning from what had unhappily obtained throughout his vast and miserable empire. A prince must be born with an uncommon greatness of soul to listen readily to a stranger, and to be able to divest himself of the prejudices of a throne and of his country. The czar was sensible that neither himself nor his people were yet to be reckoned among men; and that he had an empire to form, but could have no affistance at home. From that time he took a refolution to leave his dominions; and fet out, like another Prometheus, to borrow celeffial fire for animating his s countrymen.

arts and sciences into his dominions, and freed religion from many superstitious abuses: he made laws, built cities, cut canals, &c.; was generous in rewarding, impartial in punishing; faithful, laborious, and humble; yet was not free from a certain roughness of temper natural to his nation. He had indeed cured himself of excess in drinking; but he has been branded with feveral other vices, particularly crucity. He published the unfortunate history of his fon Prince Alexis (B); towards whom fome blame his feverity, while others think it no more than was necessary. He perfectly knew the honour due to perfons of merit; and not only heaped honours upon them during their life, but gave them marks of esteem even after their death. He died of the strangury in 1725, and left the world with the magnanimity of a hero and the piety of a

Peter was tall of stature, and of a bold and majestic aspect, though sometimes disfigured by convulsions, which altered his features, This deformity was afcribed to poison, given him, as it is faid, by his fifter Sophia; but it was indeed no other than wine and brandy, which he often drank to excess, relying too much on the strength of his constitution. He conversed with persons in all stations, from the mechanic to the general of an army; and his conversation was neither like that of a barbarian who makes no diffinetion between men, nor of a popular prince who feeks to please all the world, but that of a person who aims at instruction. He loved women as much as the king of Sweden, his rival, dreaded them, and all were equally agreeable to him; he valued himself on drinking large draughts, rather than fipping delicious wine. We are told that kings and legiflators should never suffer

Peter.

(B) Alexis, like his father, is faid to have married a flave, and, like him, quitted Muscovy secretly, but had not the same success in his undertakings; and the being but a bad imitator of his father, cost him his life. He became an example of the most terrible severity that ever was given from the tribunal of the throne: but, what is much to the honour of the empress Catherine, she had no hand in the misfortunes of that prince, who was born of another woman, and loved nothing that his father loved. Catherine was not in the least suspected of acting the cruel stepmother. The great crime of the unfortunate Alexis was his being too much a Ruslian, and his disapproving every thing that was grand and immortal, and projected by his father for the glory of the nation. One day, hearing some Muscovites lamenting the insupportable fatigues they were to undergo in the building of Petersburg, he said, "Take courage, this city will not stand long." When he was called to attend his father in a journey of 600 or 700 leagues, which the czar often made, he seigned sickness. He took violent purges for a distemper which he had not; and such quantities of medicines, with excessive drinking of brandy, impaired his health and his wits. At first he had an inclination to learning, was acquainted with geometry and history, and had learnt the German tongue: but he hated war, and would never learn it; for which he was most reproached by his father. They had married him in 1711 to the princess of Wolfenbuttle, sister of the empress consort to Charles VI. This marriage was unfortunate; the princess was often abandoned for a debauch in brandy, and for Afrofina, a Finland wench, of a large stature, well made, and very agreeable. It is reported that the princess died of chagrin, if it be possible for chagrin to prove mortal; and that afterwards the czarowitz secretly espoused Afrosina in 1713, when the empress Catherine had just brought him a brother, at which he had no

The mifunderstandings between the father and the son became every day more serious; till at length the father, about the year 1716, threatened the prince to difinherit him; and the prince told him that he intended to go into

The czar, in 1717, renewed his journeys, as well with a view to politics as curiofity. He came at last into France. If the son had entertained an inclination to revolt, if he had actually had a party formed in his favour, now was the time to declare himself; but instead of remaining in Russia, making himself popular, and creating dependents, he took a journey in his turn, having with much difficulty scraped together some thousands of ducats which he had secretly borrowed. He threw himself under the protection of the emperor Charles VI. brother of his deceased wife. They kept him for some time incognito at Venice, from whence he passed to Naples, where he refided almost a year, while neither his father nor any person in Russia knew the place of his re-

While the fon kept himself thus concealed, the father was at Paris, where he was received with all the respect paid him in other places, but with a gallantry nowhere to be found but in France. If he went to vifit a manufactory, and one piece of work attracted his fight more than another, he was presented with it the next day. He went to dine at the duke d'Antin's at Petitbourg, where the first thing he saw was his own picture at full length, in the same habit that he wore. When he was at the royal mint of medals, they struck all kinds before him, and presented him with them; at last they struck one which they let drop on purpose at his feet, and left him to take it up. He there saw himself perfectly engraven with these words, Peter the Great. The reverse was a Fame, and round her in letters Vires acquirit eundo; an allusion no less just than flattering to a prince who really acquired new

After he had feen this country, where every thing disposes men to gentleness and indulgence, he returned to his own, and refumed his feverity. He had engaged his fon to return from Naples to Petersburg, from whence that young prince was conducted to Moscow before the czar his father; who began with depriving him of his succession to the throne, by making him fign a solemn act of renunciation at the end of January 1718, in confideration of

which act the father promifed the fon to spare his life.

It was not altogether improbable that fuch an act would have been some time or other annulled. The czar, therefore, themselves to be transported by passion; but never was any man more passionate than Peter the Great, or more merciless. In a king this is more than an infirmity for which we make amends by confessing it; but it was generally remarked of Peter, and he himself said to a magistrate of Holland, at his second voyage, "I have reformed my nation, and have not been able to reform myself." It is true, the cruelties with which he is reproached were not nevelties at the court of Moscow, any more than at that of Morocco: it was not uncommon to fee a czar, with his own royal hand, inflict 100 lashes on the naked shoulders of a prime officer of the crown, or of a lady of the palace, for failing in their duty, by getting drunk; or to try the goodness of his fabre, by striking off the head of a criminal. Peter had himself performed some of those ceremonies of his country; Le Fort, however (see note A), had authority enough over him at times to flay his hand even when lifted up to strike, but he had not Le Fort always near

The czar's first marriage is thus related in the memoirs of Peter Henry Bruce, Efq. " It took place in 1690, when he was only 18. He was married to Ottokessa Lapuchin, a boyar's daughter, by whom he had Prince Alexis; some time after he turned her away and thut her up in a monastery, on suspicion of insidelity. It was faid, that in one of her jealous fits she charged Prince Menzikoff with carrying the czar to drabs of his former acquaintance, who had been his customers for cakes; upbraiding him with his first occupation: and that Menzikoff ever after bore an irreconcileable enmity to both her and her fon. After the divorce,

one Miss Mons, a very beautiful young lady, born at Peter. Moscow, of foreign parents, was much in favour with the czar; but when he was abroad, Mr Keyserling, then refiding at Moscow as envoy from the king of Prussia, paid his addresses to, and married her. When the czar returned, he was fo much offended at Keyferling, that he ordered him to leave Moscow, which occasioned his immediate recal by the king his master, who fent another in his room. It was believed, if his public character had not protected him, he would have

feverely felt his majesty's displeasure.

"The czar was fome time after fmitten with the charms of another beautiful young lady, the daughter of a foreign merchant in this city: he first saw her in her father's house, where he dined one day. He was fo much taken with her appearance, that he offered her any terms she pleased, if she would live with him; which this virtuous young woman modestly refused: but dreading the effects of his authority, she put on a refolution, and left Moscow in the night, without communicating her defign even to her parents. Having provided a little money for her support, she travelled on foot feveral miles into the country, till she arrived at a small village where her nurse lived with her husband and their daughter, the young lady's foster-sister, to whom the discovered her intention of concealing herfelf in the wood near that village: and to prevent any discovery, she set out the same night, accompanied by the husband and daughter. The husband being a timber-man by trade, and well acquainted with the wood, conducted her to a little dry fpot in the middle of a morafs, and there he built a hut for her habi-

therefore, in order to give it more force, forgetting that he was a father, and only remembering that he was the founder of an empire, which his fon might overturn, and involve in its ancient barbarity, ordered a public process to be drawn up against that unfortunate prince, for some concealment, with which he was charged, in the confession that they had exacted of him.

An affembly was held of the bishops, inferior ecclesiastics, and professors; who found in the Old Testament, that those who curse their father or their mother should be put to death; that David indeed had pardoned Absalom, who had rebelled against him, but that Absalom was never pardoned by God. Such was their opinion, without drawing any conclusion; but it was in effect figning a warrant for his death. Alexis had not in fact cursed his father, neither had he ever revolted like Absalom; he had never lain publicly with the king's concubines; but he had left the kingdom without his father's permission, and had written letters to his friends in which he only fignified that he hoped they would one day be mindful of him in Russia. But whatever might be his case, of 124 lay judges, who were appointed to sit on him, there was not one that judged his offences less than capital; and those who could not write, made others fign for them. It is reported in Europe, that the czar had got translated from Spanish into Russian the criminal process against Don Carlos, that unfortunate prince whom his father Philip II. had confined in a prison, where the heir of that great monarchy ended his days. But there was nothing like a process carried on against Don Carlos, nor was it ever known whether that prince died a natural or a violent death. Peter, the most despotic of princes, wanted not an example. Certain it is that the prince died the day after the sentence, and that the czar had at Moscow one of the best apothecary's shops in Europe. It is probable, however, that the prince Alexis, the heir of the most extensive empire in the world, being condemned unanimously by his father's subjects, which were one day to be his own, might die of the sudden shock and change given to the body at the apprehension of so strange and dismal a sentence. The father went to see his fon in his last agonies; and it is said he shed tears. Infelix utcunque ferent ea fata nepotes. These tears, however, did not prevent the wheels from being covered with the broken limbs of his son's friends. He beheaded his own brother in-law Count Lapuchin, brother to his wife Ottokessa Lapuchin whom he had divorced, and uncle to-Prince Alexis. The prince's confessor had also his head cut off. If Muscovy has been civilized, she has, it must be confessed, paid dear for her improvement.

The remainder of the czar's life was nothing but a feries of grand projects, labours, and exploits, that feemed to efface the memory of his excessive severities, which were perhaps necessary. He made frequent speeches to his court and to his council. In one he told them that he had sacrificed his son to the welfare of his

dominions.

Foter. tation. She had deposited her money with her nurse to procure little necessaries for her support, which were faithfully conveyed to her at night by the nurse or her daughter, by one of whom the was constantly attended in the night time.

"The next day after her flight, the czar called at her father's to fee her, and finding the parents in anxious concern for their daughter, and himfelf disappointed, fancied it a plan of their own concerting. He became angry, and begun to threaten them with the effects of his displeasure if she was not produced: nothing was left to the parents but the most folemn protestations, with tears of real forrow running down their cheeks, to convince him of their innocence, and ignorance of what was become of her; affuring him of their fears that some fatal disaster must have befallen her, as nothing belonging to her was amisfing, except what she had on at the time. The czar, fatisfied of their fincerity, ordered great fearch to be made for her, with the offer of a confiderable reward to the person who should discover what was become of her, but to no purpose: the parents and relations, apprehending she was

no more, went into mourning for her.

"Above a year after this she was discovered by an accident. A colonel who had come from the army to fee his friends, going to hunt in that wood, and following his game through the morals, he came to the hut, and looking into it faw a pretty young woman in a mean dress. After inquiring of her who she was, and how she came to live in fo folitary a place, he found out at last that the was the lady whose disappearance had made so great a noise; in the utmost confusion, and with the most fervent intreaties, she prayed him on her knees that he would not betray her; to which he replied, that he thought her danger was now past, as the czar was then otherwise engaged, and that she might with safety discover herfelf, at least to her parents, with whom he would confult how matters should be managed. The lady agreed to this propofal; and he fet out immediately, and overjoyed her parents with the happy discovery; the iffue of their deliberation was to confult Madame Catherine (as she was then called) in what manner the affair should be opened to the czar. The colonel went also upon this bufiness, and was advised by Madame to come next morning and fhe would introduce him to his majesty, when he might make the discovery and claim the promised reward. He went according to appointment; and being introduced, told the accident by which he had discovered the lady, and represented the miferable fituation in which he found her, and what she must have suffered by being so long thut up in such a difmal place, from the delicacy of her fex. The czar showed a great deal of concern that he should have been the cause of all her sufferings, declaring that he would endeavour to make her amends. Here Madame Catherine fuggested, that she thought the best amends his majesty could make, was to give her a handsome fortune and the colonel for a husband, who had the best right, having caught her in purfuit of his game. The czar, agreeing perfectly with Madame Catherine's fentiments. ordered one of his favourites to go with the colonel, and bring the young lady home; where she arrived to the inexpressible joy of her family and relations, who had all been in mourning for her. The marriage was under the direction and at the expence of the czar, who himself

gave the bride to the bridegroom; faying, that he pre- Peter. sented him with one of the most virtuous of women; and accompanied his declaration with very valuable prefents, befides fettling on her and her heirs three thousand rubles a-year. This lady lived highly esteemed by the czar, and every one who knew her. Befides the concurring reports of other people, I had the ftory from her own mouth."

On the whole, that Peter I. was a great man, few will deny who know what real greatness is. A minute account of the life of this diffinguished emperor would make a large volume; we have been able to give but the mere outlines of it: the anecdotes, however, at the end, show in some degree the nature of the man; at all events they show one important truth, that it is a more difficult thing to reform one's felf than to reform a kingdom; to conquer one's passions, than to conquer the world. The Russians, however, if there be any good in civilization, owe to him every thing: and they feem to be fenfible of it; for a very pompous oration was delivered to his memory by Michael Lomonoffoff, before the Academy of Sciences at St Petersburg, on the 26th of April 1755. For a minuter account of his improvements, &c. fee Russia, Petersburg, and Cathe-

PETER the Wild Boy. This extraordinary creature occasioned great speculation among the learned; but we do not know that any fatisfactory causes have been affigned for the striking difference between him and other

human beings.

The following account of him is extracted from the parish-register of North-church, in the county of Hertford. "Peter, commonly known by the name of Peter the Wild Boy, lies buried in this churchyard, oppo-fite to the porch. In the year 1725 he was found in the woods near Hamelen, a fortified town in the electorate of Hanover, when his majesty George I. with his attendants, was hunting in the forest of Hertswold. He was supposed to be then about 12 years of age, and had fubfifted in those woods upon the bark of trees, leaves, berries, &c. for some confiderable length of time. How long he had continued in that wild state is altogether uncertain; but that he had formerly been under the care of some person, was evident from the remains of a shirt collar about his neck at the time when he was found. As Hamelen was a town where criminals were confined to work upon the fortifications, it was then conjectured at Hanover that Peter might be the iffue of one of those criminals, who had either wandered into the woods and could not find his way back again, or being discovered to be an idiot was inhumanly turned out by his parents, and left to perish or shift for himself. In the following year, 1726, he was brought over to England, by the order of Queen Caroline then princess of Wales, and put under the care of Dr Arbuthnot with proper mafters to attend him. But notwithstanding there appeared to be no natural defect in his organs of speech, after all the pains that had been taken with him he could never be brought distinctly to articulate a single syllable, and proved totally incapable of receiving any instruction. He was afterwards intrusted to the care of Mrs Titchbourn, one of the queen's bedchamber women, with a handsome pension annexed to the charge. Mrs Titchbourn usually spending a few weeks every summer at the house of Mr James Fenn, a yeoman farmer at Axter's

End in this parish, Peter was left to the care of the said Mr Fenn, who was allowed 35l. a-year for his support and maintenance. After the death of James Fenn he was transferred to the care of his brother Thomas Fenn, at another farm-house in this parish called Broadway, where he lived with the feveral fuccessive tenants of that farm, and with the same provision allowed by government to the time of his death, Feb. 22. 1785, when he was supposed to be about 72 years of age.

" Peter was well made, and of the middle fize. countenance had not the appearance of an idiot, nor was there any thing particular in his form, except that two of the fingers of his left hand were united by a web up to the middle joint. He had a natural ear for music, and was so delighted with it, that if he heard any musical instrument played upon, he would immediately dance and caper about till he was almost quite exhaufted with fatigue; and though he could never be taught the distinct utterance of any word, yet he could easily learn to hum a tune. All those idle tales which have been published to the world about his climbing up trees like a fquirrel, running upon all fours like a wild beaft, &c. are entirely without foundation; for he was fo exceedingly timid and gentle in his nature, that he would fuffer himfelf to be governed by a child. There have been also many false stories propagated of his incontinence; but from the minutest inquiries among those who conffantly lived with him, it does not appear that he ever discovered any natural passion for women, though he was subject to the other passions of human nature, such as anger, joy, &c. Upon the approach of bad weather he always appeared fullen and uneafy. At particular feasons of the year he showed a strange fondness for stealing away into the woods, where he would feed eagerly upon leaves, beech-mast, acorns, and the green bark of trees, which proves evidently that he had subfisted in that manner for a confiderable length of time before he was first taken. His keeper therefore at such seasons generally kept a strict eye over him, and sometimes even confined him, because if he ever rambled to any distance from his home he could not find his way back again: and once in particular, having gone beyond his knowledge, he wandered as far as Norfolk, where he was taken up, and being carried before a magistrate, was committed to the house of correction in Norwich, and punished as a flurdy and obstinate vagrant, who would not (for indeed he could not) give any account of himself: but Mr Fenn having advertised him in the public papers, he was releafed from his confinement, and brought back to his ufual place of abode.

" Notwithstanding the extraordinary and savage state in which Peter was first found greatly excited the attention and curiofity of the public; yet, after all that has been faid of him, he was certainly nothing more than a common idiot without the appearance of one. But as men of some eminence in the literary world have in their works published strange opinions and ill-founded conjectures about him, which may feem to stamp a credit upon Vol. XVI. Part I.

what they have advanced; that posterity may not through Peter. their authority be hereafter misled upon the subject, this' short and true account of Peter is recorded in the parishregister by one who constantly resided above 30 years in his neighbourhood, and had daily opportunities of feeing and observing him."

Perhaps our readers will not be displeased if we prefent them with Lord Monboddo's account of this extraordinary creature (A). "It was in the beginning of June 1782 (fays his lordship) that I saw him in a farmhouse called Broadway, within about a mile of Berkhamflead, kept there upon a pension which the king pays. He is but low of stature, not exceeding five feet three inches; and although he must now be about 70 years of age, has a fresh healthy look. He wears his beard; his face is not at all ugly or difagreeable; and he has a look that may be called fenfible and fagacious for a favage. About 20 years ago he was in use to elope, and to be missing for several days; and once, I was told, he wandered as far as Norfolk; but of late he has been quite tame, and either keeps in the house or saunters about the farm. He has been the 13 last years where he lives at present; and before that he was 12 years with another farmer, whom I faw and converfed with. This farmer told me, that he had been put to school somewhere in Hertfordshire, but had only learned to articulate his own name Peter, and the name of King George, both which I heard him pronounce very distinctly. But the woman of the house where he now is (for the man happened not to be at home) told me, that he underflood every thing that was faid to him concerning the common affairs of life; and I faw that he readily understood feveral things that she said to him while I was prefent. Among other things she desired him to sing Nancy Dawson; which he did, and another tune which she named. He never was mischievous, but had always that gentleness of nature which I hold to be characteristical of our nature, at least till we became carnivorous, and hunters or warriors. He feeds at present as the farmer and his wife do; but, as I was told by an old woman (one Mrs Collop, living at a village in the neighbourhood called Hempstead, who remembered to have seen him when he first came to Hertfordshire, which she computed to be 55 years before the time I faw her), he then fed very much upon leaves, and particularly upon the leaves of cabbage, which he ate raw. He was then, as she thought, about 15 years of age, walked upright, but could climb trees like a squirrel. At present he not only eats flesh, but has also got the taste of beer, and even of fpirits, of which he inclines to drink more than he can get. And the old farmer above-mentioned, with whom he lived twelve years before he came to this last farmer, told me, that he had acquired that taste before he came to him, which is about 25 years ago. He has also become very fond of fire, but has not yet acquired a liking for money; for though he takes it, he does not keep it, but gives it to his landlord or landlady, which I suppose is a lesson that they have taught him. He retains so

⁽A) This eccentric writer, in support of his hypothesis, that man in a state of nature is a mere animal, without clothes, houses, the use of sire, or even speech, adduces the oran-outang, or man in the woods, and this Peter the wild man and others, as examples. He denies the want of the organs of speech as an objection, and infifts they only want the artificial use of them.

much of his natural inflinct, that he has a fore-feeling of bad weather, growling and howling, and showing great disorder, before it comes.

"These are the particulars concerning him which I observed myself, or could learn by information from the neighbourhood." From all these facts put together his lordship makes the following observations:

" Ift, Whatever doubts there may be concerning the humanity of the oran-outang, it was never made a quef-

tion but that Peter was a man.

" 2dly, That he was, as the Dean [Swift] fays, of a father and mother like one of us. This, as I have faid, was the case of two savages found in the Dismal swamp in Virginia, of the one found in the island of Diego Garcia, and of him that was discovered by M. le Roy in the Pyrenees, and in general of all the favages that have been found in Europe within these last 300 years; for I do not believe, that for these 2000 years past there has

been a race of fuch favages in Europe.

" 3dly, I think there can be no reason to doubt of what was written from Hanover, and published in the newspapers, that he was found going upon all fours, as well as other folitary favages that have been found in Europe. It is true that others have been found erect; which was the case of the two found in the Dismal swamp of Virginia, likewise of the man of the Pyrenees, and of him in the island of Diego Garcia; but these I suppose were not exposed till they had learned to walk upright; whereas Peter appears to have been abandoned by his parents before he had learned that leffon, but walked as we know children do at first.

"4thly, I think it is evident that he is not an idiot, not only from his appearance, as I have described it, and from his actions, but from all the accounts that we have of him, both those printed and those attested by persons yet living; for as to the printed accounts, there is not the least information of that kind in any of them, except in one, viz. Wye's letter, No 8. wherein is faid, that fome imputed his not learning to speak to want of understanding; which I should think showed rather want of understanding in those who thought so, when it is confidered that at this time he had not been a year out of the woods, and I suppose but a month or two under the care of Dr Arbuthnot, who had taken the charge of his education. The Dean indeed tells us, that he suspected he was a pretender, and no genuine wild man, but not a word of his being an idiot. And as to the perfons living, not one with whom I have converfed appeared to have the least suspicion of that kind; though it is natural that men, who were not philosophers, and knew nothing of the progress of man from the mere animal to the intellectual creature, nor of the improvement of our understanding by social intercourse and the arts of life, but believed that man when he came to a certain age has from nature all the faculties which we fee him exert, and particularly the faculty of speech, should think him an idiot, and wanting even the capacity of acquiring understanding. I knew an officer of dragoons, a man of very good fense, who was quartered where Peter then lived for fome months, and faw him almost every day,

and who affured me that he was not an idiot, but showed common understanding, which was all that could be

expected from one no better educated than he.

" Laftly, those who have considered what I have faid (B) of the difficulty of articulation, will not be furprised that a man who had lived a favage for the first 14 or 15 years of his life, should have made so little progress in that art. I cannot, however, have the least doubt, that if he had been under the care of Mr Braidwood of Edinburgh, he would have learned to fpeak, though with much more difficulty than a man who had been brought up tame among people who had the use of speech, and who consequently must know the advantage of it. And I can have as little doubt that Mr Braidwood could have taught the oran outang in Sir Ashton Lever's collection, who learned to articulate a few words, fo as to speak

plainly enough."

St PETER, Le Port, a market-town of England, in the fouth-east part of Guernsey, in Hampshire, in the British channel, confishing of only one long and narrow fireet. The mouth of the harbour is well fet with rocks, and is on each fide defended by a castle; one casted the Old caffle, and the other Caffle-cornet. The governor of the island generally refides here, who has the command of the garrifon in this and all the other castles. The harbour has a good road, from whence ships may fail with any wind, and from the road pass under the guns of the castle to the pier, close up to the town. The pier is a noble work, formed of vast stones, joined together with great art and regularity; it is not only a fecurity to the flips, but, being contiguous to the town, is handsomely paved at the top with large smooth flagstones, guarded with parapets, and, being of a great length and breadth, forms a pleafant walk, affording a free prospect of the sea and the neighbouring islands. Cornet-castle, which commands both the town and the harbour, stands on a rock, separated from the land by an arm of the fea, no less than 600 yards wide, and not fordable but at low water in great fpring-tides.

St PETER's island, in the lake of Bienne in Switzerland, remarkable for being one of the retreats of Rouffeau; whence it has also got the name of Rouffeau's island. It lies towards the fouth fide of the lake, and produces a great variety of shrubs and trees, particularly large oaks, beech, and Spanish chesnut. The southern shore slopes gradually to the lake, and is covered with herbage; the remaining borders are steep and rocky; their fummits in a few places thinly covered with shrubs; in others their perpendicular fides are clothed to the water's edge with hanging woods. The views from the different parts of the island are beautiful and diversified; that to the north being the most extensive and pleasing. It commands the prospect of the lake, which is of an oval form; its cultivated borders, interfperfed with villages and castles, with the towns of Nidau and Bienne standing upon the farther extremity. Agreeable walks are carried through the woods, and terminate in a circular pavilion placed in the centre of the island. Before the troubles in France, on Sunday, and particularly the vintage-time, this island was filled

⁽B) Lord Monboddo, far from thinking speech or articulation natural to man, rather wonders how he can by any teaching or imitation attain to the ready performance of fuch various and complicated operations. Add to this, when the organs are completely formed to one language, how hard it is to make them answer another.

with parties who amused themselves with wandering about the woods or dancing in the circular pavilion. How they employ themselves now it is not so easy to fay, as it was overrun and fubjected by the forces of that unhappy nation, and of course tainted with their destructive principles. It was retaken by the Spaniards, and properly belongs to the king of Sardinia. There is only one farm-house on the island, in an apartment of which Rousseau was lodged.

PETER-Pence, was an annual tribute of one penny, paid at Rome out of every family at the feast of St Peter. And this Ina the Saxon king, when he went in pilgrimage to Rome about the year 740, gave to the pope, partly as alms and partly in recompence of a house erected in Rome for English pilgrims. And this continued to be paid generally until the time of King Henry VIII. when it was enacted, that from henceforth no person shall pay any pensions, Peter-pence, or other impositions,

to the use of the bishop or see of Rome.
PETERBOROUGH, a city of Northamptonshire, about 82 miles from London. It is the least city except perhaps Ely, and unquestionably the poorest bishopric, though one of the oldest towns in England. It had a monastery dedicated to St Peter, and founded as early as the year 655, to which the abbot of Croyland and his monks flying for protection in the year 870, they were overtaken and murdered in a court of this monastery, called the monks churchyard, because they were all buried here; and to this day is to be feen the tombstone with their esfigies, which had been erected over their common grave. Soon after this the Danes destroyed both the monastery and friars, so that it lay destitute for above 100 years. The monks were, however, restored, and lived very sumptuously, with a mitred abbot at their head, till the reformation, when Henry VIII. converted it into a bishop's fee. The cathedral, which is faid to be more than 1000 years old, though apparently more modern, is a most noble Gothic fabric, and was much more fo before it was defaced in the civil wars. The west front, which is 156 feet broad, is very flately; and befides columns curiously adorned, is supported by three of the tallest arches in Britain. The windows of the cloisters are finely stained with scripture history and the succession of its abbots. There are in the church monuments of Queen Catharine, wife of Henry VIII. and of Mary queen of Scots; and the figure of one Mr Scarlet the fexton, who buried them, and lived to 95, after he had buried all the housekeepers of the town twice over. There is but one parish-church besides the cathedral. The city is governed by a mayor, recorder, and aldermen, by a charter of Henry VIII. All its officers are elected by the dean and ehapter, confifting of fix prebendaries, who are all lords of the manor. Befides the dean and chapter, who are an ecclefiastical corporation distinct from the bishop, there are eight petty canons, four students in divinity, one epistler, one gospeller, a subdean, subtreasurer, and chanter, eight chorifters, eight finging men, two chancellors, befides a fleward, organist, &c. a grammar school, and two charity schools. The river Nen, over which there is here a wooden bridge, is navigable by barges to Northampton, 50 miles further, which bring coal, corn, &c. and by which they export in some years 6000 quarters of malt, besides other goods, especially the woollen manufactures. either of cloth or stockings, in which the poor are em-

227 ployed. The air of Peterborough is faid not to be very wholesome, by reason of the neighbouring fens; but the water of the river is fresh and good, the highest springtide never coming up within five miles of the town; and there is plenty of excellent water in their wells. streets are very poor, and the houses but mean; there is, however, a handsome market-house, over which are kept the affizes and fessions. Its jurisdiction extends over 32 towns and hamlets, wherein the civil magistrates appointed by the royal commission are vested with the same power as judges of affize, and hold their quarterly feffions in this city.

PETERHEAD, a town in Scotland, in the county of Aberdeen, lies about 30 miles north-east of that city. It flands on the most easterly point in Scotland, and from thence due west that kingdom is broadest.

Peterhead is the nearest land to the northern continent of Europe, and lies within 300 miles of the cape, which is called the Naze of Norway. Through this channel the grand body of the herrings pass in their annual migrations from Shetland and the north feas to the more fouthern latitudes, attended with the all-devouring cod and ling; on which account Peterhead, or, as it is fometimes called, Buchannefs, hath always been the fecond station of the Dutch buffes after leaving the Shetland islands. Tradition fays, that some hundred years ago the Dutch offered Lord Mareschal, then the proprietor of the coast, to cover a small island called Inch-Keith with filver for the property of it to carry on their fisheries, which for obvious reasons could not be accepted. Be that as it may, the Dutch, in time of peace, still frequent the coast in July and August, and fometimes 100 fail are feen within fight of land, bufily employed in the herring and white fisheries. The natives, to whom this treasure properly belongs, have lately made some attempts towards the white fishery, of which they cure and vend, chiefly at the London market, 4000 barrels of delicate small cod and ling annually. They also fit out some vessels for the Hebride fishery off Barrahead for the Barcelona market; and they claim the merit of having taught the islanders how to take and cure the large fish which abound on their coasts. They have often gained the highest premiums allowed by government for curing white fishes.

Few harbours in Great Britain are of more importance to navigation than this of Peterhead, as, in case of violent storms from the easterly points, large vessels embayed betwixt this and the mouth of the Forth have not a port that they can fafely take at every time of the tide, that of Aberdeen excepted. If therefore they cannot make their way to fea in the teeth of a strong easterly wind, or double this headland that they may gain the Murray frith, they must inevitably come on shore. This harbour lies on a spacious bay, where vessels of any burden may ride in all other winds, and is therefore the general rendezvous of the shipping which frequent the northern feas, where they cast anchor on clean ground, and ride fafely till the storms have abated. But though nature hath done so much for the benefit of navigation, fomething is left for the exercise of human aid. The harbour can at present contain in perfect safety 40 or 50 fail of veffels drawing 12 feet water, and is capable of being extended fo as to admit a greater number of ships drawing 20 feet; by which means not only cafual merchantmen but finall ships of war with their convoys
Ff2 would

Peterhoff.

Peterhead, would find this a most defirable refuge when pursued by fuperior force. The harbour is defended by a good battery. A confiderable trade is carried on from this place directly to the Baltic for deals, iron, hemp, tar, and other articles. There is also a manufacture of fewing thread, which employs many young girls. A mineral well in the summer-months gives great gaiety to the place; its falutary virtues have long, and we believe very justly, been celebrated. The waters of this spring are powerfully diuretic, and are thought to be efficacious in removing complaints in the bowels.

Twelve pounds avoirdupois of this water were analyzed by Dr Laing, who found it composed of

Muriate of iron,	30.75 grains.
Carbonate of iron,	3.25
Muriate of lime,	7.00
Siliceous earth,	2.00
Sulphate of lime,	2.00
foda,	13.25
Muriate of foda,	7.5

Carbonic acid gas, 83.5 cubic inches. The ingenious author of the above analysis recommends this water very much in cases of scrofula. Its most valuable property is tonic, which is no doubt derived from the iron

that enters into its composition.

There are here many elegant houses for the accommodation of strangers. There is also a ball-room, under which there are two falt-water baths. These baths are much frequented in nervous disorders: their effect in strengthening the constitution is often surprising. Owing to the open peninfulated fituation, the air of this place is esteemed peculiarly pure and healthful; even the fogs rifing from the sea are thought to be medicinal: the town is therefore much enlivened by the concourse of company who frequent it on these accounts. Upon the whole, the town is neat and well built, the houses are handsome, and the streets tolerably spacious and very clean; and it has every appearance of a thriving, plentiful, and happy place. In 1793, the population was 4100, being an increase of 1613, since the return to Dr Webster.

PETERHOFF, in Russia, is situated about 20 miles from Petersburg, and is distinguished for its palace and gardens. The palace was begun by Peter I. and finished by Elizabeth. As it is placed upon an eminence, it commands a most superb view of Cronstedt, Petersburg, the intervening gulf, and the opposite coast of Carelia. The palace is most magnificently furnished, and the suite of apartments are truly princely. The presence-chamber is richly ornamented with portraits of the fovereigns of the house of Romanof, who have reigned in Russia

p. 485.

Coxe's Tra-"The gardens of Peterhoff (fays an intelligent traveller) have been celebrated for their taste and elegance; and from the number of jet d'eaus, fountains, basons, cascades, parterres, &c. they have been compared to those of Versailles: and indeed in one respect they are far superior; for the water-works of the latter only play upon particular occasions, while those of Peterhoff are perennial. These gardens, which at the time of their formation were greatly admired in this country, though not congenial to the taste of the empress, are suffered to remain in their present state; as during summer her majesty principally resides at Tzarskoe-Selo, where the

grounds are disposed in a more modern and pleasing Peterhoff manner." A vast number of filver dolphins and gilded statues are scattered through them; but the most remarkable figures are those of two gladiators placed in a bason of water. These are represented, not with the fword and buckler, the ancient implements of war, but with a brace of pittols. These they point to each other in a threatening posture, while the water gushes impe-tuously from the barrels. In that part of the garden which lies between the palace and the gulf, close to the water, is a building which was the favourite retreat of Peter I. It is preserved, together with its furniture, entirely in its original flate with a kind of religious vene-Its plainness shows the frugal simplicity in which that monarch was accustomed to live. In the fame celebrated gardens there is a remarkable building called the mountain for fledges, and often by travellers the flying mountain. "It stands (fays Mr Coxe) in the middle of an oblong area, inclosed by an open colonnade, with a flat roof, which is railed for the conveni-ence of holding spectators. The circumference of this colonnade is at least half a mile. In the middle of the area stands the slying mountain, stretching nearly from one end to the other. It is a wooden building, supported upon pillars, representing an uneven furface of ground, or a mountain composed of three principal ascents, gradually diminishing in height, with an intermediate space to resemble valleys: from top to bottom is a floored way, in which three parallel grooves are formed. It is thus used: a small carriage containing one person being placed in the centre groove upon the highest point, goes with great rapidity down one hill; the velocity which it acquires in its descent carries it up a fecond; and it continues to move in a fimilar manner until it arrives at the bottom of the area, where it rolls for a confiderable way on the level furface, and stops before it attains the boundary: it is then placed in one of the fide grooves, and drawn up by means of a cord fixed to a windlass. To a person unacquainted with the mechanism, this entertainment would appear tremendous; but as the grooves always keep the carriage in its right direction, there is not the least danger of being overturned. At the top of the mountain is a handsome apartment for the accommodation of the court and principal nobility; there is also room for many thousand spectators within the colonnade and upon its roof. Near the flying mountain is a spacious amphitheatre, in which tournaments are usually exhibited."

PETERS, FATHER, a Jesuit, was confessor and counsellor to James II. king of England. This prince dismissed him in 1688, because he was considered as the author of those troubles in which the kingdom was then involved. " He was (fays Bishop Burnet) the most violent of the king's advisers, and the person most listened to. Though he had the honour of being nobly descended, he was a man of no extensive erudition, and was eminent only for his bigotry and forwardness." Though Burnet is not always to be believed, yet certain it is, from the testimony of other historians, that Father Peters was by no means a person properly qualified to direct King James in the critical fituation in which he

then stood.

PETERSBURG, St, a city of the province of Ingria in Russia, and capital of the whole empire. It is situated in N. Lat. 59. 26. 23. and E. Long. 30. 25.

Petersburg from the first meridian of Greenwich. It was founded in the year 1703 by Czar Peter the Great, whose ambition it was to have a fleet on the Baltic; for which reason he determined to found a city which might become the centre of trade throughout all his dominions. The fpot he pitched upon was a low, fenny, uncultivated island, formed by the branches of the river Neva, before they fall into the gulf of Finland. In the fummer this island was covered with mud; and in winter became a frozen pool, rendered almost inaccessible by dreary forests and deep morasses, the haunts of bears, wolves, and other favage animals. Having taken the fort of Nattebourg, and the town of Neischanz, in the year 1703, this mighty conqueror affembled in Ingria above 300,000 men, Russians, Tartars, Cosfacks, Livonians, and others, even from the most distant parts of his empire, and laid the foundation of the citadel and fortifications, which were finished in four months, almost in despite of nature. He was obliged to open ways through forests, drain bogs, raise dykes, and lay causeways, before he could pretend to found the new city. The workmen were ill provided with necessary tools and implements, fuch as spades, pick-axes, shovels, planks, and wheel-barrows: they were even obliged to fetch the earth from a great distance in the skirts of their garments, or in little bags made of old mats and rags fewed together. They had neither huts nor houses to shelter them from the feverity of the weather: the country, which had been defolated by war, could not accommodate fuch a multitude with provisions; and the supplies by the lake Ladoga were often retarded by contrary winds. In confequence of these hardships, above 100,000 men are faid to have perished: nevertheless the work proceeded with incredible vigour and expedition; while Peter, for the fecurity of his workmen, formed a great camp, in fuch a manner, that his infantry continued in Finland, and his cavalry were quartered in Ingria. Some Swedish cruizers being descried in the neighbourhood, the czar posted a body of troops in the isle of Rutzari, by whom the Swedes were repulfed, and the work met with no farther interruption. The buildings of the city kept pace with the fortrefs, which is the centre of the town, furrounded on all fides by the Neva; and in little more than a year, above 30,000 houses were erected. At present there may be about double that number in Pctersburg, though many of them are paultry and inconfiderable. In order to people this city, Peter invited hither merchants, artificers, mechanics, and feamen, from all the different countries of Europe: he demolished the town of Nieuschants, and brought hither not only the materials of the houses, but the inhabitants themselves. A thousand families were drawn from Moscow; he obliged his nobility to quit their palaces and their villas in and about Moscow, and take up their re-fidence at Petersburg, in a much more cold and comfortless climate. Finally, resolving to remove hither the trade of Archangel, he issued an ordonnance, importing, that all fuch merchandise as had been conveyed to Archangel, in order to be fold to foreigners, should now be sent to Petersburg, where they should pay no more than the usual duties. These endeavours and regulations have rendered this one of the greatest and most flourishing cities in Europe. The Russian boyars and nobility have built magnificent palaces, and

are now reconciled to their fituation. At first many Petersburg. houses were built of timber; but these being subject to fudden conflagrations in spite of all the precautions that could be taken, the czar, in the year 1714, issued an order, that all new houses should be walled with brick and covered with tiles. The fort is an irregular hexagon, with opposite bastions. This, together with all the rest of the fortifications, was in the beginning formed of earth only; but in the sequel they were faced with ftrong walls, and provided with cafemates, which are bomb-proof. In the curtain of the fort, on the right hand fide, is a noble difpenfary, well supplied with excellent medicines, and enriched with a great number of porcelain vafes from China and Japan. From one of the gates of the fort a draw-bridge is thrown over an arm of the river, in which the czar's galleys and other fmall vessels are sheltered in the winter. The most remarkable building within the fort is the cathedral, built by the direction of an Italian architect. Petersburg is partly built on little islands, some of which are connected by draw-bridges; and partly on the continent. In the highest part, on the bank of the Neva, the czar fixed his habitation, or ordinary residence, built of freestone, and situated so as to command a prospect of the greater part of the city. Here likewise is a royal foundery; together with the superb houses of many noble men. The marshy ground on which the city is built, being found extremely slippery, dirty, and incommodious, the czar ordered every inhabitant to pave a certain space before his own door. In the year 1716, Peter, taking a fancy to the island Wasili-Osterno, which he had given as a present to Prince Menzikoff, resumed the grant, and ordered the city to be extended into this quarter. He even obliged the boyars, or nobles, to build stone-houses on this spot, though they were already in possession of others on the side of Ingria: accordingly this is now the most magnificent part of the city. On the other fide of a branch of the Neva stands the czar's country or fummer palace, provided with a fine garden and orangery. On the bank of the same river is the slaboda, or suburbs, in which the Germans generally choose their habitation. Petersburg is very much fubject to dangerous inundations. In the year 1715, all the bastions and draw-bridges were either overwhelmed or carried away. The breadth, depth, and rapidity of the Neva, have rendered it extremely difficult, if not impracticable, to join the islands and the continent by bridges. Besides, Peter was averse to this expedient for another reason: resolved to accustom his subjects to navigation, he not only rejected the project of a bridge, but also ordered that no boat should pass between the islands and continent, except by the help of fails only. In consequence of this strange regulation, many lives were lost: but at length he gained his point; and by habituating his fluggish Muscovites to the dangers of the fea, in a little time produced a breed of hardy failors. The adjacent country is fo barren, that the town must be supplied with provisions from a great distance; consequently they are extremely dear. Here are woods in plenty, confifting of pine, fir, alder, birch, poplar, and elm; but the oak and the beech are generally brought from Cafan. In winter the weather is extremely cold, and hot in the fummer. In June the length of the night does not exceed three hours, during which the

Peterburg, natives enjoy a continued twilight: but in December the fun is not visible more than three hours above the horizon.

The czar Peter, who was indefatigable in his endeayours to improve and civilize his fubjects, neglected nothing which he thought could contribute to these purposes. He condescended even to institute and regulate affemblies at Petersburg: these were opened at five in the afternoon, and the house was shut at ten: between these hours the fashionable people of both sexes met without ceremony, danced, conversed, or played either at cards or at chess, this last being a favourite diversion among the Russians. There was likewise an apartment appointed for drinking brandy and fmoking tobacco. Plays and operas were likewise introduced for the same purposes; but as Peter had little relish, and less taste, for those entertainments, they were performed in a very aukward manner in his lifetime: however, fince his death these performances have been brought to a greater

degree of art and decorum. This great northern legislator established, in the neighbourhood of Petersburg, manufactures of linen, paper, faltpetre, fulphur, gunpowder, and bricks, together with water-mills for fawing timber. He instituted a marine academy, and obliged every confiderable family in Ruffia to fend at least one son or kinsman, between the ages of ten and eighteen, to this feminary, where he was instructed in navigation, learned the languages, was taught to perform his exercises, and to live under the severest discipline. To crown his other plans of reformation, he granted letters patent for founding an academy, upon a very liberal endowment; and though he did not live to execute this scheme, his empress, who survived him, brought it to perfection. It was modelled on the plans of the Royal Society in London, and the academy of France. Mr Bullfinger opened it in the year 1726, with an eloquent speech on the defign and utility of an academy of sciences; and the professors, who have always diftinguished themselves by their merit and erudition, published an annual collection of their transactions; a task the more easy, as they have the benefit of printing-preffes, well managed, at Petersburg.

Peter the Great has been much censured for transferring the feat of the empire from Moscow to St Petersburg; the former of which lay nearer to the centre of his dominions. But these objections will have but little weight with those who consider the consequences of the removal. The new city is nearer than Moscow was to the more civilized parts of Europe; and from an intercourse with them the manners of the Russians have been improved, and the nobility in particular have loft much of their feudal importance. Above all, the grand object of Peter, that of having a formidable navy in the Baltic, has certainly been obtained, and the empress of Russia is now the arbitress of the north, and in some degree the mediatrix of all Europe. In short, the erection of St Petersburg was perhaps one of the best acts of Peter's reign, and has in its confequences been the most beneficial. Indeed it is at least probable, that if through any revolution the feat of government should be again transferred to Moscow, we should nowhere see the traces of those memorable improvements, which the passing century has given birth to, but in the annals of history; and Ruffia would again, in all probability, relapfe into her original barbarifm.

The excelion of fach a city as Peteriburg in fo fluor a time is truly wonderful: Mr Coxe fays his mind was filled with altonifhment, when he reflected that fo late as the beginning of the 18th century the ground on which it flands was one vaft morafs, occupied by a very few fithermen's hats. The prefent divifions of the town, fome of which we have already mentioned, are called, 1. The Admiralty quarter; 2. The Vaffill Oftrof or Ifland; 3. The Fortrefs; 4. The Ifland of St Peteriburg; and, 5. The various fuburbs of Livonia, of Mofcow, of Alexander Nevfki, and Wiburg.

The late empress has done so much for this city, that she may not improperly be called its second sounders. It is, nevetheless, fill an infant place, and, as Mr Wraxall observes, "only an immense outline, which will require future empresses, and almost future ages, to complete."

"The streets in general, fays a late traveller, are Coxe's Trabroad and spacious; and three of the principal ones, vels. which meet in a point at the admiralty, and reach to the extremities of the fuburbs, are at least two miles in length. Most of them are paved; but a few are still fuffered to remain floored with planks. In feveral parts of the metropolis, particularly in the Vassili Oftrof, wooden houses and habitations, scarcely superior to common cottages, are blended with the public buildings; but this motley mixture is far less common than at Moscow, where alone can be formed any idea of an ancient Ruffian city. The brick houses are ornamented with a white stucco, which has led several travellers to say that they are built with stone; whereas, unless I am greatly mistaken, there are only two stone structures in all Petersburg. The one is a palace, building by the emprefs upon the banks of the Neva, called the marble palace; it is of hewn granite, with marble columns and ornaments; the other is the church of St Isaac, constructed with the same materials, but not yet finished.

"The manfions of the nobility are many of them valt piles of building, but are not in general upon fo large and magnificent a feale as feveral I observed at Moscow: they are furnished with great cost, and in the same elegant style as at Paris or London. They are futuated chiefly on the fouth side of the Neva, either in the Admiralty quarter, or in the suburbs of Livonia and Moscow, which are the finest parts of the city."

"Peterflurg, although it is more compact than the other Ruflian cities, and has the houses in many fireets contiguous to each other, yet fill bears a refemblance to the towns of this country, and is built in a very firaggling manner. By an order lately iffued from government, the city has been inclosed within a rampart, the circumference whereof is 21 versts, or 14 English miles."

The fame accurate observer calculates the number of inhabitants at Petersburg, and makes the medium number

We have already faid that Petersburg is very liable to be inundated. An inundation of a very alarming nature took place when Mr Coxe was there in September 1777, of which the following account was given in Journal St Petersburg, September 1777: "In the evening of the 9th, a violent storm of wind blowing at first S. W. and afterwards W. raifed the Neva and its various branches to fo great a height, that at five in

Peteriburg-the morning the waters poured over their banks, and fuddenly overflowed the town, but more particularly the Vaffili Oftrof and the island of St Petersburg. The torrent rose in several streets to the depth of four feet and a half, and overturned, by its rapidity, various buildings and bridges. About seven, the wind shifting to N. W. the flood fell as fuddenly; and at midday most of the streets, which in the morning could only be passed in boats, became dry. For a short time, the river rose 10 feet 7 inches above its ordinary level."

Mr Kraft, profesfor of experimental philosophy to the Imperial Academy of Sciences, has written a judicious treatife upon the inundation of the Neva, from which the following observations were extracted by Mr Coxe: "These floods are less alarming than formerly, as the fwelling of the river to about fix feet above its usual level, which used to overflow the whole town, has no longer any effect, excepting upon the lower parts of Petersburg; a circumstance owing to the gradual raifing of the ground by buildings and other

" Upon tracing the principal inundations, the professor informs us that the most ancient, of which there is any tradition, happened in 1691, and is mentioned by Weber, from the account of some fishermen inhabiting near Nieschants, a Swedish redoubt upon the Neva, about three miles from the present fortress of Petersburg. At that period the waters usually rose every five years; and the inhabitants of that diffrict no fooner perceived the particular storms which they had been taught from fatal experience to confider as forerunners of a flood, than they took their hovels to pieces, and, joining the timbers together in the form of rafts, failened them to the fummits of the highest trees, and repaired to the mountain of Duderof, which is distant fix miles from their place of abode, where they waited till the waters

" The highest inundations, excepting the last of 1777, were those of the 1st of November 1726, when the waters role 8 feet 2 inches; and on the 2d of Octo-

ber 1752, when they rose 8 feet 5 inches.

"From a long course of observations the professor draws the following conclusion. The highest sloods, namely, those which rise about fix feet, have generally happened in one of the last four months of the year: no fensible effect is ever produced by rain or fnow; a fwell is fometimes occasioned by the accumulation of masses of ice at the mouth of the Neva; but the principal causes of the overflowing of that river are derived from violent storms and winds blowing fouth-west or north-west, which usually prevail at the autumnal equinox; and the height of the waters is always in proportion to the violence and duration of those winds. In a word, the circumstances most liable to promote the overflowings of the Neva, are when, at the autumnal equinox, three or four days before or after the full or new moon, that luminary being near her perigaum, a violent north-west wind drives the waters of the northern ocean, during the influx of the tide, into the Baltic, and is accompanied, or instantaneously fucceeded by a fouth-west wind in that sea and the gulf of Finland. All these circumstances concurred at the inundation of 1777: it happened two days before the autumnal equinox, four before the full moon, two after her passing through the perigacum, and by a storm at

fouth-west, which was preceded by strong west winds Petersburg. in the northern ocean, and strong north winds at the mouth of the Baltic."

See Notices et Remarques sur les debordemens de la Neva à St Petersbourg, accompagneés d'une carte representant la crue et la diminution des eaux, &c. in Nov. Act. Pet. for 1777, Par. II. p. 47. to which excellent treatife we would refer the curious reader for further

All our readers have unquestionably heard of the equestrian statue of Peter I. in bronze. We shall give an account of that extraordinary monument in Mr Coxe's own words. "It is (fays he) of a coloffal fize, and is the work of Monsieur Falconet, the celebrated French statuary, cast at the expence of Catherine II. in honour of her great predecessor, whom she reveres and imitates. It represents that monarch in the attitude of mounting a precipice, the fummit of which he has nearly attained. He appears crowned with laurel, in a loofe Afiatic vest, and fitting on a housing of bearikin: his right hand is stretched out as in the act of giving benediction to his people; and his left holds the reins. The defign is matterly, and the attitude is bold and spirited. If there be any defect in the figure, it confifts in the flat position of the right hand; and for this reason, the view of the left fide is the most striking, where the whole 'appearance is graceful and animated. The horse is rearing upon its hind legs; and its tail, which is full and flowing, flightly touches a bronze ferpent, artfully contrived to affift in supporting the vait weight of the statue in due equilibrium. The artist has, in this noble effay of his genius, represented Peter as the legislator of his country, without any allusion to conquest and bloodshed; wifely preferring his civil qualities to his military exploits. The contrast between the composed tranquillity of Peter (though perhaps not abfolutely characteristic) and the fire of the horse, eager to press forwards, is very striking. The simplicity of the infcription corresponds to the sublimity of the defign, and is far preferable to a pompous detail of exalted virtues, which the voice of flattery applies to every fovereign without distinction. It is elegantly finished in brafs characters, on one fide in Latin, and on the oppofite in Russian. Petro primo Catherina secunda, 1782; i.e. Catherine II. to Peter I.

" The statue, when I was at Petersburg, was not erected, but flood under a large wooden shed near the Neva, within a few yards of its enormous pedellal. When Falconet had conceived the defign of his statue, the base of which was to be formed by a huge rock, he carefully examined the environs of Petersburg, if, among the detached pieces of granite which are feattered about these parts, one could be found of magnitude correspondent to the dimensions of the equestrian figure. After considerable research, he discovered a stupendous mass half buried in the midst of a morals, The expence and difficulty of transporting it were no obflacles to Catherine II. By her order the morals was immediately drained, a road was cut through a forest, and carried over the marshy ground; and the stone which, after it had been somewhat reduced, weighed at least 1500 tons, was removed to Petersburg. This more than Roman work was, in less than fix months from the time of its first discovery, accomplished by a windlass, and by means of large friction balls

Peterbarg, alternately placed and removed in grooves fixed on each fide of the road. In this manner it was drawn, with 40 men feated upon its top, about four miles, to the banks of the Neva; there it was embarked in a vessel constructed on purpose to receive it, and thus conveyed about the fame diftance by water to the fpot where it now stands. When landed at Petersburg, it was 42 feet long at the base, 36 at the top, 21 thick, and 17 high; a bulk greatly furpaffing in weight the most boasted monuments of Roman grandeur, which, according to the fond admirers of antiquity, would have baffled the skill of modern mechanics, and were alone fufficient to ren-der confpicuous the reign of the most degenerate emperors

"The pedestal, however, though fill of prodigious magnitude, is far from retaining its original dimensions, as, in order to form a proper station for the statue, and to represent an ascent, the summit whereof the horse is endeavouring to attain, its bulk has been necessarily diminished. But I could not observe, without regret, that the artift has been defirous to improve upon nature; and, in order to produce a refemblance of an abrupt broken precipice, has been too lavish of the chissel. was a model in plaster, to the shape of which the workmen were fashioning the pedestal. It appeared to me, that in this model the art was too conspicuous; and that the effect would have been far more fublime, if the stone had been left as much as possible in its rude state, a vast unwieldy stupendous mass. And indeed, unless I am greatly mistaken, the pedestal, when finished according to this plan, will have fcarcely breadth fufficient to afford a proper base for a statue of such colosfal fize.

" The statue was erected on the pedestal on the 27th of August 1782. The ceremony was performed with great solemnity, and was accompanied with a solemn inauguration. At the same time the empress issued a proclamation, in which, among other inflances of her clemency, the pardons all criminals under fentence of death; all deferters, who should return to their respective corps within a limited time; and releases all criminals condemned to hard labour, provided they had not

been guilty of murder." Mr Coxe informs us, that the weather is extremely changeable in this capital, and the cold is at times extreme; against which the inhabitants take care to provide (fee PEASANT), though some of them nevertheless unfortunately fall victims to it. " As I traverfed the city, (fays Mr Coxe), on the morning of 12th January, I observed several persons whose faces had been bitten by the frost: their cheeks had large scars, and appeared as if they had been finged with an hot iron. As I was walking with an English gentleman, who, instead of a fur cap, had put on a common hat, his ears were fuddenly frozen: he felt no pain, and would not have perceived it for some time, if a Russian, in passing by, had not informed him of it, and affifted him in rubbing the part affected with fnow, by which means it was inftantly recovered. This, or friction with flannels, is the usual remedy; but should the person in that state approach the Fre, or dip the part in warm water, it immediately mortifies and drops off .- The common people continued at their work as usual, and the drivers plied in the streets with their fledges feemingly unaffected by the frost;

their beards were incrusted with clotted ice, and the Petersburghorfes were covered with ificles.

" It fometimes happens that coachmen or fervants, while they are waiting for their mafters, are frozen to death. In order to prevent as much as possible thesedreadful accidents, great fires of whole trees, piled one upon another, are kindled in the court-yard of the palace and the most frequented parts of the town. As the flames blazed above the tops of the houses, and cast a glare to a confiderable diffance, I was frequently much amused by contemplating the picturesque groups of Rusfians, with their Afiatic dress and long beards, affembled round the fire. The centinels upon duty, having no beards, which are of great use to protect the glands of the throat, generally tie handkerchiefs under their chins, and cover their ears with small cases of flan-

The police of this city has been much admired. This establishment consists of a police master, two prefidents, the one for criminal, the other for civil cases. and two confulters, chosen from the burgher class. To this is committed the care to maintain decorum, good order and morals; the attainment of which is thus accomplished.

The refidence is divided into ten departments, each of which has a prefident, who must possess a correct knowledge of the inhabitants in his own department, of which he is regarded as the cenfor morum. His house must be a refuge both night and day for all in distress; and he must not leave the city for two hours, under any pretext whatever, without appointing a fubflitute to act in his absence. The constables and watchmen of his department are subject to his orders; and in the difcharge of his duty, he has two fergeants to attend

Each department has three, four, or five fubdivisions, of which there are 42 in the whole refidence. Each of these has a quarter-inspector, and under him a quarter-The duty of all these is in unison with that lieutenant. of the prefident, but the fphere of their activity is more circumferibed. They fettle trivial affairs, and keep a watchful eye over every thing that paffes.

The night watchmen are 500 in number, who have stations assigned them, and are to be aiding in the seizing of offenders, or in any fervice their commanders may require. There is also a command of 120 men, who are supported by a regiment of hustars, should the nature of their duty be at any time fo hazardous as to render fuch a measure necessary.

This piece of political mechanism is so harmoniously connected in all its parts, that it becomes the admiration of every foreigner.

So extraordinary is the vigilance observed by every part of this admirable whole, that all fecret inquifitions are totally superfluous. The police has a knowledge of every person in the residence; travellers are subject to certain formalities, in confequence of which to hide the place of their abode, or the time of their departure, are alike impracticable. Every householder must declare to the police who lodges with him, or what strangers have put up at his house. When travellers leave the town, they must publish in the newspapers their name, quality, and place of abode, three different times, and produce the papers containing fuch advertisement.

The police also watches over secret societies of every Kind, to that nothing inimical to the existing government can either be freely discussed, or safely carried into execution. The diffurbers of the public peace in this

city muit of consequence be few in number.

The court called oral, fits every day, and proceeds orally in all the causes brought before it; keeping at the same time a day-book, in which the decisions of the court are entered, and every week it is laid before the fitting magistrate. Every cause must be determined in one day, or in three at most, if the collecting of examinations should be intricate and tedious. But some travellers have given a more unfavourable account of the police of the Ruffian metropolis, and have declared that murder and robbery may fometimes be committed with impunity, if the guilty have it in their power to bribe the watchmen.

PETERSBURGH, in America, is a fea-port town in Virginia, 25 miles fouthward of Richmond, feated on the fouth fide of the Appamatox river, about 12 miles above its junction with James river, and contained nearly 300 houses in 1787, in two divisions; one is upon a cold clay foil, and is very dirty; the other upon a plain of fand or loam. There is no regularity, and very little elegance in Petersburgh. It is merely a place of businefs. The Free Masons have a hall tolerably elegant; and the feat of the Bowling family is pleafant and well built. It is very unhealthy. About 2200 hogsheads of tobacco are inspected here annually. Like Richmond, Williamsburgh, Alexandria, and Norfolk, it is a corporation; and what is fingular, Petersburgh city comprehends part of three counties. The celebrated Indian queen, Pocahonta, from whom descended the Randolph and Bowling families, formerly refided at this Place.

PETERSFIELD, a handsome town of Hampshire in England, and fends two members to parliament. It

is feated in W. Long. 1. 5. N. Lat. 51. 5.
PETERWARADIN, a fortified town in Sclavonia, and one of the strongest frontier places the house of Austria has against the Turks, seated on the Danube between the Drave and the Save. E. Long. 20. o. N. Lat. 45. 20. PETIOLE, in Botany, the flender stalks that sup-

port the leaves of a plant.

PETIT, or PETITE, a French word fignifying little

PETITE Guerre, denotes the operations of detached parties and the war of posts. See WAR, Part III.

PETIT Sergeanty. See SERGEANTY. PETIT Treason. See TREASON.

PETIT, John, a doctor of the Sorbonne, very early gained to himself a character by his knowledge, and those eloquent orations which he pronounced before the university of Paris. He was employed in the famous embassy which was sent from France to Rome, for the purpose of healing the schism in 1407; but he soon lost all the honour which he had acquired. John Sans Peur, duke of Burgundy, having treacherously contri-ved to assassinate Louis of France, duke of Orleans, only brother to Charles VI. John Petit, entirely devoted to the views of the murderer, maintained in a public disputation, at Paris, the 8th of March 1408, that the murder was lawful. He had the effrontery to affert, that "it is allowable to employ fraud, treason, and Vor. XVI. Part I.

every other method, however base, in order to get rid of a tyrant; and that no faith ought to be kept with him." He dared to add further, that "the man who should commit fuch an action, not only deferved to be exempted from punishment, but to receive a reward." This fanguinary doctrine was loudly exclaimed against; but the duke of Burgundy's powerful influence sheltered Petit for some time. Some eminent writers, however, of that period, with Gerson at their head, denounced the doctrine to John de Montaigu, bishop of Paris, who condemned it as heretical the 23d November 1414. It was likewife condemned by the council of Constance the year following at the instigation of Gerson; but no notice was taken either of Petit's name or his writings. In fine, the king, on the 16th of September 1416, ordeted the parliament of Paris to pronounce a severe decree against this dangerous performance; and it was alfo censured by the university. But the duke of Burgundy, in 1418, had interest enough to compel the grand vicars of the bishop of Paris, who then lay sick at St Omer's, to retract the fentence which that prelate had past in 1414. Petit died three years before, i. e. in 1411, at Hesdin; and his apology in favour of the duke of Burgundy, with all the particulars of that infamous transaction, may be seen in the fifth volume of the last edition of Gerson's works. Father Pinchinat, of the order of St Francis, and author of the Dictionary of Herefies, in 4to, has endeavoured to vindicate his order from a charge brought by some writers who have called Petit a Cordelier, or Franciscan friar. "He proves very clearly (says Abbé Prevot) that he was a secular priest; and adds, that upon the same evidence, Father Mercier, a Cordelier, had a warm dispute in 1717 with M. Dupin, who had given this title to Petit in his Collection of Censures. He represented to him (says he), before a meeting of the Faculty, the falfity of fuch a claim, and the injury which he offered to the order of St Francis. Dupin, convinced of his error, candidly owned that he was led into it by following some infidel writers, and promised to retract it in the new edition of the Cenfures, which was published in 1720. M. Fleury, who had committed the same mistake, promised also to make amends for it by a folemn recantation; but dying before he had an opportunity of doing that piece of justice to the Cordeliers, the continuator of his Ecclesiaffical History, who had not fuch opportunities of information, fell into the fame fault." (Pour & contre, tom. x. p. 23.). If we take the opinion of L'Advocat's Dictionary, it would appear no fault was committed; for it gives a lift of the penfioners of the dukes of Burgundy, in order to prove that John Petit was a Cordelier. Indeed, it is highly probable that if Dupin, Fleury, and Father Fabré, did not alter their opinion, it was owing to a firm perfuafion that they had committed

PETIT, John Lewis, an eminent furgeon, born at Paris in 1674. He had so early an inclination to surgery, that Mr Littre, a celebrated anatomist, being in his father's house, he regularly attended that gentleman's lectures, from his being seven years of age. He was received master in surgery in the year 1700; and acquired fuch reputation in the practice of that art, that in 1726 the king of Poland fent for him to his court. and in 1734 the king of Spain prevailed on him to go into that kingdom. He restored the health of those

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princes;

princes; and they endeavoured to detain him by offering him great advantages, but he chose rather to return to France. He was received into the academy of sciences in 1715; became director of the royal academy of furgery; made several important discoveries; and invented new instruments for the improvement of surgery. He died at Paris in 1750. He wrote an excellent Treatise on the Diseases of the Bones, the best edition of which is that of 1723; and many learned Dissertations in the Memoirs of the Academy of Sciences, and in the first volume of the Memoirs of Surgery.

PETITIO PRINCIPII, in Logic, the taking a thing for true, and drawing conclusions from it as such, when it is really false; or at least wants to be proved before

any inferences can be drawn from it.

PETITION, a supplication made by an inferior to a superior, and especially to one having jurisdiction. It is used for that remedy which the subject hath to help a wrong done by the king, who hath a prerogative not to be sued by writ: In which sense it is either general, That the king do him right; whereupon follows a general indorsement upon the same, Let right be done the party: Or it is special, when the conclusion and indorsement are special, for this or that to be done, &c.

By flatute, the foliciting, labouring, or procuring the putting the hands or confent of above twenty persons to any petition to the king, or either house of parliament, for alterations in church or flate, unless by affent of three or more justices of the peace of the county, or a majority of the grand jury at the affizes or fessions; &c. and repairing to the king or parliament to deliver fuch petition with above the number of ten persons, is subject to a fine of 100l. and three months imprisonment, being proved by two witnesses within fix months, in the court of B. R. or at the affizes, &c. And if what is required by this statute be observed, care must be taken that petitions to the king contain nothing which may be interpreted to reflect on the administration; for if they do, it may come under the denomination of a libel: and it is remarkable, that the petition of the city of London for the fitting of a parliament was deemed libellous, because it suggested that the king's dissolving a late parliament was an obstruction of justice; also the petition of the feven bishops, sent to the Tower by James II. was called a libel, &c. To subscribe a petition to the king, to frighten him into a change of his measures, intimating, that if it be denied many thousands of his subjects will be discontented, &c. is included among the contempts against the king's person and government, tending to weaken the same, and is punishable by fine and imprisonment.

PETITORY ACTION, in Scots Law. See LAW,

Nº clxxxiii, 18. 20.

PETITOT, John, a curious painter in enamel, who was born at Geneva in 1607, reached a great degree of perfection in the art. He was wonderfully patient in finishing his works, but he had the address to conceal his labour. He only painted the heads and hands of the figures: the hair, grounds, and drapery, being executed by Bordier his brother-in-law. These two artists had the credit of associating and labouring together for fifty years, without the least misunderstanding between them. It is afferted by an ingenious French writer, that Petitot and Bordier derived the knowledge of the most cu-

rious and durable colours proper for enamelling, from Sir Theodore Mayerne at London, who recommended Petitot to Charles I. He had the honour to paint the portraits of that monarch and the whole royal family, and continued in England until Charles's unhappy end: he then went to Paris, where he was highly favoured by Louis XIV. and acquired an ample fortune. Being a Protestant, the revocation of the edict of Nantz obliged to retire to Geneva; but settling soon after at Veray in the canton of Bern, he passed the remainder of his life in ease and assume the died in 1691.

Petitot may be called the inventor of painting portraits in enamel. Though his friend Bordier made feveral attempts before him, and Sir Theodore Mayerne had facilitated the means of employing the most beautiful colours; yet Petitot completed the works, which under his hand acquired a fortness and liveliness of colouring that will never change, and will ever render his works valuable. He made use of gold and filver plates, and feldom enamelled on copper. When he first came in vogue, his price was 20 louis's a head, which he soon raised to 40. It was his custom to take a painter with him, who painted the picture in oil; after which Petitot sketched out his work, which he always finished after the life. When he painted the king of France, he took those pictures for his copies that most resembled him; and the king afterwards gave him a fitting or two to finish his work.

PETIVER, JAMES, a celebrated English botanist, was contemporary with Plukenet; but we are wholly unacquainted with the precise time of his birth. He was by profession an apothecary, having served an apprenticeship under Mr Feltham, apothecary to Bartholomew's hospital, He settled in Aldersgate-street when he commenced business on his own account, where he continued during the whole of his life. His bufiness was extensive; and he was afterwards chosen apothecary to the Charter-house. Excepting Sir Hans Sloane, and Mr Courten, he was the only person after the Tradefeants, who made any important collections in natural history, previous to those of the present day. He employed the captains and furgeons of different ships to bring him home specimens; and by means of printed directions he enabled them to felect proper objects. In this manner his collection foon became fo valuable, that he was offered 4000l. for it by Sir Hans Sloane, some time prior to his decease; but, after he died, it was purchased by that naturalist. His same was extended both at home and abroad by his valuable museum. He was chosen a fellow of the Royal Society; and having become acquainted with Ray, he affisted him in arranging the fecond volume of his History of Plants. He died on the 20th of April, 1718; and his funeral was honoured by the attendance of Sir Hans Sloane, and other eminent men, as pall-bearers.

He published several works, on different subjects of natural history, such as Musci Petiveriani Centuriae decem, 1692—1703, 8vo: Gazophylacii Naturae et Artis, Decades decem, solio, 1702, with 100 plates: A catalogue of Mr Ray's English Herbal, illustrated with figures, solio, 1713, and continued in 1715: Many small publications, which may be found enumerated in Dr Pultney's book: Many papers in the Philosophical Transactions; and a material article in the third volume of Ray's work, entitled, Plantae Rariores Chinenses,

Madras

Petrarch.

Petiveria Madras patanæ, et Africanæ, à Jacobo Petivero ad opus consummandum collatæ, &c. Many of his small tracts having become scarce, his works were collected and published, exclusive of his papers in the Transactions, in 2 vols. folio, in the year 1764.

PETIVERIA, a genus of plants belonging to the hexandria class, and in the natural method ranking under the 12th order, Holoraceæ. See BOTANY Index.

PETRA, (Cæfar, Lucian), a town of Greece, on the coast of Illyricum, near Dyrrhachium, and not far from the mouth of the river Panyalus .- Another PE-TRA, (Livy); a town of Mædica, a district of Thrace, lying towards Macedonia; but in what part of Macedonia, he does not fay.

PETRA (Ptolemy), Petræa (Silius Italicus), Petrina (Italicus), in both which last urbs is understood; an inland town of Sicily, to the fouth-west of Engyum.

Now Petraglia (Cluverius).

PETRA Jecktael (2 Kings xiv.), a town of the Amalekites; near the Adscensus Scorpionis (Judges i.) and the valley of Salt in the fouth of Judea; afterwards in the possession of the Edomites, after destroying the A. malekites.

PETRA Recem, or Rekem, fo called from Rekem king of the Midianites, flain by the Ifraelites (Num. xxxi.). Formerly called Arce, now Petra; the capital of Arabia Petræa (Josephus). Ptolemy places it in Long. 66. 45. from the Fortunate islands, and Lat. 30. It declines therefore 80 miles to the fouth of the parallel of Jerusalem, and 36 miles, more or less, from its meridian to the east. Josephus says, that the mountain on which Aaron died flood near Petra; which Strabo calls the capital of the Nabatæi; at the distance of three or four days journey from Jericho. This Petra feems to be the Sela of Isaiah xvi. 1. and xlii. 11. the Hebrew name of Petra " a rock:" Though fome imagine Petra to be no older than the time of the Macedonians.

PETRARCH, FRANCIS, a celebrated Italian poet, was born at Arezzo in 1304, and was the fon of Petrarco di Parenzo. He studied grammar, rhetoric, and philosophy, for four years at Carpentras; from whence he went to Montpelier, where he studied the law under John Andreas and Cino of Pistoia, and probably from the latter received a taste for Italian poetry. As Petrarch only studied the law out of complainance to his father, who on his visiting him to Bologna had thrown in the fire all the Latin poets and orators except Virgil and Cicero; he, at 22 years of age, hearing that his father and mother were dead of the plague at Avignon, returned to that city to fettle his domestic affairs, and purchased a country-house in a very solitary but agreeable fituation, called Vaucluse; where he first knew the beautiful Laura, with whom he fell in love, and whom he has immortalised in his poems. He at length travelled into France, the Netherlands, and Germany; and at his return to Avignon entered into the fervice of Pope John XXII. who employed him in feveral important affairs. Petrarch was in hopes of being raifed to some confiderable posts: but being disappointed, he applied himself entirely to poetry; in which he met with such applause, that in one and the same day he received letters from Rome and the chancellor of the univerfity of Paris, by which they invited him to receive the poetic crown. By the advice of this friends, he preferred Rome to Paris, and received that crown from

the senate and people on the 8th of April 1341. "The Petrarch. ceremony of his coronation (fays Gibbon) was performed in the Capitol, by his friend and patron the supreme magistrate of the republic. Twelve patrician youths were arrayed in fearlet; fix representatives of the most illustrious families, in green robes, with garlands of flowers, accompanied the procession; in the midst of the princes and nobles, the fenator, count of Anguillara, a kinfman of the Colonna, affumed his thronc; and at the voice of a herald Petrarch arofe. After difcourfing on a text of Virgil, and thrice repeating his vows for the prosperity of Rome, he knelt before the throne, and received from the fenator a laurel crown, with a more precious declaration, 'This is the reward of merit.' The people shouted, 'Long life to the Capitol and the poet!' A fonnet in praise of Rome was accepted as the effusion of genius and gratitude; and after the whole procession had visited the Vatican, the profane wreath was fufpended before the shrine of St Peter. In the act or diploma which was presented to Petrarch, the title and prerogatives of poet-laureat are revived in the Capitol after the lapfe of 1300 years; and he receives the perpetual privilege of wearing, at his choice, a crown of laurel, ivy, or myrtle; of assuming the poetic habit; and of teaching, disputing, interpreting, and composing, in all places whatsoever, and on all subjects of literature. The grant was ratified by the authority of the fenate and people; and the character of citizen was the recompense of his affection for the Roman name. They did him honour, but they did him justice. In the familiar fociety of Cicero and Livy, he had imbibed the ideas of an ancient patriot; and his ardent fancy kindled every idea to a fentiment, and every fentiment to a passion." His love of solitude at length induced him to return to Vaucluse; but, after the death of the beautiful Laura, Provence became insupportable to him, and he returned to Italy in 1352; when, being at Milan, Galeas Viceconti made him counsellor of state. Petrarch spent almost all the rest of his life in travelling to and from the different cities in Italy. He was archdeacon of Parma, and canon of Padua; but never received the order of priesthood. All the princes and great men of his time gave him public marks of their esteem; and while he lived at Arcqua, three miles from Padua, the Florentines deputed Boccace to go to him with letters, by which they invited him to Florence, and informed him, that they restored to him all the estate of which his father and mother had been deprived during the diffenfions between the Guelphs and Gibelines. He died a few years after at Arcqua, in 1374. Hs wrote many works that have rendered his memory immortal; thefe have been printed in four volumes folio. His life has been written by feveral authors. Amongst these there was one by Mrs Sufanna Dobson, in 2 volumes 8vo, collected and abridged from the French. In this work we have the following elegant and just character of Pe-

" Few characters, perhaps, have fet in a stronger light the advantage of well regulated dispositions than that of Petrarch, from the contrast we behold in one particular of his life, and the extreme mifery he suffered from the indulgence of an affection, which, though noble and delightful when justly placed, becomes a reproach and a terment to its possessor when once di-

G g 2

Petrarch, rected to an improper object. For, let us not deceive ourselves or others; though (from the character of Laura) they are acquitted of all guilt in their personal intercourse, yet, as the was a married woman, it is not possible, on the principles of religion and morality, to clear them from that just centure which is due to every defection of the mind from those laws which are the foundation of order and peace in civil fociety, and which are flamped with the facred mark of divine au-

" In this particular of his character, therefore, it is fincerely hoped that Petrarch will ferve as a warning to those unhappy minds, who, partaking of the fame feelings under the like circumitances, but not yet fuffering his mifery, may be led, by the contemplation of it, by a generous regard to the honour of human nature, and by a view to the approbation of that all-feeing Judge who penetrates the most fecret recesses of the heart, to check every unhappy inclination in its birth, and destroy, while yet in their power, the feeds of those passions which may otherwise destroy them.

ble of tenderness themselves, can neither enjoy the view of it when prefented in its most perfect form, nor pity its fufferings when, as in this work, they appear unhappily indulged beyond the bounds of judgement and tranquillity; to fuch minds I make no address, well convinced, that, as no callous heart can enjoy, neither will it ever be in danger of being misled, by the example of Petrarch in this tender but unfortuante circumstance

" To fusceptible and feeling minds alone Petrarch will be ever dear. Such, while they regret his failings, and confider them as warnings to themselves, will love his virtues; and, touched by the glowing piety and ardently deare to partake with him in those pathetic and fublime reflections which are produced in grateful and affectionate hearts, on reviewing their own lives, and contemplating the works of God.

"Petrarch had received from nature a very dangerous present. His figure was so distinguished as to attract universal admiration. He appears, in his portraits, with large and manly features, eyes full of fire, a blooming complexion, and a countenance that bespoke In the flower of his youth, the beauty of his person was fo very firiking, that wherever he appeared, he was the object of attention. He possessed an understanding active and penetrating, a brilliant wit, and a fine imagination. His heart was candid and benevolent, fufceptible of the most lively affections, and inspired with

" But his failings must not be concealed. His temper was, on fome occasions, violent, and his passions headstrong and unruly. A warmth of constitution hurried him into irregularities, which were followed with repentance and remorfe.-No effential reproach, however, could be cast on his manners, till after the 23d year of his age. The fear of God, the thoughts of death, the love of virtue, and those principles of religien which were inculcated by his mother, preserved him from the furrounding temptations of his earlier

A refemblance has been traced, in feveral instances,

between this admired poet and our late famous Yorick. Petrarca -Both, we know, had great wit and genius, and no less imprudence and eccentricity; both were canons, or Petriacprebendaries, the Italian of Padua, &c. and the Englishman of York; they both " ran over France, without any business there." If the bishop of Lombes patronifed and corresponded with the one, a prelate * of * Dr Gilthe English church, now deceased, desired, in a letter, bert, Arch. to shandyise + with the other. In their attachments to York. Laura and Eliza, both married women, these two pre-Grace's bendaries were equally warm, and equally innocent. own expref-And, even after death, a most remarkable circumstance son. has attended them both; fome persons, we are told, ftole Petrarch's bones, in order to fell them; and, in like manner, Yorick's body, it is confidently affirmed, was also stolen, and his skull has been exhibited at Ox-

PETRE, or SALTPETRE. See NITRE, CHEMISTRY

PETREA, in Botany, a genus of plants belonging to the didynamia class; and in the natural method ranking under the 40th order, Personate. See BOTANY

PETREL. See PROCELLARIA, ORNITHOLOGY In-

PETRIFACTION, in Natural History, denotes the conversion of wood, bones, and other substances, principally animal or vegetable, into flone. Thefe bodies are more or less altered from their original flate, according to the different substances they have lain buried among in the earth; some of them having suffered very little change, and others being fo highly impregnated with crystalline, sparry, pyritical, or other extraneous matter, as to appear mere maffes of ftone or lumps of the matter of the common pyrites; but they are generally of the external dimensions, and retain more or less of the internal figure, of the bodies into the pores of which this matter has made its way. The animal fubflancés thus found petrified are chiefly feashells; the teeth, bony palates, and bones, of fish; the bones of land animals, &c. There are found variously altered, by the infinuation of flony and mineral matis now wholly gone, there being only frony, sparry, or other mineral matter remaining in the shape and form.

Respecting the manner in which petrifaction is accomplished, we know but little. It has been thought by many philosophers, that this was one of the rare processes of nature; and accordingly such places as afforded a view of it, have been looked upon as great curiofities. However, it is now discovered, that petrifaction is exceedingly common; and that every kind of water carries in it fome earthy particles, which being precipitated from it, become flone of a greater or leffer degree of hardness; and this quality is most remarkable in those waters which are much impregnated with felenitic matter. It has been found by observation, that iron contributes greatly to the process: and this it may do by its precipitation of any aluminous earth which happens to be diffolved in the water by means of an acid; for iron has the property of precipitating this earth. Calcareous earth, however, by being foluble in water without any acid, must contribute very much to the process of petrifaction, as they are capable of a great degree of hardness by means only of being

Petrifac- joined with fixed air, on which depends the folidity of our common cement or mortar used in building houses.

The name petrifaction belongs only, as we have feen, to bodies of vegetable or animal origin; and in order to determine their class and genus, or even species, it is necessary that their texture, their primitive form, and in some measure their organization, be still discernible. Thus we ought not to place the stony kernels, moulded in the cavity of some shell, or other organized body, in the rank of petrifactions properly so called.

Petrifactions of the vegetable kingdom are almost all either gravelly or filiceous; and are found in gullies, trenches, &c. Those which strike fire with steel are principally found in fandy fiffures; those which effervesce in acids are generally of animal origin. and are found in the horizontal beds of calcareous earth, and fometimes in beds of clay or gravel; in which case the nature of the petrifaction is different. As to the fubflances which are found in gypfum, they feldom undergo any alteration, either with respect to figure or composition, and they are very rare.

Organized bodies, in a state of petrifaction, generally acquire a degree of folidity of which they were not possessed before they were buried in the earth, and fome of them are often fully as hard as the stones or matrices in which they are enveloped. When the stones are broken, the fragments of petrifactions are eafily found, and eafily diftinguished. There are some organized bodies, however, to changed by petrifaction, as to render it impossible to discover their origin. That there is a matter more or less agitated, and adapted for penetrating bodies, which crumbles and separates their parts, draws them along with it, and disperses them here and there in the fluid which furrounds them, is a fact of which nobody feems to entertain any doubt. Indeed we fee almost every substance, whether solid or liquid, infenfibly confume, diminish in bulk, and at last, in the lapfe of time, vanish and disappear.

A petrified substance, strictly speaking, is nothing more than the skeleton, or perhaps image, of a body which has once had life, either animal or vegetable, combined with fome mineral. Thus petrified wood is not in that state wood alone. One part of the compound or mass of wood having been destroyed by local causes, has been compensated by earthy and sandy subflances, diluted and extremely minute, which the waters furrounding them had deposited while they themfelves evaporated. These earthy substances, being then moulded in the skeleton, will be more or less indurated, and will appear to have its figure, its structure, its size, in a word, the fame general characters, the fame specific attributes, and and fame individual differences. Farther, in petrified wood, no veffige of ligneous matter appears to exist. We know that common wood is a body in which the volume of folid parts is greatly exceeded by that of the pores. When wood is buried in certain places, lapidific fluids, extremely divided and fometimes coloured, infinuate themselves into its pores and fill them up. These fluids are afterwards moulded and condensed. The folid part of the wood is decomposed and reduced into powder, which is expelled without the mass by aqueous filtrations. In this manner, the places which were formerly occupied by the wood are now left empty in the form of pores. This operation of nature produces no apparent difference either of the fize or of the shape; but it occasions, both at the Petrifacfurface and in the infide, a change of fubstance, and the ligneous texture is inverted; that is to fay, that which was pore in the natural wood, becomes folid in that which is petrified; and that which was folid or full in the first Thate, becomes porous in the fecond. In this way, fays M. Mufard, petrified wood is much less extended in pores than folid parts, and at the fame time forms a body much more dense and heavy than the first. As the pores communicate from the circumference to the centre, the petrifaction ought to begin at the centre, and end with the circumterence of the organic body subjected to the action of the lapidific fluids. Such is the origin of petrifactions. They are organized bodies which have undergone changes at the bottom of the fea or the furface of the earth, and which have been buried by various accidents at different depths

under the ground. In order to understand properly the detail of the formation of petrihed bodies, it is necessary to be well acquainted with all their conflituent parts. Let us take wood for an example. Wood is partly folid and partly porous. The folid parts confitt of a lubitance, hard, ligneous, and compact, which forms the up ort of the vegetable; the porous parts confit of veilels or interstices which run vertically and horizon, ally across the ligneous fibres, and which serve for corducting air, lymph, and other fluids. Among these veffers, the trachiæ which rise in ipiral forms, and which contain only air, are eafily diffinguished. The cylindric vessels, some of which contain lymph, and others the fuccus proprius, are full only during the lite of the vegetable. After its death they become vacant by the evaporation and absence of the sluids with which they were formerly filled. All these vessels, whether afcending or descending, unite with one another, and form great cavities in the wood and in the bark. According to Malpighi and Duhamel, the ligneous fibres are themselves tubular, and assord a passage to certain liquors; in short, the wood and bark are interspersed with utriculi of different shapes and fizes. The augmentation of the trunk in thickness, according to Malpighi, is accomplished by the annual addition of a new exterior covering of fibres and of trachiæ. Others think that a concentric layer of fap-wood is every year hardened, whilst a new one is forming from the bark. But it is on all fides agreed that the concentric layers of wood are diffinct from one another, because at the point of contact betwixt any two of them, the new vessels, as well as new fibres, are more apparent and perceptible than they are in any other place. Having made these preliminary remarks on the structure of vegetables, we shall now propeed to give an abridged account of the manner in which M. Mongez explains their petrifaction.

In proportion to the tenderness and bad quality of wood, it imbibes the greater quantity of water; therefore this fort will unquestionably petrify more easily than that which is hard. It is thought that all the petrified wood fo often found in Hungary has been or ginally foft, fuch as firs or poplars. Suppose a piece of wood buried in the earth; if it be very dry, it will fuck up the moisture which furrounds it like a fonge. This moisture, by peretrating it, will dilate all the parts of which it is composed. The trachiæ, or air-vessels,

Petrifac- be filled first, and then the lymphatic vessels and those which contain the fuccus proprius, as they are likewise empty. The water which forms this moisture keeps in diffolution a greater or a lefs quantity of earth; and this earth, detached, and carried along in its course, is reduced to fuch an attenuated state, that it escapes our eyes and keeps itself suspended, whether by the medium of fixed air or by the motion of the water. Such is the lapidific fluid. Upon evaporation, or the departure of the menstruum, this earth, fand, or metal, again appears in the form of precipitate or fediment in the cavities of the veffels, which by degrees are filled with it. This earth is there moulded with exactness: The lapse of time, the fimultaneous and partial attraction of the particles, make them adhere to one another; the lateral fuction of the furrounding fibres, the obstruction of the moulds, and the hardening of the moulded earth, become general; and there confifts nothing but an earthy fubstance which prevents the sinking of the neighbouring parts. If the depolit is formed of a matter in general pretty pure, it preferves a whiter and clearer colour than the rest of the wood; and as the concentric layers are only perceptible and distinct in the wood, because the vessels are there more apparent on account of their fize, the little earthy cylinders, in the state of petrified wood, must be there a little larger, and confequently must represent exactly the turnings and separations of these layers. At the place of the utriculi, globules are observed, of which the shapes are as various as the moulds wherein they are formed. The anastomoses of the proper and lymphatic veffels, form besides points of support or reunion for this stony substance.

With regard to holes formed by worms in any bits of wood, before they had been buried in the earth, the lapidific fluid, in penetrating these great cavities, deposits there as easily the earthy sediment, which is exactly moulded in them. These vermisorm cylinders are somewhat less in bulk than the holes in which they are found. which is owing to the retreat of the more refined earth

and to its drying up.

Let any one represent to himself this collection of little cylinders, vertical, horizontal, inclined in different directions, the stony masses of utriculi and of anaftomoses, and he will have an idea of the stony substance which forms the ground-work of petrifaction. Hitherto not a fingle ligneous part is destroyed; they are all existing, but surrounded on every side with earthy deposits: and that body which, during life, was composed of folid and of empty parts, is now entirely folid: its destruction and decomposition do not take place till after the formation of these little deposits. In proportion as the water abandons them, it penetrates the ligneous substance, and destroys it by an infensible fermentation. The woody fibres being decomposed, form in their turn voids and interstices, and there remains in the whole piece nothing but little flony cylinders. But in proportion as these woody fibres disappear, the furrounding moisture, loaded with earth in the state of dissolution, does not fail to penetrate the piece of wood, and to remain in its new cavities. The new deposite assumes exactly the form of decomposed fibres; it envelopes in its turn the little cylinders which were formed in their cavities, and ends by incorporating with them. We may suppose here, that in proportion as it decomposes, there is a reaction of the ligneous part against the lapidific

fluid: from this reaction a colour arises which stains Petrifacmore or less the new deposit; and this colour will make it easily diftinguishable from that which has been laid in the infide of the veffels. In all petrified wood this shade

is generally perceptible.

We have then, fays M. Mongez, four distinct epochs in the process by which nature converts a piece of wood into stone, or, to speak more justly, by which she substitutes a stony deposit in its place: 1. Perfect vegetable wood, that is to fay, wood composed of folid and of empty parts, of ligneous fibres, and of vessels. 2. Wood having its veffels obstructed and choaked up by an earthy deposit, while its folid parts remain unaltered. 3. The folid parts attacked and decomposed, formingnew cavities betwixt the stony cylinders, which remain in the same state, and which support the whole mass. 4. Thefe new cavities filled with new deposits, which incorporate with the cylinders, and compose nothing else but one general earthy mass representing exactly the piece of wood.

Among the petrifactions of vegetables called dendrolites, are found parts of shrubs, stems, roots, portions of the trunk, some fruits, &c. We must not, however, confound the impressions of mosses, ferns, and leaves, or

incrustations, with petrifactions.

Among the petrifactions of animals, we find shells. crustaceous animals, polyparii, some worms, the bony parts of fishes and of amphibious animals, few or no real infects, rarely birds and quadrupeds, together with the bony portions of the human body. The cornua ammonis are petrified shell-fish; and with regard to figured and

accidental bodies, these are lusus natura.

In order, fays M. Bertrand, in his Dictionnaire des Fossiles, that a body should become petrified, it is necessary that it be, 1. Capable of preservation under ground: 2. That it be sheltered from the air and running water (the ruins of Herculaneum prove that bodies which have no connection with free air, preserve themfelves untouched and entire). 3. That it be fecured from corrofive exhalations. 4. That it be in a place where there are vapours or liquids, loaded either with metallic or stony particles in a state of dissolution, and which, without deftroying the body, penetrate it, impregnate it, and unite with it in proportion as its parts

are diffipated by evaporation.

It is a question of great importance among naturalists, to know the time which Nature employs in petrifying bodies of an ordinary fize.-It was the wish of the emperor, duke of Lorraine, that fome means should be taken for determining this question. M. le Chevalier de Baillu, director of the cabinet of natural history of his imperial majefty, and fome other naturalists, had, feveral years ago, the idea of making a refearch which might throw some light upon it. His imperial majesty being informed by the unanimous observations of modern historians and geographers, that certain pillars which are actually feen in the Dahube in Gervia, near Belgrade, are remains of the bridge which Trajan constructed over that river, prefumed that these pillars having been preserved for so many ages behoved to be petrified, and that they would furnish fome information with regard to the time which nature employs in changing wood into stone. The emperor thinking this hope well founded, and wishing to fatisfy his curiofity, ordered his ambaffador at the court of Constantinople

the pillars of Trajan's bridge. The petition was granted, and one of the pillars was accordingly taken up; from which it appeared that the petrifaction had only advanced three fourths of an inch in the space of 1 500 years. There are, however, certain waters in which this transmutation is more readily accomplished .- Petrifactions appear to be formed more flowly in earths that are porous and in a flight degree moift than in water itself.

When the foundations of the city of Quebcc in Canada were dug up, a petrified savage was found among the last beds to which they proceeded. Although there was no idea of the time at which this man had been buried under the ruins, it is however true, that his quiver and arrows were still well preserved. In digging a leadmine in Derbyshire, in 1744, a human skeleton was found among stags horns. It is impossible to say how many ages this carcase had lain there. In 1695 the entire skeleton of an clephant was dug up near Tonna in Thuringia. Some time before this epoch the petrified skeleton of a crocodile was found in the mines of that country. We might cite another fact equally curious which happened at the beginning of the last century. John Munte, curate of Slægarp in Scania, and feveral of his parishioners, wishing to procure turf from a drained marshy soil, found, some feet below ground, an entire cart with the skeletons of the horses and carter. It is presumed that there had formerly been a lake in that place, and that the carter attempting to pass over on the ice, had by that means probably perished. In fine, wood partly fossil and partly coaly, has been found at a great depth, in the clay of which tile was made for the abbey of Fontenay. It is but very lately that fosfil wood was discovered at the depth of 75 feet in a well betwixt Ish and Vauvres near Paris. This wood was in fand betwixt a bed of clay and pyrites, and water was found four feet lower than the pyrites. M. de Laumont, inspector general of the mines, says (Journal de Physique, Mai 1736), that in the leadmine at Pontpéan near Rennes, is a fissure, perhaps the only one of its kind. In that fiffure, fea-shells, rouned pebbles, and an entire beech, have been found 240 feet deep. This beech was laid horizontally in the direction of the fiffure. Its bark was converted into pyrites, the fap-wood into jet, and the centre into

A great many pieces of petrified wood are found in different counties of France and Savoy. In Cobourg in Saxony, and in the mountains of Misnia, trees of a confiderable thickness have been taken from the earth, which were entirely changed into a very fine agate, as also their branches and their roots. In fawing them, the annual circles of their growth have been distinguished. Pieces have been taken up, on which it was diffinctly feen that they had been gnawed by worms; others bear visible marks of the hatchet. In fine, pieces have been found which were petrified at one end, while the other still remained in the state of wood fit for being burned. It appears then that petrified wood is a great deal less rare in nature than is commonly ima-

Cronstedt has excluded petrifactions from any place in the body of his system of mineralogy, but takes notice of them in his appendix. He distinguishes them

Petrifac- to alk permission to take up from the Danube one of by the name of Mineralia Larvata, and defines them Petrifacto be "mineral bodies in the form of animals or vegetables." The most remarkable observations concerning them, according to Mr Kirwan, who differs in some particulars from Mongez, are as follow. I. Those of shells are found on or near the surface of the carth; those of fish deeper; and those of wood deeper sill. Shells in substance are found in vast quantities, and at confiderable depths. 2. The fubflances most susceptible of petrifaction are those which most result the putrefactive process; of which kind are shells, the harder kinds of wood, &c.; while the fofter parts of animals, which eafily putrefy, are feldem met with in a petrified state. 3. They are most commonly found in strata of marl, chalk, limestone, or clay: seldom in sandstone, still more seldom in gypsum; and never in gneis, granite, basaltes, or schoerl. Sometimes they are found in pyrites, and ores of iron, copper, and filver; confifting almost always of that kind of earth or other mineral which furrounds them; fometimes of filex, agate, or cornelian. 4. They are found in climates where the animals themselves could not have existed. 5. Those found in flate or clay are compressed and flattened.

The different species of petrifactions, according to Cronstedt, are,

I. Terræ Larvatæ; extraneous bodies changed into a limy substance, or calcareous changes. These are, 1. Loofe or friable. 2. Indurated. The former are of a chalky nature in form of vegetables or animals; the fecond filled with folid limestone in the same forms. Some are found entirely changed into a calcareous spar. All of them are found in France, Sweden, and other countries in great plenty.

On these petrifactions Cronstedt observes, that shells and corals are composed of limy matter even when still inhabited by their animals, but they are classed among the petrifactions as foon as the calcareous particles. have obtained a new arrangement; for example, when they have become sparry; filled with calcareous earth either hardened or loofe, or when they lie in the strata of the earth. "These, says he, form the greatest part of the fosfil collections which are so industriously made, often without any regard to the principal and only use they can be of, viz. that of enriching zoology. Mineralogists are fatisfied with feeing the possibility of the changes the limestone undergoes in regard to its particles; and also with receiving some infight into the alteration which the earth has been subject to from the state of the strata which are now found in it." The calcined shells, where the petrifactions are of a limy or chalky nature, answer extremely well as a manure; but the indurated kind ferve only for making grottoes. Gypfeous petrifactions are extremely rare; however, Chardin informs us that he had feen a lizard inclosed in a stone of that kind in Perfia.

II. Larvæ, or bodies changed into a flinty fubflance. These are all indurated, and are of the following species. 1. Cornelians in form of shells from the river Tomm in Siberia. 2. Agate in form of wood; a picce of which is faid to be in the collection of the Count de Tessin. 3. Coralloids of white slint (Millepora) found in Sweden. 4. Wood of yellow flint found in Italy, in Turkey near Adrianople, and produced by the waters of Lough-neagh in Ireland.

III. Larvæ Argillaceæ; where the bodies appear to

Petrified-

City.

Petrifac-

be changed into clay. These are found either loofe and friable, or indurated. Of the former kind is a piece of porcelain clay met with in a certain collection, with all the marks of the root of a tree upon it. Of the latter kind is the ofteocolla; which is faid to be the roots of the poplar-tree changed, and not to confift of any calcareous substance. A fort of fossil ivory, with all the properties of clay, is faid likewife to be found in some places.

IV. Larvæ Infalitæ; where the substances are impregnated with great quantities of falts. Human bodies have been twice found impregnated with vitriol of iron in the mine of Falun, in the province of Dalarne in Sweden. One of them was kept for several years in a glass case, but at last began to moulder and fall to pieces. Turf and roots of trees are likewise found in water firongly impregnated with vitriol. They do not flame, but look like a coal in a strong fire; neither do they de-

cay in the air.

V. Bodies penetrated by mineral inflammable fubstances. 1. By pit coal, such as wood; whence some have imagined coal to have been originally produced from wood. Some of these substances are fully satutated with the coaly matter; others not. Among the former Cronstedt reckons jet; among the latter the fubstance called munia vegetabilis, which is of a loose texture, refembling amber, and may be used as such. 2. Those penetrated by asphaltum or rock-oil. The only example of these given by our author is a kind of turf in the province of Skone in Sweden. The Egyptian mummies, he observes, cannot have any place among this species, as they are impregnated artificially with afphaltum, in a manner fimilar to what happens naturally with the wood and coaly matter in the last species. 3. Those impregnated with sulphur which has dissolved iron, or with pyrites. Human bodies, bivalve and univalve shells and insects, have been all found in this state; and the last are found in the alum slate at Andrarum, in the province of Skone in Sweden.

VI. Larvæ metalliferæ; where the bodies are impregnated with metals. These are, 1. Covered with native filver; which is found on the furface of shells in England. 2. Where the metal is mineralized with copper and fulphur. Of this kind is the fahlertz or gray filver ore, in the shape of ears of corn, and supposed to be vegetables, found in argillaceous flate at Frankenberg and Tahlitteren in Hesse. 3. Larvæ cu-priferæ, where the bodies are impregnated with copper. To this species principally belong the turquoise or Turkey stones, improperly so called; being ivory and bones of the elephant or other animals impregnated with copper. At Simore in Languedoc there are bones of animals dug up, which, during calcination, assume a blue colour; but according to Cronstedt it is not probable that these owe their colour to copper. 3. With mineralized copper. Of these our author gives two examples. One is where the copper is mineralized with fulphur and iron, forming a yellow marcafitical ore. With this fome shells are impregnated which lie upon a bed of loadstone in Norway. Other petrifactions of this kind are found in the form of fish in different parts of Germany. The other kind is where the copper is impregnated with fulphur and filver. Of this kind is the gray filver ore, like ears of corn, found in the flate quarries at Hesse. 4. Larvæ ferriferæ, with iron in form of a

calx, which has affumed the place or shape of extraneous Petrifacbodies. These are either loose or indurated. Of the loofe kind are some roots of trees found at the lake Langelma in Finland. The indurated kinds are exemplified in some wood found at Orbissan in Bohemia. 5. Where the iron is mineralized, as in the pyritaceous larvæ, already described.

VII. Where the bodies are tending to decomposition, or in a way of destruction. Among these, our author enumerates Mould and Turf. See likewife-

the article FossiL.

We shall add the following description of a very curious animal petrifaction. The Abbé de Sauvages, celebrated for his refined tafte and knowledge in natural history, in a tour through Languedoc, between Alais and Uzes, met with a narrow vein of no more than two toises wide, which crosses the road, and is bordered on one fide by a grey dirty foil, and on the other by a dry fandy earth, each of a vast extent, and on a level with the narrow vein which separates them. In this narrow vein only are contained petrified shells, cemented together by a whitish marl. They are in prodigious plenty; among which there is one species which the abbé does not remember to have known to have been anywhere described, and may probably be a new acquisition to natural history.

This shell has the shape of a horn, somewhat incurvated towards the base. It seems composed of several cups, let into each other, which are fometimes found feparate. They have all deep channels, which extend, as in many other shells, from the base to the aperture; the projecting ribs which form these channels are mostly worn away, being rarely to be found entire. Sometimes feveral are grouped together; and as a proof that they are not a fortuitous affemblage caused by the petrifaction, they are fixed together through their whole length, in fuch fort, that their base and aperture are regularly turned the fame way. The abbé should have referred this to the genus which Linnæus and the Marquis d'Argenville named dentalis, had they not been let into each other. He found some of them whose aperture or hollow was not stopped up by the petrifaction, and feemed as cones adapted to one another, forming a row of narrow cells, separated by a very thin partition: this row occupied not more than one half of the cavity of the shell.

Our article has already extended to fuch a length as to preclude any further additions; we cannot, however, finish it without observing, that fossil bones are very common in Dalmatia. They are of various kinds, and in their nature apparently very extraordinary; but we have found no tolerable account or probable conjecture of their origin. Vitaliano Donati of Padua, in his Saggio sopra la storie naturale dell' Adriatico, was the first who took notice of them; and Fortis, in his Travels into Dalmatia, has given a copious account of them. They are most common in the islands of Cherso and Osero. See Fortis's Travels into Dalmatia; and those of our readers who wish to profecute this inquiry may confult with advantage Parkinson's Organic Remains of a For-

mer World, two vols. 4to.
, PETRIFIED CITY. The flory of a petrified city is well known all over Africa, and has been believed by many confiderable persons even in Europe. Louis XIV. was fo fully perfuaded of its reality that he or-

Petrified dered his ambaffador to procure the body of a man petrified from it at any price. Dr Shaw's account of this affair is as follows: "About 40 years ago (now more than 70), when M. le Maire was the French conful at Tripoli, he made great inquiries, by order of the French court, into the truth of the report concerning a petrified city at Ras Sem; and amongst other very curious accounts relating to this place, he told me a remarkable circumstance, to the great discredit, and even confutation, of all that had been so positively advanced with regard to the petrified bodies of men, children,

and other animals.

"Some of the janizaries, who, in collecting tribute, traverse the district of Ras Sem, promised him, that, as an adult person would be too cumbersome, they would undertake, for a certain number of dollars, to bring him from thence the body of a little child. After a great many pretended difficulties, delays, and difappointments, they produced at length a little Cupid, which they had found, as he learned afterwards, among the ruins of Leptis; and, to conceal the deceit, they broke off the quiver, and some other of the distinguishing characteristics of that deity. However, he paid them for it, according to promife, 1000 dollars, which is about 1501. Sterling of our money, as a reward for their faithful service and hazardous undertaking; having run the risk, as they pretended, of being strangled if they should have been discovered in thus delivering up to an infidel one of those unfortunate Mahometans,

as they take them originally to have been. "But notwithflanding this cheat and imposition had made the consul desist from searching after the petrified bodies of men and other animals; yet there was one matter of fact, as he told me, which still very strangely embarrassed him, and even strongly engaged him in favour of the current report and tradition. This was some little loaves of bread, as he called them, which had been brought to him from that place. His reasoning, indeed thereupon, provided the pretended matter of fact had been clear and evident, was just and fatisfactory; for where we find loaves of bread, there, as he urged, some persons must been employed in making them, as well as others for whom they were prepared. One of these loaves he had, among other petrifications, very fortunately brought with him to Cairo, where I saw it, and found it to be an echinites of the discoid kind, of the same fashion with one I had lately found and brought with me from the deferts of Marah. We may therefore reasonably conclude, that there is nothing to be found at Ras Sem, unless it be the trunks of trees, echinites, and fuch petrifications as have been discovered at other places.

"M. le Maire's inquiries, which we find were supported by the promise and performance of great rewards, have brought nothing further to light. He could never learn that any traces of walls, or buildings, or animals, or utenfils, were ever to be feen within the verge of these pretended petrifications. The like account I had from a Sicilian renegado, who was the janizary that attended me whilst I was in Egypt; and as in his earlier years he had been a soldier of Tripoli, he assured me that he had been several times at Ras Sem. This I had confirmed again in my return from the Levant by the interpreter of the British factory at Tunis, who was likewife a Sicilian renegado; and being the libertus or freed-

Vol. XVI. Part I.

man of the bashaw of Tripoli, was preferred by him to Petrified be the bey or viceroy of the province of Darna, where Ras Sem was immediately under his jurisdiction. His account was likewise the same; neither had he ever feen, in his frequent journeys over this district, any other petrifications than what are above mentioned. So that the petrified city, with its walls, castles, streets, shops, cattle, inhabitants, and utenfils, were all of them at first the mere inventions of the Arabs, and afterwards propagated by fuch persons, who, like the Tripoli ambassador, and his friend above mentioned, were credulous enough to believe them.

" However, there is one remarkable circumstance

relating to Ras Sem that deferves well to be recorded. When the winds have blown away the billows of fand, which frequently cover and conceal these petrifications, they discover, in some of the lower and more depressed places of this diffrict, feveral little pools of water, which is usually of fo ponderous a nature, that, upon drinking it, it passes through the body like quickfilver. This perhaps may be that petrifying fluid which has all along contributed to the conversion of the palm trees and the echini into stone: for the formation not only of these, but of petrifications of all kinds, may be entirely owing to their having first of all lodged in a bed of loam, clay, fand, or some other proper nidus or matrix, and afterwards gradually been acted upon and pervaded by fuch a petrifying fluid as we may suppose this to be."?

To this account it may not be amiss to subjoin the memorial of Cassem Aga, the Tripoli ambassador at the court of Britain. The city, he fays, is fituated two days journey fouth from Onguela, and 17 days journey from Tripoli by caravan to the fouth-east. "As one of my friends (fays the ambassador) desired me to give him in writing an account of what I knew touching the petrified city, I told him what I had heard from different persons, and particularly from the mouth of one man of credit who had been on the fpot: that is to fay, that it was a very spacious city, of a round form, having great and small streets therein, furnished with shops, with a vast castle magnificently built : that he had seen there feveral forts of trees, the most part olives and palms, all of stone, and of a blue or rather lead colour: that he faw also figures of men in a posture of exercising their different employments; some holding in their hands stuffs, others bread, every one doing fomething, even women fuckling their children, and in the embraces of their husbands, all of stone: that he went into the castle by three different gates, though there were many more, where he saw a man lying upon a bed of stone: that there were guards at the gates with pikes and javelins, in their hands: in short, that he saw in this wonderful city many forts of animals, as camels, oxen, horses, affes, sheep, and birds, all of stone, and of the colour abovementioned."

We have subjoined this account, because it shows in striking colours the amazing credulity of mankind, and the avidity with which they swallow the marvellous, and the difficulty of discovering the truth respecting places or things at a distance from us.

PETROBRUSSIANS, a religious fect, which had its rife in France and the Netherlands about the year 1110. The name is derived from Peter Bruys, a Provençal, who made the most laudable attempt to reform Hh

242

Petrobrus- the abuses and remove the superstition that disgraced the beautiful fimplicity of the gospel. His followers were numerous; and for 20 years his labour in the ministry was exemplary and unremitted. He was, however, burnt in the year 1130 by an enraged populace fet on by the

The chief of Bruys's followers was a monk named Henry; from whom the Petrobrussians were also called Henricians. Peter the Venerable, abbot of Clugny, has an express treatife against the Petrobrussians; in the preface to which he reduces their opinions to five heads. 1. They denied that children before the age of reason can be justified by baptism, in regard it is our own faith that saves by baptism. 2. They held that no churches should be built, but that those that already are should be pulled down; an inn being as proper for prayers as a temple, and a stable as an altar. 3. That the cross ought to be pulled down and burnt, because we ought to abhor the instruments of our Saviour's passion. 4. That the real body and blood of Christ are not exhibited in the eucharist, but merely represented by their figures and fymbols. 5. That facrifices, alms, prayers, &c. do not avail the dead. F. Langlois objects Manicheism to the Petrobruffians; and fays, they maintained two gods, the one good, the other evil: but this we rather esteem an effect of his zeal for the catholic cause, which determined him to blacken the adversaries thereof, than any real fentiment of the Petrobrussians.

PETROJOANNITES, were followers of Peter John, or Peter Joannis, i. e. Peter the son of John, who flourished in the 12th century. His doctrine was not known till after his death, when his body was taken out of his grave and burnt. His opinions were, that he alone had the knowledge of the true fense wherein the apostles preached the gospel; that the reasonable soul is not the form of man; that there is no grace infused by baptism; and that Jesus Christ was pierced with a

lance on the cross before he expired.

PETROLEUM, or ROCK OIL; a thick oily subflance exuding from the earth, and collected on the furface of wells in many parts of the world. See MINE-RALOGY Index.

PETROMYZON, the LAMPREY, a genus of fishes belonging to the order Cartilaginei. See ICHTHYOLOGY

PETRONIUS was a renowned Roman fenator. When governor of Egypt, he permitted Herod, king of the Jews, to purchase in Alexandria any quantity of corn which he should judge necessary for the supply of his fubjects, who were afflicted with a fevere famine. When Tiberius died, Caius Caligula, who fucceeded him, took from Vitellius the government of Syria, and gave it to Petronius, who discharged the duties of his office with dignity and honour. From his inclination to favour the Jews, he run the risk of losing the emperor's friendthip and his own life; for when that prince gave orders to have his Ratue deposited in the temple of Jerusalem, Petronius, finding that the Jews would rather suffer death than fee that facred place profaned, was unwilling to have recourse to violent measures; and therefore preferred a moderation, dictated by humanity, to a cruel obedience. We must not confound him with another of the same name, viz. Petronius Granius, who was a centurion in the eighth legion, and ferved under Cæfar in the Gallic war. In his voyage to Africa, of which country he had been appointed quæstor, the ship in which Petronius he failed was taken by Scipio, who caused all the foldiers. Arbiter. to be put to the fword, and promifed to fave the quæstor's life, provided that he would renounce Caefar's party. To this propofal Petronius replied, that "Cæfar's officers were accustomed to grant life to others, and not to receive it;" and, at the fame time, he stabbed himfelf with his own fword.

PETRONIUS Arbiter, Titus, a celebrated critic and polite writer of antiquity, the favourite of Nero, fupposed to be the same mentioned by Tacitus in the 16th book of his Annals. He was proconful of Bithynia, and afterwards conful, and appeared capable of the greatest employments. He was one of Nero's principal confidants, and in a manner the superintendant of his pleasures; for that prince thought nothing agreeable or delightful but what was approved by Petronius. The great favour shown him drew upon him the envy of Tigellinus, another of Nero's favourites, who accused him of being concerned in a conspiracy against the emperor; on which Petronius was feized, and was fentenced to die. He met death with a striking indifference, and seems to have tasted it nearly as he had done his pleasures. He would fometimes open a vein and fometimes close it, converfing with his friends in the meanwhile, not on the immortality of the foul, which was no part of his creed, but on topics which pleased his fancy, as of love-verses, agreeable and passionate airs; so that it has been said " his dying was barely ceasing to live." Of this disciple of Epicurus, Tacitus gives the following character: " He was (fays he) neither a spendthrift nor a debauchee, like the generality of those who ruin themselves; but a refined voluptuary, who devoted the day to fleep, and the night to the duties of his office, and to pleafure. This courtier is much diffinguished by a fatire which he wrote, and fecretly conveyed to Nero; in which he ingeniously describes, under borrowed names, the character of this prince. Voltaire is of opinion that we have no more of this performance but an extract made by fome obscure libertine, without either taste or judgement. Peter Petit discovered at Traw in Dalmatia, in 1665. a confiderable fragment containing the fequel of Trimalcion's Feast. This fragment, which was printed the year after at Padua and at Paris, produced a paper war among the learned. While some affirmed that it was the work of Petronius, and others denied it to be fo, Petit continued to affert his right to the discovery of the manufcript, and fent it to Rome, where it was acknowledged to be a production of the 15th century. The French critics, who had attacked its authenticity, were filent from the moment it was deposited in the royal library. It is now generally attributed to Petronius, and found in every subsequent edition of the works of that refined voluptuary. The public did not form the fame favourable opinion of fome other fragments, which were extracted from a manuscript found at Belgrade in-1688, and printed at Paris by Nodot in 1694, though they are ascribed by the editor Charpentier, and several other learned men, to Petronius; yet, on account of the Gallicisms, and other barbarous expressions with which they abound, they have generally been confidered as unworthy of that author. His genuine works are, 1. A Poem on the civil war between Cæfar and Pompey, translated into profe by Abbé de Marolles, and into French verse by President Bouhier, 1737, in 4to. PePetteia.

Petronius tronius, full of fire and enthufialm, and disgusted with Lucan's flowery language, opposed Pharsalia to Pharsalia; but his work, though evidently superior to the other in some respects, is by no means in the true style of epic poetry. 2. A Poem on the Education of the Roman Youth. 3. Two Treatifes; one upon the Corruption of Eloquence, and the other on the Causes of the Decay of Arts and Sciences. 4. A Poem on the Vanity of Dreams. 5. The Shipwreck of Licas. 6. Reflections on the Inconstancy of Human Life. And, 7. Trimalcion's Banquet. To this last performance morality is not much indebted. It is a description of the pleafures of a corrupted court; and the painter is rather an ingenious courtier than a person whose aim is to reform abuses. The best editions of Petronius are those published at Venice, 1499, in 4to; at Amsterdam, 1669, in Svo, cum notis variorum; Ibid. with Boschius's notes, 1677, in 24to; and 1700, two vols. in 24to. The edition of variorum was reprinted in 1743, in two vols. 4to, with the learned Peter Burman's commentaries. Petro-

nius died in the year 65 or 66.

PETRONIUS Maximus, was born in the year 395, of an illustrious family, being at first a senator and consul of Rome. He put on the imperial purple in 455, after having effected the affaffination of Valentinian III. In order to establish himself upon the throne, he married Eudoxia the widow of that unfortunate prince; and as she was ignorant of his villany, he confessed to her, in a transport of love, that the strong desire he had of being her husband, had made him commit this atrocious crime. Whereupon Eudoxia privately applied to Genferic, king of the Vandals, who coming into Italy with a very powerful army, entered Rome, where the usurper then was. The unhappy wretch endeavoured to make his escape; but the foldiers and people, enraged at his cowardice, fell upon him, and overwhelmed him with a shower of stones. His body was dragged through the streets of the city for three days; and, after treating it with every mark of difgrace, they threw it into the Tiber the 12th of June the same year, 455. He reigned only 77 days. He had some good qualities. He loved and cultivated the sciences. He was prudent in his councils, circumspect in his actions, equitable in his judgements; a facetious companion, and steady friend. He had the good fortune to win the affections of every body, while he remained a private character; but as a prince, he was fo much the more detestable, in that, after he had obtained the throne by villany, he kept pof-fession of it only by violence. The crown was scarcely on his head before it appeared to him an insupportable burden. "Happy Democles (exclaimed he in his defpair), thou wert a king during a fingle entertainment."

PETROSA ossa, in Anatomy, a name given to the fourth and fifth bones of the cranium, called also offa temporum and offa fquamofa; the substance whereof, as their first and last names express, is squamose and very

hard. See ANATOMY Index.

PETROSELINUM (APIUM PETROSELINUM, Lin.) Parfley, a plant which is commonly cultivated for culinary purposes. See BOTANY and GARDENING Index. PETTEIA, in the ancient music, a term to which

we have no one corresponding in our language.

The melopæia, or the art of arranging founds in fuccession so as to make melody, is divided into three parts, which the Greeks call lepsis, mixis, and chresis; the Latins sumptio, mixio, and usus; and the Italians presa, Pettera, mescolamento, and uso. The last of these is called by the Greeks merles, and by the Italians pettia; which therefore means the art of making a just discernment of all the manners of ranging or combining founds among themselves, so as they may produce their effect, i. e. may express the several passions intended to be raised. Thus it shows what founds are to be used, and what not; how often they are feverally to be repeated; with which to begin, and with which to end; whether with a grave found to rife, or an acute one to fall, &c. The petteia constitutes the manners of the music; chooses out this or that passion, this or that motion of the soul, to be awakened; and determines whether it be proper to excite it on this or that occasion. The petteia, therefore, is in music much what the manners are in poetry.

It is not eafy to discover whence the denomination should have been taken by the Greeks, unless from merleue, their game of chess, the musical petteia being a fort of combination and arrangement of founds, as chess is of pieces called #stlio, calculi, or " chess-men."

PETTY, SIR WILLIAM, fon of Anthony Petty, a clothier, was born at Rumsey, a small town in Hamp-shire, in 1623; and while a boy took great delight in fpending his time among the artificers, whose trades he could work at when but twelve years of age. Then he went to the grammar school there: at fifteen he was master of the Latin, Greek, and French tongues, and of arithmetic and those parts of practical geometry and astronomy useful to navigation. Soon after he went to Caen in Normandy, and Paris, where he studied anatomy, and read Vesalius with Mr Hobbes. Upon his return to England, he was preferred in the king's navy. In 1643, when the war between the king and parliament grew hot, he went into the Netherlands and France for three years; and having vigorously profecuted his studies, especially in physic, at Utrecht, Leyden, Amsterdam, and Paris, he returned home to Rumfey. In 1647, he obtained a patent to teach the art of double withing for seventeen years. In 1648, he published at Landau Market and Ma lished at London " Advice to Mr Samuel Hartlib, for the advancement of some particular parts of learning." At this time he adhered to the prevailing party of the kingdom; and went to Oxford, where he taught anatomy and chemistry, and was created a doctor of physic. In 1650, he was made professor of anatomy there; and foon after a member of the college of physicians in London. The same year he became physician to the army in Ireland; where he continued till 1659, and acquired a great fortune. After the restoration, he was introduced to King Charles II. who knighted him in 1661. In 1662, he published "A Treatise of taxes and contributions." Next year he was greatly applauded in Ireland for his invention of a double-bottomed ship. He died at-London, in 1687, of a gangrene in the foot, occasioned by the swelling of the gout.

The character of his genius is sufficiently seen in his writings, which were much more numerous than those we have mentioned above. Among these, it is faid, he wrote the history of his own life, which unquestionably contained a full account of his political and religious principles, as may be conjectured from what he has left us upon those subjects in his will. In that he has these remarkable words: " As for legacies to the poor, I am at a stand; and for beggars by trade and election, I give

Peyrere.

Petty them nothing : as for impotents by the hand of God, the Petworth public ought to maintain them: as for those who can get no work, the magistrates should cause them to be employed; which may be well done in Ireland, where are fifteen acres of improveable land for every head: as for prisoners for crimes by the king, or for debt by their profecutors, those who compassionate the sufferings of any object, let them relieve themselves by relieving such fufferers; that is, give them alms (A), &c. I am, contented, that I have affifted all my poor relations, and put many into a way of getting their own bread, and have laboured in public works and inventions, and have fought out real objects of charity; and do hereby conjure all who partake of my estate, from time to time to do the same at their peril. Nevertheless, to answer cuflom, and to take the fure fide, I give twenty pounds to the most wanting of the parish wherein I die." As for his religion, he fays, " I die in the profession of that faith, and in the practice of fuch worship, as I find established by the laws of my country; not being able to believe what I myself please, nor to worship God better than by doing as I would be done unto, and observing the laws of my country, and expressing my love and honour to Almighty God, by fuch figns and tokens as are understood to be such by the people with whom I live." He died possessed of a very large fortune, and his family was afterwards ennobled.

The variety of purfuits in which Sir William Petty was engaged, shows him to have had a genius capable of any thing to which he chose to apply it; and it is very extraordinary, that a man of fo active and bufy a fpirit could find time to write fo many things as it appears he did.

PETTY, any thing little or diminutive, when compared with another.

PETTY-Bag, an office in chancery; the three clerks of which record the return of all inquifitions out of every county, and make all patents of comptrollers, gaugers, customers, &c.

PETTY-Chaps. See MOTACILLA, ORNITHOLOGY In-

PETTY-Fogger, a little tricking folicitor or attorney, without either skill or conscience.

PETTY, or Petit, Larceny. See LARCENY.

PETTY-Patees, among confectioners, a fort of small pies, made of a rich crust filled with sweetmeats.

PETTY-Singles, among falconers, are the toes of a hawk. PETTY-Tally, in the fea language, a competent allowance of victuals, according to the number of the thip's company.

PETTY, or Petit, Treason. See TREASON.

PETUNSE, in Natural History, one of the two subflances of which porcelain or china-ware is made. The petunse is a coarse kind of slint or pebble, the surface of which is not fo fmooth when broken as that of our common flint. See PORCELAIN.

PETWORTH, in Suffex in England, five miles from Midhurst and the Suffex Downs, and 49 from London, is a large, populous, and handsome town. It is adorned with feveral feats of gentlemen, particularly

the magnificent feat of the Percies, earls of Northum- Pencedaberland, many of whom lie buried in a feparate vault of its church. In the duke of Somerfet's armory, in this place, there is a fword which, by circumstances, appears to have been the weapon of the famous Henry Hotspur, though it is less unwieldy than other ancient fwords.

PEUCEDANUM, or SULPHUR-WORT, a genus of plants belonging to the pentandria class, and in the natural method ranking under the 45th order, Umbellatæ. See BOTANY Index.

PEUTEMAN, PETER, was born at Rotterdam in 1650, and was a good painter of inanimate objects; but the most memorable particular relative to this artist was the incident which occasioned his death.

He was requested to paint an emblematical picture Dict. of of mortality, representing human skulls and bones, fur-Painters. rounded with rich gems and mufical inftruments, to express the vanity of this world's pleasures, amusements, or possessions; and that he might imitate nature with the greater exactness, he went into an anatomy room, where feveral skeletons hung by wires from the ceiling, and bones, skulls, &c. lay scattered about; and immediately prepared to make his defigns.

While he was thus employed, either by fatigue, or by intense study, insensibly he fell asleep; but was suddenly roused by a shock of an earthquake, which happened at that inftant, on the 18th of September 1692. The moment he awoke, he observed the skeletons move about as they were shaken in different directions, and the loofe skulls roll from one fide of the room to the other; and being totally ignorant of the cause, he was ftruck with fuch a horror, that he threw himfelf down stairs, and tumbled into the street half dead. His friends took all possible pains to efface the impression made on his mind by that unlucky event, and acquainted him with the real cause of the agitation of the skeletons; yet the transaction still affected his spirits in so violent a manner, that it brought on a diforder, which in a short time ended his days. His general subjects were either allegorical or emblematical allufions to the shortness and misery of human life.

PEWIT, SEA-CROW, or Mire-Crow. See LARUS, ORNITHOLOGY Index.

PEWTER, a factitious metal used in making domestic utenfils, as plates, dishes, &c .- The basis of the metal is tin, united to small portions of lead, zinc, bismuth, and antimony. "We have (fays Dr Watson) three forts of pewter in common use; they are distinguished by the name of Plate, Trifle, and Ley. The plate pewter is used for plates and dishes; the trifle, chiefly for pints and quarts; and the ley-metal for wine measures, &c. Our very best pewter is said to consist of 100 parts tin, and 17 of antimony, though others allow only 10 parts of the latter." Besides this composition, * Chem. there are other kinds, compounded of tin, antimony, bif-Effays, muth, and copper, in feveral proportions.

PEYRERE, Isaac LA, a remarkable character for versatility in religious opinions, was born at Bourdeaux, of protestant parents, in 1594. He entered the service

(A) In the town of Rumsey there is a house which was given by him for the maintenance of a charity-school; the rent of which is still applied to that use.

Perrere of the Prince of Conde, who was much pleafed with the fingularity of his genius. From the perufal of St Paul's writings he took into his head to aver, that Adam was not the first of the human race; and, in order to prove this extravagant opinion, he published in 1655 a book, which was printed in Holland in 4to and in 12mo, with this title: Præadamitæ, five exercitatio super versibus 12, 13, 14. cap. 15. Epistolæ Pauli ad Romanos. This work was burnt at Paris, and the author imprisoned at Bruffels, through the influence of the archbishop of Malines's grand vicar. The Prince of Conde having obtained his liberty, he travelled to Rome in 1656, and there gave in to Pope Alexander VII. a fo-lemn renunciation both of Calvinism and Preadamism. His convertion was not thought to be fincere, at least with regard to this last herefy. His defire to be the head of a new fect is evident; and his book discovers his ambition; for he there pays many compliments to the Jews, and invites them to attend his lectures. Upon his return to Paris, notwithstanding the earnest folicitations of his holinels to remain at Rome, he went again into the Prince of Conde's fervice in the quality of librarian. Some time after he retired to the feminary des Vertus, where he died the 30th of January 1676, at the age of 82, after the facraments of the church had been administered to him. Father Simon says, that when he was importuned in his last moments to retract the opinion which he had formed respecting the Preadamites, his answer was, Hi quæcunque ignorant blasphemant. His having no fixed fentiments of religion is fupposed to proceed more from a peculiar turn of mind than a corruption of the heart; for good nature, fimplicity of manners, and humanity, feem to have formed his character. "He was (fays Niceron) a man of a very equal temper, and most agreeable conversation. He was a little too fond, however, of indulging his wit, which sometimes bordered on raillery; but he took care never to hurt or wound the feelings of his neighbour. His learning was extremely limited. He knew nothing either of Greek or Hebrew; and yet he ventured to give a new interpretation of feveral passages of the facred volume. He piqued himself on his knowledge of the Latin; but excepting a few poets which he had read, he was by no means an adept in that language. His style is very unequal; fometimes swelling and pompous, at other times low and grovelling." Befides the work already mentioned, he has left behind him, I. A treatife as fingular as it is fcarce, intitled, Du rappel de Juifs, 1643, in 8vo. The recal of the If-raelites, in the opinion of this writer, will be not only of a spiritual nature, but they will be reinstated in the temporal bleffings which they enjoyed before their rejection. They will again take possession of the holy land, which will refume its former fertility. God will then raise up to them a king more just, and more victorious, than any of their former sovereigns had been. Now, though all this is doubtless to be understood spiritually of Jesus Christ, yet our author is of opinion, that it ought also to be understood of a temporal prince, who shall arise for the purpose of effecting the temporal deliverance of the Jews; and that this prince shall be no other than the king of France, for the following reafons, which, it is believed, will carry conviction to few minds: 1. Because the two titles of Most Christian, and of Eldest Son of the Church, are ascribed to him by way

of excellence. 2. Because it is presumable, if the kings Peyrere, of France possess the virtue of curing the evil or scrofu- Peyroniu la, which can only afflict the bodies of the Jews; that they will likewise have the power of curing their obstinate incredulity, and the other inveterate diseases of their fouls. 3. Because the kings of France have for their arms a fleur de luce; and because the beauty of the church is in scripture compared to the beauty of lilies. 4. Because it is probable that France will be the country whither the Jews shall first be invited to come and embrace the Christian faith, and whither they shall retreat from the perfecution of the nations that have dominion over them; for France is a land of freedom, it admits of no flavery, and whoever touches it is free. Peyrere, after explaining his ftrange system, proposes a method of converting the Jews to Christianity; a method, fays Niceron, which will not be acceptable to many. He proposes to reduce the whole of religion to a bare faith or belief in Jesus Christ; taking it for granted, without any shadow of proof, that " it is as difficult to comprehend the articles of our faith, as to observe the ceremonies of Moles .- From this scheme (fays he) there would refult a double advantage to the church; the reunion of the Jews, and of all those Christians who are separated from the body of the church." Peyrere, when he wrote this book, was a Calvinist; but his Calvinism too nearly resembled the Deism of our age. He confessed himself, that his reason for quitting the Protestants was on account of their being the first and principal oppofers of his book concerning the Preadamites. II. A curious and entertaining account of Greenland, printed in 8vo, 1647. When he was asked, on occasion of this work, why there were fo many witches in the north? he replied, " It is because part of the property of these pretended conjurers, when condemned to suffer death, is declared to belong to their judges." III. An equally interesting account of Iceland, 1663, 8vo. IV. A letter to Philotimus, 1658, in 8vo, in which he explains the reasons of his recantation, &c. We find in Moreri the following epitaph of him, written by a poet of his own times.

La Peyrere ici gît, ce bon Ifraelite, Huguenot, Catholique, enfin Preadamite: Quatre religions lui plurent à la fois, Et son indifference etoit si peu commune, Qu'après quatre-vingts ans qu'il eut à faire un choix, Le bon homme partit, & n'en choisit pas une.

PEYRONIUS, FRANCIS DE LA, for a long timepractifed furgery at Paris with fuch diffinguished eclat, that he obtained for himself the appointment of first surgeon to Louis XV. He improved this favourable fituation with his majesty, and procured to his profession those honours which had the effect to quicken its progress, and those establishments which contributed to extend its benefits. The Royal College of Surgery at Paris was founded by his means in 1731, was enlightened by his knowledge, and encouraged by his munificence. At his death, which happened at Verfailles the 24th of April 1747, he bequeathed to the fociety of furgeons in Paris two thirds of his effects, his effate of Marigni, which was fold to the king for 200,000 livres, and his library. This useful citizen also left to the society of furgeons at Montpelier two houses, situated in

Peyronius, that town, with 100,000 livres, for the purpose of , erecting there a chirurgical amphitheatre. He appointed the same society universal legatee for the third of his effects; and all these legacies contain clauses whose sole object is to promote the public good, the perfection and improvement of furgery; for which he always folicited the protection of the court. At the time of the famous dispute between the physicians and surgeons, he entreated the Chancellor d'Aguessan to build up a brazen wall between the two bodies. "I will do fo, replied the minister, but on what side of the wall shall we place the fick:" Peyronius afterwards behaved with more moderation .- He was a philosopher without any ostentation; but his philosophy was tempered by a long acquaintance with the world and with the court. The acuteness and delicacy of his understanding, joined to his natural vivacity, rendered his conversation agreeable; and all these advantages were crowned with a quality still more valuable, an uncommon degree of sympathy for those in distress. He was no sooner known to be at his estate in the country, than his house was filled with fick people, who came to him from the distance of 7 or 8 leagues round about. He had once a plan of establishing, on this fpot, an hospital, to which he intended to retire, that he might devote the remainder of his life to the fervice of the poor.

PEYROUSE, or Perouse, John Francis Galoup DE LA, the celebrated but unfortunate French navigator, was born at Albi in the year 1741. His father intended to train him up to a maritime life, for which purpose he sent him, when very young, to the marine school, where he became enthusiastically attached to his profession, and ambitious to emulate the same

of the most celebrated navigators.

He was appointed midshipman on the 19th of November 1756, behaving with great bravery in that station; and was feverely wounded in the engagement between Hawke and Conflans, on the 20th of November 1759. The Formidable, in which he ferved, was taken, after a vigorous resistance; and it is probable that Peyrouse reaped some advantage from his acquaintance with British officers.

He was promoted, on the 1st of October 1764, to the rank of lieutenant; and as he abhorred a life of ease and idleness, he contrived to be employed in fix different ships of war during the peace that subsisted between Great Britain and France. In 1767 he was promoted to the rank of master and commander. In 1779 he commanded the Amazone, belonging to the squadron of Vice-admiral Count d'Estaing; and when that officer engaged Admiral Byron, the post of La Peyrouse was to carry the orders of the admiral to the whole of the line. He afterwards took the floop Ariel, and contributed to the capture of the Experiment.

In the year 1782, La Peyrouse was sent with the Sceptre of 74 guns, and two frigates of 36 guns each, with some troops and field-pieces on board, to destroy the English settlements in Hudson's Bay, which was eafily accomplished, as nothing was found on shore to oppose the smallest force. Having destroyed the settlements, he learned that some of the English had fled at his approach into the woods. He generously left them provisions and arms to defend themselves against the sa-

vages.

In the year 1785, he was appointed to the command Peyrouse of some ships employed in a voyage round the world, which unfortunately proved his last. Of this voyage, as far as it was acomplished, full accounts have been already published, from which it is manifest that Peyrouse was admirably qualified to discharge such a trust. was an experienced and skilful seaman; a man of mathematical and physical science, uncorrupted by that false philosophy which disgraced many of his attendants, and capable of the utmost perseverance in every commendable pursuit. To these excellent qualities he added caution and courage, with a disposition truly benevolent towards the favages whom he vifited. Most of the calamities attendant on the voyage, with the exception of the last, were occasioned by the disobedience

of his officers, or their neglecting to follow his advice.

The last dispatches of this great and truly excellent man were dated from Eotany Bay, February 7. 1788; and fince that period, no account of him has been received which is entitled to the smallest credit.

PEZAY, N. MASSON, MARQUIS OF, born at Paris, very early applied himself to the study of letters, and afterwards went into the army. He was made a captain of dragoons; and had the honour of giving some lef-sons on tactics to the ill-fated Louis XVI. Being appointed inspector general of some coasting vessels, he repaired to the maritime towns, and executed his commiffion with more care and attention than was to have been expected from a votary of the muses. But as, at the fame time, he showed too much haughtiness, a complaint was brought against him to the court, and he was banished to his country feat, where he died foon after, in the beginning of 1778. He was the intimate friend and companion of Dorat. He had studied, and successfully imitated, his manner of writing; but his poems have more delicacy, and are less disfigured with trifling conversations of gallantry. He has left behind him, I. A translation of Catullus, which is not much esteemed. 2. Les Soirées Helvetiennes, Alfaciennes, et Franc-Comtoises, in 8vo, 1770; a work very agreeably diversified, full of charming landscapes, but written with too little accuracy. 3. Les Soirées Provençales, in manuscript, which are faid to be nowise inferior in merit to the foregoing ones. 4. La Rosiere de Salency; a pastoral in three acts, and which has been performed with success on the Italian theatres. 5. Les campagnes de Mailebois, in 3 vols 4to, and a volume of maps.

PEZENAS, a place in France about 24 miles from Montpelier. The foil about it is fandy. The rock is limestone. The fields are open, and produce corn, wine, limestone. The fields are open, and produce corn, wine, and oil. There are to be seen at this place the extensive ruins of a castle, which formerly belonged to the Montmorency family. This strong fortress was hewn out of the rock on which it stands, and appears to have been complicated and full of art. The walls are lofty, and above 8 feet in thickness. The rock, which is perpendicular, is a mass of shells, such as turbinites, oysters, cockles, with a ealcareous cement. From hence the circumjacent plain, decked with luxuriant verdure, and fhut in by rugged mountains, affords a most delightful prospect. E. Long. 3. 35. N. Lat. 43. 18.

PEZIZA, CUP-MUSHROOM, a genus of plants of the natural order of fungi, belonging to the cryptogamia class. See BOTANY Index.

PHACA, a genus of plants belonging to the diadelphia class; and in the natural method ranking under the 22d order, *Papilionaceæ*. See BOTANY *Index*.

PHÆA, in Antiquity, a famous fow which infested the neighbourhood of Cromyon. Theseus destroyed it as he was travelling from Trozene to Athens to make himself known to his father. Some imagine that the boar of Calydon sprang from this sow. According to some authors, Phæa was a woman who prostituted herself to strangers, whom she murdered, and afterwards plundered.

PHÆACIA, one of the ancient names of the island Corcyra. *Phæaces* the people, who were noted

for their indolence and luxury.

PHÆDON, a disciple of Socrates, who had been feized by pirates in his youth; and the philosopher, who feemed to discover something uncommon in his countenance, bought his liberty for a sum of money. Phædon, after Socrates's death, returned to Elis his native country, where he sounded a sect of philosophers who composed what was called the Eliac school. The name of Phædon is affixed to one of Plato's dialogues.

PHÆDRA, in fabulous history, was a daughter of Minos and Pasiphae; she married Theseus, by whom the was the mother of Acamas and Demophoon. They had already lived for some time in conjugal felicity, when Venus, who hated all the descendants of Apollo, because he had discovered her amours with Mars, inspired Phædra with the strongest passion for Hippolytus the fon of Theseus, by the amazon Hippolyte. This passion she long attempted to stifle, but in vain; and therefore, in the absence of Theseus, she addressed Hippolytus with all the impatience of desponding love. He rejected her with horror and disdain. She, however, incensed by the reception she had met, resolved to punish his coldness and refusal; and at the return of Theseus she accused Hippolytus of attempts upon her virtue. He listened to her accusation; and without hearing Hippolytus's defence, he banished him from his kingdom, and implored Neptune, who had promifed to grant three of his requests, to punish him in an exemplary manner. As Hippolytus fled from Athens, his horses were suddenly terrified by a sea monster, which Neptune had fent on the shore; and he was thus dragged through precipices and over rocks, trampled under the feet of his horses, and crushed under the wheels of his chariot. When his tragical end was known at Athens, Phædra confessed her crime, and hung herself in despair, unable to survive one whose death her extreme guilt had occasioned. The death of Hippolytus, and the infamous passion of Phædra, is the subject of one of the tragedies of Euripides and of Seneca. She was buried at Træzene, where her tomb was still to be seen in the time of the geographer Pausanias, near the temple of Venus, which she had built to render the goddess favourable to her incestuous passion. Near her tomb was a myrtle, whose leaves were full of small holes, which, it was reported, Phædra had done with a hair pin, when the vehemence of her passion had rendered her melancholy and almost desperate. She was represented in a painting in Apollo's temple at Delphi, as suspended in the air, while her sister Ariadne stood near to her, and fixed her eyes upon her.

PHÆDRUS, an ancient Latin writer, who compofed five books of fables, in iambic verse. He was a

Thracian; and was born, as there is reason to conclude, fome years before Julius Cæsar made himself master of the Roman empire. How he came into the service of Augustus is not known: but his being called Augustus's freedman in the title of the book, shows that he had been that emperor's slave. The sables of Phædrus are valued for their wit and good sense, expressed in very pure and elegant language; and it is remarkable that they remained buried in libraries altogether unknown to the public, until they were discovered and published by Peter Pithou, or Pithœus, a learned French gentleman, toward the close of the 16th century.

PHÆNOMENON, in philosophy, denotes any remarkable appearance, whether in the heavens or earth, and whether discovered by observation or expe-

riment.

PHAETON, in fabulous history, was the son of the Sun, or Phœbus and Clymene, one of the Oceanides. He was fon of Cephalus and Aurora, according to Hefied and Paufanias; or of Tithonus and Aurora, according to Apollodorus. He is, however, more generally acknowledged to be the fon of Phœbus and Clymene. He was naturally of a lively disposition, and a handsome figure. Venus became enamoured of him, and entrusted him with the care of one of her temples. This distinguishing favour of the goddess rendered him vain and afpiring; and when Epaphus, the fon of Io, had told him, to check his pride, that he was not the fon of Phœbus, Phaeton resolved to know his true origin, and at the infligation of his mother he visited the palace of the sun. He begged Phœbus, that if he really were his father, he would give him incontestable proofs of his paternal tenderness, and convince the world of his legitimacy. Phoebus received him with great tenderness, and swore by Styx to grant whatever he requested as a proof of his acknowledging him for his fon. The youth boldly asked the direction of the chariot of the fun for one day. His father, grieved and furprised at this demand, used all his arguments to disfuade him from the rash attempt; but all was in vain: and being by his oath reduced to submit to his obstinacy, entrusted him with the reins, after he had directed him how to use them. The young adventurer was however foon fenfible of his madness. He was unable to guide the fiery fleeds; and loofing the reins, Jupiter, to prevent his confuming the heavens and earth, fluck him with a thunderbolt, and hurled him from his feat into the river Eridanus or Po. His fisters Phaethusa, Lambetia, and Phoebe, lamenting his loss upon its banks, were changed by the gods into black poplar trees; and Cycnus king of Liguria, also grieving at his fate, was transformed into a f , an.

The poets fay, that while Phaeton was driving the chariot of his father, the blood of the Ethiopians was dried up; and their skin became black; a colour which is still preserved among the greatest part of the inhabitants of the torrid zone. The territories of Libya were also, they tell us, parched up, on account of their too great vicinity to the sun; and ever since, Africa, unable to recover her original verdure and fruitfulness, has exhibited a sandy country and uncultivated waste. According to those who explain this poetical sable, Phaeton was a Ligurian prince, who studied assertionally, and in whose age the neighbourhood of the Po was vi-

fited with uncommon heats.

' Phaeton

PHAETON, a genus of birds belonging to the order of anseres. See Ornithology Index.

PHAGEDÆNA, in *Medicine*, denotes a corroding ulcer.

PHAGEDENIC MEDICINES, those used to eat off proud or fungous slesh; such as are all the caustics.

PHAGEDENIC Water, in Chemistry, denotes a water made from quicklime and sublimate; and is very efficacious in the cure of phagedenic ulcers. To prepare this water, put two pounds of fresh quicklime in a large earthen pan, and pour upon it about ten pounds of rainwater; let them stand together for two days, stirring them frequently: at last leave the lime to settle well, then pour off the water by inclination, filtrate it, and put it up in a glass bottle, adding to it an ounce of corrosive sublimate in powder; which from white becomes yellow, and sinks to the bottom of the vessel. The water being settled, is sit for use in the cleansing of wounds and ulcers, and to cat off supersuous stess, and especially in gangrenes; in which case may be added to it a third or fourth part of spirit of wine.

PHALÆNA, the MOTH, a genus of infects belonging to the order of lepidoptera. See ENTOMOLOGY

Index.

PHALANGIUM, a genus of infects belonging to the order of aptera. See Entomology Index.

PHALANGOSIS, in Surgery, is a tumor and relaxation of the eyelids, often fo great as to deform the eye, and confiderably to impede vision. Sometimes the eyelid when in this state subsides or sinks down, occafioned perhaps either by a palfy of the muscle which sustains and elevates the eyelid, or else from a relaxation of the cutis above, from various causes. But in the paralytic or relaxed case, the use of cordial and nervous medicines must be proposed internally; and outwardly, balsam of Peru and Hungary water are to be employed. If all these fail, the remaining method of cure is to extirpate a sufficient quantity of the relaxed cutis.

PHALANX, in Grecian antiquity, a square battalion of soldiers, with their shields joined and pikes crofsing each other; so that it was next to impossible to

break it.

The Macedonian phalanx is supposed by some to have had the advantage in valour and strength, over the Roman legion. Its number was 8000 men. But the word phalanx is used for a party of 28, and several other numbers; and even sometimes for the whole body of foot. See Legion.

PHALANX is applied, by anatomists, to the three rows of small bones which form the fingers. See ANATOMY

PHALARIS, a remarkable tyrant, born at Crete, where his ambitious defigns occasioned his banishment: he took refuge in Agrigentum, a free city of Sicily, and there obtained the supreme power by stratagem. The circumstance which has chiefly contributed to preserve his name in history is his cruelty; in one act of which he gave, however, an example of strict justice. It is thus related: Perillus, a brass-founder at Athens, knowing the cruel disposition of Phalaris, contrived a new species of punishment for him to inslict on his subjects. He cast a brazen bull, bigger than the life, with an opening in the side to admit the victims; who being shut up in the body, a fire was kindled under it to roast them to death; and the throat was so contrived, that

their dying groans refembled the roaring of a bull. The artist brought it to the tyrant, expecting a great reward. Phalaris admired the invention and workmanship, but ordered the inventor to be put into it to make the first trial. In allusion to which, Ovid fays,

Neque enim lex æquior ulla, Quam necis artifices arte perire fua.

The end of this detestable tyrant is differently related; but it is very generally believed, with Cicero, that he fell by the hands of the Agrigentines; and, as some suppose, at the instigation of Pythagoras. Ovid tells us, that his tongue was cut out; and that he was then put into the bull to perish by the same slow fire by which means he had murdered so many before. Others fay that he was stoned to death; and all agree that his end was violent. He reigned, Eusebius says, 28 years; others say 16. After all, there is great uncertainty both as to his life, death, and history. Many of the circumstances related of him, as they are collected by Mr Boyle, depend upon the authenticity of those epistles which go under the name of the tyrant; and which have been justly questioned, and with great probability rejected, as the spurious production of some modern sophist. See BENTLEY, p. 177. col. 2.

PHALARIS, or Canary-grass, a genus of plants belonging to the triandria class. See BOTANY Index.

PHALERÆ, among the ancient Romans, were military rewards bestowed for some fignal act of bravery. Authors do not agree whether the Phaleræ were a suit of rich trappings for a horse, or golden chains something like the torques, but so formed as to hang down to the breast and display a greater profusion of ornament. The last opinion appears to have the greater prevalence, but perhaps both are true.

PHALEREUS (Nepos), a village and port of Athens; this last neither large nor commodious, for which reason Themistocles put the Athenians on building the Piræus; both joined to Athens by long walls. The Phalereus lay nearer the city (Pausanias). Demetrius Phalereus, the celebrated scholar of Theophrastus, was of this place; to whom the Athenians erected above 300 statues; which were afterwards destroyed by his enemies, on his slight to Ptolemy king of Egypt (Strabo). Here Demosthenes was wont to declaim, to accustom his voice to surmount the noise and roaring of the sea; a just and lively emblem of popular assemblies.

PHALEUCIAN VERSE, in ancient poetry, a kind of verse confishing of five feet; the first of which is a spondee, the second a dactyl, and the three last trochees.

PHALLUS, the Morel, a genus of plants of the order of fungi, and belonging to the cryptogamia class. See BOTANY *Index*.

PHALLUS, among the Egyptians, was the emblem of fecundity. It was very fervently worshipped by women, especially by those who were barren. This custom was introduced among the Greeks, and seftivals in honour of it were called *phaluca*. See MYSTERIES, N° 38, &c. Among the Hindoos a similar emblem called *lingam* is used, and for similar purposes. See HINDOOS, N° 4.

PHALTI, or PHALTIEL, fon of Laish. He married Michal, after Saul had taken her from David; but David afterwards took her away from Phalti (I Sam. xxv. 44. 2 Sam. iii. 15.). Some interpreters are of opi-

Pharaoh.

Phanatic nion Phalti did not meddle with Michal all the time she continued in his house, for fear that both of them should incur the penalty of death, to be inflicted on adulterers (Levit. xx. 10.), because Michal had not been legally divorced; but these reasons are frivolous. Saul looked upon David as a rebel to his king, and an outlaw, whose goods and wives belonged to him, and which he could absolutely dispose of. He would not have given Michal to Phalti, nor would he have received her, if he had not thought he might use her as his wife. If Michal had no children by Phalti, by whom then were those children that the scripture says she had, since it is known she had none by David? See 2 Sam. xxi. 8. and

PHANATIC, or FANATIC, a visionary; one who fancies he sees spectres, spirits, apparitions, or other imaginary objects, even when awake; and takes them

to be real. See PHANTASY and FANATIC.

Such are phrenetics, necromancers, hypochondriac persons, lycanthropi, &c. See Phrenetic, Hypochon-DRIAC, LYCANTHROPI.

Hence the word is also applied to enthusiasts, pretenders to revelation, new lights, prophecies, &c. See

ENTHUSIAST, and SECOND Sight.

PHANTASIA was the daughter of Nicarchus of Memphis in Egypt. It has been supposed that she wrote a poem on the Trojan war, and another on the return of Ulysses to Ithaca, from which compositions Homer copied the greatest part of his Iliad and Odysfey, when he vifited Memphis, where they were depo-

PHANTASM, a term fometimes used in a fynonymous fense with idea, or notion retained in the mind, of an external object.

PHANTASMAGORIA, an optical deception.

See Science, Amusements of.

PHANTASY, or FANCY, the Imagination; one of the powers of the mind, by which the species of objects received by the external organs of fense are retained, recalled, further examined, and either compounded, or divided: See IMAGINATION; and METAPHYSICS, Part I. Chap. ii. Or it is that internal fense whereby the ideas of ablent things are formed, and represented to the mind as if they were prefent. In melancholics and madmen this faculty is very strong, representing many extravagant and monstrous things, and framing its images as lively as those of fensation: whence the vifions and deceptions those persons are liable to.

PHANUEL, of the tribe of Asher, the father of a holy widow and prophetess called Anna, who was in the temple when our Saviour was presented there by his pa-

rents (Luke ii. 36, 37, 38.).

PHAON, a young man of Mytilene, in the island of Lesbos, received from Venus, as fable reports, an alabafter vafe filled with an effence which had the virtue of conferring beauty. He had no fooner anointed his body with it than he became the most beautiful of men. The ladies of Mytilene fell desperately in love with him; and the celebrated Sappho threw herfelf down a precipice because he would not encourage her passion. He is faid to have been killed by a husband who furprised him with his wife. We have in Ovid a letter from Sarpho to Phaon, which Mr Pope has translated into English verse.

PHARA, in Ancient Geography, a village between WOL. XVI. Part I.

Egypt and Arabia Petræa; or, according to Ptolemy, at a promontory fituated between the Sinus Heroopolites and Elaniticus of the Red sea; where Ismael is said to have dwelt. In Hebrew it is Paran, and in most interpreters; Pharan, Septuagint and Vulgate. Pharanitæ, the people (Ptolemy). Paran or Pharan, the name of the wilderness in its neighbourhood, adjoining

PHARÆ, in Ancient Geography, a town of Achaia in Peloponnesus, on the river Pierus, 70 stadia from the sea, and to the fouth of Patræ 150 stadia. Another, of Crete (Pliny); a colony from the *Pharæ* of Messenia (Stephanus). A third *Pharæ*, or *Pheræ* (Strabo, Ptolemy); Phara, -æ, (Polybius); a town of Messenia, on the river Nedo (Straco); on the north fide of the Sinus Messenius, and to the north-west of Abea. Anciently read Pharis in Homer (Paufanias, Statius'), though now read Phare. Pharitæ is the name of the

PHARAMOND is the name which is given by the generality of historians to the first king of France. He is faid to have reigned at Treves, and over a part of France, about the year 420; and to have been fucceeded by his fon Clodion: but the account which is given of these two princes is very uncertain. It is probable Pharamond was properly no more than a general of an army, the head of a military fociety of Franks, who were masters of their persons and their fortunes. Gregory of Tours feems to have been of this opinion. " It is not generally known (fays he) who was the first king of the French. Sulpitius Severus, who mentions feveral things respecting that nation, takes no notice of its first monarch; he only fays that it had generals." Be that as it may, the inftitution of the famous Salique law (so named from the Salians, the most illustrious of the Franks) is generally attributed to Pharamond. "This law fixed the punishment of crimes, and various points of police. There is no just ground for believing that it expressly settled the right of succession to the crown: it only fays, that, with relation to the Salic land, women have no share of heritage, without restricting it to the royal family in particular; for all those were generally called Salic lands which were held by right of conquest; and it is easy to conceive that a nation of foldiers, whose general was their king, would not fubmit to be governed by a woman. custom, supported by the principles of the nation, came in time to be the established law of the kingdom." (See M. Abbé Millot, Elem. de l'Histoire de France, tom. i.).

PHARAOH, a common name of the kings of Eypt. Josephus fays, that all the kings of Egypt, from Minæus the founder of Memphis, who lived feveral ages before Abraham, have always had the name of Pharaoh, down to the times of Solomon, for more than 3300 years. He adds, that in the Egyptian language the word Pharaoh fignifies a king; and that those princes did not assume this name but when they ascended the throne, at which time they quitted also their former name. From hence it comes to pass, says Josephus, that Herodotus names none of the kings of Egypt after Minæus the builder of Memphis, though he had 330 kings for his fuccessors, because they had all the name of Pharaoh; but because this name did not pass to women also, he names an Egyptian queen Nicaule who

fucceeded

Pharaoh. fucceeded them. Laftly, I find, adds Josephus, from the ancient records of our nation, that from the age of Solomon no king of Egypt had any longer the name of Pharaoh.

But Josephus is not very accurate in this passage. True it is, Herodotus fays, that Mines, or Minæus, was the first king of Egypt, and founder of Memphis; that there were 330 kings after him in Egypt; that after them there was a queen called Nicotris, and not Nicaule, as Josephus writes it; but it is not true that these kings had no other name but Pharaoh. Herodotus fays expressly, that in the books of the Egyptian priests were read the names and the catalogue of 330 kings; that in this number of 330 there were 18 Ethiopians, and a woman that was a foreigner called Nicotris, and that all the others were Egyptians. These rances therefore had every one his proper name mentioned in the catalogue of the Egyptian kings. So likewise we see in the fragments of Manetho, that every king of Egypt had a name peculiar to him; and we find the name Pharaoh

only in Scripture.

What Josephus adds concerning Queen Nicaule, or Nicotris, whom he pretends to be the same as the queen of Sheba, of whom mention is made in Scripture (I Kings x. I, 2, &c.), is entirely fabulous; and as to what he fays, that fince the time of Solomon the kings of Egypt have no longer had the name of Pharaoh, is manifestly false, since we still find this name in the second book of Kings, under Hezekiah (2 Kings xviii. 21.); under Josiah (xxiii. 29, 30, 33, &c.), where this name is joined to Necho, which was the proper name of this prince; under Jehoiakim (xxiii. 35.); and in the prophets Isaiah, Jeremiah, and Ezekiel, who are much later than Solomon. It is very probable that the Egyptians gave the name of Pharaoh to their kings as long as the Egyptian language was in common use, and as long as their kings were of their own nation: but after the conquest of Egypt by Alexander the Great, and that the Grecians introduced their language with their government, the name of Pharaoh was known no longer among them. The first prince known to us by the name of Pharaoh was he in whose time Abraham went down to Egypt, when Sarah, who passed only for Abraham's fifter, was by the command of Pharaoh brought to his palace in order to become his wife. See ABRAHAM. But the Lord fmote Pharaoh and his family with great infirmities, and gave him to know that she was Abraham's wife; whereupon Pharaoh fent for Abraham, reflored him his wife, and at the same time gave orders that he should be conducted out of Egypt, with every thing that belonged to him. See SARAH.

The fecond Pharaoh spoken of in the Scripture is he who reigned when Joseph arrived there. This prince or his fucceffor had the mysterious dream of the fat and lean kine, and the feven full and barren ears of corn, which Joseph explained so much to his satisfaction, that he made him governor of his house and of all Egypt, referving only to himself the name of a king. This is the fame Pharaoh who fent for and entertained the patriarch Jacob and his family in Egypt, and gave them the land of Goshen for their habitation. See JOSEPH and

The third Pharaoh known in holy writ is he who perfecuted the Ifraelites. Mofes tells us that he was a new king, and had no knowledge of Joseph (Exod. i. 8.). This prince, observing that the Israelites had become

very numerous and powerful, resolved to depress them Pharach. by hardship and labour; and set cruel and pitiless taskmasters over them. But the more he oppressed them, the faster they multiplied; infomuch that he gave orders to the Egyptian midwives, who affifted the Hebrew women in their labour, to put all the male children to death, and to fave alive the females only. But this command was not strictly executed. The midwives feared the Lord, and preserved alive not only the semale children, but the males also.

Pharaoh, feeing this project did not fucceed to his wishes, published a decree (Exod. i. 22.) that all the male children born of Hebrew women should be thrown into the Nile, and that ordy the females should be spared. This order was rigoroufly executed; yet by the providence of God Mofes was preferved, and even brought up in Pharaoh's own court, by his own daughter, who by chance had found the child, as he was exposed upon

Moses being grown up, and having killed an Egyptian who had abused an Hebrew, was obliged to fly from Egypt to avoid that death that Pharaoh had threatened

Several years after, being about 80 years old, he returned again by an order from God, and performed mighty miracles before Pharaoh. See Moses. There is a good deal of probability that this Pharaoh before whom Moses appeared, and in whose fight he smote Egypt with fo many plagues, was a different person from him who would have laid hands on him after he had flain the Egyptian. This same Pharaoh having at last been compelled to fend away the Hebrews, and to fuffer them to go out of Egypt, foon repented of the leave he had given, and purfued them at the head of his army with his chariots. But he was drowned in the Red fea, wherein he had rashly entered in the eagerness of his pursuit. Some historians pretend to give us the name of this Pharaoh; fome, as Appion, call him Amofis or Amasis; Eusebius calls him Chenchris; Usher calls him Amenophis; but we may affure ourselves that there can be nothing certain in all this.

The fifth Pharaoh known to us is he who gave protection to Hadad fon of the king of Edom, who gave him to wife the fifter of his own queen, enriched him with lands, and brought up his fon Genubah in his own court. Hadad returned to Idumea after the death

of David.

The fixth Pharaoh is he who gave his daughter in marriage to Solomon king of the Hebrews (1 Kings iii. 1.); and having taken Gezer, he fet it on fire, drove the Canaanites out of it, and gave it for a present to Solomon, in lieu of a dowry for his daughter, whom he had married to this prince (1 Kings ix. 16.).

The feventh is Shishak, who entertained Jeroboam in his dominions, a rebellious subject of Solomon, and offered him a refuge in opposition to the king his master. The same Shishak declared war against Rehoboam the fon and fucceffor of Solomon, befieged and took Jerufalem, carried away all the king's treasures, and those of the house of God, and particularly the golden bucklers

that Solomon had made. See Shishak.

The eighth is that Pharaoh with whom Hezekiah made a league against Sennacherib king of Assyria, in the year of the world 3290. See SENNACHERIB. This Pharaoh is probably the same whom Herodotus names

Sethon,

Pharaon. Sethon, priest of Vulcan, who came to meet Sennacherib before Pelufium, and to whose affistance Vulcan fent an army of rats, which gnawed the bow-ftrings and the thongs of the bucklers of Sennacherib's foldiers.

The ninth is Pharaoh-Necho, or Nechos, fon of Pfammiticus, who made war with Jofiah, and fubdued him. Herodotus also mentions this prince. See NE-

сно, and Есурт, Nº 11.

The tenth is Pharaoh Hophrah, who entered into an alliance with Zedekiah king of Judah, and attempted to come to his affiftance against Nebuchadnezzar king of Chaldea. It was against this Pharaoh that Ezekiel pronounced several of his prophecies (See Ezek. xxix. xxx. xxxi. xxxii.). He is called Apries in Herodotus, lib. ii. c. 161. He is also mentioned in Habakkuk ii. 15, 16. See also Isaiah xix. xx. and Jeremiah xlvi. 16, &c. See

APRIES, and EGYPT, No 13, &c. PHARAON is the name of a game of chance, the principal rules of which are: the banker holds a pack confisting of 52 cards; he draws all the cards one after the other, and lays them down alternately at his right and left hand; then the ponte may at his pleasure set one or more stakes upon one or more cards, either before the banker has begun to draw the cards, or after he has drawn any number of couples. The banker wins the stake of the ponte when the card of the ponte comes out in an odd place on his right hand, but loses as much to the ponte when it comes out in an even place on his left hand. The banker wins half the ponte's stake when it happens to be twice in one couple. When the card of the ponte being but once in the stock happens to be the last, the ponte neither wins nor loses; and the card of the ponte being but twice in the stock, and the last couple containing his card twice, he then loses his whole stake. De Moivre has shown how to find the gain of the banker in any circumstance of cards remaining in the stock, and of the number of times that the ponte's cards is contained in it. Of this problem he enumerates four cases, viz. when the ponte's card is once, twice, three, or four times in the flock. In the first case, the gain of the banker is $\frac{1}{n}$, n being the number of cards in the flock.

In the fecond case, his gain is $\frac{n-2 \times y}{n \times n-1} + \frac{2}{n \times n-1}$, or $\frac{(n+1)}{n \times n-1}$, fupposing $y=\frac{7}{2}$. In the third case, his

gain is $\frac{3y}{2 \times n-1}$, or $\frac{3}{n \times n-1}$, supposing $y = \frac{7}{2}$. In Pharities the fourth case, the gain of the banker, or the loss of the ponte, is $\frac{2n-5}{n-1 \times n-3}y$, or $\frac{2n-5}{2 \times n-1 \times n-3}$, supposing $\frac{2n-5}{n-1 \times n-3}$, supposing $\frac{2n-5}{2 \times n-1 \times n-3}$.

posing $y=\frac{1}{2}$. De Moivre has calculated a table, exhibiting this gain or loss for any particular circumstance of the play; and he observes, that at this play the least disadvantage of the ponte, under the same circumstances of cards remaining in the stock, is when the card of the ponte is but twice in it, the next greater when three times, the next when once, and the greatest when four times. He has also demonstrated, that the whole gain per cent. of the banker, upon all the money that is ad-

ventured at this game, is 2l. 19s. 10d. See De Moivre's Doctrine of Chances, p. 77, &c. p. 105, &c. PHAREZ, fon of Judah and Tamar (Gen. xxxviii. 27, 28, &c.). Tamar being just ready to lie in, found herself with child of twins. One of them appeared first, and putting his arm out, he immediately drew it back again. The midwife tied a scarlet thread upon his arm, to distinguish him for the first-born: but having withdrawn his hand, his brother got before him into the world: whereupon he was called by his mother Pharez, i. e. one breaking forth; as the other with the thread on his hand was called Zarah. The fons of Pharez were Hezron and Hamul (Numb. xxvi. 20, 21.). F. Calmet, upon this article, explains the text as if Pharez, and not Zarah, had put out his hand, and drew it in again.

PHARISEES, a famous fect of the Jews, who distinguished themselves by their zeal for the traditions of the elders, which they derived from the same fountain with the written word itself; pretending that both were delivered to Moses from Mount Sinai, and were therefore both of equal authority. From their rigorous ob-fervance of these traditions, they looked upon themfelves as more holy than other men; and therefore feparated themselves from those whom they thought sinners or profane, fo as not to eat or drink with them; and hence, from the Hebrew word pharic, which fignifies "to separate", they had the name of Pharifees or Separatists.

This fect was one of the most ancient and considerable among the Jews; but its original is not very well known (A); however, it was in great repute in the time of our Saviour; and must have had its original at the same time with the traditions, and they grew up to-

Ii2 gether,

(A) The Jesuit Serrarius places their first rise about the time of Esdras: because it was then that the Jews first began to have interpreters of their traditions. Maldonat, on the other hand, will not have this fect to have arisen among the Jews till a little before the time of Christ. Others, perhaps, with more probability, refer the origin of the Pharisees to the time of the Maccabees.

Dr Lightfoot thinks, that Pharifaism rose up gradually, from a period which he does not assign, to the maturity of a fect. It is certain, from the account given by Josephus, that in the time of John Hyrcanus, the high priest and prince of the Afmonean line, about 108 years before Christ, the fect was not only formed, but made a considerable figure; and that it had advanced to a high degree of popularity and power about 80 years before Christ. Jos. Ant. lib. xiii. cap. 10. § 5, 6. cap. 15. § 5. and cap. 16. § 1. According to Basnage, Hist. of the Jews, book ii. cap. 9. § 2. one Aristobulus, an Alexandrian Jew, and a Peripatetic philosopher, who flourished about 125 years before Christ, and wrote some allegorical commentaries on the scripture, was the author of those traditions by an adherence to which the Pharifees were principally diffinguished from other sects.

Pharifees, gether, till at length they had gained ground so far, that the traditional law fwallowed up the written, and those who were the propagators of it the whole bulk of the Jewish nation.

The extraordinary pretences of the Pharifees to righteoutness drew after them the common people, who held them in the highest esteem and veneration. Our Saviour frequently, however, charges them with hypocrify, and making the law of God of no effect through their traditions (Matth. ix. 2. xv. 1-6. xxiii. 13-33. and Luke xi. 39-52.). Several of these traditions are particularly mentioned in the gospel; but they had a vast number more, which may be feen in the Talmud, the whole subject whereof is to dictate and explain those traditions which this fect imposed to be believed and obferved.

The Pharifees, contrary to the opinion of the Sadducees, held a refurrection from the dead, and the existence of angels and spirits (Acts xxiii. 8.). But according to Josephus, this resurrection of theirs was no more than a Pythagorean refurrection, that is, of the foul only, by its transmigration into another body, and being born anew with it. From this refurrection they excluded all that were notoriously wicked, being of opinion that the fouls of fuch persons were transmitted into a state of everlasting woe. As to lesser crimes, they held they were punished in the bodies which the fouls of those who committed them were next fent into.

Josephus, however, either mistook the faith of his countrymen, or, which is more probable, wilfully mifrepresented it, to render their opinions more respected by the Roman philosophers, whom he appears to have on every occasion been defirous to please. The Pharifees had many pagan notions respecting the foul; but Bishop Bull, in his Harmonia Apostolica, has clearly proved, that they held a refurrection of the body, and that they supposed a certain bone to remain uncorrupted, to furnish the matter of which the resurrection body was to be formed. They did not, however, believe that all mankind were to be raifed from the dead. A refurrection was the privilege of the children of Abraham alone, who were all to rife on Mount Zion; their incorruptible bones, wherever they might be buried, being carried to that mountain below the furface of the earth. The state of future felicity, in which the Pharifees believed, was very gross: They imagined, that men in the next world, as well as in the present, were to eat and drink, and enjoy the pleasures of love, each being reunited to his former wife. Hence the Sadducee, who believed in no refurrection, and suppofed our Saviour to teach it as a Pharifee, very shrewdly urged the difficulty of disposing of the woman who had in this world been the wife of feven husbands. Had the refurrection of Christianity been the Pharifaical refurrection, this difficulty would have been infurmountable; and accordingly we find the people, and even some of the Pharisees themselves, struck with the manner in which our Saviour removed it.

This fect feems to have had some confused notions, probably derived from the Chaldeans and Perfians, respecting the pre-existence of souls; and hence it was that Christ's disciples asked him concerning the blind man (John ix. 2.), 'Who did fin, this man or his parents, that he was born blind?' And when the disciples told Christ, that some said he was Elias, Jeremias, or

one of the prophets (Mat. xvi. 14.), the meaning can Pharmaca only be, that they thought he was come into the world with the foul of Elias, Jeremias, or fome other of the old prophets, transmigrated into him. With the Esfenes, they held absolute predeilination; and with the Sadducees free-will: but how they reconciled these feemingly incompatible doctrines is nowhere fufficiently explained. The fect of the Pharifees was not extinguished by the ruin of the Jewish commonwealth. The greatest part of the modern Jews are still of this feet; being as much devoted to traditions or the oral law as their ancestors were. See the articles CABBALISTS, CA-RAITES, ESSENES, SADDUCEES, &c.

PHARMACA, among the ancients, meant medicated or enchanted compositions of herbs, minerals, &c. some of which, when taken inwardly, were supposed to cause blindness, madness, love, &c.: others infected by touch; fuch was the garment fent by Medea to Creusa, prepared fecundum artem: and others operated upon perfons at a distance. Pharmaca soteria were employed as antidotes against these mischievous compositions: Thus the herb moly preserved Ulysses from the magical influence of Circe. The laurel, the rhamnus, the flea-bane, the jasper-stone, were used for similar purposes. Sce

Potter's Græc. Ant.

PHARMACI, were two perfons who were employed in the lustration or purification of cities. Some fay they were both men; but others maintain, that a man to represent the males, and a woman to represent the females, performed this office. They performed facrifice, and wore figs about their necks called onzades, those of the man were blackish, and those of the woman white. Figs were an emblem of fertility, which they doubtless prayed for on these solemn occasions.

PHARMACEUTICAL, any thing connected with pharmacy, or the operations or processes employed in the

preparation of medicines.

PHARMACOCHEMIA, an old term denoting that part of the chemical art which treats of the preparation of medicines; by way of distinction from that chemistry which is wholly employed about the transmutation of metals by means of the philosopher's stone; this being called *spagirico-chemia*.

PHARMACOLOGY, is a treatife of medicines, or

the art of preparing them, judging of them, &c.

PHARMACOPOEIA (from quequaxer remedy, and moisir to make), means a dispensatory, or a treatise defcribing the preparations of the feveral kinds of medicines, with their uses, manner of application, &c.

We have various pharmacopæias, as those of Bauderon, Quercetan, Zwelfer, Charas, Bates, Salmon, Lemery, Lewis, &c. But the Edinburgh, London, and Dublin pharmacopæias, are chiefly confulted and

followed in Britain in the prefent day.

PHARMACOPOLA, or PHARMACOPEIUS, an apothecary, or a person who prepares and sells medicines; but this word is rarely used but in the way of ridicule. It is composed of paguanov, medicine, and moder, to sell. Hor. Sat. ii. lib. i. ver. 1.

PHARMACUM, Quepunnov, a medicine or medicament, either of a falutary or deleterious quality.

PHARMACY, the art of preparing, preserving, and compounding medicines. See MATERIA MEDICA. See also Prescriptions, Extemporaneous.

PHAROS, (Homer, Strabo, &c.), a small oblong island. Pharos island, adjoining to the continent of Egypt, over-against Alexandria. On this island stood a cognominal lighttower, of four fides, each fide a stadium in length; and the tower fo high as to be feen 100 miles off. Some affirm, each of its four corners rested on a large sea-crab of glass or of hard transparent stone of Ethiopia or Memphis. Others imagine the crabs were only added externally to the base by way of ornament, or as emblematical of its fituation and use. The architect was Sostrates the Cnidian, as appears by an infcription on the tower, under Ptolemy Philadelphus, who laid out 800 talents upon it. On account of the port of Alexandria, the entrance to which was difficult and dangerous, the Pharos was called the key of the Egyptian sea, or even of Egypt itself (Lucan): and Pharos, from being a proper name, became an appellative to denote all light-

PHAROS, or Phare, a light-house; a pile raised near a port, where fire is kept burning in the night, to guide and direct vessels near at hand. The pharos of Alexandria, built in the island of Pharos, at the mouth of the Nile, was anciently very famous, infomuch as to communicate its name to all the rest. This most magnificent tower confifted of feveral stories and galleries, with a lantern at top, in which a light being continually burning, might be feen for many leagues at fea, and along the coast. It was accounted one of the seven wonders of the world. It was built by the famed architect Sostrates, a native of Cnidos, or, according to some, by Deiphanes, the father of Sostrates; and cost Ptolemy Philadelphus 800 talents. The several stories were adorned with columns, ballustrades, galleries of the finest marble and workmanship; to which some add, that the architect had contrived to fasten some looking-glasses so artificially against the highest galleries, that one could fee in them all the ships that failed on the sea for a great way. Instead of which noble structure, one sees now only a kind of irregular castle, without ditches or outworks of any strength, the whole being accommodated to the inequality of the ground on which it stands, and which it seems is no higher than that which it should command. Out of the midst of this clumfy building rifes a tower, which ferves for a light-house, but which hath nothing of the beauty and grandeur of the old one. The Colossus of Rhodes also served as a pharos.

PHARPAR, or PHARPHAR, is one of the rivers of Damascus, or rather it is an arm of the Barrady or Chryforrhoas, which waters the city of Damascus and the country about it (2 Kings v. 12.). " Are not Abana and Pharpar, rivers of Damascus, better than all the waters of Israel?" The river of Damascus has its fountain in the mountains of Libanus. At its approach to the city it is divided into three arms, one of which passes through Damascus. The other two water the gardens round about, and then reuniting, they lose themselves at four or five leagues from the city, towards the north. See Maundrell's Travels from Aleppo to Jerusalem; see also the articles ABANA and DA-

PHARSALIA, PHARSALIUM, Pharfalus, or Pharfalos, in Ancient Geography, a town of the Phthiotis, a district of Thessaly, near Pheræ and Larissa, to which last place Pompey sled from the plains of Pharsalus; watered by the river Enipeus, which falls into the Api-

danus, and both together into the Peneus. Between Pharfalia. Pharfalus and Enipeus, Pompey drew up his men at the fatal battle of Pharfalia.

In this battle, the advantage with respect to numbers was greatly on the fide of Pompey. That general himself was on the left with the two legions which Cæfar had returned to him at the beginning of the war. Scipio, Pompey's father in-law, was in the centre, with the legions he had brought from Syria, and the reinforcements fent by several kings and states of Asia. The Cilician legion, and fome cohorts which had ferved in Spain, were in the right, under the command of Afranius. As Pompey's right wing was covered by the Enipeus, he strengthened the left with his slingers, archers, and the 7000 Roman horse, on whom chiefly his party founded their hopes of victory. The whole army was drawn up in three lines, with very little spaces between them. In conformity to this disposition, Cæsar's army was drawn up in the following order: The tenth legion, which had on all occasions fignalized itself above all the rest, was placed in the right wing, and the ninth in the left; but as the latter had been confiderably weakened in the action at Dyrrhachium, the eighth legion was posted so near as to be able to support and reinforce it upon occasion. The rest of Cæfar's forces filled up the space between the two wings. Marc Antony commanded the left wing, Sylla the right, and Cneius Domitius Calvinus the main body. As for Cæsar, he posted himself in the right overagainst Pompey, that he might have him always in his

Thus was the whole plain covered, from Pharfalia to the Enipeus, with two armies, dreffed and armed after the same manner, and bearing the same ensigns, the Roman eagles. Pompey observing how well the enemy kept their ranks, expecting quietly the fignal of battle, and on the contrary how impatient and unfleady his own men were, running up and down in great disorder for want of experience, he began to be afraid lest his ranks should be broken upon the first onset; and therefore commanded the foot in the front to keep their ground, and quietly wait for the enemy. The two armies, though within reach of each other, kept a mournful filence; but at length the trumpets founded the charge, and Cæfar's army advanced in good order to begin the attack, being encouraged by the example of one Caius Crastinus, a centurion, who at the head of 120 men, threw himself upon the enemy's first line with incredible fury. This he did to acquit himself of a promise he had solemnly made to Cæfar, who, meeting him as he was going out of his tent in the morning, asked him, after some discourse, What his opinion was touching the event of the battle? To which he, stretching out his hand, replied aloud, Thine is the victory, Cæsar; thou shalt gloriously conquer, and I myself this day will be the subject of thy praise either dead or alive. In pursuance of this promise he broke out of his rank as foon as the trumpet founded; and, at the head of his company, ran in upon the enemy, and made a great flaughter of them. But while he was fill pressing forward, forcing his way through the first line, one of Pompey's men ran him in at the mouth with such violence, that the point of his sword came out at the hind part of his neck. Upon his death Pompey's foldiers took courage, and with great bravery flood the enemy's onfet. While the foot were thus Pharfaia. Tharply engaged in the centre, Pompey's horse in the left wing marched up confidently; and having first widened their ranks, with a defign to furround Cæfar's right wing, charged his cavalry, and forced them to give ground. Hereupon Cæfar ordered his horse to retreat a little, and give way to the fix cohorts, which he had posted in the rear as a body of reserve. These, upon a fignal given, coming up, charged the enemy's horse with that resolution and good order which is peculiar to men who have spent all their lives in camps. They remembered their inftructions, not firiking at the legs or thighs of the enemy, but aiming only at their faces. This unexpected and new manner of fighting had the defired effect. For the young patricians, whom Cæfar contemptuously calls the pretty young dancers, not being able to bear the thoughts of having their faces deformed with scars, turned their backs, and, covering their faces with their hands, fled in the utmost confulion, leaving the foot at the mercy of the enemy. Cæfar's men did not pursue the fugitives; but charging the foot of that wing, now naked and unguarded, furrounded them, and cut most of them in pieces.

> Pompey was fo transported with rage, in feeing the flower of his forces thus put to flight or cut in pieces, that he left his army, and retired flowly towards his camp, looking more like a man diffracted and befide himfelf than one who by his exploits had acquired the name of the Great. When he had reached the camp, he retired to his tent without speaking a word to any; and continued there, like one distracted and out of his fenses, till his whole army was defeated. Cæsar no sooner saw himself master of the field than he marched to attack the enemy's entrenchments, that Pompey might not have time to recollect himself. When Pompey was informed that his rival was advancing to attack his entrenchments, he then first seemed to have recovered his fenses, and cried out, What, into my camp too! He faid no more; but immediately laying afide the marks of his dignity, and putting on fuch a garment as might best favour his slight, he stole out at the decuman gate, and took the road to Lariffa, which city had hitherto shown great attachment to him. In the mean time Cæfar began the attack on the enemy's camp, which was vigorously defended by the cohorts Pompey had left to guard it; but they were at length forced to yield. Cæfar was not a little furprifed, when, after having forced the entrenchments, he found the enemy's tents and pavilions richly adorned with carpets and hangings, their couches firewed with flowers, their tables ready spread, and fideboards fet out with abundance of plate, bowls, and glaffes, and fome of them even filled with wine. So great was the confidence of Pompey's party, that they made preparations beforehand for pleasures to be enjoyed after the victory, which they thought certain. In Pompey's tent, Cæsar found the box in which he kept his letters: but, with a mcderation and magnanimity worthy of himself, he burnt them all, without reading one; faying, that he had rather be ignorant of crimes, than obliged to punish

The next day, when the dead were numbered, it appeared that Cæfar had scarce lost 200 men; among whom was about 30 centurions, whom Cæfar caused to be buried with great folemnity. He did particular honours to the body of Crastinus, who had begun the Pharfalia. battle; and ordered his ashes to be deposited in a tomb, which he erected to his memory. On Pompey's fide, the number of the dead amounted to 15,000 according to some, and to 25,000 according to others. Cæfar took 24,000 prisoners, eight eagles, and 180 en-

PHARSALIA, an epic poem, composed by Lucan on the civil war between Pompey and Cæfar, and particularly on the victory of the latter over the former of which we have given an account in the preceding article. It is a poem univerfally acknowledged to have great beauties and great defects; but we are the less capable of estimating its merit as a whole, that either time has deprived us of the last books, or its author has lest it incomplete. "The subject of the Pharsalia Blair's (fays an excellent critic) carries undoubtedly all the Lectures. epic grandeur and dignity: neither does it want unity of object, viz. the triumph of Casar over the Roman liberty. In the choice of that subject, he thinks, however, that the author was not happy. The civil wars were too recent to admit in the description of them the embellishments of fiction and machinery. The fables of the gods mixed with the exploits of Cæfar and Pompey, instead of raising, would have diminished, the dignity of such well known facts." Another objection to the subject, perhaps more forcible than this, arises from the success of the war and the abilities of the generals. Lucan was a friend to liberty, and wished to raise the character of Pompey and Cato; but in spite of his utmost efforts, they are always eclipsed by the superior talents and confequent fuccess of Cæsar. All his characters, however, are drawn with spirit, and with uncommon regard to truth; and fome of the speeches which he puts into the mouths of his heroes are equal for moral fublimity to any thing that is to be found in all an-

"There are in the Pharfalia (continues the critic already quoted) several very poetical and spirited descriptions. But the author's chief strength does not lie either in narration or description. His narration is often dry and harsh; his descriptions are often overwrought, and employed too upon difagreeable objects. His principal merit confifts in his fentiments, which are generally noble and firiking, and expressed in that glowing and ardent manner which peculiarly diftinguishes him. Lucan is the most philosophical and the most public-spirited poet of all antiquity. He was the nephew of the famous Seneca the philosopher; was himself a Stoic; and the spirit of that philosophy breathes throughout his poem. We must observe, too, that he is the only ancient epic poet whom the subject of his poem really and deeply interested. Lucan recounted no fiction. He was a Roman, and had felt all the direful effects of the Roman civil wars, and of that fevere despotism which succeeded the loss of liberty. His high and bold spirit made him enter deeply into this subject, and kindle, on many occasions, into the most real warmth. Hence, he abounds in exclamations and apostrophes, which are almost always well-timed, and supported with a vivacity and fire that do him no small

"But it is the fate of this poet, that his beauties can never be mentioned, without their suggesting his blemishes also. As his principal excellency is a lively and

Roman

Empire.

glowing genius, which appears sometimes in his descriptions, and very often in his fentiments, his great defect in both is want of moderation. He carries every thing to an extreme. He knows not where to stop. From an effort to aggrandize his objects, he becomes tumid and unnatural: and it frequently happens, that where the second line of one of his descriptions is sublime, the third, in which he meant to rife still higher, is perfeetly bombast. Lucan lived in an age when the schools of the declaimers had begun to corrupt the eloquence and taste of Rome. He was not free from the infection; and too often, instead of showing the genius of the poet, betrays the spirit of the declaimer; but he is, on the whole, an author of lively and original

PHARUS, a genus of plants belonging to the monœcia class; and in the natural method ranking under the fourth order, Gramina. See BOTANY Index.

PHARYNX, fee Anatomy, No 92.

PHASCUM, a genus of plants of the order of musci, belonging to the cryptogamia class. See BOTANY

PHASEOLUS, the Kidney-Bean; a genus of plants, belonging to the diadelphia class. See BOTANY

PHASES, in Astronomy, from the Greek word Police, "to appear;" the feveral appearances or quantities of illumination of the moon, Venus, Mercury, and. the other planets. See ASTRONOMY.

PHASGA, or PISGAH, (Moses), a mountain on the other fide Jordan, joined to Abarim and Nebo, and running fouth to the mouth of the Arnon: from which Moses had a view of the promised land, and where he died, having before appointed Joshua his successor. Wells takes Pifgah and Nebo to be different names of one and the same mountain, a part or branch of the mountains Abarim, (Deut. xxxii. 49. compared with Deut. .xxxiv. 1.). Or that the top of Nebo was peculiarly called Pilgah; or some other part of it, cut out in steps, as the primitive word denotes: and thus it is rendered by Aquila, by a Greek word fignifying cut out (Jerome). There was also a city of this name, id.; and the adjoining country was in like manner called Pifgah, id.

PHASIANUS, a genus of birds belonging to the order of gallinæ. See ORNITHOLOGY Index.

PHASIS, a river which falls into the Euxine fea about 700 miles from Conftantinople. " From the Decline and Iberian Caucasus (fays Gibbon), the most lofty and Fall of the craggy mountains of Asia, that river descends with fuch oblique vehemence, that in a short space it is traverfed by 120 bridges. Nor does the stream become placid and navigable till it reaches the town of Sarapana, five days journey from the Cyrus, which flows from the same hills, but in a contrary direction, to the Caspian lake. The proximity of these rivers has fuggested the practice, or at least the idea, of wafting the precious merchandise of India down the Oxus, over the Caspian, up the Cyrus, and with the current of the Phasis into the Euxine and Mediterranean feas. As it successively collects the streams of the plain of Colchos, the Phasis moves with diminished speed, though accumulated weight. At the mouth it is 60 fathoms deep, and half a league broad; but a fmall woody island is interposed in the midst of the channel: the

water, fo foon as it has deposited an earthy or metallic Phasmata fediment, floats on the furface of the waves, and is no longer susceptible of corruption. In a course of 100, miles, 40 of which are navigable for large velicls, the Phasis divides the celebrated region of Colchos or Mingrelia, which, on three fides, is fortified by the Iberian and Armenian mountains, and whose maritime coast extends about 200 miles, from the neighbourhood of Trebizond to Dioscurias and the confines of Circaffia. Both the foil and climate are relaxed by excessive moilture: 28 rivers, besides the Phasis and his dependent streams, convey their waters to the sea; and the hollownefs of the ground appears to indicate the fubterraneous channels between the Euxine and the Caspian."

PHASMATA, in Physiology, certain appearances arising from the various shades of colour in the clouds by the light from the heavenly bodies, especially the sun and moon. These are infinitely diversified by the different figures and fituations of the clouds, and the appulses of the rays of light; and, together with the occafional flashings and shootings of different meteors, they have, no doubt, occasioned those prodigies of armies fighting in the air, &c. of which we have fuch frequent accounts in many writers. See 2 Maccab. xi. 8. Melancth. Meteor. 2. Shel. de Comet. ann.

Kircher and Schottus have erroneously attempted toexplain the phenomenon from the reflection of terrestrial objects made on opake and congcaled clouds in the middle region of the air, which, according to them, have the effect of a mirror. Thus, according to those authors, the armies pretended by feveral historians to have been feen in the fkies, were no other than the reflection of the like armies placed on some part of the earth. See Hift. Acad. Roy. Scienc. ann. 1726, p. 405,

et seq.
PHEASANT. See PRASIANUS, ORNITHOLOGY

Index.

PHEASANT's-eye, or Bird's-eye. See ADONIS, Box TANY Index.

PHEBE, a deaconess of the port of Corinth, called Cenchrea. St Paul had a particular esteem for this holy woman; and Theodoret thinks the apostle lodged at her house for some time, while he continued in or near Corinth. It is thought she brought to Rome the epiftle he wrote to the Romans, wherein she is commended and recommended in so advantageous a manner. He fays (Rom. xvi. 1, 2.), "I commend unto you Phebe our fifter, which is a fervant of the church which is at Cenchrea: that ye receive her in the Lord, as becometh faints, and that ye affift her in whatfoever business she hath need of you; for she hath been a succourer of many, and of myfelf alfo." Some moderns have advanced a notion, that Phebe was wife to St Paul; but none of the ancients have faid any thing like it. It is thought, in quality of deaconess, she was employed by the church in some ministrations suitable to her sex and condition; as to visit and instruct the Christian women, to attend them in their fickness, and distribute alms

PHEGOR, or PEOR, a deity worshipped at a very early period by the Midianites and Moabites, and probably by all the other tribes which then inhabited Syria. Much has been faid concerning the functions of this god, and the rank which he held among the PaPheons.

Phellandri-gan divinities (fee BAAL-Peor); and many conjectures have been formed concerning the origin of his name. Most of these seem to have no better foundation than the fenfeless dreams of the Jewish rabbies. PHEGOR, or PEOR, is undoubtedly the same with the Hebrew word pechor, which fignifies aperuit, and probably refers to the prophetic influence always attributed to the folar deity, by which he opened or discovered things to come. Accordingly we find PHEGOR or PEOR generally joined to Baal, which was the Syrian and Chaldean name of the fun after he became an object of worship; hence Baal-PHEGOR must have been the sun worshipped by some particular rites, or under some particular character. What these were, a resolution of Pechor into its component parts may perhaps inform As this word, wherever it occurs in Scripture, has some relation to distending or opening the mouth wide, it is probably compounded of PHAH the mouth or face, and EHAR naked. In those countries we know that the women wore veils; but it would appear, that in celebrating the rites of this deity they were unveiled. It feems even not improbable, that on these occasions the fexes danced promiscuously without their clothes; a practice which would naturally give birth to the licentious amours mentioned in the 25th chapter of the book of Numbers. If this be admitted, it will follow that Phegor was the fun prefiding over the mysteries

PHELLANDRIUM, WATER-HEMLOCK; a genus of plants belonging to the pentandria class. See BOTANY

of Fosils, P 490.

PHENGITES, among the ancients, the name of a Hill's Hift. beautiful species of alabaster. It is a rude irregular mass, very shattery and friable, but of a brightness superior to that of most other marbles, and excelling them all in transparence. The colour is an agreeable pale, yellowish white, or honey colour; the yellowish is more intense in some places than in others, and fometimes makes an obscure resemblance of veins. It is very weak and brittle in the mass; and when reduced to small pieces, may be easily crumbled between the fingers into loofe, but confiderably large angular pieces, some perfect, others complex, irregular, or mutilated, and all approaching to a flat shape. The ancients were very fond of this species in public buildings; and the temple of Fortune, built entirely of it has long been celebrated. Its great beauty is its transparence, from which alone this temple was perfectly light when the doors were shut, though it was built without a window, and had no other light but what was transmitted through the stone of which the walls were built. It was anciently found in Cappadocia, and is still plentiful there: we have it also in Germany and France, and in our own kingdom in Derbyshire, and some other counties. It takes an excellent polish, and is very fit for ornamental works, where no great strength

PHENICE, a port of the island of Crete, to the west of the island. St Paul having anchored at Phenice, when he was carried to Rome (Acts xxvii. 12.), advised the ship's crew to spend the winter there, because the feason was too far advanced.

PHENICIA. See PHOENICIA.

PHEONS, in Heraldry, the barbed heads of darts, arrows, or other weapons.

PHEOS, in Botany, a name which Theophrastus, Dioscorides, and others, give to a plant used by fullers in dressing their cloths, and of which there were two pherecydes. kinds, a smaller called simply pheos, and a larger called hippopheos. This plant is fometimes called phleos; and is thus confounded with a kind of marsh cudweed, or gnaphalium, called also by that name; but it may always be discovered which of the two plants an author means, by observing the sense in which the word is used, and the use to which the plant was put. The phleos, properly fo called, that is, the cudweed, was used to stuff beds and other fuch things, and to pack up with earthen vessels to prevent their breaking; but the pheos, improperly called phleos, only about cloths: this was, however,

also called sabe and cnaphon.

PHERECRATES, a Greek comic poet, was contemporary with Plato and Aristophanes. After the example of the ancient comedians, who never introduced upon the theatre imaginary but living characters, he acted his contemporaries. But he did not abuse the liberty which at that time prevailed upon the stage; and laid it down as a rule to himself never to destroy the reputation of any person. Twenty-one comedies are attributed to him, of which there now only remain some fragments collected by Hertelius and Grotius. From these fragments, however, it is easy to discern, that Pherecrates wrote the purest Greek, and possessed that ingenious and delicate raillery which is called attic urbanity. He was author of a kind of verse called, from his own name, Pherecratick. The three last feet were in hexameter verse, and the first of those three feet was always a spondee. This verse of Horace (for example, Quamvis pontica pinus) is a Pherecratick verse. We find in Plutarch a fragment of this poet upon the music of the Greeks, which has been critically examined by M. Burette of the academy of inscriptions. See the 15th volume of the collection published by that learned fociety.

PHERECYDES, a native of Scyros, flourished about the year 560 before the Christian era, and was disciple of Pittacus, one of the seven wise men of Greece (fee PITTACUS). He is faid to have been the first of all the philosophers who has written on natural subjects and the effence of the gods. He was also the first, it is faid, who held the ridiculous opinion, "that animals are mere machines." He was Pythagoras's master, who loved him as his own father. This grateful scholar having heard that Pherecydes lay dangerously ill in the island of Delos, immediately repaired thither, in order to give every necessary assistance to the old man, and to take care that no means should be left untried for the recovery of his health. His great age, however, and the violence of his disease, having rendered every prescription ineffectual, his next care was to fee him decently buried; and when he had paid the last duty to his remains, and erected a monument to his memory, he fet out again for Italy. Other causes have been affigued for the death of Pherecydes: some say he was eaten up by lice, and others that he fell headlong from the top of Mount Corycius in his way to Delphos. He lived to the age of 85 years, and was one of the first prose writers among the Greeks.

"Marvellous circumstances have been related of him, Enfield's which only deferve to be mentioned, in order to show History of that what has been deemed supernatural by ignorant Philosophy.

spectators.

Phidias.

Pherecydes speciators may be easily conceived to have happened from natural causes. A ship in full fail was at a distance approaching its harbour; Pherecydes predicted that it would never come into the haven, and it happened accordingly; for a fform arose which funk the vessel. After drinking water from a well, he predicted an earthquake, which happened three days afterwards. It is eafy to suppose that these predictions might have been the refult of a careful observation of those phenomena which commonly precede florms or earthquakes in a climate where they frequently happen.

" It is difficult to give in any degree an accurate account of the doctrines of Pherecydes; both because he delivered them, after the manner of the times, under the concealment of fymbols; and because very few memoirs of this philosopher remain. It is most probable that he taught those opinions concerning the gods and the origin of the world which the ancient Grecian theogonifts borrowed from Egypt;" and of which the reader will find accounts in different articles of this work. See EGYPT, METAPHYSICS, MYSTERIES, MY-

THOLOGY, and POLYTHEISM.

PHERETIMA, was the wife of Battus king of Cyrene, and the mother of Arcefilaus. After her fon's death, the recovered the kingdom by means of Amalis king of Egypt, and to avenge the murder of Arcefilaus, the caufed all his affaffins to be crucified round the walls of Cyrene, and she cut off the breasts of their wives, and hung them up near the bodies of their husbands. It is faid that she was devoured alive by worms; a punishment which, according to some of the ancients, was inflicted by Providence for her unparalleled cruelties.

PHIAL, a well-known veffel made of glass, used for

various purpofes.

Leyden PHIAL, is a phial of glass coated on both sides with tin-foil for a confiderable way up the fides, of great use in electrical experiments. The discovery that electricity may be accumulated in an apparatus of this kind, was originally made in the year 1745 by Mr Von Kleift, dean of the cathedral in Comin. But this remarkable property was first satisfactorily observed at Leyden, with a bottle containing some water which ferved for the infide coating, and the accidental application of the hands on the outfide ferved for another coating. Hence a bottle coated on both fides for the purpole of being charged with electricity, has received the name of Leyden phial, or otherwise electric jar. See ELECTRICITY, passim.

PHIDIAS, the most famous sculptor of antiquity, was an Athenian, and a contemporary of the celebrated Pericles, who flourished in the 83d Olympiad. This wonderful artist was not only consummate in the use of his tools, but accomplished in those sciences and branches of knowledge which belong to his profession, as history, poetry, fable, geometry, optics, &c. He first taught the Greeks to imitate nature perfectly in this way; and all his works were received with admiration. They were also incredibly numerous; for it was almost peculiar to Phidias, that he united the greatoft facility with the greatest perfection. His Nemesis was ranked among his first pieces: it was carved out of a block of marble, which was found in the camp of the Persians after they were defeated in the plains of

Vol. XVI. Part I.

Marathon. He made an excellent statue of Minerva Phidias for the Plateans; but the statue of this goddess in her magnificent temple at Athens, of which there are fill fome ruined remains, was an aftonishing production of human art. Pericles, who had the care of this pompous edifice, gave orders to Phidias, whose prodigious talents he well knew, to make a statue of the goddess; and Phidias formed a figure of ivory and gold 30 feet high. Writers never speak of this illustrious monument of skill without raptures; yet what has rendered the name of the artist immortal, proved at that time his ruin. He had carved upon the shield of the goddess his own portrait and that of Pericles; and this. was, by those that envied them, made a crime in Phidias. He was also charged with embezzling part of the materials which were defigned for the statue. Upon this he withdrew to Elis, and revenged himself up-on the ungrateful Athenians, by making for the Elians the Olympic Jupiter: a prodigy of art, and which was afterwards ranked among the feven wonders of the world. It was of ivory and gold; 60 feet high, and every way proportioned. "The majefty of the work did equal the majesty of the god (fays Quintilian), and its beauty scems to have added lustre to the religion of the country." Phidias concluded his labours with this masterpiece : and the Elians, to do honour to his memory, erected, and appropriated to his descendants, an office,

which confifted in keeping clean this magnificent image.
PHIDITIA, in Grecian antiquity, featis celebrated with great frugality at Sparta. They were held in the public places and in the open air. Rich and poor affilted at them equally, and on the fame footing; their defign being to keep up peace, friendship, good understanding, and equality among the citizens great and fmall. It is faid that those who attended this feast brought each a bushel of flour, eight measures of wine named chorus, five pounds of cheefe, and two pounds and a half of figs, with some money.

PHILA, in Mythology, one of the attributes of Venus, which diftinguishes her as the mother of love, from QIASIP

PHILADELPHIA, in antiquity, were games inflituted at Sardis to celebrate the union of Caracalla

and Geta, the fons of Septimius Severus.

PHILADELPHIA, the capital of the flate of Penfylvania in North America, fituated in W. Long. 75. 8. N. Lat. 39. 57. It is one of the most beautiful and regular cities in the world, being of an oblong form, fituated on the west bank of the river Delaware, on an extensive plain, about 118 miles (some say more) from The length of the city east and west, that is, from the Delaware to the Schuylkill, upon the original plan of Mr Penn, is about three miles, and the breadth. north and fouth, rather less than one mile. Not two fifths of the plot covered by the city charter is yet built. The inhabitants, however, have not confined themselves within the original limits of the city, but have built north and fouth along the Delaware two miles in length. The longest street is Second-street, about 700 feet from Delaware river, and parallel to it. The circumference of that part of the city which is built, if we include Kenfington on the north and Southwark on the fouth, may be about five miles. Market-street is 100 feet wide, and runs the whole length of the city from

Philadel- river to river. Near the middle, it is intersected at right angles by Broad-street, 113 feet wide, running nearly

north and fouth quite across the city.

Between Delaware river and Broad-fireet are 14 Areets, nearly equidiffant, running parallel with Broadflreet across the city; and between Broad-street and the Schuylkill, there are nine streets equidistant from each other. Parallel to Market-street are eight other streets, running east and west from river to river, and interfecting the cross streets at right angles; all these streets are 50 feet wide, except Arch-street, which is 65 feet wide. All the streets which run north and fouth, except Broad-street mentioned above, are 50 feet wide. There were four squares of eight acres each, one at each corner of the city, originally referved for public and common uses. And in the centre of the city, where Broad street and Market street interfect each other, is a square of ten acres, referved in like manner, to be planted with rows of trees for public walks. This city was founded in 1682 by the celebrated William Penn, who in October 1701 granted a charter incorporating the town with city privileges. In 1749 the dwelling-houses were computed, and found to be 2076; in 1794, they amounted to 9000. They are in general handsomely built of brick; and contain 55,000 inhabitants, composed of almost all nations and religions. Their places for religious worship are as follows: The Friends or Quakers have five, the Presbyterians fix, the Episcopalians three, the German Lutherans two, the German Calvinists one, the Catholics three, the Swedish Lutherans one, the Moravians one, the Baptists one, the Universal Baptists one, the Methodifts two, the Jews one.

The other public buildings in the city, befides the univerfity, academies, &c. are the following, viz. a stateitouse and offices, a city court-house, a county courthouse, a carpenter's hall, a philosophical society's hall, a dispensary, an hospital and offices, an alms-house, a house of correction, a public factory of linen, cotton, and woollen, a public observatory, three brick market

houses, a fish-market, a public gaol.

In Philadelphia there are 304 squares, and about 34 ftreets, many of which are very broad, and all of them neat and elegant, lighted by 662 lamps of two branches each, and confuming annually about 9000 gallons of oil. Here is a library which owed its origin to Dr Franklin, was incorporated in 1742, and now contains upwards of 12,000 volumes, befides a muleum and a valuable philosophical apparatus. There is a new theatre in Chesnut-street, which was finished in 1793. The univerfity stands on the west side of Fourth-street, and was incorporated in the year 1791, the funds of which produce annually a revenue of about 23651. and the students on an average amount to 510, 25 of whom are annually admitted to degrees. In the city and fuburbs are 10 rope-walks, 13 breweries, 6 fugar-houses, 7 hair-powder manufactories, 2 rum distilleries, 15 manufactories of earthen ware, and the public mint for the whole United States. In the year 1791, the value of the exports amounted to 3,436,092 dollars, and in 1795, to 11,518,260. From August 1792 to the same month in 1793, the births amounted to 2511, and the deaths to 1497, which added to the population rather more than a thousand. There were 8060 debtors and criminals confined in the gaol from September

28th, 1780, to September 5. 1790, of which vast num- Philadelber only twelve died a natural death; than which no- phia. thing can be a more honourable proof the great hu-

manity with which prisoners are there treated.

The univerfity of Philadelphia was founded during the war. Its funds were partly given by the state, and partly taken from the old college of Philadelphia. A medical school, which was founded in 1765, is attached to the university; and has professors in all the branches of medicine, who prepare the students (whose number yearly is 50 or 60) for degrees in that science. Besides the univerfity and medical school, there is the Protestant Episcopal academy, a very hourishing institution; the academy for young ladies; another for the Friends or Quakers, and one for the Germans, besides five free fchools.

In Market-street, between Front and Fourth-streets, is the principal market, built of brick, and is 1500 feet in length. This market, in respect to the quantity, the variety, and neatness of the provisions, is not equalled in America, and perhaps not exceeded in the

The Philadelphians are not fo focial, nor perhaps fo hospitable, as the people in Boston, Charlestown, and New York. Various causes have contributed to this difference: among which the most operative has been the prevalence of party-spirit, which has been and is carried to greater lengths in this city than in any other in America; yet no city can boast of so many useful improvements in manufactures, in the mechanical arts, in the art of healing, and particularly in the science of humanity. In thort, whether we confider the convenient local fituation, the fize, the beauty, the variety and utility of the improvements, in mechanics, in agriculture, and manufactures, or the industry, the enterprise, the humanity, and the abilities, of the inhabitants of the city of Philadelphia, it merits to be viewed as the capital not only of the province, but of the flourishing empire of United America.

Several canals are let into the town, which add much to the beauty and convenience of the place. Its quay is 200 feet quare, to which ships of 400 or 500 tons may come up, and lay their broadfides close to it; with wet and dry docks for building and repairing ships, besides magazines, warehouses, and all other conveniences for exporting and importing merchandize. Scarce any thing can appear more beautiful than the city and the adjacent country, which for some miles may be compared to a fine and flourishing garden.

Though all our readers must unquestionably have heard of the malignant fever known by the name of yellow fever, which some years raged in Philadelphia, it will not, we trust, be thought improper if we give a fhort account of that dreadful malady in this place. This account we shall extract from a pamphlet written

by Mr Carey.

Of this fever, then, it is observed, that, generally speaking, the mortality was not so great among women as among men, but that corpulent, high-fed, and drunken men, common prostitutes, and such of the poor as had been debilitated through the want of fufficient nourishment, and lived in dirty and confined habitations, became an easy prey to it; whilst those who refided in the fuburbs, enjoying the benefit of country air, were little affected by it. A fingular fact is, that the

French

Philadel- French refiding in Philadelphia were in a remarkable degree exempt from it; a circumstance which cannot be accounted for. The report which prevailed here of the Africans having wholiy escaped the disease, proves to be not altogether true, feveral of them having been feized. The fever, however, was found to yield more readily to medicine in them than in white perfons.

We find the following account of the nature and fymptoms of the disease, as described by Dr Currie, in the third edition of the pamphlet already mentioned. "The fymptoms which characterised the first stage of the fever were, in the greatest number of cases, after a chilly fit of some duration, a quick tense pulse; hot Ikin; pain in the head, back, and limbs; flushed countenance; inflamed eye, moist tongue; oppression and fense of foreness at the stomach, especially upon pressure; frequent fick qualms, and retchings to vomit, without discharging any thing, except the contents last taken into the stomach; costiveness. &c. And when stools were procured, the first generally showed a defect of bile, or an obstruction to its entrance into the intestines. But brisk purges generally altered this ap-

" These symptoms generally continued with more or less violence from one to three, four, or even five days; and then gradually abating, left the patient free from every complaint, except general debility. On the fe-brile fymptoms fuddenly fubfiding, they were immediately fucceeded by a yellow tinge in the opaque cornea, or whites of the eyes; an increased oppression at the præcordia, a constant puking of every thing taken into the stomach, with much straining, accompanied with a

hoarfe hollow noife.

" If these symptoms were not soon relieved, a vomiting of matter resembling coffee-grounds in colour and confiftence, commonly called the black vomit, fometimes accompanied with or fucceeded by hemorrhagies from the nofe, fauces, gums, and other parts of the body; a yellowish purple colour, and putrescent appearance of the whole body, hiccup, agitations, deep and diffressed fighing, comatofe delirium, and finally death, are the confequence. When the difease proved fatal, it was generally between the fifth and eighth days.

"This was the most usual progress of this formidable disease through its several stages. There were, however, very confiderable variations in the fymptoms as well as in the duration of its different stages, according to the conflitution and temperament of the patient, the state of the weather, the manner of treatment, &c.

" In some cases, figns of putrescency appeared at the beginning or before the end of the third day. In thefe. the black vomiting, which was generally a mortal fymptom, and universal yellowness, appeared early. these cases, also, a low delirium, and great prostration of strength, were constant symptoms, and coma came on

very speedily.

" In fome, the fymptoms inclined more to the nervous than the inflammatory type. In these, the jaundice colour of the eye and skin, and the black vomiting, were more rare. But in the majority of cases, particularly after the nights became fenfibly cooler, all the fymptoms indicated violent irritation and inflammatory diathefis. In these cases, the skin was always dry, and the remissions very obscure.

" The febrile fymptoms, however, as has been al-

ready observed, either gave way on the third, fourth, Philadelor fifth day, and then the patient recovered; or they, were foon after succeeded by a different but much more dangerous train of fymptoms, by debility, low pulse, cold tkin (which affumed a tawny colour, mixed with purple), black vomiting, hemorrhagies, hiccup, anxiety, reftleffnefs, coma, &c. Many who furvived the eighth day, though apparently out of danger, died fuddenly in confequence of a hemorrhagy."

Purging the patient with calomel and jalap appears to have proved the most successful treatment; and the repeated use of the lancet, in cases where no symptoms of putridity existed. Dr Griffiths, who had been seized with the difease, "was bled seven times in five days, and ascribes his recovery principally to that operation." Dr Maese also, " in five days, lost 72 ounces of blood, by which he was recovered when at the lowest stage of the diforder." It was generally remarked that an obftinate costiveness took place at the commencement of the disease; and when this was removed, by purgatives, within the first twelve hours, the patient seldom failed to do well.

The work concludes with a lift of the committee for the relief of the fick, of which our author was a member: also the names of a large number of the inhabitants who were cut off, a feries of meteorological tables, and a general account of burials during the prevalence of this fatal complaint. From the latter we extract the following account:

" August 325 " September " October 1993 " November 118 Jews, returned in gross " Baptists, do. 60 " Methodists, 32 Free Quakers, do. 39 " German part of St Mary's congregation 30

Total 4042"

It is not difficult to conceive the general diffress which fuch an evil must have occasioned to persons of every rank and description. Some of the most striking inflances our author has related in very affecting terms; but no picture of human calamity perhaps ever exceeded the following: " A fervant girl belonging to a family in this city, in which the fever had prevailed, was apprehensive of danger, and resolved to remove to a relation's house in the country. She was, however, taken fick on the road, and returned to town, where she could find no person to receive her. One of the guardians of the poor provided a cart, and took her to the alms-house, into which she was refused admittance. She was brought back, and the guardian offered five dollars to procure her a fingle night's lodging, but in vain. And in fine, after every effort made to provide her shelter, she absolutely expired in the cart."

We cannot difmifs the prefent article, though it has already extended to a fufficient length, without giving our readers an account of a very extraordinary people who live within 50 miles of Philadelphia; where there is a little town or colony, particularly remarkable on account of its origin and the manners of the people by whom it is inhabited. It was founded by a German, Kk2

Philadel- who, weary of the world, returned into the country , that he might be more at liberty to give himself up to contemplation. Curiofity brought feveral of his countrymen to visit his retreat; and by degrees his pious, simple, and peaceable manners, induced them to fettle near him; when they all formed a little colony, which they called Euphrates, in allusion to the Hebrews, who used to sing plalms on the borders of that river.

This little town forms a triangle, the outfides of which are bordered with mulberry and apple trees planted with great regularity; and its inhabitants, we know not for what reason, are called Dumplers. In the middle of the town is a very large orchard, and between the orchard and those ranges of trees are houses built of wood, three stories high, where every Dumpler is left to enjoy the pleasures of his meditation without disturbance. These contemplative men do not amount to above 500; and the extent of their territory is about 250 acres, bounded by a river, a piece of stagnated water, and a mountain covered with trees.

The men and women live in separate quarters of the town, and never fee each other but at places of worship; for among the Dumplers there are no affemblies of any kind but for public bufiness. Their lives are spent in

labour, prayer and fleep. Twice every day and night they are called forth from their cells to attend divine fervice. Like the Methodists and Quakers, every individual among them has the right of preaching when he thinks himself inspired. The favourite subjects on which they discourse in their assemblies, are humility, temperance, chastity, and the other Christian virtues. They never violate that day of repose which all orders of men, whether idle or luxurious, much delight in. They admit a hell and a paradife; but reject the eternity of future punishments. They abhor the doctrine of original fin as an impious blasphemy; and, in general, every tenet that is fevere to men appears to them injurious to the Divinity. As they do not allow merit to any but voluntary works, they administer baptism only to the adult; at the fame time, they think baptism so effentially necessary to falvation, that they imagine the fouls of Christians in another world are employed in converting those who have not died under the law of the Gospel. In this ridiculous opinion we have known Christians of other denominations, and who boasted a

higher antiquity, that agreed with them. Still more difinterested than the Quakers, they never enter into any law-fuit. One may cheat, rob, and abuse them, without being exposed to any retaliation, or even to any complaint from them. On them religion has the same effect that philosophy had upon the Stoics: it makes them infensible to every kind of in-

Nothing can be plainer than their dress. In winter it is a long white gown, from which there hangs a hood, which ferves instead of a hat, a coarse shirt, thick shoes, and very wide breeches. The women are dreffed very much like the men, except that they have no breeches. Their common food confifts wholly of vegetables; not because it is unlawful to eat any other, but because that kind of abstinence is looked upon as more conformable to the spirit of Christianity, which has an aversion from

Each individual follows with checrfulness the branch of bufiness allotted him; and the produce of all their

labours is deposited in a common stock, for the use of Philadelthe whole. This union of industry has not only ofta- phia. blished agriculture, manufactures, and all the arts neccsfary for the support of this little society, but hath also fupplied, for the purposes of exchange, superfluities proportioned to the degree of its population.

Though the two fexes live separate at Euphrates, the Dumplers do not on that account foolishly renounce matrimony; but those who find themselves disposed to it, leave the town, and form an establishment in the country, which is supported at the public expence. They repay this by the produce of their labours, which is all thrown into the public treasury; and their children are fent to be educated in Euphrates, which they confider as their mother-country. - Without this wife privilege, the Dumplers would be no better than monks; and in process of time they would become either favages or libertines. They are at present an innocent, though perhaps deluded, race.

PHILADELPHIA, an ancient town of Turkey in Afia, in Natolia. It is feated at the foot of Mount Tmolus, by the river Cogamus, from whence there is an exceeding fine view over an extensive plain. This place was founded by Attalus Philadelphus, brother of Eumenes.

It was very liable to earthquakes, which, perhaps, arose from its vicinity to the region called Catakekaumene *. So severe were those earthquakes, that even the city walls were not fecure; and fo frequent were they, *Signifyin that these experienced daily concussions. The inhabitants, therefore, who were not numerous, lived in perpetual apprehension, and their constant employment was in repairs. In fact, so great were their fears, that their chief residence was in the country, the soil of which was very fertile. Such is Strabo's account of this place. In the year 1097, it was taken by affault by John Ducas the Greek general. It was without difficulty reduced also in the year 1106, under the same emperor. The Turks marched from the East with a defign to plunder it and the maritime towns. The emperor Manuel, in 1175, retired for protection from the Turks to this place. In 1300 it fell by lot to Karaman. In 1306 it was befieged by Alifaras, and confiderably haraffed; but was not taken. In 1391, this place alone refused to admit Bajazet; but it was at length forced to capitulate for want of provisions. It has been matter of furprife that this town was not totally abandoned; and yet it has furvived many citics less liable to inconveniences, and is still an extensive place, though in its appearance it is poor and mean. Some remnants of its walls are still standing, but with large gaps. The materials of the wall are small stones strongly cemented. It is thick, lofty, and has round towers. Near this place, between the mountains, there is a fpring of a purgative quality; it is much esteemed, and many people refort to it in the hot months. It tastes like ink, is clear, but tinges the earth with the colour of ochre. The famous wall which credulity has afferted to be made of human bones, stands beyond this and beyond the town. See the next article.

When Dr Chandler was there, he tells us, " The bi- * Travels shop of Philadelphia was absent; but the proto-papas in Greece. or chief-prieft, his fubstitute, whom we went to vifit, received us at his palace, a title given to a very indifferent house or rather a cottage of clay. We found him

ignorant

Philadel- ignorant of the Greek tongue, and were forced to difcourse with him by an interpreter in the Turkish language. He had no idea that Philadelphia existed before Christianity, but told us it had become a city in consequence of the many religious foundations. The number of churches he reckoned at 24, mostly in ruins, and mere mailes of wall decorated with painted faints. Only fix are in a better condition, and have their priests. The episcopal church is large, and ornamented with gilding, carving, and holy portraits. The Greeks are about 300 families, and live in a friendly intercourse with the Turks, of whom they speak well. We were affured that the clergy and laity in general knew as little of Greek as the proto-papas; and yet the liturgies and offices of the church are read as elsewhere, and have undergone no alteration on that ac-

"The Philadelphians are a civil people. One of the Greeks fent us a small earthen vessel full of choice wine. Some families beneath the trees, by a rill of water, invited us to alight, and partake of their refreshments. They faluted us when we met; and the aga or governor, on hearing that we were Franks, bade us welcome

by a messenger.

" Philadelphia possessing waters excellent in dyeing, and being fituated on one of the most capital roads to Smyrna, is much frequented, especially by Armenian merchants. The Greeks still call this place by its ancient name, but the Turks call it Allahijur. The number of inhabitants is about 7000 or 8000; of whom 2000 are supposed to be Christians. It is about 40 miles E. S. E. of Smyrna. E. Long. 28. 15. N.

Lat. 38. 28.

PHILADELPHIA-Stones, a name which fome authors have given to what is otherwise called Christian bones, found in the walls of that city. It is a vulgar error that these walls are built of bones; and the tradition of the country is, that when the Turks took the place, they fortified it for themselves, and built their walls of the bones of the Christians whom they had killed there. Dr Smyth in one of his epistles, mentions this wall as an instance of Turkish barbarity. This idle opinion has gained credit merely from a loofe and porous flone of the sparry kind, found in an old aqueduct, which is still in the wall. Sir Paul Rycaut brought home pieces of these stones, which even he supposed to have been bones, but they proved on examination to be various bodies, chiefly vegetable, incrusted over and preserved in a foar of the nature of that which forms incrustations in Knaresborough spring, and other places with us. These bodies are often cemented together in considerable numbers by this matter, and their true shape lost in the congeries, till a diligent and judicious eye traces them regularly.

PHILADELPHIAN Society, in ecclefiastical history, an obscure and inconsiderable society of mystics. They were formed about the end of the last century by an English semale sanatic, whose name was Jane Leadley, This woman, feduced by her visions, predictions, and doctrines, feveral disciples, among whom were persons of learning. She believed that all diffensions among Christians would cease, and the kingdom of the Redeemer become a scene of charity and felicity, if Christians, difregarding the forms of doctrine or discipline of their feveral communions, would all join in commit-

ting their fouls to the care of the internal guide, to be Philadelinstructed, governed, and formed, by his divine impulse and fuggestions. But she went farther than this: she even pretended a divine commission to proclaim the approach of this glorious communion of faints; and was convinced that the fociety established by herfelf was the true kingdom of Christ. One of her leading doctrines was, that of the final restoration of all intelligent beings to perfection and happiness.

PHILADELPHUS, in Antiquity, was a title or furname borne by feveral ancient kings; formed from the Gree φιλος, " friend, lover," and αδελφος, " brother;" q. d. one who loves his brother or brethren. See

PTOLEMY and EGYPT.

PHILADELPHUS, the PIPE-TREE, or Mock-orange; a genus of plants belonging to the icofandria class. See

BOTANY Index.

The coronarius, white fyringa, or mock-orange, has been long cultivated in the gardens of this country as a flowering shrub; it is not well known in what-country it is to be found native. It rifes feven or eight feet high; fending up a great number of slender stalks from the root. These have a grey bark, branch out from their sides, and are garnished with oval spear-shaped leaves. This shrub by its flowers makes a fine figure in May and June; for they are produced in clusters both at the end and from the fides of the branches. They are of a fine white colour, and exceedingly fragrant.

PHILÆNI, were two brothers, citizens of Carthage, who facrificed their lives for the good of their country. At the time when the Carthaginians ruled over the greatest part of Africa, the Cyrenians were also a great and wealthy people. The country in the middle betwixt them was all fandy, and of an uniform appearance. There was neither river nor mountain to diffinguish their limits; a circumstance which engaged them in a terrible and tedious war with one another. After their armies and fleets had been often routed and put to flight on both fides, and they had weakened one another pretty much; and fearing left, by and by, some third people should fall upon the conquered and conquerors together, equally weakened, upon a cessation of arms they made an agreement, "that upon a day appointed deputies should set out from their respective homes, and the place where they met one another should be accounted the common boundary of both nations." Accordingly, the two brothers called Philæni, fent from Carthage, made all dispatch to perform their journey. The Cyrenians proceeded more flowly. These last, perceiving themfelves a little behind, and becoming apprehensive of punishment at home for mismanaging the affair, charged the Carthaginians with fetting out before the time; made a mighty buftle upon it; and, in short, would rather choose any thing than go away outdone. But whereas the Carthaginians defired any other terms, provided only they were fair, the Cyrenians made this proposal to the Carthaginians, "either to be buried alive in the place which they claimed as the boundary to their nation, or that they would advance forward to what place they inclined upon the fame condition." The Philæni accepting the offer, made a facrifice of themselves and their lives to their country, and so were buried alive. The Carthaginians dedicated altars in that place to the memory of the two brothers. These altars, called Aræ Philænorum, ferved as a boundary to the emPhilanthre-pire of the Carthaginians, which extended from this monument to Hercules's Pillars, which is about 2000 miles, or, according to the accurate observations of the moderns, only 1420 geographical miles. It is Sallust who gives this account in his history of the Jugurthine

who gives this account in his hiltory of the Jugurthi

PHILANTHROPY is compounded of two Greek words which fignify the love of mankind. It is therefore of nearly the fame import with benevolence (A); and differs from friend/bip, as this latter affection subsists only between a few individuals, whilst philanthropy com-

prehends the whole species.

Whether man has an inftinctive propentity to love his species, which makes him incapable of happiness but in the midit of society, and impels him to do all the good that he can to others, feeling their felicity an addition to his own, is a question that has been warmly debated among philosophers ever since metaphysics was studied as a science. With the opinions of the ancients we shall not, in this detached article, trouble our readers; but it would be unpardonable to pass without notice the different theories which on so interesting a subject have divided the moderns.

Hobbes, who believed, or pretended to believe, that right refults from power, and that in fociety there is no other standard of justice than the law of the land, or the will of the supreme magistrate, built his opinions upon a theory of human nature in which philanthropy has no place. According to him, mankind, in the original flate of nature, were wholly selfish. Each endeavoured to feize, by fraud or force, whatever he thought would contribute to his comfort; and as all had nearly the same wants, the inevitable consequence of this felfishness was universal war. We are taught in-deed by the same philosopher, that, in a series of ages, mankind discovered the miseries of this state of nature; and therefore, upon the fame basis of universal selfishness, formed societies, over which they placed supreme governors for the purpose of protecting the weak against the violence of the strong. He does not, however, explain how men, whose angry and felfish passions were thus excited to the utmost against each other, could enter upon this friendly treaty; or, supposing it formed, how the ignorant multitude were induced to pay obedience to the more enlightened few. Clogged with this and other infurmountable difficulties, his philosophy of human nature foon fell into merited contempt; but about the origin of philanthropy those who united in opposition to him still thought very differently from one another.

The elegant Shaftesbury, who had imbibed much of the spirit of Plato, endeavoured, like his master, to deduce all the duties of man, and almost all his actions, from a number of internal feelings or instincts which he supposed to be interwoven with his constitution by the immediate hand of God. This system appeared so honourable to human nature, and at the same time was so easily comprehended, that the noble lord had soon many followers, and may indeed be considered as the

founder of a fchool which has produced philosophers Philanthro-whose works do honour to the age and country in which they flourished. Among these we must reckon Bishop Butler, Hutchison, Lord Kames, Dr Beattie, and perhaps Dr Reid.

According to the system of these writers, the whole duty of man refults from an intuitive principle, to which they have given the name of the moral sense; and with this fense they conceive philanthropy to be inseparably united, or rather perhaps to make an effential part of it. (See MORAL PHILOSOPHY.). If this theory be carried to its utmost extent, as it has been by some of its patrons, it feems to follow, that peace and harmony should reign among savages; and that a man who had from his infancy grown up in folitude, would be delighted with the first fight of a fellow-creature, and run to him with eagerness as to a new source of enjoyment. This conclusion, however, is contrary to acknowledged facts. Savages are generally divided into fmall tribes or hordes; and though the attachment of individuals to their own tribe appears indeed to be abundantly strong, 'the tribes themselves are frequently at war, and entertain a constant jealoufy of each other. Savages, too, are almost univerfally afraid of strangers; and the few solitary individuals, who have been caught in parts where they had run wild from their infancy, instead of being delighted with the appearance of fellow-men, have either fled from them with their utmost speed, or been fixed to the spot in terror and astonishment. These are no indications of that instinctive philanthropy for which some writers fo strenuously plead. They have indeed induced others to deny, that in human nature there is any instinctive principles at all; and to endeavour to account for our feveral propenfities by the influence of education producing early and deep-rooted habits.

At the head of this school stood Locke and Hartley. The former, employing himfelf almost wholly on the intellectual powers of man, and combating the abfurd, though then generally received, belief, that there are in the human mind innate principles of speculative truth, has touched but incidentally on our principles of action. It feems, however, to be evident, that he did not confider any one of these principles as innate; and his opinion was adopted by Hartley, who studied the sensitive part of human nature with greater industry and success than perhaps any writer who had preceded him in that department of fcience. This philosopher refuses all kinds of instinct to man, even the foeyn of a mother to her new-born infant, and that which has been generally supposed innate—the propensity of the infant to suck the breaft. It is therefore needless to say that in his theory of human nature innate philanthropy can have

no place.

The reader, however, must not suppose that the theory of Hartley is the theory of Hobbes. Though he admits no *innate* principles of action in the human mind, he is far from dreaming that the original state of man was a state of war and selfishness, or that the acquisition of philanthropic sentiments is not natural. He considers

⁽A) We fay nearly of the fame import; because benevolence extends to every being that has life and sense, and is of course suspensed in and pleasure; whereas philanthropy cannot comprehend more than the human race.

Philanthro fuch acquisitions as even necessary and unavoidable, and founds them on the great law of affociation, which we have elsewhere endeavoured to explain. (See META-PHYSICS, Part I. chap. v.). Hartley was a Christian, and appears to have been a man of great piety. Conceiving with Locke that men are born without any ideas, or any principles either of knowledge or of action, but that they are subject to the law of affociation as much as to the impressions of sense, he seems to have thought, that the important purpose for which they are fent into this world is, that they may acquire habits of piety and virtue, which, operating like initincts, will fit them for the purer fociety of a future state. That this theory is unfriendly to morals, no man who understands it will presume to affirm. It appears, indeed, to be more confiltent with the necessity of a revelation from God than that of Shafterbury, which has fo many followers: but notwithstanding this, we cannot help thinking that the excellent author has carried his antipathy to instincts by much too far (see Instinct), and that the truth lies in the middle between him and his oppo-

> Without some instincts to influence before the dawn of reason, it is not easy to be conceived how children could be induced to that exercife which is absolutely neceffary to life and health; nor does it appear with fufficient evidence that the human race are deferted by every inflinct as foon as their rational powers are evolved. It feems to be a matter of fact which cannot be controverted, that women have an instinctive attachment to their new-born infants; but that these, when they become capable of diffinguithing objects, are inflinctively attached to their parents, their brothers, and fifters, is a polition which, though it may be true, feems incapable of proof. That they foon appear to be fo attached, is a fact which we believe no man will deny: but the attachment may be accounted for by the affociating principle operating upon that defire of happinels which is necessarily formed as foon as happiness is experienced. (See Passion.). An infant becomes earlier attached to its nurse than to any other person; because, feeling wants which she supplies, the idea of enjoyment becomes foon affociated in its mind with the perception of the woman. If this woman be its mother, a hafty obferver immediately attributes this attachment to inftinct directing the infant to love its parent; but that instinct has here no place, is evident from the well-known facts, that a child is as fond of a tender nurse, though no relation, as of the most affectionate mother; and as regardlefs of a mother who feldom sees it, or sees it with indifference, as of any other perfon. Nay, we have feen children of the sweetest dispositions as fond of the maid with whom they flept, as of a very affectionate parent by whom they had been tenderly nurfed: and fure no man will fay that this could be inflined; it was evidently a new affociation of the idea of the maid with the greatest happiness which they enjoyed after the period of their fuckling was at an end.

It is much in the same way that children acquire an attachment to their brothers and fifters. Brothers and fisters being constantly together, contribute to each other's amusement: hence arises that pleasure which they have in each other's company, and the uneafiness which they feel when separated. This generates mutual love in their minds, which is strengthened by the perpetual injunctions of their parents; for if these have

any virtue themselves, they cannot fail to inculcate the Philanthroduty of loving each other on their tender offspring. Benevolence, thus generated, foon extends to their daily companions; and takes a wider and a wider range as these companions are multiplied, and as children advance towards the state of manhood. New objects then pre-fent themselves to the mind. A man foon discovers, that, as he is a member of a community, his happineds as an individual depends in a great measure on the profperity of the whole. Hence arises patriotifm, and that pleasure which we all take in the eminence of our countrymen. But the principle of benevolence flops not here. He whose mind is enlarged by a liberal education, confiders all particular countries as provinces of one great country extended over the whole globe; and all mankind, of course, as not only sharing the same nature with himself, but as being in reality his fellowcitizens and brethren. The principles of religion, if he be actuated by them, must aid these reslexions, and make him wish the happiness of all who stand in the same relation with himself to the Great Governor of the world. This is philanthropy; and we see how it may fpring, by the great law of affociation, from defires which, in their original state, cannot be confidered as other than felfish. It is a calm fentiment, which we believe hardly ever rifes to the warmth of affection, and

certainly not to the heat of passion.

Should any of our readers be disposed to controvert this opinion, or to fancy it degrading to human nature, we will not enter into controversy with them; we only beg leave to ask, whether they have ever rejoiced in the good fortune of a stranger or a foreigner, or regretted his loss, with any portion of those feelings which they have frequently experienced on hearing of the prosperity or the death of a friend or a neighbour? We answer candidly for ourselves, that we feel no interest which can be called paffion or affection in the fortunes of a native of China; and yet we should be forry to think that our philanthropy is less than that of other men. A common clown, we are inclined to believe, feldom extends his affection beyond his friends and neighbours; and though, from having often heard his country praifed, and knowing that he belongs to his country, he would probably be offended at the man who should prefer another to it; yet if no misfortune befal himself, or his friends and neighbours, we imagine that his grief for public calamities may be borne with patience. In his mind no fuch affociations have been formed as comprise the good of a country, far less of all countries; and therefore his philanthropy must be confined to a very limited range. We doubt not, however, but that as opportunity offers, and as circumstances permit, such a man is ready to feed the hungry and clothe the naked of all countries; not indeed from fentiments of affection either innate or acquired, but from the obvious reflection that he is not exempted from those calamities which have befallen them, and from a still higher principle-a-sense of duty to that God who has made of one blood all nations upon earth, and commanded them to be mutually aiding to each other.

PHILEMON, a Greek comic poet, was fon to Damon, and cotemporary with Menander. Any advantage he had over this poet, was owing less to his own merit than to the intrigues of his friends. Plautus has imitated his comedy du Marchand. He is reported to have died laughing on feeing his ass eat figs. He was then, about

Philemon about 97 years of age. His fon Philemon the younger, was also the author of 54 comedies, of which there are still extant some considerable fragments collected by Grotius. These clearly prove that he was not a poet of the first rank. He sourished about the year 274 before our Saviour.

> PHILEMON, was a rich citizen of Colossæ in Phrygia. He was converted to the Christian faith, with Appia his wife, by Epaphras the disciple of St Paul; for St Paul himself did not preach at Colossæ, Coloss. ii. 1. Perhaps we should have known nothing of St Philemon, had it not been on the account of his flave Onesimus, who having robbed him, and run away from him, came to Rome, where he found St Paul, and was very ferviceable to him. St Paul converted him, baptized him, and fent him back to his mafter Philemon; to whom he wrote a letter still extant, and which passes for a masterpiece of that kind of eloquence, natural, lively, strong, and pathetic, that was peculiar to St Paul. Philemon (1. 2.) had made a church of his house, and all his domestics, as well as himself, were of the household of faith. His charity, liberality, and compassion, were a sure refuge to all that were in diffress. The Apostolical Constitutions fay, that St Paul made him bishop of Colosse; but the Menæa infinuate, that he went to Gaza in Palestine, of which he was the apostle and first bishop. From hence he returned to Coloffæ, where he fuffered martyrdom with Appia his wife, in the time of Nero. They relate feveral particulars of his martyrdom, and fay, that his body remained at Colossæ, where it performed several miracles.

> PHILETAS, a Greek poet and grammarian, of the island of Cos, flourished under Philip and Alexander the Great, and was preceptor of Ptolemy Philadelphus. He was the author of fome Elegies, Epigrams, and other works, which have not come down to us. He is celebrated in the poems of Ovid and Propertius, as one of the best poets of his age. Elian reports a very improbable story of him, namely, "that his body was fo slender and feeble, that he was obliged to have fome lead in his pockets, to prevent him from being carried away by the

PHILETUS. St Paul, writing to Timothy (2 Tim. ii. 16, 17, 18.) in the 65th year of Christ, and a little while before his own martyrdom, speaks thus: " But fhun profane and vain babblings, for they will increase unto more ungodlinefs. And their word will eat as doth a canker; of whom is Hymenæus and Philetus; who concerning the truth have erred, faying, that the refurrection is past already, and overthrow the faith of some." We have nothing very certain cencerning Philetus; for we make but fmall account of what is read in the falfe Abdias, in the life of St James major, even supposing this author had not put the name of Philetus instead of Phygellus. This is the fubftance of what is found in Abdias. St James the fon of Zebedee, passing through the fynagogues of Judea and Samaria, preached everywhere the faith of Jefus Christ. Hermogenes and Philetus strenuously opposed him, affirming, that Jesus Christ was not the Meffiah. Hermogenes was a notable magician, and Philetus was his disciple, who being converted, was defirous to bring his mafter to St James; but Hermogenes bound him up fo by his magic art, that he could not come at the apostle. Philetus found means to make St James acquainted with what had happened to him;

upon which St James unbound him, and Philetus came Philibeg, to him. Hermogenes perceiving how ineffectual his art, was against the faint, became himself a convert as well as

PHILIBEG, is a little plaid, called also kilt, and is a fort of short petticoat reaching nearly to the knees worn by the Scotch Highlanders. It is a modern fubstitute for the lower part of the plaid, being found to be less cumbersome, especially in time of action, when the Highlanders used to tuck their brechdan into their girdle. Almost all of them have a great pouch of badger and other fkins, with taffels dangling before, in which

they keep their tobacco and money. PHILIP, foster-brother of Antiochus Epiphanes (1 Macc. vi. 14, & 55. 2 Macc. ix. 29.), was a Phrygian by birth, and very much in Antiochus's favour. This prince made him governor of Jerusalem (2 Macc. viii. 8. v. 22.) where he committed many outrages upon the Jews, to force them to forfake their religion. Seeing that Apollonius and Seron were defeated by Judas Maccabæus, he fent for new fuccours to Ptolemy governor of Cœlo-Syria, who fent him Gorgias and Nicanor with a powerful army. Some time after, Antiochus going beyond the Euphrates, to extort money from the people, Philip went along with him; and Antiochus finding himself near his end (1 Macc. vi. 14.) made him regent of the kingdom, put his diadem into his hands, his royal cloak, and his ring, that he might render them to his fon the young Antiochus Eupator. But Lyfias having taken possession of the government in the name of young Eupator, who was but a child, Philip not being able to cope with him, durst not return into Syria: but he went into Egypt, carrying the body of Epiphanes along with him, there to implore affiftance from Ptolemy Philometor against Lysias the usurper of the government of Syria. The year following, while Lysias was bufy in the war carrying on against the Jews, Philip got into Syria, and took possession of Antioch: but Lyfias returning into the country, with great diligence, retook Antioch, and put Philip to death, who was taken

PHILIP the apostle was a native of Bethsaida in Galilee. Jesus Christ having seen him, said to him, "Follow me," John i. 43, 44, &c. Philip followed him; and foon after finding Nathanael, Philip faid to him, "We have found the Mcshah, of whom Moses and the prophets have spoken, Jesus of Nazareth, the son of Jofeph." Nathanael asked him, "Can any thing good come out of Nazareth? To which Philip replied, "Come and fee." Then he brought Nathanael to Jesus, and they went with him to the marriage of Cana in Galilee. St Philip was called at the very beginning of our Saviour's mission; and when Jesus Christ was about to feed the 5000 that followed him (Luke vi. 13. Mat. x. 2. John vi. 5-7.), he asked St Philip, only to prove him, whence bread might be bought for fuch a multitude of people? Philip answered, that 200 penny-worth of bread would not be sufficient for every one to taste a little. Some Gentiles, having a curiofity to fee Jesus Christ, a little before his passion, they addressed themselves to St Philip (John xii. 21, 22.), who mentioned it to St Andrew, and these two to Christ. At the last supper, Philip defired our Saviour, that he would be pleafed to show them the Father, being all that they defired (John xiv. 8-10.) But Jesus told them, that seeing the Son they saw the

in the city.

Father also. This is all we find concerning Philip in the gospel.

The upper Asia fell to this apostle's lot, where he took great pains in planting the gospel, and by his preaching and miracles made many converts. In the latter part of his life, he came to Hierapolis in Phrygia, a city very much addicted to idolatry, and particularly to the worship of a serpent of a prodigious bigness. St Philip by his prayers procured the death, or at least the disappearing, of this monster, and convinced its worshippers of the absurdity of paying divine honours to such odious creatures. But the magistrates, enraged at Philip's fuccess, imprisoned him, and ordered him to be severely fcourged, and then put to death, which some say was by crucifixion; others, by hanging him up against a pillar. St Philip is generally reckoned among the married apostles; and it is said he had three daughters, two whereof preserved their virginity, and died at Hierapolis; the third, having led a very spiritual life, died at Ehpefus. He left behind him no writings. The gospel under his name was forged by the Gnostics, to countenance their bad principles and worse practices. The Christian church observes the festival of this saint, together with that of St James, on the first day of May.

Euseb. lib. iii. c. 30.

PHILIP, the second of the seven deacons, was chosen by the apostles after our Saviour's resurrection. (Acts vi. 5.). This deacon, they fay, was of Caesarea in Palestine. It is certain that his daughters lived in this city (Acts xxi. 8, 9.). After the death of St Stephen, all the Christians, excepting the apostles, having left Jerusalem, and being dispersed in several places, St Philip went to preach at Samaria (id. viii. 1, 2, &c.), where he performed feveral miracles, and converted many persons. He baptized them; but being only a deacon, he could not confer on them the Holy Ghost. Wherefore having made known to the apostles at Jerusalem, that Samaria had received the word of God, Peter and John came thither, and the Samaritans that were converted received the Holy Ghost. St Philip was probably at Samaria when the angel of the Lord ordered him to go to the fouth part of the country, in the road that leads from Jerusalem to old Gaza. Philip obeyed, and there met with an Ethiopian eunuch belonging to Queen Candace, who had the care of her revenues, and had been at Jerusalem to worship God there (id. viii. 26, 27, &c.). He was then returning into his own country, and was reading the prophet Isaiah as he went along in his chariot. Philip, hearing the eunuch reading the prophet Isaiah, said to him, Do you understand what you read? The eunuch replied, How should I understand, except fomebody explain it to me? He defired Philip therefore to come and fit down by him in the chariot. The paffage the eunuch was reading is this: " He was led as a sheep to the slaughter, and like a lamb dumb before his shearer, so he opened not his mouth." The eunuch then fays to Philip, Pray, whom does the prophet fpeak of in this place? Is it of himself, or of some other? Then Philip began to instruct him concerning Jesus Christ. And having gone on together, they came to a fountain; when the eunuch faid to Philip, Here is water, what hinders me from being baptized? Philip told him that he might be fo, if he believed with all his heart. He replied, I believe that Jesus Christ is the son of God. He then ordered the chariot to stop, and they both alighted Vol. XVI. Part I.

and went down into the water, where Philip baptized Philip. the canuch. Being come out of the water, the Spirit of the Lord took away Philip, and the eunuch faw no more of him. But Philip was found again at Azotus, and he . preached the gospel in all the cities he passed through, till he arrived at Cæsarea in Palestine. After this, the scripture does not inform us of any particulars relating to Philip. The modern Greeks fay that he went to Tralles in Afia, where he founded a church, of which he was the apostle and bishop; and where he rested in peace, after performing many miracles. The Latins, on the contrary, fay that he died at Cæfarea, and that three of his daughters were there buried with him.

It is thought, that the eunuch converted by St Philip was the first apostle of the Ethiopians; and that the Abyssines boast of having received the Christian faith

PHILIP II. was the fourth fon of Amyntas, king of Lempri-Macedonia. He was fent to Thebes as an hostage by ere's Biblihis father, where he learnt the art of war under Epa-othera minondas, and studied with the greatest care the man-classicaners and the pursuits of the Greeks. He discovered, from his earliest years, that quickness of genius and greatness of courage which afterwards procured him fo great a name and fuch powerful enemies. He was recalled to Macedonia; and at the death of his brother Perdiccas he ascended the throne as guardian and protector of the youthful years of his nephew. His ambition, however, foon discovered itself, and he made himself independent about the year 360 before Christ. The valour of a prudent general, and the policy of an experienced statesman, feemed requifite to enfure his power. The neighbouring nations, ridiculing the youth and inexperience of the new king of Macedonia, appeared in arms; but Philip foon convinced them of their error. Unable to meet them as yet in the field of battle, he suspended their fury by presents, and soon turned his arms against Amphipolis, a colony tributary to the Athenians. Arephipolis was conquered, and added to the kingdom of Macedonia; and Philip meditated no less than the destruction of a republic which had rendered itself so formidable to the rest of Greece, and had even claimed submission from the princes of Macedonia. His designs, however, were as yet immature; and before he could make Athens an object of conquest, the Thracians and the Illyrians demanded his attention. He made himself master of a Thracian colony, to which he gave the name of Philippi, and from which he received the greatest advantages on account of the gold mines in the neighbourhood. These made it a very important capture. He fettled in it a number of workmen, and was the first who caused gold to be coined in his own name. He employed his wealth in procuring spies and partisans in all the great cities of Greece, and in making conquests without the aid of arms. It was at the fiege of Methone in Thrace that Philip had the misfortune to receive a wound in his right eye from the stroke of an arrow. In the midst of his political prosperity, Philip did not neglect the honour of his family. He married Olympias the daughter of Neoptolemus, king of the Molossi; and when, some time after, he became father of Alexander, the monarch, conscious of the inestimable advantages which arise from the lessons, the example. and converfation of a learned and virtuous preceptor, wrote a letter with his own hand to the philosopher Aristotle, and

Philip. begged him to retire from his usual pursuits, and to dedicate his whole time to the instruction of the young prince. Every thing feemed now to conspire to his aggrandizement; and historians have observed that Philip received in one day the intelligence of three things which could gratify the most unbounded ambition, and flatter the hopes of the most aspiring monarch: the birth of a fon, an honourable crown at the Olympic games, and a victory over the barbarians of Illyricum. But all these rather increased than satiated his ambition: he declared his inimical fentiments against the power of Athens, and the indepandence of all Greece, by laying fiege to Olynthus, a place which, on account of its fituation and consequence, would prove most injurious to the interests of the Athenians, and most advantageous to the intrigues and military operations of every Macedonian prince. The Athenians roused by the eloquence of Demosthenes, sent 17 vesfels and 2000 men to the affistance of Olynthus; but the money of Philip prevailed over all their efforts. The greatest part of the citizens suffered themselves to be bribed by the Macedonian gold, and Olynthus furrendered to the enemy, and was inflantly reduced to ruins. Philip foon after defeated the Athenians, and made a great number of them prisoners, whom he dismissed without ransom. Of this victory, the fruit of that excellent discipline which he had established in his army, the Macedonian phalanx had the princi-pal honour. This was a body of infantry heavily armed, confifting commonly of 16,000 men, who had each of them a shield fix feet high and a pike 21 feet long. (See PHALANX). The fuccess of his arms, and especially his generofity after victory, made his alliance and a peace a defirable object to the people of Athens; and as both parties were inclined to this measure, it was concluded without delay. His fuccesses were as great in every part of Greece: he was declared head of the Amphictyonic council, and was entrusted with the care of the facred temple of Apollo at Delphi. If he was recalled to Macedonia, it was only to add fresh laurels to his crown, by victories over his enemies in Illyricum and Theffaly. By affuming the mask of a moderator and peace-maker, he gained confidence; and in attempting to protect the Peloponnchians against the incroaching power of Sparta, he rendered his cause popular; and by ridiculing the infults that were offered to his person as he passed through Corinth, he displayed to the world his moderation and philosophic virtues. In his attempts to make himself master of Eubœa, Philip was unfuccessful; and Phocion, who despised his gold as well as his meanness, obliged him to evacuate an island whose inhabitants were as infenfible to the charms of money as they were unmoved at the horrors of war, and the bold efforts of a vigilant enemy. From Eubœa he turned his arms against the Scythians; but the advantages he obtained over this indigent nation were inconfiderable, and he again made Greece an object of plunder and rapine. He advanced far in Bœotia, and a general engagement was fought at Chæronea. The fight was long and bloody, but Philip obtained the victory. His behaviour after the battle reflects great difgrace upon him as a man and as a monarch. In the hour of festivity, and during the entertainment which he had given to celebrate the trophies he had won, Philip fallied from his camp, and

with the inhumanity of a brute, he infulted the bodies Philip. of the flain, and exulted over the calamities of the prifoners of war. His infolence, however, was checked, when Demades, one of the Athenian captives, reminded him of his meanness, by exclaiming, "Why do you, O king, act the part of a Therfites, when you can reprefent with fo much dignity the elevated character of an Agamemnon?" The reproof was felt; Demades received his liberty; and Philip learned how to gain popularity even among his fallen enemies; by relieving their wants and easing their distresses. At the battle of Chæronea the independence of Greece was extinguished; and Philip, unable to find new enemies in Europe, formed new enterprises, and meditated new conquests. He was nominated general of the Greeks against the Perfians, and was called upon as well from inclination as duty to revenge those injuries which Greece had suffered from the invafions of Darius and of Xerxes. But he was stopped in the midst of his warlike preparations, being stabbed by Paufanias as he entered the theatre at the celebration of the nuptials of his daughter Cleopatra. This murder has given rife to many reflections upon the causes which produced it; and many who consider the recent repudiation of Olympias and the resentment of Alexander, are apt to investigate the causes of his death in the bosom of his family. The ridiculous honours which Olympias paid to her hufband's murderer strengthened the suspicion; yet Alexander declared that he invaded the kingdom of Persia to revenge his father's death upon the Persian satraps and princes, by whose immediate intrigues the affassination had been committed. The character of Philip is that of a fagacious, artful, prudent, and intriguing monarch: he was brave in the field of battle, eloquent and diffimulating at home, and he possessed the wonderful art of changing his conduct according to the disposition and caprice of mankind, without ever altering his purpose, or losing fight of his ambitious aims. He posfessed much perseverance, and in the execution of his plans he was always vigorous. He had that eloquence which is inspired by strong passions. The hand of an affassin prevented him from atchieving the boldest and the most extensive of his undertakings; and he might have acquired as many laurels, and conquered as many nations, as his fon Alexander did in the succeeding reign; and the kingdom of Persia might have been added to the Macedonian empire, perhaps with greater moderation, with more glory, and with more lasting advantages. The private character of Philip lies open to censure, and raises indignation. The admirer of his virtues is difgusted to find him among the most abandoned prostitutes, and disgracing himself by the most unnatural crimes and lascivious indulgencies which can make even the most debauched and the most profligate to blush. He was murdered in the 47th year of his age, and the 24th of his reign, about 336 years before the Christian era. His reign is become uncommonly interesting, and his administration a matter of instruction. He is the first monarch whose life and actions are defcribed with peculiar accuracy and historical faithfulnefs. Philip was the father of Alexander the Great and of Cleopatra, by Olympias; he had also by Audaca an Illyrian, Cyna, who married Amyntas the fon of Perdiccas, Philip's elder brother; by Nicasipolis a Thessalian, Nicæa, who married Caffander; by Philæna a Lariffæan

Laristican dancer, Aridaus, who reigned some time after Alexander's death; by Cleopatra, the niece of Attalus, Caranus and Europa, who were both murdered by Olympias; and Ptolemy the first king of Egypt, by Arfinoe, who in the first month of her pregnancy was married to Lagus. Of the many memorable actions and fayings reported by Plutarch of this prince, the following are the most remarkable. Being present at the fale of some captives, in an indecent posture, one of them informed him of it; "Set this man at liberty (fays Philip), I did not know that he was my friend." Being folicited to favour a lord of his court, who was like to lose his character by a just but severe sentence, Philip refused to hearken to the solicitation, and added, " I had rather that he be disgraced than myself." A poor woman was importuning him to do her justice; and as he fent her away from day to day, under the pretence that he had no time to attend to her petition, she faid to him with fome warmth, " Cease then to be a king." Philip felt all the force of this reproof, and immediately gave her fatisfaction .- Another woman came to ask justice of him as he was going out from a great entertainment, and was condemned. "I appeal (exclaimed she)!" "And to whom do you appeal (said the king to her)?" "To Philip fasting." This answer opened the eyes of the monarch, who retracted his fentence. If he possessed any virtue, it was principally that of fuffering injuries with patience. Democharus, to whom the Greeks gave the furname of Parrhefiastes, on account of his excessive petulance of tongue, was one of the deputies whom the Athenians fent to this monarch. Philip, at the conclusion of the audience, begged the ambassadors to tell him, " if he could be of any fervice to the Athenians;" to which Democharus gave an infolent return, which he forgave. Having learned that some Athenian ambassadors charged him, in full asfembly, with atrocious calumnies: "I am under great obligations (faid he) to those gentlemen, for I shall henceforwards be fo circumspect in my words and actions, that I shall convict them of falsehood." One faying of Philip, which does him less honour than those we have before-mentioned, was, " Let us amuse children with playthings, and men with oaths." This abominable maxim, which was the foul and fpring of his politics, gave rife to the observation, " That he was in full length, what Louis XI. afterwards was in miniature." It is well known that Philip had a person about him, who called out at times, " Philip, remember that thou art mortal;" but whether we should place this to the account of his pride or his humility, it is difficult to

PHILIP V. was king of Macedonia, and fon of Demetrius. His infancy, at the death of his father, was protected by Antigonus, one of his friends, who ascended the throne, and reigned for 12 years, with the title of *Independent monarch*. When Antigonus died, Philip recovered his father's throne, though only 15 years of age, and he early distinguished himself by his boldness and his ambitious views. He came to the throne in the year 220 before our Saviour, and the beginning of his reign was rendered glorious by the conquests of Aratus; a general who was as eminent for his love of justice as his skill in war. But so virtuous a character could hardly sail to be disagreeable to a prince who

wanted to indulge himself in every species of dislipation and vice: and indeed his cruelty to him foon displayed his character in its true light; for to the gratification of every vice, and every extravagant propenfity, he had the meannels to facrifice this faithful and virtuous Athenian. Not fatisfied with the kingdom of Macedonia, Philip aspired to become the friend of Hannibal, and wished to share with him the spoils which the distresses and continual loss of the Romans seemed soon to promife. But his expectations were frustrated; the Romans discovered his intrigues; and though weakened by the valour and artifice of the Carthaginian, yet they were foon enabled to meet him in the field of battle. The conful Lævinus entered without delay his territories of Macedonia; and after he had obtained a victory over him near Apollonia, and reduced his fleet to ashes, he compelled him to fue for peace. This peaceful difposition was not permanent; and when the Romans difcovered that he had affifted their formidable enemy Hannibal with men and money, they appointed T. Q. Flaminius to punish his perfidy, and the violation of the treaty. The Roman conful, with his usual expedition, invaded Macedonia; and in a general engagement, which was fought near Cynocephale, the hostile army was totally defeated, and the monarch faved his life with difficulty by flying from the field of battle. Destitute of resources, without friends either at home or abroad, Philip was obliged to submit to the mercy of the conqueror, and to demand peace by his ambassadors. It was granted with difficulty; the terms were humiliating; but the poverty of Philip obliged him to accept the conditions, however difavantageous and degrading to his dignity. In the midst of these public calamities, the peace of his family was disturbed; and Perses, the eldest of his fons by a concubine, raifed feditions against his brother Demetrius, whose condescension and humanity had gained popularity among the Macedonians, and who from his refidence at Rome, as an hostage, had gained the good graces of the fenate, and by the modesty and innocence of his manners had obtained forgiveness from that venerable body for the hostilities of his father. Philip listened with too much avidity to the false accufations of Perfes; and when he heard it afferted that Demetrius wished to rob him of his crown, he no longer hesitated to punish with death so unworthy and so ungrateful a fon. No fooner was Demetrius facrificed to credulity, than Philip became convinced of his cruelty and rashness; and to punish the persidy of Perses, he attempted to make Antigonus, another fon, his succesfor on the Macedonian throne. But he was prevented from executing his purpose by death, in the 42d year of his reign, 178 years before the Christian era. The affassin of Demetrius succeeded his father, and with the same ambition, with the fame rashness and oppression, renewed the war against the Romans, till his empire was destroyed, and Macedonia became a Roman province. Philip has been compared with his great ancestor of the same name; but though they possessed the same virtues, the same ambition, and were tainted with the same vices, yet the father of Alexander was more fagacious and more intriguing, and the fon of Demetrius was more fuspicious, more cruel, and more implacable; and, according to the pretended prophecy of one of the Sybils, Macedonia was indebted to one Philip for her L12 rife

Ibid.

Ibid.

Philip. rife and confequence among nations, and under another Philip the lamented the loss of her power, her empire,

and her dignity.

PHILIP, M. Julius, a Roman emperor, of an obscure family in Arabia, from whence he was furnamed Arabian. From the lowest rank in the army he gradually rose to the highest offices; and when he was made general of the pretorian guards, he affaffinated Gordian, to make himself emperor. To secure himself on the imperial throne, he left Mesopotamia a prey to the continual invasions of the Persians, and hurried to Rome, where his election was univerfally approved by the fenate and the Roman people. Philip rendered his cause popular by his liberality and profusion; and it added much to his splendour and dignity, that the Romans during his reign commemorated the foundation of their city; a folemnity which was observed but once every 100 years, and which was celebrated with more pomp and more magnificence than under the preceding reigns. The people were entertained with games and spectacles; the theatre of Pompey was successively crowded during three days and three nights; and 2000 gladiators bled in the circus at once, for the amusement and pleasure of a gazing populace. His usurpation, however, was short. Philip was defeated by Decius, who had proclaimed himself emperor in Pannonia; and he was affassinated by his own foldiers near Verona, in the 45th year of his age, and the 5th of his reign. His fon, who bore the same name, and who had shared with him the imperial dignity, was also massacred in the arms of his mother. Young Philip was then in the 12th year of his age, and the Romans lamented in him the lofs of rifing talents, of natural humanity, and endearing vir-

PHILIP, a native of Acarnania, physician to Alexander the Great. When that monarch had been suddenly taken ill, after bathing in the Cydnus, Philip undertook to remove the complaint, when the rest of the physicians believed that all medical affistance would be ineffectual. But as he was preparing his medicine, Alexander received a letter from Parmenio, in which he was advised to beware of his physician Philip, as he had conspired against his life. The monarch was alarmed; and when Philip presented him the medicine, he gave him Parmenio's letter to peruse, and began to drink the potion. The ferenity and composure of Philip's countenance, as he read the letter, removed every fuspicion from Alexander's breast, and he pursued the directions of his physician, and in a few days recovered.

There were, besides, a vast number of persons of this name in antiquity, and many of them were very emi-

PHILIP I. king of France, succeeded his father Henry I. in 1060, when but eight years of age, under the regency and guardianship of Baudouin V. count of Flanders, who discharged his trust with zeal and fidelity. He defeated the Gascons who were inclined to revolt, and died, leaving his pupil 15 years of age. This young prince made war in Flanders against Robert, Baudouin's younger fon, who had invaded Flanders, which belonged to the children of his elder brother. Philip marched against him with a numerous army, which was cut to pieces near Mount Cassel. Peace was the consequence of the victory, and the conqueror quietly enjoyed his

usurpation. Philip, after the fatigues of the war, by Philip. way of relaxation gave himself up entirely to pleasure and dislipation. Tired of his wife Bertha, and fond of Bertrade, spouse of Foulques count of Anjou, he carried her off from her husband. Having, in 1093, legally annulled his own marriage, under the pretext of barrenness, and Bertrade's marriage with the count of Anjou having been set aside under the same pretext, Philip and the were afterwards folemnly married by the bishop of Beauvais. This union was declared void by Pope Urban II. a Frenchman by birth, who pronounced the fentence in the king's own dominions, to which he had come for an afylum. Philip, fearing that the anathemas of the Roman pontiff might be the means of exciting his fubjects to rebellion, fent deputies to the pope, who obtained a delay, during which time he was permitted to use the crown. To know what is meant by this permission, it is necessary to recollect, that at that period kings appeared on public folemnities in royal habit, with the crown on their heads, which they received from the hand of a bishop. This delay was not of long duration. Philip was excommunicated anew in a council held at Poictiers in 1100; but in the year 1104, Lambert bishop of Arras, legate of Pope Pascal II. at last brought him his absolution to Paris, after having made him promise never to see Bertrade more; a promife which he did not keep. It would appear that the pope afterwards approved their marriage; for Suger informs us, that their fons were declared capable of fucceeding to the crown. Philip died at Melun the 29th of July 1108, aged 57 years, after having witneffed the first crusade, in which he declined taking any part. His reign, which comprehends a period of 48 years, was the longest of any of his predecessors, excepting that of Clotarius, and of all who came after him except those of Louis XIV. and Louis XV. It was distinguished by several great events: but Philip, though brave in battle, and wife in counfels, was no very excellent character. He appeared so much the more contemptible to his fubjects, as that age abounded with heroes. Philip is not the first of the French monarchs (as is commonly reported), who, in order to give the greater authority to his charters, caused them to be subscribed by the officers of the crown; for Henry I. had fometimes done the fame before him.

PHILIP II. furnamed Augustus, the conqueror and given of God, fon of Louis VII. (called the younger), king of France, and of Alix, his third wife, daughter of Thibault, count of Champagne, was born the 22d of August 1165. He came to the crown, after his father's death in 1180, at the age of 15 years. His youth was not spent like that of the generality of other princes; for, by avoiding the rock of pleasure on which so many are apt to split, his courage thereby became the more lively and intrepid. The king of England feemed willing to take advantage of his minority, and to feize upon a part of his dominions. But Philip marched against him, and compelled him, fword in hand, to confirm the ancient treaties between the two kingdoms. As foon as the war was ended, he made his people enjoy the bleffings of peace. He gave a check to the oppressions of the great lords, banished the comedians, punished blasphemies, caused the streets and public places of Paris to be paved, and annexed to that capital a part of the adjacent villages. It was enclosed by walls with towers;

Ibid.

Philip and the inhabitants of other cities were equally proud to fortify and embellish theirs. The Jews having for a long time practifed the most shameful frauds in France, Philip expelled them from his kingdom, and declared his subjects quit with them; an action unjust, contrary to the laws of nature, and confequently to religion. The tranquillity of France was fomewhat disturbed by a difference with the count of Flanders, which was however happily terminated in 1184. Some time after he declared war against Henry II. king of England, and took from him the towns of Isloudun, Tours, Mans and other places. The epidemical madness of the crusades then agitated all Europe; and Philip, as well as other princes, caught the infection. He embarked in the year 1190, with Richard I. king of England, for the relief of the Christians in Palestine, who were oppressed Those two monarchs sat down before by Saladin. Acre, which is the ancient Ptolemais; as did almost all the Christians of the east, while Saladin was engaged in a civil war on the banks of the Euphrates. When the two European monarchs had joined their forces to those of the Afiatic Christians, they counted above 300,000 fighting men. Acre furrendered the 13th of July 1191; but the unhappy difagreement which took place between Philip and Richard, rivals of glory and of interest, did more mischief than could be compensated by the successful exertions of those 300,000 men. Philip, tired of these divisions, and displeased with the behaviour of Richard his vaffal, returned to his own country, which, perhaps, he should never have left, or at least have seen again with more glory. Besides, he was attacked (say historians) with a languishing disorder, the effects of which were attributed to poison; but which might have been occasioned merely by the scorching heat of a climate fo different from that of France. He loft his hair, his beard, and his nails; nay, his very flesh came off. The physicians urged him to return home; and he soon determined to follow their advice. The year after, he obliged Baudouin VIII. count of Flanders to leave him the county of Artois. He next turned his arms against Richard king of England, from whom he took Evreux and Vexin; though he had promifed upon the holy gofpels never to take any advantage of his rival during his absence; so that the consequences of this war were very unfortunate. The French monarch, repulfed from Rouen with loss, made a truce for fix months; during which time he married Ingelburge, princess of Denmark, whose beauty could only be equalled by her virtue. The divorcing of this lady, whom he quitted in order to marry Agnes daughter of the duke of Merania, embroiled him with the court of Rome. The pope iffued a fentence of excommunication against him; but it was taken off upon his promifing to take back his former wife. John Sans-terre fucceeded to the crown of England in 1199, to the prejudice of his nephew Arthur, to whom of right it belonged. The nephew, supported by Philip, took up arms against the uncle, but was defeated in Poictou, where he was taken prisoner, and afterwards murdered. The murderer being fummoned before the court of the peers of France, not having appeared, was declared guilty of his nephew's death, and condemned to lose his life in 1203. His lands, fituated in France, were forfeited to the crown. Philip foon fet about gathering the fruit of his vaffal's crime. He seized upon Normandy, then carried his

victorious arms into Maine, Anjou, Touraine, Poictou, Philip. and brought those provinces, as they anciently were, under the immediate authority of his crown. The Englith had no other part left them in France but the province of Guienne. To crown his good fortune, John his enemy was embroiled with the court of Rome, which had lately excommunicated him. The ecclefiaftical thunder was very favourable for Philip. Innocent II. put into his hands, and transferred to him, a perpetual right to the kingdom of England. This king of France, when formerly excommunicated by the pope, had declared his cenfures void and abufive; he thought very differently, however, when he found himself the executor of a bull investing him with the English crown. To give the greater force to the fentence pronounced by his holiness, he employed a whole year in building 1700 ships, and in preparing the finest army that was ever feen in France. Europe was in expectation of a decifive battle between the two kings, when the pope laughed at both, and artfully took to himself what he had bestowed upon Philip. A legate of the holy see perfuaded John Sans-terre to give his crown to the court of Rome, which received it with enthusiasm. Then Philip was expressly forbid by the pope to make any attempt upon England, now become a fee of the Roman church, or against John who was under her protection. Meanwhile, the great preparations which Philip had made, alarmed all Europe; Germany, England, and the Low-Countries were united against him in the same manner as we have feen them united against Louis XIV. Ferrand, count of Flanders, joined the emperor Otho IV. He was Philip's vaifal; which was the strongest reason for declaring against him. The French king was nowife disconcerted; his fortune and his courage disfipated all his enemies. His valour was particularly confpicuous at the battle of Bouvines, which was fought on the 27th of July 1214, and lasted from noon till night. Before the engagement, he knew well that fome of his nobles followed him with reluctance. He affembled them together; and placing himself in the midst of them, he took a large golden cup, which he filled with wine, and into which he put several slices of bread. He ate one of them himfelf, and offering the cup to the rest, he faid, " My companions, let those who would live and die with me follow my example." The cup was emptied in a moment, and those who were the least attached to him fought with all the bravery that could be expected from his warmest friends. It is also reported, that after showing the army the crown that was worn by fovereigns upon these occasions, he said, " If any one thought himself more worthy than he was to wear it, he had only to explain himself; that he should be content it were the prize of that man who should difplay the greatest valour in battle." The enemy had an army of 150,000 fighting men; that of Philip was not half fo numerous; but it was composed of the flower of his nobility. The king run great hazard of his life; for he was thrown down under the horses feet, and wounded in the neck. It is faid 30,000 Germans were killed; but the number is probably much exaggerated. The counts of Flanders and Boulogne were led to Paris with irons upon their feet and hands; a barbarous custom which prevailed at that time. The French king made no conquest on the fide of Germany after

Philip. after this ever memorable action; but it gained him an additional power over his vaffals. Philip, conqueror of Germany, and possessor of almost all the English dominions in France, was invited to the crown of England by the subjects of King John, who were grown weary of his tyranny. The king of France, upon this occafion, conducted himself like an able politician. He persuaded the English to ask his son Louis for their king; but as he wished at the same time to manage the pope, and not lose the crown of England, he chose to affift the prince his fon, without appearing to act him-felf. Louis made a descent upon England, was crowned at London, and excommunicated at Rome in 1216; but that excommunication made no change upon John's fituation, who died of grief. His death extinguished the resentment of the English, who having declared themselves for his son Henry III. forced Louis to leave England. Philip-Augustus died a little time after, at Mantes, the 14th of July 1223, aged 59, after a reign of 43 years. Of all the kings of the 3d race, he made the greatest accession to the crown-lands, and transmitted the greatest power to his successors. He reunited to his dominions Normandy, Anjou, Maine, Touraine, Poitou, &c. After having subdued John Sansterre, he humbled the great lords, and by the overthrow of foreign and domestic enemies, took away the counterpoise which balanced his authority in the kingdom. He was more than a conqueror; he was a great king and an excellent politician; fond of splendor on public occasions, but frugal in private life; exact in the administration of justice; skilful in employing alternately flattery and threatenings, rewards and punishments; he was zealous in the defence of religion, and always disposed to defend the church; but he knew well how to procure from her fuccours for fupplying the exigencies of the state. The lords of Coucy, Rhetel, Rofey, and feveral others, feized upon the property of the clergy. A great many of the prelates applied for protection to the king, who promifed them his good offices with the depredators. But, notwithstanding his recommendations, the pillages continued. The bishops redoubled their complaints, and intreated Philip to march against their enemies. " With all my heart (faid he); but in order to fight them, it is necesfary to have troops, and troops cannot be raifed without money." The clergy understood his meaning; they furnished subsidies, and the pillages ceased. The enterprises of Philip-Augustus were almost always successful; because he formed his projects with deliberation, and executed them without delay. He began by rendering the French happy, and in the end rendered them formidable; though he was more inclined to anger than to gentleness, to punish than to pardon, he was regretted by his subjects as a powerful genius and as the father of his country. It was in his reign that the marshal of France was seen, for the first time, at the head of the army. It was then, also, that families began to have fixed and hereditary furnames; the lords took them from the lands which they poffessed; men of letters from the place of their birth; the converted Jews and rich merchants from that of their residence. Two very cruel evils, viz. leprofy and usury were prevalent at that time; the one infected the body, the other proved the ruin of the fortunes of families. The number of lepers was fo great, that the smallest villages

were obliged to have an hospital for the cure of that di- Philip. stemper. It is remarkable, that when Philip was on the point of engaging Richard, the English, who were lying in ambush near the Loire, run away with his equipage, in which he caused to be carried all the deeds or writings respecting the rights of the crown; a custom which is used at this day by the grand seignior. Philip caused copies of his charters to be collected wherever they could be found; but after all his endeavours, some of them were never recovered. The furname of Augustus was given to Philip by his cotemporaries. Mezerai is mistaken, when he afferts that Paulus Emilius was the first who rendered the name of conqueror by that of Augustus; a learned critic has proved the contrary by undoubted authorities.

PHILIP of Valois, first king of France of the collateral branch of the Valois, was son to Charles count of Valois, brother of Philip the Fair. He mounted the throne in 1328, on the death of his cousin Charles the Fair, after having held for some time the regency of the kingdom. France was much divided in the beginning of his reign, by disputes about the succession to the crown. Edward III. king of England laid claim to it as grandson of Philip the Fair, by his mother; but Philip of Valois took possession of it as first prince of the blood. The people gave him, upon his accession to the throne, the title of fortunate; to which might have been added, for some time, those of victorious and just. He marched to the relief of his vassal the count of Flanders, whose subjects, on account of bad usage, had taken up arms against him. He engaged the rebels at Cassel, performed prodigies of valour, and gained a fignal victory, the 24th of August 1328. Having made all quiet, he went home, after faying to the count of Flanders, "Be more prudent and more humane, and you will have fewer difloyal subjects." The victorious Philip devoted the time of peace to the internal regulations of his kingdom. The financiers were called to an account, and some of them condemned to death; among others Peter Remi, general of the finances, who left behind him near 20 millions. He afterwards enacted the law respecting freeholds, imposing a tax upon churches, and commoners who had acquired the lands of the nobility. Then, also, began to be introduced the form of appel comme d'abus, the principles of which are more ancient than the name. The year 1329 was diftinguished by a folemn homage paid to Philip, by Edward king of England, for the duchy of Guienne, upon his knees, and with his head uncovered. The interior peace of the kingdom was diffurbed by difputes about the diffinction of the church and state. An assembly was summoned for hearing the two parties, in the presence of the king: and in this affembly Peter de Cugnieres, his majesty's advocate, defended the secular jurisdiction with great ability as a man well-informed, and an enlightened philosopher. Bertrand bishop of Autun, and Roger archbishop of Sens, pled the cause of the clergy with less ingenuity and judgement. This did not, however, prevent the king from showing them favours, though the controversy itself laid the foundation of all the difputes which were afterwards agitated about the authority of the two powers; disputes which contributed not a little to confine the ecclefiaftical jurifdiction within narrower limits. While Philip was employing himfelf in some useful regulations, he was unhappily interrupted

by Edward III. declaring war against France. This prince immediately recovered those parts of Guicane of which Philip was in possession. The Flemish having again revolted from France in spite of oaths and treaties, joined the standard of Edward; and required that he would affume the title of king of France, in consequence of his pretentions to the crown; because then, agreeably to the letter of their treaty, they only followed the king of France. From this period is dated the union of the flower-de-luce and leopards in the arms of England. Edward, in order to justify the change of his arms, caused the following manifesto to be published in the verse of the times.

> Rex sum regnorum, bina ratione, duorum: Anglorum in regno sum rex ego jure paterno; Matris jure quidem Francorum nuncupor idem: Hinc est armorum variatio facta meorum.

In the way of a parody to these lines, Philip made the following reply:

Prædo regnorum qui diceris esse duorum, Francorum regno privaberis, atque paterno, Succedunt mares huic regno, non mulieres: Hinc est armorum variatio stulta tuorum.

In the mean time Philip put himself in a posture of defence. His arms were at first attended with some success; but those advantages were far from compensating the loss of the battle of Ecluse, in which the French fleet, confisting of 120 large ships, and manned by 40,000 feamen, was beat by that of England in the year 1340. This defeat is to be attributed, in part, to the little attention which had been paid to the navy of France, notwithstanding her favourable situation, by being washed by two seas. She was obliged to make use of foreign ships, which obeyed but slowly, and even with some reluctance. This war, which had been alternately discontinued and renewed, began again with more heat than ever in 1345. The two armies having come to an engagement the 26th of August 1346, near Cresfy, a village in the county of Ponthieu, the English there gained a fignal victory. Edward had only 40,000 men, while Philip had nearly twice that number; but the army of the former was inured to war, and that of the latter was ill-disciplined and overcome with fatiguing marches. France lost from 25,000 to 30,000 men; of which numbers were John king of Bohemia (who, though blind, fought gallantly), and about 1500 gentlemen, the flower of the French nobility. The loss of Calais, and feveral other places, was the fad fruit of this defeat. Some time before Edward had challenged Philip of Valois to a fingle combat; which he refused, not on the score of cowardice, but from the idea that it was improper for a fovereign prince to accept a challenge from a king who was his vaffal. At length, in 1347, a truce for fix months was concluded between France and England, and afterwards prolonged at different times. Philip died a short time after, the 23d of August 1350, aged 57 years, and far from bearing on his monument the title of Fortunate. He had, however, reunited Dauphiny to France. Humbert, the last prince of that country, having loft all his children, and wearied with the wars which he had held out against Savoy, turned a Dominican, and gave his province to Philip, in 1349, on condition that the eldest son of the kings of France

should bear the title of Dauphin. Philip likewise added Philip. to his domain Roufillon and a part of Cerdague, by lending some money to the king of Majorca, who gave him those provinces as a security; provinces which Charles VIII. afterwards restored without any reimbursement. It is surprising that in so unfortunate a reign he should have been able to purchase those provinces after having paid a great deal for Dauphiny; but the duty on falt, the rife on the other taxes, and especially the frauds committed in the coinage of money, are supposed to have enabled him to make those acquisitions. The fictitious and ideal value of the coin was not only raifed, but a great deal of bad money was iffued from the mint. The officers of the mint were fworn upon the gospels to keep the secret: but how could Philip flatter himself that so gross a fraud would not be dis-

PHILIP II. fon of Charles V. and of Isabella of Portugal, who was born at Valladolid on the 21st of May 1527, became king of Naples and Sicily by his father's abdication in 1554. He ascended the throne of Spain on the 17th of January 1556 by the same means. Charles had made a truce with the French, but his fon broke it; and having formed an alliance with England, poured into Picardy an army of 40,000 men. The French were cut to pieces at the battle of St Quintin, which was fought on the 20th of August 1557. That town was taken by affault, and the day on which the breach was mounted Philip appeared armed cap-a-pee in order to animate the foldiers. It was the first and last time that he was observed to wear this military dress. It is well known, indeed, that his terror was fo great during the action that he made two vows; one, that he should never again be present in a battle; and the other, to build a magnificent monastery dedicated to St Lawrence, to whom he attributed the success of his arms, which he executed at Escurial, a village about seven leagues from Madrid. After the engagement, his general, the duke of Savoy, wanted to kils his hand; but Philip prevented him, faying, "It is rather my duty to kifs your's, who have the merit of fo glorious a victory;" and immediately presented him with the colours taken during the action. The taking of Catelet, Ham, and Noyon, were the only advantages which were derived from a battle which might have proved the ruin of France. When Charles V. was informed of this victory, it is faid he asked the person who brought him the intelligence, " if his fon was at Paris?" and being answered in the negative, he went away without uttering a fingle word. The duke of Guise having had time to assemble an army, repaired the diffrace of his country by the taking of Calais and Thionville. While he was animating the French, Philip gained a pretty confiderable battle against Marshal de Thermes near Gravelines. His army was, on this occasion, commanded by Count Egmont, whom he afterwards caused to be beheaded. The conqueror made no better use of the victory of Gravelines than he had done of that of St Quintin; but he reaped confiderable advantage from the glorious peace of Cateau-Cambresis, the masterpiece of his politics. By that treaty, concluded the 13th of April 1559, he gained possession of the strong places of Thionville, Marienbourg, Montmedi, Hesdin, and the county of Charollois. This war, fo terrible, and attended with fo much cruelty, was terminated, like many others, by a marriage. Philip took

for his third wife Elizabeth, daughter of Henry II. who had been promifed to Don Carlos.

After these glorious atchievements, Philip returned in triumph to Spain, without having drawn a fword. His first care, upon his arrival at Valladolid, was to demand of the grand inquisitor the spectacle of an auto-da-fé. This was immediately granted him; 40 wretches, some of whom were priests or monks, were strangled and burnt, and one of them was burnt alive. Don Carlos de Seza, one of those unfortunate victims, ventured to draw near to the king, and faid to him, " How, Sir, can you fuffer fo many wretches to be committed to the flames? Can you be witness of such barbarity without weeping?" To this Philip coolly replied, " If my own fon were suspected of herefy, I would myself give him up to the feverity of the inquisition. Such is the horror which I feel when I think of you and your companions, that if an executioner were wanting, I would supply his place myself." On other occasions he conducted himself agreeably to the spirit which had dictated this answer. In a valley of Piedmont, bordering on the country of the Milaneie, there were some heretics; and the governor of Milan had orders to put them all to death by the gibbet. The new opinions having found their way into some of the districts of Calabria, he gave orders that the innovators should be put to the sword, with the refervation of 60 of them, of whom 30 were afterwards strangled, and the rest committed to the flames.

This spirit of cruelty, and shameful abuse of his power, had the effect to weaken that power itself. The Flemish, no longer able to bear so hard a yoke, revolted. The revolution began with the fine and large provinces of the continent; but the maritime provinces only obtained their liberty. In 1579 they formed themselves into a republic, under the title of the United Provinces. Philip fent the duke of Alba to reduce them; but the cruelty of that general only ferved to exasperate the spirit of the rebels. Never did either party fight with more courage, or with more fury. The Spaniards, at the fiege of Haerlem, having thrown into the town the head of a Dutch officer who had been killed in a skirmish, the inhabitants threw to them the heads of eleven Spaniards, with this infcription: "Ten heads for the payment of the tenth penny, and the eleventh for interest." Haerlem having surrendered at discretion, the conquerors caused all the magistrates, all the pastors, and above 1500 citizens, to be hanged.

The duke of Alba, being at length recalled, the grand commander of the Requesnes was fent in his place, and after his death Don John of Austria; but neither of those generals could restore tranquillity in the Low Countries. To this fon of Charles V. succeeded a grandfon no less illustrious, namely, Alexander Farnese duke of Parma, the greatest man of his time; but he could neither prevent the independence of the United Provinces, nor the progrefs of that republic which arose under his own eye. It was then that Philip, always at his ease in Spain, instead of coming to reduce the rebels in Flanders, proscribed the prince of Orange, and set 25,000 crowns upon his head. William, superior to Philip, disdained to make use of that kind of vengeance, and trusted to his sword for his preservation.

In the mean time the king of Spain fucceeded to the crown of Portugal, to which he had a right by his mother Isabella. This kingdom was subjected to him by Philip. the duke of Alba, in the space of three weeks, in the year 1580. Antony, prior of Crato, being proclaimed king by the populace of Lisbon, had the resolution to come to an engagement; but he was vanquished, purfued, and obliged to fly for his life.

A cowardly affaffin, Balthazar Gerard, by a piftolshot killed the prince of Orange, and thereby delivered Philip from his most implacable enemy. Philip was charged with this crime, it is believed without reason; though, when the news was communicated to him, he was imprudent enough to exclaim, " If this blow had been given two years ago, the Catholic religion and I

would have gained a great deal by it."

This murder had not the effect to restore to Philip the Seven United Provinces. That republic, already powerful by sea, assisted England against him. Philip having refolved to diffress Elizabeth, fitted out, in 1588, a fleet called the Invincible. It confifted of 150 large thips, on which were counted 2650 pieces of cannon, 8000 feamen, 20,000 foldiers, and all the flower of the Spanish nobility. This fleet, commanded by the duke of Medina Sidonia, failed from Lifbon when the feafon was too far advanced; and being overtaken by a violent ftorm, a great part of it was dispersed. Twelve ships, driven upon the coast of England, were captured by the English fleet, which confisted of 100 ships; 50 were wrecked on the coasts of France, Scotland, Ireland, Holland, and Denmark. Such was the fuccess of the Invincible. See ARMADA.

This enterprise, which cost Spain 40 millions of ducats, 20,000 men, and 100 ships, was productive only of difgrace. Philip supported this misfortune with a hereic refolution. When one of his courtiers told him, with an air of consternation, what had happened, he coolly replied, " I fent to fight the English, and not the winds. God's will be done." The day after Philip ordered the bishops to return thanks to God for having preserved some remains of his fleet; and he wrote thus to the pope: " Holy father, as long as I remain mafter of the fountain head, I shall not much regard the loss of a rivulet. I will thank the Supreme Disposer of empires, who has given me the power of easily repairing a difaster which my enemies must attribute solely to the

elements which have fought for them."

At the same time that Philip attacked England, he was encouraging in France the Holy League; the object of which was to overturn the throne and divide the state. The leaguers conferred upon him the title of Protector of their affociation; which he eagerly accepted, from a perfuafion that their exertions would foon conduct him, or one of his family, to the throne of France. He thought himself so sure of his prey, that when speaking of the principal cities in France, he used to fay, " My fine city of Paris, my fine city of Orleans," in the same manner as he would have spoken of Madrid and Seville. What was the refult of all those intrigues? Henry IV. embraced the Catholic religion, and by his abjuration of Protestantism made his rival lose France in a quarter of an hour.

Philip, at length, worn out by the debaucheries of his youth, and by the toils of government, drew near his last hour. A slow fever, the most painful gout, and a complication of other diforders, could not difengage him from bufiness, or draw from him the least comPhilip. plaint. "What!" faid he to the physicians who hesitated about letting blood of him; "What! are you afraid of drawing a few drops of blood from the veins of a king who has made whole rivers of it flow from heretics?" At last, exhausted by a complication of distempers, which he bore with a heroic patience, and being eaten up of lice, he expired the 13th of September 1598, aged 72 years, after a reign of 43 years and eight months. During the last 50 days of his illness he showed a great sense of religion, and had his eyes almost

always fixed towards heaven.

Watfon's Philip II.

No character was ever drawn by different historians in more opposite colours than that of Philip; and yet, considering the length and activity of his reign, there is none which it should seem would be more easy to ascertain. From the facts recorded in history, we cannot doubt that he possessed, in an eminent degree, penetration, vigilance, and a capacity for government. His eyes were continually open upon every part of his extenfive dominions. He entered into every branch of administration; watched over the conduct of his ministers with unwearied attention; and in his choice both of them and of his generals, discovered a considerable share of fagacity. He had at all times a composed and settled countenance, and never appeared to be either elated or depressed. His temper was the most imperious, and his looks and demeanor were haughty and fevere; yet among his Spanish subjects he was of easy access; listened patiently to their representations and complaints; and where his ambition and bigotry did not interfere, was generally willing to redress their grievances. When we have said thus much in his praise, we have said all that truth requires or truth permits. It is indeed impossible to suppose that he was infincere in his zeal for religion. But as his religion was of the most corrupt kind, it served to increase the natural depravity of his disposition; and not only allowed, but even prompted, him to commit the most odious and shocking crimes. Although a prince in the bigotted age of Philip might be persuaded that the interest of religion would be advanced by falsehood and persecution; yet it might be expected, that, in a virtuous prince, the fentiments of honour and humanity would on some occasions triumph over the dictates of superstition: but of this triumph there occurs not a fingle instance in the reign of Philip; who without hesitation violated his most facred obligations as often as religion afforded him a pretence, and under that pretence exercifed for many years the most unrelenting cruelty without reluctance or remorfe. His ambition, which was exorbitant; his refentment, which was implacable; his arbitrary temper, which would fubmit to no controul-concurred with his bigotted zeal for the Catholic religion, and carried the fanguinary spirit, which that religion was calculated to inspire, to a greater height in Philip than it ever attained in any other prince of that or of any former or fucceeding age.

Though of a small size, he had an agreeable person. His countenance was grave, his air tranquil, and one could not discover from his looks either joy in profperity or chagrin in adversity. The wars against Holland, France, and England, cost Philip 564 millions of ducats; but America furnished him with more than the half of that sum. His revenues, after the junction of Portugal, are faid to have amounted to 25 millions of ducats, of which he only laid out 100,000 for Vol. XVI. Part I.

the support of his own household. Philip was very Philip, jealous of outward respect; he was unwilling that any should speak to him but upon their knees. The duke of Alba having one day entered this prince's cabinet without being introduced, he received the following harsh falutation, accompanied with a stormy countenance: "An impudence like this of yours would deferve the hatchet." If he thought only how to make himself be feared, he succeeded in doing so; for few princes have been more dreaded, more abhorred, or have caused more blood to flow, than Philip II. of Spain. He had fucceffively, if not all at once, war to maintain against Turkey, France, England, Holland, and almost all the Protestants of the empire, without having a fingle ally, not even the branch of his own house in Germany. Notwithstanding so many millions employed against the enemies of Spain, Philip found in his economy and his resources wherewith to build 30 citadels, 64 fortified places, 9 sea ports, 25 arfenals, and as many palaces, without including the Escurial. His debts amounted to 140 millions of ducats, of which, after having paid feven millions of interest, the greatest part was due to the Genoese. Moreover, he had fold or alienated a capital stock of 100 millions of ducats in Italy. He made a law, fixing the majority of the kings of Spain at 14 years of age. He affected to be more than commonly devout; he ate often at the refectory with the monks; he never entered their churches without kiffing all the relics; he caused knead his bread with the water of a fountain which was thought to possess a miraculous virtue; he boasted of never having danced, and of never wearing breeches after the Grecian fashion. Grave and solemn in all his actions, he drove from his prefence a woman who had fmiled while he was blowing his nofe. One great event of his domestic life is the death of his son Don Carlos. The manner of this prince's death is not certainly known. His body, which lies in the monument of the Escurial, is there separated from his head; but it is pretended that the head is separated only because the leaden coffin which contains the body is too fmall. The particulars of his crime are as little known as the manner in which it was committed. There is no evidence, nor is there any probability, that Philip would have caused him to be condemned by the inquisition. All that we know of the matter is, that in 1568 his father, having discovered that he had some correspondence with the Hollanders his enemies, arrested him himself in his own room. He wrote at the same time to Pope Pius V. in order to give him an account of his fon's imprisonment; and in his letter to this pontiff, the 20th of January 1568, he fays, "that from his earliest years the strength of a wicked nature has stifled in Don Carlos every paternal instruction." It was Philip II. who caused to be printed at Anvers, between 1569 and 1572, in 8 vols folio, the fine Polyglot Bible, which bears his name; and it was he who subjected the islands afterwards called the Philippines. He married fucceffively, 1st, Mary daughter of John III. king of Portugal; 2dly, Mary daughter of Henry VIII. and queen of England; 3dly, Elizabeth of France, daughter of Henry II.; 4thly, Anne, daughter of the emperor Maximilian II. Don Carlos was the fon of his first wife, and Philip III. of the last.

PHILIPPI, in Ancient Geography, a town of Mace-Mm donia,

Philippi. donia, in the territory of the Edones, on the confines of Thrace (Pliny, Ptolemy), fituated on the fide of a fleep eminence; anciently called Datum and Drenides (Appian), though Strabo feems to distinguish them. This town was famous on feveral accounts; not only as taking its name from the celebrated Philip of Maccdon, father to Alexander the Great, who confidered it as a fit place for carrying on the war against the Thracians, but also on account of two battles fought in its neighbourhood between Augustus and the republican party. In the first of these battles, Brutus and Cassius had the command of the republican army; while Octavianus, afterwards Augustus, and Mark Antony, had the command of their adverfaries. The army of Brutus and Cassius consisted of 19 legions and 20,000 horse; the imperial forces of an equal number of legions, but more complete, and 13,000 horse; so that the numbers on both fides were pretty equal. The troops of Brutus were very richly dressed, most of them having their armour adorned with gold and filver; for Brutus, though very frugal in other respects, was thus extravagant with respect to his men, thinking that the riches that they had about them would make them exert themselves the more, to prevent these from falling into the enemy's hands. Both the republican generals appear to have been inferior in skill to Mark Antony; for as to Octavianus, he is allowed never to have conquered but by the valour of others. A little before the first engagement, Octavianus, who had been indisposed, was carried out of the camp, at the persuasion of Artorius his phyfician, who had dreamed that he faw a vision directing him to be removed. Brutus's men, who opposed the wing commanded by Octavianus, charged without orders, which caused great confusion. However, they were successful; for part of them, taking a compass about, fell upon the enemy's rear: after which they took and plundered the camp, making a great flaughter of fuch as were in it, and among the rest putting 2000 Lacedemonians to the fword who were newly come to the affiftance of Octavianus. The emperor himself was fought for, but in vain, having been conveyed away for the reason above mentioned; and as the soldiers pierced the litter in which he was usually carried, it was thence reported that he had been killed. This threw that whole part of the army into fuch consternation that when Brutus attacked them in front, they were most completely routed; three whole legions being cut in pieces, and a prodigious flaughter made among the fugitives. But by the imprudence of the general in purfuing too far, the wing of the republican army commanded by Caffius was left naked and separated from the rest of the army; on which they were attacked at once in front and in flank, and thus they were defeated and their camp taken, while Brutus imagined that he had gained a complete victory. Cassius himself retired to an eminence at a small distance from Philippi; whence he fent one of his greatest intimates to procure intelligence concerning the fate of Brutus. That general was on his way, and already in view, when the meffenger set out. He soon met his friends; but they furrounding him to inquire the news, Cassius, who beheld what passed, imagined that he was taken prisoner by the enemy, retired to his tent, and in despair caused one of his freedmen cut off his head. Thus far at least is certain, that he went into the tent with that freed-

man, and that his head was found feparated from his Philippi, body when Brutus entered. However, the freedman Phioppics. was never afterwards feen.

The fecond engagement was pretty fimilar to the first. Brutus again opposed Octavianus, and met with the same success; but in the mean time Antony, to whom he ought undoubtedly to have opposed himself, having to do only with the lieutenants of Cassius, gained a complete victory over them. What was worst, the fugitives, inflead of leaving the field of battle altogether, fled for protection to Brutus's army; where crowding in among the ranks, they carried despair and confusion wherever they went, so that a total defeat enfued, and the republican army was almost entirely cut in pieces. After the battle, Brutus put an end to his own life, as is related more fully under the article

The city of Philippi is likewife remarkable on account of an epiftle written by St Paul to the church in that place. It was a Roman colony (Luke, Pliny, Coin, Inscription). It is also remarkable for being the birth-place of Adrastus, the Peripatetic philosopher, and disciple of Aristotle .- The town is still in being, and is an archbifhop's fee; but greatly decayed and badly peopled. However, there is an old amphitheatre, and feveral other monuments of its ancient grandeur. E. Long. 44. 55. N. Lat. 41. 0.

PHILIPPICS, Φιλιππικοι λογοι, in literature, is a name which is given to the orations of Demosthenes against Philip king of Macedon. The Philippics are reckoned the master-pieces of that great orator: Longinus quotes many inflances of the sublime from them; and points out a thousand latent beauties. Indeed that pathetic in which Demosthenes excelled, the frequent interrogations and apostrophes wherewith he attacked the indolence of the Athenians, where could they be better employed? Whatever delicacy there be in the cration against Leptines, the Philippics have the advantage over it, were it only on account of the subject, which gives Demosthenes fo fair a field to display his chief talent, we mean, with Longinus, that of moving and aftonish-

Dionysius Halicarnasseus ranks the oration on the Halonese among the Philippics, and places it the eighth in order: but though his authority be great, yet that force and majesty wherein Cicero characterizes the Philippics of Demosthenes, seem to exclude the oration on the Halonese out of the number; and authorize the almost universal opinion of the learned, who reject it as spurious. Libanius, Photius, and others, but above all the languidness of the style, and the lowness of the expressions, which reign throughout the whole, father it on Hegefippus.

PHILIPPIC is likewise applied to the fourteen orations of Cicero against Mark Antony. Cicero himfelf gave them this title in his epiftles to Brutus; and posterity have found it so just, that it has been continued to our times. Juvenal, Sat. x. calls the fecond the divine Philippic, and witnesses it to be of great fame, conspicuæ divina Philippica famæ. That orator's intitling his last and most valued orations after the Philippics of Demosthenes shews the high opinion he had of them. Cicero's Philippics cost him his life; Mark Antony having been fo irritated with them, that when he arrived at the triumvirate, he procured Cicero's murBeatfon's

PHILIPPINE ISLANDS, are certain islands of Asia, which lie between 114 and 126 degrees of east longitude, and between 6 and 20 degrees of north latitude; about 300 miles fouth-east of China. They are said to Mil. Mem. be about 1200 in number, of which there are 400 very considerable. They form a principal division of that immense Indian Archipelago, which confists of so many thousand islands, some of which are the largest, and many of them the richest, in the world. The Philippines form the northernmost cluster of these islands, and were discovered in the year 1521 by the famous navigator Ferdinand Magellan, a Portuguese gentleman, who had ferved his native country both in the wars of Africa and in the East Indies; particularly under Albuquerque, the famous Portuguese general, who reduced Goa and Malacca to the obedience of that crown. Magellan having had a confiderable share in those actions, and finding himself neglected by the government of Portugal, and even denied, as it is faid, the small advance of a ducat a month in his pay, left the court of Portugal in difgust, and offered his services to Charles V. then emperor of Germany and king of Spain, whom he convinced of the probability of discovering a way to the Spice islands, in the East Indies, by the west: whereupon the command of five small ships being given him, he set sail from Seville, on the 10th of August 1519, and standing over to the coast of South America, proceeded fouthward to 520, where he fortunately hit upon a strait, since called the Strait of MAGELLAN, which carried him into the Pacific ocean or South fea; and then steering northward, repassed the equator: after which, he stretched away to the west, across that vast ocean, till he arrived at Guam, one of the Ladroncs, on the 10th of March 1521; and foon after failed to the westward, and discovered the Philippines, which he did on St Lazarus's day; and, in honour of that faint, he called them the Archipelago of St Lazarus. He took possession of them in the name of the king of Spain, but happened to be killed in a skirmish he had with the natives of one of them. His people, however, arrived afterwards at the Moluccas, or Clove islands, where they left a colony, and returned to Spain by the way of the Cape of Good Hope; being ,the first persons that ever failed round the globe .- But there was no attempt made by the Spaniards to subdue or plant the Philippine islands until the year 1564, in the reign of Philip II. fon of Charles V. when Don Louis de Velasco, viceroy of Mexico, sent Michael Lopez Delagaspes thither with a fleet, and a force sufficient to make a conquest of these islands, which he named the Philippines, in honour of Philip II. then upon the throne of Spain; and they have remained under the dominion of that crown till taken by Sir William Draper. The Philippines are scarce inferior to any other islands of Asia in all the natural productions of that happy climate; and they are by far the best situated for an extensive and advantageous commerce. By their position, they form the centre of intercourse with China, Japan, and the Spice islands; and whilst they are under the dominion of Spain, they connect the Afiatic and American commerce, and become a general magazine for the rich manufactures of the one and for the treasures of the other. Besides, they are well situa-

ted for a fupply of European goods, both from the fide Philippine of Acapulco and by the way of the Cape of Good Hope. In fact, they formerly enjoyed a traffic in some degree proportioned to the peculiar felicity of their fituation; but the Spanish dominion is too vast and unconnected to be improved to the best advantage.—The spirit of commerce is not powerful in that people. The trade of the Philippines is thought to have declined; its great branch is now reduced to two ships, which annually pass between these islands and Acapulco in America, and to a fingle port of Manilla in the island of Luconia.

Indeed the Spaniards appear by no means to be actuated by the spirit of industry; for, so far from improving the fine fituation of these islands to the utmost, it happens, on the contrary, that the trade is hurtful to the mother-country; for (to confine ourselves to Manilla, with which they have most to do), instead of taking Spanish manufactures, they trade with the Chinese for spices, filks, stockings, Indian stuffs, callicoes, chintz, and many other articles; and with the Japanese for cabinets, and all forts of lacquered ware; for all which they pay in gold or filver. All these commodities, together with what the islands produce, and great quantities of wrought plate by the Chinesc artisans, are collected at Manilla, and transported annually in two ships to Acapulco in Mexico. Each of these ships is esteemed worth 600,000l. sterling; and in the war which began in 1739, and which was not diffinguished by fuch a feries of wonderful fuccesses as that which ended in 1763, the taking of one of the galleons which carry on the trade between Manilla and America, was confidered as one of the most brilliant advantages which we gained. This trade is not laid open to all the inhabitants of Manilla, but is confined by very particular regulations, fomewhat analogous to those by which the trade of the register ships from Cadiz to the West Indies is restrained. The ships employed are all king's ships, commissioned and paid by him; and the tonnage is divided into a certain number of bales, all of the same fize. These are divided among the convents at Manilla, but before the suppression of the Jesuits principally among them, as a donation to support their missions, for the propagation of the Roman Catholic faith. Most of the religious are concerned in this trade, and fell to the merchants at a great price what room in the ship they are not to occupy. This trade is by a royal edict limited to a certain value, but it always exceeds it, each ship being generally worth 3,000,000 of dollars. The returns made from America are in filver, cochineal, fweetmeats, together with fome European millinery ware for the women, and fome strong Spanish wine. It is obvious, that the greatest part of the treasure remitted does not remain at Manilla, but is dispersed over India for goods. Many strong remonstrances against this Indian trade to Mexico have been made to the court of Spain, wherein they urge, that the filk manufactories of Va-Icntia and other parts of Spain, the linens from Cadiz, and their other manufactories, are hurt in their fale in Mexico and Peru, by the Chinese being able to afford them goods of the same fort cheaper than they are able; that were this trade laid open, the whole treasure of the New World would centre in Spain, or with European merchants; but now it enriches only some religious orders and a few private persons. Wise as these arguments are, the Jesuits and priests, versant in intrigue, M m 2

276

Philippine and the most selfish set of men on earth, had interest enough at court to stop the effect.

At Cavite in this bay are a fort, a town, and a fine dock-yard, where these large galleons are built and repaired, and where they load and unload, together with all the other large ships that trade to this bay.

The principal of the Philippine islands are Luconia or Manilla, Tandago or Samar, Masbate, Mindora, Luban, Paragoa, Panay, Leyte, Bohel, Sibu, Sogbu, Negros, St John, Xolo, and Mindanao. In most of these, the Spanish power prevails, and all are under the governor of Luconia; but there are some in which that nation has little authority, or even influence, fuch

as Mindanao.

The inhabitants of these islands consist of Chinese, Ethiopians, Malays, Spaniards, Portuguefe, Pintados or Painted People, and Mestees, a mixture of all these. Their persons and habits resemble those of the several nations whence they derive their original; only, it is observable, that the features of the blacks of these islands are as agreeable as those of the white people. There is not a foil in the world that produces greater plenty of all things for life; as appears by the multitude of inhabitants to be found in the woods and mountains, who fubfift almost entirely by the fruits of the earth, and the venison they take. Nor can any country appear more beautiful; for there is a perpetual verdure, and buds, bloffoms, and fruit, are found upon the trees all the year round, as well on the mountains as in the cultivated gardens. Vast quantities of gold are washed down from the hills by the rains, and found mixed with the fand of their rivers. There are also mines of other metals, and excellent loadstones found here; and such numbers of wild buffaloes, that a good huntsman on horseback, armed with a spear, may kill 10 or 20 in a day. The Spaniards take them for their hides, which they fell to the Chinese; and their carcases serve the mountaineers for food. Their woods also abound with deer, wild hogs, and goats. Of the last, there is such plenty in one of these islands, that the Spaniards gave it the name of Cabras. Horses and cows have been likewife imported into these islands, from New Spain, China, and Japan, which have multiplied confiderably; but the sheep that were brought over came to nothing. The trees produce a great variety of gums; one kind, which is the commonest, by the Spaniards called brea, is used instead of pitch; of the others some are medicinal, others odoriferous.

In those islands are monkeys and baboons of such a fize, as to defend themselves if attacked by men. When they can find no fruit in the mountains, they go down to the sea to catch crabs and oysters; and that the oysters may not close and catch their paws, they first put in a stone to prevent their shutting close: they take crabs by putting their tail in the holes where they lie, and when the crab lays hold of it, they draw him out. There are also great numbers of civet-cats in some of the islands. The bird called tavan, is a black fea-fowl, fomething less than a hen, and has a long neck; it lays its eggs in the fand by the fea-fide, 40 or 50 in a trench, and then covers them, and they are hatched by the heat of the fun. They have likewise the bird saligan, which builds her nest on the fides of rocks. This is a species of swallow the nests of which are so much esteemed in the east, being a kind Philippine of jelly that dissolves in warm water.

The Spaniards have introduced several of the American fruits, which thrive here as well as in America; the cocoa or chocolate nut particularly, which increafes fo that they have no occasion now to import it from Mexico. Here is also the FOUNTAIN-Tree, from which the natives draw water; and there is likewise a kind of cane, by the Spaniards called vaxueo, which, if cut, yields fair water enough for a draught, of which there is plenty in the mountains, where water is most want-

These islands being hot and moist, produce abundance of venomous creatures, as the foil does poisonous herbs and flowers, which do not kill those who touch or taste them, but so infect the air, that many people die in the

time of their bloffoming.

The orange, lemon, and feveral other trees, bear twice a-year. A fprig, when planted, becomes a tree and bears fruit in a year's time; fo that without any hyperbole it may be affirmed, that a more luxuriant verdant foil can scarcely be conceived. The woods are filled with old, large, and lofty trees, and fuch as yield more sustenance to man than is to be found in almost any other part of the world. These islands, however, besides their other inconveniences, of which they have many, are very subject to earthquakes, which often prove very fatal. See MANILLA.

PHILIPPINES, a religious fociety of young women at Rome, so called from their taking St Philip de Neri for their protector. The fociety confifts of 100 poor girls, who are brought up till they are of age to be married, or become nuns, under the direction of some religious women, who teach them to read, write, and work, and instruct them in the duties of Christianity. They wear a white veil, and a black cross on their

breafts. See MACEDONIA.

PHILIPPISTS, a fect or party among the Lutherans; the followers of Philip Melancthon. He had strenuously opposed the Ubiquists, who arose in his time; and the dispute growing still hotter after his death, the university of Wirtemberg, who espouled Melancthon's opinion, were called by the Flacians, who at-

tacked it, Philippifts.

PHILIPS, FABIAN, was author of several books relating to ancient customs and privileges in England. He was born at Prestbury in Gloucestershire, September 28. 1601. When very young, he spent some time in one of the Inns of Chancery; and went from thence to the Middle-Temple, where he became learned in the law. In the civil wars, he was a bold affertor of the king's prerogative; and was fo strongly attached to Charles I. that, two days before that monarch was beheaded, he wrote a protestation against the intended murder, and caused it to be printed, and affixed to posts in all public places. He likewise published, in 1649, 4to, a pamphlet entitled, "Veritas Inconcussa; or King Charles I. no Man of Blood, but a Martyr for his People:" which was reprinted in 1660, 8vo. In 1663, when the courts of justice at Westminster, especially the chancery, were voted down by Oliver's parliament, he published, "Confiderations against the dissolving and taking them away:" for which he received the thanks of parliament. He was for some time filazer for LonPhilips. don, Middlesex, Cambridgeshire, and Huntingdonshire; and spent much money in searching records, and writing in favour of the royal prerogative. The only advan-tage he received for this attachment to the royal cause was, the place of one of the commissioners for regulating the law, worth 2001. per annum, which only lasted two years. After the restoration of Charles II. when the bill for taking away the tenures was depending in parliament, he wrote and published a book to show the necessity of preserving them, entitled, " Tenenda non tollenda; or, the Necessity of preserving Tenures in capite, and by Knight's-fervice, which, according to their first institution, were, and are yet, a great part of the falus populi, &c. 1660," 4to. In 1663 he published, "The Antiquity, Legality, Reason, Duty, and Necesfity of Pre-emption and Pourveyance for the King," 4to; and afterwards many other pieces upon subjects of a similar kind. He assisted Dr Bates in his " Elenchus Motuum; especially in searching the records and offices for that work. He died, November 17th, 1690, in his 89th year. He was a man well acquainted with records and antiquities; but his manner of writing is neither close nor well digested. He published a politi-cal pamphlet in 1681, entitled "Ursa Major et Minor; showing that there is no such Fear, as is factitiously pretended, of Popery and arbitrary Power."

PHILIPS, Ambrose, an English poet, was descended from a very ancient and confiderable family of that name in Leicestershire. He received his education at St John's college, Cambridge; during his stay at which university, he wrote his pastorals, which acquired him at that time so high a reputation. His next performance was, The Life of Archbishop Williams, written, according to Mr Cibber, to make known his political principles, which in the course of it he had a free opportunity of doing, as the archbishop, who is the hero of his work, was a strong opponent to the high-church

measures.

When he quitted the university, and came to London, he became a constant attendant at, and one of the wits of, Button's coffee-house, where he obtained the friendship and intimacy of many of the celebrated geniuses of that age, more particularly of Sir Richard Steele, who, in the first volume of his Tatler, has inferted a little poem of Mr Philips's, which he calls a Winter Piece, dated from Copenhagen, and addressed to the earl of Dorfet, on which he bestows the highest encomiums; and, indeed, so much justice is there in these his commendations, that even Mr Pope himself, who had a fixed aversion for the author, while he affected to despise his other works, used always to except this from the number.

The first dislike Mr Pope conceived against Mr Philips, proceeded from that jealoufy of fame which was fo conspicuous in the character of that great poet; for Sir Richard Steele had taken fo ftrong a liking to the pastorals of the latter, as to have formed a defign for a critical comparison of them with those of Pope, in the conclusion of which the preference was to have been given to Philips. This defign, however, coming to Mr Pope's knowledge, that gentleman, who could not bear a rival near the throne, determined to ward off this stroke by a stratagem of the most artful kind; which was no other than taking the same task on himself; and, in a paper in the Guardian, by drawing the like com-

parison, and giving a like preference, but on principles Philips. of criticism apparently fallacious, to point out the abfurdity of fuch a judgment. However, notwithstanding the ridicule that was drawn on him in consequence of his standing as it were in competition with so powerful an antagonist, it is allowed, that there are, in some parts of Philips's pastorals, certain strokes of nature, and a degree of fimplicity, that are much better fuited to the purposes of pastoral, than the more correctly turned periods of Mr Pope's verification. Mr Philips and Mr Pope being of different political principles, was another cause of enmity between them; which arose at length to fo great a height, that the former, finding his antagonist too hard for him at the weapon of wit, had even determined on making use of a rougher kind of argument; for which purpose he even went so far as to hang up a rod at Button's for the chastisement of his adverfary whenever he should come thither; which, however, Mr Pope declining to do, avoided the argumentum baculinum, in which he would, no doubt, have found himfelf on the weakest fide of the question. Our author also wrote several dramatical pieces; The Briton, Distressed Mother, and Humphrey Duke of Gloucester; all of which met with success, and one of them is at this time a standard of entertainment at the theatres, being generally repeated feveral times in every feafon. Mr Philips's circumstances were in general, through his life, not only eafy, but rather affluent, in consequence of his being connected, by his political principles, with persons of great rank and consequence. He was concerned with Dr Hugh Boulter, afterwards archbishop of Armagh, the right honourable Richard West, Esq. lord chancellor of Ireland, the reverend Mr Gilbert Burnet, and the reverend Mr Henry Stevens, in writing a feries of papers called the Free Thinker, which were all published together by Mr Philips, in three volumes

In the latter part of Queen Anne's reign, he was fecretary to the Hanover club, who were a fet of noblemen and gentlemen who had formed an affociation inhonour of that succession, and for the support of its interests, and who used particularly to distinguish in their toasts such of the fair sex as were most zealously attached to the illustrious House of Brunswic. Mr Philip's station in this club, together with the zeal shown in his writings, recommended him to the notice and favour of the new government. He was, foon after the accession of King George I. put into the commission of the peace, and appointed one of the commissioners of the lottery. And, on his friend Dr Boulter's being made primate of Ireland, he accompanied that prelate across St George's Channel, where he had confiderable preferments bestowed on him, and was elected a member of the House of Commons there, as representative for the county of Armagh. At length, having purchased an annuity for life of 400l. per annum, he came over to England fome time in the year 1748; but having a very bad state of health, and being moreover of an advanced age, he died foon after, at his lodgings near Vauxhall, in Surry

" Of his personal character (says Dr Johnson) all I. have heard is, that he was eminent for bravery, and skill in the fword, and that in conversation he was solemn and pompous." He is somewhere called Quaker Philips, but, however, appears to have been a man of inte-

grity; for the late Paul Whitehead relates, that when Mr Addison was secretary of state, Philips applied to him for some preferment, but was coolly answered, "that it was thought that he was already provided for, by being made a justice for Westminster." To this observation our author, with some indignation, replied, "Though poetry was a trade he could not live by, yet he scorned to owe subsistence to another which he ought not to live by."

The following anecdote is told of our author by Dr Johnson: "At a coffee house, he (Philips) was dicourfing upon pictures, and pitying the painters, who, in their historical pieces, always draw the same fort of sky." "They should travel (said he), and then they would see that there is a different sky in every country, in England, France, Italy, and so forth." "Your remark is just (said a grave gentleman who sat by), I have been a traveller, and can testify what you observe is true; but the greatest variety of skies that I found was in Poland." "In Poland, Sir? (says Philips)." "Yes, in Poland; for there is Sobiesky, and Sabrunsky, and Jablonsky, and Podebrasky, and many more skies."

PHILIPS, Catharine, a very ingenious lady, the daughter of Mr John Fowler merchant, was born at London in January 1631, and educated at a school at Hackney. She married James Philips of the priory of Cardigan, Esq. and went with the viscountess of Dungannon into Ireland, where she translated Corneille's tragedy of Pompey into English, which was several times acted there

with great applaufe.

She translated also the four first acts of Horace, another tragedy of Corneille, the fifth being done by Sir John Denham. This excellent and amiable lady, for fuch it feems the was, died of the small-pox in London, the 22d of June 1664, much and justly regretted; " having not left (fays Langbaine) any of her fex her equal in poetry.—She not only equalled (adds he) all that is reported of the poetesses of antiquity, the Lesbian Sappho and the Roman Sulpitia, but justly found her admirers among the greatest poets of our age." Cowley wrote an ode upon her death. Dr Jeremy Taylor had addressed to her his "Measures and Offices of Friendship:" the second edition of which was printed in 1657, 12mo. She assumed the name of Orinda. In 1667, were printed, in folio, " Poems by the most defervedly admired Mrs Catharine Philips, the matchless Orinda. To which is added, Monfieur Corneille's Pompey and Horace, tragedies. With feveral other translations from the French;" and her picture before them, engraven by Faithorne. There was likewise another edition in 1678, folio; in the preface of which we are told, that " she wrote her familiar letters with great facility, in a very fair hand, and perfect orthography; and if they were collected with those excellent discourses the wrote on feveral fubjects, they would make a volume much larger than that of her poems." In 1705, a fmall volume of her letters to Sir Charles Cottrel was printed, under the title of "Letters from Orinda to Poliarchus." The editor of these letters tells us, that "they were the effect of an happy intimacy between herself and the late famous Poliarchus, and are an admirable pattern for the pleafing correspondence of a virtuous friendship. They will sufficiently instruct us, how an intercourse of writing between persons of

different fexes ought to be managed with delight and innocence; and teach the world not to load fuch a commerce with censure and detraction, when it is removed at such a distance from even the appearance of

guilt."

PHILIPS, John, an eminent English poet, was born in 1676. He was educated at Winchester and Oxford, where he became acquainted with Milton, whom he fludied with great application, and traced in all his fuccefsful translations from the ancients. The first poem which distinguished our author, was his Splendid Shilling, which is in the Tatler flyled the "finest burlesque poem in the English language." His next was entitled Blenheim, which he wrote at the request of the earl of Oxford, and Mr Henry St John, afterwards Lord Bolingbroke, on the victory obtained there by the duke of Marlborough in 1704. It was published in 1705; and the year after he finished another poem upon cyder, the first book of which had been written at Oxford. It is on the model of Virgil's Georgics, and is a very excellent piece. We have no more of Mr Philips but a Latin ode to Henry St John, Esq. which is esteemed a masterpiece. He was contriving greater things; but illness coming on, he was obliged to drop every thing but the care of his health. This care, however, did not fave him: for, after lingering a long time, he died at Hereford, Feb. 15. 1708, of a confumption and althma, before he had reached his 33d year. He was interred in the cathedral of that city with an inscription over his grave; and had a monument erected to his memory in Westminster-abbey by Sir Simon Harcourt, afterwards lord-chancellor, with an epitaph upon it written by Dr Atterbury, though commonly afcribed to Dr Freind. He was one of those few poets whose muse and manners were equally excellent and amiable; and

both were so in a very eminent degree.

Dr Johnson observes, that "Philips has been always praised, without contradiction, as a man modest, blameless, and pious; who bore a narrow fortune without discontent, and tedious and painful maladies without impatience; beloved by those that knew him, but not ambitious to be known. He was probably not formed for a wide circle. His conversation is commended for its innocent gaiety, which feems to have flowed only among his intimates; for I have been told, that he was in company filent and barren, and employed only upon the pleasures of his pipe. His addiction to tobacco is mentioned by one of his biographers, who remarks, that in all his writings except Blenheim he has found an opportunity of celebrating the fragrant fume. In common life, he was probably one of those who please by not offending, and whose person was loved, because his writings were admired. He died honoured and lamented. before any part of his reputation had withered, and before his patron St John had difgraced him. His works are few. The Splendid Shilling has the uncommon merit of an original defign, unless it may be thought precluded by the ancient Centos. To degrade the founding works and stately construction of Milton, by an application to the lowest and most trivial things, gratifies the mind with a momentary triumph over that grandeur which hitherto held its captives in admiration; the words and things are presented with a new appearance, and novelty is always grateful where it gives no pain. But the merit of fuch performances begins and ends

Philips, with the first author. He that should again adapt Mil-Philippourg ton's phrase to the gross incidents of common life, and even adapt it with more art, which would not be difficult, must yet expect but a small part of the praise which Philips has obtained; he can only hope to be

confidered as the repeater of a jest.

"There is a Latin ode written to his patron St John, in return for a present of wine and tobacco, which cannot be passed without notice. It is gay and elegant, and exhibits feveral artful accommodations of classic expressions to new purposes. It seems better turned than the odes of Hannes. To the poem on cyder, written in imitation of the Georgics, may be given this peculiar praise, that it is grounded in truth; that the precepts which it contains are exact and just; and that it is therefore at once a book of entertainment and of science. This I was told by Miller, the great gardener and botanist, whose expression was, that ' there were many books written on the same subject in prose, which do not contain fo much truth as that poem.' In the disposition of his matter, so as to intersperse precept, relating to the culture of trees, with fentiments more generally pleafing, and in eafy and graceful transitions from one subject to another, he has very diligently imitated his matter; but he unhappily pleafed himfelf with blank verse, and supposed that the numbers of Milton, which impress the mind with veneration, combined as they are with subjects of inconceivable grandeur, could be fustained by images which at most can rise only to elegance. Contending angels may shake the regions of heaven in blank verse; but the flow of equal measures, and the embellishment of rhime, must recommend to our attention the art of engrafting, and decide the merit of the redstreak and pearmain. What study could confer, Philips had obtained; but natural deficiency cannot be supplied. He seems not born to greatness and elevation. He is never lofty, nor does he often furprise with unexpected excellence: but perhaps to his last peem may be applied what Tully said of the work of Lucretius, that 'it is written with much art, though with few blazes of genius."

It deserves to be remarked, that there were two poets of both the names of our author, and who flourished in his time. One of them was Milton's nephew, and wrote feveral things, particularly fome memoirs of his uncle, and part of Virgil Travestied. The other was the author of two political farces, which were both printed in 1716; 1. The Earl of Marr married, with the Humours of Jocky the Highlander. 2. The Pretender's Flight; or a Mock Coronation, with the Hu-

mours of the facetious Harry St John.

PHILIPSBURG, is an imperial town of Germany, in the circle of the Upper Rhine. It is very strong, and looked upon as one of the bulwarks of the empire. It is scated in a morals, and fortified with seven bastions, and feveral advanced works. The town belongs to the bishop of Spire, but all the works and the fortifications to the empire. It has been several times taken and retaken, particularly by the French in 1734, when the duke of Berwick was killed at the fiege; but it was rendered back the year following, in confequence of the treaty of Vienna, It is feated on the river Rhine, over which there is a bridge feven miles fouth of Spire, 22 fouth-east of Worms, and 40 north-east of Strasburg. E. Long. 8. 33. N. Lat. 49. 12.

PHILISTÆA, in Ancient Geography, the country Philithaa, of the Philiftines (Bible); which lay along the Medi-Philiftines terranean, from Joppa to the boundary of Egypt, and extending to inland places not far from the coast. Palæssini, the people; Palæssina, the country (Josephus): Afterwards applied to the whole of the Fioly Land and its inhabitants. Philistai, the people (Septuagint); Philistini (Vulgate); the Caphtorim and Philistim, originally from Egypt, and descendants of Cham (Moses). Expelled and destroyed the Hivites the ancient inhabitants, and occupied their country; that is, the region which retained the name of *Philiflim*, in which that of

Caphtorim was fwallowed up.

PHILISTINES, were the ancient inhabitants of Palestine, well known in sacred history. These people are sometimes called in Scripture Cherethites and Caphtorims. The earlier part of their history is, like that of most other nations, very obscure and uncertain. The authors of the Universal History tell us, that they were descended from the Cassuhim partly, and partly from the Caphtorim, both from the loins of Mizraim the fon of Ham, the fon of Noah. Moses tells us (Deut. xi. 23.), that they drove out the Avim or Avites even to Azzah or Gazah, where they settled; but when this happened cannot be determined. On the whole, however, our learned authors are clearly of opinion, that the Cassuhim and Caphtorim, from whom the Philistines are descended, came originally from Egypt, and called the country which they had conquered by their own name (See PALESTINE). Many interpreters, however, think, that Caphtor was but another name for Cappadocia, which they imagine to have been the original country of the Philistines. But Father Calmet, in a particular differtation prefixed to the first book of Samuel, endeavours to show that they were originally of the isle of Crete. The reasons which led him to think that Caphtor is the isle of Crete are as follow: The Philistines were strangers in Palestine, as appears in various parts of Scripture; such as Gen. x. 14. Deut. ii. 23. Jer. xlvii. 4. and Amos ix. 7. whence the Septuagint always translate this name Strangers. Their proper name was Cherethims, for Ezekiel (xxv. 16.), fpeaking against the Philistines, has these words, " I will stretch out mine hand upon the Philistines, and I will cut off the Cherethims, and de-stroy the remnant of the sea-coast." Zephaniah (ii. 5.), inveighing against the same people, says, "Wo unto the inhabitants of the sea-coasts, the nation of the Cherethites." And Samuel (Book I. xxx. 14.) fays, that the Amalekites made an irruption into the country of the Cherethites, that is to fay, of the Philistines, as the fequel of the discourse proves. And afterwards the kings of Judah had foreign guards called the *Cherethites*-and *Pelethites*, who were of the number of the Phili-ftines (2 Sam. xv. 18.) The Septuagint, under the name Cherethites, understood the Cretans; and by Cherith they understood Crete. Besides the Scripture says, that the Philistines came from the isle of Caphtor. Now we fee no island in the Mediterranean wherein the marks whereby the Scripture describes Caphtor and Cherethim agree better than in the isle of Crete. The name Cretim or Cherethim is the fame with that of Cretenses. The Cretans are one of the most ancient and celebrated people which inhabited the islands of the Mediterranean. They pretended to have been proPhilistines. duced originally out of their own soil. This island was well peopled in the time of the Trojan war. Homer calls it the island with a hundred cities. The city of Gaza in Palestine went by the name of Minoa (Steph. Byzant. in Gaza), because Minos king of Crete coming into that country, called this ancient city by his own

> Herodotus acknowledges that the Cretans were originally all barbarians, and did not come from Greece. Homer fays, that a different language was spoken in the isle of Crete; that there were Greeks there, true or ancient Cretans, Pelasgians, &c. The ancient Cretans are the same as the Cherethites, the Pelasgians as the Philistines or Pelethites of the Scripture: their language was the same with that of the Canaanites or Phœnicians, that is, Hebrew: they were descended, as well as Canaan, from Ham, by Mizraim (Gen. x. 6, 13, 14.). The manners, arms, religion, and gods of the Cretans and Philistines were the same. The arms of the one and the other were bows and arrows. Dagon the god of the Philistines was the same as the Dictynna of the Cretans.

Whether these arguments are convincing, it is not for us to determine; but Wells does not think they are, as he is of the same opinion with the authors of the Universal History, who say, that Coptus, the name of an old city of Egypt, is a corruption of the ancient Caphtor. It is not, however, of great importance to determine whether they came from Crete, from Cappadocia, or from Egypt: they had certainly been a confiderable time in the land of Canaan, when Abraham arrived there in the year of the world 2083. They were then a very powerful people, were governed by kings, and in possession of several considerable cities. The race of kings then in power were honoured with the title of Abimelech. This tace, however, was but of short duration; for their monarchy became an aristocracy of five lords, who were, as far as we can discover, partly independent of each other, though they acted in concert for the common cause. This form of government was again fucceeded by another race of kings, distinguished by the title of Achish, though they also bore that of Abimelech. The kings were always under great limitations. The Philistines appear to have been a very warlike people, industrious, and lovers of freedom; they did not circumcise, and in the early periods of their history held adultery in the greatest abhorrence. "Their character (fay the authors of the Universal History) must be considered at different periods; for we may fay they were not always the same people. In the days of Abraham and Isaac, they were without all doubt a righteous and hofpitable nation: but afterwards a revolution in government, religion, and morals, may have enfued. From thenceforward they became like other idolatrous nations; the fame enormities crept in and prevailed among them.

They are constantly mentioned in Scripture as strangers; Philistines. and, though possessed of a very considerable part of the Land of Promise, yet God would never suffer them to be driven out, they being Egyptians by descent, and not original natives, whose land only was promised to Abraham and his feed. Their arrogance and ambition were great; and so irreconcileable was their enmity (A) to the Israelites, that one would be almost tempted to think they were created on purpose to be a thorn in their fides; for though the hand of God was evidently against them several times, and particularly when they detained the ark, yet they hardened their hearts, and closed their eyes against conviction. They seem to have entertained a very fond veneration for their deities, in which they perfisted, though they were eye witnesses of the shame and ignominy which befel them in the prefence of the captive ark; nay, they were so biassed in their favour, as to imagine that their gods might prevail against Him who had in so glaring a manner put them to shame and disgrace. They were much engaged in trade; which, confidering their fituation, they may have exercised from the beginning; but, by the accession of the fugitive Edomites in David's time, they rose to so great a reputation as merchants, that the Greeks, it feems, preferred them to all other nations in that respect, and from them called all the country bordering on theirs Palestine. Their language was not so different from that spoken by the Hebrews as to cause any difficulty for them to converse together, as will be perceived by their intercourse with Abraham and Isaac; so that, in all this region, the feveral nations spoke one and the fame tongue, perhaps with some variation of dialect. They had doubtless the arts and sciences in common with the most learned and ingenious among their contemporaries, and perhaps some of them in greater perfection. They had giants among them; but whether they were originally of the breed of the Anakims, who retired hither when they were expelled from Hebron, or were fprung from accidental births, is not eafily determined. We must not forget, that the invention of the bow and arrow is ascribed to this people.

"Their religion was different at different times; under their first race of kings, they used the same rites with the Hebrews. Abimelech, in the sin he had like to have committed with Sarah, through Abraham's timidity, was favoured with a divine admonition from God; and, by his speech and behaviour at that time, it seems as if he had been used to converse with the Deity. In after-times, they fell into endless superstitions, and different kinds of idolatry; each of the principal or five cities seemed to have an idol of its own. Marna, Marnas, or Marnash, was worshipped at Gaza, and is said to have migrated into Crete, and to have become the Cretan Jupiter. Dagon was worshipped at Azotus; he feems to have been the greatest, the most ancient, and

Anc. part, 408, &cc.

⁽A) " From a paffage in Chronicles, it is gueffed to have been of very ancient date; where it is faid, that ' the men of Gath flew the children of Ephraim, who would have taken their cattle from them.' This incident is nowhere else to be found; and there are various notions concerning the sense in which we must take this passage. As to the time of the transaction, most people allow it to have been while the children of Israel were sojourners in Egypt. It plainly appears, by the next verse, that Ephraim himself was living at that period. The Targum supposes his children miscomputed the time they were to serve in Egypt, and began too early an attempt upon their Promised Land."

Philistines most favourite god they had; to which may be added, that he perhaps subsisted the longest of any that did not straggle out of the country. To him they ascribed the invention of bread-corn, or of agriculture, as his name imports. We cannot enter into the common notion of his being represented as a monster, half man half fish; nor confequently into another, almost as common, that he is the same with the Syrian goddess Derceto, who, we are told, was represented under some such mixed form. Our opinion is, that this idol was in shape wholly like a man; for we read of his head, his hands, and his feet. He stood in a temple at Azotus, and had priests of his own who paid him a very constant attendance. Next to Dagon was Baalzebub the god of Ekron. In the text of the New Testament he is called Beelzebub, and the prince of devils. His name is rendered lord of flies; which by some is held to be a mock appellation bestowed on him by the Jews; but others think him so styled by his worshippers, as Hercules Apomyios, and others, were, from his driving those infects away; and urge, that Ahaziah, in his sickness, would scarcely have applied to him, if his name had carried in it any reproach. But it must be remembered, it is the facred historian that makes use of that contemptuous term in derision; whereas the idolatrous monarch, who was one of his votaries, might call him by his common name, supposed to have been Baal-zebaoth, 'the lord of armies,' or Baal-shamim, 'lord of heaven,' or fome other bordering on Baal-zebub. How, or under what form he was represented is uncertain: some place him on a throne, and attire him like a king; others paint him as a fly. Not to dwell on this obscurity, it appears that he became an oracle of the highest repute for omniscience and veracity; that he had priests of his own; and that he, in the middle times at least, was much fought after by those who were anxious about futurity. Derceto we take certainly to have been the goddess of Ascalon; but we are supported by profane authority, without the least countenance from Scripture. Gath is seemingly the only city of all the five unprovided with a deity; wherefore, as the Scripture declares, that Ashtaroth, or Astarte, was worshipped by this people, we are ready to place her at Gath, and the rather, as this of all their cities may have had most communication with Sidon. To speak in general concerning their religious rites and ceremonies, which is all we can do, they seem to have erected very large and spacious temples, or very wide halls, for the celebration of their so-Jemn seasons and festivals (for such they surely had); their religious offices were attended with much pomp, and a great concourse from all parts; and they presented their gods with the chief part of their spoil, and carried them about with them when they went to war. We do not find in Scripture that they facrificed their children; and yet the Curetes (B) are faid to be their de-

> With respect to the history of this extraordinary people, we find from the above extract, that they were not Vol. XVI. Part I.

comprehended in the number of nations devoted to ex- Philiftines termination, and whose territory the Lord had abandoned to the Hebrews; nor were they of the curfed feed of Canaan. However, Joshua did not forbear to give their lands to the Hebrews, and to fet upon them by command from the Lord, because they possessed a country which was promifed to the people of God (Josh. xv. 45 -47. and xiii. 2, 3.). But these conquests of Joshua must have been ill maintained, since under the Judges, under Saul, and at the beginning of the reign of David, the Philistines oppressed the Israelites. True it is, Shamgar, Samfon, Samuel, and Saul, made head against them, but did not reduce their power; and they continued independent down to the reign of David, who fub-

jected them to his government.

They continued in subjection to the kings of Judalr down to the reign of Jehoram, fon of Jehoshaphat; that is, for about 246 years. However, Jehoram made war against them, and probably reduced them to his obedience again; because it is observed in Scripture, that they revolted again from Uzziah; and that this prince kept them to their duty during the time of his reign (2 Chron. xxi. 16. and xxvi. 6, 7.). During the unfortunate reign of Ahaz, the Philistines made great havoc in the territories of Judah; but his fon and successor Hezekiah subdued them (2 Chron. xxviii. 18. and 2 Kings xviii. 8.). Lastly, they regained their full liberty under the latter kings of Judah; and we may fee by the menaces denounced against them by the prophets Isaiah, Amos, Zephaniah, Jeremiah, and Ezekiel, that they brought a thousand hardships and calamities upon the children of Ifrael: for which cruelties God threatened to punish Efarhaddon befieged Ashdod or Azoth, and took it (Ifa. xx. 1.). And according to Herodotus, Psammeticus king of Egypt took the same city, after a siege of 29 years. There is great probability, that Nebuchadnezzar, when he subdued the Ammonites, Moabites, Egyptians, and other nations bordering upon the Jews, reduced also the Philistines. After this, they fell under the dominion of the Perfians; then under that of Alexander the Great, who destroyed the city of Gaza, the only city of Phœnicia that durst oppose him. After the perfecution of Antiochus Epiphanes, the Asmonæans subjected under their obedience several cities of the Philistines; and Tryphon gave to Jonathan Maccabæus the government of the whole coast of the Mediterranean, from Tyre as far as Egypt, which included all the country of the Philistines.

PHILLYREA, MOCK-PRIVET; a genus of plants belonging to the diandria class. See BOTANY Index.

PHILO, an ancient Greek writer, was of a noble family among the Jews, and flourished at Alexandria during the reign of Caligula. He was the chief of an embassy sent to Rome about the year 42, to plead the cause of the Jews against Apion, who was fent by the Alexandrians to charge them with neglecting the honours due to Cæfar. Caligula, however, would not allow him to fpeak, and behaved to him in fuch a manner that Philo

⁽B) "The Curetes facrificed their children to Saturn; and from the fimilitude this name bears to Cherethites or Philiftines, it has been advanced that they are the same people; but as we have no warrant for saying the Philistines practifed so barbarous and unnatural a custom, we may venture to pronounce, that they learned it not from them, but borrowed it elsewhere."

was in confiderable danger of loing his life. Others again tell us that he was heard; but that his demands were refused. He afterwards went to Roine in the reign of Claudius; and there, Eusebius and Jerome inform us, he became acquainted with St Peter, with whom he was on terms of friendship. Photius adds, that he became a Christian, and afterwards, from some motive of resentment, renounced it. Great part of this, however, is uncertain, for few believe that St Peter was at Rome so early as the reign of Claudius, if he ever was there at all.

Philo was educated at Alexandria, and made very great progress in eloquence and philosophy. After the fashion of the time, he cultivated, like many of his nation and faith, the philosophy of Plato, whose principles he fo thoroughly imbibed, and whose manner he fo well imitated, that it became a common faying, "Aut Plato philonizat, aut Philo platonizat." Josephus fays, he was a man" eminent on all accounts:" and Eusebius describes him, "copious in speech, rich in sentiments, and fublime in the knowledge of holy writ." He was, however, fo much immerfed in philosophy, particularly the Platonic, that he neglected the Hebrew language, and the rites and customs of his own people. Scaliger fays, that Philo "knew no more of Hebrew and Syriac than a Gaul or a Scythian." Grotius is of opinion, that "he is not fully to be depended on, in what relates to the manners of the Hebrews:" and Cudworth goes further; for "though a Jew by nation (fays he), he was yet very ignorant of Jewish customs." Fabricius thinks differently; for though he allows fome inadvertencies and errors of Philo with regard to these matters, yet he does not see a sufficient foundation on which to charge so illustrious a doctor of the law with ignorance. He allows, however, that Philo's passion for philosophy had made him more than half a Pagan; for it led him to interpret the whole law and the prophets upon Platonic ideas; and to admit nothing as truly interpreted which was not agreeable to the principles of the academy. Befides, this led him farther; he turned every thing into allegory, and deduced the darkest meanings from the plainest words. This most pernicious practice ORIGEN, it is known, imitated, and exposed himself by it to the fcoffs of Celfus and of Porphyry. Philo's writings abound with high and mystical, new and subtile, farfetched and abstracted, notions; and indeed the doctrines of Plato and Moses are so promiscuously blended, that it is not an eafy matter to affign to each his principles. There are certainly, however, in his works many excellent things. Though he is continually Platonifing and allegorifing the Scriptures, he abounds with fine fentiments and lessons of morality; and his morals are rather the morals of a Christian than of a Jew. History, together with his own writings, give us every reason to believe that he was a man of great prudence, constancy, and virtue.

His works were first published in Greek by Turnebus at Paris 1552. A Latin translation made by Gelenius was afterwards added, and printed several times with it. The Paris edition of 1640 in solio was the best for a

whole century; which made Cotelerius fay, that "Philocles lo was an author that deferved to have a better text and a better version." In 1742, a handsome edition of his work was published at London by Dr Mangey in two volumes folio; which is certainly preferable if it were only for the paper and print, but it is not so good a one as Philo deserves.

Many of our readers may be defirous of further details respecting this celebrated man; we refer such therefore to Josephus's Antiquities, Eusebius's Ecclesiastical History, St Jerome's work De Scriptoribus Ecclesiasticis, Fabricius Bibl. Græc. Cave Hist. Liter. and vol. ii. of Monuments of the Greek Church.

PHILOCLES, an admiral of the Athenian fleet during the Peloponnesian war. He recommended to his countrymen to cut off the right hand of such of the enemies as were taken, that they might be rendered unsit for service. His plan was adopted by all the ten admirals except one; but their expectations were frustrated, and instead of being conquerors they were totally defeated at Ægospotamos by Lysander, and Philocles was put to death with the rest of his colleagues.

PHILOCTETES, in fabulous history, the fon of Pæan, was the faithful companion of Hercules; who at his death obliged him to fwear not to discover the place where his ashes were interred, and presented him with his arrows dipped in the Hydra's blood. The Greeks at the slege of Troy being informed by an oracle that they could never take that city without those satal arrows, went to Philochetes, and insisted upon his discovering where he had left his friend; when Philochetes, to evade the guilt of perjury, let them know where Hercules was intombed, by stamping upon the place: but he was punished for the violation of his oath, by dropping an arrow upon that foot; which, after giving him great agony, was at length cured by Machaon. He was afterwards taken by Ulysses to the slege of Troy, where he killed Paris with one of his arrows.

PHILOLAUS, of Crotona, was a celebrated philofopher of antiquity, of the school of Pythagoras, to whom that philosopher's Golden Verses have been ascribed. He made the heavens his principal object of contemplation; and has been idly (A) supposed to have been the author of that true system of the world which Copernicus afterwards revived. This made Bullialdus place the name of Philolaus at the head of two works, written to illustrate and confirm that system.

"He was (fays Dr Enfield) a disciple of Archytas, Hist. of and flourished in the time of Plato. It was from him Philosophy. that Plato purchased the written records of the Pythagorean system, contrary to an express oath taken by the society of Pythagoreans, pledging themselves to keep secret the mysteries of their sect. It is probable, that among these books were the writings of Timaeus, upon which Plato formed the dialogue which bore his name. Plutarch relates, that Philolaus was one of the persons who escaped from the house which was burned by Cylon, during the life of Pythagoras; but this account cannot be correct. Philolaus was contemporary with Plato, and therefore certainly not with Pythagoras. Interfering

(A) We say idly, because there is undoubted evidence that Pythagoras learned that system in Egypt. See Philosophy.

Philolaus, terfering in affairs of flate, he fell a facrifice to political

" Philolaus treated the doctrine of nature with great fubtlety, but at the same time with great obscurity; referring every thing that exists to mathematical principles. He taught, that reason, improved by mathematical learning, is alone capable of judging concerning the nature of things; that the whole world consists of infinite and finite; that number subfifts by itself, and is the chain which by its power fustains the eternal frame of things; that the Monad is not the fole principle of all things, but that the Binary is necessary to furnish materials from which all subsequent numbers may be produced; that the world is one whole, which has a fiery

centre, about which the ten celestial spheres revolve. Philolaus. heaven, the fun, the planets, the earth, and the moon; that the fun has a vitreous furface, whence the fire diffused through the world is reflected, rendering the mirror from which it is reflected visible; that all things are preferved in harmony by the law of necessity; and that the world is liable to destruction both by fire and by water. From this fummary of the doctrine of Philolaus it appears probable, that, following Timæus, whose writings he possessed, he so far departed from the Pythagorean system as to conceive two independent principles in nature, God and Matter, and that it was from the same source that Plato derived his doctrine upon this fubject."

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PHILOLOGY.

Definition.

PHILOLOGY is compounded of the two Greek words φιλος and λογος, and imports " the defire of investigating the properties and affections of words." The fages of Greecc were, in the most ancient times, denominated Dopos, that is, wife men. Pythagoras renounced this pompous appellation, and affumed the more humble title of φιλοσοφος, that is, a lover of wife men. The lcarned Greeks were afterwards called philosophers; and in process of time, in imitation of this epithet, the word philologer was adopted, to import " a man deeply verscd in languages, etymology, antiquities, &c." Hence the term philology, which denotes the science that we propose briefly to discuss in the following

lology.

Though philology, in its original import, denoted only the study of words and language, it gradually acquired a much more extensive, and at the same time a much Objects and more useful, as well as more exalted, fignification. It uses of phi comprehended the study of grammar, criticism, etymology, the interpretation of ancient authors, antiquities; and, in a word, every thing relating to ancient manners, laws, religion, government, language, &c. In this enlarged fense of the word, philology becomes a science of the greatest utility; opens a wide field of intellectual investigation; and indeed calls for a more intense exertion of industry, and multifarious erudition, than most of those departments of literature which custom hath dignified with more high-founding names. It is indeed apparent, that, without the aid of philological studies, it is impossible, upon many occasions, to develope the origin of nations; to trace their primary frame and constitution; to discover their manners, customs, laws, religion, government, language, progress in arts and arms; or to learn by what men and what measures the most celebrated states of antiquity rose into grandeur and consideration. The study of history, so eminently useful to the legislator, the divine, the military man, the lawyer, the philosopher, and the private gentleman who wishes to employ his learned leifure in a manner honourable and improving to himfelf, and useful to his country, will contribute very little towards enlightening the mind without the aid of philological refearches. For these reasons we shall endeavour to explain the various branches of that useful science as fully and as intelligibly as the nature of the present undertaking will per-

Most of the branches of philology have been already Object of canvassed under the various heads of CRITICISM, ETY-this article. MOLOGY, GRAMMAR, LANGUAGE, &c. There still remains one part, which has been either flightly touched upon, or totally omitted, under the foregoing topics: we mean, the nature and complexion of most of the oriental tongues; as also some of the radical dialects of the languages of the west. As we would willingly gratify our readers of every description to the utmost of our power, we shall endeavour in this place to communicate to them as much information upon that subject as the extent of our reading, and the limits prescribed one fingle article, will permit.

Before we enter upon this subject, we must observe, that it is not our intention to fill our pages with a tedious, uninteresting, catalogue of barbarous languages, spoken by savage and inconsiderable tribes, of which little, or perhaps nothing, more is known than barely their names. Such an enumeration would fwell the article without communicating one fingle new idea to the reader's antecedent stock. We shall therefore confine our inquiries to fuch languages as have been used by confiderable states and focicties, and which of confequence have acquired a high degree of celebrity in the

regions of the east. What was the antediluvian language, or whether it Variety of was divided into a variety of dialects as at this day, can dialects beonly be determined by the rules of analogy; and these fore the will lead us to believe, that whatever might have been deluge. the primitive language of mankind, if human nature was then constituted as it is at present, a great variety of dialects must of necessity have sprung up in the space of near 2000 years. If we adopt the Mosaic account of the antediluvian events, we must admit that the defcendants of Cain for some ages lived separated from those of Seth. Their manner of life, their religious ceremonies, their laws, their form of government, were probably different, and these circumstances would of course produce a variety in their language. The posterity of Cain were an inventive race. They found out the art of metallurgy, mufic, and fome think of weaving; and in all probability many other articles condu-

Nn2

especially Cain.

cap. 56.

Origin of

writing.

History of cive to the ease and accommodation of life were the produce of their ingenuity. A people of this character must have paid no fmall regard to their words and modes of expression. Wherever music is cultivated, language will among the naturally be improved and refined. When new inventions are introduced, a new race of words and phrases of necessity spring up, corresponding to the recent stock of ideas to be intimated. Befides, among an inventive race of people, new vocables would be continually fabricated, in order to supply the deficiencies of the primitive language, which was probably fcanty in words, and its phraseology unpolished. The Cainites, then, among their other improvements, cannot well be suppofed to have neglected the cultivation of language.

Many conjectures have been hazarded both by ancient and modern authors with respect to the origin of writing; an art nearly connected with that of speaking. * Nat. Hift. According to Pliny *, "the Affyrian letters had al-lib. vii. ways existed; fome imagined that letters had been invented by the Egyptian Mercury; others ascribed the honour of the invention to the Syrians." The truth feems to be, that letters were an antediluvian invention, preserved among the Chaldeans or Assyrians, who were the immediate descendants of Noah, and inhabited those very regions in the neighbourhood of which the ark rested, and where that patriarch afterwards fixed his refidence. This circumstance, we think, affords a strong presumption that the use of letters was known before the deluge, and transmitted to the Assyrians and Chaldeans by Noah their progenitor, or at least by their immediate ancestors of his family. If, then, the art of writing was an antediluvian invention, we think that in all probability it originated among the posterity of

> The descendants of Seth, according to the oriental tradition, were chiefly addicted to agriculture and tending of cattle. They devoted a great part of their time to the exercises of piety and devotion. From this circumstance they came to be distinguished by the title of the (A) fons of God. According to this description, the Sethites were a fimple (B), unimproved race of people till they mingled with the race of Cain; after which period they at once adopted the improvements and the vices of that wicked family.

> It is not, however, probable, that all the descendants of Seth, without exception, mingled with the Cainites. That family of which Noah was descended had not incorporated with the race of Cain: it was, according to the facred historian, lineally descended from Seth, and had preserved the worship of the true God, when, it is probable, the greatest part of mankind had apostatised

and become idolaters (c). Along with the true reli- Language. gion, the progenitors of Noah had preferved that fimpli-city of manners and equability of character which had diffinguished their remote ancestors. Agriculture and rearing cattle had been their favourite occupations. Accordingly we find, that the patriarch Noah, immediately "after the deluge," became a husbandman, and "planted a vineyard." The chosen patriarchs, who doubtless imitated their pious ancestors, were shepherds, and employed in rearing and tending cattle. Indeed there are strong presumptions that the Chaldeans, Affyrians, Syrians, Canaanites, and Arabians, in the earliest ages followed the same profession.

From this deduction, we imagine it is at least probable, that the ancestors of Noah persisted in the observance of the fame fimplicity of manners which had been handed down from Adam to Seth, and from him to Enoch, Methuselah, Lamech, and from this last to Noah. According both to scripture and tradition, innovations were the province of the Cainites, while the descendants of Seth adhered to the primitive and truly patriarchal institutions.

If these premises are allowed the merit of probability, The origiwe may justly infer that the language of Noah, what-nal lanever it was, differed very little from that of Adam (D); guage preand that if it is possible to ascertain the language of the erved in the family former, that of the latter will of course be discovered from which We shall then proceed to throw together a few observa-Noah tions relating to the language of Noah, and leave our sprung. readers to judge for themselves. We believe it will be superfluous to suggest, that our intention in the course of this deduction, is, if possible, to trace the origin and antiquity of the Hebrew tongue; and to try to discover whether that language, or any of its fifter dialects, may claim the honour of being the original language of man-

Whatever may have been the dialect of Noah and his family, that fame dialect, according to the Mofaic account, must have obtained, without any alteration, till the era of the building of the tower of Babel .- Upon this occasion a dreadful convulsion took place: the language of mankind was confounded, and men were feattered abroad upon the face of all the earth.

How far this catastrophe (E) extended, is not the bu-Confusion finess of the present inquiry to determine. One thing at the tower of is certain beyond all controverfy, namely, that the lan-babel guages of all the nations which fettled near the centre of population were but flightly affected by its influence. A very judicious writer has observed *, that 3000 years * Strabo. after, the inhabitants of those countries exhibited a very strong resemblance of cognation, " in their language;

(B) The orientals, however, affirm, that Seth, whom they call Edris, was the inventor of astronomy.

(D) For the first language communicated to Adam, see the article on LANGUAGE; also Schenckford's Connect. vol. i. lib. ii. p. 111. et seq.

⁽A) From this passage (Gen. chap. vi. verse 2.) misunderstood, originated the absurd idea of the connection between angels and mortal women. See Joseph. Antiq. Jud. lib. i. cap. 4. See Euseb. Chron. lib. i. All the fathers of the church, almost without exception, adopted this foolish notion. See also Philo-Jud. p. 198. edit. Turn. Paris 1552.

⁽c) We think it highly probable that idolatry was established before the slood; because it prevailed almost immediately after that catastrophe. See POLYTHEISM.

⁽E) Josephus and the fathers of the church tell us, that the number of languages produced by the confusion of tongues was 72; but this is a mere rabbinical legend.

Miltory of manner of living, and the lineaments of their bodies. At the same time he observes, that the resemblance in all those particulars was most remarkable among the inhabitants of Mesopotamia." This observation, with respect to language, will, we doubt not, be vouched by every one of our readers who has acquired even a superficial knowledge of the languages current in those quar-

ters at a very early period.

It appears, then, that the languages of the Armenians, Syrians, Affyrians, Arabians, and probably of the Chauaanim, did not fuffer materially by the confusion of tongues. This observation may, we imagine, be extended to many of the dialects (F) spoken by the people who fettled in those countries not far distant from the region where the facred historian has fixed the original feat of mankind after the deluge. The inference then is, that if Noah and his family spoke the original language of Adam, as they most probably did, the judgement which effected the confusion of tongues did not produce any confiderable alteration in the language of fuch of the descendants of Noah as settled near the region where that patriarch had fixed his residence after he quitted the ark.

But supposing the changes of language produced by the catastrophe at the building of the tower as considerable as has ever been imagined, it does not, after all, apthe tower, pear certain, that all mankind, without exception, were engaged in this impious project. If this affertion should be well founded, the consequence will be, that there was a chosen race who did not engage in that enterprise. If there was such a family, society, or body of men, it will follow, that this family, fociety, &c. retained the language of its great ancestor without change or variation. That fuch a family did actually exist, is

highly probable, for the following reasons.

1. We think there is reason to believe that Ham, upon the heavy curse denounced upon him by his father *, retired from his brethren, and fixed his residence elsewhere. Accordingly we find his descendants scattered far and wide, at a very great distance from the Gordyæan mountains, where the ark is generally supposed to have rested immediately after the slood. of them we find in Chaldaea, others in Arabia Felix, ethers in Ethiopia (G), others in Canaan, and others in Egypt; and, finally, multitudes fcattered over all the coast of Africa. Between these countries were planted many colonies of Shemites, in Elam, Affyria, Syria, Arabia, &c. We find, at the same time, the descendants of Shem and Japhet fettled, in a great degree, contiguous to each other. This dispersion of the Hamites, irregular as it is, can scarce, we think, have been acci-

dental; it must have been owing to some uncommon Language cause, and none seems more probable than that assigned above. If, then, the descendants of Ham separated early, and took different routes, as from their posterior fituations it appears they did, they could not all be prefent at the building of the tower.

2. It is not probable that the descendants of Shem and those were engaged in this undertaking, fince we find that not the dethey were not fcattered abroad upon the face of all the of Shem. earth. The children of Shem were + Elam, Ashur, + Chap. x-Arphaxad, Lud, and Aram. Elam fettled near the verse 22. mouth of the river Tigris, in the country which, by the Gentile writers, was called Elymais. Above him, on the same river, lay the demesne of Ashur, on the western side. In like manner, upon the same river, above him, was fituated Aram, who possessed the country of Aramea; and opposite to him was Arphaxad, or Arbaces, or Arbaches, and his country was denominated Arphachites. Lud, as some think, settled in Lydia, among the fons of Japhet; but this opinion feems to be without foundation (H). Here, then, there is a difper-

fettled contiguous, without being feattered abroad upon the face of the whole earth. Besides, there was no confusion of language among these tribes: they continued to use one and the same lip through many succeeding

fion, but fuch as must have originated from the nature

of the thing. The four, or rather the five brothers, all

generations. From these circumstances it appears that the posterity The lan-

of Shem were not involved in the guilt of the builders guage of of the tower, and of consequence did not undergo their served in punishment. If then the language of the Shemites was the family not confounded upon the erection of the tower, the pre-of Shem. fumption is, that they retained the language of Noah, which, in all probability, was that of Adam. Some

dialectical differences would in process of time creep in, but the radical fabric of the language would remain un-

3. The posterity of Shem appear in general to have cultivated the pastoral life. They imitated the style of living adopted by the antediluvian posterity of Seth. No sooner had Noah descended from the ark, than he became Ish ha Adamah, a man of the earth; that is, a husbandman, and planted a vineyard. We find that fome ages after, Laban the Syrian had flocks and herds; and that the chief wealth of the patriarch Abraham and his children confisted in their flocks and herds. Even his Gentile descendants, the Ishmaelites and Midianites, feem to have followed the same occupation. But people of this profession are seldom given to changes: their wants are few, and of consequence they are under few

* Gen. ix. 25.

Only a part

of mankind engaged in

building

⁽F) The languages of the Medes, Persians, Phœnicians, and Egyptians, very much resembled each other in their original complexion; and all had a strong affinity to the Hebrew, Chaldean, Syriac, &c. See Walton's Proleg.; Gale's Court of the Gent. vol. i. lib. i. ch. 11. p. 70. et feq.; Boch. Phalec and Chanaan, paff. To these we may add the Greek language, as will appear more fully below.

⁽G) Josephus informs us, that all the nations of Asia called the Ethiopians Cushim, lib. i. cap. 7. (H) The ancient name of Lydia was Mæonia. See Strabo Casaub. lib. xiii. p. 586. chap. 7. Rhod. 577. The Lydians were celebrated for inventing games; on which account they were nicknamed by the Æolian Greeks Avdos, Lydi or Ludi, from the Hebrew word lutz, ludere, illudere, deridere. We find (Ezek. chap. xxvii. ver. 10.) the men of Elam and the men of Lud joined in the defence of Tyre; which feems to intimate, that the Elamites and Ludim were neighbours. If this was actually the case, then Lud settled in the same quarter with his brothers.

A braham.

This circumstance renders it probable, that the language of Noah, the same with that of Adam, was preserved with little variation among the descendants of Arphaxad

down to down to Abraham.

We have observed above, that Ham, upon the curse denounced against him by his father, very probably left the fociety of his other brothers, and emigrated elsewhere, as Cain had done in the antedsluvian world. There is a tradition still current in the East, and which was adopted by many of the Christian fathers (1), that Noah, in the 930th year of his life, by divine appointment, did, in the most formal manner, divide the whole terraqueous globe among his three fons, obliging them to take an oath that they would stand by the decision. Upon this happened a migration at the birth of Peleg, that is, about three centuries after the flood. It is affirmed that Nimrod the arch-rebel difregarded this partition, and encroached upon the territory of Ashur, which occasioned the fift war after the flood.

The Greeks had acquired fome idea of this partition, to the fupposed to have been between Jupiter 1.

Hym.

Hom. Jiiad, it (K): "For (fays he) the gods of old obtained the dominion of the whole earth, according to their different allotments. This was effected without any contention, for they took possession of their several provinces

§ Aut. Jud. in a fair and amicable way, by lot." Josephus §, in his lib. 1. c. 5. account of the dispersion of mankind, plainly infinuates a divine destination; and Philo-Judeus (L) was of the

fame opinion before him.

In confequence of this arrangement, the fons of Shem pofieffed themfelves of the countries mentioned in the preceding pages: the pofterity of Japhet had fpread themfelves towards the north and weft; but the Hamites, who had feparated from their brethren in confequence of the curfe, not choofing to retire to their quarters, which were indeed very diffant from the place where the ark reflect, feized upon the land of Canaan (M). Perhaps, too, it might be fuggefted by fome malicious fpirits, that the aged patriarch was dealing partially when he affigned Ham and his pofterity a quarter of the world to inhabit not only remote from the centre of population, but likewife fequeftered from the reft of mankind (N).

Be that as it may, the children of Ham removed eatward, and at length descending from the Carduchean

or Gordysean mountains, directed their courfe weltward, Language and arrived at the plains of Shinar, which had been poliefied by the Afhurin ever fince the era of the first migration at the birth of Peleg. The facred historian informs us, that the whole earth "was of one language and of one speech;" that in journeying from the east, they lighted upon the plain of Shinar, and dwelt there. In this passage we find no particular people specified; but as we find Nimrod, one of the descendants of Ham, settled in that country, we are fure that they were the offspring of that pairiarch. It would not, we think, be easy to assign a reason how one branch of the family of Ham came to plant itself in the midst of the sons of Shem by any other means but by violence.

It is indeed generally supposed, that Nimrod, at the The tower head of a body of the children of Ham, made war upon of Babel Ashur, and drove him out of the country of Shinar; the chiland there laid the foundation of that kingdom, the be-dren of ginning of which was Babel a that this chief, supported Ham. by all the Cushites, and a great number of apostates from the families of Shem and Japhet who had joined him, refused to submit to the divine ordinance by the mouth of Noah, with respect to the partition of the earth; and that he and his adherents were the people who erected the celebrated tower, in confequence of a resolution which they had formed to keep together, without repairing to the quarters assigned them by the determination of heaven. This was the crime which brought down the judgement of the Almighty upon them, by which they were feattered abroad upon the face of all the earth. The main body of the children of Shem and Japhet were not engaged in this impious undertaking; their language, therefore, was not confounded, nor were they themselves scattered abroad. Their habitations were contiguous; those of the Shemites towards the centre of Asia; the dwellings of Japhet were extended towards the north and north-west; and the languages of both thefe families continued for many ages without the least variation, except what time, climate, laws, religion, new inventions, arts, sciences, and commerce, &c. will produce in every tongue in a fucceffion of years.

The general opinion then was, that none but the progeny of Ham and their affociates were prefent at the building of the tower, and that they only fuffered by the judgement (0) confequent upon that attempt. There

are

(1) Epiph. vol. i. p. 5. ibid. p. 709. where our learned readers will observe some palpable errors about Rhino-coruba, &c. Euseb. Chron. p. 10. Syncellus, p. 89. Cedrenus Chron. Pasch. &c.

(K) Critias, vol. iii. page 109. Serr. Apollodorus mentions a time when the gods respectively selected particu-

lar cities and regions, which they were to take under their peculiar protection.

(L) Lib. x. p. 236. Turn. Paris 1552. We have a plain allufion to this distribution (Deut. ch. xxxii. ver. 7).

"When the most High divided to the nations their inheritance, when he separated the sons of Adam, he set the bounds of the people, according to the number of the children of Ifrael; for the Lord's portion is his people; Jacob is the lot of his inheritance." From this passage it appears, that the whole was arranged by the appointment of God, and that the land of Canaan was expressly referved for the children of Israel. St Paul, Acts ch. xvii. ver. 16. speaks of this divine arrangement, "God made of one blood all nations of men, for to dwell on all the face of the earth; and determined the bounds of their habitation."

(M) The ark, according to the most probable accounts, rested upon Mount Ararat in Armenia.

(N) We think it is by no means improbable that Noah, well knowing the wickedness of the family of Ham, and effecially their inclination to the idolatry of the antediluvians, might actually intend to feparate them from the reft of mankind.

(o) Some learned men have imagined that this confusion of language, which the Hebrew calls of Lip, was only

History of are even among the Pagans fome allusions to the diviof the learned have imagined that this patriarch was Saturn; and that his three fons were Jupiter, Neptune,

* Euseb. Chron.

+ Euseb. Prep. Ev.

‡ Epiph. Hæres.

fion of the world among the three fons of Noah. Many and Pluto, as has been observed above.

Berofus *, in his hiftory of the Babylonians, informs us, that Noah, at the foot of Mount Baris or Luban, where the ark refled, gave his children their last instructions, and then vanished out of fight. It is now generally believed that the Xisuthrus of Berosus was Noah. Eupolemus+, another heathen writer, tells us, "that the city Babel was first founded, and afterwards the celebrated tower; both which were built by some of those people who escaped the deluge. They were the same with those who in after times were exhibited under the name of giants. The tower was at length ruined by the hand of the Almighty, and those giants were scattered over the whole earth." This quotation plainly intimates, that according to the opinion of the author, only the rafcally mob of the Hamites, and their apollate affociates, were engaged in this daring enterprise.

Indeed it can never be supposed that Shem, if he was alive at that period, as he certainly was, would co-operate in fuch an abfurd and impious undertaking. That devout patriarch, we think, would rather employ his influence and authority to divert his descendants from an attempt which he knew was undertaken in contradiction to an express ordinance of Heaven: and it is surely very little probable that Elam, Ashur, Arphaxad, and Aram, would join that impious confederacy, in opposition to the remon-

ilrances of their father.

The building of the tower, according to the most probable chronology, was undertaken at a period fo late, that all mankind could not possibly have concur-

red in the enterprise.

Many of the fathers were of opinion, that Noah fettled in Armenia, the country where the ark rested; and that his descendants did not leave that region for five generations ‡, during the space of 659 years. By this period the human race must have been so amazingly multiplied, that the plains of Shinar could not have contained them. According to the Samaritan Pentateuch, and the Septuagint version, Peleg was born in the 134th year of his father Eber. Even admitting the vulgar opinion, that the tower was begun to be built, and the dispersion consequent upon that event to have taken place at this era, the human race would have been by much too numerous to have univerfally concurred in one

From these circumstances, we hope it appears that the whole mass of mankind was not engaged in building the tower; that the language of all the human race was

not confounded upon that occasion; and that the disper- Language from reached only to a combination of Hamites, and of the most profligate part of the two other families, who

had joined their wicked confederacy.

We have purfued this argument to confiderable length, Therefore because some have inferred, from the difference in langua- the original ges existing at this day, that mankind cannot have fprung language from two individuals; because from the connection still in the other existing among languages, some have been bold enough two famito question the fact, though plainly recorded in sacred lies. history; and lastly, because we imagine that some of our readers, who do not pretend to peruse the writings of the learned, may be gratified by feeing the various opinions respecting the confusion of tongues, and the dispersion of mankind, collected into one mass, equally brief, we hope, and intelligible: and this view of these opinions, with the foundations on which they respectively rest, we think may suffice to prove, that the language of Noah was for fome ages preserved unmixed among the descendants of both Shem and Japhet.

To gratify still farther such of our curious readers as may not have access to more ample information, we shall in this place exhibit a brief detail of the circumstances which attended this fatal attempt. The people engaged in it have been held up as a profligate race. The Almighty himself denominates them "the children of men," which is the very appellation by which the antediluvian finners were characterized; the fons of God faw the daughters of men, &c. Their defign in raifing this edifice was " to make them a name, and to prevent their being scattered abroad upon the face of the whole

Whatever resolution the rest of mankind might take, chap. xi. they had determined to maintain themselves on that spot. The tower was intended as a centre of union, and perhaps as a fortress of defence. Such a stupendous fabric, they imagined, would immortalize their memory, and transmit the name of their confederacy with eclat (P) to future ages. This defign plainly intimates, that there was only a party concerned in the undertaking, fince, had all mankind been engaged in it, the purpose would have been foolish and futile. Again, they intended, by making themselves a name, to prevent their being scattered abroad upon the face of the earth. This was an act of rebellion in direct contradiction to the divine appointment, which constituted their crime, and brought down the judgement of Heaven upon their guilty heads. The consequence of the confusion of languages was, that the projectors left off to build (Q), and were actually scattered abroad, contrary to their intention.

Abydenus, in his Affyrian annals, records, that the Pagan tra-(R) "tower was carried up to heaven; but that the dition con-

cerning the gods tower of

a temporary failure of pronunciation, which was afterwards removed. This they are led to conclude, from the agreement of the languages of these people in after times.

(P) Many foolish and absurd notions have been entertained concerning this structure. Some have imagined that they meant to take shelter there in case of a second deluge; others, that it was intended for idolatrous purposes; others, that it was to be employed as an observatory. Its dimensions have likewise been most extravagantly magnified. Indeed Strabo, lib. 16. mentions, a tower of immense fize remaining at Babylon in his time, the dimenfions of which were a stadium every way. This, however, seems to have been the remains of the temple of Bel or Belus.

(Q) For a description of the tower, see the article BABEL.

(R) See the Greek original of this quotation, Euseb. Chron. lib. 1. page 13.

History of gods ruined it by storms and whirlwinds, and overthrew it upon the heads of those who were employed in the work, and that the ruins of it were called Babylon. Before this there was but one language fubfifting among men: but now there arose modulen pum, a manifold speech; and he adds, that a war soon after broke out between (s) Titan and Cronus." (T) The Sybilline oracles give much the same account of this early and important transaction.

* Philip. lib 18. cap. 3.

+ Bochar. Phaleg.

lib. I.

cap. 10.

verse 571.

"Justin * informs us, that the Phœnicians who built Tyre were driven from Affyria by an earthquake. These Phoenicians were the descendants of Mizraim the youngest son of Ham; and were, we think, confederates in building the tower, and were driven away by the catastrophe that ensued. Many other allusions to the difpersion of this branch of the family occur in Pagan authors, which the limits to be observed in an inquiry of this nature oblige us to omit. Upon the whole, we think it probable that the country of Shinar lay defolate for fome time after this revolution; for the dread of the judgement inflicted upon the original inhabitants would deter men from fettling in that inaufpicious region. At last, however, a new colony arrived, and Babel, or Babylon, became the capital of a flourishing kingdom.

Our readers, we believe, will expect that we should fay fomething of Nimrod the mighty hunter, who is generally thought to have been deeply concerned in the transactions of this period. According to most authors, both ancient and modern, this patriarch was the leader of the confederates who erected the tower, and the chief instigator to that enterprise. But if the tower was built at the birth of Pheleg, according to the Hebrew computation, that chief was + either a child, or "rather not born at that period (u). The Seventy have pronounced him a giant, as well as a huntsman. They have translated the Hebrew word gebur, which generally fignifies strong, mighty, by the word yiyas, giant; an idea which we imagine those translators borrowed from the Greeks. The antediluvian giants are called Nephelim and Rephaim, but never Geburim. The Rabbinical writers, who justly hated the Babylonians, readily adopted this idea (x); and the fathers of the church, and the Byzantine historians, have universally followed them. He has been called Nimrod, Nebrod, Nymbroth, Nebroth, and Nebris. Not a few have made him the first Bacchus, and compounded his name of Bar, a fon, and Cu/h, that is, the fon of Cu/h. Some have imagined that he was the Orion of the Pagans, whose shade is so nobly described by Ho-\$ Odys. 1. 1. mer 1. But the etymology of this last name implies fomething (Y) honourable, and very unfuitable to the Language. idea of the tyrant Nimrod. It must be observed, however, that we find nothing in Scripture to warrant the suppofition of his having been a tyrant; fo far from it, that (z) fome have deemed him a benefactor to mankind. See NIMROD.

The beginning of this prince's kingdom was Babel. Eusebius gives us first * a catalogue of six kings of the * Chron. Chaldeans, and then another of five kings of Arabian lib. 1. extraction, who reigned in Chaldea after them. This page 14. might naturally enough happen, fince it appears that the inhabitants of those parts of Arabia which are adjacent to Chaldea were actually Cushites, of the + same family + Gen. x.

with the Babylonians.

The Cushites, however, were at last subdued, perhaps partly expelled Chaldea by the Chasidim, who probably claimed that territory as the patrimony of their progenitors. That the Chasidim were neither Cushites, nor indeed Hamites, is obvious from the name. The Hebrews, and indeed all the Orientals ‡, denominated both the ; Yoseph. people who inhabited the eastern coast of Arabia Cushim, Ant lib. 1. and also the Ethiopians who sprung from the last men-cap. 6. tioned people. Had the later inhabitants of Chaldea been the descendants of Cush, the Jewish writers would have called them Cushim. We find they called the Phoenicians Chanaanim, the Syrians Aramim, the Egyptians Mizraim, the Greeks Jonim, &c. The Chasidim, therefore, or modern inhabitants of Chaldea, were positively descended of one Chesed or Chased; but who this familychief was, it is not eafy to determine. The only person of that name whom we meet with in early times is the fourth fon of Nahor &, the brother of Abraham; and & Gen. fome have been of opinion that the Chaldeans were the chap xxiiprogeny of this same Chesed. This appears to us highly probable, because both Abram and Nahor were || na- | Gen. tives of Ur of the Chasidim. The former, we know, in chap. xi. consequence of the divine command, removed to Haran, verse 28. afterwards Charræ; but the latter remained in Ur, where his family multiplied, and, in process of time, became masters of the country which they called the land of the Chasidim, from Chefed or Chased, the name of their ancestor. This account is the more probable, as we find the other branches of Nahor's family fettled in the fame neighbourhood (A).

How the Greeks came to denominate these people Origin of Χαλδαιοι, Chaldæi, is a question rather difficult to be re-the name folved; but we know that they always affected to diftin-Chaldzi. guish people and places by names derived from their own language. They knew a rugged, erratic nation (B)

Ezek, xxvii.

(T) Theoph. ad Antol. lib. ii. page 107. ed. Paris 1636.

(z) See Shuckford's Connect. vol. i. lib. 3. page 179, 180. Also the authors of the Univer. Hist. vol. i.

(B) See Eustat. in Dion. Perieg. ver. 768. Strabo. lib. xii. page 543. Casaub. As the Chalybes were famous for manufacturing iron, fo were they celebrated for making the choicest pieces of armour. They excelled in making

⁽s) This war was probably carried on between the leaders of the Hamites and Ashur upon their invasion.

⁽u) Gen. chap. x. verse 8, 9. "This man began to be a giant upon the earth; he was the giant hunter before the Lord God .- As Nymbrod the giant hunter before the Lord.

⁽x) See Mr Bryant's Analysis, vol. iii. page 38. et seq.
(y) Orion is compounded of the Hebrew Or "light," and ion "one of the names of the sun;" and Orion was probably one of the names of that luminary.

⁽A) Huz gave name to the country of Job; Elihu, one of Job's friends, was a Buzite of the kindred of Ram or Aram, another of the sons of Nahor. Aram, whose posterity planted Syria cava, was the grandson of Nahor by Kemuel. Hence it appears probable that Job himself was a descendant of Nahor by Huz his first born.

History of on the banks of the river Thermodoon, in the territory of curious sciences. Ur or Orchoe (D) was a kind of uni- Language. Pontus, bordering on Armenia the Lefs. Thefe, in ancient times, were called Alybes or Chalybes, because they were much employed in forging and polishing iron. Their neighbours, at length, gave them the name of Chald or Caled, which imports, in the Armenian dialect, fierce, hardy, robust. This title the Greeks adopted, and out of it formed the word Xadduss " Chaldeans."

The Mosaic history informs us (c), that Ashur went out of that land (Shinar), and built Nineveh and feveral other confiderable cities. One of the fuccessors of Ashur was the celebrated Ninus, who first broke the peace of the world*, made war upon his neighbours, and obliglib. i. cap. I.ed them by force of arms to become his subjects, and pay tribute. Some authors make him the immediate fuccessor of Ashur, and the builder of Nineveh. This we think is not probable; Eusebius, as we have observed above, gives a list of fix Arabian princes who reigned in Babylon. These we take to have been the immediate successors of Nimrod, called Arabians; because these people were Cushites. Ninus might be reputed the first king of the Assyrians, because he figured beyond his predecessors; and he might pass for the builder of Nineveh, because he greatly enlarged and beautified that city. We therefore imagine, that Ninus was the fifth or fixth in fuccession after Ashur.

Ninus, according to Diodorus Siculus +, made an alliance with Ariæus king of the Arabians, and conquered the Babylonians. This event, in our opinion, put an end to the empire of the Hamites or Cushim in Shinar or Babylonia. The author observes, that the Babylon which figured afterwards did not then exist. This fact is confirmed by the prophet Isaiah 1: " Behold the land of the Chafidim; this people was not till Ashur founded it for them that dwell in the wilderness. They set up the towers thereof, &c." After Babylonia was subdued by the Affyrians under Ninus, the capital was either destroyed by that conqueror or deferted by the inhabitants. At length it was re-edified by some one or other of the Affyrian monarchs, who collected the roving Chasidim, and obliged them to settle in the new city. These were subject to the Assyrian empire till the reign of Sardanapalus, when both the Medes and Babylonians rebelled against that effeminate prince.

The Chasidim were celebrated by all antiquity for their proficiency in aftronomy, aftrology, magic, and Vol. XVI. Part I.

him most cruelly for adhering to the true religion. That these two patriarchs were contemporary, is very improbable, fince Nimrod was the third generation after Noah, and Abram the tenth. Abram has been invested by the

rabbinical writers with every department of learning. According to them, he transported from Charræ into Chanaan and Egypt, astronomy, astrology, mathematics, geography, magic, alphabetical writing, &c. &c.

reputation in those studies, that over a great part of Asia and Europe a Chaldean and an aftrologer were fynony-

mous terms. These sciences, according to the tradition of the Orientals, had been invented by Seth, whom they

call Edris; and had been cultivated by his descendants

downward to Noah, by whom they were transmitted

to Shem, who conveyed them to Arphaxad and his po-

ments transmitted from Noah through the line of Shem, were kept alive in the family of Arphaxad, and fo hand-

ed down to the families of Serug, Nahor, Terah, Abram,

Nahor II. and Haran, &c. The Jewish rabbis, and all the Persian and Mahomedan writers, make Abraham

contemporary with Nimrod; who, fay they, perfecuted

To us it appears probable, that the religious fenti-

After the Babylonish captivity, when the Jews were Legendary dispersed over all the east, and began to make proselytes tales conof the gate among the Pagans, wonderful things were re- Abraham, ported of Abram with respect to his acquirements in human erudition, as well as his fupereminence in virtue and piety. These legendary tales were believed by the proselytes, and by them retailed to their connections and acquaintances. But certainly the holy man either was not deeply versed in human sciences, or did not deem them of importance enough to be communicated to his posterity; fince the Jews are, on all hands, acknowledged to have made little progress in these improvements. To think of raising the fame of Abraham, by classing him with the philosophers, betrays an extreme defect in judgement. He is entitled to praise of a higher kind; for he excelled in piety, was the father of the faithful, the root of the Messiah, and the friend of God. Before these, all other titles vanish away. Such of our readers, however, as have leifure enough, and at the fame time learning enough to enable them to confult the rabbinical legends, will be furnished with a full and ample de-

κλιβανοι, or coats of mail, or brigandines used by the bravest of the Persian horsemen. Bochart Phaleg. lib. iii. cap. 12. and 13. has proved that the word Cheliba fignifies "fcales of brass or steel." From the word Cheliba, the Greeks formed their Xalules, Chalybes. Xenoph. Cyrop. lib. iii. page 43. Steph. represents the Chaldeans, who inhabited a mountainous country bordering upon Armenia, as a very fierce warlike people. Ib. page 107. we have an example of their rapacious character. Id. ib. lib. iv. page 192. Hen. Steph. we have an account of their bravery and of their arms. Another instance of their rapacity occurs in their plundering the cattle of Job.

(c) A dispute has arisen about the sense of verse 10. chap. x. Out of that land went forth Ashur, and builded Nineveh. Some approve our translation, which we think is just; others, considering that the inspired writer had been speaking of Nimrod and the beginning of his kingdom, are of opinion that it should be translated, And out of this land He (that is Nimrod) went into Ashur and builded Nineveh. This they make a military expedition, and

a violent irruption into the territory of Ashur.

(D) Ur or Orchoe was fituated between Nifibis and Corduena. See Ammianus Marcel. Expeditio Juliana, lib. xv. It lay not far from the river Tigris. Strabo, lib. xvi. page 739, tells us that the Chaldean philosophers were divided into different fects, the Orcheni, the Borsippeni, and several others. Diod. Sicul. likewise, lib. ii. page 82. Steph. gives an exact detail of the functions, profession, and establishment of the Chaldeans, to which we must refer our curious readers.

versity for those branches of learning. Such was their

† Lib. ii.

* Justin.

t Ch. xxiii. verse 13.

History of tail of his imaginary exploits and adventures. Others, who are either not willing or not qualified to peruse the *Chap. ii. writings of the rabbins, may consult Dr Hyde * de Relig. vet. Pers. and the authors of the Universal Hittory +, where they will find materials sufficient to gratify their curiosity. We shall only observe, in addition to what we have already said, that the Persians, Chaldeans, and Arabians, pretended that their religion was that of Abraham; that honourable mention is made of him in the Koran; and that the name of Abraham or Ibrahim was celebrated over all the east. See ABRA-

In the progress of this disquisition, we have seen that the language of Noah was, in all probability, the same or nearly the fame with that of Adam. Additions and improvements might be introduced, but still the radical stamina of the language remained unchanged. It has likewife, we hope, appeared, that the continion of language at the building of the tower of Babel was only partial, and affected none but the rebellious crew of the race of Ham, and the apostate part of the families of Shem and Japhet. We have concluded, that the main body of the race of Shem, at least, were neither dispersed nor their language confounded; and that consequently the descendants of that patriarch continued to speak their paternal dialch or the uncorrupted language of Noah. To these arguments we may take the liberty to add another, which is, that in all probability the worship of the true God was preserved in the line of Arphaxad, after the generality of the other fects had lapfed into idolatry. Out of this family Abraham was taken, in whose line the true religion was to be preserved. Whether Abraham was an idolater when he dwelt in Chaldea, the scripture does not inform us, though it seems to be evident that his father was. One thing, however, is certain, namely, that Jehovah (E) appeared to him, and pronounced a bleffing upon him before he left Ur of the Chaldees. This circumstance no doubt indicates, that this patriarch had made uncommon advances in piety and virtue, even prior to his emigration. The progenitors of his family had been diffinguished by adhering to the truc religion. About this time, however, they began to degenerate, and to adopt the Zabiism of their apostate neighbours. It was then that Abraham was commanded by Heaven to " leave his kindred and his father's house, and to travel into a land which was to be shown him." The Almighty intended that the true religion should be preserved in his line, and therefore removed him from a country and kindred, by the influence of whose bad example his religious principles might be endangered. His family had only of late apostatized; till that period they had preserved both the language and religion of their venerable ancestors.

But however much Abraham might differ from the other branches of his family in his religious fentiments, his language was certainly in unifon with theirs. The confequence of this unquestionable position is, that the language which he carried with him into Chanaan was exactly the same with that of his family which he relinquished when he began his perferinations. But if this

be true, it will follow, that the language afterwards de- Language. nominated Hebrew, and that of the Chandim or Chaldeans were originally one and the same. This position, we think, will not be controverted. There is then an end of the dispute concerning the original language of mankind. We have advanced fome prefumptive proofs in the preceding pages, that the language of Adam was transmitted to Neah, and that the dialect of the latter was preserved in the line of Arphaxad downwards to the family of Abraham: and it now appears that the Hebrew and Chaldean were originally spoken by the same family, and of course were the same between themselves, and were actually the first language upon earth, according to the Mofaic hiftory. Numberless additions, alterations, improvements, we acknowledge, were introduccd in the course of 2000 years; but still the original stamina of the language were unchanged. Our readers will please to observe that the Orientals are not a people given to change; and that this character, in the earliest ages, was still more prevalent than at profest. This affertion we prefume, needs no proof.

In confirmation of these prelumptive arguments, we may add the popular one which is commonly urged upon this occasion, viz. that the names of antediluvian persons and places mentioned by the facred historian, are generally of Hebrew original, and significant in that language. Some of them, we acknowledge, are not so; but in this case it ought to be remembered, that a very small part of that language now exists, and that probably the radicals from which these words are descended are among the number of those which have long been lost.

SECT. I. The Hebrew Language.

HAVING thus proved the priority of the Hebrew Characterto every other language that has been spoken by men, iffice of the we shall now proceed to consider its nature and genius; Hebrew from which it will appear still more evidently to be an language. original language, neither improved or debased by foreign idioms. The words of which it is composed are short, and admit of very little slexion. The names of places are descriptive of their nature, situation, accidental circumstances, &c. Its compounds are few, and inartificially joined together. In it we find few of those artificial affixes which distinguish the other cognate dialects; fuch as the Chaldean, Syrian, Arabian, Phœnician, &c. We find in it no traces of improvement from the age of Moses to the era of the Babylonish captivity. The age of David and Solomon was the golden period of the Hebrew tongue; and yet, in our opinion, it would puzzle a critic of the nicest acumen to discover much improvement even during that happy era. In fact, the Jews were by no means an inventive people. We hear nothing of their progress in literary pursuits; nor do they feem to have been industrious in borrowing from their neighbours. The laws and statutes communicated by Moses were the principal objects of their studies. These they were commanded to contemplate day and night; and in them they were to place their chief delight. The consequence of this command was, that little or no regard could be paid to tafte, or any other fubject.

The Hebrew and Chaldean originally the fame, and the first language spoken on earth.

Hebrew fubiect of philosophical investigation. Every unimprov-Language ed language abounds in figurative expressions borrowed from sensible objects. This is in a peculiar manner the characteristic of the language in question; of which it would be superfluous to produce instances, as the fact must be obvious even to the attentive reader of the Eng-

> In the course of this argument, we think it ought to be observed, and we deem it an observation of the greatest importance, that if we compare the other languages which have claimed the prize of originality from the Hebrew with that dialect, we shall quickly be convinced that the latter has a just title to the preference. The writers who have treated this fubject, generally bring into competition the Hebrew, Chaldean, Syrian, and Arabian. Some one or other of these has commonly been thought the original language of mankind. The arguments for the Syrian and Arabian are altogether futile. The numerous improvements superinduced upon these languages, evidently prove that they could not have been the original language. In all cognate dialects, etymologists hold it as a maxim, that the least improved is likely to be the most ancient.

We have observed above, that the language of Abraham and that of the Chefedim or Chaldeans were originally the same; and we are persuaded, that if an able critic should take the pains to examine strictly these two languages, and to take from each what may reasonably be supposed to have been improvements or additions fince the age of Abraham, he will find intrinsic evidence fufficient to convince him of the truth of this position. There appear still in the Chaldean tongue great numbers of (F) words the fame with the Hebrew, perhaps as many as mankind had occasion for in the most early ages; and much greater numbers would probably be found if both languages had come down to us entire. How it was The construction of the two languages is indeed somewhat different; but this difference arises chiefly from the superior improvement of the Chaldean. While the Hebrew language was in a manner stationary, the Chaldean underwent progressive improvements; was mellowed by antitheses, rendered sonorous by the disposition of vocal founds, acquired a copiousness by compounds, and a majesty by astixes and prefixes, &c. In process of time, however, the difference became so great, that the Ifraelites did not understand the Chaldean language at the era of the Babylonish captivity. This much the prophet * intimates, when he promifes the pious Jews protection " from a fierce people; a people of a deeper speech than they could perceive; of a stammering tongue, that they could not understand."

The priority of the Chaldean tongue is indeed contended for by very learned writers. Camden + calls it the mother of all languages; and most of the fathers † Præf. ad were of the same opinion. Amira † has made a col-

lection of arguments, not inconfiderable, in fayour of Hebrew it; and Myriceus & after him, did the fame. Erpe-Language nius ||, in his Oration for the Hebrew tongue, thought & Praf. ad the argument for it and the Chaldean fo equal, that he Gram. did not choose to take upon him to determine the que-Chald.

Many circumstances, however, concur to make us de lingua. Hebr. xii. assign the priority to the Hebrew, or rather to make us believe that it has suffered fewest of those changes to which every living tongue is more or less liable. If we strip this language of every thing obviously adventitious, we shall find it extremely simple and primitive. 1. Every thing masoretical, supposing the vowels and points (G) effential, was certainly unknown in its ori-Reasons ginal character. 2. All the prefixed and affixed letters for mainwere added time after time, to give more compass and taining precision to the language.

3. The various voices, ty of the moods, tenses, numbers, and persons of verbs, were Hebrew, posterior improvements; for in that tongue, nothing at first appeared but the indeclinable radix. 4. In the same manner, the few adjectives that occur in the language, and the numbers and regimen of nouns, were not from the beginning. 5. Most of the Hebrew nouns are derived from verbs; indeed many of them are written with the very same letters. This rule, however, is not general; for often verbs are derived from nouns, and even some from prepositions. 6. All the verbs of that language, at least all that originally belonged to it, uniformly confist of three letters, and seem to have been at first pronounced as monofyllables. If we anatomize the Hebrew language in this manner, we shall reduce it to very great simplicity; we shall confine it to a few names of things, persons, and actions; we shall make all its words monofyllables, and give it the true charac-

ginality. It will not be expected that we should enter into a minute discussion of the grammatical peculiarities of this ancient language. For these we must refer our readers to the numerous and elaborate grammars of that tongue, which are everywhere eafily to be found. We shall only make a few strictures, which naturally present themfelves, before we difmifs the subject.

ters of an original language. If at the same time we

reflect on the small number of (H) radical words in that

dialect, we shall be more and more convinced of its ori-

The generality of writers who have maintained the fuperior antiquity of the Hebrew language, have at the fame time contended that all other languages of Asia, and most of those of Europe, have been derived from that tongue as their fource and matrix. We, for our All lanpart, are of opinion, that perhaps all the languages in guages in the eastern part of the globe were coeval with it, and the east were originally one and the fame; and that the differ-originally ences which afterwards distinguished them sprung from the same. climate, caprice, inventions, religions, commerce, con-

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(F) Most of the Chaldean names mentioned in Scripture are pure Hebrew words compounded; fuch as Nebuchadnezzar, Nebuzaradan, Rabshakeh, Rabmag, Belshazzar, Rabsaris, Nahar, Malahtha, Phrat or Pharad, Barofus, Carchemish, Ur, Cutha, Heb. Cush, &c. All these words, and a multitude of others which we could mention, approach so near the Hebrew dialect, that their original is discernible at first sight. Most of these are compounds, which the limits prescribed us will not allow us to decompound and explain.

(G) The futility of these points will be proved in the following part of this section. (H) The radical words in the Hebrew language, as it now stands, are about 500.

changed is called the Chaldean.

* Ifaiah, ch. xxxiii. verfe 19.

+ Brit. Gram. Syr.

quests, and other accidental causes, which will occur to our intelligent readers. We have endeavoured to prove, in the preceding pages, that all mankind were not concerned in the building of the fatal tower, nor affected by the punishment consequent upon that attempt: and we now add, that even that punishment was only temporary; fince we find, that those very Hamites or Cushim, who are allowed to have been affected by it, did certainly afterwards recover the former organization of their lip, and differed not more from the original standard than the descendants of Japhet and Shem.

The Jewish rabbis have pretended to ascertain the number of languages generated by the vengeance of Heaven at the building of Babel. They tell us that mankind was divided into 70 nations and 70 languages, and that each of these nations had its tutelar or guardian angel. This fabulous legend is founded on the number of the progeny of Jacob at the time when that patriarch and his family went down into Egypt. Others attribute its origin to the number of the fons and grandfons of Noah, who are enumerated Gen. chap. x.

* Clem. Alex. Strom. Eu eb. Chron. lib.

The fathers * of the church make the languages at the confusion to amount to 72; which number they complete by adding Cainan and Elishah, according to the Septuagint, who are not mentioned in the Hebrew i. Epiphan. text. This opinion, they think, is supported by the words of Moses, when he saith, that + " when the Most August. &c High divided to the nations their inheritance, when enap. xxxii. he separated the sons of Adam, he set the bounds of the people according to the number of the tribes of Ifrael." That is, fay they, he divided them into 72 nations, which was the number of the children of Ifrael when they came into Egypt. The Targum of Ben-Uzziel plainly favours this interpretation; but the Jerufalem Targum intimates that the number of nations was only 12, according to the number of the tribes of Ifrael. This paffage, however, feems to refer to the tribes of the Chanaanim; and imports, that the Almighty affigned to the different fepts of that family fuch a tract of land as he knew would make a fufficient inheri-† Pacanini tance for the children of Israel ‡. Others have increased the different languages of the dispersion to 120; but the general opinion has fixed them to 70 or 72. Our apud Hier-on. in Cata-readers need fcarce be put in mind that these opinions logo Epist. are futile and absurd; neither founded in Scripture, profane history, or common sense. At the same time, it § 14. page must not be omitted, that according to Horapollo §, the 25. Hoefch. Egyptians held, that the world was divided into 72 habitable regions; and that, in consequence of this tradition, they made the cynocephalus the emblem of the world, because that in the space of 72 days that animal pines away and dies.

Origin of the name Hebrew.

It has been made a question, whether the Hebrew language was denominated from Heber the progenitor of Abraham, or from a word which in that tongue imports over, beyond. Most of the Christian fathers, prior to St Origen, believed that both the Gentile name Hebrew, and the name of the language, were derived from the name of the patriarch; but that learned man imagined, that Abraham was called the Hebrew, not Hebrew because he was a descendant of Heber, but because he Language. was a transfluvianus, or from beyond the river Eu-* Phaleg, phrates. The learned Bochart * has firained hard ib. i. c. 15. to prove the former position; but to us his arguments do not appear decifive. We are rather inclined to believe, that Abraham was called Chibri, (Hebrew), from the fituation of the country from which he emigrated when he came to the country of Chanaan; and that in process of time that word became a Gentile appellation, and was afterwards applied to his posterity (1) often by way of reproach, much in the same manner as we say a Northlander, a Norman, a Tramontane, &c.

Here we may be indulged an observation, namely, that Abraham, a Hebrew, lived among the Chaldeans, travelled among the Chanaanites, fojourned among the Philistines, lived some time in Egypt, and in all appearance converfed with all those nations without any apparent difficulty. This circumstance plainly proves, that all these nations at that time spoke nearly the same language. The nations had not yet begun to improve their respective dialects, nor to deviate in any great measure from the monosyllabic tongue of the Hebrews. With respect to the language of Chanaan, afterwards the Phœnician, its fimilarity to the Hebrew is obvious from the names of gods, men, cities, mountains, rivers, &c. which are the very same in both tongues, as might be shown in numberless cases, were this a proper place for etymological refearches.

Before we dismiss this part of our subject, we would wish to gratify our unlearned readers with a brief account of the Hebrew letters, and of the Masoretical points which have been in a manner ingrafted on these letters. In the course of this deduction, we shall endeavour to follow fuch authors as are allowed to have handled that matter with the greatest acuteness, learning, and perspicuity. If, upon any occasion, we should be tempted to hazard a conjecture of our own, it is cheerfully submitted to the candour of the pu-

Much has been written, and numberless hypotheses proposed, with a view to investigate the origin of alphabetical writing. To give even an abridged account of all thefe, would fill many volumes. The most plaufible, in our opinion, is that which supposes that the primary characters employed by men were the figures of material objects, analogous to those of the Mexicans, so often mentioned by the authors who have written the history of that people at the era of the Spanish invasion of their country. As this plan was too much circum-Origin of fcribed to be generally useful, hieroglyphical figures alphabetic were in process of time invented as subsidiaries to this writing. contracted orthography. In this scheme, we imagine, the process was somewhat more extensive. A lion might be sketched, to import sierceness or valour; an ox, to denote strength; a flag, to fignify swiftness; a hare, to intimate timorousness, &c.

The next step in this process would naturally extend

to

⁽¹⁾ The Egyptians might not eat bread with the Hebrews, for that is an abomination to the Egyptians. The Philistines (Samuel I. pass.) always call the Israelites Hebrews by way of reproach.

Hebrew to the inventing and appropriating of a few arbitrary Language characters, for representing abstract ideas, and other relations, which could not be well ascertained by the methods above-mentioned. These arbitrary signs might readily acquire a currency by compact, as money and medals do over a great part of the world .- Upon this plan we imagine the ancient Chinese formed their lan-

guage. But neither the picture nor the hieroglyphic, nor the method of denoting ideas by arbitrary characters appropriated by compact, could ever have arrived at fuch perfection as to answer all the purposes of ideal communication. The grand defideratum then would be to fabricate characters to represent simple sounds, and to reduce theie characters to so small a number as to be easily learned and preserved in the memory. In this attempt the Chinese have notoriously failed; their letters, or rather their characters, are so numerous, that few, if any, of their most learned and industrious authors, have been able to learn and retain the whole catalogue. Indeed those people are not able to conceive how any combinations of 20 or 30 characters should be competent to answer all the purposes of written lan-

Many different nations have claimed the honour of this invention. The Greeks ascribed it to the Phœnicians; and consequently used the word powerizew *, to all the Phanician, in the same sense with avayivworksiv, to read; and consequently the poet + ascribes the invention to the same ingenious people. The Greeks borrowed their letters from the Phænicians, and of courfe

looked up to them as the inventors.

Others have attributed the invention to the Egyptians. That people ascribed every useful and ingenious invention to their Thyoth, or Mercury Trismegistus. Plato feems to have believed this tradition (K), and pretends to record a dispute between the king of Egypt that then reigned and this personage, with respect to the influence that the art of alphabetic writing might poslibly have upon the improvements of mankind in science Bibl. lib. i. and liberal arts. Diodorus the Sicilian # gives a fimilar

page 10. history of the same invention,
Steph.

Nat. Hist. reign of Osiris.

Nat. Hist. reign of Osiris.

Pliny informs us ||, that Gellius attributed letters to
the same Egyptian Mercury, and others to the Sythe same Egyptian in the Sythat for "his part, he thought that the Asimagined, that the Affyrian letters had existed at a period prior to all the records of history; which was in fact the case. By the Assyrian letters, he must mean the Chaldaic, and by the Syrian probably the Hebrew. The earliest Greek historians generally confound the Jews with the Syrians. Herodotus, enumerating the people who had * learned circumcifion from the Egyptians, mentions the Syrians of Palestine; and elsewhere he tells us, that Necho + beat the Syrians, and took Cadytis, a large and populous city belonging to that people. Hence it is evident that the Syrian alphabet, or the Sy-

rian letters, were the same with the Hebrew. That the Hebrew Affyrian or Chaldaic and Hebrew languages were the Language. fame, has, we hope, been fully proved already: that their letters were the same in the original structure, can fcarce be controverted. These letters, we think, were Antediluantediluvian; whether, to use the expression of Plato, vian. they were dictated by some god, or fabricated by some man divinely inspired. As this opinion may admit fome dispute, we shall take the liberty to subjoin our

1. It appears that the era of this invention is buried in impenetrable obscurity. Had an invention of such capital importance to mankind been made in the polldiluvian ages, we imagine the author would have been commemorated in the historical annals of the country

where he lived (L).

2. The art of writing in alphabetical characters, according to the facred records, was practifed at fo early a period, that there was not a long enough interval between that and the deluge to give birth to that noble invention. If we consider the state of the world during fome ages after that difastrous event, we shall quickly be convinced that little respite could be found from the labour and industry indispensably requisite to provide the necessaries, and only a few of the conveniences, of life. Such a state of things was certainly most unfavourable to the invention of those arts and improvements which contribute nothing towards procuring the accommodations of life. The consequence is obvious.

Moses has recorded the history of the creation, of a few of the capital transactions of the antediluvian world, the birth, the age, the death, of the lineal defcendants of Seth. He has preserved the dimensions of the ark, the duration of the universal deluge, its effects upon man and all terrestrial animals, the population of the world by the posterity of Noah, the age, &c. of the patriarchs of the line of Shem, from which his own ancestors had sprung. To this he has subjoined the petty occurrences which diversified the lives of Abraham, Ifaac, and Jacob, and their descendants. Whence did the historian derive his information? We believe few of our readers will be fo enthufiastic as to imagine that the author received it from divine inspiration. Tradition is a fallible guide; and in many cases the accounts are so minutely precise, as to defy the power of that species of conveyance. The inspired author must certainly have extracted his abridgement from written memoirs, or histories of the transactions of his ancestors regularly transmitted from the most early periods. These annals he probably abridged, as Ezra did afterwards the history of the kings of Israel. If this was the case, as it most certainly was, the art of writing in alphabetical letters must have been known and practised many agesbefore Moses. It has indeed been pretended, that the Jewish decalogue, inscribed upon two tables of stone, was the very first specimen of alphabetical writing. The arguments adduced in proof of this fact are lame and inconclusive

(K) See Phædrus, page 1240. See also page 374. Phil.

Hefych. + Lucan.

Lib. ii. c. 104. † Ibid.

c. 159.

⁽L) It is true, the Egyptians attribute the invention to their Thoth, and the Phœnicians to their Hercules, or Melicerta or Baal; but these were only imaginary personages.

clusive (M). Had that been the case, some notice must have been taken of so palpable a circumstance. Mofes wrote out his history, his laws, and his memoirs; and it appears plainly from the text, that all the learned among his countrymen could read them. Wri-

ting was then no novel invention in the age of the Hebrew Jewish legislator, but current and generally known at Language

The patriarch Job lived at an earlier period. In that book we find many allusions to the art of writing,

(M) The most ingenious and plausible of those arguments which have fallen under our observation, is given by Mr Johnson vicar of Cranbrook, a writer of great learning and piety, who flourished in the beginning of the 18th century, and whose works describe to be more generally known than we have reason to think they are at present. After endeavouring to prove that alphabetical writing was not practised before the era of Moses, and expatiating upon the difficulty of the invention, this excellent scholar attempts to show, that the original Hebrew alphabet was actually communicated to the Jewish legislator at the same time with the two tables of the law. "I know not (lays he) any just cause why the law should be written by God, or by an angel at his command, except it were for want of a man that could well perform this part. This could give no addition of authority to the law, especially after it had been published in that astonishing and miraculous manner at Mount Sinai. The true writing of the original was indeed perfectly adjutted, and precifely afcertained to all future ages, by God's giving a copy of it under his own hand; but this, I conceive, had been done altogether as effectually by God's dictating every word to Moses, had he been capable of performing the office of an amanuensis." The learned writer goes on to suppose, that it was for the purpose of teaching Mofes the alphabet, that God detained him forty days in the mount; and thence he concludes, that the Decologue was the first writing in alphabetical characters, and that those characters were a divine, and not a human

It is always rash, if not something worse, to conceive reasons not assigned by God himself, for any particular transaction of his with those men whom he from time to time inspired with heavenly wisdom. That it was not for the purpose of teaching Moses the alphabet that God detained him forty days in the mount, when he gave him the two tables of the law, feems evident from his detaining him just as many days when he gave him the fecond tables after the first were broken. If the legislator of the Jews had not been sufficiently instructed in the art of reading during his first stay in the mount, he would have been detained longer; and it is not conceivable, that though in a fit of pious passion he was so far thrown off his guard as to break the two tables, his mind was so totally unhinged by the idolatry of his countrymen, as to forget completely an art which, by the supposition, the Supreme Being had spent forty days in teaching him! "But if Moses could, at his first ascent into the mount, perform the office of an amanuenfis, why are the original tables faid to have been written by the finger of God, and not by him who wrote the fecond?" We pretend not to fay why they were written by God rather than man; but we think there is fufficient evidence, that by whomfoever they were written, the characters employed were of human invention. The Hebrew alphabet, without the Masoretic points, is confessedly defective; and every man who is in any degree acquainted with the language, and is not under the influence of inveterate prejudice, will readily admit that those points are no improvement. But we cannot, without impiety, suppose an art invented by infinite wisdom, to fall thort of the utmost perfection of which it is capable: an alphabet communicated to man by God, would undoubtedly have been free both from defects and from redundancies; it would have had a distinct character for every simple found, and been at least as perfect as the Greek or the Roman.

But we need not fill our pages with reasonings of this kind against the hypothesis maintained by Mr Johnson. We know that " Mofes wrote all the words of the Lord," i. e. the substance of all that had been delivered in Exod. xx, xxi, xxii, xxiii. before he was called up into the mount to receive the tables of stone; way, that he had long before been commanded by God himself to "write in a book" an account of the victory obtained over Amalek (Exod. xvii. 14.). All this, indeed, the learned writer was aware of; and to reconcile it with his hypothesis, he frames another, more improbable than even that which it is meant to support. "It is not unreasonable (fays he) to believe that God had written these tables of stone, and put them in Mount Horeb, from the time that by his angel he had there first appeared to Moses; and that, therefore, all the time after, while he kept Jethro's sheep thereabouts, he had free access to those tables, and perused them at discretion." But if belief should rest upon evidence, we beg leave to reply, that to believe all this would be in the highest degree unreasonable; for there is net a fingle hint in Scripture of the tables having been written at so early a period, or upon such an occasion, as God's first appearance to Moses in the burning bush. We know how reluctant Moses was to go upon the embassy to which he was then appointed; and it is strange, we think passing strange, that when he records so faithfully his own backwardness, and the means made use of by God to reconcile him to the arduous undertaking, he should make no mention of these important tables, if at that period he had known any thing of their existence. Besides all this, is it not wonderful, if Moles had been practifing the art of writing, as our author supposes, from the time of the burning bush to the giving of the law, he should then have stood in need of forty days teaching from God, to enable him to read with eafe the first tables; and of other forty, to enable him to write the second? This gives such a mean view of the natural capacity of the Hebrew legislator, as renders the hypothesis which implies it wholly incredible. See a Collection of Discourses, &c. in two volumes, by the reverend John Johnson, A. M. vicar of Cranbrook in Kent.

20, Stc.

‡ Antiq.

lib. i. c. 3.

Traditions

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pole.

Hebrew and some passages which plainly prove its existence. This ihows that alphabetical characters were not confined to the chosen feed, fince Job was in all probability * Gen. xxii. a descendant of Huz, the eldest son of Nahor * the brother of Abraham. From this circumstance, we think we may fairly conclude, that this art was known and practifed in the family of Terah the father of Abra-

3. There was certainly a tradition among the Jews in the age of Josephus, that writing was an antediluvian invention +. That historian pretends, that the descendants of Seth erected two pillars, the one of stone and the other of brick, and inscribed upon them their astronomical observations and other improvements .to this pur-This legend shows that there did exitt such an opinion

of the antiquity of the art of writing.

4. There must have been a tradition to the same purpose among the Chaldeans, fince the writers who have copied from Berofus, the celebrated Chaldean historian (0), speak of alphabetical writing as an art well known among the antediluvians. According to them, Oannes the Chaldean legislator gave his disciples "an infight into letters and science. This person also wrote concerning the generation of mankind, of their different purfuits, of civil polity, &c. Immediately before the deluge (fay they) the god Cronus appeared to Sifuthrus or Xisuthrus, and commanded to commit to writing the beginning, improvement, and conclusion of all things down to the present term, and to bury these accounts securely in the temple of the Sun at Seppara." All these traditions may be deemed fabulous in the main; but still they evince that such an opinion was current, and that though the use of letters was not indeed eternal (P), it was, however, prior to all the records of history; and of course, we think, an antediluvian discovery. The origi-

This original alphabet, whatever it was, and however constructed, was, we think, preserved in the family of Noah, and from it conveyed down to succeeding generations. If we can then discover the original Hebrew alphabet, we shall be able to investigate the primary species of letters expressive of those articulate founds by which man is in a great measure distinguished from the brute creation. Whatever might be the nature of that alphabet, we may be convinced that the ancient Jews deemed it facred, and therefore preferved it pure and unmixed till the Babylonish captivity. If, then, any monuments are still extant inscribed with letters prior to that event, we may rest affured that these are the remains

of the original alphabet.

There have, from time to time, been dug up at Jeru-

falem, and other parts of Judea, coins and medals, and Hebrew medallions, inferibed with letters of a form very differ- Language. ent from those square letters in which the Hebrew Scriptures are now written.

When the Samaritan Pentateuch was discovered (Q), The same it evidently appeared that the inscriptions on those me-with the dals and coins were drawn in genuine Samaritan cha-Samaritan. racters. The learned abbé Barthelemi, in his * differ- * Mem de racters. The learned abbé Barthelemi, in his anier-tation "on the two medals of Antigonus king of Judea, P. Academ. tation "on the two medals of Antigonus king of Judea, de l'Inscrip. one of the later Asmonean princes, proves that all the &c. inscriptions on the coins and medals of Jonathan and Simon Maccabeus, and also on his, were invariably in the Samaritan character, down to the 40th year before the Christian era."

It were easy to prove, from the Mishna and Jerufalem Talmud, that the Scriptures publicly read in the fynagogues to the end of the fecond century were written in the Samaritan character, we mean in the same character with the Pentateuch in question. As the ancient Hebrew, however, ceased to be the vulgar language of the Jews after their return from the Babylonish captivity, the copies of the Bible, especially in private Which afhands, were accompanied with a Chaldaic paraphrase; terwards and at length the original Hebrew character fell into gave place difuse, and the Chaldaic was universally adopted.

It now appears that the letters inscribed on the an-daic. cient coins and medals of the Jews were written in the Samaritan form, and that the Scriptures were written in the very same characters: we shall therefore leave it to our readers to judge whether (confidering the implacable hatred which subsisted between these two nations) it be likely that the one copied from the other; or at least that the Jews preferred to the beautiful letters used by their ancestors, the rude and inelegant characters of their most detested rivals. If, then, the inscriptions on the coins and medals were actually in the characters of the Samaritan Pentateuch (and it is abfurd to suppose that the Jews borrowed them from the Samaritans), the confequence plainly is, that the letters of the infcriptions were those of the original Hebrew alphabet, coeval with that language, which we dare to maintain was the first upon earth.

It may, perhaps, be thought rather fuperfluous to mention, that the Samaritan colonists, whom the kings of Affyria planted in the cities of Samaria (R), were natives of countries where Chaldaic letters were current, and who were probably ignorant of the Hebrew language and characters. When those colonists embraced the Jewish religion, they procured a copy of the Hebrew Pentateuch written in its native character, which, from superstition, they preserved inviolate as they re-

(0) Apollodorus, Alexander Polyhistor, Abydenus. See Syncellus, cap. 39. et seq. Euseb. Chron. lib. i. page 3.

(P) Plin. Nat. Hist. lib. vii. page 413.—Ex quo apparet æternus literarum usus.
(Q) The celebrated Archbishop Usher was the first who brought the Samaritan Pentatench into Europe. In a letter to Ludovicus Capellus "he acknowledges, that the frequent mention he had feen made of it by fome authors, would not fuffer him to be at rest till he had procured five or fix copies of it from Palestine and

(R) 2 Kings, chap. xvii. ver. 24. " And the king of Affyria brought men from Babylon, and from Cuthah, and from Avah, and from Hamath, and from Sepharvaim, and placed them in the cities of Samaria." Babylon and Cuthah, and Avah, were neighbouring cities, and undoubtedly both spoke and wrote in the Chaldaic syles. The natives of Hamath spoke the Syriac, which at that time differed very little from the Chaldaic.

Hebrew ceived it; and from it were copied successively the others which were current in Syria and Palestine when Archbishop Usher procured his.

From the reasons above exhibited, we hope it will appear, that if the Hebrew alphabet, as it appears in the Samaritan Pentateuch, was not the primitive one, it was at least that in which the Holy Scriptures were first committed to writing.

* Chron. in + Præf. I. Reg. Which was introduced

The He-

vowels.

prew

Scaliger has inferred, from a passage in Eusebius *, anno 4740. and another in St Jerome +, that Ezra, when he reformed the Jewish church, transcribed the Scriptures from the ancient characters of the Hebrews into the square letters of the Chaldeans. This, he thinks, was done for the use of those Jews who, being born during the captivity, knew no other alphabet than that of the people among whom they were educated.—This account of the matter, though probable in itself, and supported by pasfages from both Talmuds, has been attacked by Buxtorf with great learning and no less acrimony. Scaliger, however, has been followed by a crowd of learned men(s). whose opinion is now pretty generally espoused by the facred critics.

> Having faid so much concerning the Hebrew alphabet in the preceding pages, we find ourselves laid under a kind of necessity of hazarding a few strictures on the vowels and Masoretic points; the first essential, and the last an appendage, of that ancient language. The number of the one, and the nature, antiquity, and necessity of the other, in order to read the language with propriety and with discrimination, have been the subject of much and often illiberal controverfy among philological writers. To enter into a minute detail of the arguments on either fide, would require a complete volume: we shall, therefore, briefly exhibit the state of the controverfy, and then adduce a few observations, which, in our opinion, ought to determine the question.

> The controverfy then is, Whether the Hebrews used any vowels; or whether the points, which are now called by that name, were substituted instead of them? or if they were, whether they be as old as Moses, or were invented by Ezra, or by the Massorites (T)? This controverly has exercised the wits of the most learned critics of the two last centuries, and is still far enough from being determined in the present. The Jews maintain, that these vowel points (U) were delivered to Moses along with the tables of the law; and consequently hold them as facred as they do the letters themselves. Many Christian authors who have handled this fubject, though they do not affirm their divine original, nor their extravagant antiquity, pretend, however, that they are the only proper vowels in the language, and regulate and afcertain its true pronunciation. Though they differ from the Jews with respect to the origin of

these points, they yet allow them a pretty high antiqui- Hebrew ty, ascribing them to Ezra and the members of the great Language.

At length, however, about the middle of the 16th The Mafocentury, Elias Levita, a learned German Jew who then retic points flourished at Rome, discovered the delusion, and made a modern it appear that these appendages had never been in use inventions

till after the writing of the talmuds, about 500 years after Christ. This innovation raised Elias a multitude of adversaries, both of his own countrymen and Christians. Among the latter appeared the two Buxtorfs, the father and the fon, who produced some cabbalistical books of great antiquity (x), at least in the opinion of the Jews, in which there was express mention of the points. The Buxtorfs were answered by Capellus and other critics *, till Father Morinus +, having examined * Walton, all that had been urged on both fides, produced his Dupin, and learned differtation on that subject; against which there Vossius. has been nothing replied of any confequence, whilft his bible. work has been univerfally admired, and his opinion confirmed by those that have beaten the same field after

According to this learned father, it plainly appears that neither Origen, nor St Jerome, nor even the compilers of the talmuds, knew any thing of what has been called the vowel points; and yet these books, according to the same author, were not finished till the feventh century. Even the Jewish rabbis who wrote during the eighth and ninth centuries, according to him, were not in the least acquainted with these points. He adds, that the first vestiges he could trace of them were in the writings of Rabbi Ben Aber chief of the western, and of Rabbi Ben Naphtali chief of the eastern, school, that is, about the middle of the tenth century; fo that they can hardly be faid to be older than the beginning

Some learned men (Y) have ascribed the invention of the vowel points in question to the rabbis of the school of Tiberias; which, according to them, slourished about the middle of the second century. This opinion is by no means probable, because it appears plain from history, that before that period all the Jewish seminaries in that province were destroyed, and their heads forced into exile. Some of these retired into Babylonia, and fettled at Sora, Naherds, and Pombeditha, where they established famous universities. After this era there remained no more any rabbinical fchools in Judæa, headed by profesfors capable of undertaking this difficult operation, nor indeed of fufficient authority to recommend it to general practice, had they been ever fo thoroughly qualified for executing it.

Capellus and Father Morin, who contend for the late introduction of the vowel-points, acknowledge

(s) Cafaubon, Grotius, Voffius, Bochart, Morin, Brerewood, Walton, Prideaux, Huet, and Lewis Capel, always a fworn enemy to Buxtorf. All these have maintained the same ground with Scaliger: how truly, appears

(T) The term maforah or mafforeth fignifies " tradition;" and imports the unwritten canon by which the reading and writing of the facred books was fixed.

(U) These points are 14 in number, whose figures, names, and effects, may be seen in most Hebrew grammars. (x) These books are the Bahir, Zahar, and the Kizri. As for the Kizri, the Jews make it about 1900 years old; and the other about a century later. But the sidelity of the Jews in such matters cannot be relied upon.

(Y) See Buxtorf the father, in Tiber. cap. 5, 6, 7. Buxtorf the fon, de Antiq. Punct. P. II. 11.

Hebrew that there can certainly be no language without vocal

lectionis.

founds, which are indeed the foul and effence of speech; but they affirm that the Hebrew alphabet actually contains vowel characters, as well as the Greek and Latin and the alphabets of modern Europe. These are aleph, The matres he, vau, jod. These they call the matres lectionis, or, if you please, the parents of reading. To these some, we think very properly, add ain or oin, ajin. Thefe, they conclude, perform exactly the same office in Hebrew that their descendants do in Greek. It is indeed agreed upon all hands, that the Greek alphabet is derived from the Phænician, which is known to be the fame with the Samaritan or Hebrew. This position we shall prove more fully when we come to trace the origin of the Greek tongue. Hitherto the analogy is not only plaufible, but the refemblance precise. The Hebrews and Samaritans employed these vowels exactly in the same manner with the Greeks; and so all was eafy and natural.

34 Objections answered.

But the affertors of the Masoretic system maintain, that the letters mentioned above are not vowels but confonants or aspirations, or any thing you please but vocal letters. This they endeavour to prove from their use among the Arabians, Persians, and other oriental nations: But to us it appears abundantly strange to suppose that the Greeks pronounced beta, gamma, delta, &c. exactly as the Hebrews and the Phænicians did, and yet at the same time did not adopt their mode of pronunciation with respect to the five letters under consideration. To this argument we think every objection must undoubtedly yield. The Greeks borrowed their letters from the Phoenicians; these letters were the Hebrew or Samaritan. The Greeks wrote and (z) pronounced all the other letters of their alphabet, except the five in question, in the same manner with their originals of the east: if they did so, it obviously follows that the Greek and oriental office of these letters was the fame.

Another objection to reading the Hebrew without the aid of the Masoretic vowel points, arises from the confideration, that without these there will be a great number of radical Hebrew words, both nouns and verbs, without any vowel intervening amongst the consonants, which is certainly abfurd. Notwithstanding this supposed absurdity, it is a well known fact, that all the copies of the Hebrew Scripture, used in the Jewish synagogues throughout the world, are written or printed without points. These copies are deemed facred, and kept in a coffer with the greatest care, in allusion to the ark of the testimony in the tabernacle and temple. The prefect, however, reads the portions of the law and hagiographa without any difficulty. The same is done by the remains of the Samaritans at this day. Every oriental scholar knows that the people of these countries look upon confonants as the stamina of words. Accordingly, in writing letters, in dispatches upon business, and all affairs of small moment, the vowels are generally omitted. It is obvious, that in every original language the found of the vowels is variable and of little importance. Such was the case with the Hebrew VOL. XVI. Part I.

tongue: Nor do we think that the natives of the coun- H brew try would find it a matter of much difficulty to learn Language. to read without the help of the vowels. They knew the words beforehand, and fo might readily enough learn by practice what vowels were to be inferted.

When the Hebrew became a dead language, as it certainly was in a great measure to the vulgar after the return from the Babylonish captivity; such subfidiaries might we think, have been useful, and of course might possibly have been adopted for the use of the vulgar: but the scribe, the lawyer, and the learned rabbi, probably disdained such beggarly elements. We shall in this place hazard a conjecture, which, to us at least, is altogether new. We imagine that the Phoenicians, who were an inventive, ingenious people, had, prior to the age of Cadmus, who first brought their letters into Greece, adopted the more commodious method of inferting the vowels in their proper places; whereas the Jews, zealously attached to the customs of their ancestors, continued to write and read without them. In this manner the Gephuræi*, who were the followers * Herod. of Cadmus, communicated them to the Jones their lib.i. neighbours. We are convinced that the materials of cap. 56. the Greek tongue are to be gleaned up in the east; and upon that ground have often endeavoured to trace the origin of Greek words in the Hebrew, Phœnician, Chaldean, and Arabian languages. Reading without the vowel points we have feldom failed in our fearch; but when we followed the method of reading by the Proof that Masoretic points, we seldom succeeded; and this, we the Masobelieve, every man of tolerable erudition who will retic points make a trial will find by experience to be true. This are mo-argument appears to us superior to every objection. dern, Upon this basis, the most learned Bochart has exected his etymological fabric, which will be admired by the learned and ingenious as long as philology shall be cultivated by men.

It has been urged by the zealots for the Masoretic fystem, that the Arabians and Persians employ the vowel points. That they do fo at present is readily granted; but whether they did so from the beginning seems to be the question. That Arabia was overspread with Jewish exiles at a very early period, is abundantly certain. It was natural for them to retire to a land where they would not hear of war nor the found of the trumpet. Accordingly we find that, prior to the age of the Arabian impostor, Arabia swarmed with Jewish settlements. From these Jews, it is highly probable that their neighbours learned the use of the points in question; which in the course of their conquests the Saracens communi-

cated to the Persians.

It has been alleged with great show of reason, that without the vowel points, it is often impossible to bevelope the genuine fignification of many words which occur frequently in the language: many words of different and fometimes opposite fignifications are written with exactly the same consonants. Without the points then, how are we to know the distinction? In answer to this objection, we beg leave to observe, that, during the first period of a language, it is impossible that there Pp

(z) This is so true, that, according to Hesychius and Suidas, pounder, to act the Phoenician, signified " to read.17

* Connect.

From Ori-

apla.

book i.

Hebrew should not occur a number of similar founds of different fignifications. This is furely to be attributed to the poverty of the language. When a few terms have been once fabricated, men will rather annex new fignifications to old terms, than be at the expence of time or thought to invent new ones. This must have been the case with the Hebrew in particular; and indeed no language on earth is without instances of this inconveniency, which, however, in a living tongue, is eafily overcome by a difference of accent, tone, gesture, pronunciation; all which, we think, might obviate the dif-

> From the preceding arguments, we think ourselves authorised to infer that the Masora is a novel system, utterly unknown to the most ancient Jews, and never admitted into those copies of the Scriptures which were deemed most facred and most authentic by that

With respect to the original introduction of the points, we agree with the learned and judicious * Dr Prideaux, who imagines that they were gradually introduced after the Hebrew became a dead language, with a view to facilitate the learning to read that language, more especially among the vulgar. By whom they were introduced, we think, cannot eafily be determined; nor is it probable that they were all introduced at once, or by one and the fame person. They have been ascribed to Ezra by many, for no other reason that we can discover but to enhance their authenticity, and because the sentiment is analogous to the other articles of reformation established by that holy priest. If our curious reader should not be satisfied with the preceding detail, we must remit him to Capellus and Morinus on the one fide, and the two Buxtorfs, Schultens, and Dr James Robertson late professor of oriental languages in the university of Edinburgh, This learned orientalist, in his differon the other. tation prefixed to his Clavis Pentateuchi, has collected and arranged, with the true spirit of criticism, every thing that has been advanced in favour of the Masoretical fystem.—Si Pergama dextra defendi poffent, etiam hac defensa fuissent.

St Origen, who flourished about the beginning of gen's Hex- the 3d century, was a profound Hebrew scholar. published a most laborious and lcarned work, which is generally called the Hexapla, because it consisted of fix columns; the first of which contained the Hebrew text; the fecond, the fame text, but written in Greek characters; the third column exhibited the version of Aquila; the fourth, that of Symmachus; the fifth, the Septuagint; and the fixth, the version of Theodotan. In some fragments of that vast work which are still extant, we have a specimen of the manner in which the Hebrew was pronounced in the third century, by which it appears that it was very different from that which refults from observing the Masoretical points. The following is an inflance copied from the beginning

of Genefis.

According to ORIGEN.

Brêsith bara Elôeim eth asamaim oueth aares. Ouaares aietha Thôau ouboou ouôfckh al phne Theôm ourouê elôeim maraepheth al phne amaim.

Oniômer elôeim iei ôr ouiei ôr.

Ouiar elôcim cth aôr khi tôb ouiabdêl elôcim bên aôr Hebrew Language. oubên aôfekh.

According to the MASORITES.

Bereshith bara Elohim eth ashamajim veeth aaretz. Veaaretz ajetha thoou vaboou, vekhoshek gnal pené theom verouakh clohim merakhepheth gnal pené ham-

Vaïomer elohim jehi or, vajehi or.

Vajare elohim eth aor ki tob vajabedel elohim bein aor oubein hakhoshek.

Upon the whole, we prefume to give it as our opinion, that in the most early periods, the vowels, aleph, he, jod or yod, vaw or waw, and perhaps oin or ajin, were regularly written wherever they were founded. This to us appears plain from the practice of the an- and the cient Greeks. It is agreed on all hands that the Sa-practice of maritan and Phœnician alphabets were the fame; and the ancient that the former was that of the Jews originally. The Greeks. Phoenicians certainly wrote the vowels exactly, for fo did the Greeks who copied their alphabet: If the Phœnicians wrote their vowels, so then did the Jews of the age of Cadmus; but Cadmus was contemporary with fome of the earliest judges of Israel; the consequence is evident, namely, that the Jews wrote their vowels as late as the arrival of that colony-chief in Greece. We ought naturally to judge of the Hebrew by the Chaldaic, Syriac, and Arabian, its fifter dialects. All these languages in ancient times had their vowels regularly inferted; and why not the Hebrew in the same manner with the rest?

As these first vowels, which were coeval with the other letters, often varied in their found and application, the points, in all appearance, were first invented and employed to ascertain their different founds in different connections. Other marks might be invented to point out the various tones of voice, like the rovoi, or accents, with which the vowels were to be enounced, as was done among the later Greeks. In process of time, in order to promote celerity of writing, the yowels were omitted, and the points substituted in their place.

Before we conclude our observations on the Hebrew language, we ought, perhaps, to make an apology for omitting to interlard our details with quotations from the two Talmuds, the Mishna, the Gemara, the Cabbalas, and a multitude of rabbinical writers who are commonly cited upon fuch an occasion. We believe we could have quoted almost numberless passages from the two Buxtorfs, Father Morin, Capellus, and other Hebrew critics, with no great trouble to ourselves, and little emolument to the far greater part of our readers. But our opinion is, that fuch a pedantic difplay of philological erudition would probably have excited the mirth of our learned, and roused the indignation of our unlearned, readers. Our wish is to gratify readers of both descriptions, by contributing to the edification of one class without disgusting

We cannot, we imagine, fairly take leave of the facred language without giving a brief detail of those excellencies which, in our opinion, give it a just claim to the superiority over those other tongues which have fometimes contended with it for the prize of anti-

Hebrew quity: and of these the following in our apprehension

Language deserve particular notice.

Excellenlanguage.

If this language may claim any advantage over its antagonists, with respect to its being rather a mother than a daughter to any of them, it is undoubtedly in consequence of its simplicity, its purity, its energy, its fecundity of expressions and significations. In all these, notwithstanding its paucity of words, it excels the vast variety of other languages which are its cognate dialects. To these we may add the fignificancy of the names, both of men and brutes; the nature and properties of the latter of which are more clearly and more fully exhibited by their names in this than in any other tongue hitherto known. Besides, its well authenticated antiquity and the venerable tone of its writings furpals any thing left upon record in any other dialect now extant in the world. These extraordinary qualities excite our admiration at present under every disadvantage; and from this circumstance we may infer its incomparable beauty in the age of the Jewish legislator, and what effects it would naturally produce, could we know it now as it was spoken and written in the days of David and Solomon.

As far, however, as we understand it in its present mutilated condition, and are able to judge of its character from those few books that have come down to our time, we plainly perceive that its genius is fimple, primitive, natural, and exactly conformable to the character of those uncultivated patriarchs who used it themfelves, and transmitted it to their descendants in its native purity and simplicity. Its words are comparatively few, yet concise and expressive; derived from a very fmall number of radicals, without the artificial composition of modern languages. No tongue, ancient or modern, can rival it in the happy and rich fecundity of its verbs, refulting from the variety and fignificancy of its conjugations; which are fo admirably arranged and diverlified, that by changing a letter or two of the primitive, they express the various modes of acting, fuffering, motion, rest, &c. in such a precise and fignificant manner, that frequently in one word they convey an idea which, in any other language, would require a tedious paraphrase. These positions might easily be illustrated by numerous examples; but to the Hebrew scholar these would be superfluous, and to the illiterate class neither interesting nor entertaining.

To these we may add the monosyllabic tone of the language, which, by a few prefixes and affixes without affecting the radix, varies the fignification almost at pleafure, while the method of affixing the person to the verb exhibits the gender of the object introduced. In the nouns of this language there is no flexion except what is necessary to point out the difference of gender and number. Its cases are distinguished by articles, which are only fingle letters at the beginning of the word: the pronouns are only fingle letters affixed; and the prepositions are of the same character prefixed to words. Its words follow one another in an easy and natural arrangement, without intricacy or transposition, without suspending the attention or involving the sense by intricate and artificial periods. All these striking and peculiar excellencies combined, plainly demonstrate the beauty, the stability, and antiquity of the language

under confideration.

We would not, however, be thought to infinuate Hebrew that this tongue continued altogether without changes Language. and imperfections. We admit that many radical words of it were lost in a course of ages, and that foreign ones were substituted in their place. The long sojourning of the Israelites in Egypt, and their close connection with that people, even quoad facra, must have introduced a multitude of Egyptian vocables and phrases into the vulgar dialect at least, which must have gradually incorporated with the written language, and in process of time have become parts of its essence. In Egypt, the Israelites imbibed those principles of idolatry which nothing less than the final extirpation of their polity could eradicate. If that people were fo obstinately attached to the Egyptian idolatry, it is not very probable that they would be averse from the Egyptian language. Besides, the Scripture informs us, that there came up out of Egypt a mixed multitude; a circumstance which must have infected the Hebrew tongue with the dialect of Egypt. As none of the genuine Hebrew radicals exceed three letters, whatever words exceed that number in their radical state may be justly deemed of foreign extraction.

Some Hebrew critics have thought that verbs constitute the radicals of the whole language; but this opinion appears to us ill founded: for though many Hebrew nouns are undoubtedly derived from verbs, we find at the same time numbers of the latter deduced from the

Before we conclude our detail of the Hebrew tongue, Hutchinfo. a few of our readers may possibly imagine that we nianium. ought to give some account of the Hutchinsonian system; a system so highly in vogue not many years ago. But as this allegorical scheme of interpretation is now in a manner exploded, we shall beg leave to remit our curious Hebraist to Mr Holloway's Originals, a small book in 2 vols 8vo, but replete with multifarious erudition, especially in the Hutchinsonian style and character.—Fides sit penes autorem.

SECT. II. The Arabic Language.

WE now proceed to give some account of the Arabian Arabic lanlanguage, which is evidently one of the fifter dialects guage ori-of the Hebrew. Both, we imagine, were originally brew. the same; the former highly improved and enlarged; the latter, in appearance, retaining its original fimplicity and rude aspect, spoken by a people of a genius by no means inventive. In this inquiry, too, as in the former, we shall spare ourselves the trouble of descending to the grammatical minutiæ of the tongue; a method which, we are perfuaded, would neither gratify our learned nor edify our unlearned readers. To those who are inclined to acquire the first elements of that various, copious, and highly improved tongue, we beg to recommend Erpenii Rudimenta Ling. Arab.; Golii Gram. Arab.; the Differtations of Hariri, translated by the elder Schultens; Mr Richardson's Persic and Arabic Gram. &c.

We have pronounced the Hebrew and Arabian fifter dialects; a relation which, as far as we know, has been feldom controverted: but we think there is authentic historical evidence that they were positively one and the same, at a period when the one as well as the Pp2

25.

+ Gen. ii.

* Gen x.

Arabic other appeared in its infant unadorned fimplicity. The following detail will, we hope, fully authenticate the

truth of our position.

"Unto Eber (says the Scripture *) were born two fons. The name of one was Peleg, because in his days the earth was divided; and his brother's name was Joktan," or rather Yoktan. This last, says the sacred historian, " had thirteen fons; and their dwelling reached from Mesha (Mocha) to Sephar (A)," a mount of the east. According to this account, the descendants of Yoktan possessed all the maritime coast of Arabia from Mesha (Mocha) to Mount Sephar towards the east of that peninfula. Mofes, describing the rivers of paradife, tells us, that one of the branches of that river + " encompassed the whole land of Havilah, where there was great store of gold." Havilah was the twelfth fon of Yoktan, whom the Arabians call Kobtan; and confequently his territory was fituated towards the eaftern limit of the possessions of the posterity of the youngest fon of Eber. Yoktan or Kobtan was too young to be concerned in the building of the tower; and consequently retained the language of his family, which was undoubtedly the Hebrew. His descendants must have carried the same language into their respective fettlements, where it must have been transmitted to succeeding generations. The original language of all the tribes of the Arabians who inhabit a vast tract of country along the fouthern shore, according to this deduction, was that of their father Kobtan, that is, the Hebrew. Indeed, the most learned Arabians of modern times unanimously acknowledge this patriarch as the founder of the language as well as of their nation.

The other diffricts of Arabia were peopled by the offfpring of Abraham. The Ishmaelites, the posterity of that patriarch by Hagar, penetrated into the very centre of the peninfula; incorporated, and in process of time became one people with the Kobtanites. Another region was possessed by the children of the same holy man by Cheturah his fecond wife. The Moabites, Ammonites, Edomites, Amalekites, &cc. who fettled in the various regions of Arabia Pctræa, were all branches of Abraham's family, and used the same language with their great progenitor. The Scripture indeed speaks of people who inhabited the country last mentioned prior to the branches of Abraham's family; but these, according to the same history, were extirpated by the former. The conclusion then is, if we credit the Mofaic account, that all the inhabitants of the three divifions of Arabia did, in the earliest periods, universally

use the Hebrew tongue.

There was, we are fenfible, a region of Arabia inhabited by the Cushim, or descendants of Cush. This district was situated on the confines of Babylonia. Our translators have confounded this country with the modern Ethiopia; and have confequently ascribed the exploits of the Arabian Cushim to the Ethiopians. The Arabian kings of Babylon were of those Cushim. These were conquered and expelled Babylonia by the Chafidim. These spoke the Chaldean dialect, as will appear when we come to speak of that of the Abyssinians.

Here the candid reader is defired to reflect that the Arabic Hebrew and Chaldaic are cognate dialects. Language.

The foregoing proofs, deduced from the Mosaic hiftory, will be corroborated by a mass of internal evidence in the fucceeding parts of our inquiry.

The Arabic tongue, originally pure Hebrew, was in Gradually process of time greatly transformed and altered from its deviated, fimple unsophisticated state. The Arabians were di-from that vided into many different tribes; a circumstance which simplicity.

naturally produced many different dialects. Thefe, however, were not of foreign growth. No foreign enemy ever conquered those independent hords. The Perfians, Greeks, and Romans, fomctimes attempted to invade their territories; but the roughness of the ground, the fearcity of forage, the penury of water, and their natural bravery, always protected them. They were indeed once invaded by the Abyffinians or Ethiopians with fome show of success; but these invaders were in a short time expelled the country. Their language, of consequence, was never adulterated with foreign words or exotic phrases and idioms. Whatever augmentations or improvements it received were derived from the genius and industry of the natives, and not from adventitious or imported acquifitions. From this circumflance we may juffly infer, that the Arabian tongue was a long time stationary, and of course differed in no considerable degree from its Hebrew archetype. The learned Schultens, in his Commentary on Job, hath shown, to the conviction of every candid inquirer, that it is impossible to understand that fublime composition without having recourse to the Arabic idioms. That patriarch was a Chuzite. Hiscountry might be reckoned a part of Arabia. His three friends were actually Arabians, being the descendants of Ishmael and Esau. His country bordered upon that of the predatory Chaldcans, who were an Arabian banditti. When we consider all these circumstances in cumulo, we are strongly inclined to believe that the book of Job was actually written in Arabic, as the language stood at that period; which, according to the most probable opinion, could not have been later than the age of Moses. The learned are generally agreed that this whole book, the three first chapters excepted, is a poetical composition, replete with the most brilliant and most magnificent imagery, the boldest, the justest, and most gorgeous tropes and allusions, and a grandeur of fentiment wholly divine. Whoever has read the poetical compositions of the modern Arabians, on divine subjects, with any degree of taste, will, we flatter ourselves, difcover a striking similarity both of diction and sentiment. Be this as it may, we think there is no reason to conclude that the Arabic dialect deviated much from the Hebrew standard prior to the Christian era.

Of those different dialects which prevailed among the The two various tribes among which the peninfula of Arabia was principal divided, the principal were the Hemyaret and the Ko-dialects of reish. Though some of these were tributary to the Arabia. Tobbas, or Hemyaret sovereign of Arabia Felix, yet they took no great pains to cultivate the language of that province, and of course these people did not tho-

roughly

⁽A) Sephar, in the Septuagint Σοφηςα, and in some editions Σωφηςα: hence probably Σωφεις. Orig. in Job. cap- xxii. ver. 14. φασιδε τινες των Εζωηνεω Σωφεις την Αφεικην είναι.

Arabic roughly understand it. As for the independent tribes, Language, they had no temptation to cultivate any other language than their own.

The Koreith tribe was the noblest and the most learned of all the western Arabs; and the kaaba, or square temple of Mecca, was before the era of Mohammed folely under their protection. This temple drew annually a great concourte of pilgrims from every Arabian tribe, and indeed from every other country where the Sabian religion prevailed. The language of the Koreish was studied with emulation by the neighbouring tribes. Numbers of the pilgrims were people of the first rank, and possessed all the science peculiar to their country or their age. Great fairs were held during their residence at Mecca, and a variety of gay amusements filled up the intervals of their religious duties. In these entertainments literary compositions bore the highest and most distinguished rank; every man of genius confidering not his own reputation alone, but even that of his nation or his tribe, as interested in his suecels. Poetry and rhetoric were chiefly esteemed and admired; the first being looked upon as highly ornamental, and the other as a necessary accomplishment in the education of every leading man. An affembly at a place called Ocadh, had been in consequence established about the end of the fixth century, where all were The dialect admitted to a rivalship of genius. The merits of their of the Ko- respective productions were impartially determined by the affembly at large; and the most approved of their poems, written on filk, in characters of gold, were with much folemnity suspended in the temple as the highest mark of honour which could be conferred on literary merit. These poems were called the Moallabat, " fufpended," or Modhabebat, "golden." Seven of these are still preserved in many European libraries.

From this uncommon attention to promote emulation, and refine their language, the dialect of the Koreish became the purest, the richest, and the most polite, of all the Arabian idioms. It was studied with a kind of predilection; and about the beginning of the feventh century it was the general language of Arabia, the other dialects being either incorporated with it, or sliding gradually into difuse. By this fingular idiomatic union the Arabic has acquired a prodigious fecundity; whilst the luxuriance of fynonymes, and the equivocal or oppofite fenses of the same or similar words, hath furnished their writers with a wonderful power of indulging, in the fullest range, their favourite passion for antithesis and quaint allusion. One instance of this we have in the word veli; which fignifies a prince, a friend, and also a flave. This fame word, with the change of one letter only, becomes vali; which, without equivocation, imports a fovereign. Examples of this kind occur in almost every page of every Arabic dictionary.

But all those advantages of this incomparable language are merely modern, and do not reach higher than the beginning of the fixth century. Prior to that era, as we have observed above, a variety of dialects obtained; and as the Arabs were by their fituation in a manner fequestered from all the rest of mankind, it may not perhaps be superfluous to inquire briefly into the cause and origin of this instantaneous and universal

For a course of more than 20 centuries, the Arabians had been that up within the narrow limits of their own

peninfula, and in a great measure secluded from the rest of the world. Their commerce with India was purely Language. mercantile, and little calculated to excite or promote intellectual improvements. They traded with the Egyptians from time immemorial; but finee the invasion and usurpation of the pattor kings, every shepherd, that is, every Arabian, was an abomination to the Egyptians. From that quarter, therefore, they could not derive much intellectual improvement. Besides, when an extensive territory is parcelled out among a number of petty fepts or clans, the feuds and contests which originate from interfering interests and territorial disputes, leave but little time, and less inclination, for the culture of the mind. In these circumstances, the military art alone will be cultivated, and the profession of arms alone will be deemed honourable. Of consequence, we find that, in the general opinion, poetry, rhetoric, and the profession of arms. were the only sciences cultivated by the people in question. As for the science of arms, we are convinced that it was both studied and practifed at a very early period; but as to the two former, we imagine they were very late acquisitions, and sprung from some circumstance external and adventitious.

The tribe of the Koreish were much engaged in commerce. They exported frankincense, myrrh, cassia, galbanum, and other drugs and spices, to Damascus, Tripoli, Palmyra, and other commercial cities of Syria and its neighbourhood. Upon these oceasions the Arabian traders must have become acquainted with the Greek language, and perhaps with the more amufing and affecting parts of the Grecian literature. They might hear of the high renown of Homer and Demosthenes; and it is not impossible that some of them might be able to read their compositions. Every body knows with what unremitting ardour the learned Arabs, under the first khaliffs, perused and translated the philofophical works of the Grecian fages. The very fame spirit might animate their predecessors, though they wanted learning, and perhaps public encouragement, to arouse their exertions. From this quarter, we think, the Arabs may have learned to admire, and then to imi-

tate, the Grecian worthies.

The Ptolemies of Egypt were the professed patrons of commerce as well as of learning. Under these princes all nations were invited to trade with that happy country. The Arabs, now no longer fettered by Egyptian jealoufy, carried their precious commodities to Alexandria; where the Grecian literature, though no longer in its meridian fplendor, shone however with a clear unfaded lustre. The court of the first Ptolemies was the retreat of all the most celebrated geniuses of Greece and of the age; in a word, Alexandria was the native land of learning and ingenuity. Here the ingenious Arab must have heard the praises of learning inceffantly proclaimed; must have been often present at the public exhibitions of the poets and orators; and even though he did not understand them exactly, might be charmed with the melody of the diction, and flruck with furprife at their effects on the audience. The reader will please to reslect, that the Arabian traders werethe first men of the nation, both with respect to birth, learning, and fortune. These wise men, to use the lan-Institution guage of Scripture, inspired with the natural curiofity at Mecca of their race, might hear of the celebrated Olympic fimilar to games, the public recitations before that affembly, and the Olym-

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Arabic Language.

the glorious prize bestowed upon the conquerors. Such information might animate them to institute fomething parallel at Mecca, with a view to improve their language, and at the same time to derive honour and emolument to themselves. The Koreishim might promise themselves the like advantages from the establishment of the fair and affembly at Ocadh, as the natives of Elis drew from the inftitution of the Olympic games. For these reasons, we conjecture, the literary competitions at the place just mentioned were instituted at so late a period, though the nation had existed more than 2000 years before the establishment of this anniversary. Upon the whole, we are inclined to believe, that the Arabs, notwithstanding all the fine things recorded of them by their own poetical historians, and believed perhaps too eafily by those of other countries, were in the days of ignorance like the earliest Romans, latrones et Temibarbari. For our part, we think it by no means probable, that a people of that character should, after fo long a course of years, have stumbled upon so laudable and fo beneficial an inflitution, without taking the hint from fome foreign one of a fimilar complexion. This we acknowledge is only a conjecture, and as such it is submitted to the judgment of the reader.

There were, as has been observed above, two principal dialects of the original Arabic: The Hamyarite spoken by the genuine Arabs, and the Koreishite or pure Arabic, which at last became the general language of that people. The former of these inclined towards the Syriac or Chaldean; the latter being, according to them, the language of Ishmael, was deeply tinctured with the Hebrew idiom. The oriental writers tell us that Terah, the grandfather of Hamyar, was the first whose language deviated from the Syriac to the Arabic. Hence, fay they, the Hamyaritic dialect must have approached nearer to the purity of the Syriac, and of confequence must have been more remote from the true genius of the Arabic than that of any of the other tribes. The fact feems to stand thus: The Hamyarites were neighbours to the Chaldeans and Syrians, and confequently were connected with those people by commerce, wars, alliances, &c. This circumstance introduced into their language many phrases and idioms from both these nations. That Terah was concerned in adulterating the dialect of the Hamyarites, is a mere oriental legend, fabricated by the Arabs after they began to peruse the Hebrew Scriptures. The Koreish being situated in the centre of Arabia, were less exposed to intercourse with foreigners, and therefore preserved their language more pure and untainted.

The Koran
The learned well know, that the Koran was written written in the dialect of the Koreish; a circumstance which communicated additional splendor to that branch of the Arabian tongue. It has been proved, that the language of the original inhabitants of Arabia was genuine Hebrew; but upon this supposition a question will arise, namely, whether the Arabians actually preserved their original tongue pure and unsophisticated during a space of 3000 years, which elapsed between the deluge and birth of Mohammed? or, whether, during that period, according to the ordinary course of human affairs, it underwent many changes and deviations from the original standard?

The admirers of that language strenuously maintain the former position; others, who are more moderate in

their attachment, are disposed to admit the latter. Arabic Chardin observes of the oriental languages in general, Language. that they do not vary and fluctuate with time like the European tongues*. "Ce qu'il y a de plus admirable, * Voyage, dit il, et de plus remarquable, dans ces langues, c'est, vol. iii. qu'elles ne changent point, et n'ont point changé du P. 43° tout, soit à l'égard de termes, soit à l'égard du tour : rien n'y est, ni nouveau ni vieux, nulle bonne façon de parler, n'a cessé d'etre en credit. L'Alcoran, par exemple, est aujourdhui, comme il y a mille années, le modele de plus pure, plus courte, et plus eloquente diction." It is not to our purpose to transcribe the remaining part of the author's reflection upon this subject: From the above it plainly appears that he concludes, that the Arabian tongue has suffered no change since the publication of the Koran; and at the same time infinuates, that it had continued invariable in its original purity through all ages, from the days of Kobtan to the appearance of that book. Whether both or either of these sentiments is properly authenticated will appear in the fequel.

The learned Dr Robertson, late professor of oriental lan-Means aguages in the university of Edinburgh, informs us, that dopted by the Arabians, in order to preserve the purity of their the Arabs language, strictly prohibited their merchants, who were to preserve obliged to go abroad for the sake of commerce, all com-of their lanmerce with strange women. We know not where this guage. injunction is recorded, but certainly it was a most terrible interdict to an amorous son of the desert. If such a prohibition actually existed, we suspect it originated from some other source than the fear of corrupting their language. Be that as it may, the Doctor, as well as the great Schultens, is clearly of opinion, that the language in question, though divided into a great number of streams and canals, still slowed pure and limpid in its

Our readers who are acquainted with the history of the orientals are already apprized of the steady attachment of those people to ancient customs and institutions. We readily allow, that in the article of Language this same predilection is abundantly obvious; but every oriental scholar must consess, that the style of the Koran is The style at this day in a manner obsolete, and become almost a of the Kodead language. This sast, we believe, will not be questannow stioned. If the Arabian has deviated so very considerably from the standard of the Koran in little more than 1000 years, and that too after an archetype is afcertained; by a parity of reason we may infer, that much greater deviations must have affected the language in the space of 3000 years.

It is univerfally allowed by fuch as maintain the unfullied purity of the Arabian tongue, that it was originally the fame with the Hebrew, or with the ancient Syriac and Chaldaic. Let any one now compare the words, idioms, and phraseology of the Koran with the remains of those three languages, and we think we may venture to affirm that the difference will be palpable. This circumstance, one would think, indicates in the strongest terms a remarkable alteration.

The Arabs themselves are agreed, that, notwithstanding the amazing secundity of their language, vast numbers of its radical terms have been irrecoverably lost. But this loss could not be supplied without either fabricating new words or borrowing them from foreign languages. To the latter method we have seen their aver-

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* Pococke's

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† Ib. ibid.

‡ Vol. iii.

p. 153.

yarites,

Arabic fion; and must therefore conclude that they adopted the Language. former.

The Chaldeans, Syrians, and Phœnicians, had made innovations on their language at a very early period, even before conquests were undertaken: We see no reason to suppose that the Arabs did not innovate as well as their nearest neighbours: the Hamyarites did actually

There are, we think, very strong reasons to believe, that Job was an Arabian, and flourished prior to Moses, perhaps as early as Jacob. The style, the genius, the figurative tone of the composition; the amazing sublimity of the fentiments, the allufions, the pathos, the boldness, the variety, and irregularity, the poetical enthufiasm which pervades the whole poem, strongly breath the Arabian spirit: indeed the very diction is peculiar to that fingle book, and differs widely from that of the Pfalms and every poetical part of the facred canon. If we compare this book with Mohammed's Koran, we brew in its shall scarce find any resemblance of words or phraseology; but a wonderful fimilarity of figures, enthusiasm, phraseoloand elevation of fentiments.

We are then led to conclude, that the Arabic did actually lose and gain a multitude of vocables between the era of its first establishment among the descendants of Joktan and Ishmael, and the birth of the im-

postor. The art of writing was introduced among the Arabs at a very late period: Without the affiftance of this art, one would think it altogether impossible to preserve any language in its primæval purity and fimplicity. Our curious readers may here expect some account of the Arabic characters: the following detail is the most probable one we have been able to collect on that subject.

It is generally agreed*, that the art of writing was known among the Hamyarites or Homerites at a very Hist. Arab. early period. These people were sovereigns of Arabia Art of writ-during a course of many ages. Their character was fomewhat perplexed and confused. It was called al Mofnad, from the mutual connection of the letters. The alphabet of these people resembled that of the Hebrews both in the number and order of the letters, and is called abgad heviz +, from the first ten letters of the Hebrew alphabet, artificially thrown together. " And this word (fays the learned Chardin 1) a, b, g, d, is formed of the four letters which were heretofore the first in the Arabian language, as they are still in that of the Hebrews." The same traveller is positive that these were the ancient characters of the Arabs; that they differed from Cuphite letters, which were afterwards introduced; and that they were furnished with vowel points. These, we imagine, were the first sketches of the Chaldean character, which probably the Hamyarites retained in their pristine unpolished form, after they had been polished and reduced to a more elegant fize by the original inventors.

Monuments bearing inscriptions in these characters are, they tell us, still to be seen in some places of Ara-

bia. Some were engraved on rocks; and to these we think it probable that the patriarch Job alludes in Language. those passages where he seems to intimate an inclination to have his fufferings recorded in a book, and graven in the rock for ever. All the Arabians agree, that the dialect of the Hamyarites inclined towards the Syriac or Chaldean. This we have imputed to the connection of that people with the Chaldeans, who lived in their neighbourhood. If the Hamyaritic dialect was infected with the Syriac or Chaldaic, there can be no doubt that they derived their letters from the same

We conclude then, that the Hamyarites knew the art in Chaldaie of writing from the earliest antiquity, and that the let-characters. ters they employed were the rude Chaldaic in their unimproved state *. Some of the Arabians do indeed * Pococke hold, that Ishmael was the first author of letters; but Orat. de that his characters were rude and indiffinet, without any Ling. Arabinterval between letters or words, and that these were adopted by Kedar and his other children: but this tradition hath met with little credit.

With respect to the highly polished Koreishites, it is agreed on all hands, that they were unacquainted with the use of letters till a few years before the birth of Mohammed. Two difficulties here present themselves. The first is, how the Koreishite dialcet, without the art of writing, happened to excel all the other dialects of Art of writthe Arabic tongue, affifted by that art, apparently foing among necessary for preserving a language in its original purity. the Koreinstein of the first of the control of The fecond is still, we think, rather greater, namely, how the Koreish learned that most useful art at so late a period as the fixth century. It is a well known fact, that ever after the Babylonish captivity Arabia swarmed with Jewish villages, in which the art of writing was generally known; and almost at the beginning of the Christian era, multitudes of Christians retired to the same country, in order to avoid the perfecutions which they fuffered in the Roman empire. In these circumstances, we think it rather strange, that the Koreishites, highly polished and acute as they were, never thought of laying hold on the opportunity of learning an art fo very useful. These two problems we leave to be solved by our more learned readers.

But however they be folved, it is univerfally acknowledged, that the Koreish were ignorant of letters till a few years before the birth of their prophet. Ebn Chalican (B), one of their most celebrated historians, informs us, that Moramer the fon of Morra, an Anbarian, a native of Anbaris, a city of Irak (c), first invented alphabetical characters, and taught his countrymen to use them, from whom this noble invention was derived to the Koreishites. These letters, though neither beautiful nor convenient, were long used by the Arabs. They were denominated Cuphite, from Cupha, a city of Irak. In this character the original copy of the Koran was written. These we think were the original clumfy characters which were retained by the vulgar, after the beautiful square Chaldaic letters were invented, and probably used by priests, philosophers, and the

⁽B) See this whole detail in Dr Pococke's Specim. Hift. Arab. p. 250. et feq. (c) Irak, "Babylonia," from Erech, one of the cities built by Nimrod. The Arabians have generally restored. the ancient names of places. Thus with them Tyre is Tzur, Sidon Seyd, Egypt Mezri, &c. .

Arabic learned in general. These letters are often at this day Language, used by the Arabs for the titles of books and public inferiptions.

Glav. Pent. Improved about 300 years after Mohammed.

Abauli the fon of Mocla *, about 300 years after p. 35, 36. the death of Mohammed, found out a more elegant and more expeditious character. This invention of Abauli was afterwards carried to perfection by Ebn Bowla, who died in the year of the Hegira 413, when Kader was caliph of Bagdad. This character, with little variation, obtains at this day. As we think this article of some importance, we shall, for the fake of our unlearned readers, transcribe an excellent account of this whole mat-

ter from the very learned Schultens.

"The Cuphic character, fays he, which had been brought from the region of the Chaldeans to the province of Hejaz, and to Mecca its capital, in the age of Mohammed, was employed by the Koreishites, and in it the Koran was first written. But as this character was rude and clumfy, in confequence of its fize, and ill calculated for expedition, Abauli Ebn Mocla devised a more elegant and expeditious one. This person was vifir to Arradius the 41th caliph, who began to reign in the year of the Hegira 322. Accordingly, in the 10th century, under this emperor of the Saracens, the form of the Arabian alphabet underwent a change; and the former clumfy embarrassed character was made to give way to the polished, easy and expeditious type. Regarding this expedition alone, the author of the invention left very few vowel characters; and as the Hebrew manner of writing admits five long ones and five short in different shapes, he taught how to express all the vowels, both long and short, suitably to the genius of the language, by three, or rather by two, fmall points, without any danger of a mistake: an abbreviation truly deserving applicuse and admiration; for by placing a very small line above _ he expressed a and e; and by placing the fame below in he meant to intimate i only. To the other fhort ones, o and u, he affigned a fmall waw above. In order to represent the long ones, he called in the matres lectionis, the "quiescent letters &, ,, ';" so that phata with elift intimated a and o long, i. e. kametz and cholem; jod placed after kefram became tzeri and chirek long. Waw annexed to damma made schurek."

In this passage, the great orientalist acknowledges that the vifir above mentioned, who carried the Arabian alphabet to the pinnacle of perfection, invented and annexed the vowel points for the fake of eafe and expedition in writing; from which we may infer, that prior to the tenth century the Arabians had no vowel points; and confequently either read without vowels, or contented themselves with the matres lectionis above

mentioned.

The design of the author of the invention, in fabricating these points, was confessedly ease and expedition in writing; a circumstance which furnishes a violent prefumption that the Hebrew vowel-points were devised and annexed at some late period for the very same purposes.

Some, indeed, have gone fo far as to affirm that the Arabians were the original fabricators of the vowelpoints. " The Arabians + (fays the learned Dr Grethe Origin gory Sharp) were the original authors of the vowelof Lan &c points. They invented three, called fatha, and damma, and kefra: but these were not in use till several years

after Mohammed; for it is certain that the first copies Avabic of the Koran were without them. The rabbis stole Language. them from the Arabs." This, however, is carrying the matter too far, fince it is certain that the Jews were acquainted with the points in question long before the pcriod above-mentioned.

Though it is not our intention to enter into a minute detail of the peculiarities of this noble language, we cannot omit observing one thing, which indeed belongs to grammar, but is not generally taken notice of by the Arabic grammarians. The roots of verbs in this dialect are univerfally triliteral; fo that the composition of the 28 Arabian letters would give near 22,000 elements of the language. This circumstance demonstrates the furprifing extent of it: for although great numbers of Surprifing its roots are irrecoverably loft, and fome perhaps were extent of never in use; yet if we suppose 10,000 of them, without language. reckoning quadriliterals to exist, and each of them to admit only five variations, one with another, in forming derivative nouns, the whole language would then confit of 50,000 words, each of which may receive a multitude

of changes by the rules of grammar.

Again, the Arabic feems to abhor the composition of words, and invariably expresses very complex ideas by circumlocution; fo that if a compound word be found in any dialect of that language, we may at once pronounce it of foreign extraction. This is indeed a distinguishing feature in the structure of this tongue, as well as of some of its fifter dialects. This circumstance has, in our opinion, contributed not a little to the amazing fecundity of that language: for as every ingredient in the composition of a complex idea requires a word to express it, as many words became necessary to complete the language as there were simple ideas to be intimated by discourse. Were all the compounds of the Greek language to be dissolved, as probably once they were, the vocables of that tongue would infinitely exceed their present number.

The Arabic authors boast most unconscionably of the richness and variety of their language. No human understanding, say they, is capacious enough to comprehend all its treasures. Inspiration alone can qualify one for exhausting its fources *. Ebn Chalawalb, * Pococke's a most renowed grammarian of theirs, has spent a whole Specimen. volume upon the various names of the lion, which amount to 500; another on the names of the serpent, which make up 200. Mohammed al Firancabodius affirms that he wrote a book on the usefulness and different denominations of honey, in which he enumerates 80 of them; and after all, he affures us that he was still far from having exhausted his subject. To excel in a language so amazingly copious, was certainly a proof of uncommon capacity, and confidered as no mean talent even among the Koreishites. Hence Mchammed, when some people were expressing their admiration of the elequence of the Koran, told them that he had been taught by the angel Gabriel the language of Ishmael, which had fallen into defuetude.

In a language fo richly replenished with the choicest Oratory and most energetic terms, both oratory and poetry and poetry were cultivated with eafe. All the difficulty confifted of the in making a choice among words and phrases equally Arabs. elegant. We may compare one of those poets or orators to a young gentleman, of a taffe highly refined, walking into a repository where a profusion of the richest

Arabic

Language.

Arabic and most elegant dresses are piled up in wild confusion. Language. Our beau is here diftressed with variety; but to be able to choose the most handsome and most becoming, he must have received from nature a superior good taste; which he must likewife have cultivated by affiduous industry, and by affociating with the most genteel com-

The orations of the Arabs were of two kinds, metrical and profaic. The former they compared to pearls fet in gold, and the latter to loofe ones. They were ambitious of excelling in both; and whoever did fo, was highly distinguished. His fuccess in either of those departments was thought to confer honour, not only on his family, but even on his tribe. In their poems were preserved the genealogies of their families, the privileges of their tribes, the memory of their heroes, the exploits of their ancestors, the propriety of their language, the magnificence of banquets, the generofity of their wealthy chiefs and great men, &c. After all, we cannot avoid being of the unpopular opinion, that this mighty parade of eloquence and poetry did not reach backward above two centuries before the birth of Mohammed, as it certainly vanished at the era of the propagation of his religious institutions. The two succeeding centuries were the reigns of superstition and bloodshed. The voice of the muses is seldom heard amidst the din of arms.

The ancient Arabs, at whatever time poetry began to be in request among them, did not at first write poems of confiderable length. They only expressed themselves in metre occasionally, in acute rather than harmonious strains. The Proverbs of Solomon, and the book of Ecclefiastes seem to be composed in this species of verification. The profody of the Arabs was never digested into rules till some time after the death of Mohammed; and this is faid to have been done by Al Khalti al Farabidi, who lived in the reign of the caliph

Karan of Raschid.

After fo many encomiums on the copiousness of the Arabic tongue, one class of our readers may possibly expect that we should subjoin a brief detail of its genius and character; and this we shall do with all possible

charaster

guage.

All the primary or radical words of the language Genius and are composed of different combinations of confonants of the lan- by triads; fo that the various combinations and conjunctions of radicals make more than 10,000, even without including those which may arise from the meeting of guttural letters. From this quality of the language has flowed that stability of the dialect which has preserved it pure and entire for so many thousand years, and fecured it from those changes and that fluctuation to which most other tongues are subject.

Perhaps, notwithstanding its copiousness and variety, no other language can vie with the one in question in point of perspicuity and precision. It is possessed of a brevity and rotundity which, amidst the greatest variety, enables it to express with clearness and energy what could not be expressed in any other tongue without tedious circumlocutions. To this purpose we shall beg leave to transcribe a passage from Bishop Pococke's oration on the Arabic language. As we imagine few of our readers who will have the curiofity to perufe this article can be unacquainted with the Latin tongue,

VOL. XVI. Part I.

we shall give it as it stands in the original, without a

" Neque in nulla certe laudis parte, mira illa qua, non folum verborum in fignificando, perspicuitate, sed in prolatione, elegantiæ et dulcedini caverunt, fedulitas; quoque, non folum accurata, inter literas ex fignificata proportione, fenfus vel intenfioni, vel remiffioni, prout res postulaverit, literarum appositione, fubductione, vel juxta organorum, rationem prospexerunt; fed et ne quid delicatulis auribus ingratum, ne quid horridum, aut acumpavor, reperiatur, effecerunt. Hoc in genere est, quod nuspiam in verbo aliquo, genuinæ apud Arabes originis, concurrunt, non intercedente vocalis alicujus motione confonantes, cum vel tres, vel plures, aliis in linguis frequenter collidantur. Immo neque, fi adfint, quæ asperitati remedio sint, vocales, quas libet temerè tamen committunt consonantes; fed ita rei natura postulat, ut concurrere debeant illa, qua fe invicem, fine asperitatis inductione consequi, et inter se connecti non possint; illi vel situs, vel literarum mutatione, eas abjiciendo, inferendo, emolliendo, aliifve quibus possent modis, remedia quærunt; adeo ab omni, quod vel absonum, vel dissonum est, abhorrent. Quod fi nobis fecus videntur, et asperius sonare ab Arabibus prolata, illud auribus nostris, et usui, non linguæ imputandum, nec mollius illis fonare nostra, quam eorum nobis censendum. Quin et gutturalium, quæ nobis maxima asperitatis causa videntur, absentiam, ut magnum in lingua Græca defectum, arguunt Arabes."

The learned Dr Hunt, late professor of the Hebrew and Arabic languages at Oxford, is of the same opinion with the very learned prelate, part of whose oration we have transcribed above, with respect to the delicacy and elegance of the Arabian language :- " Nufquam, mihi credite, (inquit ille) auribus magis parcitur quam in Arabia; nulla lingua à κακοθωνια, alienior quam Arabica. Quamquam enim nonnullæ ejus literæ minus fortaffe suaviter, immo durius etiam sonuerint, ita tamen Arabes eas temperarunt cum lenibus, duras cum mollibus, graves cum acutis miscendo, voces inde non minus auribus jucundæ, quam pronunciatu faciles confecerint, totique sermoni miram sonorum tam dulcedinem quam varietatem addiderint. Quod quidem orationis modulandæ studium in Corano adeo manifestum est, ut primi Islamismi oppugnatores eum librum magica ideo arte scriptum dixerint. Non auribus tantum gratus est Arabifinus, fed et animi conceptibus exprimendis aptus, fonos suos sententiis semper accommodans, et felici verbo-

rum junctura eorum naturam depingens."

To these we might add quotations from Erpenius's oration on the fame subject, from Golius, Schultens, Hottinger, Bochart, and Sir William Jones; befides a whole cloud of oriental witnesses, whose extravagant encomiums would rather astonish than edify the far greater part of our readers. These panegyrics may perhaps be in fome measure hyperbolical; but in general we believe them pretty well founded. At the same time we are convinced that the Arabic, however melodious in the ears of a native, founds harsh and unharmonious in that of an European.

When we consider the richness and variety of the Difficulty Arabic tongue, we are led to conclude, that to ac-of acquiring quire a tolerable degree of skill in its idioms, is a more a thorough difficult task than is generally imagined; at least fome of it.

Language,

Ezc.

people who have acquired the knowledge of the Greek and Latin, and likewise of the more fashionable modern languages, with facility enough, have found it fo. Be that as it may, there are two classes of men who, in our opinion, cannot handfomely dispense with the knowledge of that almost universal tongue: the gentleman, who is to be employed in the political transactions of the most respectable mercantile company upon earth, in the east-ern parts of the world; and the divine, who applies himself to investigate the true purport of the sacred oracles: without this, the former will often find himfelf cmbarraffed in both his civil and mercantile negociations; and the latter will often grope in the dark, when a moderate acquaintance with that tongue would make all funshine around him.

Bochart, Hottinger, Schultens, Pocock, Hunt, and Robertson, &c. have taken wonderful pains, and lavished a profusion of learning, in proving the affinity and dialectical cognation between the Hebrew and Arabic. Much of this labour, we think, might have been spared. We prefume to affirm, that no person tolerably versed in both languages can read a fingle paragraph of the A. rabic version of the New Testament, or indeed of the Koran itself, without being convinced of the truth of this position: it is but stripping the latter of its adventitious frippery, and the kindred features will immediately appear.

The learned professors of the university of Lcyden were the first who entered upon the career of Arabian learning. To them the European students are principally indebted for what knowledge of that language they have hitherto been able to attain. Though feveral Italians have contributed their endeavours, yet the fruit of their labours has been rendered almost useless by more commodious and more accurate works printed in Holland.

The palm of glory, in this branch of literature, is due to Golius, whose works are equally profound and elegant; fo perspicuous in method, that they may always be consulted without fatigue, and read without languor. Erpenius's excellent grammar, and his memorable dictionary, will enable the student to explain the history of Taimur by Ibni Arabshah. If he has once mastered that sublime work, he will understand the learned Arabic better than most of the Khatabs of Constantinople or of Mecca.

The Arabian language, however, notwithstanding all its boasted perfections, has undoubtedly shared the fate of other living languages; it has gradually undergone fuch confiderable alterations, that the Arabic spoke and written in the age of Mohammed may be now regarded as a dead language: it is indeed fo widely different from the modern language of Arabia, that it is taught and studied in the college of Mecca just as the Latin is at Rome.

The dialect of the Highlands of Yemen is faid to have the nearest analogy to the language of the Koran, because these Highlanders have little intercourse with strangers. The old Arabic is through all the East, like the Latin in Europe, a learned tonguc, taught in colleges, and only to be acquired by the perufal of the best authors.

" Ut folia in sylvis pronos mutantur in annos, doc."

SECT. III. Of the Chaldean, Phanician, Ethiopian or Aby Jinian, and Egyptian Languages.

As there is a very first councetion and dialectical Connection analogy among these languages, we have arranged them of the all under one section; especially since what is observed Chaldean, relating to one of them may, without the least strain-Ethiopic, ing, be extended to them all. We shall begin with the and Egyptime,

The Chaldeans, or Chandim, as they are always call-guages. ed in Scripture, were the descendants of Chesco the son of Nahor, the brother of Abraham. The descendants of this patriarch drove the Cushim or Arabians out of Babylonia, and possessed themselves of that country at a very early period. As these Chasidim or Chaldeans were the posterity of Nahor, the descendant of Heber, they undoubtedly spoke the original Hebrew tongue as well as the other branches of that family. But being an ingenious inventive people, they feem to have polished their language with much care and delicacy of tafte.

The only genuine remains of the ancient Chaldaic language are to be found in the Hebrew Scriptures; and those are contained in 268 verses, of which we have 200 in Daniel, reaching from verse 4th chapter 2d to chapter 8th exclusive; in Ezra 67, in chapter 4th, 17 verses; chapter 5th, the same number; chapter 6th, 18 verses; and in chapter 7th, 15: in Jeremial, chapter 10th, there is extant only one verfe. From these fragments, compared with the Hebrew, it plainly appears, that the difference between that language and the Chaldaic is scarce equal to that between the Doric and Ionic dialects of the Greek.

Whatever might have been the form of the most ancient Chaldaic letters, it is generally known that the beautiful square characters, in which the Hebrew Scriptures began to be written after the age of Ezra, were current among them at an era prior to the Babylonish captivity. Those elegant characters were probably the invention of the Chaldean academies, which were established in various parts of that extensive and fertile

The Chaldean declensions and conjugations differ so Chaldean little from the Hebrew modifications, that it would be differs little almost superfluous to dwell upon them in this section. from the The most effectual way to acquire an idea of the an-Hebrew. cient Chaldaic, is to decompound the names confessedly of that dialect, which occur in many places of Scripture. By this method of proceeding, its beautiful structure and expressive energy will be readily comprehended even by the most illiterate classes of our readers. At the same time, we must observe, that the Chaldaic and ancient Syriac bore fo near a refemblance to each other, that they have generally been classed under one

The first Chaldaic word that occurs in the Old Testament is bara "creavit." This word has all along been affigned to the language under confideration; for what reason, we confess we are not able to discover. The greatest part of the Hebrew tongue is now lost. The words bar, " a fon," and bara "creavit," rather filiavit), may probably be of that number. Another Scripture word which is often quoted, and always afcribed either to the Syriac or Chaldaic, is igar or jegar Sahadutha,

Chaldean fahadutha, which fignifies "a monument of witneffes." Language, Every body knows, that when Jacob and Laban made , their compact, the latter denominated the heap of stones reared upon that occasion in this manner; while the former called it Galeed, as we now write and pronounce it. This pronunciation, however, does not appear to us altogether genuine. The word is probably compounded of אם gal, cumulus, "a heap," and ער chad, æter-nitas, feculum, "eternity, an age:" fo that פלער galchad, or galaad as it came to be written afterwards, fignified an "everlasting heap." Laban then had respect to the end for which the monument was erected; but Jacob alluded to its duration. It appears, however, upon this and every other occasion, when Chaldaic words are mentioned, that k, a, was a favourite letter

pentine found of that confonant.

The Chaldaic names of gods, men, places, &c. which names pure occur in Scripture, appear to be no other than Hebrew polished and improved. Bel, Belus in Latin, is evidently בעל Baal, or we think rather בעל Bechel. The Phœnicians, and fometimes the Hebrews, used it to fignify the most high. The Chaldeans used their word Bel for the same purpose; and because this word originally imported the High One, they dignified their first monarch with that name. They denominated their capital city Ba-Bel, which imports the temple of Bel, and afterwards Babylon, which intimates the abode or dwelling of our lord the fun. Nebo was a name of the moon among the Babylonians, derived from the Hebrew נבא, nabah, vaticinari, " to prophecy." Azer was the planet Mars, from אער, Azer or Ezur, accinxit, " to gird," alluding to the girding on of arms. Ahad was an Af-* Mereb. fyrian name of the fun *, a word deduced from the lib. i. c. 23. Hebrew name aliad, unus, "one." Netzar was the name + Pococke of an Arabian idol+, which often occurs in the com-Specim. position of Babyloman names. High. Arab. an eagle: we think, however, that the word is the Hebrew typ natzar, custodivit, servavit, "to keep, to preferve." To these names of deities many more might be

both with the Syrians and Chaldeans. We may like-

wife observe, that the same people always changed the Hebrew w shin into n thau, in order to avoid the fer-

Almost all the Chaldean proper names which occur either in facred or profane history are evidently of Hebrew original, or cognate with that language. We shall subjoin a few examples: Nabonassar is evidently compounded of Nabo and nazur, both Hebrew words. Nabopollazar is made up of Nabo-Pul, the same with Bel, and Azer or Azor, above explained, Belesis is made up of Bel and www E/ha, "fire." Nebuchadnezzar, Belfhazzar, Beltihazzar, Nerigliffar, Nebuzaradan, Rabmag, Rabsaris, Nergal Sharezer, Rabshakeh, Ezar-haddon, Merodach, Evil Merodach, and numberless others, are so manifestly reducible to Hebrew vocables, when decompounded, that the oriental scholar will readi-

added, which the nature of our defign will not allow us

ly distinguish them.

to mention.

Names of places in the Chaldaic are likewife so nearly Hebrew, that nothing but the dialectical tone separates them. Thus Ur of the Chaldeans is actually אור light, that city being facred to the fun; Sippora is plainly the Hebrew word Zipporah; Carchemish, a city on the Euphrates, is evidently compounded of Kir or Kar " a city," and Chemosh, a name of the fun. In short,

every Chaldean or old Syrian word now extant, without Chaldean any difficulty, bewray their Hebrew original. As for Language, their dialectical differences, these we remit to the Chaldaic grammars and lexicons.

We now proceed to the confideration of the Phoeni-Phoenician cian language, which is known to have been that of the language ancient Canaanites. That this was one of the original derived from the dialects, and consequently a cognate of the Hebrew, is Hebrew. univerfally acknowledged. Intead therefore of endeavouring to prove this position, we may refer our readers to the works of the learned Mr Bochart, where that author has in a manner demonstrated this point, by deriving almost all the names of the Phoenician colonies from the Hebrew, upon the supposition that the dialect of those people was closely connected with that tongue. St Augustine, de Civitate Dei, has observed, that even in his time many of the vulgar in the neighbourhood of Carthage and Hippo spoke a dialect of the old Punio which nearly refembled the Hebrew. Procopius, de bello Goth. informs us, that there existed even in his days in Africa a pillar with this inscription in Hebrew, " We flee from the face of Joshua the robber, the son of Nun." The names of all the ancient cities built by the Carthaginians on the coast of Africa are easily reducible to a Hebrew original. The Carthaginian names of perfons mentioned in the Greek and Latin hittory, fuch as Himilco, Hamilcar, Afdrubal, Hamibal, Han-

harbal, Adherbal, &c. all breathe a Hebrew extraction. The Greeks borrowed a great part of their religious worship from the people of whose language we are treating; of consequence, the names of most of their gods are Phænician. Almost every one of these is actually Hebrew, as might eafily be shown. The names of persons and places mentioned in the fragments of Sanchoniathon, preserved by Eusebius, are all of Hebrew complexion. The names mentioned in the Hebrew scriptures of places which belonged to the Canaanites prior to the invasion of the Israelites under Joshua, are as much Hebrew as those which were afterwards substituted in their stead. The Punic scene in Plautus has been analysed by Bochart and several other learned men, by whom the language has been clearly proved to be deduced from the Hebrew, with some dialectical variations.

no, Dido, Anna or Hannah, Sophonisba, Gisgo, Ma-

The island of Malta (Melita now) was inhabited by a colony of Phœnicians many ages before the Moors took possession of it. Among the vulgar of that island many Punic vocables are current to this day, all which may be readily traced up to the Hebrew fountain. To these we may add many inscriptions on stones, coins, medals, &c. which are certainly Phænician, and as certainly of Hebrew extraction. We have thrown together these few hints without pursuing them to any great length, as we deemed it unnecessary to dwell long on a point to hackneyed and to generally acknowledged.

Before we proceed to treat of the ancient language Origin of of the Ethiopians, we find ourselves obliged to hazard the Ethioa few strictures on the origin of that ancient nation. pians. If we can once fettle that fingle point, the discovery will open an avenue to their primitive dialect, the article about which we are chiefly concerned in the prefent discussion.

In our Section concerning the Hebrew language, we were led often to mention the patriarch Cush the eldest fon of Ham. The posterity of this family-chief, under

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Chaidean his fon Nimrod, possessed themselves of Shinar, after-Language, wards denominated Chaldea. These were probably the Arabians whose kings (according to Eusebius, Africa-

nus, and other ancient chronologers) reigned in Babylon during feveral fuccessive generations. Those were the Cushim or Cushites, whom the learned Mr Bryant has conducted over a great part of the world, and to whose industry and ingenuity he has ascribed almost all the inventions, arts, sciences, laws, policy, religious, &c. which diffinguished mankind in the earliest ages.

In process of time, the posterity of Chasid or Chefed, called Chafdim or Chafdim, in the east, and Chaldeans in the west, drove out the Cushim, and seized upon their country. The Cushim retired westward, and spread themselves over that part of Arabia situated towards the fouth-eaft. They probably extended themselves over all the eastern part of that peninsula from the sea to the wilderness between Arabia and Syria. Those were the Ethiopians mentioned in Scripture by a very unpardonable inadvertency of our translators. Their, then, we

think, were the primitive Cushim.

Josephus informs us*, that all the Asiatics called the Jud. lib. i. Ethiopians of Africa by the name of Cu/him. This denomination was not given them without good reason: it imports at least, that they deemed them the descendants of Cush; it being the constant practice of the orientals in the early ages to denominate nations and tribes from the name of their great patriarch or founder. The name Cu/bim must then have been given to the Ethiopians, from a perfuafion that they were the progeny of the fon of Ham who bore that name. By what route foever the Cushim penetrated into that region of Africa which was called by their name, it may be taken for granted that they were the descendants of Cush above mentioned.

It has been observed above, that the posterity of Cush possessed the country of Shinar or Chaldea at a very early period, but were expelled by the Chafidim or Chaldeans. Upon this eatastrophe, or perhaps somewhat later, a colony from the fugitive Cushim transported themselves from the fouth and fouth-east coast of Arabia over the fea, which lies between that country and Ethiopia. However imperfect the art of navigation might be in that age, the distance was fo fmall that they might easily enough make a voyage cross that narrow sea in open boats, or perhaps in canoes. However that may have been, it cannot be doubted that the tribes on both fides

of that branch of the fea were kindred nations.

If, then, both the northern and fouthern Cushim fprung from the same stock, there can be no doubt that both spoke the same language. The language of the Babylonian Cushim was Chaldaic, and of consequence that of the Ethiopian Cushim was the same. We may therefore rest assured, that whatever changes the Ethiopian dialect may have undergone in the course of 3000 years, it was originally either Chaldaic, or at least a branch of that language. Scaliger informs us, that the Ethiopians call themselves Chaldeans; and that, says he, not without reason, because of those many sacred and profane books which are extant among them, the most elegant and most beautiful are written in a style near Chaldean that of the Chaldean or Affyrian. Marianus Victorius, Language, who was the first that reduced the Ethiopic tongue to the rules of grammar, tells us, in his Proæmium, " that the Ethiopians call their tongue Chaldaic; that it fprings from the Babylonian; and is very like the Hebrew, Syriac, and Arabic: At the fame time (he concludes), that this language may be easily learned by those who are mafters of the Hebrew." The learned Bochart, and Bishop Walton in his Proleg. are clearly of the same opinion.

The vulgar letters of the Ethiopians, according to Diodorus Siculus, were the fame with the facred † Lib. iii. characters of the Egyptians (D). From this account, p. 101. if the Sicilian may be trufted, the facred letters of these Steph. people, concerning which fo many wife conjectures have been formed, were actually Chaldaic. To carry on this investigation a little farther, we may observe, that Sir William Jones feems to have proved, by very plaufible arguments, that the Sanfcrit characters were deduced from the Chaldaic. This circumstance affords a presumption that the Ethiopian Cushim were likewise concerned with the Egyptians; who, as is remarked in the Section concerning the Sanferit, probably introduced the religion of the Brahmans into Hindoltan. This is advanced as a conjecture only; and yet when we consider the affinity between the Egyptian and Gentoo religions, we are firongly inclined to hope that this furmife may one

day be verified by undeniable facts.

The original Ethiopians were a people highly civilized; their laws, their inftitutions, and especially their religion, were celebrated far and wide. Homer talks in raptures of the piety of the Ethiopians, and fends his gods every now and then to revel 12 days with that devout people. The Sicilian adduces a number of very fpecious arguments to prove that these two nations had fprung from the fame flock. He mentions a fimilarity 64
Ancient inof features, of manners, of customs, of laws, of letters, tercourse of the fabrication of statues, of religion, as evidences of between the relation between those two neighbouring nations, the Ethio-There was, every body knows, a communion, as to fa-pians and cred rites, between the two countries. The Egyptians Egyptians. fent annually a deputation of their priefts, furnished with the portable statues of their gods, to visit the fanes of the devout Ethiopians. Upon this occasion, a folemn religious banquet was prepared, which lasted 12 days, and of which the priefts of both nations were partakers. It was, we imagine, a kind of facramental inflitution, by which both parties publicly avouched their agreement in the ceremonies of their religion respectively. These observations plainly show, that the most ancient Ethiopians were a people highly civilized; indeed fo much, that the Egyptians were at one time contented to be their scholars. The tone of their language was certainly the same with that of the Chaldeans or Arabian Cushim, from whom they are descended. We know not whether there are any books in the ancient Ethiopic now extant; fo that it is not eafy to produce instances of its coincidence with the Chaldaic. Diogenes Laertius * informs us, that Thrafyllus, in his ca- * Lib. iz.

talogue p. 461. Cafaub.

⁽D) We find the same observation confirmed by Heliodorus (Ethiop. lib. x. p. 476.). "The royal letters of the Ethiopians (says he) were the sacred characters of the Egyptians." Cassiodorus likewise assures us, "That the letters inscribed upon the Egyptian obelisks were Chaldean." See Sect. Sanscrit.

Chaldean talogue of the books composed by Democritus, men-Language, tions one, περι των εν Μεροη ίερων γραμματων, concerning , the facred letters in the island of Meroe (E); and another concerning the facred letters in Babylon. Had thefe books furvived the ravages of time, they would in this age of refearch and curiofity have determined not onlythe point under our confideration, but the affinity of facred rites among the Chaldeans, Ethiopians, and Egyp-

We have now shown that the Ethiopians were a colony of Cushites; that the Cushites were originally fovereigns of Shinar or Chaldea, and confequently spoke either Chaldaic or a dialect of that tongue; that their colonists must have used the same language; that the ancient Ethiopians were a people highly polifhed, and celebrated in the most early ages on account of their virtue and piety. It has likewife appeared, that the common letters of that people were the facred characters of Egyptians. These letters, we imagine, were the Cuphite; for which fee the Section on the Arabic. When they were discarded, and the modern substituted in their room, cannot be determined; nor is it, we apprehend, a matter of much importance. We shall therefore drop that part of the subject, and refer our curious and inquifitive readers to the very learned Job Ludolf's (F) excellent grammar and dictionary of the Abyffinian or Geez tongue, where they will find every thing worth knowing on that subject. We shall endeavour to gratify our readers with a very brief account of the modern Ethiopic or Abyffinian tongue; for which both they and we will be obliged to James Bruce, Efq. that learned, indefatigable, and adventurous traveller; who, by his observations on that country, which he made in person, often at the hazard of his life, has discovered, as it were, a new world both to Europe and Asia.

The most ancient language of Ethiopia, which we shall now call Abyssinia (its modern name), according to that gentleman, was the Geez, which was spoken by the ancient Cushite shepherds. This, we should think, approaches nearest to the old Chaldaic. Upon a revolution in that country, the court refided many years in the province of Amhara, where the people spoke a different language, or at least a very different dialect of the same language. During this interval, the Geez, or language of the shepherds, was dropt, and retained only in writing, and as a dead language: the facred Scriptures being in that tongue only faved it from going into disuse. This tongue is exceedingly harsh and unharmonious. It is sull of these two letters D and T, in which an accent is put that nearly refembles stammering. Confidering the small extent of sea that divides this country from Arabia, we need not wonder that it has great affinity with the Arabic. It is not difficult to be acquired by those who understand any other of the oriental languages; and as the roots of many Hebrew words are only to be found here, it feems to be abfolutely necessary to all those who wish to obtain a critical skill in that language.

The Ethiopic alphabet confifts of 26 letters, each of which, by a virgula or point annexed, varies its found

in such a manner as that those 26 form as it were 62 Chaldean diffinct letters. At first they had but 25 of these origi- Language, nal letters, the Latin P being wanting: fo that they were obliged to substitute another letter in its place. Paulus, for example, they call Taulus, Aulus, or Caulus: Petros, they pronounced Ketros. At last they substituted T, and added this to the end of their alphabet; giving it the force of P, though it was really a repetition of a character rather than the invention of a new one. Befides thefe, there are 20 others of the nature of diphthongs; but some of them are probably not of the fame antiquity with the letters of the alphabet, but have been invented in later times by the scribes for con-

The Amharic, during the long banishment of the royal family in Shoa, became the language of the court, and feven new characters were of necessity added to anfwer the pronunciation of this new language; but no book was ever yet written in any other language than Geez. There is an old law in the country, handed down by tradition, that whoever shall attempt to translate the Holy Scripture into Amharic or any other language, his throat shall be cut after the manner in which they kill sheep, his family fold to slavery, and their houses

razed to the ground.

Before we leave this fubject, we may observe, that all the ancients, both poets and historians, talk of a double race of Ethiopians; one in India, and another in Africa. What may have given rife to this opinion it is not easy to discover. Perhaps the swarthy complexion of both people may have led them to this fentiment. Eusebius indeed informs us *, that " a nume- * Chron. rous colony of people emigrated from the banks of the p. 12. Indus, and croffing the ocean, fixed their residence in the country now called Ethiopia." For our part, we are rather inclined to believe that the original Ethiopians transported themselves into India, and there perhaps cooperated with the Egyptians in digging the excavations and framing the statues, some of which are still to be feen in that country, and which we have mentioned in another Section. The Greeks called those people. Aidiones, Æthiopes we believe, from their fun-burnt countenance; but indeed they were very little acquainted either with the country or its inhabitants.

The most ancient name of Egypt was Mizrain, of Ancient confequence the Arabians still call it Mefri. It was language likewife distinguished by other names, such as Oceana, fifter dia-Aeria, &c. It appears from the facred historian, that it left of was inhabited by the descendants of Mizraim the second Hebrew. fon of Ham. Mizraim had feveral fons, who, according to the Scripture account, fettled respectively in that country. If we trust to the facred records, there will be little difficulty in afcertaining the language of the Mizraim. It will appear to be one of the fifter dialects of the Hebrew, Phœnician, Arabic, Chaldaic, &c.; and this, to us, appears to be the fact. But the origin of that people, their language, religion, laws, and inflitutions, have been fo warped and confounded, both by their own historians and those of other countries, that one is scarce able to determine what to believe or what

(E) Where the capital of Ethiopia was fituated.

Ethiopic

alphabet.

Modern

Ethiopic

tongues.

⁽F) A very learned German, who published a grammar and dictionary of the Geez in folio.

passim.

68

Egyptian

phics.

Chald an to reject. Herodotus, Diodorus Siculus, Strabo, Ptole-Language, my, and most other ancient geographers and historians, are univerfally agreed, that Egypt, at least that part of

it called Delta, was overflown by the fea, and confequently uninhabitable for many centuries after the difpersion of mankind. When we consider the low situation of the Delta, and the violent current of the tide from the coast of Phœnicia and Palestine towards that shore, we would be almost tempted to adopt this hypothesis; but the facred records avouch the contrary. According to them, we find Egypt a populous, rich, and flourishing kingdom, as early as the age of Abraham. Had the Lower Egypt been a pool of stagnating water at any time after the general deluge, we think it could not have been drained, cleared, cultivated, and flocked

with inhabitants, fo early as the days of Abraham. Diodorus Siculus, however, is positive that the Egyp-

* Lib. xiii, tians * were a colony of Ethiopians; and this he endeavours to prove by the fimilarity of features, customs, laws, religious ceremonies, &c. between the two nations. That there was a constant intercourse of good offices between these two branches of the Hamites, cannot be questioned; and that they nearly refembled each other in many respects, is too evident to admit of contradiction. The excavations, originally dug out of the folid rocks of porphyry and marble, in which the natives refided before the plains were drained, have been observed by a most judicious traveller (G) a very few years ago. At the same time, the most accurate and judicious travellers (H) who have visited that region in modern times, are generally of opinion that the land has gained nothing on the fea fince the period when Herodotus wrote his description of that country; from which circumstances we may be led to conclude, that the idea of the inundation of the Delta is not founded in fact.

But even admitting that the Egyptian Delta has acquired nothing from the sea since the age of Herodotus to the present, it certainly does not follow that the region in question was never overflown by that element; fince there are, in many parts of the globe, large tracts of land, certainly once covered with fea, which have continued to this day in the very fame fituation in which they were 2000 years ago. We leave the decision of this point to the judgement of our readers.

We have already hinted our opinion of the nature of the Egyptian language; but because Egypt is generally thought to have been the native land of hieroglyphics, and because many are of opinion that hieroglyphical characters were prior to alphabetical, we shall hazard a few conjectures with respect to that species of

The end of speech, in general, is to enable men to communicate their thoughts and conceptions one to another when present; the use of writing is to perform the same office when people are at so great a distance that vocal founds cannot mutually reach them. Hieroglyphics are faid to have been invented to fupply this defect. The most ancient languages were everywhere full of tropes and figures borrowed from fensible objects. As in that stage of society men have not learned to abstract and generalize, all their ideas are borrowed Chaldean from fuch objects as most forcibly strike their senses. Language, This circumstance would naturally suggest to savages. the idea of conveying their fentiments to each other, when absent, by delineations of corporeal objects. Thus, if a favage asked a loan of his friend's horse, he might find means to have conveyed to him the figure of that animal; and fo of others. This was the very lowest fpecies of ideal communication, and has been styled picture-writing.

Necessity would foon impel our favage correspondents to fabricate a method more extensively useful, which would likewise be suggested by the constant use of the metaphorical mode of speech. Some savage leader, more fagacious than the vulgar herd, would observe that certain fensible objects were fitted, according to the rules of analogy, to reprefent certain human passions, and even fome abstract ideas; and this would be readily enough adopted by the herd as a new improvement. In this case a horn might be the emblem of power, a sword of bravery, a lion of fury, a fox of cunning, a ferpent of malice, &c. By and by artificial figns might be contrived to express such ideas as could not readily be denoted by bodily objects. This might be called fymbolical writing. Such was the foundation of the Chinese characters; and hence that prodigious number of letters of which the written language of that people is compofcd. Farther they could not proceed, notwithstanding their boafted inventive powers; and farther, we believe, no nation ever did proceed, who had once upon a time no other characters but hieroglyphical. The Mexicans had arrived at the very lowest stage of hieroglyphical writing, but had not taken one step towards alphabetical. The Hurons employ hieroglyphical fymbols, but never entertained a fingle idea of alphabetical. Hieroglyphical characters are the images of objects conveyed to the mind by the organs of vision; alphabetic are arbitrary artificial marks of found, accommodated by compact to convey to the mind the ideas of objects by the organs of hearing. In a word, we think that there is not the least analogy between these two species to con-Were never duct from the one to the other : we are therefore of opi in vulgar nion, that hieroglyphical characters were never the vul-ufe;

gar channels of ideal conveyance among civilized people. We know that in this point we differ from many learned, judicious, and ingenious writers; some of whom have taken much pains to investigate the intermediate flages through which the fabricators of characters must have passed in their progress from hieroglyphical to alphabetical writing, These writers have adopted a plan analogous to Bishop Wilkins's project of an artisicial language. In this theory, we own, we are led to fuspect that they supposed all mankind were once upon a time favages, and were left to hammer out words, as well as characters, by necessity, ingenuity, experience, practice, &c. For our part, we have endeavoured to prove, in our fection on the Hebrew language, that alphabetical writing was an antediluvian invention; and we now lay it down as our opinion, that among all those nations which settled near the centre of civiliza-

(G) See Mr Bruce's Travels, vol. i.

⁽H) Mr Bruce, Dr Shaw, Bishop Pococke, Savary, Volney, &c.

Chaldean tion, hieroglyphics were, comparatively, a modern fabri-

Language, cation.

The Orientals are, at this day, extravagantly devoted to allegory and fiction. Plain unadorned truth with them has no charms. Hence that extravagant medley of fables and romance with which all antiquity is replete, and by which all ancient history is difguised and corrupted. Every doctrine of religion, every precept of morality, was tendered to mankind in parables and proverbs. Hence, fays the Scripture, to understand a proverb, the words of the wife, and their dark fayings. The eastern fages involved their maxims in this enigmatical drefs for feveral reasons: to fix the attention of their disciples; to assist their memory; to gratify their allegorical tafte; to sharpen their wit and exercise their judgement; and sometimes perhaps to display their own acuteness, ingenuity, and invention.

It was among the ancients an universal opinion, that the most facred arcana of religion, morality, and the sublime sciences, were not to be communicated to the uninitiated rabble. For this reason every thing sacred was

involved in allegorical darknefs.

Here, then, we ought to look for the origin of hieroglyphical or picture-writing among the civilized nations of the east. They did not employ that species of writing because they were ignorant of alphabetical characters, but because they thought fit to conceal the most important heads of their doctrines under hieroglyphical figures. The Egyptian priests were most celebrated for their skill in devising those emblematical representations; but other nations likewise employed them. We learn from the fragments of Berofus the Chaldean historian, preserved by Syncellus and Alexander Polyhistor, that the walls of the temple of Belus at Babylon were covered all over with those emblematical paintings. These characters were called iseos, because they were chiefly employed to represent facred objects; and yauque, because they were originally carved or engraved. Their name points to their original use. Instead of pursuing these observations, which the nature of our defign will not permit, we must refer our readers to Herodotus, lib. ii. Diodorus Sic. lib. i. Strabo, lib. xvii. Plut. Ifis et Ofiris; and among the Christian fathers, to Clem. Alex. Euseb. Præp. Evang.; but chiefly to Horapollo's Hierogly-

From this deduction we would conclude, that this fpecies of writing was an adventitious mode in Egypt, peculiar to the priefts, and employed chiefly to exhibit things facred; and that among all civilized people it did not supersede the use of alphabetical characters, nor did the use of the latter originate from the former. When alphabetical letters were invented, if indeed they were a human invention, they were antecedent to the other in use and extent. The Egyptian priests alone characters. knew the true import of those facred fyinbols; and communicated that knowledge first to their own children from generation to generation, then to the initiated, and last of all to the grandees of the nation, all of whom were indeed initiated. The hieroglyphics of Egypt were not then the fymbols of any facred occult language; but figns invented by the priefts and prophets or wife men, in order to represent their deities, the at-

tributes and perfections of their deities, and the myste- Chaldean sterious arcana of their religion, and many other circum. Language, flances relating to objects of importance, which were deemed either too facred or too important to be impart-

ed to the vulgar.

The Egyptians ascribed the invention of letters to a person whom they called Thoth*, Theuth, or Thyoth; * Euseb. the Greeks Eguns; and the Romans Mercurius. Plato + Pheedrus. calls him a god, or a godlike man; Diodorus t makes Lib. i. him privy counsellor to Ofiris; Sanchoniathon ap. Euseb. oconnects him with the Phoenician Cronus or Prep. Ev. Saturn. To this Mercury the Egyptians afcribe the invention of all the arts and sciences. He was probably fome very eminent inventive genius, who flourished during the first ages of the Egyptian monarchy, and who perhaps taught the rude favages the art of wri-

According to Diodorus Siculus, the Egyptians had Two kinds two kinds of letters*; the one facred, the oil er com-of alphabe-mon: the former the priests taught their own children, racters in the latter all learned promiscuously. In the facred cha-Egypt. racters the rites and ceremonies of their religion were * Lib. i. couched; the other was accommodated to the ordinary business of life. Clem. Alexand. mentions three different flyles of writing employed by the Egyptians † \$trom. "The pupils, who were instructed by the Egyptians, first learned the order and arrangement of the Egyptian letters, which is called epiftolography, that is, the manner of writing letters; next, the facred character, which the facred fcribes employed; lastly, the hieroglyphic character, one part of which is expressed by the first elements, and is called Cyriologic, that is, capital, and the other fymbolic. Of the fymbolic kind, one part explains properly by imitation; and the other is written tropically, that is, in tropes and figures; and a third by certain enigmatical expressions. Accordingly, when we intend to write the word fun, we describe a circle; and when the moon, the figure of that planet appearing horned, conformable to the appearance of that luminary after the change." In this passage we have an excellent defcription of the three different modes of writing used by the Egyptians; the common, the facred, and the hieroglyphic. The last he describes according to its three divisions, in exact conformity to our preceding ob-

By the description above translated, it plainly ap. The facred pears, that the sacred character of the Egyptians was letters and pears, the translated by the bigger of the Egyptians was language entirely different from the hieroglyphic; and by this of Egypt confideration we are in a good measure justified, in Chaldaic. fuppofing, as we have done all along, that the facred letters of the Egyptians were actually the Chaldaic. The inscriptions on the obelisks mentioned by Cassiodorus, fo often quoted, were certainly engraved in the facred character; and the character in which they were drawn was that above mentioned. If the facred letters were Chaldaic, the facred language was probably

The Egyptians pretended, that the Babylonians derived the knowledge of the arts and sciences from them; while, on the other hand, the Babylonians maintained, that the former had been tutored by them. The fact is, they both spoke the same language; used the same religious rites; had applied with equal success to astrology, aftronomy, geometry, arithmetic, and the other

50 but em-

ployed to

trines from

conceal facred doc-

tiated;

and posterior in phabetical

Chaldean sciences; of course a rivalship had arisen between the Language, two nations, which laid the foundation of those opposite &cc. pretentions.

The most faithful specimen of the vulgar language of the Egyptians, is, we believe, still preserved in the Coptic, which, however, is fo replete with Grecisms, that it

must be difficult to trace it out.

Under the Ptolemies, the Greek was the language of the court, and confequently must have diffused itfelf over all the country. Hence, we believe, twothirds of the Coptic are Greek words, diversified by their terminations, declenfions, and conjugations only. To be convinced of the truth of this, our learned and curious readers need only confult Christian Scholtz's Egyptian and Coptic grammar and dictionary, corrected and published by Godfred Woide, Oxford,

The Egyptian and Phœnician the fame.

The Egyptians and Phœnicians were in a manner coufin-germans, and confequently must have spoken the same language; that is, one of the fister dialects of the Hebrew, Chaldean, Arabian, Cushite, &c .-This is not a mere conjecture; it may be realized by almost numberless examples. It is true, that when Joseph's brethren went down to Egypt, and that ruler deigned to converse with them, they could not understand the Egyptian idiom which he spoke; nor would he, had he been actually an Egyptian, have understood them without an interpreter. The only conclusion from this circumstance is, that by this time the Egyptian had deviated confiderably from the original language of mankind. The Irish and Welch, every body knows, are only different dialects of the Celtic tongue; and yet experience proves, that a native of Ireland and another of Wales cannot well comprehend each other's language, nor converse intelligibly without an interpreter. The Erse, spoken in the Highlands of Scotland, and the Irish, are known to be both branches of the old Celtic; yet a Scotch Highlander and an Irishman can hardly understand each other's speech. By a parity of reason, a Hebrew and an Egyptian might, in the age of Joseph, speak only different dialects of the fame original tongue, and yet find it difficult to understand one another. The fact feems to be, the Hebrew dialect had been in a manner stationary, from the migration of Abraham to that period; whereas the Egyptian, being spoken by a powerful, civilized, and highly cultivated people, must have received many improvements, perhaps additions, in the course of near two cen-

75 The vulgar letters of fame with,

The descendants of Canaan and of Mizraim were strictly connected in their religious ceremonies: they worthipped the fame objects, namely, the Host of Heaven; they mourned Ofiris and Adonis in concert; they carried on a joint commerce, and, we think, spoke the fame language; we may, therefore, conclude, that their Phoenician vulgar letters were nearly the same, both in form, dispofition, and number. Their original number was probably 16, viz. five vowels, fix mutes, fimple and middle, four liquids, and the folitary o.-With thefe, it is likely, was joined a mark of aspiration, or an h, such as we have in the Roman alphabet, and find on some Greek monuments. Cadmus was originally an Egyptian; that leader brought a new fet of letters into Greece. These are generally deemed to be Phœnician. They were nearly the fame with the ancient Pelasgic, as will be

shown in the section of the Greek language. The latter, Chaldean we think, were from Egypt, and confequently the former Language, must have been from the same quarter. Danaus, Perfeus, Lelex, &c. were of Egyptian extraction: they too adopted the Cadmean characters, without substituting any of their own.

The Jonim, or Ionians, emigrated from Gaza, a colony of Egyptians; and their letters are known to have differed very little from those of Cadmus and the Pelasgi. The conclusion, therefore, is, that the vulgar Egyptian letters were the same with the Phœnician.

We are abundantly fensible that there are found upon Egyptian monuments characters altogether different from those we have been describing. At what time, by what people, and to what language, these letters belonged, we will not pretend to determine. The Ethiopians, the Chaldeans, the Perfians, the Greeks, the Romans, the Saracens, have, at different times, been fovereigns of that unhappy country. Perhaps other nations, whose memory is now buried in oblivion, may have erected monuments, and covered them with inscriptions composed of words taken from different languages, perhaps, upon fome occasions, whimsically devised, with a view to perplex the curious antiquaries of future ages. Some of these are composed of hieroglyphics intermingled with alphabetical characters, artificially deranged, in order to render them unintelligible. These we do not pretend to develope; because the most inquisitive and sagacious antiquaries are not yet agreed as to their purport and fignifica-

We shall now go on to show, that most part of the Egyptian names of persons and places, &c. which have been names of conveyed down to us, may, in general, be reduced to original, a Hebrew, Phœnician, Syrian, or Chaldean original. As the first of these languages is most generally known, we shall employ it as our arch-type or standard, beginning with those terms which occur in Scrip-

The word Pharaoh, the title of the melech or king of Egypt, is, we think, compounded of two terms, which plainly discover a Hebrew original. According to an oriental tradition, the first who assumed this title was the fovereign of the royal shepherds; a race of people from Arabia and Phœnicia. They conquered Egypt at an early period, and kept possession of it for several centuries. They gloried in the title berow, or bestow, which, according to Josephus contra Apion. fignifies "royal shepherds." The word Pharaoh seems to be compounded of פל Phar, " a bullock," and דעה, Rachah, " to feed;" hence פרעת Pharachah, as we think it ought to be written. The name given to Joseph is evidently of kin with the Hebrew; for zaphnath differs very little from the Hebrew verb tzaphan, which fignifies " to hide, to keep fecret;" Paneah or Phaneah, fignifies much the same with the Hebrew Phanah, aspexit: so that the name actually intimates one who fees hidden things; which was certainly the very idea the prince intended to convey by giving him that name.

Potiphar, or Potipherah, the name of Joseph's fatherin-law, has likewife a dialectical affinity with the Hebrew idiom. In that language Patah fignifies " to open, to explain," which was one part of the facerdotal of-fice; and *Phar* imports "a bullock." Potiphar was

Chaldean then priest of the bullock, that is, the ox, apis, facred Language, to the fun (1). This person was priest or prince of On, which, according to Cyrillus on Hofea, was an Egyptian name of that luminary. The Hebrew word hon or chon fignifies " power, wealth, fufficiency;" a very proper epithet for the fun, who was thought to bestow those blessings. The name of Joseph's wife was Asenath

or Afnath, compounded of I/hah " a woman," and Naith or Neit, an Egyptian name of "Minerva, a votary of Minerva."

Almost all the names of cities belonging to Egypt which are mentioned in Scripture are evidently Hebrew. To be fatisfied as to this position, our curious readers may consult Jamieson's Spicilegia, an excellent book ve-And fignifi ry little known. The names of most of the Egyptian cant in that deities are fignificant in the Hebrew tongue; and in that language. dialect the names appear to have been imposed with great judgement and propriety, plainly indicating some office affigned them, or pointing to some peculiar attribute. We shall produce a few instances.

Osiris was the great divinity of Egypt; he was certainly the fun. The Egyptians gave their deities a variety of names in allusion to their various offices and attributes. Jablonski has in a manner wearied himself with tracing the fignification of this name. In Hebrew we have Ohir "to grow rich, to be enriched." The fun may be called the great enricher of nature, and therefore might properly be called by a name alluding so that quality. Is was both the moon and the earth. I/hah is the Hebrew word for woman, and Horapollo affigns this very derivation. Anubis was one of the names of Mercury among the Egyptians: He was always figured with the head of a dog. He accompanied Iss in her peregrinations in quest of Osiris, and frighted away the wild beafts from attacking the princess. In Hebrew, Nubah fignifies "to bark." Here the analogy, we think, is evident. Many Egyptian names begin with Can, such as Canobus, Canopus, &c. The Hebrew word Cahen or Cohen, Syr. Con or Chon, intimates both a prince and a priest. Ob or Aub, in Hebrew, imports "a bottle, a flaggon," any thing round and prominent like the human belly. In the language of Egypt it was often applied to the fun, in allufion to his rotundity. In the temple of Jupiter Ammon or Amon, in the defert of Libya, there was a statue of the god representing the navel of the human body, which was probably framed in allusion to this fancy. Hence the Pythoness, or people who, according to the Scripture, had familiar spirits, were said to prophecy by the inspiration of Ob, as the Delphic priestess did by that of Apollo. Again, many Egyptian names end with firis, as Calasiris, Termosiris. This termination is no doubt a cognate of the Hebrew and Chaldean far or zar, fignifying "a prince, or grandee, &c." The river Nile in the Ethiopic dialect is called Siris; that is, we believe, the king of rivers. The same flood seems to derive the name by which it is generally known, from the Hebrew nehel, "a valley, or torrent running down a valley." The fame river was often called *Oceanus*, a word composed of og, or oc, or och, which fignifies "a king, a leader," Vol. XVI. Part I.

and the Hebrew oin, " a fountain;" fo that the word Chaldean imports the king of fountains. The Hebrews always de- Language, nominated the land of Egypt the land of Mizraim; the Egyptians themselves, in later times, seemed to have called it Aiguates, Ægyptus, "Egypt," which some think is compounded of Ai, Hebrew, "an island, a country, a province," and Copt or Cupt, "a famous ci-

ty in that country."

From this specimen, we hope it will appear that the Egyptian language in the more early ages was one of those dialects into which that of the descendants of the postdiluvian patriarchs was divided, and perhaps subdivided, a few centuries after the deluge. Among all those, we believe, such an affinity will be found, as plainly demonstrates that they originally sprung from one common stock. Here we might easily follow the Egyptian language into Greece; and there we are perfuaded we might trace a vast number of Egyptian terms into that tongue, which, however, the nature of this inquiry will not permit. If our learned readers should incline to know more of the affinity of the Egyptian tongue with the others fo often mentioned, they may confult Bochart's Chanaan, Walton's Proleg. Gebelin's Monde Prim. Jamieson's Spicilegia, &c.

SECT. IV. Of the Persian Lauguage.

THE Persian language is divided into the ancient and modern; the former of which is at this day very imperfeetly known, the latter is at present one of the most expressive, and at the same time one of the most highly polished, in the world. We shall, in treating of this language, in compliance with the plan we have all along followed, begin with the ancient.

When Mohammed was born, and Anu'shi'RAVA'N, At the whom he calls the just king, fat on the throne of Persia, birth of two languages were generally prevalent in that em-med two pire (K). The one was called Deri, and was the dia-languages lect of the court, being only a refined and elegant branch prevalent of the Parsi, so called from the province of which Shi-in Persia. raz is now the capital; and that of the learned, in which most books were composed, and which had the name of Pahlavi, either from the heroes who spoke it in former times, or from pahlu, a tract of land which included fome confiderable cities of Iran: The ruder dialects of both were spoken by the rustics of several provinces; and many of these distinct idioms were vernacular, as happens in every kingdom of confiderable extent. Besides the Parsi and Pahlavi, a very ancient And a and abstruse tongue was known to the priests and philo-more anfophers, called the language of the Zend, because a book cient lan-on religious and moral duties which they held facred, either and which bore that name, had been written in it; known only while the Pazend or comment on that work was com-to the posed in Pahlavi, as a more popular dialect. The let. priests. ters of this book were called zend, and the language

The Zend and the old Pahlavi are now almost extinct in Iran, and very few even of the Guebres can read it; while the Parsi remaining almost pure in Shabnameh,

(1) The Septuagint (Gen. xli. v. 45. and 50.) translate On by 'Ηλιοπολίς.

⁽K) The moderns call the empire of Persia Iran; a name unknown to the ancients.

Persian has, by the intermixture of Arabic words, and many Language, imperceptible changes, now become a new language, exquifitely polified by a feries of fine writers both in profe and verfe, analogous to the different idioms gradually formed in Europe after the subversion of the Roman em-

80 Parfi lan-

The very learned and laborious Sir William Jones is guage, and confident that the Parsi abounds with words from the Sanscrit, with no other change than such as may be obferved in the numerous dialects of India; that very many Persian imperatives are the roots of Sanscrit verbs; and that even the moods and tenses of the Persian verb substantive, which is the model of all the rest, are deducible from the Sanscrit by an easy and clear analogy. From this he infers that the Pars, like the various idiom dialects, is derived from the language of the Bramins. This conclusion, we imagine, is not altogether just, fince by the same train of reasoning we may infer that the Sanscrit is derived from the Parsi.

The same learned gentleman adds, that the multitude of compounds in the Persian language proves that it is not of Arabic but Indian original. This is undoubtedly , true; but though the Parfi is not of Arabic original, it does not necessarily follow that it is of Sanscrit. We might with the fame propriety, and with an equal show of reason, conclude, that the Greek language is defcended of the Sanscrit, because it too abounds with compounds. We may then rest assured, that neither the one nor the other argument adduced by the ingenious president proves that the Parsi tongue is a descendant of

the Sanscrit.

The gentleman fo often mentioned, affures us, that the Zend bears a strong resemblance to the Sanscrit; which, however, it might do without being actually derived from it, fince we believe every oriental scholar will find that all the languages from the Mediterranean to the utmost coast of Hindostan exhibit very strong signatures of a common original. The Parsi, however, not being the original dialect of Iran or Persia, we shall purfue it no farther at present, but return to give some account of the Pahlavi, which was probably the primitive language of the country. We have observed above, that the Pazend or comment on the Zend was composed in the Pahlavi for the use of the vulgar. This, according to Sir William, was a dialect of the Chaldaic; and of this affertion he exhibits the following proof.

By the nature of the Chaldean tongue, most words ended in the first long vowel, like shemaia, " heaven;" and that very word, unaltered in a fingle letter, we find in the Pàzend, together with lailiá, "night," meyá, "water," nírá, "fire," matrá, "rain," and a multitude of others, all Arabic or Hebrew, with a Chaldean termination; fo zamar, by a beautiful metaphor from pruning trees, means in Hebrew to compose verses, and thence, by an easy transition, to fing them; now in Pahlavi we see the verb zamarúniten, "to sing," with its forms zamaraunemi, "I fing," and zamzunid, "he fang;" the verbal terminations of the Persian being added to the Chaldaic root. All these words are integral parts of the language; not adventitious like the Arabic nouns and verbals engrafted on the modern

From this reasoning it plainly appears, 1st, That Pahlavi was the ancient language of Persia; and, 2d, That

the ancient Persian was a cognate dialect of the Chal- Persian dean, Hebrew, Arabie, Phoenician, &c. M. Anquetil Language. has annexed to his translation of the Zendavesta two vocabularies in Zend and Pahlavi, which he found in an approved collection of Rawayat or Traditional Pieces in modern Persian. His vocabulary of the Pahlavi strongly confirms this opinion concerning the Chaldaic origin of that language. But with respect to the Zend, it abounded with vast numbers of pure Sanscrit words, to fuch a degree, that fix or feven words in ten belonged to that language.

From this deduction it would appear, that the oldest derived languages of Perfia were Chaldaic and Sanscrit: and from Chalthat when they had ceafed to be vernacular, the Pahlavi daic and and Zend were deduced from them respectively, and the &c. Parsi either from the Zend, or immediately from the dialect of the Brahmans: but all had perhaps a mixture of Tartarian; for the best lexicographers affert, that numberless words in ancient Persian are taken from the Cimmerians. With respect to the last of these, we cannot help being of opinion, that colonies of people from the neighbourhood of Persia did transport themselves into Crim Tartary, and perhaps into Europe. These colonists brought along with them those vocables which still occur in their dialect. Emigrants from those quarters must have found their way into Scandinavia, fince numberless Persian words are still current in those regions. Perhaps Odin and his followers emigrated from the neighbourhood of Media and Persia, and brought with them the dialect of the nations from whose country they had taken their departure.

With respect to the Zend, it might well be a dialect The Zend of the Sanscrit, and was probably a facred language; from the and if fo, concealed from the vulgar, and referved for same the offices of religion. If Zoroastres, or Zaratusht as source. the orientals call him, travelled into Egypt, and was initiated in the mysteries of the Egyptian religion, as fome pretend he was, he might be instructed in the sacred dialect of that people by the priests under whom he studied. When that philosopher returned into Persia, and became the apostle of a new religion, he might compose the volume of his laws and religious institu-tions in the facred language of his Egyptian tutors. This language then became that of the Magi, who concealed it carefully from the knowledge of the uninitiated, as the priests did in Egypt and the Brahmans in Hin-

In our Section on the Sanscrit language, we shall give a detail of a number of particulars, which to us feem to furnish a presumption that the language in question was imported from Egypt into Hindostan. We confess there are not fufficient data to improve these presumptions into absolute certainty; but we hope the time is at hand when the worthy members of the Afiatic Society will discover abundant materials to ascertain the truth of this position. We are the rather inclined to adopt this hypothesis, when we consider the character of Zoroastres in connection with that of the Egyptian Cohens and of the Indian Brahmans.

If this opinion should one day appear to be wellfounded, we believe the coincidence between the language of the Zend and the Sanscrit will be easily accounted for, without making the Hindoos masters of Iran or Persia, and then driving them back to the shores of the Ganges. That the nations of Turan or Scythia

the Pahla-

Proofs

ture of the

* Strabo.

lib. II.

f Gen.

chap. xiv.

* Cyrop.

lib. I.

cause they were trained from their infancy to ride the Persian

Persian did actually overrun that country, and make themselves Language masters of a considerable part of it at different times, is vouched by the records and traditions of the Perfians themselves. Upon those occasions a number of Tartarian words might be introduced into the country, and acquire a currency among the inhabitants. As the annals of ancient Persia have been long since destroyed and configned to eternal oblivion, it is impossible to ascertain either the extent or duration of these irruptions. Indeed the nature of our defign does not call for that investigation.

In order to corroborate the cognation between the from Scrip-Chaldean and Pahlavi languages, we shall subjoin a few arguments derived from the Mosaic history, and the other writings of the Old Testament. These we believe the Pahlavi. will be admitted as irrefragable proofs of the position above advanced by fuch as admit the authenticity of

> Elam is always allowed to have been the progenitor of the Persians. This patriarch was the eldest son of Shem the fon of Noah; and according to the Mosaic account, his posterity settled in the neighbourhood of the descendants of Ashur, Arphaxad, Lud, and Aram, the other fons of Shem. The country where they fet. tled was denominated Elymais *, as late as the beginning of the Christian era. This name was retained till the Saracens conquered and took possession of that country. If this was the case, as it certainly was, the Elamites or Persians spoke a dialect of the primary language, which, in the first Section, we have proved to have been

> When the four eastern monarchs invaded the five cities of the plain in Canaan +, Chedorlaomer king of Elam was at the head of the confederacy. Amraphel king of Shinar, that is Babylon or Chaldea, was one of the allies; Arioch king of Elasar was another; and Tidal, king of some scattered nations in the same neighbourhood, was the fourth. That Chedorlaomer was principal in this expedition, is obvious from the historian's detail of the second, where that prince is placed first, and the rest are named the kings that were with him. This passage likewise demonstrates, that Elam, Shinar, and Elafar, lay contiguous, and were engaged in the same cause. Wherever the country in question is mentioned in Scripture prior to the era of Daniel and Ezra, it is always under the name of Elam. To go about to prove this would be superfluous.

> According to Xenophon f, the Persians knew nothing of horsemanship before the age of Cyrus: but that historian informs us, that after that monarch had introduced the practice of fighting on horseback, they became fo fond of it, that no man of rank would deign to fight on foot. Here it ought to be considered, that the historian above mentioned was now writing a moral, military, and political romance; and therefore introduces this anecdote, in order to exalt the character of his hero: fo that we are not to suppose that the people under confideration were unacquainted with the art of horsemanship till that period.

> The very name Phars or Pharas is certainly of Hebrew origin, and alludes to the skill that people profesfed in horsemanship. The original seems to be Pharsah, ungula, " a hoof;" and in the Arabic Pharas intimates a horse, and Pharis a horseman. Consequently the people were denominated Parfai, and the country Pars, be-

great horse, which indeed they deemed their greatest ho- Language. nour. This name was perhaps first imposed upon them by the neighbouring nations, and in process of time became their gentile appellation. Mithras is generally known to have been the chief divinity of the Persians; a name which is plainly derived from Mither, " great." We find in Strabo the Persian god Amanus, which is plainly a cognate of Hamah, the "fun or fire." Hence we believe comes Hamarim, the "hearths or chapels" where the fire facred to the fun was kept burning; which, we believe, the Greeks called Πυραθεια, or "fire-temples." Herodotus * mentions a custom among the Per- * Lib. ix fians, according to which, when they came to engage cap. \$5. an enemy, they cast a rope with a kind of gin at the end of it on their enemy, and by those means endeavoured to entangle and draw him into their power. The people of Persia who employed this net or gin were called Sagartes, from Sarags, Sharag, or Serig, a word which in Hebrew, Arabic, and Chaldaic, fignifies to " hamper or entangle:" hence perhaps the Greek word Sagyann, a " basket or net." Sar or zar in Hebrew, Phœnician, Syriac, &c. fignifies "a lord, a prince;" and hence we have the initial fyllable of the far-famed zar-tusht, Zoroastres. In a word, most of the Persian names that occur in the Grecian histories, notwithstanding the scandalous manner in which they have been difguised and metamorphosed by the Greeks, may still with a little skill and industry be traced back to a Hebrew, Chaldaic, Syriac, or Phoenician origin. In the books of Daniel, Ezra, Nehemiah, and Esther, we find a number of Persian names which are all of a Hebrew or Chaldaic complexion: to investigate these at much greater length would be foreign to the defign of the prefent article. If our curious reader should incline to be more fully fatisfied as to this point, he may confult Bochart's Chanaan, D'Herbelot's Bib. Orient. Walton's

It now appears, we hope, to the entire satisfaction of our readers, that the Pahlavi is a remnant of the old Persian, and that the latter is a cognate branch of the Hebrew, Chaldaic, Syriac, &c. We have likewise adduced some presumptive proofs that the Zend was copied from the facred language of the Egyptians: we shall now endeavour to explain by what changes and revolutions the language first mentioned arrived at its present fummit of beauty and perfection.

We have observed above, that the Scythians, whom Progress of the old Persians called Zuzus, Saca, and whom the mo-the Persian dern call Turan, often invaded and overran Persia at a language. very early period. The consequence was, an infusion of Scythian or Tartarian terms, with which that language was early impregnated. This in all probability occafioned the first deviation from the original standard. The conquests of Alexander, and the dominion of his succesfors, must, one would imagine, introduce an inundation of Greek words. That event, however, feems to have affected the language in no considerable degree, at least very few Grecian terms occur in the modern Per-

The empire of the Arfacidee or Parthians, we apprehend, produced a very important alteration upon the ancient Persian. They were a demi-Scythian tribe; and as they conquered the Persians, retained the dominion of those parts for several centuries, and actually incorporated Rr2

rated with the natives, their language must necessarily Language. have given a deep tincture to the original dialect of the Persians. Sir William Jones has observed, that the letters of the infcriptions at Islakhr or Persepolis bear some resemblance to the old Runic letters of the Scandinavians. Those inscriptions we take to have been Parthian; and we hope, as the Parthians were a Tartarian clan, this conjecture may be admitted till another more plaufible is discovered. The Persians, it is true, did once more recover the empire; and under them began the reign of the Deri and Parsi tongues: the former consisting of the old Persian and Parthian highly polished; the latter of the same languages in their uncultivated vernacular dress. In this situation the Persian language remained till the invasion of the Saracens in 636; when these barbarians overran and settled in that fine country; demolished every monument of antiquity, records, temples, palaces, every remain of ancient superstition; massacred or expelled the ministers of the Magian idolatry; and introduced a language, though not entirely new, yet widely differing from the old exem-

But before we proceed to give some brief account of the modern Persian, we must take the liberty to hazard one conjecture, which perhaps our adepts in modern Persian may not find themselves disposed to admit. In modern Persian we find the ancient Persian names wonderfully difforted and deflected from that form under which they appear in the Scripture, in Ctesias, Mega-Ithenes, and the other Greek authors. From this it has been inferred, that not only the Greeks, but even the facred historians of the Jews, have changed and metamorphofed them most unmercifully, in order to accommodate them to the standard of their own language. As to the Greeks, we know it was their constant practice, but we cannot believe so much of the Hebrews. We make no doubt of their writing and pronouncing the names of the Persian monarchs and governors of that nation nearly in the same manner with the native Persians. It is manifest, beyond all possibility of contradiction, that they neither altered the Tyrian and Phœnician names of persons and places when they had occafion to mention them, nor those of the Egyptians when they occurred in their writings. The Babylomian and Chaldaic names which are mentioned in the Old Testament vary nothing from the Chaldean original. No reason can be assigned why they should have transformed the Persian names more than the others. On the contrary, in Ezra, Nehemiah, and Esther, we find the Persian names faithfully preserved through-

86 Nothing now existing in Perfic, except the Zend, older than conquest.

The fact, we imagine, is this: Our modern admirers of the Perfic have borrowed their names of the ancient kings and heroes of that country from romances and fabulous legends of more modern date and composition. The archives of Persia were destroyed by the Saracens: the Saracen nothing of importance was written in that country till two centuries after the era of Mohammed. What fucceeded was all fiction and romance. The authors of those entertaining compositions either forged names of heroes to answer their purpose, or laid hold on such as were celebrated in the ballads of their country, or preferved by vulgar tradition. The names were no doubt very different from those of the ancient kings and heroes of Persia; and probably many of them had under-

gone confiderable changes during the continuance of the Perfian Parthian empire. Upon this foundation has the learned Language Mr Richardson erected a very irregular fabric, new, and, to use his own expression, we think built upon pillars of ice. He has taken much pains to invalidate the credit of the Grecian histories of the Persian empire, by drawing up in battle array against their records legions of romantic writers, who were not born till near 1000 years after the events had taken place; and to complete the probability, who lived 200 years after all the chronicles of the Medes and Persians had been finally destroyed by the fury of the Saracens.

After the decifive victory obtained over the Perfians at Kadessa, their ancient government was overturned, their religion proscribed, their laws trampled under foot, and their civil transactions disturbed by the forcible introduction of the lunar for the folar kalendar; while, at the fame time, their language became almost overwhelmed by an inundation of Arabic words; which from that period, religion, authority, and fashion, incor-

porated with their idiom.

From the feventh till the tenth century the Persian tongue, now impregnated with Arabic words, appears to have laboured under much discouragement and neglect. Bagdad, built by Almansor, became soon after the year 762 the chief residence of the caliphs, and the general refort of the learned and the ambitious from every quarter of the empire. At length the accession of the Buyah princes to the Persian throne marked in the tenth century the great epoch of the revival of Persian learning. About the year 977 the throne of Persia was filled by the great Azaduddawla; who first assumed the title of Sultan, afterwards generally adopted by eastern princes. He was born in lipalian, and had a strong attachment to his native kingdom. His court, whether at Bagdad or in the capital of Persia, was the standard of taste and the favourite residence of genius. The native dialect of the prince was particularly diffinguished. and became foon the general language of composition in almost every branch of polite learning. From the end The most of the tenth till the 15th century may be considered as flourishing the most flourishing period of Persian literature. The period of Persian literature. epic poet Firdausi, in his romantic history of the Persian terature. kings and heroes, displays an imagination and smoothness of numbers hardly inferior to Homer. The whole fanciful range of Persian enchantment he has interwoven in his poems, which abound with the noblest efforts of genius. This bard has stamped a dignity on the monsters and fictions of the east, equal to that which the prince of epic poetry has given to the mythology of ancient Greece. His language may at the same time be confidered as the most refined dialect of the ancient Perfian, the Arabic being introduced with a very sparing hand: whilft Sadi, Jami, Hafiz, and other fucceeding writers, in profe as well as verse, have blended in their works the Arabic without referve; gaining perhaps in the nervous luxuriance of the one language what may feem to have been lost in the fofter delicacy of the other. Hence Ebn Fekreddin Anju, in the preface to the dictionary called Farhang Jehanguiri, fays, that the Deri and the Arabic idioms were the languages of heaven; God communicating to the angels his milder mandates in the delicate accents of the first, while his stern commands were delivered in the rapid accents of the laft.

For near 300 years the literary fire of the Persians feems

Persian seems indeed to have been almost extinguished; since, Language during that time, hardly any thing of that people which deserves attention has appeared in Europe: enough, however, has already been produced, to inspire us with a very high opinion of the genius of the east. In taste, the orientals are undoubtedly inferior to the best writers of modern Europe; but in invention and fublimity, they are excelled, perhaps equalled, by none. The Perfians affect a rhetorical luxuriance, which to a European wears the air of unnecessary redundance. If to these leading distinctions we add a peculiar tone of imagery, of metaphor, of allusion, derived from the difference of government, of manners, of temperament, and of fuch natural objects as characterife Asia from Europe; we shall see, at one view, the great points of variation between the writers of the east and west. Amongst the oriental historians, philosophers, rhetoricians, and poets, many will be found who would do honour to any age or people; whilst their romances, their tales, and their fables, stand upon a ground which Europeans have not yet found powers to reach. We might here quote the Arabian Nights Entertainments, Persian Tales, Pilpay's Fables, &c.

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The genius We shall now annex a sew itrictures on the genius of the mothat noble language; though it is our opinion that the origin. We shall now annex a few strictures on the genius of dern Perfic. province of the philologist is to investigate the origin, progrefs, and final improvement of a language, without descending to its grammatical minutiæ or peculiar idiomatic distinctions. We have already observed, that the tongue under confideration is partly Arabic and partly Persian, though the latter generally has the ascendant. The former is nervous, impetuous, and masculine; the latter is slowing, soft, and luxuriant. Wherever the Arabic letters do not readily incorporate with the Persian, they are either changed into others or thrown away. Their letters are the Arabic with little variation; these being found more commodious and expeditious than the old letters of the Deri and Parsi. Their alphabet consists of 32 letters, which, like the Arabic, are read from right to left; their form and order will be learned from any grammar of that language. The letters are divided into vowels and confonants as usual. The Arabic characters, like those of the Europeans, are written in a variety of different hands; but the Persians write their poetical works in the Talick, which answers to the most elegant of our Italic hands.

There is a great refemblance between the Persian and English languages in the facility and simplicity of their form and construction: the former, as well as the latter; has no difference of terminations to mark the gender either in substantives or adjectives; all inanimate things are neuter; and animals of different fexes have either different names, or are distinguished by the words ner male, and made female. Sometimes indeed a word is made feminine, after the manner of the Arabians, by having & added to it.

The Persian substantives have but one variation of case, which is formed by adding a syllable to the nominative in both numbers; and answers often to the dative, but generally to the accufative, case in other languages. The other cases are expressed for the most part by particles placed before the nominative. The Per-

fians have two numbers, fingular and plural; the latter is formed by adding a fyllable to the former.

The Persian adjectives admit of no variation but in the degrees of comparison. The comparative is formed Language by adding ter, and the superlative by adding terin to the

The Persians have active and neuter verbs like other nations; but many of their verbs have both an active and neuter fense, which can be determined only by the construction. Those verbs have properly but one conjugation, and but three changes of tense: the imperative, the aorist, and the preterite; all the other tenses being formed by the help of particles or of auxiliary verbs. The paffive voice is formed by adding the tenses of the substantive verb to the participle of the

In the ancient language of Persia there were very few or no irregularities; the imperative, which is often irregular in the modern Persian, was anciently formed from the infinitive, by rejecting the termination eeden: for originally all infinitives ended in den, till the Arabs introduced their harsh consonants before that syllable, which obliged the Persians, who always affected a fweetness of pronunciation, to change the old termination of some verbs into ten, and by degrees the original infinitive grew quite obsolete; yet they still retain the ancient imperative, and the aorists which are formed from This little irregularity is the only anomalous part of the Persian language; which nevertheless far surpasses in fimplicity all other languages ancient or modern.

With respect to the more minute and intricate parts of this language, as well as its derivations, compositions, constructions, &c. we must remit our readers to Minin. skie's Institutiones Linguæ Turcicæ, cum rudimentis parallelis linguarum Arab. et Perf.; Sir William Jones's Persian Grammar; Mr Richardson's Arabian and Perfian Dictionary; D. Herbelot's Bibl. Orient.; Dr Hyde de Relig, vet. Perf. &c. Our readers, who would penetrate into the innermost recesses of the Persian history, colonies, antiquities, connections, dialects, may confult the last mentioned author, especially chap. xxxv. De Persia et Persarum nominibus, et de moderna atque veteri lingua Perfica, ejusque dialectis. In the preceding inquiry we have followed other authors, whose accounts appeared to us more natural, and much less embarras-

fing.

To conclude this fection, which might eafily have Utility of the Arathe liberty to put our readers in mind of the vast utility bian and Numberless Persian lanof the Arabian and Persian languages. events are preserved in the writings of the orientals which were never heard of in Europe, and must have for ever lain concealed from the knowledge of its inhabitants, had not these two tongues been studied and understood by the natives of this quarter of the globe. Many of those events have been transmitted to posterity in poems and legendary tales like the Runic fragments of the north, the romances of Spain, or the heroic ballads of our own country. Such materials as these, we imagine, may have suggested to Firdausi, the celebrated heroic poet of Persia, many of the adventures of his Shahnamé; which, like Homer when stript of the machinery of supernatural beings, is supposed to contain much true hiflory, and a most undoubted picture of the superstition and manners of the times. The knowledge of these two languages has laid open to Europe all the treasures of oriental learning, and has enriched the minds of Britons

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Persian with Indian science as much as the produce of these regions has increased their wealth and enervated their constitution.

Before we conclude this fection, we shall subjoin a few strictures on the nature of Persian poetry, in order to render our inquiry the more complete. The modern Persians borrowed their poetical measures from the Arabs: they are exceedingly various and complicated; they consist of 19 different kinds; but the most common of them are the *Iambic* or *Trochaic* measure, and a metre that chiefly confists of those compounded feet which the ancients called Emingines, which are composed of iambic and fpondees alternately. In lyric poetry their verses generally consist of 12 or 16 syllables: they fometimes, but feldom, confift of 14. Some of their lyric verses contain 13 fyllables: but the most common Persian verse is made up of 11; and in this measure are written all their great poems, whether upon heroic or moral fubjects, as the works of Firdaufi and Jami, the Boftar of Sadi, and the Mesnavi of Gelaleddin. This fort of verse answers to our common heroic rhyme, which was brought to fo high a degree of perfection by Pope. The study of the Persian poetry is so much the more necessary, as there are few books or even letters written in that language, which are not interspersed with fragments of poetry. As to their profody, nothing can be more easy and simple. When the student can read profe eafily, he will with a little attention read poetry with equal facility.

SECT. V. Sanscrit and Bengalese Languages.

THE Sanscrit, though one of the most ancient languages in the world, was little known even in Afia till of the most about the middle of the present century. Since that period, by the indefatigable industry of the very learned and ingenious Sir William Jones and the other worthy members of that fociety of which he has the honour to be prefident, that noble and ancient language has at length been brought to light; and from it vast treasures of oriental knowledge will be communicated both to Europe and Asia; knowledge which, without the exertions of that happy establishment, must have lain concealed from the researches of mankind to the end of the world. In this fection we propose to give to our readers such an account of that language as the limits of the prefent article, and the helps we have been able to procure, shall

> The Sanscrit language has for many centuries lain concealed in the hands of the bramins of Hindostan. It is by them deemed facred, and is of confequence confined folely to the offices of religion. Its name imports the perfect language, or, according to the eastern style, the language of perfection; and we believe no language ever spoken by man is more justly intitled to that high

> The grand fource of Indian literature, and the parent of almost every dialect from the Persian gulf to the China feas, is the Sanfcrit; a language of the most venerable and most remote antiquity, which, though at prefent thut up in the libraries of the bramins, and appropriated folely to the records of the religion, appears to have been current over most of the oriental world. Accordingly traces of its original extent may be discovered in almost every district of Asia. Those who are ac-

quainted with that language have often found the fimi- Sanscrit litude of Sanscrit words to those of Persian and Ara-and Bengabic, and even of Latin and Greek; and that not in technical and metaphorical terms, which refined arts and improved manners might have occasionally introduced, but in the main ground-work of language, in monofyllables, the names of numbers, and appellations of fuch things as would be first discriminated on the immediate drawn of civilization.

The ancient coins of many different and distant kingdoms of Asia are stamped with Sanscrit characters, and mostly contain allusions to the old Sanscrit mythology. Befides, in the names of perfons and places, of titles and dignities, which are open to general notice, even to the farthest limits of Asia, may be found manifest traces of the Sanscrit. The scanty remains of Coptic antiquities afford little scope for comparison between that idiom and this primitive tongue; but there still exists sufficient ground to conjecture, that, at a very early period, a correspondence did subsist between these two nations. The Hindoos pretend, that the Egyptians frequented their country as disciples, not as instructors; that they came to seek that liberal education and those sciences in Hindostan, which none of their own countrymen had fufficient knowledge to impart. Perhaps we may examine the validity of this claim hereafter.

But though numberless changes and revolutions have from time to time convulled Hindostan, that part of it which lies between the Indus and the Ganges still preferves that language whole and inviolate. Here they Number of still offer a thousand books to the perusal of the curious; books in many of which have been religiously handed down from guage. the earliest periods of human existence.

The fundamental part of the Sanscrit language is divided into three classes: Dhaat, or roots of verbs, which fome call primitive elements; Shubd, or original nouns; and Evya, or particles. The latter are ever indeclinable, as in other languages; but the words comprehended in the two former classes must be prepared by certain additions and inflexions to fit them for a place in composition. And here it is that the Characterart of the grammarian has found room to expand it-iftics of itfelf, and to employ all the powers of refinement. Not a fyllable, not a letter, can be added or altered but by regimen; not the most trifling variation of the fense, in the minutest subdivision of declension or conjugation, can be effected without the application of feveral rules: all the different forms for every change of gender, number, case, person, tense, mood, or degree, are methodically arranged for the affiftance of the memory, according to an unerring feale. The number of the radical or elementary parts is about 700; and to thefe, as to the verbs of other languages, a very plentiful stock of verbal nouns owes its origin; but these are not thought to exceed those of the Greek either in quantity or variety.

To the triple fource of words mentioned above, every term of truly Indian original may be traced by a laborious and critical analysis. All such terms as are thoroughly proved to bear no relation to any one of the Sanscrit roots, are considered as the production of fome remote and foreign idiom, subsequently ingrafted upon the main flock; and it is conjectured, that a judicious investigation of this principle would throw a new

Traces of Sanscrit in ftrict of Afia and afewhere.

light

Sanscrit light upon the first invention of many arts and sciences, and Benga- and open a fresh mine of philological discoveries. We shall now proceed to give as exact an account of the constituent parts of this language as the nature of our design will permit.

96 1 It is copious and nerwous.

.The Sanscrit language is very copious and nervous. The first of these qualities arises in a great measure from the vast number of compound words with which it is almost overstocked. "The Sanscrit (fays Sir William Jones), like the Greek, Persian, and German, delights in compounds; but to a much higher degree, and indeed to fuch excess, that I could produce words of more than 20 fyllables; not formed ludicroufly like that by which the buffoon in Aristophanes describes a feast, but with perfect seriousness, on the most solemn occasions, and in the most elegant works." But the flyle of its best authors is wonderfully concise. In the vegularity of its etymology it far exceeds the Greek and Arabic; and, like them, has a prodigious number of derivatives from each primary root. The grammatical rules also are numerous and difficult, though there are not many anomalies. As one instance of the truth of this affertion, it may be observed, that there are feven declenfions of nouns, all used in the fingular, the dual, and the plural numbers, and all of them differently formed, according as they terminate with a confonant, with a long or a short vowel; and again, different also as they are of different genders: not a nominative case can be formed to any one of these nouns without the application of at least four rules, which vary likewise with each particular difference of the nouns, as above stated: add to this, that every word in the language may be used through all the seven declenfions, which is a full proof of the difficulty of the idiom.

The Sanscrit grammars are called Beeakerun, of which there are many composed by different authors; some too abstruse even for the comprehension of most bramins, and others too prolix to be ever used as references. One of the shortest, named the Sarasootee, contains between two and three hundred pages, and was compiled by Anoobhootee Seroopenam Acharige, with a conciseness that can scarcely be paralleled in any other lan-

97 Sanscrit

alphabet.

* Plate

The Sanscrit alphabet contains 50 letters; and it is one boast of the bramins, that it exceeds all other alphabets in this respect: but it must be observed, that as of their 34 confonants, near half carry combined founds, and that fix of their vowels are merely the correspondent long ones to as many which are short, the advantage feems to be little more than fanciful. Befides these, they have a number of characters which Mr Halhed calls connected vowels, but which have not been explained by the learned prefident of the Afiatic

The Sanscrit character used in Upper Hindostan * CCCCXVI is faid to be the same original letter that was first delivered to the people by Brahma, and is now called Diewnāgur, or the language of angels, which shows the high opinion that the bramins have entertained of that character. Their confonants and vowels are wonder-

fully, perhaps whimfically, modified and diverlified; to Sanfcrit enumerate which, in this place, would contribute very and Bengalittle either to the entertainment or instruction of our lese Lanreaders. All these distinctions are marked in the Beids (L), and must be modulated accordingly; so that they produce all the effect of a laboured recitative: but by an attention to the music of the chant, the sense of the passage recited equally escapes the reader and the audience. It is remarkable, that the Jews in their fynagogues chant the Pentateuch in the same kind of melody; and it is supposed that this usage has descended to them from the remotest ages.

The Sanscrit poetry comprehends a very great va-Poetry. riety of different metres, of which the most common are

The munnee hurreneh chhund, or line of 12 or 19 fyllables, which is scanned by three fyllables in a foot, and the most approved foot is the anapæst.

The cabee chhund, or line of eleven fyllables. The anufhtofe chhund, or line of eight fyllables.

The poems are generally composed in stanzas of four lines, called a/blogues, which are regular or irre-

The most common assilogue is that of the anushtofe chhund, or regular stanza of eight syllables in each line. In this measure the greatest part of the Māhābāret is composed. The rhyme in this kind of stanza should be alternate; but the poets do not feem to be very nice in the observance of a strict correspondence in the sounds of the terminating fyallables, provided the feet of the verse are accurately kept.

This short anushtofe ashlogue is generally written by two verses in one line, with a pause between; so the

whole then assumes the form of a long distich.

The irregular stanza is constantly called anyachhund, of whatever kind of irregularity it may happen to confift. It is most commonly compounded of the long line cabee chhund and the short anushtofe chhund alternately; in which form it bears some resemblance to the most

common lyric measure of the English.

Perhaps our readers may feel a curiofity to be informed of the origin of this oriental tongue. If we believe the bramins themselves, it was coeval with the race of man, as was observed towards the beginning of this section. The bramins, however, are not the only people who ascribe a kind of eternity to their own particular dialect. We find that the Sanscrit in its primitive destination was appropriated to the offices of religion. It Origin of is indeed pretended, that all the other dialects spoken in this tongue. Hindostan were emanations from that fountain, to which they might be traced back by a skilful etymologist. This, we think, is an argument of no great consequence, fince we believe that all the languages of Europe, by the same process, may be deduced from any one of those current in that quarter of the globe. By a parity of reason, all the different dialects of Hindostan may be referred to the language in question. Indeed, if we admit the authority of the Mofaic history, all languages whatfoever are derived from that of the first man. It is allowed that the language under confideration is impregnated with Persian, Chaldaic, Phœnician, Greek,

* Lib. iii.

Sanscrit and even Latin idioms. This, we think, affords a preand Benga-fumption that the Sanfcrit was one of those original dialects which were gradually produced among the descendants of Noah, in proportion as they gradually receded from the centre of population. What branch or from the centre of population. branches of that family emigrated to Hindostan, it is not easy to determine. That they were a party of the descendants of Shem is most probable, because the other fepts of his posterity settled in that neighbourhood. The fum then is, that the Hindoos were a colony con-

fifting of the descendants of the patriarch Shem.

It appears, however, by almost numberless monuments of antiquity still existing, that at a very early period a different race of men had obtained fettlements in that country. It is now generally admitted, that colonies of Egyptians had peopled a confiderable part of Hindoftan. Numberless traces of their religion occur everywhere in those regions. The very learned president himself is positive, that vestiges of those sacerdotal wanderers are found in India, China, Japan, Tibet, and many parts of Tartary. Those colonists, it is well known, were zealous in propagating their religious ceremonies wherever they refided, and wherever they travelied. There is at the same time even at this day a striking resemblance between the sacred rites of the vulgar Hindoos and those of the ancient Egyptians. prodigious statues of Salsette and Elephanta fabricated in the Egyptian style; the vast excavations hewn out of the rock in the former; the wooly hair of the statues, their difforted attitudes, their grotesque appearances, their triple heads, and various other configurations -plainly indicate a foreign original. These phenomena suit no other people on earth so exactly as the sons of Mizraim. The Egyptian priefts used a sacred character, which none knew but themselves; none were allowed to learn except their children and the choice of the initiated. All these features mark an exact parallel with the bramins of the Hindoos. Add to this, that the drefs, diet, luftrations, and other rites of both fects, bore an exact refemblance to each other. Sir William Jones has justly observed, that the letters of the Sanscrit, stript of all adventitious appendages, are really the square Chaldaic characters. We learn from Cassiodorus * the epist. 2. et following particulars: "The height of the obelisks is equal to that of the circus; now the higher is dedicated to the fun, and the lower to the moon, where the facred rites of the ancients are intimated by Chaldaic fignatures by way of letters." Here then it is plain that the facred letters of the Egyptians were Chaldaic, and it is allowed that those of the bramin's were of the fame complexion; which affords a new prefumption of the identity of the Sanscrit with those just men-

That the Egyptians had at a very early period penetrated into Hindostan, is universally admitted. Osiris, their celebrated monarch and deity, according to their mythology, conducted an army into that country; taught the natives agriculture, laws, religion, and the culture of the vine, &c. He is faid at the same time to have left colonies of priests, as a kind of missionaries, to instruct the people in the ceremonies of religion. Sesostris, another Egyptian potentate, likewise overran Hin- Sanscrit dostan with an army, and taught the natives many use-and Pengan ful arts and sciences. When the pastor-kings invaded lefe Lanand conquered Egypt, it is probable that numbers of the priests, in order to avoid the fury of the merciless invaders who demolished the temples and perfecuted the ministers of religion, left their native country, and transported themselves into India. These, we should think, were the authors both of the language and religion of the bramins. This dialect, as imported by the Egyptians, was probably of the same contexture with the sacred language of that people, as it appeared many ages after. The Indians, who have always been an inventive and industrious race of men, in process of time cultivated, improved, diverlified, and constructed that language with fuch care and affiduity, that it gradually arrived at that high degree of perfection in which at prefent it appears.

Had the learned president of the Asiatic Society (M), when he instituted a comparison between the deities of Hindostan on the one side and of Greece and Italy on the other, examined the analogy between the gods of Hindostan and those of Egypt, we think he would have performed a piece of service still more eminent. Having first demonstrated the similarity between the divinities of India and Egypt, he might then have proceeded to investigate the resemblance of the Egyptian and Phœnician with those of Greece and Rome. By this process a chain would have been formed which would have conducted his reader to comprehend at one view the identity of the Zabian worship almost throughout the world.

We foresee that it will be objected to this hypothefis, that all the dialects of Hindostan being clearly reducible to the Sanscrit, it is altogether impossible that it could have been a foreign language. To this we anfwer, that at the early period when this event is suppofed to have taken place, the language of the posterity of the fons of Noah had not deviated confiderably from the primitive standard, and consequently the language of the Egyptians and the Hindoos was nearly the same. The Sanscrit was gradually improved: the language of the vulgar, as is always the case, became more and more different from the original archetype; but still retained fuch a near refemblance to the mother-tongue as proved the verity of its extraction.

To the preceding account of the Sanscrit language Bengalese we shall annex a few strictures on the language of Ben-language gal, which we believe is derived from the other, and derived is in most common use in the southern parts of Hin-Sanscrit.

Though most of the ancient oriental tongues are read from right to left, like the Hebrew, Chaldaic, Arabic, &c. yet-fuch as properly belong to the whole continent of India proceed from left to right like those of Europe. The Arabic, Persian, &c. are the grand sources whence the former method has been derived; but with these, the numerous original dialects of Hindostan have not the smallest connection or resemblance.

The great number of letters, the complex mode of combination, and the difficulty of pronunciation, are confiderable

IOI Bengal alphabet.

102

Genders, &c. of this

language.

103

Peculiarities of

Sanfcrit

galese

nouns.

and Ben-

Sanscrit considerable impediments to the study of the Bengal and Benga-language; and the carelessness and ignorance of the lese Lanpeople, and the inaccuracy of their characters, aggravate these inconveniences. Many of their characters are spurious; and these, by long use and the hurry of business, are now almost naturalized into the language.

The Bengal alphabet, like that of the Sanfcrit, from which it is derived, confifts of 50 letters, whose form, order, and found, may be learned from Mr Halhed's grammar of the Bengal language. The vowels are divided into long and short, the latter of which are often omitted in writing. Most of the oriental languages are constructed upon the same principle, with respect to the omission of the short vowel. The Hebrews had no fign to express it before the invention of the Masoretic points; in Arabic it is rarely inferted unless upon very folemn occasions, as in the Koran; in the modern Perfian it is univerfally omitted: fo to all the confonants in the Sanscrit, the short vowel is an invariable appendage. and is never fignified by any diacritical mark; but where the construction requires that the vowel should be dropped, a particular stroke is set under the letter. It is in vain to pretend, in a sketch like this, to detail the found and pronunciation of these letters: this must be acquired by the ear and by practice.

In the Bengal language there are three genders, as in Greek, Arabic, &c. The authors of this threefold division of genders, with respect to their precedence, appear to have confidered the neuter as a kind of refiduum refulting from the two others, and as lefs worthy or less comprehensive than either (see Section of the Greek.) The terminations usually applied upon this occasion are aa for the masculine, and ee for the seminine. In Sanfcrit, as in Greek and Latin, the names of all things inanimate have different genders, founded on vague and incomprehensible distinctions: the same is the case with

the Bengal.

A Sanscrit noun, on its first formation from the general root, exists equally independent of case as of gender. It is neither nominative, nor genitive, nor accusative; nor is impressed with any of those modifications which mark the relation and connection between the feveral members of a fentence. In this state it is called an imperfest or crude noun. To make a nominative of a word, the termination must be changed and a new form supplied. Thus we see, that in the Sanscrit, at least, the nominative has an equal right with any other inflexion to be called a case. Every Sanscrit noun has feven cases, exclusive of the vocative; and therefore comprehends two more than even those of the Latin. Mr Halhed above mentioned details all the varieties of these with great accuracy, to whose Grammar we must refer our readers. The Bengal has only four cases be-fide the vocative; in which respect it is much inferior to the other.

It would be difficult to account for the variety of words which have been allotted to the class of pronouns by European grammarians. The first and second perfon are chiefly worthy of observation: these two should feem to be confined to rational and converfable beings only: the third supplies the place of every object in nature; wherefore it must necessarily be endued with a capacity of shifting its gender respectively as it shifts the subject; and hence it is in Sanscrit frequently denominated an adjective. One of the demonstratives hic or

VOL. XVI. Part I.

ille usually serves for this purpose; and generally the Sanscrit latter, which in Arabic has no other name than dhemeer and Bengael ghaayb, "the pronoun of the absentee," for whose less Lanname it is a substitute.

In most languages where the verb has a separate inflection for each person, that inflection is sufficient to Bengalese afcertain the perfonality; but in Bengal compositions, pronouns, though the first and second persons occur very frequently, nothing is more rare than the ufage of the pronoun of the third; and names of persons are inserted with a constant and difgusting repetition, to avoid, as it should feem, the application of the words HE and SHE. The fecond person is always ranked before the first, and the third before the fecond. The personal pronouns have feven cases, which are varied in a very irregular manner. Leaving these to the Bengalian grammar, we shall proceed to the verb.

The Sanscrit, the Arabic, the Greek and Latin verbs, are furnished with a set of inflections and terminations fo comprehensive and so complete, that by their form alone they can express all the different distinctions both of persons and time. Three separate qualities in them are perfectly blended and united. Thus by their root they denote a particular act, and by their inflection both point out the time when it takes place and the number of the agents. In Persian, as in English, the verb admits but of two forms, one for the prefent tense and one for the aorist; and it is observable, that while the past tense is provided for by a peculiar inflection, the future is generally supplied by an additional word conveying only the idea of time, without any other influence on the act implied by the principal verb. It is also frequently necessary that the different state of the action. as perfect or imperfect, be further afcertained in each of the tenses, past, present, and future. This also, in the learned languages, is performed by other variations of inflections, for which other verbs and other particles are applied in the modern tongues of Europe and

Every Sanscrit verb has a form equivalent to the Middle middle voice of the Greek, used through all the tenses voice of with a reflective fense, and the former is even the most Sanferit extensive of the two in its use and office: for in Greek verbs. the reflective can only be adopted intransitively when the action of the verb descends to no extraneous subject; but in Sanscrit, the verb is both reciprocal and transitive at the same time.

Neither the Sanscrit, nor the Bengalese, nor the Hindoftanic, have any-word precifely answering to the sense of the verb I have, and confequently the idea is always expressed by est mihi; and of course there is no auxiliary form in the Bengal verb correspondent to I have written, but the fense is conveyed by another mode. The verb fubstantive, in all languages, is defective and irregular, and therefore the Sanscrit calls it a semi-verb. It is curious to observe that the present tense of this verb, both in Greek and Latin, and also in the Persian, appears plainly to be derived from the Sanscrit. In the Bengalese, this verb has but two distinctions of time, the present and the past; the terminations of the several persons of which serve as a model for those of the same tense in all other verbs respectively.

Verbs of the Bengal language may be divided into terifics of the Bengal language may be divided into terifics of the Bengal language may be divided into terifics of the Bengal language may be divided into terifics of the Bengal language may be divided into terifics of the Bengal language may be divided into terifics of the Bengal language may be divided into terifics of the Bengal language may be divided into terifics of the Bengal language may be divided into terifics of the Bengal language may be divided into terifics of the Bengal language may be divided into terifics of the Bengal language may be divided into terifics of the Bengal language may be divided into terifics of the Bengal language may be divided into terifics of the Bengal language may be divided into terifics of the Bengal language may be divided into the Bengal language may be divided by their populations. three classes, which are distinguished by their penulti-galese mate letter. The simple and most common form has verbs,

guages.

Santerit an open confonant immediately preceding the final letand Benga-ter of the infinitive. The fecond is composed of those words whose final letter is preceded by another vowel or open conforant going before it. The third confifts ontirely of causals derived from verbs of the first and second conjugations. The reader will eafily guess at the impossibility of prosecuting this subject to any greater length: we shall therefore conclude with a few remarks collected from the grammar fo often mentioned, which we apprehend may be more amnfing, if not more inftructing.

The Greek verbs in me are formed exactly upon the fame principle with the Sanferit conjugations, even in the minutest particulars. Instances of this are produced in many verbs, which from a root form a new verb by adding the fyllable mi, and doubling the first consonant. This mode furnishes another prefumption of the Egyptian origin of the Sanferit. Many Greeks travelled into Egypt; many Egyptian colonies settled in Greece. By one or other of those channels the foregoing innovation might have been introduced into the Greek lan-

To form the past tense, the Sanscrit applies a syllabic augment, as is done in the Greek: the future has for its characteristic a letter analogous to that of the same tense in the Greek, and it omits the reduplication of the first confonant. It may be added, that the reduplication of the first confonant is not constantly applied to the prefent tenie of the Sanferit more than to those of the Greek.

The natural fimplicity and elegance of many of the Afiatic languages are greatly debased and corrupted by the continual abuse of auxiliary verbs; and this inconvenience has evidently affected the Persian, the Hindoftan, and the Bengal idioms.

The infinitives of verbs in the Sanscrit and Bengalese are always used as substantive nouns. Every body knows that the fame mode of arrangement very often occurs in the Greck.

In the Sanscrit language, as in the Greck, there are forms of infinitives and of participles comprehenfive of time; there are also other branches of the verb that feem to refemble the gerunds and fupines of the

All the terms which serve to qualify, to distinguish, or to augment, either fubflance or action, are classed by the Sanfcrit grammarians under one head; and the word used to express it literally fignifies increase or addition. According to their arrangement, a simple sentence confilts of three members; the agent, the action, the fubject: which, in a grammatical fense, are reduced to two; the noun and the verb. They have a particular word to specify such words as amplify the noun which imports quality, and answers to our adjectives or epithets: Such as are applied to denote relation or connection, are intimated by another term which we may translate preposition.

The adjectives in Bengalese have no distinction of Sanscrit and Benga gender or number; but in Sanscrit these words prelese adjec- ferve the distinction of gender, as in the Greek and Latin.

Prepositions are substitutes for cases, which could not have been extended to the number necessary for expreffing all the feveral relations and predicaments in which a noun may be found, without causing too much em-

barrassment in the form of a declension. Those arc too Sanserit few in the Greek language, which occasions much in and Bengaconvenience. See sect. Greek.

The Latin is less polithed than the Greek, and of confequence bears a much nearer refemblance to the Sanferit, both in words, inflections, and terminations.

The learned are now convinced that the use of numerical figures was first derived from India. Indeed the antiquity of their application in that country far exceeds the powers of investigation. All the numerals in Sanfcrit have different forms for the different genders, as in Arabic. There appears a frong probability that the European method of computation was derived from India, as it is much the fame with the Sanforit, though we think the Europeans learned it from the Arabians. The Bengalese merchants compute the largest sums by fours; a custom evidently derived from the original mode of computing by the fingers.

The Sanscrit language, among other advantages, has a great variety in the mode of arrangement; and the words are fo knit and compacted together, that every fentence appears like one complete word. When two or more words come together in regimine, the last of them only has the termination of a case; the others are known by their polition; and the whole fentence fo connected, forms but one compound word, which is called a foot.

SECT. VI. Of the Chinese Language.

THE Chincle, according to the most authentic ac-Antiquity counts, are a people of great antiquity. Their fitua-of the Chition was fuch, as, in the earliest ages of the world, sefe. in a great measure secured them from hostile invasion. Their little commerce with the rest of mankind precluded them the knowledge of those improvements which a mutual emulation had often generated among other nations, who were fituated in fuch a manner, with relation to each other, as ferved to promote a mutual intercourse and correspondence. As China is a large and fertile country, producing all the necessaries, conveniencies, and even the luxuries of life, its inhabitants were not under the necessity of looking abroad for the two former, nor exposed to the temptation of engaging in foreign commerce, in order to procure the latter. Perfectly fatisfied with the articles which their own country produced, they applied themselves entirely to the practice of agriculture and other arts connected with that profession; and their frugality, which they retain even to this day, taught them the lesson of being contented with little; of confequence, though their population was almost incredible, the produce of their foil was abundantly fufficient to yield them a subsistence. Their inventions were their own; and as they borrowed nothing from other people, they gradually began to despile the rest of mankind, and, like the ancient Egyptians, branded them with the epithet of barbarians.

Those people had at an early period made amazing proficiency in the mechanical arts. Their progress in the liberal sciences, according to the latest and indeed the most probable accounts, was by no means proportioned. In mathematics, geometry, and aftronomy, their knowledge was contemptible; and in ethics, or moral philosophy, the complexion of their laws and customs

Chincle cultoms proves their skill to have been truly superficial. Language. They value themselves very highly at present upon their oratorial talents; and yet of all languages spoken by any civilized people, theirs is confessedly the least improved. To what this untowardly defect is owing, the

109 Their language an original tongue.

learned have not yet been able to determine. The language of the Chinese is totally different from those of all other nations, and bears very strong marks of an original tongue. All its words are monofyllabic, and compositions and derivations are altogether unknown. Their nouns and verbs admit of no flexions; in fhort, every thing relating to their idioms is peculiar, and incapable of being compared with any other dialect fpoken by any civilized people. Most barbarous languages exhibit fomething that refembles an attempt towards those diacritical modifications of speech; whereas the Chinese, after a space of 4000 years, have not advanced one step beyond the very first elements of ideal communication. This circumstance, we think, is a plain demonstration that they did not emigrate from that region where the primitive race of mankind is thought to have fixed its residence. Some have imagined, we believe with good reason, that they are a Tartarian race, which, breaking off from the main body of that numerous and widely extended people, directed their march towards the fouth east. There, falling in with delightful and fertile plains which their pofterity now inhabit, they found themselves accommodated fo much to their liking, that they dropped all defire of changing their habitations. The country of China is, indeed, fo environed with mountains, deferts, and feas, that it would have been difficult for men in their primitive state to have emigrated into any of the neighbouring regions. Thus feeluded from the rest of mankind, the Chinese, in all probability, were left to the strength of their own inventive powers to fabricate a language, as well as the other arts and improvements necessary for the support and convenience of life.

It is indeed obvious that their stock of vocables, when they emigrated from Tartary, was neither ample nor properly accommodated to answer the purposes of the mutual conveyance of ideas. With this slender stock, however, they seem to have been satisfied; for it does not appear that any additions were afterwards made to that which was originally imported. Initead of framing a new race of terms by compounding their primitive ones; instead of diversifying them by inflections, or multiplying them by derivatives, as is done in every other language; they rather chose to retain their primitive words, and by a variety of modifications, introduced upon their orthography or pronunciation, to accommodate them to a variety of figmifications. Were is possible to scrutinize all the Tartarian dialects, and to reduce them to their primitive monofyllabic character, perhaps the original language of the Chinese might be investigated and ascertained. know that attempts have been made to compare it with fome of the other Afiatic languages, especially the Hebrew: This labour has, however, proved unfuccefsful, and no primeval identity has been discovered. Before this comparison could be instituted with the most dithant prospect of success, the language last mentioned must be stripped of all its adventitious qualities; and not only fo, but it must be reduced to the monosyllabic

tone, and then contrasted with the Chinese monofyl- Chinese lables; an undertaking which we are perfuaded would Langu ge. not be readily executed. After all, we are convinced that no refemblance of any importance would be difcovered.

The Chinese language must then, in our opinion, Process of have been a Tartarian dialect, as the people them-its sabricafelves were colonists from Tartary. We have observed tion. above, that those people have not hitherto found out the art of composition of words. This is the more surprifing, when we consider that, in the characters which form their written language, they employ many compositions. For example, the character by which they represent misfortune, is composed of one hieroglyphic which represents a house, and another which denotes fire; because the greatest misfortune that can befal a man is to have his house on fire. With respect to the language which they use in speech, though they very often employ many words to express one thing, yet they never run them together into one word, making certain changes upon them that they may incorporate the more conveniently, but always preferve them entire and unaltered.

The whole number of words in the Chinese language Paucity of does not exceed 1200: the nouns are but 326. It its words. must certainly appear surprising, that a people whose manners are fo highly polithed and refined, should be able to express so many things as must of necessity attend fuch a course of life by so small a number of words, and those too monofyllables. The difficulties which attend this fingular mode must be felt almost every instant; circumstances which, according to the ordinary course of things, should have induced them to attempt both an augmentation of the number of their words and an extention of those which they had by composition and derivation. We learn from Du Halde * that the Chinese have two different dialects: * Hist. of the one vulgar, which is spoken by the vulgar, and China, varies according to the different provinces; the other is vol. ii. called the Mandarin language, and is current only among the learned. The latter is properly that which was formerly spoken at court in the province of Kiangnan, and gradually spread among the polite people in the other provinces. dingly, this language is fpoken with more clegance te provinces adjoining to Kiang-nan than in any other part of the kingdom.

It then appears that the modern language of China was originally the court dialect, and utterly unknown to the bulk of the people. From this circumstance we think it may fairly be concluded that this dialect was deemed the royal tongue, and had been fabricated on purpose to distinguish it from the vulgar dialects. We learn from Heliodorus, that the + E-+ Ethiop. thiopians had a royal language which was the fame lib. vi. with the facred idiom of the Egyptians. This Mandarin tongue was originally an artificial dialect fabricated with a view to enhance the majesty of the court, and to raise its very style and diction above that of the rest of mankind. The Chinese, a wonderfully inventive people, might actually contrive a language of that complexion, with an intention to render it obscure S f 2 and

By flow degrees it was introduced into all parts of the

empire, and confequently became the universal lan-

Chinese and enigmatical (N). Such a plan would excite their Language admiration, and would at the same time greatly exceed their comprehension. In process of time, when the Chinese empire was extended, the Mandarins who had been been brought up at court, and understood nothing of the provincial dialects, found it convenient to have the most eminent persons in every province taught the language employed by themselves in order to qualify them for transacting the affairs of government with them in a language which both understood. By this means the royal dialect descended to the vulgar, and in process of time became universal. The Tartar dialest formerly in use vanished; only a few vestiges of it remained; which gradually incorporating with the royal language, occasioned the variation of provincial tongues above mentioned.

We are therefore clearly of opinion, that the modern language of the Chinese was deduced from the original Mandarin, or court dialect, and that this last was an artificial speech fabricated by the skill and ingemaity of that wonderful people. The learned have long held it up as the primary dialect, because, say they, it bears all the fignatures of an original unimproved language. In our opinion, nothing appears more ingeniously artificial. It is universally allowed that, in its structure, arrangement, idioms, and phraseology, it resembles no other language. Is not every learned man now convinced that all the Afiatic languages yet known, discover unequivocal symptoms of their cognation and family resemblance? The Ethiopians, Chaldeans, Arabians, Perfians, Egyptians, Hebrews, Phœnicians, the Brahmans, Bengalese, the Hindoos bordering upon China, all fpeak only different dialects of one language, varying from the original in dialect only fome in a greater fome in a leffer degree: why should the Chinese alone stand altogether insulated and unallied ?

The languages of the North all wear congenial features. The Tartar or Tatar dialects of every clan, of every canton, of every denomination, exhibit the most palpable proofs of a near affinity: the Gothic and Selavonian dialects, which pervade a great part of Europe and some parts of Asia, are obviously brethren, and may eafily be traced up to an Afiatic original. Even some of the American jargon dialects contain vocables which indicate an Afiatic or European original. Our readers, we flatter ourselves, will agree with us, that had the language of the Chinese been the original language, a resemblance must have still existed between it and its descendants. If it had originated from any other language, it would have retained some characteristic features of its parent archetype. As neither of these is to be found in the fabrie of the language under confideration, the conclusion must be, that it is a language entirely different from all other tongues; that it is constructed upon different principles, descended from different parents, and framed by different artiffs.

The Chinese themselves have a common and immemorial tradition, that their language was framed by Yao their first emperor, to whom they attribute the invention of every thing curious, useful, and ornamental. Language. Traditional history, when it is ancient, uniform, and univerfal, is generally well founded: upon this occasion we think the tradition above mentioned may be fairly admitted as a collateral evidence.

The paucity of voeables contained in this fingular A proof of language, we think another prefumption of its artificial its artificial contexture. The Chinese Onomathetæ would find it an ftructure. arduous task to devise a great number of new terms, and would therefore rest satisfied with the smallest number possible. In other languages we find the like economy was observed. Rather than fabricate new words, men chose fometimes to adapt old words to new, and, upon fome oecasions, even to contrary fignifications. spare themselves the trouble of coining new terms, they contrived to join feveral old ones into one; whence arose a numerous race of compounds. Derivatives too were fabricated to answer the same purpose. By this process, instead of creating new vocables, old ones were compounded, diversified, deflected, ramified, metamorphofed, and tortured into a thousand different

The Greek is deservedly esteemed a rich and copious language; its radical words have been curiously traced by several learned men, who, after the most laborious and exact ferutiny, have found that they do not amount to more than 300. The Sanscrit language is highly compounded; its radical terms, however, are very few in number. Upon the whole, we think we may conclude, that the more any language abounds in compounds and derivatives, the smaller will be the number of its radical terms. The Arabic admits of no compofition, and of consequence its words have been multiplied almost in infinitum; the Sanscrit, the Persian, and the Greek, abound with compounds, and we find their radieals are few in proportion.

There are, we think, three different methods which Three difmay be employed in order to enrich and extend the ferent merange of a language. 1st, By fabricating a multitude thods of of words; the plan which has been purfued by the enriching Arabs. 2d, By framing a multitude of compounds and derivatives; the artifice employed by the Greeks and the authors of the Sanscrit. 3d, By varying the fignifica-tion of words without enlarging their number; the method practifed by the Chinese and their colonists. The Arabians, we think, have shown the most fertile and inventive genius, fince they have enriched their language by actually creating a new and a most numerous race of words. The fabricators of the Sanscrit and the collectors of the Greek have exhibited art, but comparatively little fertility of genius. Leaving, therefore, the Arabians, as in justice we ought, masters of the field in the contest relating to the formation of language, we may range the Greek and Sanserit on the one fide, and the Chinese on the other; and having made this arrangement, we may attempt to discover on which side the largest proportion of genius and invention seems to

⁽N) An attempt of this nature, among a people like the Chinese, is by no means improbable; nor is its success less probable. For a proof of this, we need only have recourse to Bishop Wilkins's Artificial Language, and. Psalmanazar's Dictionary of the language of Formosa.

Chinese Language.

114 That a dopted by the Chineie.

The Greek and Sanscrit (for we have selected them as most highly compounded) exhibit a great deal of art in modifying, arranging, and diversifying their compounds and derivatives, in such a manner as to qualify them for intimating complex ideas; but the Chinese have performed the same office by the help of a race of monofyllabic notes, fimple, inflexible, invariable, and at the same time few in number. The question then comes to be, whether more art is displayed in new-modelling old words by means of declenfions, compounds, and derivatives; or by devising a plan according to which monofyllabic radical terms, absolutely invariable, should, by a particular modification of found, answer all the purpoles performed by the other. The latter appears to us much more ingeniously artificial. The former rescmbles a complicated machine composed of a vast number of parts, congenial indeed, but loofely connected; the latter may be compared to a simple, uniform engine, eafily managed, and all its parts properly adjusted. Let us now see in what manner the people in question managed their monofyllabic notes, so as to qualify them for answering all the purposes of speech.

Though the number of words in the Chinese language does not amount to above 1200; yet that fmall number of vocables, by their artificial management, is sufficient to enable them to express themselves with ease and perspicuity upon every subject, Without multiplying words, the fense is varied almost in infinitum by the variety of the accents, inflections, tones, afpirations, and other changes of the voice and enunciation; circumstances which make those who do not thoroughly understand the language frequently mistake one word for another. This will appear obvious by an

example.

The word teou pronounced flowly, drawing out the v and raising the voice, fignifies a lord or master. If it is pronounced with an even tone, lengthening the v, it fignifies a hog. When it is pronounced quick and lightly, it imports a kitchen. If it be pronounced in a ftrong and masculine tone, growing weaker towards the

end, it fignifies a column.

By the same economy, the syllable po, according to the various accents, and the different modes of pronunciation, has eleven different fignifications. It fignifies glass, to boil, to winnow rice, wife or liberal, to prepare, an old woman, to break or cleave, inclined, a very little, to water, a flave or captive. From these examples, and from almost numberless others which might be adduced, it is abundantly evident that this language, which at first fight appears fo poor and confined, in consequence of the fmall number of the monofyllables of which it is composed, is notwithstanding very copious, rich, and expressive.

Again, the same word joined to various others, imports a great many different things; for example mou, when alone, fignifies a tree, wood; but when joined with another word, it has many other fignifications. Mou leoo, imports "wood prepared for building;" mou lan, is "bars, or wooden grates;" mou hia, "a box;" mou fang, "a chest of drawers;" mou thiang, "a carpenter;" mou eul, "a mushroom;" mou nu, "a fort of small orange;" mou fing, "the planet Jupiter;" mou mien, "cotton," &c. This word may be joined to several others, and has as many different fignifications as it has different combinations.

Thus the Chinese, by a different arrangement of Chinese their monofyllables, can compose a regular and ele-Language gant discourse, and communicate their ideas with energy and precision; nay even with gracefulness and propriety. In these qualities they are not excelled either by the Europeans or Afiatics, who use alphabetical letters. In fine, the Chinese so naturally distinguish the tones of the same monofyllable, that they comprehend the fense of it, without making the least reflection on the various accents by which it is deter-

We must not, however, imagine, as some authors have Consequenrelated, that those people cant in speaking, and make a ces of this a fort of music which is very disagreeable to the ear; method on these different tones are pronounced so curiously, that tion. even strangers find it difficult to perceive their difference even in the province of Kiang-nan, where the accent is more perfect than in any other. The nature of it may be conceived by the guttural pronunciation in the Spanish language, and by the different toncs that are used in the French and Italian: these tones are almost imperceptible; they have, however, different meanings, a circumstance which gave rise to the proverb, that the

If the fineness and delicacy of their tones are such as to be scarce perceptible to a stranger, we must suppose that they do not rise high, but only by small intervals; fo that the music of their language must somewhat refemble the music of the birds, which is within a fmall compass, but nevertheless of great variety of notes. Hence it will follow, that strangers will find it very difficult, if not impossible, to learn this language; more especially if they have not a delicate ear and a flexible voice, and also much practice. The great difference then between the Chinese and Greek accents consists in this, that the Greeks had but two accents, the grave and acute, diffinguished by a large interval, and that not very exactly marked: for the acute, though it never rifes above a fifth higher than the grave, did not always rife fo high, but was sometimes pitched lower according to the voice of the speaker. The Chinese must have many more accents, and the intervals between them must be much smaller, and much more carefully marked; for otherwise it would be impossible to distinguish them. At the same time, their language must be much more mufical than the Greek, and perhaps more fo than any language ought to be; but this becomes necessary for the purposes above-mentioned. Du Halde is positive, that notwithstanding the perpetual variation of accents in the Chinese tongue, and the almost imperceptible intervals between these tones, their cnunciation does not refemble finging: many people, however, who have refided in China, are equally positive that the tone with which they utter their words does actually refemble canting; and this, when we consider the almost imper-ceptible intervals by which they are perpetually raising and lowering the tone of their voice, appears to us highly probable.

As the people of whose language we are treating at present communicate a variety of different fignifications to their monofyllabic words by their different accentuation, fo they employ quantity for the very same purpose. By lengthening or shortening the vowels of their words, they employ them to fignify very different things. The fame they perform by giving their words different aspi-

Chinese rations, as likewise by founding them with different degrees of roughness and smoothness; and even sometimes by the different motion, posture, or attitude, with which their enunciation is accompanied. By these methods of diversifying their monofyllables (says Du Halde), they make 330 of them ferve all the purpoles of language, and these too not much varied in their termination; fince all the words in that language either terminate with a vowel or with the confonant n, fomctimes with the confonant g annexed.

From this account, we think it is evident that the Chinese, by a wonderful exertion of ingenuity, do, by different tones and profodical modifications, by means of a very inconfiderable number of words, all invariable radicals, actually perform all that the most polished nations have been able to atchieve by their compounds, derivatives, &c. diversified by declensions, conjugations, and flexions of every kind; circumstances which, in our opinion, reflect the greatest honour on their inventive

powers.

116 Grammar of the Chirefe.

Chinese

letters or

characters

With respect to the grammar of this language, as it admits of no flexions, all their words being indeclinable, their cases and tenses are all formed by particles. They have no idea of genders; and even the distinction of numbers, which in almost all other languages, even the most unimproved, is marked by a particular word, is in the Chinese only indicated by a particle. They have only the three simple tenses, namely, the past, present, and future; and for want of different terminations, the fame word stands either for the verb or the verbal subflantive, the adjective or the substantive derived from it, according to its position in the sentence.

The Chinese language being composed of monosyllables, and these indeclinable, can scarce be reduced to grammatical rules: we shall, however, attempt to lay before our readers as much of the texture of that fingular dialect as may enable them to form fome vague idea of its genius and constitution. We shall begin with the letters, and proceed regularly to the remaining

parts as they naturally fucceed each other.

The art of joining the Chinese monofyllables together is extremely difficult, and requires a very long and laborious course of study. As they have only figures by which they can express their thoughts, and have no accents in writing to vary the pronunciation, they are obliged to employ as many different figures or characters as there are different tones, which give fo many different fignifications to the fame word. Befides, fome fingle characters fignify two or three words, and fometimes even a whole period. For example, to write these words, good morrow, Sir, instead of joining the characters which fignify good and morrow with that of Sir, a different character must be used, and this character alone expresses these three words. This circumstance greatly contributes to multiply the Chinese cha-

This method of joining the monofyllables is indeed fufficient for writing fo as to be understood; but it is deemed trilling, and is used only by the vulgar. The flyle that is employed, in order to fline in composition, is quite different from that which is used in conversation, though the words are in reality the same. In writings of that species, a man of letters must use more elegant phrases, more lofty expressions, and the whole must be dignified with tropes and figures which are not in general use, but in a peculiar manner adapt- Chinese ed to the nature of the subject in question. The cha. Language. racters of Cochin-china, of Tong-king, of Japan, are the same with those of the Chinese, and signify the fame things; though, in speaking, these nations do not express themselves in the same manner; of consequence the language of conversation is very different, and they are not able to understand each other; while, at the fame time, they understand each other's written language, and use all their books in common.

The learned must not only be acquainted with the characters that are employed in the common affairs of life, but must also understand their various combinations, and the numerous and multiform dispositions and arrangements which of feveral simple strokes make the compound characters. The number of their characters amounts to 80,000; and the man who knows the great-exceeding. est number of them is of course the most learned. From your, this circumstance we may conclude, that many years must be employed to acquire the knowledge of such a prodigious number of characters, to diftinguish them when they are compounded, and to remember their shape and import. After all, a person who understands 10,000 characters may express himself with tolerable propriety in this language, and may be able to read and underfland a great number of books. The generality of their learned men do not understand above 15,000 or 20,000, and few of their doctors have attained to the knowledge of above 40,000. This prodigious number of characters is collected in their great vocabulary called Hai-pien. They have radical letters, which show the origin of words, and enable them to find out those which are derived from them: for instance, the characters of mountains, of trees, man, the earth, of a horse, under which must be fought all that belongs to mountains, trees, man, &c. In this fearch one must learn to distinguish in every word those strokes or figures which are above, beneath, on the fides, or in the body of the radical figure.

Clemens Alexandrinus (see Section Chaldean, &c.) informs us, that the Egyptians employed three forts of characters: The first was called the epistolary, which was used in writing letters; the second was denominated facred, and peculiar to the facerdotal order; the last hieroglyphical, which was appropriated to monumental inscriptions and other public memorials. This mode of representation was twofold: one, and the most simple, was performed by describing the picture of the object which they intended to reprefent, or at least one that refembled it pretty nearly; as when they exhibited the fun by a circle and the moon by a crescent: the other was properly fymbolic; as when they mark-ed eternity by a ferpent with his tail in his mouth, the air by a man clothed in an azure robe fludded with

The Chinese, in all probability, had the same variety. of characters. In the beginning of their monarchy, they communicated their ideas by drawing on paper the images of the objects they intended to express; that is, they drew the figure of a bird, a mountain, a tree, waving lines, to indicate birds, mountains, forests, rivers, &c.

There were, however, an infinite number of ideas to be communicated, whose objects do not fall under the cognizance of the fenfes; fuch as the foul, the thoughts,

and truly

hieroglyphical.

Chinese the passions, beauty, deformity, virtues, vices, the ac-Language tions of men and other animals, &c. This inconvenience obliged them to alter their original mode of writing, which was too confined to answer that purpose, and to introduce characters of a more simple nature, and to invent others to express those things which are

the objects of our fenses.

These modern characters are, however, truly hieroglyphical, fince they are composed of fimple letters which retain the fignification of the primitive characters. The original character for the fun was a circle, thus 0; this they called ga: They now represent that luminary by the figure | , to which they still give the original name. But human inflitutions having annexed to these last framed characters the very same ideas indicated by the original ones, the consequence is, that every Chinese letter is actually fignificant, and that it ftill retains its figuificancy, though connected with others. Accordingly the word tfai, which imports " misfortune, calamity," is composed of the letter mien " a house, and the letter ho " fire;" fo that the symbolical character for misfortune is the figure of a house on fire. Chinese characters, then, are not simple letters without any fignification, like those of the Europeans and other Afiatics; but when they are joined together, they are fo many hieroglyphics, which form images and express thoughts.

Upon the whole, the original characters of the Chinese were real pictures (see Section of the Egyptian language); the next improvement was the symbolical charaster; the third and last stage is the present mode, in which artificial figns have been fabricated, in order to represent such thoughts or ideas as could not be represented by one or other of the methods above described. -Du Halde, vol. ii. p. 400, et feq. has furnished us with rules for pronouncing the Chinese vowels and consonants; a piece of information which, we apprehend, would be of little consequence to our readers, and which we shall therefore pass over, and proceed to give a brief account of their grammar. As the whole language is composed of monofyllables, and these indeclinable, its grammatical structure must be simple and obvious: we shall only mention what to us appears fingular and im-

portant.

In the Chinese language there is no diversity of genders or cases, and of consequence no declensions. Very often the noun is not distinguished from the verb; and the same word which in one situation is a substantive, in another may become an adjective, and even a

verb. The adjective always goes before the fubstantive; but

if it follow it, it becomes a fubstantive.

The cases and numbers are known only by the composition. The plural number is distinguished by the particle men, which is common to all nouns; but when the noun is preceded by fome word that fignifies number, the particle men is not annexed.

The Chinese genitive, both fingular and plural, when it comes after nouns, is often made by ti; and there is no other case in that language. The same particle is fometimes placed after pronouns, as if they were deri-

The comparative degree is formed by adding the particle keng, which is always fet before the noun, and fig-

nifies much. The particle to is fometimes used, which Chinese

likewise imports much.

The Chinese have only three personal pronouns, ngo "I," ni "thou," and ta "he:" these become plural by adding the syllable men. They are made posfessive by adding the syllable ti, as ngo ti " mine," ni ti " thine," ta ti " his." The patronymics are formed by putting the name of the city, country, &c. after the pronoun: chon is the pronoun relative who, what, which.

Chinese verbs have only three tenses, the preterperfect, the present, and the future. When there is no particle added to the verb, it is the prefent: the preterperfect is made by adding the particle leao: to diftinguish the future tense they use the particle thang or hoei; and these are all the varieties incident to their verbs.

The Chinese language has no words that are properly adverbs; they only become so by custom, or by the place they possess in discourse. They are often obliged to employ feveral words to express the adverbs of other languages: they have none that are demonstrative, or proper for calling or exhorting; but in their stead they are obliged to use nouns and verbs.

Perhaps our readers may with to know the Chinese Their nunumerals; and may imagine that they bear a resemblance merals. to those of the European or other Asiatic dialects. In

this, however, they will be disappointed.

They fland as follows:

r	One
Eut	Two
San	Three
Sace .	Four
Ou	Five
Lou	Six
Th	Seven
Po	Eight
Kieou	Nine
Che	Ten
Chey	Eleven
Eut che	Twelve
San che	Thirteen
Pe	One hundred
Eut pe	Two hundred
Y then	One thousand
Youan	Ten thousand
Che ouan	Twenty thousand
Eut ouan	One hundred thousand
Che ouan	Two hundred thousand
Y pe ouan	One million.

There are a great many particles proper to numbers in the Chinese language: they are frequently used, and in a way peculiar to it; for every numeral has a particle importing the object to which it is attached. Thus co is used for man, and y co for a woman, &c.; hoei is used for illustrious men; tche or tchi is used for ships, dogs, hens; mey is used for pearls and precious things; pen is used for books; teng is appropriated to oxen and cows; too is used for letters and little bundles of paper; 00 is employed for corn and pulse. Those distinctions indicate a language manufactured on purpose to be em-

ployed.

120 Peculiarities of the Chinese parts of fpeech.

Chinese

Chinese ployed by people who were too high and too haughty Language. to converse with the vulgar.

The style of the Chinese, in their elaborate composi-Style of the tions, is mysterious, concise, and allegorical, after the eastern manner. It is often obscure to those who do not understand the language thoroughly; and it requires a confiderable degree of skill to avoid mistakes in reading an author of elegance and fublimity. Their writers express a great deal in few words; and their expressions are lively, full of spirit, intermingled with bold comparifons and lofty metaphors. They affect to infert in their compositions many sentences borrowed from their five canonical books; and as they compare their books to pictures, fo they liken these quotations to the five principal colours employed in painting; and in this their eloquence chiefly confifts.

> They prefer a beautiful character to the most finished picture; and nothing is more common than to fee a fingle page covered with old characters, if they happen to be fair and elegant, fold at a very high price. They honour their characters in the most common books; and when they happen to light by chance upon a printed leaf, they gather it up with the greatest care and respect.

> In China there are three varieties of language; that of the common people, that of the people of fallion, and that employed in writing books. Though the first is not so elegant as either of the other two, it is not however inferior to our European languages; though those who are but superficially acquainted with the Chinese may, in fact, imagine it uncouth and barbarous. This low and rude language is pronounced and written many different ways, as is generally the case in other countries.

> But a more polished, and at the same time a much more energetic, language, is employed in an almost infinite number of novels; some perhaps true, but many more the vehicles of fiction. These are replete with lively descriptions, characters highly finished, morality, variety, wit, and vivacity, in fuch a degree as to equal in purity and politeness the most celebrated authors of Europe. This was the language of the Mandarins; and though exquifitely beautiful in its kind, was still inferior to the language of books. This last might be styled the hyperfublime; and of this there are several degrees and intervals before an author can arrive at what they call the language of the king. This mode of writing cannot be well understood without looking upon the letters; but when understood, it appears easy and flowing. Each thought is generally expressed in four or fix characters: nothing occurs that can offend the nicest ear; and the variety of the accents with which it is pronounced produces a foft and harmonious

> The difference between the king and their other books confifts in the difference of the fubjects upon which they are written. Those of the former are always grand and fublime, and of course the style is noble and elevated: those of the latter approach nearer to the common affairs and events of life, and are of consequence detailed in the Mandarin tongue. In writing on fublime fubjects no punctuations are used. As these compositions are intended for the learned only, the author leaves to the reader to determine where the fense is complete;

and those who are well skilled in the language readily Chinese Language.

The copiousness of the Chinese language is in a great measure owing to the multitude of its characters. It is likewise occasioned, in some degree, by the difference of their fignification, as also by the artificial method of their conjunction, which is performed most commonly by uniting them two and two, frequently three and three, and fometimes four and four.

Their books are very numerous and bulky, and of Their course exceedingly cumbrous. A dictionary of their books nulanguage was compiled in the 18th century. It con-merous and fifted of 95 large volumes. An appendix was annexed of 25 volumes. Their other books are voluminous in proportion. The Chinese, one may say, are a nation of learned men. Few people of rank neglect the belles lettres; for ignorance in a man of any degree of eminence is deemed an indelible stain on his cha-

For their manner of writing, the implements with which they write, and the materials upon which they draw their characters, we must refer our readers to the article WRITING. It would, we believe, afford our readers some pleasure, could we discover and explain the reasons which have hitherto prevented the Chinese from adopting the letters employed from time immemorial by the other nations of Europe and Asia.

The Chinese have ever looked upon themselves as Obstacles greatly superior to the rest of mankind. In ancient to their times they entertained fuch contemptible notions of fo-improvereigners, that they fcorned to have any further commerce ment in fcience and with them than to receive their homage. They were literature. indeed, at a very early period, highly revered by the Indians, Persians, and Tartars. In consequence of this veneration, they looked upon themselves as the favourites of heaven. They imagined they were fituated in the middle of the earth, in a kind of paradife, in order to give laws to the rest of mankind. Other men they looked upon with contempt and disdain, and deemed them deformed in body and defective in mind, cast out into the remote corners of the world as the drofs and refuse of nature. They boasted that themselves only had received from God rational fouls and beautiful bodies, in order to qualify them for being fovereigns of the species.

Such are the fentiments of the Chinese; and with fuch fentiments it is by no means furprifing that their improvements in language, in writing, and other appendages of the belles lettres, have not been proportioned to their progress in mechanics. When people are once fully perfuaded that they have already arrived at the fummit of perfection, it is natural for them to fit down contented, and folace themselves with the idea of their own superior attainments. The Chinese had early entertained an exalted opinion of their own superiority to the rest of mankind; and therefore imagined that they had already carried their inventions to the ne plus ultra of perfection; the confequence was, that they could make no exertions to carry them higher.

The Chinese, for the space of 3000 years, had almost no intercourse with the rest of mankind. This was the consequence of their infulated situation .- They, of course, compared themselves with themselves; and finding that they excelled all their barbarian fleigh-

Chinese bours, they readily entertained an opinion that they Language excelled all the rest of mankind in an equal proportion. This conceit at once stifled the emotions of ambition, and deprived them of all opportunities of learning what was going forward in other parts of the

They despifed every other nation. People are little disposed to imitate those whom they despise; and this perhaps may be one reason why they are at this day so averse from adopting the European inven-

A superstitious attachment to the customs of the ancients, is the general character of the Afiatic nations. This is evidently a kind of diacritical feature among the Chinese. The institutions of Fohi are looked up to among them with equal veneration as those of Thoth were among the Egyptians. Among the latter, there was a law which made it capital to introduce any innovation into the music, painting, or statuary art, instituted by that legislator. We hear of no such law among the former; but custom established, and that invariably, for a space of 3000 years, might operate as forcibly among them as a positive law did among the people first mentioned. An attachment to ancient customs is often more powerful and more coercive than any law that can be promulgated and enforced by mere human authority. These reasons, we think, may be assigned as the impediments to the progress of the Chinese in the belles lettres, and perhaps in the cultivation of the other

Though the language of the Chinese is confessedly different from all the other known languages in its character and construction, it contains, however, a great number of words evidently of the same origin with those which occur in other dialects, used by people, who, according to the natural course of things, could never have been connected with that remote country. A few of those we shall produce before we conclude this fection. We shall begin with the import of the name

China, or, as the orientals write it, Sin, is perhaps the Latin finus, " the bosom, the heart, the middle." The Chinese actually imagine that their country is fituated in the very middle of the earth, and of confequence call it Cham, " the middle, the heart;" a denomination which exactly fuits their opinion.

Tu, in Chinese, intimates every thing that falls under the cognizance of the fenses, every thing that strikes the fight; in Latin, tuecr.

Ta, a table, a plank, a figure that renders every thing fensible: 2. To see, to look upon, to appear; Greek ταν τανω, whence τεινω, tendo.

Tue, to examine attentively, to inspect carefully. Tui, the most apparent, chief, principal, first; 2. Lightning, thunder.

Teu, a fign by which to know one, letter of acknowledgment. All these ideas are contained in the Hebrew 17, thu, fignum, which we believe has produced the Egyptian theuth, the god or godlike man who invented letters, geometry, music, astronomy, &c.

Tai, a dye, a theatre; Greek of old Oeaa, then Oeaau, "to fee, to look."

Tam, Latin tantum, " fo much."

Tan, land, country, region, a fyllable annexed to the Vol. XVI. Part I.

end of a great number of words. Aqui tan, Aquitania, Chinere "a land of water;" Mauri tan, Mauritania, "the land of the Moors." The orientals prefix s, whence Farsi flan, Farfislan, " the land or country of the Persians:" Chust stan, Chuststan, "the country of Chuz;" Turque stan, Turquestan, "the land of the Turks."

Ti, a chief, an emperor, a title of dignity; whence the Greek TIW " to honour;" hence, too, the word di " bright, glorious;" whence Ais " Jupiter, " Aios " divine;" the Latin Dius, now Deus, "God," and Divus, with the digamma Æolicum inserted; the Celtic Dhia, &c. It fignified originally "bright, glorious," and was an epithet of the Sun.

Tum, Latin tumco, " to swell."

Liven, "to love;" Hebrew 25, leb, "the heart;" Latin, libet. This word pervades all the dialects of the the Gothic tongue, still retaining either the same of a nearly analogous fignification.

Li, "letters;" Latin, lino, "to daub," as the Chi-

nese actually do in forming their letters.

Lo, " to contain, that which contains;" Celtic, log; French, loge, logis, loger.

Lim, " a rule;" hence Latin, linea, " a line."

Su, "with;" Greek, our, "with;" Celtic, cyn, cym; whence Latin, cum, con, &c.

Xim, " very high, elevated, facred, perfect;" Latin, eximius.

Sin, "the heart;" Perfian, Sin, "the heart."

Sien, " chief, first;" Celtic, can, cean, fan, " the head;" metaphorically, the chief, the first, the principal; Thibet, fen, or ken, " great, elevated;" Arabic, fame, " to be elevated or raised."

Sim, or Sing, " a constellation, a star, an element;" Hebrew, shem: Greek, oquew, oqua; Latin, signum.

Sie, " a man of learning;" Goth. Sax. Engl. " see; to fee, feer."

Cem, " a priest :" Hebr. cohen; Syr. con; Egypt. can, cun.

Quin, " a king; Celtic, ken, kend, " head, chief;" Gothic, koanig; Germ. Flem. Eng. king, also queen.

Hu, "a door; Goth. Germ. Engl. hus, hausen, house.

Min, "a river;" Welch, men, "the water of a river;" Latin, mano, " to flow," and perhaps amoenus, " pleafant."

Hen, " hatred;" Greek, acros, " cruel, horrible, odi-

Kiven, "a dog;" Greek κυων, id. Ven, "beauty;" Latin, Venus, venustas; Iceland. Swed. wen, " pleasant;" Scotch, winsome.

Han, "the foul, breath;" Greek, avenos; Latin, anima, animus.

To these instances of the analogy between the Chinese language and those of the other people of Asia and Europe many more might be added; but the preceding, it is hoped, will ferve as a specimen, which is all that can be expected from an inquiry of the nature of the present.

SECT. VII. Of the Greek Language.

BEFORE we enter upon the confideration of the ef-Origin of fential and constituent parts of this noble language, we the Greeks. must beg leave to settle a few preliminaries, which, we

Chinese words found in various other languages.,

trust, will serve to throw some light upon many points Language, which may come under confideration in the course of

the following disquisition.

The Greeks, according to the most authentic accounts, were descended of Javan or Jon, the fourth ion of Japhet, the eldest son of the patriarch Noah. The Scriptures of old, and all the orientals to this day, call the Greeks Jonim, or Jaunam, or Javenoth. We have already observed, in the beginning of the article concerning the Hebrew language, that only a few of the descendants of Ham, and the most prosligate of the posterity of Shem and Japhet, were concerned in building the tower of Babel. We shall not now refume the arguments then collected in support of that position; but proceed to investigate the character of that branch of the posterity of Javan which inhabited Greece and the neighbouring regions.

At what period the colonists arrived in these parts cannot be certainly determined; nor is it of great importance in the question before us. That they carried along with them into their new fettlements the language of Noah and his family, is, we think, a point that cannot be controverted. We have endeavoured to prove that the Hebrew, or at least one or other of its fisterdialects, was the primæval language of mankind. The Hebrew, then, or one of its cognate branches, was the

original dialect of the Jonim or Greeks.

Be that as it may, before these people make their appearance in profane history, their language deviates very widely from this original archetype. By what means, at what period, and in what length of time this change was introduced, is, we believe, a matter not easy to be elucidated. That it was progressive, is abundantly certain both from the rules of analogy and

The colonies, which traverfed a large tract of country before they arrived at their destined settlements, must have struggled with numberless difficulties in the course of their peregrinations. The earth, during the period which immediately succeeded the universal deluge, must have been covered with forests, intersected with fwamps, lakes, rivers, and numberless other impediments. As the necessaries, and a few of the conveniences of life, will always engross the first cares of mankind, the procuring of these comforts will, of necessity, exclude all concern about arts and sciences which are unconnected with these pursuits. we think it probable, that most of those colonies which migrated to a very great distance from the plains of Shinar, which we believe to have been the original feat of mankind, in a great measure neglected the practice of the polite but unnecessary modes of civilization which their ancestors were acquainted with, and practised before the era of their migration. Certain it is, that those nations which continued to reside in the neighbourhood of that centre of civilization, always appear in a cultivated state; while, at the same time, the colonists who removed to a considerable distance appear to have funk into barbarism, at a period more early than the annals of profane history can reach .- This appears to have been the fituation of the primary inhabitants of

Greece. Their own historians, the most partial to their Greek own countrymen that can well be imagined, exhibit a Language. very unpromising picture of their earliest progenitors. Diodorus Siculus, in delineating the character of the original men, we believe sketches his draught from the first inhabitants of Greece *. He represents them as * Lib. i. absolute savages, going out in small parties to make war upon the wild beafts of the field, which (according to him) kept them in continual alarm. "Necessity obliged them to band together for their mutual fecurity; they had not fagacity enough to distinguish between the wholesome and poisonous vegetables; nor had they skill enough to lay up and preserve the fruits of autumn for their subsistence during the winter." The scholiast on Pindar describes the situation of the inhabitants of Peloponnesus in the following manner +. " Now + Python. fome have affirmed that the nymphs, who officiated in Ode 4. performing the facred rites, were called Melissa. Of these Mnaseas of Patara gives the following account. They prevailed upon men to relinquish the abominable practice of eating raw flesh torn from living animals, and persuaded them to use the fruits of trees for food .-Meliffa, one of them, having discovered bee-hives, ate Progress of of the honey-combs, mingled the honey with water lization. for drink, and taught the other nymphs to use the fame beverage. She called bees Medicous Melissa, from her own name, and bestowed much care on the management of them.

"These things (says he) happened in Peloponnesus; nor is the temple of Ceres honoured without nymphs, because they first pointed out the mode of living on the fruits of the earth, and put an end to the barbarous practice of feeding on human flesh. The same ladies, too, from a fense of decency, invented garments made of

the bark of trees."

Hecatæus the Milefian, treating of the Peloponnesians, affirms*, "that before the arrival of the Hellenes, * Strabo, a race of barbarians inhabited that region; and that al-lib. vii. most all Greece was, in ancient times, inhabited by barbarians +. In the earliest times (fays Pausanias) (0) + Id. lib. i. barbarians inhabited most part of the country called Hellas." The original Greeks, if we may believe an author of deep research and superior ingenuity t, were t Plin. Nat. strangers to all the most useful inventions of life. Even Hift. the use of fire was unknown till it was found out and communicated by Prometheus, who is thought to have been one of the first civilizers of mankind. Hence Æschylus §, introduces Prometheus commemorating the § Promethe benefits which he had conferred upon mankind by his verse 441. inventions, in a strain that indicates the uncultivated state of the world prior to the age in which he flourish-For the entertainment of our readers, we shall translate as much of that passage as suits our present pur-

-" Of the human race Now hear the tale, how foolish erst they were: I taught them thought and exercise of reason; If aught they faw before, they faw in vain. Hearing, they heard not; all was shapeless dreams For a long space of time, at random mixt In

727 who were long a barneople.

(o) The Greeks borrowed this contemptuous epithet from the Egyptians. See Herod. lib. ii. cap. 158.

Greek Language.

Plato.

† Pausan.

lib. viii.

C. I.

In wild confusion: for they neither knew Tile-cover'd houses standing in the sun, Nor timber work; but, like the earth-bred ant, They lodg'd in funless caves dug under ground: No certain fign had they of winter cold, Nor of the flow'ry fpring, or fummer store, But blindly manag'd all; till I them taught What time the stars appear, what time they set, Hard to be scan'd: then arithmetic rare, That queen of arts, by dint of patient thought Descry'd, I taught them; and how vocal founds From letters join'd arose."

This character, though applied to mankind in general, was in reality that of the most ancient Greeks. These forbidding features had been transmitted to the poet by tradition as those of his ancestors: he was a Greek, and of consequence imputes them to all mankind without distinction.

Phoroneus, the fon and fuccessor of Inachus *, is faid to have civilized the Argives, and to have taught them the use of some new inventions. This circumstance raised his character so high among the savage aborigines of the country, that succeeding ages + deemed him the first of men. Pelasgus obtained the like character, because he taught the Arcadians to live upon the fruit of the fagus, to build sheds to shelter them from the cold, and to make garments of the skins of swine.

But what clearly demonstrates the unpolished character of the most ancient Greeks is, the extravagant honours lavished by them upon the inventors of uleful and ingenious arts. Most of these were advanced to divine honours, and became the objects of religious worship to succeeding generations. The family of the Titans affords a most striking instance of this species of adulation. Jupiter, Juno, Mars, Apollo, Venus, Diana, &c. were sprung of this family. By the useful inventions which these personages communicated to the uncultivated nations of Greece, they obtained fuch lasting and fuch extravagant honours, that they juftled out the fidereal divinities of the country, and possessed their high rank as long as Paganism prevailed in those regions. To these testimonies of the savagism of the original Greeks, others almost without number might be added; but those adduced in the preceding part of this inquiry will, we hope, fatisfy every candid reader as to the truth of the position advanced.

While matters were in this fituation with respect to the primitive Jonim or Greeks, a new colony arrived in those parts, which in a few years considerably changed the face of affairs. The people who composed this colony Greece cal-were called Pelasgi; concerning whose origin, country, led Pelasgi. character, and adventures, much has been written, and many different opinions exhibited by the learned. It is not our province to enter into a detail of their arguments and fystems; we shall only inform our readers, that the general opinion is, that they were natives either of Egypt or Phœnicia. We have feen a differtation in manuscript upon this subject, from which we are allowed to extract the following particulars.

The author, we think, has proved by very plaufible arguments, that these people could not be descendants of the Egyptians nor Phænicians. He maintains, that the Pelasgi were a great and numerous tribe; that they overspread all the coast of Asia Minor from Mount My-

cale to Troas; that they were masters at one time of all Greek the Afiatic and Grecian islands; that they overran Language Greece and many of the neighbouring countries; and all this in less than half a century.—These facts he seems to have proved from Homer, Herodotus, Diodorus Siculus, Pausanias, and other Greek authors of approved authenticity. He shows, that they were a civilized generation; that they were well acquainted with military affairs, legislation, agriculture, navigation, architecture, letters, &c. He infifts, that Phœnicia could not at any given period have furnished such a numerous body of emigrants, even supposing the whole nation had emigrated, and left their native country a defert. He believes that this event took place before the invalion of Canaan by the Ifraelites; that confequently the Pelafgic migration was not occasioned by that catastrophe. He has shown, we think by very probable arguments, that the Egyptians in the earliest ages were averse to foreign expeditions, especially by sea; because that people hated this element, and besides could be under no temptation to emigrate: add to this, they were accustomed to live on small matters, and their country was exceedingly fertile and eafily cultivated. It appears (fays he) from Herodotus, that the Pelasgi were not acquainted with the religion of the Zabians, which could not have been the case had they emigrated from either of these countries. He makes it appear, at least to our satisfaction, that Herodotus is mistaken when he supposes that the deities of Greece were derived from Egypt. He demonstrates, that the names of the greatest part of those deities are of Phoenician extraction; and this opinion he establishes by a very plaufible etymological deduction. He afferts, that had the Pelasgi been natives of either of the countries above-mentioned, it would be abfurd to suppose them ignorant of the names and religious rites of their respective nations. He finds, that the Egyptian and Phoenician colonies, which afterwards settled in Greece, were enemies to the Pelasgi, and either subdued or expelled them the country, which, he imagines, would fcarce have been the case had both parties sprung from the same ancestors. After settling these points, he concludes, that the people in question were the progeny of the Arabian shepherds, who, at a very early period, invaded and subdued both the Lower and Upper Egypt. After poffeffing that country about a century and a half, they were conquered by Amenophis king of the Upper Egypt, who drove them out of the country. Upon this the fugitives retired to Palestine, where Manetho the Egyptian historian loses fight of them, and either through malice or ignorance confounds them with the Ifraelites. This writer supposes that those fugitives gradually directed their course for the west and north-west coasts of Asia Minor, whence they conveyed themselves over to Greece.

Such are the arguments by which the author of the differtation above-mentioned supports his hypothesis. It is, for aught we know, altogether new, and to us it appears by no means improbable. If our curious readers should wish to know more of this subject, they may confult Gebelin's preliminary Discourse to his Greek Dictionary, Lord Monboddo's inquiry into the Origin and Progress of Language, vol. i. towards the end, and Mr Bryant's Analysis of Ancient Mythology, pass.

Be this as it may, nothing is more certain than that the Pelasgi were the first people who in some degree civilized the favages of ancient Greece. It is not our Tt2

A new colony ar-

* Lib. i.

ap. 59.

Greek bufiness at present to enumerate the many useful inventions which they communicated to the Greeks, at that time worse than barbarians. We deem it, however, abfolutely necessary, as an introduction to our subject, to hazard a few conjectures on the language and letters of those adventurers; a point strictly connected with the subject soon to fail under consideration.

Whether we suppose the Pelasgi to have been the offfpring of the Phœnicians, Egyptians, or Arabian shepherds, it will make little difference as to their language; every man of learning and refearch is convinced that those three nations, especially at that early period, spoke a dialect of the Hebrew. The Pelafgi, then, must have fpoken a dialect of that language when they arrived in Greece. Perhaps it might have undergone several changes, and acquired some new modifications, during so many years as had passed since they began to be a separate nation, and in the course of so many peregrinations. Some monuments of theirs still extant prove this fact beyond all contradiction. As these people incorporated with the aborigines of Greece, the remains of the original language of mankind, or at least so much of it as had been retained by them, gradually coalesced with that of the new fettlers. From this, we think, it is obvious, that prior to the arrival of the new colonists from the East, the language now current among the two united tribes must have been a dialect of the Phœnician, Arabian, Hebrew, &c. Be that as it may, Herodotus * affirms that the Pelasgi in his time spoke a barbarous language, quite unintelligible to the modern

The reason of this difference between the language of the Hellenes or Greeks in the age of Herodotus, and that of the remains of the Pelasgi at that period, feems to be this: Prior to the time of that historian, the Greek language had, from time to time, undergone many changes, and received vast improvements; whereas, on the contrary, that of the remnant of the Pelafgi, who were now reduced to a very low state, had remained stationary, and was then just in the same predicament in which it had been perhaps a century after their arrival in the country.

As the Pelasgi, as was observed above, were a people highly civilized and well instructed in the various arts at that time known in the eastern world, they were skilled in agriculture, architecture, music, &e. (P): The prefumption then is that they could not be unacquainted with alphabetical writing. This most useful art was well known in the countries from which they emigrated; and of course it is impossible to imagine that they did not export this art as well as the others above-mentioned. Diodorus Siculus imagines that + the Pelasgi knew not the use of alphabetical letters, but that they received them from Cadmus and his Phœnician followers; that those letters were afterwards ealled Pelafgre, because the Pelasgi were the first people of Greece who adopted them. This account must go to the score of national vanity, fince very foon after he acknowledges * that Linus wrote the exploits of the first Bac-

chus and several other romantic fables in Pelasgie eha- Greek racters; and that Orpheus, and Pronapides the mafter Language. of Homer, employed the fame kind of letters. Zeno-bius likewife informs us + that Cadmus flew Linus for Apud Dr teaching characters differing from his. These letters Sharp's could be none other than the Pelafgie !.

Paufanias, in his Attics, relates |, that he himfelf faw Greek Lanan infcription upon the tomb of Coræbus, who lived at guage. the time when Crotopus, who was contemporary with XVI. Deucalion, was king of the Argives. This infeription | Lib. i. then was prior to the arrival of Cadmus; and confe-cap 49. quently letters were known in Greece before they were introduced by this chief. It likewise appears from Herodotus himfelf, that the Ionians were in possession of alphabetical characters before the coming of the Phænicians. " For (fays he) & the Ionians having received & Lib. i. letters from the Phoenicians, changing the figure and c. 58.] found of some of them, ranged them with their own, and in this manner continued to use them afterwards." If, then, the Ionians (Q) ranged the Phænician characters with their own, it is obvious that they had alphabetical eharacters of their own.

Besides these historical proofs of the existence of Pelasgic characters, monuments bearing inscriptions in the fame letters have been discovered in several parts of Greece and Italy, which place this point beyond the reach of controverfy. What characters these were may be easily determined. As the Pelasgi emigrated from Arabia, the prefumption is that their letters were Phonician. They are faid by Dr Swinton to have been 13 in number, whereas the Phænician alphabet confifts of 16. The three additional letters were probably invented by the latter people after the Pelasgi had left the eastern quarters. The Phoenician letters imported by the Pelasgi were, no doubt, of a coarse and clumsy contexture, unfavourable to expedition in writing, and unpleafant to the fight. Befides, the Phœnician characters had not as yet received their names; and accordingly the Romans, who derived their letters from the Areadian Pelasgi *, had no names for theirs. The probabi- * Livii lity is, that prior to this era the Pelasgic letters had not lib.i. c. 7. been distinguished by names. There were of course no other than the original letters of the Phænicians in their Plate XV. first uncouth and irregular form: and for this reason they eafily gave way to the Cadmean, which were more beautiful, more regular, and better adapted to expedi-

Hitherto we have feen the Pelafgi and the Ionim incorporated, living under the fame laws, speaking the fame language, and ufing the fame letters. But another nation, and one too of vast extent and populousness, had at an early period taken possession of a considerable part of the country afterwards diftinguished by the name of Hellas or Greece. The Thracians were a great and mighty nation; inferior to none except the Indians +, + Herod. fays the father of Grecian history. These people at a lib. v. c. 3. very early period, had extended their quarters over all The Thrathe northern parts of that country. They were, in an-cians a cient times, a learned and polished nation. From them, powerful in nation at a very early period.

t Lib. iii.

* Ibid.

⁽P) The Arcadians, who were a Pelasgic tribe, were highly celebrated for their skill in music. They introduced this art into Italy. See Dion. Halicar. lib. i.

⁽Q) The Athenians were originally called Ionians.

Greek in succeeding ages, the Greeks learned many useful and Language ornamental sciences. Orpheus (R) the musician, the legislator, the poet, the philosopher, and the divine, is known to have been of Thracian extraction. Thamyris and Linus were his disciples, and highly respected among the Greeks for their learning and ingenuity. That these people spoke the same language with the Greeks, is abundantly evident from the connection between them and these Thracian bards. The Thracian language, then, whatever it was, contributed in a great proportion towards forming that of the Greeks. From the remains of the Thracian dialect there appears to have been a very firong refemblance between it and the Chaldean. This position we could readily support by the most plaufible etymological deduction, did the limits preferibed us in this article admit fuch an inquiry. It appears, how-* Strabo, ever, that the * Thracians, Getæ, and Daci or Davi, lib. i. & vii. spoke nearly the same language. The Goths, so much celebrated in the annals of the lower empire, were the defeendants of the Getæ and Daci, and confequently retained the dialect of their ancestors. The reader, therefore, must not be furprised, if in tracing the materials of which the Greek language is composed, we should fometimes have recourse to the remains of the

We have now found out three branches of the Greek language; that of the Ionim or Aborigines, that of the Pelasgic tribe, and that of the Thracians. These three, of three dif- we imagine, were only different dialects of the very fame original tongue. This affertion we could readily prove by the comparison of a great number of words taken from the two last, were this a proper place for such a

Arrival of Greece.

Some centuries after the arrival of the Pelasgi, Cadmus, an Egyptian (s) by birth, and a fojourner in Phoecicia, arrived in Bœotia with a multitude of followers. This colony-chief and his countrymen introduced letters and feveral other useful improvements into the country in question. As these people were natives of Phœnicia and its environs, their alphabet was that of their native country, confifting of 16 letters. That the Phoenician alphabet was nearly the fame with the Samaritan and Hebrew, has been fo often and fo clearly demonstrated by the learned of this and the former century, that it would be altogether fuperfluous to infift upon it in this fhort inquiry. The Phœnicians, as is generally known, wrote from right to left, and the old Grecian characters inverted, exactly refemble the other. The names of the Cadmean characters are Syrian +,

+ Scaliger.

which shows the near resemblance between that language and the Phœnician. They fland thus: alpha, be-tha, gamla, delta, &c. The Syrians used to add a The letters to the Hebrew vocables; hence alph becomes alpha, introduced beth, betha or beta, &c. In the Cadmean alphabet we find the vowel letters, which is an infallible proof by him. that this was the practice of the Phœnicians in the age of Cadmus; and this very circumstance furnishes a presumption that the Jews did the same at the

fame period.

After all, it is evident that the oldest Greek letters, Greek Language. which are written from right to left, differ very little from those of the Pelasgi. The four double letters 0, 0, 2, are faid to have been added by Palamedes about 20 years before the war of Troy. Simonides is generally supposed to have added the letters &, a, \(\psi\), though it appears by fome ancient inscriptions that some of these letters were used before the days of Palamedes and Simonides.

In the year of our Lord 1456 feven brazen tables were discovered at Engubium, a city of Umbria in the Apennines, of which five were written in Pelafgic or Etruscan characters and two in Latin. The first of these tables is thought to have been composed about 168 years after the taking of Troy, or 1206 years before Christ. old Ionic characters, the curious have been enabled to

discover the resemblance.

The old Ionic character wrote from right to left con-The old tinued in general use for several centuries: It was com-Ionic chaposed of the Cadmean and Pelasgic characters, with some racter. variations of form, polition, and found. The Athenians continued to use this character till the year of Rome 350. The old Ionic was gradually improved into the new, and this quickly became the reigning mode. After the old Ionic was laid afide, the * (Bevergeopador) Builtro-* Paufon, phodon came into custom, which goes backwards and lib vii. forwards as the ox does with the plough. They carried cap. 17. the line forward from the left, and then back to the right. The words were all placed close together, and few fmall letters were used before the fourth century. If our curious readers would wish to know more of letters and alphabets, we must remit them to Chishul, Morton, Postellus, the great Montfaucon, Gebelin, Astle, &c. For our part we are chiefly concerned at prefent with the Phœnician and Cadmean fystems; and on these perhaps we may have dwelt too long. Having now, we The Greek perhaps we may have diver to long.

The perhaps we may have diverted that the Greek alphabet was alphabet derived from the Phenician, in order to convince our from the curious but illiterate readers of the certainty of our Phenician. position, as it were by ocular demonstration, we shall annex a scheme of both alphabets, to which we shall fubioin fome strictures upon fuch letters of the Greek alphabet as admit any ambiguity in their nature and application.

A, alpha, had two founds, the one broad like a in the English word all; the other slender, as e in end, fpend, defend. The Hebrews certainly used it so, because they had no other letter to express that found; the Arabs actually call the first letter of their alphabet elif; and they as well as the Phœnicians employ that letter to express both the found of A and E promiscuously. The Greeks call their letter E s- Vixon, that is, E flender, which feems to have been introduced to fupply the

place of A flender.

H, eta, was originally the mark of the spiritus asper, and no doubt answered to the Hebrew . It is still retained in that capacity in the word Hexarov, and in words with the spiritus asper beginning books, chapters, sec-

⁽R) Orpheus feems to be compounded of two oriental words, or "light," and phi " the mouth." Though fome deduce it from the Arabian arif a learned man." (s) Joseph Scaliger's account of the origin of the Ionic letters. Eufeb. Chron.

tions, &c. E originally marked both the found of Language. Ethor and HTZ; that is, it was fometimes founded short as at present, and sometimes long, where it is now supplied by H. As it was found convenient to distinguish these two different quantities of sound by different letters, they adopted H, the former spiritus asper, to denote the long found of E, and substituted the present Spiritus asper ['] in its place.

I, iota, is the Hebrew or Phænician jod or yod. We imagine it originally ferved the purpose of both iota and ypfilon. It had two different founds; the one broad and full, the other weak and flender. The latter had the found of the modern ofiner. That this was actually the case, appears in several monumental inscriptions: And upon this depends the variation of some cases of the demonstrative pronoun and of the second de-

O, omicron, or fmall o, in the original Greek had three different founds. It founded o fhort, as at prefent; and likewise o long, now denoted by Ω or large O. It likewise marked the sound of the improper diphthong ov, founded like the English diphthong oo. The Ω was taken from the Phœnician wau or V.

Y, ypsilon, we have observed before, was adopted to supply a mark for the found of I slender.

Z, zeta, is compounded of ds. Dion. Halic. however, informs us, that this letter should be pronounced σδ, according to the Doric plan.

O, theta, was not known in the old Greek. It is compounded of \(\tau \) and the spiritus asper, both which were of old written feparately thus TH.

Ξ, xi, is compounded of γς, κς, χς. These letters, too, were originally written feparately.

 Φ , phi. This letter is compounded of β , π , and the Spiritus asper; thus BH, PH.

x, chi, like the foregoing, is compounded of y, x, and the spiritus asper as above.

4, ph, like some of the rest, is made up of Bs, Ts, which, too, were originally written in feparate charac-

These observations are thrown together purely for the use of students who may not choose to inquire into the minutiæ. We are forry that the nature of the work will not permit us to extend our refearches to greater length. The reader will find an ancient inscription on Plate CCCCXVI. in which the powers of the letters are exemplified as they were in the first stage of the Greek language. Every language, we believe, was originally composed of inflexible words; the variations which now diffinguish nouns and verbs were the effects of progreffive improvements. What might have been the state of the Greek language with respect to these variations in its original form, it is not now possible to discover. That it was rude and irregular, will not, we imagine, be controverted. One of the first attempts towards forming the variations, now denominated declenfions and conjugations, would probably be made upon the demonstrative article and the substantive verb. This observation will be found to hold good in most polished languages. In the Greek tongue, this was evidently the method.

Origin and flexion of

The original Greek article was imported from the east. It was the Hebrew or Phoenician in ha. This parthe article. ticle fometimes fignifies one, and fometimes it answers to our demonstrative the; both in its adverbial and demonstrative capacity it imports demonstration. In the ear- Greek liest stages of the two oriental languages, it was proba-Language. bly written apart, as ha-melech "the king." In process of time it came to be joined with the following word, as Hammelech. From this we think the Greek article was deduced. It is still retained in the Doric dialect in its pristine character. The difference between ho and ha in the eastern language is nothing. Here then we have the articles o masculine and a feminine. Upon these several changes were superinduced, in order to render them more useful for the purposes of language. For those changes we know of no arche-

The Greeks then having adopted the Hebrew, or Phoenician, or Chaldean article ha, and changed it into ho for the masculine, seem to have arranged its varia-

tions in the following manner:

Sing.	Plu.
Nom. 6	os.
Gen. iv	ών
Dat. i.	015
Acc. or	609

In the earliest stages of the Greek language, and vits use in were founded in the fame manner, or nearly fo, as was the flexion observed above. The accusative was at first like the no-of nouns of minative; for distinction's sake it was made to terminate the sirst in , which letter was likewise adopted to characterize declensions. the genitive plural; 5 was annexed to the dative plural, to distinguish it from the dative singular. The radical

word was still without inflexion. When the article was inflected in this manner, the process stood as follows: we take 2000s for an ex-

	Sing.	Plu.
	¿ Noy Speech	is day speeches
	ou day of speech	we day of speeches
Dat.	is Loy to Speech	is Loy to Speeches
Acc.	or how speech	oue now speeches

In this arrangement our readers will observe, that in the time under confideration, w was not yet introduced; and therefore ourger or little o was the same letter in the genitive plural as in the accufative fingular; but in the latter case it was sounded long by way of distinc-

The article ha, which is still retained in the Doric dialect, was varied as follows:

Sing.	Plu.
Nom. à	å
Gen. as	ws
Dat. as	üis
Acc. av	ice

These variations differ a little from those of the masculine; and they were no doubt made for the fake of distinction, as is usual in such cases. We shall now give an example of the feminine as it must have slood before variations were introduced. We shall employ

Sing.		Plu.	
Nom. à Tipe /		às tipe honours	
Gen. às Tipe	of honour	we ripe of honours	
Dat. de ripe	to honour	ais tipe to honours	
Acc. as Tipe	honour	as the honours	
·		Afterwards	5

Afterwards, when the Chaldean article da was adopt-Language. ed for the neuter gender, the letter 7 or d was changed into r, and prefixed to it; and then the Greeks, who, in their declenfion of adjectives, always followed the neuter gender, began to prefix it to the oblique

> In this manner we think the Greek nouns stood originally; the only change being made upon the article. At length, instead of prefixing that word, and expresfing it by itself, they found it convenient to affix a fragment of it to the noun, and fo to pronounce both with more expedition. Thus is-day, e. g. became day-is, iv Doy became Doy-ou, and of course Doyos and Doyou, &c. The foiritus asper, or rough breathing, was thrown away, in order to facilitate the coalition. Nouns of the neuter gender, as was necessary, were distinguished by using , instead of s. In Oriental words the Greeks often change ; into v, and vice versa.

> In this case the Greeks seem to have copied from an eastern archetype. In Hebrew we find an arrangement exactly fimilar. To supply the place of the pronouns possessive, they affix fragments of the personals: Thus, they write ben-i, "my son," instead of ben-ani, and debir-nu, "our words," instead of debir-anu, &c. The persons of their verbs are formed in the same manner. In this way, in our opinion, the variations of the first

and fecond declenfions were produced.

After that a confiderable number of their nouns were of the third arranged under these two classes, there remained an almost infinite number of others which could not conveniently be brought into these arrangements; because their terminations did not readily coalesce with the articles above mentioned. These, like nouns of the neuter gender, were in a manner secluded from the society of the two other classifications. It is probable that these for a long time continued indeclinable. At last, however, an effort was made to reduce them into a class as well as the others. All these excluded nouns originally terminated with 5, which appears from their genitives as they stand at present. By observing this case, we are readily conducted to the termination of the pristine vocable. The genitive always ends in 05, which ending is formed by inferting o between the radical word and s. By throwing out o we have the ancient nominative: Thus, Tirar, genitive Tiraros; taking out o we have Tiτανς, the original inflexible termination. Λητω, genitive Λητοος; throw out a and you have Λητος. Παλλως, genitive Hallados; take away o and there remains ** xxlads. Ogus, genitive Ogustos; by throwing out o we have Ogvids. Αναξ. genitive Ανακτος, Ανακτς. Κρατος, genitive Keuters, Keutes; originally Keutes, because originally & had the found of a, as was observed above. Meal, genitive Μελιτος, Μελιτς. Ειδος, genitive Ειδεος, Ειδες, the old noun. In short, the genitive is always formed by inferting a immediately before s, which is always the termination of the nominative; and by this rule, we eafily discover the noun such as it was in its original

The dative of this declension was closed with a ascriptum; the same with that of the second, namely, s subfcriptum. The accusative commonly terminates with a; but was originally ended with v. The Romans imitated the Æolian dialect, and they commonly ended it with em or im. The Greeks, perhaps, in this imitated their progenitors, for a was their favourite vowel. The no-

minative plural ended in &, which nearly resembles the English plural, and was possibly borrowed from the Language. Thracians. The genitive plural in all the declenfions ends in w; the dative ends in or, the o being inferted to distinguish it from the dative singular. When a strong confonant, which would not eafily coalesce with s, comes immediately before it, that confonant is thrown out to avoid a harsh or difficult found. The sum then is; the cases of nouns of the first and second declensions confist of the radical word with fragments of the articles annexed, and these were the first classifications of nouns. The other nouns were left out for some time, and might be denominated neuters; at length they too were claffified, and their variations formed as above. In this process the Greeks deviated from the oriental plan; for these people always declined their nouns by particles prefixed. Whether the Greeks were gainers by this new process, we will not pretend positively to determine. We are, however, inclined to imagine that they loft as much in perspicuity as they gained by variety.

It is generally believed that the Greeks have no Greek at-

ablative; to this opinion, however, we cannot affent. lative. It is true, that the dative, and what we would call the ablative, are always the fame: yet we think there is no more reason to believe that the latter is wanting in Greek, than that the ablative plural is wanting in Latin, because in that language both these cases are al-

ways alike.

In the eastern languages there are only two genders, analogous to the established order of nature, where all animals are either male or female. But as the people of the east are, to this day, strongly addicted to personisication, they ranged all objects of which they had occafion to speak, whether animate or inanimate, under one or other of these two classes. Hence arose what is now called the masculine and feminine genders. The orientals knew nothing of a neuter gender, because, indeed, all objects were comprehended under the foregoing clasfes. The Phoenician feminine was formed from the mafculine, by adding את, ah. In this the Greeks in many cases imitated them. The Greeks and Latins left a vast Genders. number of fubstantives, like a kind of outcasts, without reducing them to any gender; this process gave rise to the neuter gender, which imports, that such substantives were of neither gender. This has the appearance of a defect, or rather a blemish, in both. Sometimes, too, they make words neuter, which, according to the analogy of grammar, ought to be either masculine or feminine. And again, they range words under the masculine or feminine, which by the same rule ought to have been neuter. In short, the doctrine of generical distribution feems to have been very little regarded by the fabricators of both tongues. The beauty which arises from variety feems to have been their only object.

The use of the article in the Greek language is, we Farther obthink, rather indeterminate; it is often prefixed to pro-fervations per names, where there is no need of demonstration nor on the argenerical distinction. On the contrary, it is often omit-ticle. ted in cases where both the one and the other seem to require its affiftance. In fhort, in some cases it kems to be a mere expletive. Though both Lord Monboddo and Mr Harris have treated of this part of speech, neither the one nor the other has ascertained its proper ase. (See Origin and Progress of Language, vol. ii. p. 53. Hermes, p. 214. et seq.). We know not any objection

In this mode of flexion the Greeks copied from the Orientals.

139 Formation declention, Language.

Greek to the early use of articles among the Greeks so plausible as the total neglect of them among the Romans. But it ought to be confidered, that after the flexions were introduced, the use of the article was in a great measure neglected. Accordingly, Lord Monboddo observes that it is very feldom used as such by Homer, but commonly in place of the relative pronoun os, in, o .- Thus it would appear, that at the time when the Roman language was reduced to the Grecian standard, the article was not commonly used by the Greeks; and of course the Latins never employed it. There can be no doubt but the pronoun who, in the northern languages, is the same with the Greek i, and the Hebrew hua. This among the northern people is always a relative, which affords a prefumption that the Greeks originally used the article in the same manner as we do at present. The fact is, that the articles having once got into vogue, were often positively used as mere expletives to fill up a gap; and that, on the other hand, when there was no occasion for pointing out an object, it being fully determined by the tenor of the discourse, it was often omitted.

143 Adjectives. In forming adjectives, they followed the same plan that they had done with fubstantives. Their great effort was to make their adjectives agree with their fubstantives in gender, number, and case. This arrangement improved the harmony of speech; and nothing could be more natural than to make the word expressing the quality correspond with the subject to which it be-

longed.

Greek nu-

merals.

As adjectives denote qualities, and thus are susceptible of degrees, nature taught them to invent marks for expressing the difference of these degrees. qualities may exceed or fall below each other by almost numberless proportions; it was, however, found convenient to restrict these increases and decreases to two denominations. The positive is, properly speaking, no degree of comparison at all; therefore we need only point out the formation of the comparative and super-

The former is generally thought to be fabricated, by first adding the Hebrew word , excellent, to the positive, and then affixing the Greek termination os; and the latter, by affixing the Syrian word tath and the fyl-

lable os, in the fame manner. Every nation, even the most uncivilized, have early

acquired the notion of number. Numerical characters and names are the same in many different languages. These terms were discovered, and in use, long before grammar came to any perfection; and therefore remain either inflexible or irregular. The first way of computing among the Greeks was by the letters of

the alphabet; so that A fignified one and O twentyfour: in this manner the rhapsodies of Homer are numbered; and fo are the divisions of some of the Pfalms, as is generally known. But a more artificial plan of computation was obviously necessary. They divided the letters of the alphabet into decades or tens, from A to I=10. To express the number 6, they inferted \(baw=6 \); fo that by this means the first decade amounted to 10. In the next decade every letter increased by tens, and so P denoted 100. In this de-

cade they inferted 4 nonnu= 90. In the third, every letter role by 100; fo that a) ourni = 900. By inferting these three Phoenician characters they made their alphabet amount to goo. To express chiliads Grek or thousands, they began with the letters of the al- Language. phabet as before; and to make the diffinction, they placed a dot under each character, as the units, tens, hundreds, were distinguished by an acute accent over

But in monumental inscriptions, and in public inflruments, a larger and more lafting numerical character was fabricated. They began with I, and repeated that letter till they arrived at II=5. This is the first letter of merrs, five. Then they proceeded, by repeating I till they came to 10 Δ, the first letter of δικα, 10. Then they repeated Δ over and over, fo that four Δ 40. To express 50, they used this method; they inclosed Δ in the belly of $\Delta = 50$, H = 500 M = 50,000&c. Often, however, X fignifies 1000, and then we have dis Xidioi, 2000; Teis Xidioi, 3000; and so of the rest.

The word pronoun fignifies a word placed instead of Pronouns. a noun or name; and indeed the personal pronouns are really such: this needs no explication. The pronoun of the first person is one of those words which have continued invariable in all languages; and the other personals are of the same character. The relatives, possessives, demonstratives, and gentiles, are generally derived from these, as may be discerned by a very moderate adept in the language. Our readers will therefore, we hope, easily dispense with our dwelling upon this part of speech.

Verb. In most ancient languages, verbs, according Greek to the order of nature, have only three tenses or times, verbs, how namely, the past, present, and future. The intermediate tenses were the invention of more refined ages .--The Greek, in the most early periods, had no other

tenses but those above-mentioned. The manner of forming these we shall endeavour to point out, without touching upon the nature of the rest, fince an idea of them may be acquired from any common gram-

We have observed above, that the flexion of nouns of the first and second declensions are formed by annexing fragments of the articles to the radical words; and that, the variation of the tenfes was produced by joining the substantive verb, according to the same analogy. Every Greek verb was originally an inflexible biliteral, triliteral, quadriliteral or diffyllabic radix. The variations were formed a long while after in the manner above intimated.

The Greeks had their substantive or auxiliary verb, from the Phænician or Chaldean verb min, fuit. This verb, taking away the gentle aspirate from both beginning and end, actually becomes s. This vocable the Greeks brought along with them from the East, and manufactured after their own manner, which appears to

have been thus:

Pref. εω, εες, εε, εομεεν, εετε, εοσι, Cont. w, 215, 21, ouper, 2172 ovoi, Fut. 200, 20215, 2021, 200 per, &c.

We place or, in the third person plural, because for many centuries ourgor supplied the sound of the diphthong co. By thele variations it will appear that the radical verb was rendered capable of inflection. We have observed that Greek verbs were a collection of bi-

Oxemplum Tonicarum Triscarum Literarum ex columna qua in via Appia reperta postea ad hortos Farnesianos traducta est.

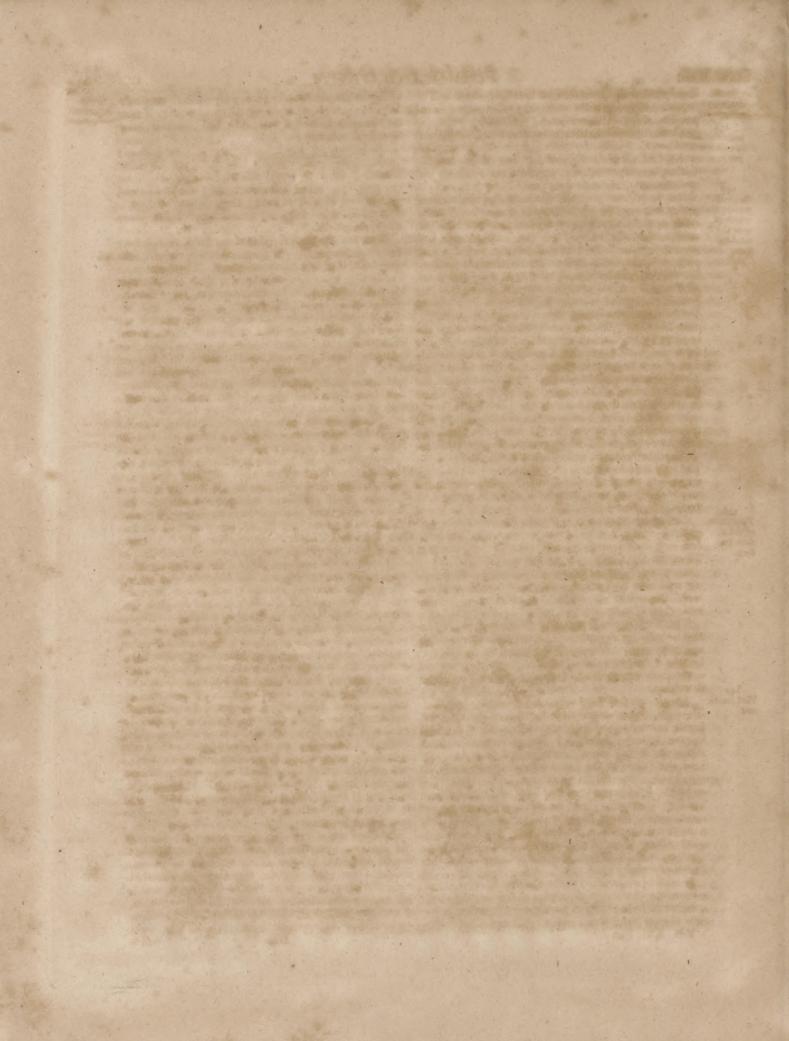
ODENI, ©EMITON. METAKINE SALEK. TO. TPIOPIO. HO
ESTLA: EPI. TO. TRITO. EN: TEL. HODOL TEL. APLALEN TOL
HERODO. AAROL. O. AAR. LOION. TOL KINESAN TI. MARTYS
D.ALMON. EN HODIA. KAL. HOL KLON'E S. DEMETROS
KALKORES. ANA ©E MA. KAL & ONION. ©EON. KAL.

Sanscrit Alphabet . Vowels .

Consonants.

क त्र म प्र ड च इ ज त ज ट ठ ड ट गा तथ दें kë kë gu ghu n criigë chi chha ja jha nya tà thà de dhe na tế t,hế để

ध्र न प फ ब भ म य र ल व पा छ स ह स जि a, he ne pa psha be bhe më yë ra të në sa sha izh kha x jinja or qya A. She ne pa psha be bhe më yë ra të në sa sha izh kha x jinja or qya



Original

which is

ture.

Greek literal, triliteral, or quadriliteral, radical words.—The Language following may ferve for examples: 11, 269, Mag, TUT, φαν, των, εωπ, Δωμε, Δηλ, Δεικ.

These radicals are taken at random; and we believe our Grecian student, by adding the terminations, will

readily find them all figuificant verbs. With these radicals, then, and the substantive verb, we suppose the

present and future tenses were formed.

But it is now generally admitted that the modern present that present was not the original one of the verb. The second, or Attic future, appears plainly to have been the most ancient present. When the language was improved, or rather in the course of being improved, a new present was invented, derived indeed from the former. but differing widely from it in its appearance and complexion. Upon this occasion, the old present was degraded, and instead of intimating what was doing at prefent, was made to import what was immediately to be done hereafter. By this means, γεωφεω, contracted into γεαφώ, I am writing, came to intimate I am just going to write. This change was probably made for the fake of enriching the language, for variety, for energy. Thus, τυπεω contracted τυπῶ became τυπτω, τικῶ, τικτω, &c. According to this theory, we find, that fuch verbs as now have no fecond future retain their original form, only the circumflex has been removed in order to accommodate them to the general flandard. Grammarians have now chosen the three characteristic letters of

> present, those have fallen into disuse. Let us now take the verb λεγω, dico, in order to make a trial; and let us write the radix and the auxiliary, first separately, and then in conjunction:

active verbs from the present, first future, and perfect. The true characteristic of the original verb was that of

the present second future. Many verbs are now desti-

tute of that tense, because since the invention of the new

λεγ-εω, λεγ-εες, λεγ-εε. λεγ-εοριεν, λεγ-εετε, λεγ-εοσσι. Then we will have contracted λεγῶ, λεγεῖς, λεγεῖ, λεγοῦμιεν, λεγείτε, λεγεσι. Here, we believe, every thing is felf-

The English would run thus: Saying I am, faying thou art, faying he is, &c. At first the radix and the auxiliary were pronounced separately, as we do our helping verbs in English, and would have been written in the same manner had words been then distinguished

The present first future occupied the same place that it now does, and concurred in its turn to complete the future in conjunction with the radix. That the fubstantive verb was inflected in the manner above laid down, is obvious from its future middle erouse, and from the future of the Latin verb fum, which was of old eso, esis, &c. Verbs in λω, μω, νω, ęω, often take σω in the first future. See Fæd. Cret. ap. Marm. Oxon. lib. 87. Verbs in No and ew affume o by analogy, as κελλω, κελσω, Eurip. Hecub. v. 1057. κελσαι Hom. Od. x. v. 511. τελλω, τελσω, unde τελσον, Il. x. v. 707. οςω. οςσομεν, Pind. Nem. Od. 9. Duodec. 2. τειςω, τεςσει, Theoc. Idyll. 22. v. 63. In fine, the Æolic dialect after the liquids often inserts o.

It must be observed, that the Greeks, in order to accelerate the pronunciation, always throw out the & and o, except in verbs ending in αω, εω, οω; where they generally change them into a and ω. When the last letter VOL. XVI. Part I.

of the radix can coalesce with σ after ϵ is thrown out, Greek they transform it, so as to answer that purpose; if not, Language. they fometimes throw it out. We shall once more take λεγω for an example:

λεγ-εσω, λεγ-εσεις, λεγ-εσει, &c.

Throwing out &, it would fland Asy-ow, Dey-oeis, &c. by changing γς into ξ it becomes λεξω. Δ θ and σ cannot coalesce with o, therefore they throw them out: thus, Ada, future first asa; Tanda, future first Tansa; AVUTW, AVUTW, &C.

These are the general rules with respect to the formation of the present and future of active verbs in the earliest stages of the Greek language. The limits prescribed will not allow us to pursue these conjectures; but the reader may, if he thinks proper, carry them a

The preterite tense falls next under consideration, preterite If we may trust analogy, this, as well as the other two, tense. must have owed its conformation to the radix of the verb, and some other word fitted to eke out its terminations. It has been thought by fome critics, that this addition was taken from the Hebrew word היה; and we should be of the same opinion did not another auxiliary prefent itself nearer home, which appears to us much more congruous to fuch a purpose. Perhaps, indeed, Origin of the people from whom we suppose it borrowed, derived the auxiit from the eastern quarters. We have already observed, that the Thracians were mafters of a great part of Greece in the very earliest ages. At that time they were a polite and learned people. From them a considerable part of the Greek language was derived. If, therefore, we should find a word in their language employed for the same purpose, and accommodated to coalesce with the radical verb, we feel ourselves very much inclined to prefer fuch a word.

The word ha pervades many different languages as an auxiliary verb. From it we have the Italian ho, the Spanish he, the French ai; and in one shape or other it appears in all the German and Scandinavian dialects. It is the Gothic auxiliary; and, we believe, it forms the termination of the perfect active of the first conjugation in the Latin tongue: For there am is the radix of amo; in the preterite am-avi, amavi: and the preterperfect am-hav-eram, i. e. amaveram, compounded of am, hav, and eram, the imperfect of the indicative of the substantive verb. This process, in the formation of the preterite of Latin verbs, will scarce be questioned, and forms certainly a prefumptive proof that the Greeks pursued the same line. From this verb is likewise derived the Latin habeo, by changing v into b, which are indeed the same letter. Our readers, after this detail, will not be furprifed if we should now hazard a conjecture, and declare it as our opinion, that this same Gothic auxiliary ha is actually the additional part of the preterite of Greek verbs, and that part upon which the conjugation depends.

In forming this combination between the radix and the auxiliary, the Greeks were obliged to fabricate feveral devices. As often as the last letter of the radix could not unite with the aspirate in ha, they metamorphofed it into one of the double letters, which are capable of coalescing with it. In the verb Asyw, γ was changed into χ; thus, λεγ ha became λεχα, τυπτω preterite τυπ ha, was combined into τυφα. In verbs

First future, and

e" 148

fent.

Fermation

Greek Language.

which had a radix that would not admit this conjunction, they hardened the h into z, as in TIW, preterite TI-za, Arov-xa. Many other ways were contrived to facilitate this re-union. These are detailed in every Greek grammar, and fo need not be mentioned. What has been faid with respect to this configuration, we offer as a pure conjecture, wi aut the most remote

intention of obtruding it upon our readers. If it is admitted, that the auxiliary ha formed the conjugating termination of the active verb among the Greeks, it will likewise be admitted, that the radical verb and the other made originally two distinct words: that, according to this scheme, the preterite would proceed thus, key ha, faid I have; key has, faid thou haft; λεγ he, said he hath, &c. This process to us appears rational, elegant, and advantageous. The pluperfect was not then invented, and therefore it does not come under our confideration. The other tenses were all deduced from those described; and in forming these intermediate distinctive tenses, we believe that both critics and grammarians, and perhaps philosophers too, were employed. See GRAMMAR.

The eastern nations have diversified their verbs, by affixing fragments of the personal pronouns to the radix, by which they gained only the advantage of exhibiting the genders of the persons engaged in being, acting, and fuffering; but a perpetual repetition of these was unavoidable. The Greeks, by their artiscial combination of the radix with the two auxiliaries, avoided the necessity of repeating their personal pronouns, as we and the other modern inhabitants of Europe are obliged to do; and at the same time, by diverfifying the terminations of their nouns and verbs, wonderfully improved the beauty and harmony of their language. The arrangement above infifted on is fo very different from that of the orientals, and so entirely Gothic, that we think there can be no doubt that the Greeks borrowed this manœuvre from the Thracians. Every person moderately acquainted with the Greek language will, upon examination, discover a wonderful coincidence between the structure, idioms, and phraseology, of the English and Greek languages; so many congenial features must engender a strong suspicion that there once subsisted a pretty intimate relation between them.

In the preceding deduction, we find ourselves obliged once more to differ from the very learned author of the Origin and Progress of Language. As we took the liberty to question his originality of the Greek language, and at the same time prefumed to attack the goodly structure raised by philosophers, critics, and grammarians; so we now totally differ from that learned writer as to his theory of the creation of verbs out of the inhabile matter of aw, sw, &c. This whole fabric, in our opinion, leans on a feeble foun-

The apparatus of intermediate tenses, of augments, derivation of tenses, with their formation, participles, and idiomatical constructions, and other essentials or appendages, we omit, as not coming within the verge of the disquisition.

The derivation and formation of the middle and Greek passive voices, would certainly assord matter of curious Language. speculation; but the labour necessary to investigate this connection would greatly overbalance the benefit Derivation

However, to complete our plan, we shall subjoin a tion of the few frictures with respect to the formation of the voice, middle voice, which was, in our opinion, immediately formed from the active.

We have feen already, that the active voice in its original state was formed by annexing fragments of the fubstantive or auxiliary verb to the radix. The fame economy was observed in fabricating the flexible parts of the verb of the middle voice. To demonparts of the verb of the middle voice. strate this, we shall first conjugate the present tense of the auxiliary passive upon the principles above laid

Present. Eonai, escai, estai, someda, escote, soutai. Such was the passive-present of the auxiliary. We shall now take our example from the verb τυπτω; fecond future τυπ-εομα, Aruck I am, τυπ-εεται, Aruck thou art, τυπεεται, struck he is, &c. contracted τυπουριαι, τυπη, τυπει-Tas. The conjunction and formation here is obvious. Perhaps, in the fecond perfon, o was inferted, which, however, is thrown out in the process of the persons. The future middle is clearly formed, by affixing the future-passive of the verb in, only as n was introduced into the language for a long, it was generally (T) fubftituted instead of that vowel in verbs ending in aw and w, and of for o in verbs ending in on; the two vowels and o being originally long as well as fhort, till , was adopted to denote the long found of the former, and w that of the latter. In many verbs, before the conjunction of the radix and auxiliary, was thrown out: CCCCXVI. thus, τυπ-εσομαι became τυψομαι, λεγ-εσομαι, λεξομαι,

The preterite was deduced from that of the active by a very flight variation, fo trifling, indeed, that it need not be mentioned; only we may observe, that the aspirate h is never retained in this tense, which originally feems to have been the only distinguishing character by which that tense of the middle voice differed from the fame tense of the active.

From the strict analogy between the mode of forming the three primary tenses of the active and middle voice, we are led to suspect that what is now the middle was originally the passive voice.

The immediate formation of the former, by annexing the passive auxiliary, is obvious. The middle voice still partakes of the passive fignification, fince it has sometimes a passive, though more frequently an active. There are several parts of the present passive quite analogous to the fame tenses in the middle: and, lastly, it is the common progress, in the course of improvement, to proceed step by step, and by approximation. What is most fimple and easy is the first object, then succeeds what is only a little more difficult, and fo on till we arrive at the last stage, when human ingenuity can go no farther. Now, it will readily be admitted, that the passive voice is much more embarrassed and intricate in its texture than the middle; and, therefore,

paffive.

Greek the former should have been posterior in point of time Language. to the latter.

We are well aware, that the very learned Kuster, and most other moderns, deeply skilled in the origin, progress, and structure, of the Greek language, have thought otherwise. The general opinion has been, that the Greek middle voice answered exactly to the Hebrew conjugation hithpachal, and in its pristine fignification imported a reciprocality, or when the agent acts upon itfelf. For our part, we only intended a few hints upon the subject, which our learned readers may pursue, ap-

prove, or reject, at pleafure. and of the

If we might pretend to investigate the formation of the passive voice, we should imagine that the modern present was formed from the ancient one, by inserting such letters as were found necessary for beauty, variety, energy, &c.; the first future from the second future middle of the verb Tibnes, once Dew. This future is byropeas; and, joined to the radix, always occupies that place, τι-θησομει, τελεθησομαι, Φλέχθησομαι, τυφθησομαι, and to of the rest: whether μαι, σαι, ται, which occur to frequently as the terminations of the middle and paffive voices, are fragments of some obsolete verb, we will not pretend to determine.

From verbs in aw, sw, ow, vw, are formed verbs in ps; which in the present, imperfect, and second agrift, as it is called, only have a different form, by affuming us with a long vowel preceding it, in the present active; which vowel is preferved in each person fingular. This collection of irregular verbs feems to be formed from the verb sizes, which in some dialects might be ness Indeed the imperfect 117, 115, 11, feems to imply as much: in this, however, we dare not be positive.

In the whole of this analysis of the formation of verbs, we have laid down what to us appears most plaufible. That metaphyfical critics may discover inaccuracies in the preceding detail we make no doubt; but our candid readers will doubtless reflect, that no language was ever fabricated by philosophers, and that the elements of language were hammered out by peafants, perhaps by favages. Critics have created a philofophy of language we admit, and have a thousand times discovered wonderful acuteness and ingenuity in the mechanism of words and sentences, where the original onomathetæ never apprehended any, and which poffibly never existed but in their own heated imagination. If our more enlightened readers should find any thing in the preceding detail worthy their attention, fo much the better; if the contrary should happen, we presume they will take up with the hackneyed system. We have all along neglected the dual number, because it regularly follows the type of the other numbers.

Be that as it may, before we drop this subject we must take the liberty to subjoin an observation or two with respect to the consequences of the practice of new modelling the present, and of course the impersect, tenses of verbs. 1st, After this arrangement they commonly retained all the other tenses exactly as they had stood connected with the primitive verb: this needs no example. 2d, They often collected the tenses of verbs, whose present and imperfect were now obsolete, in order

to supply this defect. Thus we have president, respect, Greek nvoxa. 3d, They often formed present and imperfect tenses without any other tenses annexed: The poets in particular feem to have fabricated thefe two tenfes at

If this procedure was convenient for the poets, it was certainly most incommodious with respect to the vulgar, as well as to foreigners who had an inclination to learn the language. The vulgar, fome ages after Homer and Hesiod, must have found it as difficult to understand their poems as our people do to comprehend those of Chaucer and Spenfer. By this disposition, too, the etymology of verbs was almost entirely confounded. The prefent fecond future being, as has been observed, the ancient present, the attention of the curious efymologist was naturally diverted to the modern present, where it was utterly impossible to discover the radical word. A few examples will elucidate this point : TELYW, to fretch, to extend, old present Tava; Tay is the radix, which at once appears to be a Perian word fignifying a large tradi of country. Hence Mauritania "the land of the Mauri," Aquitania, Bretania; and with s prefixed Hindo-stan, Chusi-stan, Turque-stan. The obsolete verb one, whence on round, is evidently derived from op, an Egyptian name of the moon : Passa, fecond future φωνώ, to show, from the Egyptian word plan or pan, a name of the fun: τυπτω, future second τυπώ; τυπ is obviously the offspring of an thaph, " a drum or timbrel," from beating or striking, &c. In such etymological refearches, the student must be careful to turn the Ionic , into the Doric a; because the Dores were latest from the coast of Palestine, and consequently retained the largest share of the Phoenician dialect : thus yndew, to rejoice, turning n into a becomes yadew. This. word, throwing away the termination, becomes gath, plainly fignifying a wine press (U). It is likewise to be observed, that the Æolians often change a into v, as ovet instead of ones, &c.

It is not our intention to enter into the arrangement and peculiar constructions of the Greek language. There is, however, one, which we cannot well pass over in filence. As that tongue is deflitute of those words Greek inwhich the Latins call gerunds, to supply this defect they similared employ the infinitive with the article prefixed; thus, nouns. Es; to since autres \$\phi_{12} \text{es} \text{s}, in order to their being friends;} απο τε έλεσθαι αυτους Βατιλια, from their having elected a king; Ex TH and PEUYEV AUTHS EX THE TOOKEDS, from their flying out of the city. In these phrases the infinitive is faid to assume the nature of a substantive noun; agreeing with the article before it, exactly as if it were a noun of the neuter gender. Idioms of this kind occur in our own tongue; only with us the verb, inflead of being expressed in the infinitive, is turned into the participle. According to this arrangement, the first of the preceding phrases, which, according to the Greek, would thand toward to be friends, in English is, in order to their being friends. This anomaly, then, if inded it be such, is of no manner of consequence. The French, if we are not mistaken, would express it in the very same

manner with the Greek, that is, pour etre amis. From treating of verbs, we should naturally proceed Uu 2

(v) Hence it came to fignify rejoicing, from the mirth and revelry attending the treading of the vine-press.

to the confideration of adverbs, which are fo denomi-Language nated, because they are generally the concomitants of verbs. Every thing relating to that part of speech, in the Greek tongue, may be feen in the Port Royal or any other Greek grammar. Instead therefore of dwelling upon this beaten topic, we shall hazard a conjecture upon a point to which the critics in the Greek tongue, as far as we know, have not hitherto adverted.

Greek particles of oriental

The most elegant and most admired writers of Greece, and especially Homer, and after him Hesiod, abound with small particles, which appear to us pure extraction. expletives, created as it were to promote harmony, or fill up a blank without fense or fignification. How those expletive particles should abound in that language beyond any other, we think, is a matter not eafy to be accounted for. It has been faid by the Zoili, that if you extract these nonentities from the poems of that bard, qui solus meruit dici poeta, a magnum inane, a mighty blank, would be left behind. We would willingly do justice to that pigmy race of words, and at the same time vindicate the prince of poets from that groundless imputation. Plato likewise, the prince of philosophers, has been often accused of too frequently employing

these superfluous auxiliaries.

Those particles were no doubt imported from the east. It would be ridiculous to imagine that any defcription of men, however enthusiastically fond they might be of harmonious numbers, would fit down on purpose to fabricate that race of monofyllables purely to eke out their verses; mere founds without fignificancy. In the first place, it may be observed, that there is a very strict connection among the particles of all cognate languages. To this we may add, that the not understanding the nature, relations, fignification, and original import of those seemingly unimportant terms, has occasioned not only great uncertainty, but numberless errors in translating the ancient languages into the modern. The Greek language in particular loses a confiderable part of its beauty, elegance, variety, and energy, when these adverbial particles with which it is replete are not thoroughly comprehended. An exact translation of these small words, in appearance infignificant, would throw new light not only on Homer and Hefiod, but even upon poets of a much posterior date. Particles, which are generally treated as mere expletives, would often be found energetically fignificant. It is, however, altogether impossible to succeed in this attempt without a competent skill in the Hebrew, Chaldaic, Arabian, Perfian, and old Gothic languages. We shall here take the liberty to mention a few of these particles which are most familiar, one or other of which occur in almost every line of Homer, and which we believe are either not understood or mifunderstood. Such are Δα, δη, μεν, ηντοι, μαν, γε, εξι, αξα, ea, γ81. Δα is nothing else but the Chaldaic particle δα, the parent of the English the. It likewise fignifies by turns, in your turn; on is the same word in the Ionic dialect; שמי is a particle of the Hebrew affirmative אמן amen, fides, veritas. Mar, a kind of oath by the moon, called mana, almost over all the east; hence Dor. mara; ye, an oath by yea, that is, the earth; aga, another oath by the fame element, probably from the oriental word of the same import; ex is a fragment of aga mentioned before; yes, of year the earth, and or or we, an Egyptian name of the fun; ws as, a particle which pervades all the dialects of the Gothic language. In this Greek manner we believe all these finall words that occur so Language. frequently in the Greek tongue, and which have hitherto been held inexplicable, may be easily rendered in fignificant terms: and were this done, we believe they would add both beauty and energy to the clauses in which they stand. But this discussion must be left to more accomplished adepts.

We shall not explain the nature of prepositions, be-Preposicause we are convinced that few people will take the tions, trouble to perufe this disquisition who are not already acquainted with their import in language. The Greek prepositions are eighteen in number, which need not be enumerated here. Most of these might be easily shown to be particles, or fragments deduced from oriental or Gothic words. The use of these words is to connect together terms in discourse, and to show the relation between them. In languages where, as in English, all these relations are expressed without any change on the termination of the nouns to which they are prefixed, the process is natural and easy. The whole is performed by juxtaposition. But in the Greek and Latin tongues, this effect is produced, partly by prefixing prepolitions and partly varying the terminations of nouns. Had the Greeks been able to intimate all those relations by varying the terminations, or had they multiplied their prepofitions to fuch a number as would have enabled them to express these relations without the cafual variations, as the northern languages have done; in either case their language would have been less embarraffing than it is in its prefent flate. According to the prefent arrangement both prepositions and the casual variations are used promiscuously to answer that purpose; a method which appears to us not altogether uniform. Though this plan might occasion little embarrassment to natives, it must, in our opinion, have proved somewhat perplexing to foreigners. The difficulty would be, as to the latter, when to adopt the one and when the other expedient.

Another inconveniency arises from the exceeding fmall number of prepositions in that language, which bear too small a proportion to the great variety of relations which they are appropriated to express. This deficiency obliged them often to employ the same preposition to denote different relations: For instance, En intimates, 1st, upon; as ere to libe, upon the stone; and then it takes the genitive. 2d, It denotes near upon; as ἐπι τ ω λιθω, and then it governs the dative. 3d, The fame preposition signifies motion towards; as Exercivent τον λιθον, he fell upon the stone. In these instances the fame preposition intimates three different relations; and, which is still more embarrassing, each of these requires a different case. The difficulty in this instance is so confiderable, that even the most accurate of the Greek writers themselves often either forget or neglect the true application. Many examples of this might be adduced, did the limits affigned us admit fuch illustrations. Every man who has carefully peruled the Grecian authors will readily furnish himself with examples.

Again, fome prepositions, which indicate different re-irregularly lations, are prefixed to the same case. Thus, & fignifies used, from; as, Ex Διος αρχομεθα, from Jupiter we begin; ἀπ ELLOV CLOV, from my life, or my course of life; TEO TWY Ovews, before the doors; neo vinns equation, an encomium before the victory; arri ayadan anodidonai nana, to render

used in

composition.

Greek evil for good; avr. ocv, against you. In these examples, Language and indeed every where, those prepositions intimate different relations, and yet are prefixed to the same cases. Sometimes the fame preposition seems to assume two opposite significations: this appears from the preposition avr. just mentioned, which intimates both for, instead of;

and against or opposite to.

What has been observed with respect to the prepositions above mentioned, the reader will readily enough apply to xara, pera, dia, regi. These incongruities certainly imply fomething irregular; and feem to intimate that those anomalies were so deeply incorporated with the constitution of the language, that the subsequent improvers found it impossible to correct them. Indeed to prefix a preposition to a case already distinguished by the affixed termination, appears to us a fuperfluity at least, if not an absurdity; for certainly it would have been more natural to have faid ex Zeus acxoμεθα, than έκ Διος αρχομεθα. Some very learned men, who have inquired into the origin of language, have been of opinion that prepositions were the last invented species of words. If this opinion be well founded, we may suppose (and we think that this supposition is not altogether improbable) that the cafual terminations of the Greek language were first affixed to the radix, in the manner above exhibited; and that prepositions were afterwards fabricated and prefixed to the cases already in

The fyntax or construction of the Greek language does not, according to our plan, come within the compass of our present inquiry. This the curious Greek student will easily acquire, by applying to the grammars composed for that purpose. We have already hazarded a few conjectures with respect to the formation of the most important and most distinguished classes of words into which it has been divided by the most able grammarians, without, however, descending to the minutiæ of the language. As prepositions are the chief materials with which its other words, especially verbs, are compounded, we shall briefly consider the order in which

they probably advanced in this process.

Complex ideas are compounded of a certain number or collection of fimple ones. Of those complex notions, fome contain a greater and fome a fmaller num-·ber of fimple conceptions. In language, then, there are two ways of expressing those complex ideas, either by coining a word to express every simple idea separately, according to the order in which they stand in the mind; or by trying to combine two or more fimple terms into one, and by that method to intimate one complex idea by one fingle word. The Arabians, notwithstanding all the boasted excellencies of their language, have never arrived at the art of compounding their words, in order to answer this noble purpose; and the fifter dialects are but flenderly provided with this species of vocables. The Greeks, of all other nations (except perhaps those who spake the Sanscrit language), are unrivalled in the number, variety, propriety, elegance, energy, and expression of their compound terms. The Greeks, like the Arabians, in the earliest stages of their language, had only a collection of radical disjointed words, confifting of the jargons of the aboriginal Greeks, of the Pelasgi, Thracians, &c. How these words were arranged and constructed, we have no data remaining upon which we can found

a critical investigation. We must therefore remain fatisfied with fucli probable conjectures as the nature of Language. the case, and the analogy of the language, seem to suggest.

The prepositions were originally placed before the nouns, whose relations they pointed out. For example, let us take the ξυναπεθνησιετο τοις άλλοις, he died along with the rest, or he died out of hand along with the others. These words were arranged thus: anelvnonelo our rois αλλοις; and απο-θυησκου συν τοις αλλοις. In this manner the parts of every compound word were placed separately, at least as much as other words which had no connection.

The first compound words of the Greek language The first

were the radical nouns with the article, and the radical compound part of the substantive or auxiliary verb. The success Greek. of this experiment encouraged them to attempt the same in other words. By this noble invention they found themselves able to express, in one word, with ease and fignificancy, what in other languages, and formerly in their own, required a tedious ambages or circumlocution. In process of time, as their language was gradually mellowed, they increased the number of their compounds, till their language, in that respect, infinitely excelled all its parent dialects. In this process they were careful to unite fuch letters as not only prevented afperity and difficulty of pronunciation, but even promoted harmony and elegance. But this was the labour of poster-

The Greeks were entirely ignorant of the derivation or etymology of their language: for this we need only confult Plato's Cratylus, Arittotle's Rhetoric, Demetrius Phalereus, Longinus, &c. In deducing patronymics, abstracts, potsessives, gentiles, diminutives, verbals, &c. from radicals of every kind, they have flown the greatest art and dexterity. Examples of this occur almost in every page of every Greek author. But this extended no farther than their own language; every foreign language was an abomination to the Greeks.

But more of this in the fequel.

The original materials of the Greek tongue were un-Original doubtedly rough and discordant, as we have described of the them above. They had been collected from different Greek lanquarters, were the produce of different countries, and guage; had been imported at very distant periods. It would therefore be an entertaining, if not an instructing, spcculation, if it were possible to discover by what men and by what means, this wonderful fabric was founded, erected, and carried to perfection. The writers of Greece afford us no light. Foreigners were unacquainted with that originally infignificant canton. Every thing beyond Homer is buried in eternal oblivion. Orpheus is indeed reported to have composed poems; but these were soon obliterated by the hand of time. The verses now ascribed to that philosophical hero are none of his *. Linus wrote, in the Pelasgic dialect, the at. * Pausan. chievements of the first Bacchus; Thamyris the Thra-tap. 22. cian wrote; and Pronapides the master of Homer was a celebrated poet. The works of all these bards did not long furvive; and it is a certain fact that the Greek tongue was highly polished even more early than the age in which these worthies slourished. Homer, no doubt, imitated their productions, and some are of opinion that he borrowed liberally from them. The Greeks knew no more of the original character of their language, than of the original character and complexion

which was

carried to

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of their progenitors. They allowed, indeed, that their Language language was originally barbarous and uncouth; but by what means or by what persons it was polished, enriched, and finally arranged, was to them an impenetra-

> We have already demonstrated that the Ionim or aborigines of Greece were a race of barbarians; that consequently their lauguage, or rather their jargon, was of the same contexture. The Pelasgi found both the people and their speech in this uncultivated state. These people arrived in Greece about the year before Christ 1760. It was then that the language of Greece began to be cultivated. Before the age of Homer the work feems to have been completed. Nothing of confequence was afterwards added to the original stock; on the contrary, not a few moities were deducted from the Homeric treasure. The Pelasgi, as was said before, arrived in Greece an. ant. Chr. 1760. Homer is thought to have been born an. ant. Chr. 1041; consequently the cultivation of the Greek tongue was completed in a period of about 700 years. But upon the fupposition that Orpheus, Linus, Thamyris, &c. wrote long before Homer, as they certainly did, that language had arrived nearly at the standard of perfection two centuries before; by which computation the period of its progress towards its stationary point is reduced to 500 years. But as the Pelasgi were a colony of foreigners, we ought to allow them one century at least to fettle and incorporate with the natives, and to communicate their language, laws, manners, and habits, to the aborigines of the country. By this deduction we shall reduce the term of cultivation to less than four centuries.

During this period Greece was furiously agitated by tumults and infurrections. That country was divided into a number of independent states, which were perpetually engaged in quarrels and competitions. The profession of arms was absolutely necessary for the protection and prefervation of the state; and the man of conduct and prowefs was honoured as a demi-god, and his exploits transmitted with eclat to posterity. The Greek tongue was then rough and unpolished; because, like the ancient Romans, the braveit men were more disposed to act than to fpeak. Every language will take its colour from the temper and character of those who employ it; and had it not been owing to one class of men, the Greek tongue would have continued equally rough to the era of Homer as it had been a century after the ar-

rival of the Pelafgi.

There has appeared among barbarous or half-civilized people a description of men whose profession it has been to frequent the houses or palaces of the great, in order to celebrate their achievements, or those of their ancestors, in the fublimest strains of heroic poetry. Accordingly, we find that the Germans had their bards, the Gauls their fads, the Scandinavians their fcalds or fcaldres, the Irish their fileas, all retained for that very purpose. They lived with their chieftains or patrons; attended them to battle; were witnesses of their heroic deeds; animated them with martial strains; and celebrated their prowefs, if they proved victorious; or, if they fell, raifed the fong of woe, and chanted the mournful dirge over their fepulchres. Thefe bards were always both poets and muficians. Their persons were held facred and inviolable. They attended public entertainments, and appeared in all national con-

ventions. The chief of them were employed in the Greek temples of the gods; and the less illustrious, like our Language. minstrels of old, strolled about from place to place, and exercifed their functions wherever they found employ-

Among the ancient Greeks there was a numerous by the potribe of men of the very fame description, who were ets, who at once poets and muficians, and whose office it was made a to celebrate the praises of the great, and to transmit their exploits to posterity in the most exaggerated encomiums. These poetical vagrants were styled Aoides or fongsters. Some of these lived in the houses of great men; while others, less skilful or less fortunate, strolled about the country in the manner above described. The more illustrious of these Aoidor who were retained in the temples of the gods, were certainly the first improvers of the language of the Greeks. Among the Hebrews we find the first poetical compositions were hymns in honour of Jehovah, and among the Pagans the same practice was established. In Greece, when all was consufion and devastation, the temples of the gods were held facred and inviolable. There the Aoidoi improved their talents, and formed religious anthems on those very models which their progenitors had chanted in the east.

The language of the Greeks was yet rugged and unmellowed: their first care was to render it more soft and more flexible. They enriched it with vocables fuited to the offices of religion; and these, we imagine, were chiefly imported from the east. Homer every where mentions a distinction between the language of gods and men. The language of gods imports the diffinction oriental terms retained in the temples, and used in between treating of the ceremonies of religion; the language the lan-of men intimates the ordinary civil dialect which fprung gods and from the mixed dialects of the country. The priests, of men. no doubt, concurred in promoting this noble and important purpose. From this source the strolling Acidou drew the rudiments of their art; and from these last the vul-

gar deduced the elements of a polished style. To these Acidos of the superior order we would ascribe those changes mentioned in the preceding part of this inquiry, by which the Greek tongue acquired that variety and flexibility, from which two qualities it has derived a great share of that ease, beauty, and versatility, by which it now furpasses most other languages. The diverfity of its terminations furnishes a most charming variety, while at the fame time the fense is communicated to the reader or hearer by the relation between them. By this economy the poet and orator are left at liberty to arrange their vocables in that order which may be most foothing to the ear, and best adapted to

make a lasting impression on the mind.

Few colonies have emigrated from any civilized country without a detachment of priests in their train. The fupreme powers, whoever they were, have always been worshipped with music and dancing. The Hebrews, Pl cenicians, and Egyptians, delighted in these musical and jocund sestivals. The priests who attended the Iones, Dores, Æolians, Thebans, Athenians, &c. from the east, introduced into Greece that exquifite taste, those delicate mufical feelings, which diftinguished the Greeks from all the neighbouring nations. Hence that numerous race of onomatapæas, by which the Greek language is invested with the power of expressing almost every passion of the human foul, in fuch terms as oblige it to feel and actually

Greek to assimilate to the passion it would excite. Numberless Language instances of this occur in every page of Homer, Hesiod, Pindar, Sophocles, Euripides, and even of Aristophanes: 10 quote instances would be to insult the Greek

> Every body knows that the practice of writing in verse was antecedent to the date of profaic composition. Here, then, the Asidos and the ministers of religion chiefly displayed their skill and discernment. By a judicious mixture of thort and long fyllables; by a junction of confonants which naturally slide into each other; by a careful attention to the rhythm, or harmony refulting from the combination of the syllables of the whole line-they completed the metrical tone of the verse, guided by that delicacy of mufical feeling of which they were possessed before rules of prosody were known among

Much liberty was certainly used in transposing letters, in varying terminations, in annexing prefixes and affixes, both to nouns and other kinds of words where fuch adjuncts were possible: and upon this occasion we think it probable, that those particles of which we have spoken above were inferted like filling stones thrust in to and other appendages, were originally fabricated. stop the gaps or chinks of a building. Verses were then clumfy and irregular, as the quantity of vowels was not duly afcertained, and the collision of heterogeneous confonants not always avoided. Probably thefe primitive verses differed as widely from the finished strains of Homer and his fuccessors, as those of Chaucer and Spencer do from the fmooth polithed lines of Dryden

and Pope.

Earliest

poets of Greece.

The poetical compositions of the earliest Greeks were not, we think, in the hexameter flyle. As they were chiefly calculated for religious fervices, we imagine they refembled the Hebrew iambics preserved in the song of Aaron and Miriam, Deborah and Barak, Píalms, Proverbs, &c. which were indeed calculated for the fame purpose. Archilochus perhaps imitated these, though the model upon which he formed his iambies was not generally known. The later dramatic poets feem to have copied from the same archetypes. Hexameters, it is probable, were invented by Orpheus, Linus, Thamyris, Museus, &c. The first of these travelled into Egypt, where he might learn the hexameter measure from that people, who used to bewail Maneros and Ofiris in elegiac strains. This species of metre was first consecrated to theology, and the most profound sciences of moral and natural philosophy; at length it was brought down to celebrate the exploits of kings and heroes.

Res gestas regumque, ducumque, et fortia bella, Quo scribi possent numero monstravit Homerus.

We have hazarded a conjecture above, importing that the earliest poetical compositions of the Greeks were confecrated to the fervice of the gods. We shall now produce a few facts, which will furnish at least a presumptive evidence of the probability of that conjecture.

Orpheus begins his poem with ancient chaos, its transformations and changes, and purfues it through its various revolutions. He then goes on to describe the offspring of Saturn, that is time, the æther, love, and light. In short, his whole poem is, said to have been an oriental allegory, calculated to inspire mankind with the fear of the gods, and to deter them from murder, rapine, unnatural lusts, &c.

Museus was the favourite scholar of Orpheus, or perhaps his fon. He composed prophecies and hymns, and Language wrote facred instructions, which he addressed to his fon. He prescribed atonements and lustrations; but his great Musaus. work was a Theogony, or History of the Creation, &c.

Melampus brought the mysteries of Proserpine from Melampus. Egypt into Greece. He wrote the whole history of the disasters of the gods. This seer is mentioned by Homer himfelf.

Olen came from Lycia, and composed the first hymn Olen. that was fung in Delos at their folemnities; he probably emigrated from Patara a city of Lycia, where Apollo had a celcbrated temple and oracle.

The Hyperborean damfels used to visit Delos, where they chanted facred hymns in honour of the Delian god. To these we add the great Homer himself, if indeed Homer and the hymns commonly annexed to the Odyssey are his Hestod. composition. Hesiod's Theogony is too well known to need to be mentioned.

From these instances we hope it appears, that the origin of the poetry of Greece is to be found in the temples; and that there, its measure, numbers, rhythm,

The Grecian poets, however, enjoyed another advantage which that class of writers have scldom posfessed, which arose from the different dialects into which their language was divided. All those dialects were Different adopted indifferently by the prince of poets; a circum-dialects flance which enabled him to take advantage of any word with their from any dialect, provided it fuited his purpofe. This, at origin. the fame time that it rendered verification eafy, diffused an agreeable variety over his composition. He even accommodated words from Macedonia, Epirus, and Illyricum, to the purposes of his verification: Besides, the laws of quantity were not then clearly afcertained; a circumstance which afforded him another conveniency. Succecding poets did not enjoy these advantages, and consequently have been more circumscribed both in their diction and numbers.

The Greek language, as is generally known, was divided into many different dialects. Every fept, or petty canton, had some peculiar forms of speech which distinguished it from the others. There were, however, four different dialectical variations which carried it over all the others. Thesc were the Attic, Ionic, Æolic, and Doric. These four dialectical distinctions originated from the different countries in the east from which the tribes respectively emigrated. The Attics consisted, 1st, of the barbarous aborigines; 2d, of an adventitious colony of Egyptian Saites; 3d, a branch of Ionians from the coast of Palestine. These last formed the old Ionian dialect, from which fprung the Attic and modern Ionic. The Æolians emigrated from a different quarter of the fame coast; the inhabitants of which were a remnant of the old Canaanites, and confequently different in dialect from the two first mentioned colonies. The Dores sprang from an unpolished race of purple fishers on the fame coast, and consequently spoke a dialect more coarse and rustic than any of the rest. These four nations emigrated from different regions; a circumstance which, in our opinion, laid the foundation of the different dialects by which they were afterwards diffinguished.

It is impossible in this short sketch to exhibit an exact view of the distinguishing features of each dialect. Such an analysis would carry us far beyond the limits of the

Orpheus.

Greek

article in question. For entire satisfaction on this head, Language, we must refer the Grecian student to Mattaire's Grecæ Linguæ Dialecti, where he will find every thing necesfary to qualify him for understanding that subject. We shall content ourselves with the few observations follow-

The Athenians being an active, brifk, volatile race, delighted in contractions. Their flyle was most exquifitely polished. The most celebrated authors who wrote in that dialect were the following: Plato, Thucydides, Xenophon, Demosthenes, and the other orators; Æfchylus, Euripides, Sophocles, Aristophancs, Menander, Diphilus, with the other comic and tragic poets. That dialect was either ancient or modern. The ancient Attic

was the same with the Ionic.

The Ionic, as was faid, was the ancient Attic; but when that nation emigrated from Attica and fettled on the coast of Asia Minor, they mingled with the Carians and Pelafgi, and of course adopted a number of their vocables. They were an indolent, luxurious, and diffolute people; of course their thyle was indeed easy and flowing, but verbofe, redundant, and without nerves. This, however, is the leading style in Homer; and after him a prodigious number of writers on every subject have used the same dialect, such as Herodotus of Halicarnasfus the celebrated historian; Ctesias of Cnidus the historian of Persia and India; Hecatæus of Miletus; Megasthenes the historian, who lived under Seleucus Nicator; Hippocrates the celebrated physician of Coos; Hellanicus the historian often mentioned with honour by Polybius; Anacreon of Teia, Alceeus, Sappho of Lesbos, excellent poets; Pherecydes Syrus the philosopher, and a multitude of other persons of the same profession, whom it would be superfluous to mention upon the present oc-

The Æolic and Doric were originally cognate dialects. When the Dorians invaded Peloponnelus and settled in that peninfula, they incorporated with the Æolians, and their two dialects blended into one produced the new Doric. The original Dores inhabited a rugged mountainous region about Offa and Pindus, and spoke a rough unpolished language similar to the soil which they inhabited. Andreas Schottus, in his observations on poetry, lib. ii. cap. 50. proves from an old manuscript of "Theocritus, that there were two dialects of the Doric tongue, the one ancient and the other modern; that this poet employed Ionic and the modern Doric; that the old Doric dialect was rough and cumbrous; but that Theocritus has adopted the new as being more foft and mellow." A prodigious number of poets and philosophers wrote in this dialect, fuch as Epicharmus the poet; Ibycus the poet of Rhegium; Corinna the poetess of Thespis, or Thebes, or Corinth, who bore away the prize of poetry from Pindar; Erynna a poetess of Lesbos; Moschus the poet of Syracuse; Sappho the poetess of Mitylene; Pindarus of Thebes, the prince of lyric poets; Archimedes of Syracuse, the renowned mathematician; and almost all the Pythagorean philosophers. Few historians wrote in that dialect; or if they did, their works have not fallen into our hands. Most of the hymns sung in temples of the gods were composed in Doric; a circumstance which evinces the antiquity of that dialect, and which, at the fame time, proves its affinity to the oriental standard.

After that the Greek tongue was thoroughly polished by the steps which we have endeavoured to trace in the

preceding pages, conscious of the superior excellency of Greek their own language, the Greeks, in the pride of their Language. heart, stigmatized every nation which did not employ their language with the contemptuous title of barbarians. The parti-Such was the delicacy of their pampered ears, that they ality of the could not endure the untutored voice of the people whom Greeks to they called Bue Sage paros. This extreme delicacy produtheir own ced three very pernicious effects; for, 1st, It induced its evil conthem to metamorphofe and fometimes even to mangle, fequences. foreign names, in order to reduce their found to the Grecian standard; and, 2d, It prevented their learning the languages of the east, the knowledge of which would have opened to them an avenue to the records, annals, antiquities, laws, customs, &c. of the people of those countries, in comparison of whom the Greeks themselves were of yesterday, and knew nothing. By this unlucky bias, not only they, but even we who derive all the little knowledge of antiquity we possess through the channel of their writings, have fuffered an irreparable injury. By their transformation of oriental names they have in a manner stopped the channel of communication between the histories of Europe and Asia. This appears evident from the fragments of Ctesias's Persian history, from Herodotus, Xenophon, and all the other Grecian writers who have occasion to mention the intercourse between the Greeks and Perfians. 3d, It deprived them of all knowledge of the etymology of their own language, without which it was impossible for them to understand its words, phraseology, and idioms, to the bottom. We mentioned Plato's Cratylus above. In that dialogue, the divine philosopher endeavours to investigate the etymology of only a few Greek words. His deductions are absolutely childish, and little superior to the random conjectures of a school-boy. Varro, the most learned of all the Romans, has not been more successful. Both stumbled on the very threshold of that useful science; and a scholar of very moderate proficiency in our days knows more of the origin of these two noble languages, than the greatest adepts among the natives did in theirs. By prefixes, affixes, transpositions of letters, new conjunctions of vowels and confonants for the fake of the music and rhythm, they have fo difguifed their words, that it is almost impossible to develope their original. As a proof of this, we remember to have feen a manuscript in the hands of a private person where the first twelve verses of the Iliad are carefully analysed; and it appears to our fatisfaction that almost every word may be, and actually is, traced back to a Hebrew, Phœnician, Chaldean, or Ægyptian original: And we are convinced that the fame process will hold good in the like number of verses taken from any of the most celebrated poets of Greece. This investigation we found was chiefly conducted by reducing the words to their original invariable state, which was done by stripping them of prefixes, affixes, &c. These strictures are, we think, well founded; and confequently need no apology to protect them.

These imperfections, however, are counterbalanced Beauty of by numberless excellencies: and we are certainly much the Greek more indebted to that incomparable people for the in-language. formation they have transmitted to us through the medium of their writings, than injured by them in not conveying to us and to themselves more authentic and more ample communications of ancient events and occurrences. Without fatiguing our readers with fuperfluous encomiums on a language which has long ago been extolled perhaps

these what is proper and suitable. The difference, there-

Greek to an extravagant degree by the labours of men of the Language, most enlarged capacity and the most refined taste, we shall now proceed to make a few observations on spirits and accents; which being rather appendages than effentials of the language, we have on purpole referved for the last place.

The spiritus afper

and lenis.

The ac-

cents.

Every word in the Greek language beginning with a vowel is marked with a spirit or breathing : This aspiration is double, namely lenis et asper, " the gentle, and rough or aspirated." The gentle accent, though always marked, is not now pronounced, though in the earliest periods of the language it was undoubtedly enounced, though very foftly. Both these aspirations were imported from the east. They were actually the Hebrew n he and n heth. The former denoted the spiritus lenis, and the latter the spiritus asper. The Hebrew prefixed ha or he to words beginning with a vowel, and of course the Greeks followed their example. These people seem to have delighted in aspirates; and of consequence the letter 5 is, some think, rather too often affixed to the terminations of their words. Every word beginning with g had the aspirate joined to g, probably with a design to

render the aspiration still more rough.

The Greek accents are three in number; the acute, the grave, and the circumflex. The acute raifes and fharpens the voice; the grave depresses and flattens it; the circumstex first raises and sharpens the voice, and then depresses and flattens it. It is obviously composed of the other two. The learned author of the Origin and Progress of Language has taken much pains to prove that these accents were actually musical notes, invented and accommodated to raife, depress, and suspend the voice, according to a scale of musical proportions. It is scarce possible, we think, for a modern Greek scholar to comprehend distinctly the ancient theory of accents. These the native Greeks learned from their infancy, and that with fuch accuracy, that even the vulgar among the Athenians would have hiffed an actor or actress off the stage or an orator off the pulpitum *, on account of a few mistakes in the enunciation of those notes.

* See Pulpitum.

> The elevations, depressions, and suspensions of the voice upon certain fyllables, must have made their language found in the ears of foreigners fomewhat like recitative, or fomething nearly refembling cant. But the little variety of those syllabic tones, and the voice not resting upon them, but running them on without interruption, fufficiently diffinguished them from music or cant. Be that as it may, we think it highly probable, that the wonderful effects produced by the harangues of the orators of Greece on the enraptured minds of their hearers, were owing in a good measure to those artificial mufical tones by which their fyllables were fo happily diversified.

> To this purpose we shall take the liberty to transcribe a passage from Dion. Halic. De Structura Orationis, which we find translated by the author of the Origin and Progress of Language, vol. ii. book 3d, part ii. chap. 7. page 381. "Rhetorical composition is a kind of music, differing only from fong or instrumental music, in the degree, not in the kind; for in this composition the words have melody, rythm, variety, or change, and what is proper or becoming: So that the ear in it, as well as in music, is delighted with the melody, moved by the rythm, is fond of variety, and defires with all VOL. XVI. Part I.

fore, is only of greater and less." With respect to accents, it may be observed that only one syllable of a word is capable of receiving the acute accent, however many there be in the word. It was thought that the raising the tone upon more than

one fyllable of the word, would have made the pronunciation too various and complicated, and too like

The grave accent always takes place when the acute is wanting. It accords with the level of the discourse; whereas the acute raifes the voice above it.

The circumflex accent being composed of the other two is always placed over a long fyllable, because it is impossible first to elevate the voice and then to depress it on a short one. Indeed among the Greeks a long fyllable was pronounced like two short ones; and we apprehend it was fometimes written fo, especially in later times. It is altogether obvious from two learned Greek authors, Dion. Halic. and Aristoxenus, that the Greek accents were actually musical notes, and that these tones did not confift of loud and low, or simply elevating and depreshing the voice; but that they were uttered in fuch a manner as to produce a melodious rythm in dif-

In a word, the acute accent might be placed upan any fyllable before the antepenult, and rose to a fifth in the diatonical scale of music; the grave fell to the third below it. The circumflex was regulated according to the measure of both, the acute always preceding. The grave accent is never marked except over the last syllable. When no accent is marked, there the grave always takes place. Some words are called enclitics. These have no accent expressed, but throw it back upon the preceding word. The circumflex, when the last syllable is short, is often found over the penult, but never over any other fyllable but the last or the last but one.

The ancient Greeks had no accentual marks. They The ancilearned those modifications of voice by practice from ent Greeks their infancy; and we are affured by good authority, centual that in pronunciation they observe them to this day marks. The accentual marks are faid to have been invented by a famous grammarian, Aristophanes of Byzantium, keeper of the Alexandrian library under Ptolemy Philopater, and Epiphanes, who was the first likewise who is supposed to have invented punctuation. Accentual marks, however, were not in common use till about the feventh century; at which time they are found in manufcripts. If our curious readers would wish to enter more deeply into the theory of accents, we must remit them to Origin of Language, vol. ii. lib. 2. passim; and to Mr Foster's Essay on the different Nature of Accent and Quantity.

Such, in general, are the observations which we thought the nature of our defign obliged us to make on the origin and progress of the Greek language. Some of our more learned readers may perhaps blame us for not intersperfing the whole disquisition with quotations from the most celebrated writers in the language which has been the object of our refearches. We are well aware that this is the general practice in fuch cases. The books were before us, and we might have transcribed from them more quotations than the nature of an article of this kind would permit. In the first part there were no books in Xx

guage.

that language to quote from, because the Greeks knew Language nothing of their own origin, nor of that of their language, and consequently have recorded nothing but dreams and fictions relating to that subject. Even when we had made confiderable progress in our inquiry, the nature of the plan we have adopted excluded in a great measure ine use of quotations. When we drew near the conclusion, we imagined that our learned readers would naturally have recourse to the passages alluded to without our information, and that the unlearned would not trouble themselves about the matter. The Greek student who intends to penetrate into the depths of this excellent language, wll endeavour to be thoroughly acquainted with the books after mentioned.

176 Books to be Aristotle's Rhetoric and Poeties, his book De Interstudied by pretatione, especially with Ammonius's Commentary.

every one Ammonius was a native of Alexandria, and by far the who wishes

to be a ma-most acute of all the ancient grammarians.

Dion. Halic. De Structura Orationis, where, amidst language. abundance of curious and interesting observations, will be found the true pronunciation of the Greek letters.

Demetrius Phalereus De Elocutione; a short essay indeed, but replete with instruction concerning the proper arrangement of words and members in fentences.

Longinus, the prince of critics, whose remains are above commendation. Theoderus Gaza ‡ and the other \$ See Gaza. refugees from Constantinople, who found an hospitable reception from the munificent family of the Medici, and whose learned labours in their native language once more revived learning and good taste in Europe. These, with some other critics of less celebrity, but equal utility, will unlock all the treasures of Grecian erudition, without however disclosing the source from which they flowed. To these one might add a few celebrated moderns, fuch as Monf. Fourmont the Elder, Monf. Gebelin, Abbé Pezron, Salmafius, and especially the learned and industrious Lord Monboddo.

> We shall now give a very brief account of the vast extent of the Greek language even before the Macedonian empire was erected; at which period, indeed, it became in a manner univerfal, much more than ever the Latin language could accomplish notwithstanding the

wast extent of the Roman empire.

Vast extent Greece, originally Hellas, was a region of small exof the tent, and yet sent out many numerous colonies into diffe-Greek lan-rent parts of the world. These colonies carried their native language along with them, and industriously diffused it wherever they formed a settlement. The Iones, Æoles, and Dores, possessed themselves of all the west and north-west coast of the Lesser Asia and the adjacent islands; and there even the barbarians learned that polished language. The Greek colonies extended themfelves along the fouth coast of the Euxine sea as far as Sinope, now Trebizund, and all the way from the west coast of Asia Minor: though many cities of barbarians lay between, the Greek tongue was understood and generally spoken by people of rank and fashion.

There were Greek cities on the north coast of the Euxine sea to the very eastern point, and perhaps be-yond even those limits; likewise in the Taurica Chersonesus, or Crim Tartary; and even to the mouth of the Danube, the straits of Cassa, &c. In the neighbourhood of all thefa colonies, the Greek language was carefully propagated among the barbarians, who carried on

commerce with the Greeks.

A great part of the fouth of Italy was planted with Greek Greek cities on both coasts; so that the country was Larguage. denominated Magna Gracia. Here the Greek tongue univerfally prevailed. In Sicily it was in a manner vernacular, The Ionians had fent a colony into Egypt in the reign of Pfammitichus; and a Greek settlement had been formed in Cyrenia many ages before. The Phocians had built Massilia or Marseilles as early as the reign of Cyrus the Great, where fome remains of the Greek language are still to be discovered. Cæsar tells us, that in the camp of the Helvetii registers were found in Greek letters. Perhaps no language ever had so extenfive a spread, where it was not propagated by the law of conquest.

The Greek tongue, at this day, is confined within Greek spovery narrow limits. It is spoken in Greece itself, ex-ken at precept in Epirus, and the western parts of Macedonia. It is likewise spoken in the Grecian and Asiatic islands, in Candia or Crete, in some parts of the coast of Asia Minor, and in Cyprus: but in all these regions, it is much

corrupted and degenerated.

As a specimen, we shall insert a modern Greek song, and the advertisement of a quack medicine, which with other plunder, was brought by the Russians from Chocfim or Chotzini in 1772.

Song in modern Greek.

ΜΙ δυσικίαις πολεμώ μι βάσανα ώς τὸ λεμό Είμαι, και κεντινεύω, καὶ νὰ χαθω κοντεύω Στο πέλαγος των συμφοςων με έπικινδυνον καιςον Μ' ανέμες ολάθε:ες σφοδεες και εναντιες. Με κύματα πολλών καὶ μῶν τεφανὶ ανας ενασμῶν. Θαλασσα Φυσκομίενη, πόλλα άγριομίενη, Όπε άφειζι καί Φησά γε σαγανάκια περισσά Σύνεφα σκοτισμένα και κατασυγχισμένα, Και να φανή μια σωτηρία, να ίδεν τα ματιά μεσεριά. Γλίχα νερα να εύρω, πάσχα παί δεν ήξευρώ, Ν' άξαζω και δεν ήμποςω γιατι λιμένα δεν 30ξω. Μ' ατελπισίαν θεέχω στα άξιιενα πε έχω. Πέ μὲ αὐτὰ κάν νὰ πνυγῶ ή σελαμέτινα εὐγῶ, Καὶ τετα ἀν βαςαξεν, ἐμποςεν νὰ μὲ Φυλαξεν.

Translation.

With dire misfortunes, pains, and woes, O'erwhelm'd, ingulph'd, I struggling fight; O'er my frail bark proud billows close, To plunge her deep in lasting night. Rough feas of ills inceffant roar, Fierce winds adverfe, with howling blaft, Heave furge on furge. Ah! far from shore My found'ring skiff shall fink at last. Involv'd in low'ring darksome clouds, 'Mid fultry fogs, I pant for breath; Huge foaming billows rend my shrouds, While yawning gulfs extend beneath. From burfting clouds loud thunders roll, And deaf'ning peals terrific spread; Red lightnings dart from pole to pole, And burst o'er my devoted head. When shall the friendly dawning rays Guide me to pleasures once possest And breezy gales, o'er peaceful feas, Waft to some port of endless rest?

Greek Language.

In dark despair, with tempests tost, I veer my fail from fide to fide. Conduct me, Heav'n! to yond' fair coast, Or plange me in the 'whelming tide.

The Quack Bill.

ΒΑΛΣΑΜΟΝ ΤΗΣ ΊΕΡΟΥΣΑΛΗΜ, ΑΠΟ TAIE, KAI NOYPIAIE, KAI ΠΑΛΕΑΙΣ ΡΕΤΖΕΤΑΙΣ.

ΤΟΥΤΟ το μπαλσαμον ώφελει εις το άδυνατον τομάχι, και βοηθεί την χονευσιν δυναμώνει την καιδίαν. συκώνει όλας τὰς ἐμθράζοις τῆς κοιλιας ωφελεί εἰς τὴν σένωσιν και βήχα πα-Ιατρέυσε τὰς ἐσωτερικὰς πληγὰς το σήθος, καὶ το πνέυριονος ήγουν πλεμονίκ. κινεί τα καταμήνια των γυναικών. 'Εις τὰς ἐξωτες:κὰς πληγὰς πςέπει νὰ βάζεται με τὸ ξανθὸ τόσον έις παλαιάς. Οσον και έιογεας, καθώς είναι η οπαθιαις, και ριαχαιειαϊς, και άλλα κοψίματα ίατεευει κάθελογῆς Φισολα, και όλας τὰς βεομεράς πληγάς όπε έφθασαν εις το κόκαλον Δαυμάσιως, ώφελει είς τὰ ἀυτία όπε τρεχουν εμπυον νὰ σαζεται δύο ή τρεῖς κόμπες ήχουν ταλαγματίας μέδαμπάκι Βετερεένον τὶς ἀυτὸ, βάνεται εἰς τὰς πληγωμενας δοντοποιλιαϊς καὶ θέλουν ἰατρευθή, καὶ ἀκόμι δυναμώνει τὰ ὁδόντια ὁπέ κινοῦν ται δε θελουν να πέσουν. βοηθά και άπό την πανέκλαν.

Η δόσις εσωτερικώς ας είναι δέκα ή και δώδεκα κόμπες είς όλίγον κρασί, η και νερον, το κάθε ταχυ και βράδυ. ας το μεταχειζίζεται, και είνα θαυμάσιον μετήν δοκιμήν βεδαιωμενον.

'Αληθές βάλσαμον τέ Βασιλειε.

Instead of giving a literal and bald translation of this advertisement, which runs exactly in the style of other quack bills, it may be fufficient to observe, that the medicine recommended is faid, when taken inwardly, to raile the spirits, remove costiveness and inveterate coughs; to cure pains of the breast and bellyaches; to to affift respiration, and remove certain female obftructions. When applied externally, it cures wounds and fores, whether old or fresh, removes ringing of the ears, fastens the teeth when loose, and strengthens

All this, and much more, it is faid to do in a wonderful manner; and is declared to be the true royal bal-

fam of Jerusalem, and an universal specific.

It is indeed next to a miracle that fo many monuments of Grecian literature are still to be found among men. Notwithstanding the burning of the famous library of Alexandria, and the almost numberless wars, maffacres, and devastations, which have from time to time in a manner defolated those countries where the Greek language once flourished; we are told that there still remain about 3000 books written in that language.

We shall now conclude this section with a brief detail of the most distinguished stages and variations through which this noble tongue made its progress from the age of Homer to the taking of Constantistages of the Greek nople, an. ant. Chr. 1453; a period of more than 2000

179 Distin-

guished

language.

Homer gave the Greek poetry its colour and confiftency, and enriched, as well as harmonized, the language. It feems, from the coincidence of epithets and cadence in Homer and Hefiod, that the Greek heroic verse was formed spontaneously, by the old Aoidoi, a fort of improvifatori; and that Homer and his first followers adopted their verification. The Iliad and Odyffey

have much of the air of extempore compositions; an Greek epithet is never wanting to fill up a verse; and a set Language. of expressions are mechanically annexed to such ideas as were of frequent recurrence. Hence that copiousness and waste of words in the old Greek bard, which forms fuch a contrast to the condensed and laboured composition of Virgil.

The Greek profe was of a more difficult structure; and it may be distributed into different styles or degrees of purity. Of the profe-authors now extant, the first and best style is that of Herodotus, and of Plato in the florid or mixed kind, of Xenophon in the pure and fimple, of Thucydides and Demosthenes in the austere. Nothing, perhaps, is so conducive to form a good taste

in composition as the study of these writers.

The style of Polybius forms a new epoch in the hiftory of the Greek language: it was the idiotic or popular manner of exprcition, especially among military men, in his time, about the 150th Olympiad. It became the model of fucceeding writers, by introducing a fimple unstudied expression, and by emancipating them from the anxious labour of the old Greeks respecting the cadence and choice of words. The flyle of the New Testament, being plain and popular, frequently refembles that of Polybius, as has been shown by Raphelius, and by Kirchmaier, de parallelismo N. T. et Polybii, 1725.

Before this historian, the Alexandrian Jews had formed a new or Hellenistic style, resulting from the expression of oriental ideas and idioms in Greek words, after that language had lost of its purity, as it gained in general use, by the conquests of Alexander. The Hellenistic is the language of the Septuagint, the Apocrypha, the New Testament, and partly of Philo and Josephus. This mixture in the style of the evangelists and apostles, is one credential of the authenticity of the best of all books, a book which could not have been written but by Jewish authors in the first century. See the fine remarks of Bishop Warburton, Doctrine of Grace, book i. ch. 8-10. Critics lose their labour in attempting to adjust the Scripture-Greek to the standard of Atticism.

The diction of the Greek historians, and geographers of the Augustan age, is formed on that of Polybius; but improved and modernized, like the English of the present age, if compared with that of Clarendon or Bacon. More perspicuous than refined, it was well suited to fuch compilations as were then written by men of letters, fuch as Dionysius, Diodorus, and Strabo, with-

out much experience or rank in public life.

The ecclefiastical style was cultivated in the Christian schools of Alexandria, Antioch, and Constantinople; rank and luxuriant, full of oriental idioms, and formed in a great measure on the Septuagint version. Such is, for instance, the style of Eusebius. After him, the best Christian writers polished their compositions in the schools of rhetoric under the later fophists. Hence the popular and flowing purity of St Chrysoftome, who has more good sense than Plato, and perhaps as many good

On the Greek of the Byzantine empire, there is a good differtation by Ducange, de causis corruptæ Græcitatis, prefixed to his Gloffary, together with Portius's Grammar of the modern Greek. This last stage of the Greek language is a miserable picture of Turkish bar-

barism. And, which is most surprising, there is no city of Greece where the language is more different from the ancient than at Athens. The reason of that is, because it has been long inhabited by a mixed multitude of different nations.

To conclude, the Greeks have left the most durable monuments of human wisdom, fortitude, magnificence, and ingenuity, in their improvement of every art and fcience, and in the finest writings upon every subject ne-

ceffary, profitable, elegant, or entertaining.

The Greeks have furnished the brightest examples of every virtue and accomplishment, natural or acquired, political, moral, or military: they excelled in mathematics and philosophy; in all the forms of government, in architecture, navigation, commerce, war: as orators, poets, and historians, they stand as yet unrivalled, and are like to stand so for ever; nor are they less to be admired for the exercises and amusements they invented, and brought to perfection, in the institution of their

public games, their theatres, and fports.

Let us further observe, that in vain our readers will translation look for these admired excellencies in any of the best translations from the Greek: they may indeed communicate some knowledge of what the originals contain; they may present you with propositions, characters, and events: but allowing them to be more faithful and more accurate than they really are, or can well be, still they are no better than copies, in which the fpirit and luftre of the originals are almost totally lost. The mind may be instructed, but will not be enchanted: The picture may bear some faint resemblance, and if painted by a masterly hand give pleasure; but who would be satisfied with the canvas, when he may possess the real object? who would prefer a piece of coloured glass to a diamond? It is not possible to preserve the beauties of the original in a translation.—The powers of the Greek are vaftly beyond those of any other tongue. Whatever the Greeks describe is always felt, and almost seen; motion and music are in every tone, and enthusiasm and inchantment possess the mind:

> Graiis ingenium, Graiis dedit ore rotundo, Musa loqui.

SECT. VIII. Of the Latin Language.

THIS language, like every other spoken by barbarians, was in its beginning rough and uncultivated .-What people the Romans were, is a point in which antiquarians are not yet agreed. In their own opinion mans, and they were fprung from the Trojans*; Dion. Halicar. derives them from the Greeks +; and Plutarch informs * Tit. Liv. us that some people imagined that they were sprung lib.i. cap. 1. from the Pelasgi. The fact is, they were a mixture of people collected out of Latium and the adjacent parts. † Antiq. Rom. lib. i.

which a variety of accidents had drawn together, to Latin establish themselves on that mountainous region, in order Larguage. to fecure their own property, and plunder that of their neighbours. They were in all probability composed of Arcadians, Sabines, Latins, Hetruscans, Umbrians, Oscans, Pelasgi, &c.; and if so, their language must have been a mixture of the different dialects peculiar to all these discordant tribes.

The Latin language ought then to be a mingled mass of the Arcadian, that is, the Æolian || Greek, the Pe- || Strabo, lasgic, Hetruscan, and Celtic dialects. These jarring lib. v. elements, like the people to whom they belonged re-Dionys. Hasspectively, gradually incorporated, and produced what licarn Anspectively, gradually incorporated, and produced what trq. lib is

was afterwards called the Latin tongue.

The Arcadians were a Pelasgic & tribe, and confe- & Strabo es quently spoke a dialect of that ancient Greek produced Heridotus. by the coalition of this tribe with the favage aborigines of Greece. This dialect was the ground-work of the Latin. Every scholar allows, that the Æolian Greek, which was ftrongly tinctured with the Pelasgic, was the model upon which the Latin language was formed. From this deduction it appears, that the Latin tongue is much more ancient than the modern Greek; and of course we may add, that the Greek, as it stood before it was thoroughly polished, bore a very near resemblance to that language. Hence we think we may conclude, that the knowledge of the Latin language is necessary in order to understand the Greek. Let us not then expect to find the real ingredients of the Greek tongue in the academic groves of Athens, or in Smyrna, or in Rhodope, or in Hæmos; but on the banks of the Tiber and on the fields of Laurentum.

A very considerable part of the Latin tongue was derived from the Hetruscan. That people were the masters of the Romans in every thing sacred. From them they learned the ceremonies of religion, the method of arranging games and public festivals, the art of divination, the interpretation of omens, the method of lustrations, expiations, &c. It would, we believe, be easy to prove, that the Pelasgi * and Hetrusci (x) were * Thucydithe same race of people; and if this was the case, their des, lib. iv.

· languages must have differed in dialect only.

The Umbrian or Celtic enters deeply into the composition of the Latin tongue. For proof of this, we need only appeal to Pelloutier, Bullet's Memoires de la Langue Celtique, partie premiere, Abbé Pezron's Origin of Ancient Nations, &c. Whether the old Celtic differed effentially from the Pelasgic and Hetruscan, would be a matter of curious investigation, were this a proper subject for the present article.

The Latin abounds with oriental words, especially Hebrew, Chaldaic, and Persian. These are certainly remains of the Pelasgic and Hetruscan tongues, spoken originally by people who emigrated from regions where those were parts of the vernacular language.-The

(x) The Hetrusci were variously denominated by the Greeks and Romans. The former called them Tugonyos; which was their true name, for they actually emigrated from Tarshish, or the western coast of Asia Minor, and consequently Herodotus everywhere calls them Tugonio. The Æolians changed a into v; hence in that dialect they were called rugonion, from Tarfus. The Romans styled them Tusci, probably from the Greek verb over, sacrifico, alluding to the skill which that people professed in the ceremonies of religion. They called their country Hetruria, we think from the Chaldaic word heretum, "a magician or forcerer;" a name deduced from their skilt in divination.

No perfect Greek author.

181

Origin of

the Ro-

of their

‡ Vita Romul.

180

Greeks, in polithing their language, gradually difforted Language and disfigured vast numbers of the rough eastern vocables, which made a very great part of it. (See the

preceding fection).

The Romans, of lefs delicate organs, left them in their natural state, and their natural air readily bewrays their original. We had collected a large lift of Latin words still current in the cast; but find that Thomassin+ Gloffary. and Ogerius (Y), and especially Mons. Gebelin, in his most excellent Latin Dictionary, have rendered that labour superfluous.

> In this language, too, there are not a few Gothic terms. How these found their way into the Latin, it is not eafy to discover, unless, as Pelloutier supposes, the Celtic and Gothic languages were originally the same: or perhaps we may conjecture, that fuch words were parts of a primitive language, which was at one time univerfal.

182 How far the Latin refembles

the Greek.

* Tacitus,

Anal. lib. ii.

lib. vii.

cap. 53.

There are, befides, in the Latin a great number of obsolete Greek words, which were in process of time obliterated, and others fubstituted in their room; fo that, upon the whole, we are perfuaded, that the most effectual method to distinguish the difference between the early and modern Greek, would be to compare the ancient Latin with the latter; there being, we imagine, very little difference between the ancient Greek and Latin in the earliest periods.

However that may be, it is certain that the Roman letters were the fame with the ancient Greek .- Formæ literis Latinis quæ veterrimis Græcorum, fays Tacitus *; and Pliny + fays the fame thing, and for the truth of his affertion he appeals to a monument extant in his own

† Nat. Hist. times.

These old Greek letters were no other than the Pelafgic, which we have shown from Diodorus Siculus (see preceding Section) to have been prior to the Cadmean. For the figure of these letters, see Astle, Postellus, Montfaucon, Palægraphia Græca, Mons. Gebelin, and our Plates XV and XVI.

That the Latins borrowed the plan of their declenfions from the Greeks, is evident from the exact refemblance of the terminations of the cases throughout the three fimilar declenfions. In nouns of the first declenfion, the refemblance is too palpable to stand in need of illustration. In the fecond, the Greek genitive is o. In Latin the o is thrown out, and the termination becomes i. In the Greek fection, we have observed, that the founds of , and v differed very little; therefore the Latins used instead of v. The Latin dative ends in o, which is the Greek dative, throwing away . fubscriptum, which was but faintly founded in that language. No genuine Greek word ended in p or m.

The Hellenes feemed to have abhorred that bellowing liquid; it is, however, certain that they imported it from the east, as well as the other letters, and that they employed it in every other capacity, except in that of clofing words. In the termination of flexions, they

changed it into v.

The Latins retained m, which had been imported to them as a terminating letter at an era before the Greek language had undergone its last refinement.—Hence the Latin Latin accusative in um, instead of the Greek ov. The Language: vocative cafe, we imagine, was in this declenfion originally like the nominative. The Latins have no dual number, because, in our opinion, the Æolian dialect, from which they copied, had none. It would be, we think, a violent stretch of etymological exertion, to derive either the Latin genitive plural of the fecond declenfion from the same case of the Greek, or that of the latter from the former; we therefore leave this anomaly, without pretending to account for its original formation. The third declenfions in both languages are fo exactly parallel, that it would be superfluous to compare them. The dative plural here is another anomaly, and we think a very difagreeable one, which we leave to the conjectures of more profound etymologists.

For the other peculiarities of Latin nouns, as they are nearly fimilar to those of the Greek, we must beg leave to remit our readers to that section for information.

The Latins have no articles, which is certainly a defect in their language. The Pelasgic, from which they Deficiency copied, had not adopted that word in the demonstrative of articles. sense. Homer indeed seldom uses it; and the probability is, that the more early Greek used it less frequently. at least in the sense above-mentioned. Thus in Latin, when I fay, video hominem, it is impossible to find out by the bare words whether the word hominem intimates "a man," or "the man;" whereas in Greek it would be Βλεπω ανθεωπον, I see a man, Βλεπω τον ανθεωπον, I fee the man. Hence the first expression is indefinite, and the fecond definite.

The fubstantive verb fum in Latin feems to be partly formed from the Greek and partly not. Some of the prigin of persons of the present tense have a near resemblance to the substanthe Greek verb is or ince, while others vary widely tive verb, from that archetype. The imperfect præterite and præterperfect have nothing common with the Greek verb, and cannot, we think, be forced into an alliance with it. The future ero, was of old eso, and is indeed genuine Greek. Upon the whole, in our apprehension the Latin substantive verb more nearly resembles the Perfian verb hesten than that of any other language we are acquainted with.

From what exemplar the Latin verbs were derived, is not, we think, eafily ascertained. We know that at- and of ac tempts have been made to deduce them all from the Æ-ther verbs, olic Greek, and that the Romans themselves were extremely fond of this chimera; but the almost numberless irregularities, both in the formation and conjugation of their verbs, induce us to believe that only a part of them were formed upon that model. We are apt to think that the terminations in bam, bas, bat, bamus, &c. are produced by their union with a fragment of fome obfolete verb, which is now wholly loft. In the verb amo, e. g. we are fure that the radix am is the Hebrew word mother; but how am-abam, am-abo, am-arem were fabricated, and connected with the radical am, is not fo easily determined. That Latin verbs are composed of an inflexible radix and another flexible verb, as well as the Greek, cannot be doubted; but what this

⁽Y) Graca et Latina lingua Hebraizantes, Venice 1763. If these books are not at hand, Dr Littleton's Dietionary will, in a good measure, supply their place.

Language.

flexible auxiliary was, we think, cannot now be clearly afcertained. It is not altogether improbable that fuch parts of the verbs as deviate from the Greek archetype were supplied by fragments of the verb ha, which pervades all the branches of the Gothic language, and has, we think, produced the Latin verb habeo. When the Greeks began to etymologize, they feldom overpassed the verge of their own language: the Latins purfued nearly the same course. If their own language presented a plaufible etymology, they embraced it; if not, they immediately had recourse to the Greek; and this was the ne plus ultra of their etymological refearches. Cicero, Quintilian, Festus, &c. and even Varro, the most learned of all the Romans, stop here; all beyond is either doubt or impenetrable darkness. The opinion abovementioned we offer only as a conjecture; the decision we leave to more able critics.

186 Deficiencies in Latin verbs.

ties in the

conjuga-

tions.

The want of aorists or indefinite tenscs seems to us a palpable defect in the Latin language. The use of these among the Greeks enabled the writer to express the specific variations of time with more accuracy and precision than the Latins, who never attempted to specify them by any other tenses but the imperfect and pluperfect. Indeed we should imagine, that both the Greeks and Latins were much inferior to the English in this respect. The Latin word lego, for example, may be translated into English three different ways: 1st, I read; 2d, I do read; 3d, I am reading.

187 Irregulari-

The Latins, in reducing verbs to their four conjugations, formed their inflexions in a very irregular manner. Many verbs of the first class inflect their præterite and fupine like those of the second: thus domo, instead of giving avi and atum, has ui and itum, like monui and monitum. Again, not a few verbs of the third conjugation have ivi and itum, as if they belonged to the fourth; e.g. peto, petivi, petitum. Then, fome verbs have io in the prefent, ivi in the præterite, and itum in the fupine, while, contrary to the rules of analogy, they in reality belong to the third: fuch are cupio, cupivi, cupitum, cupere, &c. Some verbs of the second conjugation have their præterite and supine as if they belonged to the third; thus, jubeo, justi, justim, jubere; augeo, auxi, anctum, augere. Some verbs, which are actually of the fourth conjugation, have their præterite and fupine as if they were of the third; thus fentio, sensi, sensum, sentire; haurio, hausi, hauslum, haurire, &c. If thefe are not manifest irregularities, we cannot fay what deserves the name. The fact seems to stand thus: The Romans were originally a banditti of robbers, bankrupts, runaway flaves, shepherds, husbandmen, and pealants of the most unpolished character. They were engaged in perpetual broils and quarrels at home, and feldom enjoyed repose abroad. Their profession was robbery and plunder. Like old Ishmael, their hands were against every man, and every man's hand against them. In such a state of society no time was left for cultivating the sciences. Accordingly the arts of war and government were their fole profession. This is fo true, that their own poet characterizes them in the following manner:

Excudunt alii spirantia mollius æra, &c.

Another blemish in the Latin tongue is occasioned The Latin deficient in by its wanting a participle of the præterite tense in the participles. active voice. This defect is perpetually felt, and is the

cause of an aukward circumlocution wherever it happens Latin to present itself. Thus, "The general having croffed Linguage. the river, drew up his army;" Imperator, cum transitlet flumen; aciem instruxit. Here cum translisset flumen is a manifest circumlocution, which is at once avoided in the Greek o hyquar regards for rotaner, &c. This must always prove an incumbrance in the case of active intransitive verbs. When active deponent verbs occur, it is eafily avoided. Thus, "Cæfar having encouraged the foldiers, gave the fignal for joining battle;" Cafar cohortatus milites, prælii committendi signum dedit.

Another palpable defect in this language arises from the want of a participle of the present passive. This again must produce an inconveniency upon many occafions, as will be obvious to every Latin student almost

every moment.

The two supines are universally allowed to be sub-Supines and stantive nouns of the fourth declension. How these af-gerunds. fumed the nature of verbs it is not easy to determine. When they are placed after verbs or nouns, the matter is attended with no difficulty; but how they should acquire an active fignification, and take the cafe of the verb with which they are connected, implies, we should think, a stretch of prerogative.

The Latin gerunds form another unnatural anomaly. Every Latin scholar knows that those words are nothing but the neuters of the participles of the future passive. The fabricators of the Latin tongue, however, elevated them from their primary condition, giving them upon many occasions an active fignification. In this case we

must have recourse to

-Si volet usus, Quem penes arbitrium est et jus et norma loquendi.

Another inconveniency, perhaps more feverely felt than any of the preceding, arises from the want of the use of the present participle of the verb sum. Every body knows what a conveniency is derived from the frequent use of the participle we in Greek; and indeed it appears to us fomewhat furprifing that the Latins neglected to introduce the participle ens into their language. In this we believe they are fingular. Here again a circumlocution becomes necessary in such a case as the following: "The fenate being at Rome, passed a decree." Instead of faying fenatus ens Romæ, legem tulit, we are obliged to fay cum fenatus Romæ effet, &c. If the words ens or existens had been adopted, as in the Greek, this odious circumlocution would have been

Many other defects of the like kind will occur to every person who shall choose to search for them, and those in the most approved classical authors. Perhaps our mentioning fo many may be deemed invidious by the admirers of that language; but we write from conviction, and that must be our apology.

If one take the trouble to compare the structure of the Different Greek and Latin languages, he will, we think, quickly genius of be convinced that their characteristic features are ex-the Latin tremely different. The genius of the former feems eafy and Greek and natural; whereas that of the latter natural transfer and languages. and natural; whereas that of the latter, notwithstanding the united efforts of poets, orators, and philosophers, still bears the marks of violence and restraint. Hence it appears that the Latin tongue was pressed into the service, and compelled almost against its will to bend to the laws of the Grecian model. Take a fentence of Hebrew.

Latin Hebrew, Chaldean, Arabian, &c. and try to translate Language. it into Greek without regarding the arrangement of the words, and you will find it no difficult attempt; but make the fame trial with respect to the Latin, and you will probably find the labour attended with confiderable difficulty. To translate Greek into English is no laborious talk; the texture of the two languages is fo congenial, that the words and phrases, and even the idiomatic expressions, naturally slide into each other. With the Latin the case is quite otherwise; and before elegant English can be produced, one must deviate considerably from the original. Should we attempt to translate a piece of English into Greek, and at the same time into Latin, the translation of the former would be attended with much less difficulty than that of the latter, suppofing the translator equally skilled in both languages.

Caufes of this dif-

tongue

composed chiefly of

and Celtic

Pelafgie

words.

This incongruity feems to fpring from the following cause. Before any man of considerable abilities, either in the capacity of a poet, grammarian, or rhetorician, appeared at Rome, the language had acquired a strong and inflexible tone, too stubborn to be exactly moulded according to the Grecian flandard. After a language has continued feveral centuries without receiving a new polish, it becomes like a full grown tree, incapable of being bent to the purposes of the mechanic. For this reason, it is highly probable, that the longue in question could not be forced into a complete affimilation with the Greek. Notwithstanding all these obstructions, in process of time it arrived at such an exalted pitch of perfection, as to rival, perhaps to excel, all the other European languages, the Greek only excepted. Had men of the taste, judgement, and industry of Ennius, Plautus, Terence, Cicero, and the worthies of the Augustan age, appeared in the early stages of the Roman commonwealth, we may believe that their language would have been thoroughly reduced to the Grecian archetype, and that the two dialects might have improved each other by a rivalship between the nations who employed

Without pretending to entertain our readers with a pompous and elaborate account of the beauties of that imperial language which have been detailed by writers almost without number, we shall endcavour to lay before them as briefly as possible its pristine character, the fteps and stages by which it gradually rose to perfection, the period when it arrived at the summit of its excellence, and by what means it degenerated with a rapid career till it was lost among those very people to whom it owed its birth.

The Latin We have observed already, that the Latin tongue was a colluvies of all the languages spoken by the vagrant people who composed the first elements of that republic. The prevailing dialects were the Pelafgic or Hetruscan, which we think were the same; and the Celtic, which was the aboriginal tongue of Italy. Hence the primary dialect of the Romans was composed of discordant materials, which in our opinion never acquired a natural and congenial union. Be that as it may, this motley mixture was certainly the original dialect of the Romans. The Pelafgic or Hetruscan part of Latin it retained a strong tincture of the oriental style. The Language. Celtic part feems to have been prevalent, fince we find that most of the names of places (z), especially in the middle and northern parts of Italy, are actually of Celtic original. It is therefore clear that the flyle of the first Romans was composed of the languages above mentioned. Who those first Romans were, we believe it is impossible to determine with any degree of certainty. The Roman historians afford us as little information upon that subject, as their etymologists do upon the origin of their language. Their most celebrated writers upon this point were Ælius Gallus, Quintus Cornificius, Nonius Marcellus, Festus, and some others of less note. At the head of these we ought to place Terentius Varro, whom Cicero styles the most learned of all the Romans. From these writers we are to expect no light. Their etymologics are generally childish and futile. Of the language of the most ancient Romans we can only reason by analogy; and by that rule we can discover nothing more than what we have advanced

In the first place we may rest assured that the dual number, the articles, the participle above mentioned, the aorists, and the whole middle voice, never appeared in the Latin tongue; and accordingly were not current in those languages from which it was copied, at least at the time when it was first fabricated.

Besides all this, many circumstances concur to make it highly probable that, in the earliest period of the language, very few inflexions were introduced. 1st, When the Pelafgi left Greece, the Greek language itself was not fully polished. 2d, The Arcadians were never thoroughly cultivated. They were a rustic pastoral people, and little minded the refinements of a civilized flate; confequently the language they brought into Italy at that era must have been of a coarse and irregular contexture. 3d, When the Thoffalian * Pelasgi arrived in * Dionys. Italy about the time of Deucalion, the Greek itself was Halicarn. rude and barbarous; and, which is still of more conse-lib. i. quence, if we may credit Herodotus quoted in the former fection, that people had never adopted the Hellenic tongue. Hence it appears, that the part of the Latin language derived from the Pelasgic or Hetruscan (for those we believe to have been the same) must have taken a deep tincture from the oriental tongues. (See preceding Section). If we may judge of the Celtic of that age by that of the present, the same character must likewife have distinguished its structure.

From these circumstances, we think it appears that Hence little the earliest language of the Romans was very little di-inflected in verified with inflexions. It nearly refembled the orien-its original tal exemplar, and confequently differed widely from the modern Latin. The effect of this was, that the modern Romans could not understand the language of their early progenitors. Polybius +, fpeaking of the earlieft treaty + Lib. 3. between the Romans and Carthaginians, makes the fol. fub initio. lowing observation: "Believe me (fays he), the Roman language has undergone fo many changes fince that

⁽z) For proof of this our readers may confult Abbé Pezron, Pelloutier, Bullet's Mem. Gebelin Pref. Dict. Lac. and many others.

time (A) to the present, that even those who are most deeply skilled in the science of antiquities cannot understand the words of that treaty but with the greatest diffi-

From this fource we make no doubt has flowed that vast number of oriental words with which the Latin language is impregnated. These were originally inflexible, like their brethren of the east. They were not disguised as they now are with prefixes, affixes, metathefes, fyncopas, antitheses, &c. but plain and unadorned in their

natural drefs.

Bent afterthe Gre-

The prin-

cipal au-

thors by

whom it

was gradually po-

lished.

After the Romans became acquainted with the Æowards into lian Greeks, who gradually feized upon both coasts of Italy towards the fouth, which they called Magna Græcia, they began to affect a Grecian air, and to torture their language into that foreign contexture. It appears, however, that at first the Grecian garb sat rather aukwardly, and feveral marks of violence were eafily difcerned. The most ancient specimen of this kind that we can recollect confifts of the remains of the twelve tables. Here every thing is rude and of a clumfy cast; for though by this time confiderable progress had been made in refinement, and the language of Rome had begun to appear in a Grecian uniform, still those changes were not altogether natural. Soon after appeared Marcus Fabius Pictor and Sisenna; historians often quoted by Livy, but whose works are long fince irrecoverably loft. The Fasti Capitolini are often mentioned; but they too perished in the burning of the Capitol during the civil wars between Marius and Sylla. Had those monuments escaped the ravages of time, we should have been able to mark the progress of the Latin tongue from stage to stage, and to ascertain with the greatest accuracy its gradual configuration in the course of its progress towards the Grecian standard. We must therefore leave the Latin tongue during those periods rude and barbarous, and descend to others better known and more characteristically marked. Those commenced after that

> Græcia capta ferum victorem cepit, et artes Intulit agresti Latio.

In this period we find Ennius, who wrote a Roman history in hexameter verse in 18 books, which he called Annals; most part of which is now lost. He likewise translated Euhemerus de Origine Deorum; a work often mentioned by the Christian fathers in their disputes with the Pagans. It is fometimes quoted by Cicero. Then followed Caius Lucilius the famous fatirift, and a number of other writers, such as Accius, Valerius, Ædituus, Alpinus, &c. whose fragments were published by the Stephens, Paris, 1564. All these imitated the writers of Greece or translated from them. By their perseverance and active exertions the spirit of these authors was transfused into the Latin tongue, and its structure accommodated to the Grecian plan.

Plautus and Terence, by translating the comedies of Menander and Diphilus into their own language, taught the Latin muses to speak Attic Greek. To speak that language was then the ton of the times, as it is now with

us to chatter French. Greek tutors were retained in Latin every reputable family; and many Romans of the first Language. rank were equally qualified to speak or write both in Greek and Latin. The original jargon of Latium was now become obsolete and unintelligible; and Cato the Ancient condescended to learn the Greek language

To pretend to enumerate the various, and we may The goldadd inimitable, examples of the Augustan or golden age en age of of the Roman tongue, would be an infult to the under-Rome. standing of our readers: we shall only take the liberty to translate a few lines from a most excellent historian *, * Velleius who, had his honesty been equal to his judgement, Paterculus, might have rivalled the most celebrated writers of his lib. i. cap. Having observed, that the Greek authors, ult. who excelled in every province of literature, had all made their appearance nearly about the same space of time, confined within very narrow limits, he adds, " Nor was this circumstance more conspicuous among the Greeks than among the Romans; for unless we go back to the rough and unpolished times, which deserve commendation only on account of their invention, the Roman tragedy is confined to Accius and the period when he flourished. The charming wit of Latin elegance was brought to light by Cecilius, Terentius, and Afranius, nearly in the same age. As for our historians (to add Livy also to the age of the former), if we except Cato and fome old obscure ones, they were all confined to a period of 80 years; fo neither has our stock of poets extended to a space much backward or forward. But the energy of the bar, and the finished beauty of profe eloquence, fetting afide the fame Cato (by leave of P. Crassus, Scipio, Lælius, the Gracchi, Fannius, and Ser. Galba, be it spoken), broke out all at once under Tully the prince of his profession; so that one can be delighted with none before him, and admire none except fuch as have either feen or were feen by that ora-

From this quotation it plainly appears, that the Romans themselves were convinced of the short duration of the golden age of their language. According to the most judicious critics, it commenced with the era of Cicero's oratorical productions, and terminated with the reign of Tiberius, or perhaps it did not reach beyond the middle of that prince's reign. It is generally be-Causes of lieved that eloquence, and with it every thing liberal, the degeneelevated, and manly, was banished Rome by the despo-racy of the tism of the Cæsars. We imagine that the transition was Latin too instantaneous to have been entirely produced by that tongue, unhappy cause. Despotism was firmly established among the Romans about the middle of the reign of Augustus; and yet that period produced fuch a group of learned men as never adorned any other nation in fo short a space of time. Despotism, we acknowledge, might have affected the eloquence of the bar; the noble and important objects which had animated the republican orators being now no more: but this circumstance could not affect poetry, history, philosophy, &c. The style employed upon these subjects did not feel the fetters of despotism. The age of Louis XIV. was the golden period

(A) This treaty, according to the fame historian, was concluded in the confulship of Lucius Junius Brutus and Marcus Valerius, 28 years before Xerxes made his descent upon Greece.

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masters of

riod of the French tongue; and we think that age procumstances which chiefly contributed to produce that re-Lauguage.

Language. duced a race of learned men, in every department superior in number and equal in genius to the literati who flourished under the noble and envied constitution of Britain during the fame age, though the latter is univerfally allowed to have been the golden period of this country. The British isles, we hope, enjoy still as much liberty as ever; yet we believe few people will aver, that the writers of the present age are equal either in ftyle or in genius to that noble group who flourished from the middle of the reign of Charles I. to the middle of the reign of George II.; and here despotism is quite un-

> In the east the same observation is confirmed. The Persians have long groaned under the Mohammedan yoke; and yet every oriental scholar will allow, that in that country, and under the most galling tyranny, the most amazing productions of taste, genius, and industry, that ever dignified human nature, have been exhibited. Under the Arabian caliphs, the successors of Mohammed, appeared writers of a most sublime genius, though never was despotism more cruelly exercised than under those fanatics. The revival of letters at the era of the Reformation was chiefly promoted and cherished by petty despotical princes.

We cannot therefore be perfuaded, that the despotism of the Cæsars banished eloquence and learning from Rome. Longinus indeed has attributed this misfortune to that cause, and tells us, beerfas te yae inara ta Φεονηματα των Μεγαλοφεονων ή ΕΛΕΥΘΕΡΙΑ, &c. "It is liberty that is formed to nurse the sentiments of great geniules, to push forward the propensity of contest, to inspire them with hopes, and the generous ambition of being the first in rank." When Longinus wrote this, he did not reflect that he himself was a striking instance

of the unfoundness of his observation.

As to science, the fact is undoubtedly on the other The writer fide. That Seneca was fuperior to Cicero in philosophy, cannot be reasonably contradicted. The latter had read, and actually abridged, the whole extent of Grecian philosophy: this displayed his reading rather than his science than learning. The former had addicted himself to the stoic feet; and though he does not write with the same flow of eloquence as Tully, he thinks more deeply and rea-fons more closely. Pliny's Natural History is a wonderful collection, and contains more useful knowledge than all the writings of the Augustan age condensed into one mass. We think the historical annals of Tacitus. if inferior to Livy in ftyle and majesty of diction, much fuperior in arrangement and vigour of composition. In fhort, we discover in these productions a deep insight into human nature, an extensive knowledge of the science of government, a penetration which no diffimulation could escape, together with a fincere attachment to truth both with respect to events and characters; nor is he inferior in the majesty, energy, and propriety of his harangues, wherever an equal opportunity presents itfelf. Quintilian, Pliny the younger, Snetonius, Petronius Arbiter, and Juvenal, deserve high esteem; nor are they inferior to their immediate predecessors. We think there is good reason to conclude, that the loss of liberty among the Romans did not produce the extinction of eloquence, science, elevation of sentiment, or refinement of taste. There were, we believe, other cir-Vol. XVI. Part I.

The fame Velleius Paterculus whom we have quoted affigns fome plaufible and very judicious reasons for this catastrophe. " Emulation (fays he) is the nurse of genius; and one while envy, and another admiration, fires imitation. According to the laws of nature, that which is purfued with the greatest ardour mounts to the top: but to be stationary in perfection is a difficult matter; and by the same analogy, that which cannot go forward goes backward. As at the outfet we are animated to overtake those whom we deem before us, so when we despair of being able to overtake or to pass by them, our ardour languishes together with our hope, and what it cannot overtake it ceases to pursue; and leaving the subject as already engroffed by another, it looks out for a new one upon which to exert itself. That by which we find we are not able to acquire eminence we relinquish, and try to find out some object elsewhere upon which to employ our intellectual powers. The confequence is, that frequent and variable transitions from subject to subject proves a very great obstacle to perfection in any profeffion."

This perhaps was the case with the Romans. The heroes of the Augustan age had borne away the prize of eloquence, of history, of poetry, &c. Their succesfors despaired of being able to equal, much less to furpass them, in any of these walks. They were therefore laid under the necessity of striking out a new path by which they might arrive at eminence. Confequently Seneca introduced the file coupé, as the French call it; that is, a short, sparkling, figurative diction, abounding with antithefes, quaintneffes, witticifms, embellished with flowers and meretricious ornaments; whereas the ftyle of the Augustan age was natural, simple, solid, unaffected, and properly adapted to the nature of the subject and the fentiments of the author.

The historian Sallust laid the foundation of the unnatural style above mentioned. Notwithstanding all the excellencies of that celebrated author, he everywhere exhibits an affectation of antiquity, an antithetical cast, an air of austerity, an accuracy, exactness, and regularity, contrary to that air degagé which nature displays in her most elaborate efforts. His words, his clauses, feem to be adjusted exactly according to number, weight, and measure, without excess or defect. Velleius Paterculus imitated this writer; and, as is generally the cafe with imitators, fucceeded best in those points where his archetype had failed most egregiously. Tacitus, however excellent in other respects, deviated from the Augustan exemplars, and is thought to have imitated Sallust; but affecting brevity to excess, he often fails into obscurity. The other contemporary writers employ a cognate style; and because they have deviated from the Augustan standard, their works are held in less estimation, and are thought to bear about them marks of degeneracy.

That degeneracy, however, did not spring from the despotic government under which these authors lived, but from that affectation of fingularity into which they were led by an eager but fruitless defire of fignalizing themselves in their mode, as their predecessors had done in theirs. But the mischiefs of this rage for innovation did not reach their fentiments, as it had done their

Writers of

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style; for in that point we think they were fo far from Language falling below the measure of the writers of the former age, that in many instances they seem to have surpassed

> With respect to sentiment and mental exertions, the authors in question preserved their vigour, till luxury and offeminacy, in consequence of power and opulence, enervated both the bodies and minds of the Romans. The contagion foon became universal; and a liftleffness, or intellectual torpor, the usual concomitant of luxury, spread indolence over the mental faculties, which reudered them not only averse to, but even incapable of, industry and perseverance. This lethargic disposition of mind feems to have commenced towards the conclusion of the filver age; that is, about the end of the reign of Adrian. It was then that the Roman eagle began to stoop, and the genius of Rome, as well in arts as in arms, began to decline. Once more, the declenhon of the intellectual powers of the writers of that nation did not arise from the form of the government, but from the causes above specified.

> As the Roman genius, about that period, began to decline, fo the ftyle of the filver age was gradually vitiated with barbarisms and exotic forms of speech. The multitudes of barbarians who flocked to Rome from all parts of the empire; the ambassadors of foreign princes, and often the princes themselves, with their attendants; the prodigious numbers of flaves who were entertained in all the confiderable families of the capital, and over all Italy; the frequent commerce which the Roman armies upon the frontiers carried on with the barbarians; all concurred to vitiate the Latin tongue, and to interlard it with foreign words and idioms. In fuch circumthances, it was impossible for that or any other language to have continued pure and untainted.

> This vitiated character both of style and sentiment became more and more prevalent, in proportion as it descended from the reign of Adrian towards the era of the removal of the imperial feat from Rome to Constantinople. Then succeeded the iron age, when the Roman language became absolutely rude and barba-

> Towards the close of the filver, and during the whole course of the brazen age, there appeared, however, many writers of no contemptible talents. The most remarkable was Seneca the stoic, the master of Nero, whose character both as a man and a writer is discussed with great accuracy by the noble author of the Characteriftics, to whom we refer our readers.

> About the same time lived Persius the satirist, the friend and disciple of the stoic Cornutus; to whose precepts he did honour by his virtuous life; and by his works, though finall, he showed an early proficiency in the science of morals.

> Under the mild government of Adrian and the Antonines lived Aulus Gellius, or (as some call him) Agellius; an entertaining writer in the miscellaneous way, well skilled in criticism and antiquity. His works contain feveral valuable fragments of philosophy, which are indeed the most curious part of them.

> With Aulus Gellius we may rank Macrobius; not because he was a contemporary (for he is supposed to have lived under Honorius and Theodosius), but from his near resemblance in the character of a writer. His

works, like those of the other, are miscellaneous; filled Latin with mythology and ancient literature, with fome philo- Language.

fophy intermixed.

In the same age with Aulus Gellius slourished Apuleius of Madaura in Africa; a Platonic writer, whose matter in general far exceeds his perplexed and affected ftyle, too conformable to the false rhetoric of the age in which he lived.

Boethius was descended from one of the noblest of the Roman families, and was couful in the beginning of the fixth century. He wrote many philosophical works; but his ethic piece on the Confolation of Philosophy deferves great encomiums, both for the matter and the style; in which latter he approaches the purity of a far better age than his own. By command of Theodoric king of the Goths this great and good man fuffered death; and with him the Latin tongue, and the last remains of Roman dignity, may be faid to have funk in the western world.

There were besides a goodly number both of poets and historians who flourished during this period; such as Silius Italicus, Claudian, Aufonius, &c. poets and historians to a very great number, for whom our readers may confult Joh. Alberti Fabricii Bibl. Lat.

There flourished, too, a number of ecclesiastical writ-Elegant ecers, some of whom deserve great commendation. The clesiastical chief of these is Lactantius, who has been deservedly writers in Latin. dignified with the title of the Christian Cicero.

The Roman authors amount to a very fmall number in comparison of the Greek. At the same time, when we confider the extent and duration of the Roman empire, we are justly surprised to find so few writers of character and reputation in so vast a field. We think we have good reason to agree with the prince of Roman poets in the fentiment already quoted.

Upon the whole, the Latin tongue deserves our atten-Excellency tion beyond any other ancient one now extant. The and usefulgrandeur of the people by whom it was spoken; the pess of the lustre of its writers; the empire which it still maintains tongue. among ourselves; the necessity we are under of learning it in order to obtain access to almost all the sciences, nay even to the knowledge of our own laws, of our judicial proceedings, of our charters; all those circumstances, and many others too numerous to be detailed, render the acquisition of that imperial language in a peculiar manner at once improving and highly interesting. Spoken by the conquerors of the ancient nations, it partakes of all their revolutions, and bears continually their impression. Strong and nervous while they were employed in nothing but battles and carnage, it thundered in the camps, and made the proudest people to tremble, and the most despotic monarchs to bend their stubborn necks to the yoke. Copious and majestic, when, weary of battles, the Romans inclined to vie with the Greeks in science and the graces, it became the learned language of Europe, and by its lustre made the jargon of favages disappear who disputed with it the possession of that quarter of the globe. After having controlled by its eloquence, and humanized by its laws, all those people, it became the language of religion. In short, the Latin language will be studied and esteemed as long as good sense and fine taste remain in the

SECT.

202

Origin of

the Celts.

SECT. IX. Celtic, Gothic, and Sclavonian Languages.

§ 1. Of the Celtic Language.

In treating of the origin of the Latin tongue (fee Sect. VIII.), we observed that a great part of it is derived from the Celtic. We shall now endeavour to give fome account of the origin and extent of that ancient language; still leaving the minutiæ to grammars and dictionaries, as we have done with respect to the other dialects which have fallen under our confideration. Our candid readers, it is hoped, will remember, that we are acting in the character of philologers, not in that of grammarians and lexicographers.

The descendants of Japhet having peopled the western parts of Asia, at length entered Europe. Some broke into that quarter of the globe by the north, others found means to cross the Danube near its mouth. Their posterity gradually ascended towards the source of that river; afterwards they advanced to the banks of the Rhine, which they passed, and thence spread themselves

fas ar as the Alps and the Pyrenees.

These people, in all probability, were composed of different families; all, however, spoke the same language; their manners and customs bore a near refemblance; there was no variety among them but that difference which climate always introduces. Accordingly they were all known, in the more early times, by the general name of Celto-fcythæ. In process of time, becoming exceedingly numerous, they were divided into feveral nations, which were distinguished by different names and territorial appellations. Those who inhabited that large country bounded by the ocean, the Mediterranean, the Rhine, the Alps, and the Pyrenees, were denominated Gauls or Celts. These people multiplied whom were fo prodigiously in the space of a few centuries, that the fertile regions which they then occupied could not afford them the means of subsistence. Some of them now passed over into Britain; others crossed the Pyrenees, and formed fettlements in the northern parts of Spain. Even the formidable barriers of the Alps could not impede the progrefs of the Gauls: they made their way into Italy, and colonized those parts which lie at the foot of the mountains; whence they extended themselves towards the centre of that rich country.

By this time the Greeks had landed on the eastern coast of Italy, and founded numerous colonies in those parts. The two nations vying as it were with each other in populousness, and always planting colonies in the courfe of their progress, at length rencountered about the middle of the country. This central region was at that time called *Latium*. Here the two nations formed one fociety, which was called the Latin people. The languages of the two nations were blended together; and hence, according to some, the Latin is a mixture of

Greek and Gaelic.

As the Gauls were a brave and numerous people, they certainly maintained themselves in their pristine possesfions, uninvaded, unconquered, till their civil animofities and domestic quarrels exposed them as a prey to those very Romans whom they had so often defeated, and fometimes driven to the brink of destruction. They were not a people addicted to commerce; and, upon the whole, confidering their fituation both in their primary

feats and afterwards in Italy, they had little temptation or opportunity to mingle with foreigners. Their lan- Language. guage, therefore, must have remained unmixed with foreign idioms. Such as it was when they fettled in Gaul, fuch it must have continued till the Roman conquests. If therefore there is one primitive language now existing, it must be found in the remains of the Gaelic or Celtic. It is not, then, furprifing, that fome very learned men, upon discovering the coincidence of very great numbers of words in some of the Greek dialects with other words in the Celtic, have been inclined to establish a strict assnity between those languages. The Resemancient Pelasgic and the Celtic at least must have nearly blance berefembled each other, admitting a dialectical difference tween their only, and that discrimination which climate and a long and that period of time must always produce.

Some have thought that the Gauls loft the use of their lafgi. native language foon after their country was conquered by the Romans; but Monsieur Bullet, in his Memoires de la Langue Celtique, has proved almost to a demonstration, that the vulgar among those people continued to fpeak it feveral centuries after that period. When a great and populous nation has for many ages employed a vernacular tongue, nothing can ever make them entirely relinquish the use of it, and adopt unmixed that of

their con uerors.

Many learned men, among whom is the lexicographer above mentioned, have shown that all the local names in the north of Italy are actually of Celtic cxtraction. These names generally point out or describe fome circumstances relating to the nature of their situation; fuch as exposure, eminence, lowness, moistness, dryness, coldness, heat, &c. This is a very characteristic feature of an original language; and in the Celtic it is so prominent, that the Erse names of places all over Scotland are, even to this day, peculiarly diffinguished by this quality. We have heard a gentleman, who was well skilled in the dialect of the Celtic still fpoken in the Highlands of Scotland, propose to lay a bet, at very great odds, that if one should pronounce the name of any village, mountain, river, gentleman's feat, &c. in the old Scottish dialect, he should be able, by its very name, to give a pretty exact description of its local fituation.

To discover the sources from which the Celtic tongue is derived, we must have recourse to the following expe-

1. We must consult the Greek and Latin authors, who have preferved some Gaelic or Celtic terms in their writings.

2. We must have recourse to the Welsh and Basse Bretagne dialects; in which, indeed, there are many new words, but these are easily distinguished from the primi-

3. If one would trace another source of the Celtic, he must converse with the country people and peasants, who live at a diffance from cities, in those countries where it was once the vernacular tongue. We have been credibly informed, that a Highland gentleman croffing the Alps for Italy, accidentally fell in with an old woman, a native of those parts, who spoke a language fo near akin to his native Erfe, that he could understand her with little difficulty; and that she, on the other hand, understood most of his words. That an event of this nature should actually take place is by no Y v 2

part of denominased Gauls.

means furprifing, when we confider that the Erfe spo-Language, ken in the Highlands of Scotland is perhaps the most genuine remnant of the Celtic now existing, and at the fame time reflect that there may be some remote cantous among those wild and inaccessible mountains, the Alps, where fome remains of that tongue may still be

The most genuine remains of the Celtic Highlands of Scot-

4. We have faid that the most genuine remains of the Gaelic tongue are to be found in the Highlands of Scotland; and the reason is obvious. The Scottish Highlanders are the unmixed unconquered posterity of the ancient Britons, into whose barren domains the Romans never penetrated; not, we imagine, because they were not able, fince they subdued both North and South Wales, equally inaccessible, but because they found no scenes there either to fire their ambition or allure their avarice. Amidst all the revolutions that from time to time shook and convulsed Albion, those mountainous regions were left to their primitive lords, who, like their fouthern progenitors, hospitable in the extreme, did not, however, fuffer strangers to reside long among them. Their language, accordingly, remained unmixed, and continues fo even unto this day, especially in the most remote parts and unfrequented

The Norwegians fubdued the western islands of Scotland, at a time when the Scottish monarchy was still in its minority. They erected a kind of principality over them, of which the ifle of Man was the capital. Though they maintained the fovereignty of those islands for some centuries, built many forts, and strengthened them with garrifous, and in fine were the lawgivers and administrators of justice among the natives; yet we have been informed by the most respectable authority, that there is not at this day a fingle vocable of the Norse or Danish tongue to be found among these islanders. This fact affords a demonstration of that superstitious attachment with which they were devoted to their vernacular dia-

The Welsh dialect not the Irish.

The Welsh dialect cannot, we think, be pure and unfophisticated. The Silures were conquered by the Romans, to whom they were actually subject for the space of three centuries. During this period a multitude of Italian exotics must have been transplanted into their language; and indeed many of them are discernible at this day. Their long commerce with their English neighbours and conquerors hath adulterated their language, fo that a great part of it is now of an English complexion. The Irish is now spoken by a race of people whose morality and ingenuity is nearly upon a level. Their latest historians have brought them from the confines of Asia, through a variety of adventures, to people an island extra anni folisque vias. However this genealogical tale may please the people for whom it was fabricated, we must still suspect that the Irish are of Celtic extraction, and that their forefathers emigrated from the western coast of Britain at a period prior to all historical or even traditional annals. Ireland was once the native land of faints. The chief actors on this facred stage were Romanists, and deeply tinctured with the superstition of the times. They pretended to improve the language of the natives; and whatever their fuccess was, they improved it in such a manner as to make it deviate very confiderably from the original Celtic; fo that it is not in Ireland that we are to look

for the genuine characters of the dialect under confide-

Celtic Language.

Though the Hibernian tongue, in our opinion, differs confiderably from the original Celtic, some very ingenious effays have been lately published by the learned and laborious members of the Antiquarian Society of Coinci-Dublin; in which the coincidence of that tongue with dence befome of the oriental dialects, has been supported by tween the very plaufible arguments. In a differtation published in Phoenician. the year 1772, they have exhibited a collection of Punico-Maltese words compared with words of the same import in Irish, where it must be allowed the resemblance is palpable. In the same differtation they have compared the celebrated Punic scene in Plautus with its translation into the Irish; in which the words in the two languages are furprifingly fimilar. If those criticisms are well founded, they will prove that the Celtic is coeval and congenial with the most ancient languages of the east; which we think highly probable. Be that as it may, the Danes and Norwegians formed fettlements in Ireland; and the English have long been sovereigns of that island. These circumstances must have affected the vernacular idiom of the natives; not to mention the neceffity of adopting the language of the conquerors in law, in sciences, in the offices of religion.

The inhabitants of the highlands and illands of Scotland are the descendants of those Britons who fled from the power of the Romans, and sheltered themselves among the fens, rocks, and fastnesses of those rugged mountains and fequestcred glens. They preferred those wastes and wilds, with liberty and independence, to the pleafant and fertile valleys of the fouth, with plenty embittered by flavery. They no doubt carried their language along with them; that language was a branch of the Celtic. With them, no doubt, fled a number of the druidical priests, who unquestionably knew their native dialect in all its beauties and varieties. These fugitives in process of time formed a regular government, elected a king, and became a confiderable state. They were fequestered by their fituation from the rest of the world. Without commerce, without agriculture, without the mechanical arts, and without objects of ambition or emulation, they addicted themselves wholely to the pastoral life as their business, and to hunting and fishing as their diverfion. Those people were not distinguished by an innovating genius; and confequently their language must have remained in the fame state in which they received it from their ancestors They received it genuine Celtic,

and fuch they preferved it. When the Scots became masters of the low country, and their kings and a great part of the nobility embraced the Saxon manners, and adopted the Saxon language, the genuine Caledonians tenaciously retained their native tongue, drefs, manners, clanships, and feudal customs, and could never cordially assimilate with their fouthern neighbours. Their language, therefore, could not be polluted with words or idioms borrowed from a people whom they hated and despised. Indeed it is plain from the whole tenor of the Scottish history, that neither Caledonian chieftans, nor their vaffals, were ever steadily attached to the royal family after they fixed their residence in the low country, and became Saxons, as the Highlanders called them by way of reproach. Indeed the commerce between them and those of the fouth, till about a century and a half ago, was only transient

Celtic and accidental; nor was their native dialect in the leaft

Causes of the purity Scotch diaguage.

Their language, however, did not degenerate, because there existed among them a description of men whose profession obliged them to guard against that misfortune. Every chieftain retained in his family a bard or poet laureat, whose province it was to compose poems ancient lan-in honour of his lord, to commemorate the glorious exploits of his ancestors, to record the genealogy and connections of the family; in a word, to amufe and entertain the chief and his guests at all public entertainments and upon all folemn occasions. Those protesfors of the Parnaffian art used to vie with each other; and the chiefs of families often assembled their respective bards, and encouraged them by confiderable premiums to exert their poetic talents. The victor was rewarded and honoured; and the chieftain decmed it an honour to himfelf to entertain a bard who excelled his peers. The ancient Gauls, as we learn from Diodorus Siculus, Strabo, Tacitus, Lucan, &c. entertained persons of that profesfion; and certainly the ancient Britons did the fame. Those bards were highly revered; their persons were deemed facred; and they were always rewarded with falaries in lands or cattle (See fection Greek). Those poetic geniuses must have watched over their vernacular dialect with the greatest care and anxiety; because in their compositions no word was to be lost, but as many gained as possible.

The use of letters was not known among the ancient Coltæ; their druidical clergy forbade the use of them. All their religious rites, their philosophical dogmas, their moral precepts, and their political maxims, were composed in verses which their pupils were obliged to commit to memory. Accordingly letters were unknown to the Caledonian Scots, till they learned them either from their fouthern neighbours or from the Romans. The Irish, indeed, pretend to have letters of a very ancient date; the Highlanders of the country in question make no claim to the use of that invention. Their bards, therefore, committed every thing to memory; and of course the words of their language must have been faithfully preserved. We find that the celebrated poems of Offian, and others of an inferior character, or at least fragments of fuch poems (fee Ossian), have thus been preserved from father to fon for more than 1000 years. The beauty, fignificancy, harmony, variety, and energy of these verses, itrike us even in a prose translation: how infinitely more charming must they appear in their native form and poetical attire!

In order to exhibit the genius of the Celtic in as firiking a light as the nature of our prefent defign will permit, we shall lay before our readers a very contracted sketch of the Gaelic or Caledonian dialect as it now flands; which we hope will go a great way to convince them that this is the genuine offspring of the other. In doing this we shall borrow many hints from a gentleman * whose learning seems to equal his zeal for his native language; which, in compliance with the modern practice, we shall for the future distinguish by the name

The Gaelic is not derived from any other language as far as we know, being obviously reducible to its own roots. Its combinations are formed of fimple words of a known fignification; and those words are resolvable into the simplest combinations of vowels and confonants, and even into fimple founds. In fuch a language we may expect that fome traces will be found of the ideas and notions of mankind living in a state of primeval simplicity; and if fo, a monument is still preserved of the primitive manners of the Celtic race while as yet under the guidance of timple nature, without any artificial restraint or controul.

The fudden fenfations of heat and cold, and bodily pain, are expressed by articulate sounds, which, however, are not used in this language to denote heat, cold, or bodily pain. A fudden fensation of heat is denoted by an articulate exclamation hait; of cold, by id; of bodily pain, by oich. All these sounds may be called interjections, being parts of speech which discover the mind to be feized with some passion. Tew of the improved languages of Europe present so great a variety of founds which instantaneously convey notice of a parti-

cular passion, bodily or mental teeling.

The pronouns he and she are expressed by the simple founds e and i, and these are the marks of the masculine and feminine genders; for a neuter gender is unknown in the Gaelic. The compositions of rude and barbarous ages are univerfally found to approach to the style and numbers of poetry; and this too is a distinguishing character of the Gaelic. Bodily subfistence will always be the principal concern of an uncultivated people. Hence ed or eid is used upon discovery of any animal of prey or game: it is meant to give notice to the hunting companion to be in readiness to seize the animai: and hence we believe edo " to eat" in Latin, and ed in Irish, signifies "cattle;" likewise in Scotch edal "cattle," literally fignifies " the offspring or generation of cattle." Coed or cued, "fhare or portion of any subject of property," literally "common food." Faced "hunting," literally "gathering of food." Eara " the time of the morning when cattle are brought home from pasture to give milk," literally " meal-time." These are words importing the fimplicity of a primitive state, and are common in the Gaelic idiom.

Traces of imitative language remain in all countries. The word used for cow in the Gaelic language is bo. plainly in imitation of the lowing of that animal.

In joining together original roots in the progress of improving language and rendering it more copious, its combinations discover an admirable justness and precifion of thought, which one would scarce expect to find in an uncultivated dialect. It will, however, be found, Excellency upon examination, that the Gaclic language, in its com-of Caelic bination of words, specifies with accuracy the known compounds. qualities, and expresses with precision the nature and properties which were attributed to the object denomi-

An appears to have been a word of frequent use in this language, and feems to have been originally a name applied indefinitely to any object. According to Bullet, it was used to fignify "a planet;" hence the fun had the name of grian, which is a compound of gri "hot," and an "a planet." Re fignifies originally and radically "division." The changes of the moon and the variety of her phases were early employed to point out the divisions of time. The present name for the moon is geulach; a word derived from her whiteness of colour. To these we might add a vast number more whose fignification precisely indicates their shape, colour, effects, &c. Many of these would be found exactly similar to

James Grant, Efq. advocate.

Language

Celtic Language.

Greek and Latin words of the fame found and fignification. In order to fatisfy our curious readers, we shall annex a few, though some of them may perhaps be questionable.

The Venus of the Latins is faid to be a compound of ben and jus, which literally fignify "the first woman," the letter b in Gaelic being softened into v. Edue and esdae fignify " food." These words are compounded of the Gaelic words ed or eid and ar; the former denotes food fimply, and the latter ploughed land. These are the roots of the Greek and Latin words : 800, edo; açou, aro. Edea, which fignifies " a feat," has an evident reference to food. It is compounded of two Gaelic words ed and ira, which literally fignifies " meal-time." Edra, which fignifies " the prefents which a bridgroom made to his bride," is a compound of two Gaelic words ed and na or nuah, literally figuifying " raw food." From ar there are many Greek derivatives. Agua fignifies "ploughed land," also "crop of corn;" Agros, "bread." In Gaelic a crop of corn and bread are expressed by arbhar, commonly pronounced arar and aran; all being equally derivatives of the root ar. So the Greek and Latin words agoros, arabilis, "arable;" agorgo, aratrum, "a plough;" agorge, arator, "a ploughman;" and many others, are evidently derived from the same We would not, however, suggest, in consequence of this coincidence, that either the Greek or Latin languages was derived from the Gaelic; we rather believe that these are remains of a primeval tongue, which are still retained in all the three; and we produce them upon the present occasion as presumptions that the Gaelic is an original, underived language, and of course the most pure and unadulterated relick of the Celtic now existing. If our readers should incline to know more of this subject, they may consult Pezron's Origin of Ancient Nations, Bullet's Mem. de la Langue Celtique, Parson's Rem. of Japhet, Gebelin's Monde prim. &c.

Copiousness and anti-

When the Celtic language was generally spoken over Europe, it feems to have been amazingly copious. By quity of the confulting Bullet's Memoires, it appears that its names Celtic. for the common and various objects of nature were very numerous. The words denoting water, river, wood, forest, mountain, lake, &c. were most precisely accommodated to specify each modification and variety, with fuch peculiar exactness as even the Greek, with all its boasted idiomatical precision and copiousness, has not been able to equal. The appearances which diversify the visible face of inanimate nature, arrest the attention of men in an uncultivated state. Unaccustomed to thought and abstract reasoning, their minds expand and exercise their powers upon sensible objects, and of course mark every minutia and almost imperceptible distinction with an accuracy to us feemingly impossible.

We hope it now appears to every reader, that the Celtic was one of the dialects of the primitive language; that it once overspread by far the greatest part of Europe; that the Gaelic now spoken in the northern parts of Scotland and the adjacent islands is the most pure and unmixed relick of that tongue now anywhere existing. We would willingly refer our readers to some well composed grammar of that language; but indeed we know of none that deferves our recommendation. Some years ago we were flattered with the prospect of seeing one published by a gentleman whose deep skill in that language is universally acknowledged. We have likewise heard of an intended dictionary of the same tongue; but hitherto our hopes have been difappointed.

We are, however, happy to find that there is now publishing an excellent translation of both the Old and New Testaments into Gaelic, which has hitherto been a defideratum among those who speak this language. Such a translation will at once contribute to preserve that ancient tongue, and disseminate the knowledge of the truth among the natives of that country.

Every affiftance towards acquiring the knowledge of a tongue which was once universal over a great part of Europe, will certainly be an acceptable present to the public. The antiquary, who is defirous of tracing the affinity of languages, and wishes to mark the migrations of people, ought certainly to apply himfelf to the study of its remaining branches; and, if we mistake not, he will foon be convinced, that they all breathe a spirit congenial to the manners and fentiments of a people who are just entering upon the first stage of improvement and civilization.

Perhaps it may be expected, that, before we con-Origin of clude this short sketch of the Celtic tongue, we should the words give some account of the origin of the words Gaul and Gaul and Gal, the two names by which this people was diffinguished by the Greeks and Romans. Mr M'Pherson imagines, that the appellation of Celt is an adjective derived from Gael, the aboriginal name of the inhabitants of ancient Gaul. For our part, we can see no connection between Gael and Kelt, nor do we think that the latter is an adjective. We believe that those people called themselves Cael and not Gael. We are fure that Caledonia, or Cal-don or dun, was an ancient name of the mountainous parts of Scotland.

Though many different opinions have been advanced with relation to the etymology of this word, we imagine that none is fo probable as that which supposes that it is compounded of the two Celtic words Cal or Kal, that is, "Gal or Gaul," and dun, which fignifies "a hill or mountain." Upon this ground, the Caledonii will import the Gauls of the mountains, or, which is the same, the Highland Gauls. The Irish and Highlanders reciprocally denominate themselves by the general title of *Cael*, *Gael*, or *Gauls*. They also diffinguish themselves, as the Welch originally did, and as the Welch distinguish them both at prefent, by the appellation of Guidhill, Guethel, and Gathel. The intermediate th, they say, is left quiescent in the pronunciation, as it is in many words of the British language; in which case Gathel would immediately be formed into Gael; and Gathel is actually founded like Gael by both the Irish and Highlanders at present. The appellation of Gathel, therefore, say they, was originally the fame with Gael, and the parent of it. The quiescent letters in British are frequently transferred from the middle to the conclusion of the word; by which manœuvre, Gathel is changed into Galath, Galat, Galt, and Celt. It is true, that Gael of the continent is univerfally denominated Galatæ and Celtæ by the Grecians, and Gallt and Gallta by the Irish. The appellations, therefore, of Gathel-i, Gall-i, Gallat-æ, Calet-es, An-calit-es, and Celt-æ, are all one and the same denomination, only varied by the aftonishing ductility of the Celtic, and difguifed by the alterations ever incident to a language that has been merely oral for ages.

It may perhaps appear prefumptuous in us to dif-

212

Ancient

Gothic.

* Lib. i.

† Lib ii.

cap. 23.

The fame

with the

language

Thracians. ‡ Lib. 7.

Celtic fer from two such respectable authorities as M'Pher-Language fon and Whitaker: we must, however, acknowledge, that neither the one nor the other appears to us well founded. Befides, they convey no idea of the fignification of the words, though in the Celtic language they must have been fignificant. The name Cael, the fame with Gal, was probably given them in the East from the Greck zah, which in many oriental languages denotes fair; and yalaria may be easily derived from γαλ or γαλαθ, Gal or Galath.—This denomination might be given them by their neighbours, in allusion to their fair complexion.

§. 2. Of the Gothic Language.

THE Celtic and Gothic tongues at one time divided Europe between them. Both were of equal antiquity, both originated in Afia, both were dialects of the original language of mankind. The Celtic, however, was first imported into Europe. The Gauls or Celts had penetrated farthest towards the west; a circumstance which plainly intimates the priority of their arrival. In the population of countries, we believe it may be held as a maxim, that the colonies who emigrated first were generally impelled by succeeding emigrants; and that of consequence the most early were pushed forward to the parts most distant. The Celts, then, having overspread the most western parts of Europe, must have arrived more early in those re-

The Goths and Getæ were the same race of people, according to Procopius *, de bello Goth.; and Strabo + (B) informs us, that they spoke the same language with the Thracians, from whose confines they had spread themselves northward as far as the western banks of the Danube. Vopiscus, in the History of Probus, tells us, that this emperor ‡ obliged " the Thracians, and all the Getic tribes, either to furrender or accept of his friendship." This expression indicates, that the Thracians and the Getic tribes were deemed the same race of people. From this deduction it is clear, that the Getæ and Thracians were brethren; that they spoke the fame language: and that their laws, manners, customs, and religious tenets, were the fame, might eafily be shown, were this a proper place for an inquiry of that nature.

The Thracian language, as might be demonstrated from names of persons, offices, places, and customs, among that people, was nearly related to the Chaldean and other oriental languages.

They are thought to have been the descendants of Tiras, one of the fons of Japhet, and consequently must have preserved the speech of the Noachic family. The Gothic language abounds with Pahlavi, or the Goths. old Perfic words, which are no doubt remains of the primeval dialect of mankind. The Thracians peopled a confiderable part of the northern coast of Asia Minor; and consequently we meet with many names of cities, mountains, rivers, &c. in those parts, exactly

corresponding with many names in Europe, evidently imposed by our Gothic progenitors. Any person to-Language. lerably acquainted with the remains of the Gothic tongue, will be able to trace these with little diffi-

We learn from Herodotus *, that Darius in his * Lib. iv. expedition against the wandering Scythians who lived passim. on the other fide of the Ister or Danube, in his progress subdued the Getæ; and in the same passage the historian informs us, that these people held the immortality of the human foul, and that they were the bravest and most just of all the Thracians. After this period, we find them mentioned by almost every Greek writer, even familiarly; for Geta, in the comedies of that nation, is a common name for a flave. The Getæ then occupied all that large tract of country which extended from the confines of Thrace to the banks of the Danube; were a brave and virtuous people; and spoke the fame language with the Thracians, with whom they are often confounded both by Greek and Roman hifto-

But the name of Goths is by no means so ancient. It was utterly unknown both to the ancient Greeks and Romans. The first time that the name Goth is mentioned is in the reign of the emperor Decius, about the year of Christ 250. About that time they burst out of Getia, and rushing like a torrent into the empire, laid waste every thing with fire and sword. The name of their leader or king was Cneva. Decius, endeavouring to expel them from Thrace, was vanquished and

After this irruption, we find them frequently in the Latin authors under the name of Getæ or Gothi; though the Greeks generally denominate them Scythæ. Torfæu's tells us, that get + and got are actually the same + History of word, which anciently, according to him, denoted a Norway, " soldier." Got in Icelandic signifies a " horse or lib. i. horseman," and gata a "wanderer;" and this last was perhaps the import of the term Geta, they being originally an unfettled vagrant people. As nations generally assume to themselves some high auspicious denomination, we may believe the Goths did the same. We may therefore rest satisfied, that the Getæ assumed the Icelandic name above mentioned as their national one: or perhaps, notwithstanding their Greek denomination, they called themselves Gots or Goths from the begin-

The original feat of the Goths was the country Their prisnow called Little Tartary, into which they had ex- Their pri-tended themselves from the frontiers of Thrace. This country was called Little Scythia by the Greek writers; and it was the station whence those innumerable fwarms advanced, which, in conjunction with the Alani and other barbarous tribes, at length overran and subverted the western empire. One part of the Gothic nation was allowed by Constantine to settle in Mœsia. Before the year 420 most of the Gothic nations who had fettled within the limits of the Roman empire had been converted to the Christian faith;

(B) Lib. vii. page 295, B.; ibid. page 305. G. (Casaubon). From this passage it appears, that the Greeks were of opinion that the Getæ were Thracians. Plin. Nat. Hist. lib. iv. cap. 11. mentions a tribe of the Getæ called Gaudæ.

Gothic Language

but, unhappily, the greater part of the apostles by whom they had been profelyted, were Arians, which proved fatal to many of the orthodox Christians; for the Arian Goths perfecuted them with unrelenting

216 Remains

Remains About the year 367, Ulphilas bishop of the Mœ-of genuine sian Goths, translated the New Testament into the Gothic language. The remains of this translation furnish a genuine, and at the same time venerable, monument of the ancient Gothic dialect. No more is now extant of that valuable translation than the four Gospels, and another fragment containing part of the epiftle to the Romans. The Gospels have been repeatedly published fince the first edition by Junius 1665, down to that of Mr Lye. Other fragments of the Gothic language have also been found, which our curious readers may see in Lye's Notes to his Edition of the Gothic Gospels. The fragment of the Epistle to the Romans was lately discovered in the library at Wolfenbuttle, and published by Knitel archdeacon of Wolfenbuttle.

The Goths, prior to the age of Ulphilas, were ignorant of the use of alphabetical characters. The bishop fabricated an alphabet for them, which is a medley of Greek and Roman letters, but rather inclining to the

217 Gothic alphabet.

rived from

the Chal-

dean, &cc.

This alphabet confifts of 25 letters (fee Plate XV.). Junius has carefully analyzed those letters, and pointed out their powers and founds in his Gothic alphabet, prefixed to his Glossarium Gothicum. They were long retained in all the European languages derived from the Gothic fource, which will be enumerated in the sequel.

What kind of language the ancient Gothic was, is plain from the fragments above mentioned; but in what respects it agrees with the oriental tongues, or differs from them, is not easy to ascertain with precision. We have observed in our section on the Greek, that a confiderable part of that language must have been derived from the Thracian; which, according to Strabo there Gothic lan-quoted, was the same with the Getic or Gothic. The Thracian tongue will, we are convinced upon comparifon, be found analogous to the Chaldean or Syrian. The German, which is a genuine descendant of the Gothic, is full of Persian words: the old Persian or Pahlavi appears to be a dialect of the Chaldean. The learned Junius, near the beginning of his Gothic alphabet, remarks, that a very confiderable part of the language in question is borrowed from the most ancient Greek.

> Both the learned Ihre in his Gloffarium Suio-Gothicum, and Wachter in his excellent German and Latin Dictionary, often remark the coincidence of Gothic and German words with oriental vocables of the like found and of the fame fignification. In the old Saxon, which is another ramification of the Gothic tongue, numberless terms of the very same complexion appear. From this deduction we hope it will follow, that the Gothic tongue, in its original unmixed state as it was spoken by the ancient Getæ, was a dialect of the primeval language; that language which the fons of Tiras brought with them from the plains of Shinar or from Armenia, or from any other region where the primitive mortals had fixed their refi

dence. To confirm this position, we shall annex a few instances.

Gothic Language.

The Thracian tribes, in all probability, first took possession of those tribes of Asia Minor which stretch towards the east. Thence they crossed the Hellespont, and spread themselves far and wide northward. Strabo fupposes that they first settled in the regions to the north of those straits, and thence transported numerous colonies into Afia Minor. The reverse was probably the case: but be that as it may, it is universally agreed, that both fides of the Hellespont were peopled with

In Afia Minor we meet with the city Perga, which, throwing away the a, is Perg. In every tongue defcended from the Gothic, the word Berg fignifies a "a rock," and metaphorically a "town or burgh;" because towns were originally built on rocks for the fake of defence. Hence likewise Pergamos, the fort or citadel of Troy. Beira in Thracian fignified a "city;" the Chaldaic and Hebrew word Beer imports a " well," and is possibly the original of the Gothic word beer, ale. In ancient times, especially in the East, it was customary to build cities in the neighbourhood of fountains. The ancients called the Phrygians Bevyss, Bryges, or Bruges; the Gothic word coinciding is obvious. Dyndymus, the name of a city facred to Cybele, is compounded of two Gothic words dun and dum, both fignifying "a height, an eminence;" and hence a town, an inclosure. The word tros feems to be the very Gothic trosh, "brave, valiant." The words fader, mader, dochter, bruder, are so obviously Persian, that every etymologist has affigued them to that language.

Many futile etymologies have been given of the facred name God, which is in reality the Persian word Choda, commonly applied by them to their Hormazd or Oromazes. The Persian bad or bod signifies a "city;" the fame word in Gothic imports a "house, a mansion, an abode." Band, in Persic, a "frait place;" in Gothic, "to bend." Heim or ham, "a house," is generally known to be of Persian original. Much critical skill has been displayed in tracing the etymology of the Scotch and old English word Yule, "Christmas." Yule, derived from iul, was a festival in honour of the fun, which was originally celebrated at the winter folflice. Wick or wich is a Gothic term still preserved in many names of towns; it fignifies "a narrow corner, or small strip of land jutting into the sea, or into a lake or river:" hence the Latin vieus, and Greek poissos. In Spanish, we have many old Gothic words; among others hijo a " fon," the same with the Greck biog. In fome places of Scotland, we call any thing that is little, fmall, wee; originally spelt wi, if we mistake not, from the very fame word.

These few examples we have thrown together, without any regard to order, perfuaded that almost every word of the language, truly Gothic, may with a little pains and judgment be traced to fome oriental root or cognate. We may observe in passing, that many Gothic nouns end in a, like the Chaldaic and Syriac; that their fubstantive verb very much resembles that of the Persian, Greek, and Latin; and that their active and auxiliary verb has furnished the common preterperfect tense of Greek verbs in the active voice: that verb is

361

219 Modern tongues deduced from the

Gothic.

haban, but originally ha, as the common people pro-Language nounce it at this day, especially in the north of Scotland, and among the Swedes, Danes, Norwegians, and

We shall now leave the other inferior arrangements of this ancient language to grammarians and lexicographers, and proceed to inquire what modern tongues are deduced from it as their stock, and which of them makes the nearest approaches to its simplicity and ru-

We have already observed that the Goths, formerly Getæ, were possessed of a vast extent of country, reaching from the frontiers of Thrace to the banks of the Ister or Danube. We have feen that a colony of them fettled in Mæsia under Constantine II. They then spread themselves into Dacia, and from thence into Germany. All these countries were situated in such a manner, that the progress of population was forward, and according to the natural course of emigration. From Germany they extended themselves into Scandinavia, that is, Sweden, Denmark, and Norway. Their whole ancient Edda, Sagas, "Chronicles," show that the Goths arrived in Scandinavia by this route, without, however, fixing the era of that event with any tolerable degree of accuracy. By the Germans, we believe the ancients understood all the nations eastward, westward, and northward, reaching from the Danube on the fouth up to the extremity of Scandinavia on the Northern ocean; and from the Rhine and German ocean on the west, to the river Chronus or Niemen on the east. All those nations spoke one or other of the Gothic dialects, fome approaching nearer, and others deviating farther from, the parent language.

The Francic is a dialect of the Teutonic, Tudesque, or old German; and the Gospels of Ulphilas bear such a refemblance to the Francic, fragments of which are preserved in the early French historians, that some learned men have pronounced those gospels to be part of an old Francic version; but others of equal respectability have refuted this opinion, both from history and comparison of the dialects. Schilter has given us large monuments of the Tudesque or old German from the feventh century, which evidently prove that the Gothic of Ulphilas is the same language. Wachter's learned Gloffary of the ancient German likewise confirms this position. Mr Ihre, after hesitating whether the Gospels of Ulphilas bear most resemblance to the German or Scandinavian dialect of the Gothic, declares at last in favour of the former. The Anglo-Saxon is also known to be a venerable dialect of the Tudesque; and is fo intimately connected with the gospels, that fome valuable works on this fubject are wholly built upon that supposition.

The Icelandic is the oldest relick of the Scandinavian. It begins with Arius Frode in the eleventh century, and is a dialect of the German. The remains we have of it are more modern by four centuries than those of the German: they are more polished than the other. The words are shortened, not only because they are more modern than the German, but because the Icelandic was polished by a long succession of poets and historians almost equal to those of Greece and Rome. Hence the Icelandic, being a more polished language than the German, has less affinity with the parent Gothic. The Swedish is more nearly related Vol. XVI. Part I.

to the Icelandic than either the Danish or Norwegian. Gothic. That the Swedish is the daughter of the Gothic, is fully Language. shown by Mr Ihre above mentioned, in his Glossarium Suio-Gothicum. There is, therefore, no manner of doubt as to the identity of the Gothic, preserved in Ulphilas and other ancient remains, with the German and Scandinavian tongue.

The modern German, a language spoken in a far greater extent than any other of modern Europe, resembles the Gothic Gospels more than the present Danish, Norwegian, or wedish; and has certainly more ancient flamina. Its likeness to the Asiatic tongues, in harshness and inflexible thickness of found, is very ap-

Busbequius shows, that the clowns of Crim Tartary, remains of the ancient Goths, speak a language almost German. These clowns were no doubt descendants of the ancient Goths, who remained in their native country after the others had emigrated. It is therefore apparent from the whole of this investigation, that the Gothic was introduced into Europe from the East, and is probably a dialect of the language originally spoken

§ 3. Of the Sclavonian Language.

There is another language which pervades a considerable part of Europe, and this, like the Gothic, 220 feems to have originated in the east. The language Sclavonic we mean is the Sclavonic or rather Slavonic, which pre-language, vails far and wide in the eastern parts of this division of the globe. It is spoken by the Dalmatians, by the inhabitants of the Danubian provinces, by the Poles, Bohemians, and Russians. The word flab, that is, "flave" (whence the French word esclave, and our word flave,), fignifies " noble, illustrious;" but because in the lower ages of the Roman empire, vast multitudes of these people were spread over all Europe in the quality of flaves, that word came to denote the fervile tribe by way of distinction in the same manner as the words Geta, Davus, and Syrus, did among the Greeks at a more early period.

The Slavi dwelt originally on the banks of the Bo-spoken by rysthenes, now the Dnieper or Nieper. They were one the Slavi of the tribes of the European Sarmatians who in ancient tribes of the times inhebited on impense traft of any tribes of the times inhabited an immense tract of country, bounded Sarmatians, on the west by the Vistula, now the Weisel; on the fouth-east by the Euxine sea, the Bosphorus Cimmerius, the Palus Mœotis, and the Tanais or Don, which divides

Europe from Afia.

In this vast tract of country, which at present comprehends Poland, Russia, and a great part of Tartary, there dwelt in ancient times many confiderable tribes. To enumerate these, we believe, would not much edify our readers: we shall only inform them, that among these Sarmatian clans were the Roxolani, now the Ruffians, and likewise the Slavi, who dwelt near the Bory-Ithenes, as was observed above.

The Slavi gradually advanced towards the Danube; and in the reign of Justinian having passed that river, they made themselves masters of that part of Illyricum which lies between the Drave and the Save, and is to to this day from them called *Sclavonia*. These barbarians by degrees overran Dalmatia, Liburnia, the western parts of Macedonia, Epirus; and on the east they extended their quarters all along to the western

Sclavorian bank of the Danube, where that river falls into the Linguage Euxine. In all these countries, the Sclavonian was deeply impregnated with the Greek, which was a thing of course, fince the barbarian invaders settled in those regions, and mingled with the aborigines, who spoke a corrupt dialect of that language.

the Poles,

The Poles are the genuine descendants of the ancient Sarmatæ (c), and confequently speak a dialect of their language, but much adulterated with Latin words, in consequence of the attachment the Polanders have long professed to the Roman tongue."

The Siletians and Bohemians have corrupted their dialects in the very same manner. In those countries, then, we are not to fearch for the genuine remains of the

ancient Sarmatian.

224 Rullians descended from the Slavi.

Silefians,

and

The modern Ruslians, formerly the Rhoxani or Roxolani, are the posterity of the Sarmatæ, and are a branch of the Slavi: they inhabit a part of the country which that people possessed before they fell into the Roman provinces; they speak the same language, and wear the very same dress; for, on the historical pillar at Constantinople, the Sclavonians are dressed like the Russian boors. If then the Slavi are Sarmatæ, the Russians must of course be the descendants of the fame people. They were long a sequestered people, and consequently altogether unconnected with the other nations of Europe. They were strangers to commerce, inhospitable to strangers, tenacious of ancient usages, averse to improvements of every kind, wonderfully proud of their imaginary importance; and, in a word, a race of people just one degree above absolute savagism. A people of this character are, for the most part, enemies to innovations; and if we may believe the Russian historians, no nation was ever more averse to innovations than the one in question. From the ninth century, at which era they embraced Christianity, it does not appear that they moved one step forward towards civilization, till Peter the Great, not a century ago, in confequence of his despotic authority, compelled them to adopt the manners and customs of their more polished neighbours.

We may then conclude, that the Russians made as little change in their language during that period, as they did in their dress, habits, and manner of living. Whatever language they spoke in the ninth century, the fame they employed at the beginning of the 18th. They were, indeed, according to Appian de bel. Mithrid. once conquered by Diophantus, one of Mithridates's generals, but that conquest was for a moment only: they were likewise invaded, and their country overrun, by the great Timor or Tamerlane; but this invasion was like a torrent from the mountains, which spreads devastation far and wide while it rages, but makes little al-

teration on the face of the country.

We find likewife, that upon fome occasions they made incursions upon the frontiers of the Roman empire; but we hear of no permanent fettlements formed by them in these quarters. Upon the whole, we take the Russians to have been, with respect to their language, in the very fame predicament with the highlanders and islanders of Scotland, who, according to Sclavonian the general opinion, have preserved the Celtic dialect Language. pure and entire, in consequence of their having never mingled with foreigners.

From this deduction we may infer two things; first, The Rufthat the Russian language is the genuine Sclavonian; sian lanand, fecondly, that the latter is the fame, or nearly the guage ge

fame, with the ancient Sarmatian.

In the Ruffian, there are found a great number of vonic. words resembling the old simple roots of the Greek both in found and fignification; its grammatical genius is nearly the same; and we are informed by the very best authority, that there is in this language a translation of Epictetus, in which there are whole pages, in both original and translation, without one fingle transposition. Monf. Leveque, who has published a translation of a history of Russia, is so entirely convinced of the strict analogy between the ancient Greek and the modern Russe, that he is positive that the former is derived from the latter. Monf. Freret, a very learned French academician, is clearly of the same opinion. We are, however, perfuaded that this opinion is ill founded. We rather imagine, that those coincidences arise from the relicks of the primitive language of mankind; veftiges of which, we believe, are to be found almost in every tongue now existing.

It is, however, we allow, uncommonly difficult to render a reason for the syntaxical analogy of the two languages, without admitting the truth of the one or the other hypothesis. We have examined with some care a good number of Russian vocables, and compared them with Greck ones of the same fignification. We have not, however, found fuch a refemblance as we think necessary to support the position advanced above. We have indeed found a very strong resemblance between the former and many oriental words, especially blancebe-Hebrew, Chaldean, and old Persian, of which we could tween Rusproduce several instances, did the nature of our present sian and inquiry admit fuch a deviation. Every body knows oriental that the Sarmatæ were divided into two great nations, words. the Afiatic and European; the former extended very far eastward, behind the mountain Caucasus, the northern shore of the Euxine sea, and so forth. These, we may believe, derived their language from the original tongue long before the Greek language existed. This, in comparison of the Hebrew, Phoenician, Egyptian, Arabian, Chaldean, &c. was but of yesterday. The Greek, most learned men are now convinced, was a late composition of many different dialects, incorporated with the jargon of the aboriginal Ionim or Greeks. The Sarmatian, on the contrary, was the tongue of a great and populous nation, civilized, in all appearance, long before the Greeks began to emerge from a state of savagism. We are, therefore, by no means disposed to allow, either that the Greek is derived from the Russian, or the Russian from the Greek. We believe there is just the same reason for this conclusion, that the Abbé Pezron and Monf. Gebelin pretend to have discovered, in order to fupport their position that the Greek is derived from the Celtic. Certain it is, that the refemblance among the

⁽c) This appears by their character, their laws, their manners, their form of government, their military equipage, their impetuofity, their ariftocratic fplendor.

Sclavonian oriental languages, of which we take the Sarmatian to Language have been one, is so palpable, that any person of a moderate capacity who is perfectly master of one, will find little difficulty in acquiring any other. If, therefore, the coincidence between the Greek and Ruffian should

actually exist, we think this circumstance will not authenticate the supposition, that either of the two is de-

rived from the other.

In the course of this argument, our readers will be pleased to observe, that we all along suppose, that the Sclavonian, of which we think the Russian is the most genuine remain, is the same with the old Sarmatian. We shall now take the liberty to hazard a conjecture with respect to the syntaxical coincidence of that language with the Greek; for we acknowledge that we are not so profoundly versed in the Russian dialect of the Sclavonian as to pretend to pronounce a definitive

As the Ruffians were a generation of favages, there is no probability that they were acquainted with the use of letters and alphabetical writing till they acquired that art by intercourse with their neighbours. It is certhe syntaxi-tain, beyond all contradiction, that few nations had made less proficiency in the fine arts than that under confideration: and we think there is little appearance of their having learned this art prior to their conversion to Christianity. Certain it is, that the Slavi, who settled in Dalmatia, Illyria, and Liburnia, had no alphabetical characters till they were furnished with them by St Jerome. The Servian character, which very nearly refembles the Greek, was invented by St Cyril; on which account the language written in that character is denominated Chiurilizza. These Sclavonic tribes knew nothing of alphabetic writing prior to the era of their conversion. The Moesian Goths were in the same condition till their bishop Ulphilas fabricated them a set

If the Slavi and Goths, who resided in the neighbourhood of the Greeks and Romans, had not learned alphabetical writing prior to the era of their conversion to Christianity, it must hold, à fortiori, that the Russians, who lived at a very great distance from those nations, knew nothing of this useful art antecedent to the period

of their embracing the Christian faith.

The Rushans pretend that they were converted by St Andrew; but this is known to be a fable. Christianity was first introduced among them in the reign of the grand duke Wolodimar, who marrying the daughter of the Grecian emperor Basilius, became her convert about the year 989. About this period, we imagine, they were taught the knowledge of letters by the Grecian missionaries, who were employed in teaching them the elements of the Christian doctrines. Their alphabet confifts of 31 letters, with a few obsolete additional ones; and these characters resemble those of the Greeks fo exactly, that there can be no doubt of their being copied from them. It is true, the shape of fome has been somewhat altered, and a few barbarian ones have been intermingled. The Ruffian liturgy, every body knows, was copied from that of the Greeks; and the best specimen of the old Russian is the church offices for Easter, in the very words of Chryfostom, who is called by his name Zlato ufii, "golden-mouthed." The power of the clergy in Russia was excessive; and no doubt their influence was proportioned to their

power. The first race of clergy in that country were Sclavonian undoubtedly Greeks. We know how active and indu-Language. ftrious those people were in propagating their language as well as their religion. The offices of religion might be at first written and pronounced in the Greek tongue, but it would foon be found expedient to have them translated into Russian. The persons employed in this work must have been Greeks, who understood both lan-

As it is confessedly impossible that a people so dull and uninventive as the Ruffians originally were, could ever have fabricated a language fo artificially constructed as their present dialect; and as it is obvious, that, till Christianity was introduced among them by the Greeks, they could have no correspondence with that peopleit must appear surprising by what means their language came to be fashioned so exactly according to the Greek model. We have observed above, that the Russian letters must have been invented and introduced into that country by the Greek missionaries. We think it probable, that those apostles, at the same time that they taught them a new religion, likewise introduced a change into the idiom of their language. The influence of those ghostly teachers over a nation of savages must have been almost boundless; the force of their precepts and example almost incontrollable. If the favage converts accepted a new religion from the hands of those Grecian apostles, they might with equal submission adopt improvements in their language. Such of the natives as were admitted to the facerdotal function must have learned the Greek language, in order to qualify them for performing the offices of their religion. A predilection for that language would be the immediate confequence. Hence the natives, who had been admitted into holy orders, would co-operate with their Grecian masters in improving the dialect of the country; which, prior to the period above mentioned, must have greatly deviated from the original standard of the Sarmatian

Upon this occasion, we imagine the Greek apostles. in conjunction with their Ruffian disciples, reduced the language of the country to a refemblance with the Greek idiom. They retained the radical vocables as they found them; but by a variety of flexions, conjugations, derivations, compositions, and other modifications, transformed them into the Grecian air and apparel. They must have begun with the offices of the church; and among a nation of favages newly converted, the language of the new religion would quickly obtain a very extensive circulation. When the Grecian garniture was introduced into the church, the laity would in process of time assume a similar dress. The fabric of the Grecian declensions, conjugations, &c. might be grafted upon Ruffian stocks without affecting the radical parts of the language. If the dialect in question, like most others of a very ancient date, labour-ed under a penury of vocables, this manœuvre would contribute exceedingly to supply that defect. By this expedient the Greek language itself had been enlarged from about 300 radical terms to the prodigious number of words of which it now confifts.

The Latin tongue we have feen above in its original constitution differed widely from the Greek; and notwithstanding this incongruity, the improvers of the former have pressed it into a very strict agreement with the

Origin of -cal coincidence between this language and the Greek.

Sclavonian latter. This, we think, was still a more difficult task; Language. as, in our opinion, the genius of the Latin differs in a much greater degree than that of the Russian does from the Greek. We know, that the genius of the Gothic tongue and those of all its descendants are much more in unifon with the Greek than with that of the Latin. The Spanish, Italian, and French, have cudgelled many of their Gothic, Teutonic, and Celtic verbs, into a kind of conjugations, imitating or rather aping those of the Latin. The Persians have formed most elegant and energetic declenfions and conjugations, upon inflexible roots, borrowed from the Pahlavi and Deri, and even from Tartar originals.

Upon the grounds above-mentioned we have taken the liberty to hazard the following conjectures, which we cheerfully submit to the cognizance of our more enlightened readers.

1. That the Sarmatian was a dialect of the original

language of mankind.

2. That the Sclavonian was a dialect of the Sarma-

3. That the Russe is the most genuine unsophisticated relick of the Sclavonian and Sarmatian.

4. That the Russians had no alphabetic characters prior to the era of the introduction of Christianity, that is, towards the end of the tenth century,

5. That they were converted by Grecian missionaries.

6. That those missionaries copied their present letters from those of Greece; and in conjunction with the more enlightened natives, reduced the original unimproved Ruffe to its prefent refemblance to the Greek

228 Russian nouns.

The Russian language, like most others, contains eight parts of speech, noun, pronoun, &c. Its nouns have three genders, masculine, feminine, and neuter; it has also a common gender for nouns, intimating both sexes. It has only two numbers, fingular and plural. Its cases are seven, nominative, genitive, dative, accusative, vocative, instrumental, and prepositive. These cases are not formed by varying the termination, as in Greek and Latin; but generally by placing a vowel after the word, as, we imagine, was the original practice of the Greeks (See Greek Section). Thus in Russe, eve, ruk, "the hand;" nominative, eve-a, "the hand;" genitive, eve-N' "of the hand," &c. See Les Elem. de la Langue Russe par Charpentier. Nouns substantive are Adjectives. reduced to four declentions, and adjectives make a fifth. These agree with their substantives in case, gender, and number. They have three degrees of comparison, as is common in other languages; the positive, comparative, and superlative. The comparative is formed from the feminine of the nominative fingular of the positive, by changing a into te, that is, aie in English; the superlative is made by prefixing mee, pre, before the positive. These rules are general; for the exceptions, recourse must be had to the Russian grammar above-mentioned.

The numeral adjectives in Russe have three genders like the rest, and are declined accordingly. Their pronouns have nothing peculiar, and are divided and arranged in the fame manner as in other languages. Verbs in the Ruffian language are comprehended under two conjugations. The moods are only three; the indicative, the imperative, and the infinitive: the fubjunctive is formed by placing a particle before the indicative. Its tenses are eight in number; the present, the imper-

fect, the preterite fimple, the preterite compound, the Sclavonian pluperfect, the future indeterminate, the future fimple, Language. the future compound. The verbs have their numbers and persons as in other languages. To enter into a detail of their manner of conjugating their verbs would neither be confiftent with our plan, nor, we are persuaded, of much confequence to our readers. Their other parts of speech differ nothing from those of other lan-Their fyntax nearly resembles that of the Greek and Latin. All these articles must be learned from a grammar of the language. Whether there is any grammar of the Russian language composed in English we know not. That of Mons. Charpentier in French, printed at Petersburgh in 1768, is the only one we have feen, and which appears to us a very excellent one. We could wish to be able to gratify our readers with a more authentic account of the origin of the Sclavonian language; but this we find impossible, in confequence of the want of memorials relating to the state of the ancient Sarmatæ. Towards the era of the subversion of the western empire, the nations who inhabited the countries in question were so blended and confounded with each other, and with Huns and other Scythian or Tartar emigrants, that we believe the most acute antiquarian would find it impossible to investigate their respective tongues, or even their original residence or extraction. We have felected the Russe as the most genuine branch of the old Sclavonian, and to this predilection we were determined by the reasons above mentioned. We are forry that we are not fo well acquainted with the idiom of the Russian language as to be able to compare it with those of the east; but upon such 2 comparison, we are persuaded that the radical materials of which it is composed would be found to have originated in the oriental regions. The word Tfar, for ex-Phan ample, is probably the Phænician and Chaldean Sar, or and Chal-Zar, "a prince, a grandee." Diodorus Siculus calls dean words the queen of the Massagetæ, who, according to Ctesias, cut off Cyrus's head, Zarina; which was not many years ago the general title of the empress of all the Rushias. Herodotus calls the same princess Tomyris, which is the very name of the samous Timor or Tamur, the conqueror of Asia. The former seems to have been the title, and the latter the proper name, of the queen of the Maffagetæ. In the old Perfian or Pahlavi, the word Gard fignifies " a city;" in Ruffian, Gorad or Grad intimates the very same idea: hence Constantinople in old Ruffe is called Tfargrad or Tfargorad. Thefe are adduced as a specimen only; and able etymologists might, we believe, discover a great number.

The Sclavonian language is spoken in Epirus, the western part of Macedonia, in Bosnia, Servia, Bulgaria, in part of Thrace, in Dalmatia, Croatia, in Poland, Bohemia, Russia, and Mingrelia in Asia, whence it is frequently used in the scraglio at Constantinople. Many of the great men of Turkey understand it, and frequently use it; and most of the janizaries having been stationed in garrisons on the Turkish frontiers in Europe, use it as their vulgar tongue. The Hungarians, however, and the natives of Wallachia, speak a different language: and this language bears evident fignatures of the Tartarian dialect, which was the tongue of the orinal Huns. Upon the whole, the Sclavonian is by much the most extensive language in Europe, and extends far

into Asia.

Verbs.

SECT.

Modern Languages.

SECT. X. Modern Languages.

IF we call all the different dialects of the various nations that now inhabit the known earth, languages, the number is truly great; and vain would be his ambition who should attempt to learn them, though but imperfeetly. We will begin with naming the principal of them: There are four, which may be called original or mother-languages, and which feem to have given birth to all that are now spoken in Europe. These are the Parent dia Latin, Celtic, Gothic, and Sclavonian. It will not, lects of Eu-however, be imagined, from the term original given to rope, with these languages, that we believe them to have come their re-fpective off. down to us, without any alteration, from the confusion of tongues at the building of the tower of Babel. We have repeatedly declared our opinion, that there is but one truly original language, from which all others are derivatives variously modified. The four languages just mentioned are original only as being the immediate parents of those which are now spoken in Europe.

I. From the Latin came,

1. The Portuguese.

2. Spanish.

3. French.

4. Italian.

From the Celtic,

5. The Erfe, or Gaelic of the Highlands of Scotland.

6. The Welsh.

The Irish.

8. Basse-Bretagne.

From the Gothic,

9. The German.

10. The Low Saxon or Low German.

11. The Dutch.

12. The English; in which almost all the noun-substantives are German, and many of the verbs French, Latin, &c. and which is enriched with the spoils of all other languages.

13. The Danish.
14. The Norwegian.

15. Swedish.

16. Icelandic.

From the Sclavonian,

17. The Polonese.

18. The Lithuanian.

19. Bohemian.

20. Transylvanian.

21. Moravian.

22. The modern Vandalian, as it is still spoken in Lufatia, Prussian Vandalia, &c.

The Croatian.

24. The Russian or Muscovite; which, as we have feen, is the purest dialect of this language.

25. The language of the Calmucs and Cossacs.

26. Thirty-two different dialects of nations who inhabit the north-eastern parts of Europe and Asia, and who are descended from the Tartars and Huno-Scythians. There are polyglott tables which contain not only the alphabets, but also the principal distinct characters of all these languages,

II. The languages at present generally spoken in

Afia are, 27. The Turkish and Tartarian, with their different dialects.

tinople.

The Danish missionaries who go to Tranquebar, print books at Hall in

these languages.

28. The Persian.

29. The Georgian or Iberian. 30. The Albanian or Circassian. the patriarch of Constan-

31. The Armenian.

32. The modern Indian. 33. The Formosan.

The Indostanic.

The Malabarian. 36. The Warugian.

37. The Talmulic or Damulic.

38. The modern Arabic.

39. The Tangusian. 40. The Mungalic.

41. The language of the Nigarian or Akar Nigarian.

42. The Grusinic or Grusinian.

43. The Chinese.

44. The Japonese.
We have enumerated here those Asiatic languages only of which we have some knowledge in Europe, and even alphabets, grammars, or other books that can give us information concerning them. There are doubtless other tongues and dialects in those vast regions and adjacent islands; but of these we are not able to give any account.

III. The principal languages of Africa are,

The modern Egyptian.

languages. 46. The Fetuitic, or the language of the kingdom of Fetu.

The Moroccan; and,

48. The jargons of those favage nations who inhabit the defert and burning regions. The people on the coast of Barbary speak a corrupt dialect of the Arabic. To these may be added the Chilhic. language, otherwise called Tamazeght; the Negritian, and that of Guinea; the Abyllinian; and the language of the Hottentots.

IV. The languages of the American nations are but American little known in Europe. Every one of these, though languages. distant but a few days journey from each other, have their particular language or rather jargon. The languages of the Mexicans and Peruvians seem to be the most regular and polished. There is also one called Poconchi or Pocomana, that is used in the bay of Honduras and towards Guatimal. the words and rules of which are most known to us. The languages of North America are in general the Algonhic, Apalachian, Mohogic, Savanahamic, Virginic, and Mexican: and in-South America, the Peruvian, Caribic, the language of Chili, the Cairic, the Tucumanian, and the languages used in Paraguay, Brasil, and Guiana.

V. We have already faid, that it would be a vain and General refenseless undertaking for a man of letters to attempt the flections on study of all these languages, and to make his head an modern universal dictionary; but it would be still more abfurd languages. in us to attempt the analysis of them in this place: some general reflections therefore must here suffice. Among the modern languages of Europe, the French feems to merit great attention; as it is elegant and pleafing in itself; as it is become fo general, that with it we may travel from one end of Europe to the other

Modern Language

Afiatic

These languages are languages, spoken by the Greek
Christians in Asia under

African

Modern without scarce having any occasion for an interpreter; Languages and as in it are to be found excellent works of every kind, both in verse and prose, useful and agrecable. There are, besides, grammars and dictionaries of this language which give us every information concerning it, and very able masters who teach it; especially such as come from those parts of France where it is spoken correctly; for with all its advantages, the French language has this inconvenience, that it is pronounced scarce anywhere purely but at Paris and on the banks of the Loire. The language of the court, of the great world, and of men of letters, is moreover very different from that of the common people; and the French tongue, in general, is subject to great alteration and novelty. What pity it is, that the style of the great Corneille, and that of Moliere, should already begin to be obsolete, and that it will be but a little time before the inimitable chefs d'auvres of those men of sublime genius will be no longer seen on the stage: The most modern style of the French, moreover, does not feem to be the best. We are inclined to think, that too much concifeness. the epigrammatic point, the antithefis, the paradox, the sententious expression, &c. diminish its force; and that, by becoming more polished and refined, it loses much of

its energy.
VI. The German and Italian languages merit likewife a particular application; as does the English, perhaps above all, for its many and great excellencies (See LANGUAGE). Authors of great ability daily labour in improving them; and what language would not become excellent, were men of exalted talents to make constant use of it in their works! If we had in Iroquois books like those which we have in English, Italian, French, and German, should we not be tempted to learn that

language? How glad should we be to understand the Modern Spanish tongue, though it were only to read the Arau-Languages. cana of Don Alonzo D'Ercilia, Don Quixote, some dramatic pieces, and a fmall number of other Spanish works, in the original; or the poem of Camoens in Portuguese.

VII. The other languages of Europe have each their beauties and excellencies. But the greatest difficulty in all living languages constantly consists in the pronunciation, which it is scarce possible for any one to attain unless he be born or educated in the country where it is fpoken: and this is the only article for which a master is necessary, as it cannot be learned but by teaching or by conversation: all the rest may be acquired by a good grammar and other books. In all languages whatever, the poetic style is more difficult than the profaic: in every language we should endeavour to enrich our memories with great store of words (copia verborum), and to have them ready to produce on all occasions: in all languages it is difficult to extend our knowledge fo far as to be able to form a critical judgement of them. All living languages are pronounced rapidly, and without dwelling on the long fyllables (which the grammarians call moram): almost all of them have articles which distinguish the genders.

VIII. Those languages that are derived from the Latin have this further advantage, that they adopt without restraint, and without offending the ear, Latin and Greek words and expressions, and which by the aid of a new termination appear to be natives of the language. This privilege is forbidden the Germans, who in their best translations dare not use any foreign word, unless it be some technical terms in case of great

HI

Philomathes, Philomela.

PHILOMATHES, a lover of learning or science. PHILOMELA, in fabulous history, was a daughter of Pandion king of Athens, and fifter to Procne, who had married Tereus king of Thrace. Procne feparated from Philomela, to whom she was much attached, fpent her time in great melancholy till she prevailed upon her husband to go to Athens and bring her sister to Thrace. Tereus obeyed; but he had no fooner obtained Pandion's permission to conduct Philomela to Thrace, than he fell in love with her, and resolved to gratify his passion. He dismissed the guards whom the fuspicions of Pandion had appointed to watch him; offered violence to Philomela; and afterwards cut out her tongue, that she might not discover his barbarity, and the indignities she had suffered. He confined her in a lonely castle; and having taken every precaution to prevent a discovery, he returned to Thrace, and told Procne that Philomela had died by the way, and that he had paid the last offices to her remains. At this sad intelligence Procne put on mourning for the lofs of Philomela; but a year had scarcely elapsed before she was secretly informed that her fifter was not dead. Philomela, in her captivity, described on a piece of tapestry her mis-fortunes and the brutality of Tereus, and privately conveyed it to Frocne. She was going to celebrate the orH

gies of Bacchus when she received it, but she difguised Philomela. her refentment; and as during those festivals she was permitted to rove about the country, she hastened to deliver her sister Philomela from her confinement, and concerted with her on the best measures of punishing the cruelty of Tereus. She murdered her fon Itylus, then in the fixth year of his age, and served him up as food before her husband during the festival. Tereus, in the midst of his repast, called for Itylus; but Procne immediately informed him that he was then feafting on his flesh, when Philomela, by throwing on the table the head of Itylus, convinced the monarch of the cruelty of the scene. He drew his sword to punish Procne and Philomela; but as he was going to stab them to the heart, he was changed into a hoopoe, Philomela into a nightingale, Procne into a swallow, and Itylus into a pheasant. This tragedy happened at Daulis in Phocis; but Paulanias and Strabo, who mention the whole of the flory, are filent about the transformation; and the former observes, that Tereus, after this bloody repast, fled to Megara, where he laid violent hands on himself. The inhabitants of the place raifed a monument to his memory, where they offered yearly facrifices, and placed fmall pebbles instead of barley. It was on this monument that the birds called hoopoes were first feen; hence

Philoniam the fable of his metamorphosis. Procue and Philomela Philopæ- died through excessive grief and melancholy; and as the , nightingale's and the fwallow's voice is peculiarly plaintive and mouruful, the poets have embellished the fable by supposing that the two unfortunate fifters were chan-

P

PHILONIUM, in Phermacy, a kind of anodyne

Ancient Universal History, vol. vi.

opiate, taking its name from Philo the inventor. PHILOPOEMEN, a celebrated general of the Achæan league, was born in Megalopolis, a city of Arcadia, in Peloponnesus; and from his very infancy discovered a strong inclination to the profession of arms. He was nobly educated by Caffander of Mantinea; a man of great probity, and uncommon abilities. He was no fooner able to bear arms than he entered among the troops which the city of Megalopolis fent to make incursions into Laconia, and in these inroads never failed to give some remarkable instance of his prudence and valour. When there were no troops in the field, he used to employ his leifure time in hunting and such other manly exercises. When Cleomenes king of Sparta attacked Megalopolis, Philopæmen difplayed much courage and greatness of soul. He signalized himself no less some time after, in the battle of Sellasia, where Antigonus gained a complete victory over Cleomenes. Antigonus, who had been an eye-witness of his prudent and intrepid behaviour, made very advantageous offers to gain him over to his interest; but he rejected them, having an utter aversion to a court life, which he compared to that of a flave, faying, that a courtier was but a flave of a better condition. As he could not live idle and inactive, he went to the ifle of Crete, which was then engaged in war, and ferved there as a volunteer till he acquired a complete knowledge of the military art; for the inhabitants of that island were in those days accounted excellent warriors, being scarce ever at peace among themselves. Philopæmen, having served some years among the troops of that island, returned home, and was upon his arrival appointed general of the horse; in which command he behaved so well, that the Achean horse, heretofore of no reputation, became in a short time samous all over Greece. He was foon after appointed general of all the Achæan forces, when he applied himfelf to the re-establishing of military discipline among the troops of the republic, which he found in a very low condition, and univerfally despised by their neighbours. Aratus, indeed, was the first that raised the Achæan state to that pitch of power and glory to which it arrived; but the fuccess of his enterprises was not so much owing to his courage and intrepidity as to his prudence and politics. As he depended on the friendship of foreign princes, and their powerful fuccours, he neglected the military discipline at home; but the instant Philopæmen was created prætor, or commander in chief, he roused the courage of his countrymen, in order to put them into a condition to defend themselves without the affiftance of foreign allies. With this view he made great improvements in the Achæan discipline; changing the manner of their exercise and their arms, which were both very defective. He had thus, for the space of eight months, exercised his troops every day, making them perform all the motions and evolutions, and accustoming them to manage with dexterity their arms, when news was brought him that Machanidas was advancing, at the head of a numerous army, to invade Achaia. He

was glad of this opportunity to try how the troops had Philepæprofited by his discipline; and accordingly, taking the field, met the enemy in the territories of Mantinea, where a battle was fought. Philopæmen, having killed Machanidas with his own hand, struck off his head, and carried it from rank to rank, to encourage his victorious Achæans, who continued the pursuit, with great slaughter, and incredible ardour, to the city of Tegea, which they entered together with the fugitives. The Lacedæmonians loft on this occasion above 8000 men, of which 4000 were killed on the spot, and as many taken prifoners. The loss of the Achæans was very inconfiderable, and those that fell were mostly mercenaries. This hap-

pened about the year before Christ 204. But what most of all raised the same and reputation of Philopæmen was his joining the powerful city of Lacedæmon to the Achæan commonwealth; by which means the Achæans came to ecliple all the other states of Greece. This memorable event happened in the year 191. In this transaction we cannot help taking notice of one circumstance, which, in our opinion, reflects greater lustre on Philopæmen than all his warlike exploits. The Lacedæmonians, overjoyed to fee themselves delivered from the oppressions they had long groaned under, ordered the palace and furniture of Nabis to be fold; and the fum accruing from thence, to the amount of 120 talents, to be presented to Philopæmen, as a token of their gratitude. Deputies therefore were to be appointed, who should carry the money, and defire Philopæmen, in the name of the senate, to accept of the present. On this occasion it was that the virtue of the generous Achæan appeared in its greatest lustre; for so great was the opinion which the Spartans had of his probity and difinterestedness, that no one could be found who would take upon him to offer the present: struck with veneration, and fear of displeasing him, they all begged to be excused. At last they obliged, by a public decree, one Timolaus, who had formerly been his guest, to go to Megalopolis, where Philopæmen lived, and offer him this testimony of their regard. Timolaus, with great reluctance, fet out for Megalopolis, where he was kindly rcceived and entertained by Philopæmen. Here he had an opportunity of observing the strictness of his whole conduct, the greatness of his mind, the frugality of his life, and the regularity of his manners; which struck him with fuch awc, that he did not dare once to mention the present he was come to offer; insomuch that, giving some other pretence to his journey, he returned home with the money. The Lacedæmonians fent him again; but he could no more prevail upon himself now than the first time to mention the true cause of his journey. At last, going a third time, he ventured, with the utmost reluctance, to acquaint Philopæmen with the offer he had to make in the name of the Lacedæmonians. Philopæmen heard him with great calmness; but the instant he had done speaking, he set out with him for Sparta, where, after having acknowledged his obliga-tion to the Spartans, he advised them to lay out their money in reforming or purchasing those miscreants who divided the citizens, and fet them at variance by means of their feditious discourses; to the end that, being paid for their filence, they might not occasion so many distractions in the government: "for it is much more advisable (said he) to stop an enemy's mouth than a friend's; as for me, I shall always be your friend, and

Philopæ- you shall reap the benefit of my friendship without expence." Such was the difinterestedness of this noble Achæan!

About two years after this, the city of Messene withdrew itself from the Achæan league. Philopæmen attacked them; but was wounded, taken prisoner, and poisoned by the magistrates. Thus died one of the greatest heroes that Greece or any other country ever produced. He was no way inferior in valour, military knowledge, and virtue, to any of the boafted heroes of Rome. Had Achaia been nearer to an equality with Rome, he would have preserved his country from the yoke which the Roman republic forced it to bear. Both the Greek and Roman writers put him upon the level with Hannibal and Scipio, who were his contemporaries, and happened to die the same year. They allow him to have been not only one of the greatest commanders, but also one of the greatest statesmen of his age. To his valour and prudence Achaia owed her glory, which upon his death began to decline, there being none after him in that republic able to oppose her enemies with the like fteadiness and prudence: whence Philopæmen was called the last of the Greeks, as Brutus was afterwards styled the last of the Romans.

PHILOSOPHER, a person versed in philosophy; or one who makes profession of, or applies himself to,

the study of nature.

PHILOSOPHER's Stone, the greatest object of alchemy, is a long fought for preparation, which, when found, is to convert all the true mercurial part of metal into pure gold, better than any that is dug out of mines or perfect-

ed by the refiner's art.

Some Greek writers in the fourth and fifth centuries speak of this art as being then known; and towards the end of the 13th century, when the learning of the East had been brought hither by the Arabians, the same pretensions began to spread through Europe. It is supposed that this art, called alchemy, was of Egyptian origin; and that, when the ancient Greek philosophers travelled into Egypt, they brought back some of the allegoric language of this Egyptian art, ill understood, which afterwards passed into their mythology. Alchemy was the earliest branch of chemistry, considered as a philosophical science: in the other parts of chemical knowledge, facts preceded reasoning or speculation; but alchemy was originally speculative.

The alchemists supposed the general principles of metals to be chiefly two fubstances, which they called mercury and fulphur; they apprehended also, that the pure mercurial, fulphureous, or other principles of which they imagined gold to be composed, were contained separately in other bodies: and these principles, therefore, they endeavoured to collect, and to concoct and incorporate by long digestions; and by thus conjoining the principles of gold, if they could be fo produced and conjoined, it might be expected that gold would be produced. But the alchemists pretend to a product of a higher order, called the elixir, the medicine for metals, the tincture, the philosopher's stone; which by being projected on a large quantity of any of the inferior metals in fusion, should change them into fine gold; which being laid on a plate of filver, copper, or iron, and moderately heated, should fink into the metal, and change into gold all the parts to which it was applied; which, on being properly heated with pure

gold, should change the gold into a substance of the Philosofame nature and virtue with itself, so as thus to be fusceptible of perpetual multiplication; and which, by continued coction, should have its power more and more exalted, fo as to be able to transmute greater and greater quantities of the inferior metals, according to its different degrees of perfection.

Alchemists have attempted to arrive at the making of gold by three methods: the first by separation; for every metal yet known, it is affirmed, contains fome quantity of gold; only, in most, the quantity is so little

as not to defray the expence of getting it out.

The fecond is by maturation; for the alchemists think mercury is the basis and matter of all metals; that quickfilver purged from all heterogeneous bodies would be much heavier, denfer, and simpler, than the native quickfilver; and that by subtilizing, purifying, and digesting it with much labour, and long operations, it is possible to convert it into pure gold.

This method is only for mercury. With respect to the other metals, it is ineffectual, I. Because their matter is not pure mercury, but has other heterogeneous bodies adhering to it; and, 2. Because the digestion, whereby mercury is turned into gold, would not fucceed in other metals, because they had not been long enough

in the mines.

Weight is the inimitable character of gold, &c. Now mercury, they fay, has always some impurities in it, and these are lighter than mercury. Could they be purged away, which they think is not impossible, mercury would be as heavy as gold, and what is as heavy as gold is gold, or at least might very easily be made gold.

The third method is by transmutation, or by turning all metals readily into pure gold, by melting them in the fire, and casting a little quantity of a certain preparation into the fuled matter; upon which the fæces retire, are volatilized and burnt, and carried off, and the rest of the mass is turned into pure gold. That which works this change in the metals is called the philosopher's stone.

Whether this third method be possible or not, it is difficult to fay. We have so many testimonies of it from persons who on all other occasions speak truth, that it is hard to fay they are guilty of direct falsehood, even when they fay that they have been masters of the fecret. We are told, that it is only doing that by art which nature does in many years and ages. For as lead and gold differ but little in weight, therefore there is not much in lead beside mercury and gold. Now, if we had any body which would fo agitate all the parts of lead as to burn all that is not mercury therein, and had also some sulphur to fix the mercury, would not the mass remaining be converted into gold? There is nothing in nature fo heavy as lead except gold, mercury, and platina, which was not known to these reasoners; it is evident, threfore, there is fomething in lead that comes very near to gold. But in lead there is likewise some heterogenous matter different both from mercury and gold. If therefore 19 ounces of lead be diffolved by the fire, and 8 ounces be destroyed by these means, it is argued that we shall have the rest good gold; the ratio of lead to gold being as II to 19. If then the philosopher's stone can purify the mercurial matter in lead, fo as that nothing shall remain but the pure mercurial body, and you can

Philosopher's
Stone.

Thilosopher's
Stone.

Thilos this mercury to the proper standard, you will have gold; provided you have but a fulphur with which to fix and coagulate it. Such is the foundation of the opinion of the philosopher's stone; which the alchemists contend to be a most subtile, fixed, concentrated fire, which, as foon as it melts with any metal, does, by a magnetic virtue, immediately unite itself to the mercurial body of the metal, volatilize and cleanse off all that is impure therein, and leave nothing but a mass of pure gold. Many frauds and artifices have unquestionably been practised in this operation, and there might be political reasons why princes and others should encourage those who pretended to a power of furnishing this inexhaustible source of wealth; but it would be wrong to cenfure as impostors all those who have declared themselves convinced, from their own experiments, of the transmutability of base metals into gold. There are strong reasons, however, to believe that the authors have been deceived themselves by fallacious appearances. Mr Boyle gives an account of a process by which he imagines part of the substance of gold to have been transmuted into silver. He also relates a very extraordinary experiment, under the title of the degradation of gold by an anti-elixir, which was published in his own life-time, and since reprinted in 1739. Hence many have been led to conclude in favour of the alchemical doctrine of the transmutability of metals. See an account of this experiment, with remarks upon it by Dr Lewis, in his Commerce of Arts, fect. 12. p. 297, &c.

"The opinion (fays Holt) that one metallic or of the Kings other foreign substance might be changed into another, and Queens was, it seems, at this time (reign of Henry VI. of of England. England) propagated by certain chemists, whose obfervations on the furprifing effects and alterations pro-

duced in certain substances by the force of heat carried Philosophic, their imaginations beyond what found judgement might Philosophiwarrant. The first instance of which on record is in vol. xi. p. 68. of the Fædera; wherein Henry VI. grants a licence to John Cobbe, freely to work in metals; he having, by philosophical art, found out a method of transferring imperfect metals into perfect gold and filver.

"This pretended fecret, known afterwards by the name of the *Phylosopher's stone*, or *powder*, was encouraged by four licences, granted to different **projectors** during this reign, and at fundry times after, during this century particularly, and in fucceeding times, all over Europe. The frenzy has not entirely ceased even to this day, although it meets with neither public encouragement nor countenance from men of sober reason; the projectors having yet found nothing from their airy schemes in this mode of fearch but certain ruin to their

property." See CHEMISTRY.

The fame author, when speaking of the commerce of the kingdom, and the wonderful increase and riches of commercial cities, speaks thus: "This is the true philosopher's stone, so much sought after in former ages, the discovery of which has been reserved to genius, when studying to improve the mechanic arts. Hence a pound of raw materials is converted into stuffs of fifty times its original value. And the metals too are not, indeed, transmuted into gold-they are more: for the labour of man has been able to work the baser metal, by the ingenuity of art, fo as to become worth more than many times its weight in gold."

PHILOSOPHIC, or PHILOSOPHICAL, fomething

belonging to PHILOSOPHY.

PHILOSOPHICAL EGG, among chemists, a thin glass body or bubble, of the shape of an egg, with a long neck or stem, used in digestions.

PHILOSOPHIZING, rules of. See NEWTONIAN

Philosophy, no 16. and the following article.

HILO SOPHY

Definitions

IS a word derived from the Greek, and literally fignifies the love of wisdom (A). In its usual acceptation, however, it denotes a science, or collection of sciences, of which the universe is the object; and of the term thus employed many definitions have been given, differing from one another according to the different views of their feveral authors. By Pythagoras, philosophy is defined existing two oslar, "the knowledge of things existing;" by Cicero, after Plato, scientia rerum divinarum et humanarum cum GAUSIS; and by the illustrious Bacon, interpretatio naturæ. Whether any of these definitions be sufficiently pre-Vol. XVI. Part I.

cife, and at the same time sufficiently comprehensive, History of may be questioned; but if philosophy in its utmost Philosophye extent be capable of being adequately defined, it is not here that the definition should be given. "Explanation (fays an acute writer *), is the first of-* Tathem's fice of a teacher; definition, if it be good, is the Chart and last of the inquirer after truth; but explanation is one Scale of thing, and definition quite another." It may be properly that the definition of the property of of the per, however, to observe, that the definition given by Cicero is better than that of Pythagoras, because the chief object of the philosopher is to ascertain the causes of things; and in this confifts the difference between

3 A

(A) The origin usually attributed to the term philosophy has been already affigned in the article PHILOLOGY. M. Chauvin gives it a turn somewhat different. According to him, the term is derived from φιλια, desire or study, and σοφια, wisdom; and therefore he understands the word to mean the defire or study of wisdom; for (fays he) Pythagoras, conceiving that the application of the human mind ought rather to be called fludy than fcience, fet afide the appellation of wife as too affuming, and took that of philosopher.

History of his studies and those of the natural historian, who mere-Philosophy. ly enumerates phenomena, and arranges them into separate classes.

Its objects.

The principal objects of philosophy are, God, nature, and man. That part of it which treats of God is called theology; that which treats of nature, physics and metaphysics; and that which treats of man, logic and ethics. That these are not separate and independent sciences, but, as Bacon expresses it (B), branches from the same trunk, we shall endeavour to show, after we have given, agreeably to our usual plan, a short history of philosophy

from the earliest ages to the present day.

To attempt to affign an origin to philosophy, would be ridiculous; for every man endeavours to ascertain the causes of those changes which he observes in nature; and even children themselves are inquisitive after that which produces the found of their drums and their rattles. Children, therefore, and the most illiterate vulgar, have in all ages been philosophers. But the first people among whom philosophy was cultivated as a profession, was probably the Chaldeans. We certainly read of none earlier; for though we have more authentic accounts of the Hebrews than of any other nation of remote antiquity, and have reason to believe that no people was civilized before them, yet the peculiar circumstances in which they were placed, rendered all philosophical investigation to them useless, and even tended to suppress the very spirit of inquiry. The Egyptians indeed pretended to be the first of nations, and to have spread the bleffings of religion and the light of science among every other people; but, from the earliest records now extant, there is reason to believe that the Chaldeans were a civilized and powerful nation before the Egyptian monarchy was founded

Philosophy of the Chaldeans.

Of the Chaldean philosophy much has been said, but very little is known. Astronomy seems to have been their favourite study; and at the era of Alexander's conquest of their country, they boasted that their ancestors had continued their astronomical observations through a period of 470,000 years. Extravagant claims to antiquity have been common in all nations (c). Calisthenes, who attended the Macedonian conqueror, was requested by Aristotle to inform himself concerning the origin of science in Chaldea; and upon examining into the grounds of this report, he found that their observations reached no farther backwards than 1903 years, or 2234 years before the Christian era. Even this is a remoter antiquity than Ptolemy allows to their science; for he mentions no Chaldean observations prior to the era of Nabonaffar, or 747 years before Christ. That they cultivated fomething which they called philosophy at a much earlier period than this, cannot be questioned; for Aristotle +, on the credit of the most ancient records, fpeaks of the Chaldean magi as prior to the Egyptian History of priefts, who were certainly men of learning before the Philosophy. time of Moses. For any other science than that of the ftars, we do not read that the Chaldeans were famous; and this feems to have been cultivated by them merely as the foundation of judicial aftrology. Perfuading the multitude that all human affairs are influenced by the flars, and professing to be acquainted with the nature and laws of this influence, their wife men pretended to calculate nativities, and to predict good and bad fortune ‡. This was the fource of idolatry and various fur \$ Sext. perstitions; and whilst the Chaldeans were given up to Emp. ad fuch dotages, true science could not be much indebted Math. to their labours. If any credit be due to Plutarch and lib. 4. § 2. Vitruvius, who quote Berofus, (see BEROSUS), it was 1.b. 100. the opinion of the Chaldean wife men that an eclipse of Cic de Dive the moon happens when that part of its body which is lib. 1. § 1. destitute of fire is turned towards the earth. " Their cosmogony, as given by Berosus, and preserved by Syncellus, feems to be this, that all things in the beginning confifted of darkness and water; that a divine power dividing this humid mass, formed the world; and that the human mind is an emanation from the Divine Enfield's

The large tract of country which comprehended the Hift. Phil. empires of Affyria and Chaldea, was the first peopled vol. i. region on earth. From that country, therefore, the rudiments of science must have been propagated in every direction through the rest of the world; but what particular people made the earliest figure, after the Chaldeans, in the history of philosophy, cannot be certainly known. The claim of the Egyptians is probably best founded; but as their science was the immediate source of that of the Greeks, we shall defer what we have to fay of it on account of the connection between the parent and the offspring, and turn our attention from Chaldean to Indian philosophy, as it has been cultivated from a very early period by the Brachmans and Gymnosophists. We pass over Persia, because we know not of any science peculiar to that kingdom, except the doctrines of the magi, which were religious rather than philosophical; and of them the reader will find some account under the words MAGI, POLYTHEISM, and

ZOROASTER.

From whatever quarter India received its wisdom, we are certain that its philosophers were held in high repute losophy. at a period of very remote antiquity, fince they were visited by Pythagoras and other sages of ancient Greece, who travelled in pursuit of knowledge. Yet they seem to have been in that early age, as well as at present, more distinguished for the severity of their manners than for the acquisition of science; and, as Dr Ensield observes, to have more resembled modern monks than ancient

Apud Laert lib. 1. § 8.

(B) Convenit igitur partiri philosophiam in doctrinas tres; doctrinam de numine, doctrinam de natura, doctrinam de homine. Quoniam autem partitiones scientiarum non funt lineis diversis similes, quæ coeunt ad unum angulum; sed potius ramis arborum, qui conjunguntur in uno trunco, qui etiam truncus ad spatium nonnullum integer est et continuus, antequam se partiatur in ramos. De aug. Scient. lib. iii. cap. 1.

(c) This claim of the Babylonians is thus rejected with contempt by Cicero; "Contemnamus Babylonios, et eos, qui è Caucaso cœli signa servantes, numeris, et motibus, stellarum cursus persequuntur; Condemnemus, inquam, hos aut fluttitiæ, aut vanitatis, aut imprudentiæ, qui 470 millia annorum, ut ipsi dicunt, monumentis comprehensa continent, et mentiri judicemus, nec seculorum reliquorum judicium, quod de ipsis suturum set, pertimescere. De Divinatione, lib. i. § 19.

* Prelimi-

History of cient philosophers. The brachmans or bramins, it is Philosophy well known, are all of one tribe; and the most learned of them are in their own language called Pundits or Pandits. The Greek writers, however, mention a fociety called Samanæans, who, voluntarily devoting themselves to the study of divine wisdom, gave up all private property, committed their children to the care of the state, and their wives to the protection of their relations. This fociety was supported at the public expence; and its members spent their time in contemplation, in conversation on divine subjects, or in acts of re-

Ingrafted on religion.

The philosophy of the Indians has indeed from the beginning been engrafted on their religious dogmas, and feems to be a compound of fanatic metaphysics and extravagant superstition, without the smallest seafoning of rational physics. Very unlike the philosophers of modern Europe, of whom a great part labour to exclude the agency of mind from the universe, the Pandits of Hindostan allow no powers whatever to matter, but introduce the Supreme Being as the immediate cause of every effect, however trivial. " Brehm, the Spirit of God, (fays one of their most revered Bramins), is absorbed in self-contemplation. The same is the mighty Lord, who is present in every part of space, whose omnipresence, as expressed in the Reig Beid or Rigveda, I shall now explain. Brehm is one, and to him there is no fecond; fuch is truly Brehm. His omniscience is self-inspired or self-intelligent, and its comprebension includes every possible species. To illustrate this as far as I am able; the most comprehensive of all comprehensive faculties is omniscience; and being selfinspired, it is subject to none of the accidents of mortality, conception, birth, growth, decay, or death; neither is it subject to passion or vice. To it the three distinctions of time, past, present, and future, are not. To it the three modes of being (D) are not. It is separated from the universe, and independent of all. This omniscience is named Brehm. By this omniscient Spirit the operations of God are enlivened. By this Spirit also the 24 powers (E) of nature are animated. How is this? As the eye by the fun, as the pot by the fire, as iron by the magnet (F), as variety of imitations by the mimic, as fire by the fuel, as the shadow by the man, as dust by the wind, as the arrow by the spring of the bow, and as the shade by the tree; so by this Spirit the world is endued with the powers of intellect, the powers of the will, and the powers of action: fo that if it emanates from the heart by the channel of the ear, it causes the perception of sounds; if it emanates from the heart by the channel of the skin, it causes the perception of touch; if it emanates from the heart by the channel of the eye, it causes the perception of visible objects; if it emanates from the heart by the History of channel of the tongue, it causes the perception of Philosophy. taste; if it emanates from the heart by the channel of the nose, it causes the perception of smell. This also invigorating the five members of action, and invigorating the five members of perception, and invigorating the five elements, and invigorating the five tenses, and invigorating the three dispositions of the mind, &c. causes the creation or the annihilation of the universe, while itself beholds every thing as an indifferent fpectator *."

From this passage it is plain that all the motions nary Disc. in the universe, and all the perceptions of man, are, to Halbed's according to the Bramins, caused by the immediate Laws. agency of the Spirit of God, which leems to be here confidered as the foul of the world. But it appears Admits not from some papers in the Asiatic Researches, that the the separate most profound of these oriental philosophers, and even existence of matter, and the authors of their facred books, believe not in the existence of matter as a separate substance, but hold an opinion respecting it very similar to that of the celebrated Berkeley. The Védantis (says Sir William Jones), unable to form a distinct idea of brute matter independent of mind, or to conceive that the work of Supreme Goodness was left a moment to itself, imagine that the Deity is ever present to his work, and constantly supports a feries of perceptions, which in one fense they call illusory, though they cannot but admit the reality of all created forms, as far as the happiness of creatures can be affected by them.

This is the very immaterialism of Berkeley; and in proof that it is the genuine doctrine of the Bramins, the learned president quotes the Bhágavat, which is believed to have been pronounced by the Supreme Being, and in which is the following fentence.

"Except the first cause, whatever may appear, and

may not appear, in the mind, know that to be the mind's Máyá, or 'delufion,' as light, as darknefs."

We have shown elsewhere (see METAPHYSICS, No Teachesthe 269.) that the metaphysical doctrines of the Bramins, metempty-respecting the human soul, differ not from those of choss. Pythagoras and Plato; and that they believe it to be an emanation from the great foul of the world, which, after many transmigrations, will be finally absorbed in its parent substance. In proof of their believing in the metempsychosis, Mr Halhed gives us the following translation of what (he fays) is a beautiful stanza in the Geeta: " As throwing aside his old clothes, a man puts on others that are new; so our lives, quitting the old, go to other newer animals."

From the Bramins believing in the foul of the world Physics of not only as the fole agent, but as the immediate cause of the Braevery motion in nature, we can hardly suppose them

3 A 2

(D) To be awake, to fleep, and to be absorbed in a state of unconsciousness—a kind of trance.

(F) If the work from which this extract is quoted be of as great antiquity as Mr Halhed supposes, the Bramins must have been acquainted with the phenomena of magnetism at a much earlier period than any other philosophers of whom history makes mention.

⁽E) The 24 powers of nature, according to the Bramins, are the five elements, fire, air, earth, water, and akash (a kind of subtile æther); the five members of action, the hand, foot, tongue, anus, and male organ of generation; the five organs of perception, the ear, eye, nose, mouth, and skin; the five senses, which they distinguish from the organs of sensation; the three dispositions of the mind, desire, passion, and tranquillity; and the power of consciousness.

Apatic

History of to have made any great progress in that Science which Philosophy in Europe is cultivated under the name of physics. They have no inducement to investigate the laws of nature; because, according to the first principles of their philosophy, which, together with their religion, they believe to have been revealed from heaven, every phenomenon, however regular, or however anomalous, is produced by the voluntary act of an intelligent mind. Yet if they were acquainted with the use of fire-arms 4000 years ago, as Mr Halhed feems to believe, he who made that discovery must have had a very confiderable knowledge of the powers of nature; for though gunpowder may have been discovered by accident in the East, as it certainly was in the West many ages afterwards, it is difficult to conceive how mere accident could have led any man to the inven-Their acro-tion of a gun. In astronomy, geometry, and chronology too, they appear to have made fome proficiency at a very early period. (See ASTRONOMY, No 4.). Their chronology and astronomy are indeed full of those extravagant fictions which seem to be essential to all their fystems; but their calculation of eclipses, and their computations of time, are conducted upon scientific principles.

" It is sufficiently known (says Mr Davis*) that Researches, the Hindoo division of the ecliptic into figns, degrees, &c. is the same as ours; that their astronomical year is fidereal, or containing that space of time in which the fun, departing from a star, returns to the same; that it commences on the instant of his entering the fign Aries, or rather the Hindoo constellation Mesha; that each aftronomical month contains as many even days and fractional parts as he stays in each fign; and that the civil differs from the astronomical account of time only in rejecting those fractions, and beginning the year and month at funrise, instead of the intermediate instant of the artificial day or night. Hence arises the unequal portion of time assigned to each month dependent on the fituation of the fun's apfis, and the distance of the vernal equinoctial colure from the beginning of Mésha in the Hindoo sphere; and by these means they avoid those errors which Europeans, from a different method of adjusting their kalendar by intercalary days, have been subject to."

Mr Davis observes, that an explanation of these matters would have led him beyond his purpose, which was only to give a general account of the method by which the Hindoos compute eclipses, and to show that the science of astronomy is as well known among them now as ever it was among their ancestors. This he does very completely; but in the present short historical sketch, we can neither copy nor abridge his memoir. Suffice it to fay, that he has shown the practical part of the Hindoo astronomy to be founded on mathematical principles; and that the learned Pandits appear to have truer notions of the form of the earth, and the economy of the . universe, than those which are ascribed to their countrymen in general.

The same writer shows likewise, that the prodigious duration which the Hindoos attribute to the world, is the refult of a scientific calculation, founded indeed on very whimfical principles. "It has been common with astronomers to fix on some epoch, from which, as from a radix, to compute the planetary motions; and the ancient Hindoos chofe that point of time counted back, History of when, according to their motions as they had determin-Philosophy. ed them, they must have been in conjunction in the beginning of Mésha or Aries, and coeval with which circumflance they supposed the creation. This, as it concerned the planets only, would have produced a moderate term of years compared with the enormous antiquity that will be hereafter flated: but having discovered a flow motion of the nodes and apfides also, and taken it into the computation, they found it would require a length of time corresponding with 1955884890 years now expired, when they were so situated, and 2364115110 years more before they would return to the same situation again, forming together the grand anomalistick period denominated a Calpa, and fancifully affigned as the day of Brahmá."

But though the mathematical part of the astronomy of the Pandits is undoubtedly respectable, their physical notions of the universe are in the highest degree ridiculous and extravagant. In the Vedas and Puranas, writings of which no devout Hindoo can dispute the divine authority, eclipses are faid to be occasioned by the intervention of the monster Rahu; and the earth to be Strange mosupported by a series of animals. "They suppose (says tions of the Mr Halhed) that there are 14 fpheres, feven below and univerfe. and fix above the earth. The feven inferior worlds are faid to be altogether inhabited by an infinite variety of ferpents, described in every monstrous figure that the imagination can suggest. The first sphere above the earth is the immediate vault of the visible heavens, in which the fun, moon, and stars, are placed. The fecond is the first paradife, and general receptacle of those who merit a removal from the lower earth. The third and fourth are inhabited by the fouls of those men who, by the practice of virtue and dint of prayer, have acquired an extraordinary degree of fanctity. The fifth is the reward of those who have all their lives performed fome wonderful act of penance and mortification, or who have died martyrs for their religion. The highest sphere is the residence of Brahma and his particular favourites,

these are absorbed in the divine essence." On ethics, the Hindoos have nothing that can be called philosophy. Their duties, moral, civil, and re-Ethics of ligious, are all laid down in their Vedas and Shafters; the Minand enjoined by what they believe to be divine autho-doos. rity, which superfedes all reasoning concerning their fitness or utility. The business of their Pandits is to interpret those books, which are extremely ancient, and written in a language that has long been unintelligible to every other order of men; but no Pandit will alter the text, however impossible to be reconciled to principles established in his own practice of astronomy. On fuch occasions, the usual apology for their facred books is, that " fuch things may have been so formerly, and may be fo still; but that for astronomical purposes, astronomical rules must be followed *." The great duties of morality have been prescribed in every religious code; * Davis's

fuch as those men who have never uttered a falsehood

during their whole lives, and those women who have vo-

luntarily burned themselves with their husbands. All

and they are not overlooked in that of the Hindoos, Memoir, though the highest merit that a Bramin can have consists Afiatic Re-in voluntary acts of abstinence and mortification, and in carches,

contempt of death.

Of

Of the ancient philosophy of the Arabians and Chi-Philosophy nese nothing certain can be faid; and the narrow limits of fuch an abstract as this, do not admit of our mention-Philosophy ing the conjectures of the learned, which contradict each

Chinese.

of the Ara- other, and are all equally groundless.

bians and There is indeed sufficient evidence that both nations were at a very early period observers of the stars; and that the Chinese had even a theory by which they foretold eclipses (see ASTRONOMY, No 2, 3.); but there is reason to believe that the Arabians, like other people in their circumstances, were nothing more than judicial aftrologers, who possessed not the smallest portion of astronomical science.

Pliny makes mention of their magi, whilst later writers tell us, that they were famous for their ingenuity in folving enigmatical questions, and for their skill in the arts of divination: but the authors of Greece are filent concerning their philosophy; and there is not an Arabian book of greater antiquity than the Koran extant.

(See PHILOLOGY, Section II.).

Leaving therefore regions fo barren of information, let us pass to the Phœnicians, whose commercial ce-Phoenicians lebrity has induced many learned men to allow them great credit for early science. If it be true, as seems highly probable, that the ships of this nation had doubled the Cape and almost encompassed the peninfula of Africa long before the era of Solomon (See OPHIR, No 10.), we cannot doubt that the Phœnicians had made great proficiency in the art of navigation, and in the science of astronomy, at a period of very remote antiquity. Nor were these the only sciences cultivated by that ancient people: the learned Cudworth has, in our opinion, fufficiently proved that Moschus or Mochus a Phœnician, who, according to Strabo, flourished before the Trojan war, was the author of the atomic philosophy afterwards adopted by Leucippus, Democritus, and others among the Greeks; and that it was with some of the successors of this sage that Pythagoras, as Jamblichus tells us, conversed at Sidon, and from them received his doctrine of Monads (See Py-THAGORAS). Another proof of the early progress of the Phœnicians in philosophy may be found in the fragments of their historian Sanchoniatho which have been * Prep. Ev. preserved by Eusebius *. We are indeed aware that men of great celebrity have called in question the authenticity of those fragments, and even the very existence of fuch a writer as Sanchoniatho; but for this scepticism we can discover no foundation (See Sancho-NIATHO). His history may have been interpolated in fome places by the translator Philo-Byblius; but Porphyry, Eusebius, and Theodoret, speak of it as a work of undoubted credit, and affirm that its author flourished before the Trojan war. Now this ancient writer teaches that, according to the wife men of his country, all things arose at first from the necessary agency of an active principle upon a passive chaotic mass which he calls mot. This chaos Cudworth thinks was the same with the elementary water of Thales, who was also of Pheenician extraction; but Mosheim justly observes that it was rather dark air, fince Philo translates it acea Coquon. Be this as it may, nothing can be more evident than that the Phœnicians must have made some progress in what must furely be considered as philosophy, however false, so early as the era of Sanchoniatho; for speculations about the origin of the world never occur to untaught

barbarians. Besides Mochus and Sanchoniatho, Cad- Historyof mus, who introduced letters into Greece, may undoubt- Philosophy. edly be reckoned among the Phænician philosophers; for though it is not pretended that the alphabet was of his invention, and though it is by no means certain that the Greeks, at the time of his arrival among them, were wholly destitute of alphabetic characters (See PHILOLO-GY, No 130.); yet the man who could prevail with illiterate savages to adopt the use of strange characters, must have been a great master of the science of human nature. Several other Phoenician philosophers are mentioned by Strabo; but as they flourished at a later period, and philosophized after the systematic mode of the Greeks, they fall not properly under our notice. We pass on therefore to the philosophy of E-

gypt.

It has been already observed that the Egyptians Egyptians boasted of being the first of nations, and the authors philosophy. of all the science which in separate rays illuminated the rest of the world. But though this claim was undoubtedly ill-founded, their high antiquity and early progress in the arts of civil life cannot be controverted. The Greeks with one voice confess that all their learning and wisdom came from Egypt, either imported immediately by their own philosophers, or brought through Phoenicia by the fages of the east; and we know from higher authority than the histories of Greece, that at a period fo remote as the birth of Moses, the wisdom of the Egyptians was proverbially famous. Yet the hiftory of Egyptian learning and philosophy, though men of the first eminence both ancient and modern have bestowed much pains in attempts to elucidate it, still remains involved in clouds of uncertainty. That they had fome knowledge of physiology, arithmetic, geometry, and aftronomy, are facts which cannot be questioned; but there is reason to believe that even these sciences were in Egypt pushed no farther than to the uses of life. That they believed in the existence of incorporeal substances is certain; because Herodotus affures us that they were the first affertors of the immortality, pre-existence, and transmigration of human souls, which they could not have been without holding those souls to be at least incorporeal, if not immaterial.

The author of Egyptian learning is generally acknowledged to have been Thoth, Theut, or Taaut, called by the Greeks Hermes, and by the Romans Mercury; but of this personage very little is known. Diodorus Siculus fays that he was chief minister to Ofiris, and that he improved language, invented letters, inftituted religious rites, and taught astronomy, music, and other arts. The fame thing is affirmed by Sanchoniatho, whose antiquity has been already mentioned; by Manetho an Egyptian priest, who flourished during the reign of Ptolemy Philadelphus; and by Plato, whose authority, as he refided long in Egypt, and was himfelf an eminent philosopher, is perhaps more to be depended upon than that of the other two. In the Philebus we are told that Thoth was the inventor of letters; and lest we should suppose that by those letters nothing more is meant than picture writing or fymbolical hieroglyphics, it is added, that he diffinguished between vowels and confonants, determining the number of each. The fame philosopher, in his Phædrus, attributes to Thoth the invention of arithmetic, geometry, astronomy, and hieroglyphic learning; and subjoins a

disputa-

History of disputation said to have been held between him and Tha-Philosophy mus then king of Egypt, concerning the advantage and disadvantage of his newly invented letters. Thoth boasted that the invention, by aiding memory, would greatly contribute to the progress of science; whilst the monarch contended, that it would enervate men's natural faculties by making them trust to written characters without exerting the powers of their own minds.

All this, if real, must have happened before the era of Moses; and fince it is almost certain that alphabetical characters were in use prior to the exod of the Israelites from Egypt (See Philology, No 24, 25.) we may as well allow the invention to Thoth, as give it to an earlier author of unknown name. That arithmetic, geometry, and aftronomy, were cultivated in Egypt from the most remote antiquity, is affirmed by all the ancients, and made in the highest degree probable by the fituation of the country. The first elements of astronomy have certainly been discovered by various nations, whose habits of life led them to the frequent obfervation of the heavens; and it is observed by Cicero, that the Egyptians and Babylonians, dwelling in open plains where nothing intercepted the view of the heavenly bodies, naturally devoted themselves to the study of that science. The annual overflowing of the Nile, which broke up the boundaries of their lands, would lay the Egyptians under the necessity of adopting some method of fettling those boundaries anew; and necessity we know to be the parent of invention. Hence their early acquaintance with practical geometry cannot well be doubted. Their custom of embalming their dead, and the perfection to which they carried that art (G), shows infallibly their knowledge of the properties of natural fubstances, and gives some reason to believe that they were not altogether strangers to anatomy: but if we allow them to have been at this early period anatomists acquainted with the power of drugs, we can hardly refuse them some skill in the art of physic, which they themselves traced up to their gods and demigods, to Serapis, Isis, and her son Horus or Apollo.

The art of alchymy has been faid to have been known by the ancient Egyptians; and from the author of the Egyptian philosophy it has been called the Hermetic art. But though this is unquestionably a fiction, there is evidence that they were possessed of one art which is even History of yet a defideratum in the practice of chemistry. " Mo- Philosophy, fes (we are told *) took the golden calf, which his * Exod. brother had made for idolatrous purposes, and burnt it xxii, 20. in the fire, and ground it to powder, and strowed it on the water, and made the children of Ifrael drink of it." Had this fact been related by Herodotus or Diodorus Siculus, it would have been deemed fufficient evidence. that the Egyptians were even at that early period no strangers to the art of chemistry: and surely the evidence should not be the worse for coming from the pen of the Hebrew lawgiver, who was himself educated in the court of Egypt.

But though it is thus evident that the rudiments of Not carried almost every useful science were known in Egypt from to high per-the remotest antiquity, it does not appear that any of them was carried to a great degree of perfection, unless perhaps chemistry alone must be excepted. One would think that no science could have been more indispensably requifite to them than geometry. And yet though Pythagoras is faid to have spent 22 years in Egypt studying that science and astronomy, he himself discovered (H) the famous 47th Prop. of Euclid's first book after his return to Samos. This, though a very useful, is yet a fimple theorem; and fince it was not reached by the Egyptian geometry, we cannot suppose that those people had then advanced far in fuch speculations. fame conclusion must be drawn with respect to astronomy; for Thales is faid to have been the first that calculated an eclipfe of the fun; and we nowhere read that the Egyptians pretended to dispute that honour with him. To this it may be replied, that Pythagoras was Their in Egypt undoubtedly taught the true constitution of knowledge the folar fystem, and what is more extraordinary, the of the I doctrine of comets in particular, and of their revolutions, like the other planets, round the fun (1). We grant that he was taught all this; but it was not scientifically. but dogmatically, as facts which the priefts had received by tradition from their early ancestors, and of which they had never questioned the truth nor enquired into the reasons. Of this we need no better proof than that the Pythagorean fystem of the sun was totally neglected by the Greeks as foon as they began to frame hypotheses and to speculate in philosophy (K).

But

(G) It is true that the diffection of some mummies has lessened the high opinion long entertained of the skill of the ancient Egyptians in the art of embalming; yet it must be granted that their knowledge of antiseptic drugs was great, fince it is now certainly known, even from these diffections, that by means of such drugs they contrived to preferve rags of cloth from corruption for upwards of 3000 years.

(H) This discovery he claimed; and his claim was admitted by the Greek writers without having been directly controverted fince. An excellent mathematician, however, has shown that the equality between the square of the hypothenuse of a right-angled triangle, and the sum of the squares on the other two sides, was known to the aftronomers of India at a period long prior to that of Pythagoras. Notwithstanding this, it is certainly possible that the fage of Samos may have made the discovery himself, though we think the contrary much more probable; for we agree with the able writer already mentioned, that Pythagoras, who is generally believed to have converfed with Indian brachmans as well as Egyptian priefts, may have derived from them "fome of the folid as well as the visionary speculations with which he delighted to instruct or amuse his disciples." See Transactions of the Royal Society of Edinburgh, vol. ii. Memoir xiii. Physic Class.

(1) This is recorded by Aristotle and Plutarch; and thus expressed by Ammianus Marcellinus.—" Stellas quasdam, ceteris similes, quarum ortus orbitusque, quibus sint temporibus præstituti humanis mentibus ignorari. Lib.

(K) Fixas in supremis mundi partibus immotas persistere, et planetas his inferiores circa solem revolvi, terram pariter moveri cursu annuo, diurno vero circa axem propriam, et solem ceu socum universi in omnium centro quies-

But it may feem strange, and certainly is so, that the History of Philosophy. Egyptian priefts, in the days of Pythagoras, should

have preserved so great a discovery of their ancestors, and at the same time have totally forgotten the principles and reasoning which led to a conclusion apparently contrary to the evidence of fense. This is a difficulty which we pretend not to remove, though the fact which involves it feems to be beyond the reach of controverfy. Perhaps the following observations may throw upon it a feeble light. According to Manetho, the written monuments of the first Thoth were lost or neglected in certain civil revolutions or natural calamities which befel the kingdom of Egypt. After many ages great part of them were recovered by an ingenious interpretation of the fymbols which he had inscribed upon ancient columns; and the man who made this interpretation was called the fecond Thoth or Hermes Trifmegistus. thrice illustrious as this personage was, it is at least posfible that he may have been much inferior to the former Hermes, and have read his writings and transcribed his conclusions without being able to comprehend the principles or reasoning which led to those conclusions. Any man who understands Latin might translate into his own tongue the conclusions of Newton; but much more would be requifite to make him comprehend the demonstrations of his sublime geometry. By what mode of reasoning the first Hermes (L) was led to the true idea of the folar fystem, or whether it was by reasoning at all, cannot now be known; but it feems very evident, that when the intercourse between the Egyptians and Greeks first commenced, the wisdom of the former people confifted chiefly in the science of legislation and civil policy, and that the philosopher, the divine, the legislator, and the poet, were all united in the same person. Their cosmogony (for all the ancients who pretended to science framed cosmogonies) differed little from that of the Phœnicians already mentioned. They held that the world was produced from chaos by the energy of an intelligent principle; and they likewife conceived that there is in nature a continual tendency towards diffolution. In Plato's Timæus, an Egyptian priest is introduced describing the destruction of the world, and asferting that it will be effected by means of water and

fire. They conceived that the universe undergoes a pe- History of riodical conflagration; after which all things are reftored to their original form, to pass again through a simi-

lar fuccession of changes.

"Of preceptive doctrine the pyptians had two Their mokinds, the one facred, the other vulgar. The former, ral science. which respected the ceremonies of religion and the du-Enfield's ties of the priefts, was doubtlefs written in the facred Hillory of Philosophy. books of Hermes, but was too carefully concealed to pass down to posterity. The latter consisted of maxims and rules of virtue, prudence, or policy. Diodorus Siculus relates many particulars concerning the laws, cuftoms, and manners of the Egyptians; whence it appears that superstition mingled with and corrupted their notions of morals. It is in vain to look for accurate principles of ethics among an ignorant and fuperstitious people. And that the ancient Egyptians merited this character is sufficiently evident from this single circumstance, that they suffered themselves to be deceived by impostors, particularly by the professors of the fanciful art of aftrology; concerning whom Sextus Empiricus justly remarks, that they have done much mischief in the world, by enflaving men to superstition, which will not fusfer them to follow the dictates of right reason." See

EGYPT, MYSTERIES, MYTHOLOGY, &c. From Egypt and Phœnicia philosophy passed int Grecian Greece; where it was long taught without system, as philosophy. in the countries from which it was derived. Phoroneus, Cecrops, Cadmus, and Orpheus, were among the earliest instructors of the Greeks; and they inculcated Egyptian and Phœnician doctrines in detached maxims, and enforced them, not by strength of argument, but by the authority of tradition. Their cosmogonies were wholly Phœnician or Egyptian, difguifed under Grecian names; and they taught a future state of rewards and punishments. The planets and the moon Orpheus conceived to be habitable worlds, and the stars to be fiery bodies like the fun: but he taught that they are all animated by divinities; an opinion which prevailed both in Egypt and the east: and it does not appear that he gave any other proof of his doctrines than a confident affertion that they were derived from some god. See

ORPHEUS.

Hitherto

cere, antiquissima fuit philosophantium sententia. Ab Ægyptiis autem astrorum antiquissimis observationibus propagatam esse hanc sententiam verisimile est. Et etiam ab illis et à gentibus conterminis ad Græcos, gentem magis philologicam quam philofophicam, philofophia omnis antiquior juxta et fenior manasse videtur. Subinde docuerunt Anaxagoras, Democritus, et alii nonnulli, terram in centro mundi immotam stare, et astra omnia in occasum, aliqua celerius, alia tardius moveri, idque in spatiis liberrimis. Namque orbis solidi postea ab Eudoxo, Calippo, Aristotele, introducti sunt; declinante indies philosophia primitus introducta, et novis Græcorum commentis paulatim prævalentibus. Quibus vinculis ANTIQUI planetas in spatiis liberis retineri, deque cursu rectilineo perpetuo retractas in orbem regulariter agi docuere, non constat. Newton de Mundi Sustemate.

(L) Some authors, deeply skilled in the Hebrew language, have thought that the true system of the sun and planets may be perceived in the Scriptures of the Old Testament, and that it is only from the ignorance or carelessness. of the translators that it does not appear in the English bible and other versions. The writer of this article confesses that his knowledge of the Hebrew is very limited, which is probably the reason that to him the arguments of these men appear weak and their criticisms fanciful. No man, however, has a higher veneration than he for the sacred volume, which he believes to have been given for nobler purposes than to teach its readers the science of aftronomy; but could the principles of that science be found in it, he should be strongly inclined to think that the first Thoth was Joseph, and that the monarch to whom he was minister was the far-famed Ofiris. Were there any folid foundation for this supposition, it would be easy to conceive how Thoth acquired his science, and how the Egyptian priests might retain just notions of the solar system in general, long after they had forgotten the evidence upon which he communicated those notions to their ancestors.

l'iftory of

Hitherto we have feen philosophy in its state of in-Philosophy fancy and childhood, consisting only of a collection of fententious maxims and traditionary opinions; but among the Greeks, an ingenious and penetrating people, it foon assumed the form of profound speculation and systematic reasoning. Two eminent philosophers arose nearly at the same period, who may be considered as the parents not only of Grecian science, but of almost all the science which was cultivated in Europe prior to the era of the great Lord Bacon: These were Thales and Pythagoras; of whom the former founded the Ionic school and the latter the Italic; from which two fprung the various fects into which the Greek philosophers were afterwards divided. A bare enumeration of these sects is all that our limits will admit of; and we shall give it in the perspicuous language and just arrangement of Dr Enfield, referring our readers for a fuller account than we can give of their respective merits to his abridged translation of Brucker's history.

The Ionic fchool.

Of the Ionic School were, 1. The Ionic feet proper, whose founder Thales had as his fuccessors Anaximenes, Anaxagoras, Diogenes Apolloniates, and Archelaus. 2. The Socratic school, founded by Socrates, the principal of whose disciples were Xenophon, Æschines, Simon, Cebes, Ariftippus, Phædo, Euclid, Plato, Antisthenes, Critias, and Alcibiades. 3. The Cyrenaic fect, of which Aristippus was the author: his followers were, his daughter Arete, Hegisias, Anicerris, Theodorus, and Bion. 4. The Megaric or Eristic feet, formed by Euclid of Megara; to whom succeeded Eubulides, Diodorus, and Stilpo, famous for their logical fubtlety. 5. The Eliac or Eretriac school, raised by Phædo of Elis, who, though he closely adhered to the doctrine of Socrates, gave name to his school. His fuccesfors were Plistanus and Menedemus; the latter of whom, being a native of Eretria, transferred the school and name to his own country. .6. The Academic feet, of which Plato was the founder. After his death, many of his disciples deviating from his doctrine, the school was divided into the old, new, and middle academies. 7. The Peripatetic fect, founded by Aristotle, whose fuccessors in the Lyceum were Theophrastus, Strato, Lycon, Aristo, Critolaus, and Diodorus. Among the Peripatetics, besides those who occupied the chair, were alfo Dicæarchus, Eudemus, and Demetrius Phalereus. 8. The Cynic fect, of which the author was Antisthenes, whom Diogenes, Onesicritus, Crates, Metrocles, Menipus, and Menedemus, succeeded. In the list of Cynic philosophers must also be reckoned Hipparchia, the wife of Crates. 9. The Stoic feet, of which Zeno was the founder. His fuccessors in the porch were Perfæus, Aristo of Chios, Herillus, Sphærus, Cleanthes, Chryfippus, Zeno of Tarfus, Diogenes the Babylonian, Antipater, Panætius, and Posidonius.

Of the ITALIC SCHOOL were, 1. The Italic feet proper: it was founded by Pythagoras, a disciple of Pherecydes. The followers of Pythagoras were Aristæus, Mnesarchus, Alcmæon, Ecphantus, Hippo, Empedocles, Epicharmus, Ocellus, Timæus, Archytas, Hippafus, Philolaus, and Eudoxus. 2. The Eleatic fect, of which Xenophanes was the author: his succesfors, Parmenides, Meliffus, Zeno, belonged to the metaphyfical class of this sect; Leucippus, Democritus, Protagoras, Diogoras, and Anaxarchus, to the physi-3. The Heraclitean feet, which was founded by

Heraclitus, and foon afterwards expired: Zeno and History of Hippocrates philosophised after the manner of Heracli- Philosophy. tus, and other philosophers borrowed freely from his fystem. 4. The Epicurean sect, a branch of the Eleatic, had Epicurus for its author; among whose followers were Metrodorus, Polyænus, Hermachus, Polystratus, Basilides, and Protarchus. 5. The Pyrrhonic or Sceptic feet, the parent of which was Pyrrho: his doctrine was taught by Timon the Phliasian; and after fome interval was continued by Ptolemy a Cyrenean,

and at Alexandria by Ænesidemus.

Of the peculiar doctrines of these sects, the reader will in this work find a short account either in the lives of their respective founders, or under the names of the fects themselves. We shall only observe at present, that though many of them were undoubtedly abfurd, and many wicked, it would yet perhaps be going too far to fay with some, that the philosophy of Greece became impious under Diagoras, vicious under Epicurus, HYPOCRITICAL UNDER ZENO, impudent under Diogenes, covetous under Demochares, voluptuous under Metrodorus, fantastical under Crates, scurrilous under Menippus, licentious under Pyrrho, and quarrelfome under Cleanthes. Of the truth of this heavy charge every reader must judge for himself. We are strongly inclined to think, that there were virtues and vices peculiar to each fect; " and that the fects themselves had Pauw's an affinity more or less direct with the different tempe-Philosophiraments of man; whence the choice of sectators often cal Differdepended on physical influence, or a peculiar disposition tation, &c. of their organs. Nothing appears more natural than that those men who were born with great force of mind and strong nerves should discover a predilection for stoicifm; while mortals, endowed by nature with more delicacy of fibres and keener fensibility, fled for refuge to the myrtles of Epicurus. People whose temperaments partook of no extremes, were always inclined either for the Lyceum or the Academy. Such as possessed solidity of understanding ranged themselves with Aristotle; and those who had only genius, or even pretensions to that endowment, went to augment the crowd of Plato-

All the fystematical philosophers, however, pursued Grecian their inquiries into nature by nearly the fame method mode of Of their philosophy as well as of ours, the universe, philosophiwith all that it contains, was the vaft object; but the zing. individual things which compose the universe are infinite in number and ever changing; and therefore, according to an established maxim of theirs, incapable of being the subjects of human science *. To reduce * Boeth in this infinitude, and to fix those sleeting beings, they Pradice et established certain definite arrangements or classes, to Arist. Physome of which every thing past, present, or to come, fc. lib. i. might be referred; and having afcertained, as they thought, all that could be affirmed or denied of these classes, they proved, by a very short process of syllogistic reasoning, that what is true of the class must be true of every individual comprehended under it. The most celebrated of these arrangements is that which is known by the name of categories; which Mr Harris thinks at least as old as the era of Pythagoras, and to the forming of which mankind would, in his opinion, be necessarily led by the following considerations:

Every subject of human thought is either substance or The cateattribute; but substance and attribute may each of them gories.

20 The Italic school.

History of be modified under the different characters of universal Philosophy or particular. Hence there arises a quadruple arrangement of things into substance universal and substance particular; into attribute universal and attribute particular; to some one of which four not only our words and ideas, but every individual of that immense multitude of things which compose the universe, may be deduced. This arrangement, however, the learned author thinks too limited; and he is of opinion, that, by attending to the fubstances with which they were furrounded, the Grecian schools must soon have distinguished between the attributes effential to all substances and those which are only circumstantial; between the attributes proper to natural substances or bodies, and those which are peculiar to intelligible substances or minds. He likewife thinks, that the time and place of the existence of substances not present, must soon have attracted their attention; and that in confidering the place of this or that substance, they could hardly avoid thinking of its position or situation. He is of opinion, that the superinduction of one substance upon another would inevitably suggest the idea of cloathing or habit, and that the variety of co-existing substances and attributes would discover to them another attribute, viz. that of relation. Instead therefore of confining themselves to the simple division of substance and attribute, they divided attribute itself into nine distinct forts, some effential and others circumstantial; and thus by fetting fubstance at their head, made ten comprehensive univerfal genera, called, with reference to their Greek name, categories, and with reference to their Latin name predicaments. These categories are, SUBSTANCE, QUALI-TY, QUANTITY, RELATION, ACTION, PASSION, WHEN, WHERE, POSITION, and HABIT; which according to the fystematic philosophy of the Greeks, comprehend every human science and every subject of human thought. History, natural and civil, springs, says Mr Harris, out of SUBSTANCE; mathematics out of QUAN-TITY; optics out of QUALITY and QUANTITY; medicine out of the same; astronomy out of QUANTITY and MO-TION; music and mechanics out of the same; painting out of QUALITY and SITE; ethics out of RELATION; chronology out of WHEN; geography out of WHERE; electricity, magnetifm, and attraction, out of ACTION and PASSION; and fo in other instances.

To these categories, considered as a mere arrangement of science, we are not inclined to make many objections. The arrangement is certainly not complete: but this is a matter of comparatively small importance; for a complete arrangement of science cannot, we believe, be formed. The greatest objection to the categories arises from the use that was made of them by almost every philosopher of the Grecian schools; for those sages having reduced the objects of all human science to ten general heads or general terms, instead of fetting themselves to inquire by a painful induction into the nature and properties of the real objects before them, employed their time in conceiving what could be predicated of substance in general, of this or that Vol. XVI. Part I.

quality, quantity, relation, &c. in the abstract : and they History of foon found, that of fuch general conceptions as the categories there are but five predicables or classes of predicates in nature. The first class is that in which the predicate is the genus of the fubject; the second, that in which it is the Species of the Subject; the third, is when the predicate is the specific difference of the subject; the fourth, when it is a property of the fubject; and the fifth, when it is fomething accidental to the fubject (see Logic, Part II. chap. ii. and iii.). Having proceeded thus far in their fystem, they had nothing to do with individuals but to arrange them under their proper categories, which was commonly done in a very arbitrary manner; and then, with the formality of a fyllogism, to predicate of each the predicable of the genus or species to which it belonged. But by this method of proceeding, it is obvious that no progress whatever could be made in physical, metaphysical, or ethical science; for if the individual truly belongs to the category under which it is arranged, we add nothing to are no inour stock of knowledge by affirming or denying of struments it what we had before affirmed or denied of the whole of sciencegenus: and if it belong not to the category under which we arrange it, our fyllogifing will only give the appearance of proof to what must, from the nature of things, be an absolute falsehood. It is only by experiments made on various substances apparently of the same kind that they can be certainly known to belong to the fame category; and, when this is done, all fyllogistic reasoning from the genus to the species, and from the species to the individual, is but folemn trifling, as every proposition in this retrograde course takes for granted the thing to be proved.

Yet this mode of philosophizing spread from Greece This phialmost over the whole world. It was carried by Alex-losophy disander into Asia, by his successors into Egypt; and it feminated through found its way to Rome after Greece became a province the whole of the empire. It was adopted by the Jews, by the world; fathers of the Christian church, by the Mahommedan Arabs during the caliphate, and continued to be cultivated by the schoolmen through all Europe, till its futility was exposed by Lord Bacon (M). The professors of this philosophy often displayed great acuteness; but their systems were built on mere hypotheses, and supported by syllogistic wrangling. then indeed a superior genius, such as Alhazen and our countryman Roger Bacon, broke through the trammels of the schools, and, regardless of the authority of the Stagyrite and his categories, made real discoveries in physical science by experiments judiciously conducted on individual substances (see BACON, Roger; and OPTICS, no 6.); but the science in repute still continued

to be that of Generals.

It was indeed a combination of abfurd metaphyfics with more abfurd theology; and that which is properly called physics, had in Europe no place in a liberal education from the end of the eighth century to the end of the fourteenth. Towards the beginning of this period of darkness, the whole circle of instruction, or 3 B

(M) Scientiæ, quas habemus, fere à Græcis fluxerunt. Quæ enim scriptores Romani, aut Arabes, aut recentiores addiderunt, non multa, aut magni momenti sunt : et qualiacunque sint, fundata sunt super basin eorum quæ inventa funt à Græcis. Bacon.

and predi-

H story of the liberal arts as they were called, confifted of two Philosophy branches, the trivium and the quadrivium; of which the former comprehended grammar, rhetoric, and dialectics; the latter music, arithmetic, geometry, and astronomy, to which was added about the end of the eleventh century the fludy of a number of metaphyfical fubileties equally useless and unintelligible.

Hitherto the works of the ancient Greek philosophers had been read only in imperfect Latin translations; and before the scholastic system was completely established, Plato and Aristotle had been alternately looked up to as the oracle in science. The rigid schoolmen, however, universally gave the preference to the Stagyrite; because his analysis of body into matter and form is peculiarly calculated to keep in countenance the most incredible doctrine of the Romish church (fee TRANSUESTANTIATION): and upon the revival of Greek learning, this preference was continued after the school philosophy had begun to fall into contempt, on account of much useful information contained in some of his writings on subjects of natural history, and his supposed merit as a natural philofopher. At last the intrepid spirit of Luther and his affociates fet the minds of men free from the tyranny of ancient names, as well in human science as in theology; and many philosophers sprung up in different countries of Europe, who professed either to be eclectics, or to study nature, regardless of every authority but that of reason. Of these the most eminent be-yond all comparison was Francis Bacon Lord Veru-

26 exposed as futile by Lord Bacon:

This illustrious man having read with attention the writings of the most celebrated ancients, and made himself master of the sciences which were then cultivated, foon discovered the absurdity of pretending to account for the phenomena of nature by fyllogistic reasoning from hypothetical principles; and with a boldness becoming a genius of the first order, undertook to give a new chart of human knowledge. This he did in his two admirable works, intitled, 1. De dignitate et augmentis scientiarum; and, 2. Novum organum scientiarum, sive Judicia vera de interpretatione Naturæ. In the former of these works, he takes a very minute furvey of the whole circle of human science, which he divides into three great branches, history, poetry, and philosophy, corresponding to the three faculties of the mind, memory, imagination, and reason. Each of these general heads is fubdivided into minuter branches, and reflections are made upon the whole, which, though we can neither copy nor abridge them, will amply reward the perufal of the attentive reader. The purpole of the Novum Organum is to point out the proper method of interpreting nature; which the author shows can never be done by the logic which was then in fashion, but only by a painful and fair induction. "Homo naturæ minister (says he) et interpres tantum facit et intelligit, quantum de naturæ ordine re, vel mente observaverit; nec amplius scit aut potest. Syllogismus ad principia scientiarum non adhibetur, ad media axiomata frustra adhibetur, cum sit subtilitati naturæ longe impar. Affensum itaque constringit, non res. Syllogismus ex propositionibus constat, propositiones ex verbis, verba notionum tesseræ sunt. Itaque si notiones ipsæ (id quod basis rei eit) consusæ sint et temere à rebus abstractæ, nihil in iis quæ superstrumtur,

Itaque spes est una in inductione View of est firmitudinis.

To hypotheses and preconceived opinions, which he calls idola theatri, this great man was not less mimical than to fyllogisms; and since his days almost every philosopher of eminence, except Descartes and his followers (fee DESCARTES and CARTESIANS), has professed to study nature according to the method of induction so accurately laid down in the Novum Organum. On this method a few improvements have perhaps been made; but notwithstanding these, Lord Bacon must undoubtedly be confidered as the author of that philosophy which is now cultivated in Europe, and which will continue to be cultivated as long as men shall have more regard for matters of fact than for hypothetical opinions. Of this mode of philosophising we thall now give a short, though we hope not inaccurate, view, by stating its objects, comparing it with that which it superfeded, explaining its rules, and pointing out its uses; and from this view it will appear, that its author shares with Aristotle the empire of science.

THE universe, that unbounded object of the contem- View of his plation, the curiofity and the refearches of man, may be philosophy. confidered in two different points of view.

In the first place, it may be considered merely as a collection of existences, related to each other by means of refemblances and distinction, situation, succession, and derivation, as making parts of a whole. In this view it is the subject of pure description.

To acquire, an acquaintance with, or a knowledge of, the universe in this point of view, we must enumerate all the beings in it, mention all their fenfible qualities, and mark all these relations for each. But this would be labour immense; and when done, an undistinguishable chaos. A book containing every word of a language would only give us the materials, fo to speak, of this language. To make it comprehensible, it must be put into some form, which will comprehend the whole in a small compass, and enable the mind to pass eafily from one word to another related to it. Of all relations among words, the most obvious are those of refemblance and derivation. An etymological dictionary, therefore, in which words are classed in consequence of their refemblances, and arranged by means of their derivative distinctions, will greatly facilitate the acquisition of the language.

Just so in nature: The objects around us may be grouped by means of their refemblance, and then arranged in those groups by means of their distinctions and other relations. In this claffification we are enabled to proceed by means of our faculty of abstracting our attention from the circumflances in which things differ, and turning it to those only in which they agree. By the judicious employment of this faculty we are able not only to distribute the individuals into classes, but also to distribute those classes into others still more comprehensive, by discovering circumstances of resemblance among them: for the sewer the circumstances are which concur to form that resemblance which has engaged our attention, the greater is the number of diffimilar circumstances which are neglected; and the more extensive will be the class of individuals in which the refemblance is observed. Thus Natural a number of individuals resembling each other in the history

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Bacon's Philotophy.

distinguish-

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fingle circumstance of life, composes the most extensive KINGDOM of ANIMALS. If it be required, that they shall further resemble in the circumstance of having feathers, a prodigious number of animals are excluded, and we form the inferior class of BIRDS. We exclude a great number of birds, by requiring a further similarity of web feet, and have the order of ANSERES. If we add lingua ciliata, we confine the attention to the genus of ANATES. In this manner may the whole objects of the universe be grouped, and arranged into kingdoms, classes, orders, genera, and species.

Such a claffification and arrangement is called NA-TURAL HISTORY; and must be considered as the only foundation of any extensive knowledge of nature. To the natural historian, therefore, the world is a collection of existences, the subject of descriptive arrangement.

His aim is threefold.

1. To observe with care, and describe with accuracy,

the various objects of the universe.

2. To determine and enumerate all the great classes of objects; to distribute and arrange them into all their subordinate classes, through all degrees of subordination, till he arrive at what are only accidental varieties, which are susceptible of no farther distribution; and to mark with precision the principles of this distribution and arrangement, and the characteristics of the various assemblages.

3. To determine with certainty the particular group

to which any proposed Individual belongs.

DESCRIPTION therefore, ARRANGEMENT, and REFE-RENCE, constitute the whole of his employment; and in

this confifts all his science.

Did the universe continue unchanged, this would constitute the whole of our knowledge of nature: but we philosophy. are witnesses of an uninterrupted succession of changes, and our attention is continually called to the EVENTS which are inceffantly happening around us. These form a set of objects vastly more interesting to us than the former; being the fources of almost all the pleasures or pains we receive from external objects.

We are therefore much interested in the study of the events which happen around us, and ftrongly incited to profecute it: but they are fo numerous and fo multifarious, that the study would be immense, without some contrivance for abbreviating and facilitating the task. The same help offers itself here as in the study of what may be called quiescent nature. Events, like existences, are susceptible of classification, in consequence of refemblances and diffinction; and by attention to these, we can acquire a very extensive acquaintance with active nature. Our attention must be chiefly directed to those circumstances in which many events resemble each other, while they differ perhaps in a thousand others. Then we must attend to their most general distinctions; then to diffinctions of fmaller extent, and fo on.

It is in this way accordingly that we have advanced in our knowledge of active nature, and are gradually, and by no means flowly, forming affemblages of events more and more extensive, and distributing these with greater and greater precision into their different classes.

In the zealous and attentive profecution of this task a very remarkable and interesting observation occurs: In describing those circumstances of similarity among events, and particularly in distributing them according to those similarities, it is impossible for us to overlook

that constancy which is observed in the changes of na- View of ture in the events which are the objects of our con-Philosophy. templation. Events which have once been observed to accompany each other are observed always to do so.

The rifing of the fun is always accompanied by the Constancy light of day, and his fetting by the darkness of night, in the Sound argument is accompanied by conviction, impulse nature by motion, kindness by a feeling of gratitude, and the perception of good by defire. The unexcepted experience of mankind informs us, that the events of nature go on in certain regular trains; and if fometimes exceptions feem to contradict this general affirmation, more attentive observation never fails to remove the exception. Most of the spontaneous events of nature are very complicated; and it frequently requires great attention and penetration to discover the simple event amidst a crowd of unessential circumstances which are at once exhibited to our view. But when we succeed in this discovery, we never fail to acknowledge the perfect uniformity of the event to what has been formerly observed.

But this is not all: We firmly believe that this uni-universally formity will fill continue; that fire will melt wax, will expected. burn paper, will harden clay, as we have formerly obferved it to do; and whenever we have undoubted proofs that the circumstances of situation are precisely the same as in some former case, though but once obferved, we expect with irrefulible and unshaken confidence that the event will also be the same.

It is not furely necessary to adduce many proofs of the universality of this law of human thought. The whole language and actions of men are inflances of the fact. In all languages there is a mode of construction which is used to express this relation as diffinct from all others, and the conversation of the most illiterate never confounds them, except when the conceptions themselves are confounded. The general employment of the active and passive verb is regulated by it. Turris eversa est à militibus; turris eversa est terre motu, express two relations, and no schoolboy will confound them. The distinction therefore is perceived or felt by all who can speak grammatically. Nor is any language without general terms to express this relation, cause-effect-to occasion. Nay, it is a fact in the mind of brutes, who hourly show that they expect the same uses of every subject which they formerly made of it; and without this, animals would be incapable of fubfistence, and man incapable of all improvement. From this alone memory derives all its value; and even the constancy of natural operation would be useless if not matched or adapted to our purposes by this expectation of any confidence in that constancy.

After all the labours of ingenious men to discover the foundation of this irrefishible expectation, we must be contented with faying that fuch is the constitution of the human mind. It is an univerfal fact in human thought; and for any thing that has been yet discovered, it is an ultimate fact, not included in any other still more gene-We shall soon see that this is sufficient for making it the foundation of true human knowledge; all of which must in like manner be reduced to ultimate facts

in human thought.

We must consider this undoubted feeling, this perfuafion of the constancy of nature, as an instinctive anticipation of events fimilar to those which we have already

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View of already experienced. The general analogy of nature should have disposed philosophers to acquiesce in this, however unwelcome to their vanity. In no instance of effential consequence to our fafety or well-being are we left to the guidance of our boafted reason; God has given us the furer conduct of natural instincts. No case is so important as this: In none do we so much stand in need of a guide which shall be powerful, infallible, and rapid in its decisions. Without it we must remain incapable of all inftraction from experience, and

therefore of all improvement.

Our fensations are undoubtedly feelings of our mind. But all those feelings are accompanied by an instinctive reference of them to fomething distinct from the feelings themselves. Hence arises our perception of external objects, and our very notions of this externeity (pardon the term). In like manner, this anticipation of events, this irrefiltible connection of the idea of fire with the idea of burning, is also a feeling of the mind: and this feeling is by a law of human nature referred, without reasoning, to something external as its cause; and, like our sensation, it is considered as a fign of that external fomething. It is like the conviction of the truth of a mathematical proposition. This is referred by us to fomething existing in nature, to a necessary and eternal relation subfifting between the ideas which are the subjects of the proposition. The conviction is the fign or indication of this relation by which it is brought to our view. In precisely the same manner, the irrefishible connection of ideas is interpreted as the fensation or fign of a necessary connection of external things or events. These are supposed to include something in their nature which renders them inseparable companions. To this bond of connection between external things we Our know. give the name of CAUSATION. All our knowledge of this relation of cause and effect, is the knowledge or consciousness of what passes in our own minds during the contemplation of the phenomena of nature. If we adhere to this view of it, and put this branch of knowledge on the same footing with those called the abstract fciences, confidering only the relations of ideas, we shall acquire demonstrative science. If we take any other view of the matter, we shall be led into inextricable mazes of uncertainty and error.

We see then that the natural procedure of our faculty of abstraction and arrangement, in order to acquire a more speedy and comprehensive knowledge of natural events, presents them to our view in another form. We not only fee them as fimilar events, but as events naturally and necessarily conjoined. And the expression of resemblance among events is also an expresfion of concomitancy; and this arrangement of events in consequence of their resemblance is in fact the discovery of those accompaniments. The trains of natural appearance being considered as the appointments of the Author of Nature, has occasioned them to be considered also as consequences of laws imposed on his works by their great author, and every thing is faid to be regulated by fixed laws. But this is the language of analogy. When a fovereign determines on certain trains of conduct for his subjects, he issues his orders. These orders are laws. He inforces the ob-fervance of them by his authority; and thus a certain regularity and conftancy of conduct is produced. But should a stranger, ignorant of the promulgation

of these laws, and of the exerted authority of the View of magistrate, observe this uniformity of conduct, he would Bacon's ascribe it to the genius and disposition of the people; and his observation would be as useful to him for directing the tenor of his own conduct, as the knowledge of the subject himself of the real source of this constancy is for directing his.

Just so in nature, while the theologian pretends, from his discoveries concerning the existence and superintendance of God, to know that the constant accompaniment of events is the confequence of laws which the great Author and Governor of the universe has imposed on his works, the ordinary philosopher, a stranger to this scene, and to the unfearchable operations of the SUPREME MIND, must ascribe this constancy to the nature of the things. There is a great resemblance between the expression natural law and grammatical rule. Rule in strict language implies command; but in grammar it expresses merely a generality of fact, whether of flexion or construction. In like manner, a LAW OF NA-TURE is to the philosopher nothing but the expression of a generality of fact. A natural or physical law is a generally observed fact; and whenever we treat any subject as a generally observed fact, we treat it physically. It is a physical law of the understanding that argument is accompanied by conviction; it is a physical law of the affection that diffress is accompanied by pity; it is a physical law of the material world that impulse is accompanied by motion.

And thus we see that the arrangement of events, or the discovery of those general points of resemblance, is in fact the discovery of the laws of nature; and one of the greatest and most important is, that the laws of na-

ture are constant.

There is no question that this view of the universe is incomparably more interesting and important than that which is taken by the natural historian; contemplating every thing that is of value to us, and, in short, the whole life and movement of the universe. This Object of study, therefore, has been dignified with the name of philosophy. PHILOSOPHY and of SCIENCE; and natural history has been confidered as of importance only in fo far as it was conducive to the fuccessful profecution of philosophy.

But the philosopher claims a superiority on another account: he confiders himself as employed in the difcovery of causes, saying that philosophy is the study of the objects of the universe as related by causation, and that it is by the discovery of these relations that he communicates to the world fuch important knowledge. Philosophy, he fays, is the science of causes. The vulgar are contented to confider the prior of two infeparably conjoined events as the cause of the other; the stroke on a bell, for instance, as the cause of sound. But it has been clearly shown by the philosopher, that between the blow on the bell and the fensation of found there are interposed a long train of events. The blow fets the bell a trembling; this agitates the air in contact with the bell; this agitates the air immediately beyond it; and thus between the bell and the ear may be interposed a numberless series of events, and as many Causes more between the first impression on the ear and that last impression on the nerve by which the mind is affected. He can no longer therefore follow the nomenclature of the vulgar. Which of the events of this train therefore is the cause of the sensation? None of

Laws of nature explained.

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View of them: It is that fomething which inseparably connects any two of them, and constitutes their bond of union. These bonds of union or causes he considers as residing in one or both of the connected objects: diversities in this respect must therefore constitute the most important distinctions between them. They are therefore with great propriety called the qualities, the properties of these respective subjects.

As the events from which we infer the existence of these qualities of things resemble in many respects such events as are the confequences of the exertion of our own powers, these qualities are frequently denominated POWERS, forces, energies. Thus, in the instance just now given of the found of a bell, we infer the powers of impulse, elasticity, nervous irritability, and

animal fenfibility.

In consequence of this inference of a necessary connection between the objects around us, we not only infer the posterior event from the prior, or, in common language, the effect from the cause, but we also infer the prior from the posterior, the cause from the effect. We not only expect that the presence of a magnet will be followed by certain motions in iron-filings, but when we observe such motions, we infer the presence and agency of a magnet. Joy is inferred from merriment, poison from death, fire from smoke, and impulse from motion. And thus the appearances of the universe are the indications of the powers of the objects in it. Appearances are the language of nature, informing us of their causes. And as all our knowledge of the sentiments of others is derived from our confidence in their veracity; fo all our knowledge of nature is derived from our confidence in the constancy of natural operations. A veracity and credulity necessarily resulting from that law of our mental constitution by which we are capable of speech, conduct us in the one case; and the constancy of nature, and the principle of induction, by which we infer general laws from particular facts, conduct us in the other. As human sentiment is inferred from language, and the existence of external things from fensation; so are the laws of nature, and the powers of natural objects inferred from the phenomena. It is by the successful study of this language of nature that we derive useful knowledge. The knowledge of the influence of motives on the mind of man enables the statesman to govern kingdoms, and the knowledge of the powers of magnetism enables the mariner to pilot a ship through the pathless ocean.

Such are the lofty pretenfions of philosophy. It is to be wished that they be well founded; for we may be perfuaded that a mistake in this particular will be fatal to the advancement of knowledge. An author of great reputation + gives us an opportunity of deciding this question in the way of experiment. He says that the ancients were philosophers, employed in the discovery of causes, and that the moderns are only natural histoof Aristotle rians, contenting themselves with observing the laws of and New- nature, but paying no attention to the causes of things. If he speak of their *professed* aim, we apprehend that the assertion is pretty just in general. With very few exceptions indeed it may be assumed of his favourite Aristotle, the philosopher xxx' 'eξoxnv, and of Sir Isaac Newton. We select these two instances, both because they are fet in continual opposition by this author, and because it will be allowed that they were the most eminent students of nature (for we must not yet call

them philosophers) in ancient and modern times. Ari- View of ftotle's professed aim, in his most celebrated writings, is Bacon's the investigation of causes; and in the opinion of this Philosophy. author, he has been fo fuccessful, that he has hardly left any employment for his fuccessors beside that of commenting upon his works. We must on the other hand acknowledge that Newton makes no fuch pretenfions, at least in that work which has immortalized his name, and that his professed aim is merely to investigate the general laws of the planetary motions, and to apply these to the explanation of particular phenomena. Nor will we fay that he has left no employment for fucceeding inquirers; but, on the contrary, confess that he has only begun the study, has discovered but one law, and has enabled us to explain only the phenomena comprehended in it alone. But he has not been unfuccefsful; his investigation has been complete; and he has discovered, beyond all possibility of contradiction, a fact which is observed through the whole extent of the solar fystem; namely, that every body, nay, that every particle in it, is continually DEFLECTED toward every other body; and that this deflection is, in every instance, proportional to the quantity of matter in that body toward which the deflection is directed, and to the reciprocal of the square of the distance from it. He has therefore discovered a physical law of immense extent. Nor has he been less successful in the explanation of particular plienomena. Of this there cannot be given a better instance than the explanation of the lunar motions from the theory of gravity begun by Newton " Mathesi sua facem præferente;" and now brought to fuch a degree of perfection, that if the moon's place be computed from it for any moment within the period of two thoufand years back, it will not be found to differ from the place on which she was actually observed by one hundredth part of her own breadth.

Discimus hinc tandem qua causa argentea Phæbe Passibus haud æquis eat, et cur, subdita nulli Hactenus astronomo, numerorum frena recusat. Quæ toties animos veterum torsere sophorum, Quæque scholas hodie rauco certamine vexant, Obvia conspicimus, nube pellente mathesi; Qua superos penetrare domos, et ardua cæli Newtoni auspiciis jam dat contingere templa.

We may now defire the champions of the science of causes to name any one cause which has really been difcovered by their great master, whether in the operations of mind or of body. But they must not on this occafion adduce the inveftigation of any natural law in which he has fometimes fucceeded. With fill greater confidence may we challenge them to produce any remarkable instance of the explanation of natural phenomena either of mind or body. By explanation, we mean an account of the production, and an appreciation of all the circumstances, susceptible of a scrupulous comparifon with fact, and perfectly confistent with it. It is here that the weakness of this philosopher's pretentions is most conspicuous; and his followers candidly acknowledge, that in the inquiries which proceed by experiment, we have not derived great affiftance from Ariftotle's philosophy. But this, fay they, does not derogate from the pre-eminence of his philosophy, because he has shown that the particular fields of observation are to be cultivated only by means of experiment. But furely every field of observation is particular. There is no ab/tracti

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abstract object of philosophical research, the study of which shall terminate in the philosophy of universals. In every kind of inquiry, that cause alone must be supposed to act which we understand so far as to be able to appreciate its effects in particular circumstances, and compare them with fact, and fee their perfect coincidence: If we have discovered causes, they are known as far as they are discovered. Their genuine effects are known, and therefore the phenomena which refult from their agency are understood. When therefore it is acknowledged, as it must be acknowledged, that mankind have made but little advances in the knowledge of nature, notwithstanding the pretended discovery of causes by Aristotle, and the conducting clue of his philosophy, till of late years; and when it is also allowed that now, while we are every day making great additions to this Subordinate knowledge, the causes which Aristotle has discovered are forgotten, and his philosophy is neglected; there is great room for suspecting (to say the least), that either the causes which philosophy pretends to have discovered are not real, or that Aristotle and his followers have not aimed at the discovery of causes, but only at the discovery of natural laws, and have failed in the

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There feems here to be a previous question: Is it possible to discover a philosophical cause, that something which is neither the prior nor the posterior of the two immediately adjoining events, but their bond of union, and this diffinct from the union itself? It is evident that this is an inquiry purely experimental. It is of human knowledge we fpeak. This must depend on the nature of the human mind. This is a matter of contingency, known to us only by experiment and observation. By observing all the feelings and operations of the mind, and claffing and arranging them like any other object of science, we discover the general laws of human thought and human reasoning; and this is all the knowledge we can ever acquire of it, or of any

Much has been written on this fubject. The most acute observation and found judgment have been employed in the study; and we may venture to fay, that confiderable progress has been made in pneumatology. Many laws of human thought have been observed, and very diffinctly marked; and philosophers are bufily employed, some of them with considerable success, in the distribution of them into subordinate classes, so as to know their comparative extent, and to mark their distinguishing characters with a precision similar to what has been attained in botany and other parts of natural history; fo that we may hope that this study will advance like others. But in all these researches, no phenomena have occurred which look like the perception or contemplation of these separate objects of thought, these philosophical causes, this POWER in abstracto. No philosopher has ever pretended to state such an object of the mind's observation, or attempted to group them in-

We may fay at once, without entering into any dctail, that those causes, those bonds of necessary union between the naturally conjoined events or objects, are not only perceived by means of the events alone, but are perceived folcly in the events, and cannot be distinguished from the conjunctions themselves. They are neither the objects of separate observation, nor the productions of memory, nor inferences drawn from reflec-

tion on the laws by which the operation of our own View of minds are regulated; nor can they be derived from Bacon's Philosophy. other perceptions in the way of argumentative inference. We cannot infer the paroxysm of terror from the appearance of impending deltruction, or the fall of a stone when not supported, as we infer the incommensurability of the diagonal and fide of a fquare. This last is implied in the very conception or notion of a fquare; not as a confequence of its other properties, but as one of its effectial attributes: and the contrary proposition is not only false, but incapable of being distinctly conceived. This is not the case with the other phenomenon, or any matter of fact. The proofs which are brought of a mathematical proposition, are not the reason of its being true, but the steps by which this truth is brought into our view; and frequently, as in the instance now given, this truth is perceived, not directly, but confequentially, by the inconceivableness of the contrary proposition.

Mr Hume derives this irrefiftible expectation of events Mr Hume's from the known effect of custom, the association of ideas theory a The corelated event is brought into the mind by this petitio well known power of custom, with that vivacity of con-principii. ception which constitutes belief or expectation. But without infifting on the futility of his theory of belief, it is sufficient to observe, that this explanation begs the very thing to be proved, when it ascribes to custom a power of any kind. It is the origin of this very power which is the subject in dispute. Besides, on the genuine principles of scepticism, this custom involves an acknowledgement of past events, of a something different from present impressions, which, in this doctrine (if doctrine it can be called), are the only certain existences in nature: and, lastly, it is known that one clear experience is a fufficient foundation for this unshaken confidence and anticipation. General custom can never, on Mr Hume's principles, give superior vivacity to any particular idea.

This certain nonentity of it as a separate object of Another observation, and this impossibility to derive this notion hypothesis of necessary and causal connection between the events respecting of the universe from any fource, have induced two of causal conthe most acute philosophers of Europe, Mr Leibnitz nection. and Father Malebranche, to deny that there is any fuch connection, and to affert that the events of the universe go on in corresponding trains, but without any causal connection, just as a well-regulated clock will keep time with the motions of the heavens without any kind of dependence on them. This harmony of events was pre-citablished by the Author of the Universe, in fubserviency to the purposes he had in view in its for-

All those purposes which are cognisable by us, may certainly be accomplished by this perfect adjustment. But without infifting on the fantastic wildness of this ingenious whim, it is quite enough to observe, that it also is a begging of the question, because it supposes caufation when it ascribes all to the agency of the Deity.

Thus have we fearched every quarter, without being able to find a fource from which to derive this perception of a necessary connection among the events of the universe, or of this consident expectation of the continuance of physical laws; and yet we are certain of the feeling, and of the perfusion, be its origin what it may: for we speak intelligibly on this subject; we speak familiarly of can'e, effect, power, energy, necessary connection, motives and their influence, argument and con-

View of viction reasons and persuasion, alturements and emo-Philolophy.

Eucon's tions, of gravity, magnetifm, irritability, &cc.; and we carry on convertations on these subjects with much entertainment and feeming inftruction. Language is the exercifion of thought, and every word expresses some notion or conception of the mind; therefore it must be allowed, that we have fuch notions as are expressed by coufe, power, energy. But it is here, as in many cases, we perceive a diffinction without being able to express it by a definition; and that we do perceive the relation of causation as distinct from all others, and in particular as diffinct from the relation of contiguity in time and place; or the relation of agent, action, and patient, must be concluded from the uniformity of language, which never confounds them except on purpose, and when it is perceived. But even here we shall find, that none of the terms used for expressing those powers of fubstance which are conceived as the causes of their characteristic phenomena, really express any thing different from the phenomena themselves. Let any person try to define the terms gravity, elasticity, fenfibility, and the like, and he will find that the definition is nothing but a description of the phenomenon itself. The words are all derivatives, most of them verbal derivatives, implying action, gravitation, &c. As the general refemblances in shape, colour, &c. are expressed by the natural historian by generic terms, so the general resemblances in event are expressed by the philosopher in generic propositions, which, in the progress of cultivation, are also

abbreviated into generic terms.

This abundantly explains the confiftency of our language on this subject, both with itself and with the operations of nature, without however affording any argument for the truth of the affirmption, that causes are the objects of philosophic research as separate existences; or that this supposed necessary connection is a necessary truth, whether supreme or subordinate. But fince the perception of it has its foundation in the constitution of the human mind, it feems intitled to the name of a first principle. We are hardly allowed to doubt of this, when we confider the importance of it, and the care of nature to fecure us in all things effential to our fafety and well-being, from all danger, from inattention, ignorance, or indolence, by an inflinct infallible in its information, and inflantaneous in its decisions. " It would not be like her usual care (fays Hume), if this operation of the mind, by which we infer like effects from like causes, and vice versa, were entrusted to the fallacious deduction of our reason, which is slow in its operations, appears not in any degree during the first years of infancy, and in every age and period of human life is extremely liable to error. It is more conformable to her ordinary caution (mark the acknowledgment) to fecure so necessary an act of the mind by some instinct, or blind tendency, which may be infallible and rapid in all its operations, may discover itself at the first appearance of life, and may be independent of all the laboured deductions of reason. As she has taught us the use of our limbs, without giving us any knowledge of the nerves and muscles by which they are actuated; fo she has implanted in us an instinct, which carries forward the thought in a course conformable to that established among external objects, though we be ignorant of the powers and forces on which this regularity depends."

Such a knowledge is quite unneceffary, and therefore causes are no more cognoscible by our intellectual Bacon's powers than colours by a man born blind : nay, whoever will be at the pains to confider this matter agreeably to the received rules and maxims of logic, will find that necessary connection, or the bond of causation, can no more be the subject of philosophical discussion by man, than the ultimate nature of truth. It is precifely the fame abfurdity or incongruity, as to propose to examine light with a microscope. Other rational creatures may perceive them as eafily as we hear founds. All that we can fay is, that their existence is probable, but by no means certain. Nay, it may be (and we may never know it) that we are not the efficient causes of our own actions, which may be effected by the Deity or by ministering spirits; and this may even be true in the material world. But all this is indifferent to the real occupation of the philosopher, and does not affect either the certainty, the extent, or the utility of the knowledge

which he may acquire.

We are now able to appreciate the high pretentions The object of the philosopher, and his claim to scientific superiority, of the phi-We now fee that this can neither be founded on any fci- he differentific superiority of his object, nor of his employment, very of His object is not causes; and his discoveries are nothing physical but the discovery of general facts, the discovery of phy-laws. fical laws: and his employment is the same with that of the descriptive historian. He observes and describes with care and accuracy the events of nature; and then he groups them into classes, in consequence of resembling circumstances, detected in the midst of many others which are diffimilar and occasional. By gradually throwing out more circumstances of resemblance, he renders his classes more extensive; and, by carefully marking those circumstances in which the resemblance is observed, he characterises all the different classes: and, by a comparison of these with each other, in respect to the number of relembling circumstances, he distributes his classes according to their generality and subordination; thus exhausting the whole assemblage, and leaving nothing unarranged but accidental varieties. In this procedure it is to be remarked, that every grouping of fimilar events is, ipfo facto, discovering a general fact, a physical law; and the expression of this assemblage is the expression of the physical law. And as every observation of this conftancy of fact affords an opportunity for exerting the inftinctive inference of natural connection between the related subjects, every such observation is the discovery of a power, property, or quality, of natural fubstance. And from what has been faid, this obfervation of event is all we know of the connection, all we know of the natural power. And when the philosopher proceeds farther to the arrangement of events, according to their various degrees of complication, he is, ipso facto, making an arrangement of all natural powers according to their various degrees of subordinate influence. And thus his occupation is perfectly fimilar to that of the descriptive historian, classification and arrangement; and this conftitutes all the science attainable by both.

PHILOSOPHY may therefore be defined, the study of Philosophy the phenomena of the universe, with a view to discover defined. the general laws which indicate the powers of natural fubstances, to explain subordinate phenomena, and to improve

The perception of this confirst prinPhilosophy.

improve art: Or, in compliance with that natural instinct so much spoken of, Philosophy is the study of the phenomena of the universe, with a view to discover their causes, to explain subordinate phenomena, and to im-

The task is undoubtedly difficult, and will exercise our noblest powers. The employment is manly in itself, and the refult of it important. It therefore justly merits the appellation of philosophy, although its objects are nowife different from what occupy the attention of other

The employment

The employment of the philosopher, like that of the natural historian, is threefold; DESCRIPTION, ARRANGE-MENT, and REFERENCE; while the objects are not things

The description, when employed about events, may be more properly termed history. A philosophical history of nature confists in a complete or copious enumeration and narration of facts, properly felected, cleared of all unnecessary or extraneous circumstances, and accurately narrated. This conflitutes the materials of philosophy. We cannot give a better example of this branch of philosophical occupation than astronomy.

From the beginning of the Alexandrian school to this day, aftronomers have been at immense pains in observing the heavenly bodies, in order to detect their true motions. This has been a work of prodigious difficulty: for the appearances are such as might have been exhibited although the real motions had been extremely different. Not that our fenses give us false information; but we form hasty, and frequently false judgements, from these informations; and call those things deceptions of fense, which are in fact errors of judgement. But the true motions have at last been discovered, and have been described with such accuracy, that the history may be confidered as nearly complete. This is to be found in the usual systems of astronomy, where the tables contain a most accurate and fynoptical account of the motion; fo that we can tell with precision in what point of the heavens a planet kas been feen at any instant that can be

Sir Isaac Newton's Optics is such another perfect model of philosophical history, as far as it goes. This part of philosophy may be called PHENOMENOLOGY.

Having in this manner obtained the materials of philosophical description, we must put them into a compendious and perspicuous form, so that a general knowledge of the universe may be easily acquired and firmly retained. This is to be done by claffification and arrangement, and this claffification must proceed on resemblances observed in the events; and the subsequent arrangement must be regulated by the distinctions of which those resemblances are still susceptible. This assemblage of events into groups must be expressed. They are facts; therefore the expression must be propositions. These propositions must be what the logicians call general or abfract propositions; for they express, not any individual fact of the affemblage, but that circumstance in which they all resemble. Such propositions are the following: Proof is accompanied by belief; kindness is accompanied by gratitude; impulse is accompanied by motion. These are usually called general facts; but there are none fuch; every fact is individual. This language, however inaccurate, is very fafe from misconstruction, and we may use it without scruple. These proposi-

tions are NATURAL or PHYSICAL LAWS; and then the View of detecting and marking those resemblances in event, is Bacon's Philosophy. the investigation of physical laws; and we may denominate this employment of the philosopher INVESTIGA-

In the profecution of this task, it will be found that the fimilarities of fact are of various extent: and thus we shall form physical laws of various extent; and we shall also find that some are subordinate to others; for the refemblance of a number of facts in one circumstance does not hinder a part of them from also resembling in another circumstance: and thus we shall find subordinations of fact in the same way as of quiescent qualities. And it is found here, as in natural history, that our affemblage of refembling events will be the more extensive as the number of resembling circumstances is smaller; and thus we shall have kingdoms, classes, orders, genera, and species of phenomena, which are expressed by phy-

fical laws of all those different ranks.

It has been already observed, that this observation of physical laws is always accompanied by a reference of that uniformity of event to a natural bond of union between the concomitant facts which is conceived by us as the cause of this concomitancy; and therefore this procedure of the philosopher is considered as the discovery of those causes, that is, the discovery of those powers of natural substances which constitute their physical relations, and may justly be called their distinguishing qualities or properties. This view of the matter gives rife to a new nomenclature and language. We give to those powers generic names, such as fensibility, intelligence, irritability, gravity, elasticity, sluidity, magnetism, &c. These terms, without exception, mark resembling circumstances of event; and no other definition can be given of them but a description of these circumstances. In a few cases which have been the subjects of more painful or refined discussion, we have proceeded farther in this abbreviation of language.

We have framed the verb "to gravitate," and the verbal noun "gravitation," which purely expresses the fact, the phenomenon; but is conceived to express the operation or energy of the cause or natural power. It is of importance to keep in mind this metaphyfical remark on these terms; for a want of attention to the pure Aitiology. meaning of the words has frequently occasioned very

great mistakes in philosophical science. We may with propriety call this part of the philoso-

pher's employment AITIOLOGY.

We shall give an instance of its most successful application to the class of events already adduced as an example of philosophic history or phenomenology.

Kepler, a celebrated Prussian astronomer, having maturely confidered the phenomena recorded in the tables and observations of his predecessors, discovered, amidst all the varieties of the planetary motions, three circum-Kepler's stances of resemblance, which are now known by the laws an inname of Kepler's laws.

. I. All the planets describe ellipses, having the sun in one focus.

2. The elliptic areas described by a planet in the different parts of its orbit, are proportional to the times of

3. The squares of the periodic times are proportional to the cubes of the mean distances from the

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By this observation or discovery, the study of the planetary motions was greatly promoted, and the calcula-Philosophy, tion of their appearances was now made with a facility and an accuracy which surpassed all hopes: for the calculation of the place of a planet at any proposed instant was reduced to the geometrical problem of cutting off an area from an ellipse of known dimensions, which should bear the same proportion to the whole area, as the time for whose duration the motion is required, has to the known time of a complete revolution.

Long after this discovery of Kepler, Sir Isaac Newton found that these laws of Kepler were only particular cases of a fact or law still more general. He found that the hended un-deflections of the planets from uniform rectilineal motion were all directed to the fun; and that the fimultaneous more gene-deflections were inverfely proportional to the squares of

the distances from that body.

Thus was established a physical law of vast extent: but further observation showed him, that the motion of every body of the folar fystem was compounded of an original motion of projection, combined with a deflection towards every other body; and that the fimultaneous deflections were proportional to the quantity of matter in the body towards which they were directed, and to the reciprocal of the square of the distance from it. Thus was the law made still more general. He did not stop here. He compared the deflection of the moon in her orbit with the fimultaneous deflection of a stone thrown from the hand, and describing a parabola; and he found that they followed the same law, that is, that the deflection of the moon in a fecond, was to that of the stone in the same time, as the square of the stone's distance from the centre of the earth, to the square of the moon's distance from it. Hence he concluded, that the deflection of a stone from a straight line was just a particular instance of the deslections which took place through the whole folar fystem. called gra-

The deflection of a stone is one of the indications it gives of its being gravis or heavy; whence he calls it gravitation. He therefore expresses the physical law which obtains through the whole folar fystem, by faying that "every body gravitates to every other body; and the gravitations are proportional to the quantity of matter in that other body, and inverfely proportional to the

square of the distance from it."

Thus we fee how the arrangement of the celeftial phenomena terminated in the discovery of physical laws; and that the expression of this arrangement is the law it-

Since the fall of a heavy body is one instance of the physical law, and fince this fall is considered by all as the effect of its weight, and this weight is confidered as the cause of the fail, the same cause is assigned for all the deflections observed in the solar system; and all the matter in it is found to be under the influence of this cause, or to be heavy; and thus his doctrine has been denominated the fystem of universal gravitation.

Philosophers have gone farther, and have supposed that gravity is a power, property, or quality, refiding in all the bodies of the folar fystem. Sir Isaac Newton does not expressly fay fo, at least in that work where he gives an account of these discoveries. He contents himfelf with the immediate consequence of the first axiom in natural philosophy, viz. that every body remains in a state of rest, or of uniform rectilineal motion, unless af-VOL. XVI. Part I.

fected by some moving force. Since the bodies of the View of folar fystem are neither in a state of rest, nor of uniform Bacon's Philosophy. rectilineal motion, they must be considered as so affected; that is, that there operates on every one of them a moving force, directed towards all the others, and having the proportions observed in the deflection.

Other philosophers have endeavoured to show, that Attempts this general fact, detected by Sir Isaac Newton, is in-to include this jaw cluded in another still more general, viz. that every bo-under imdy moves which is impelled by another body in motion.pulfe, They affert, that all the bodies of the folar system are continually impelled by a fluid which they call ether, which is moving in all places, and in all directions, or in circular vortices, and hurries along with it the planets and all heavy bodies. It would feem that the familiarity of motion produced by impulse, at least in those instances in which our own exertions are most employed, has induced philosophers to adopt such notions; perhaps, too, they are influenced by an obscure and indistinct notion affixed to the term action, as applied to changes in the material world, and which has given life to an axiom, "that a body cannot act at a diffance, or where it is not;" and thus have thought themselves obliged to look out for an immediate and contiguous agent in all those phenomena.

But the philosophers who profess to be most scrupulous in their adherence to the rules of philosophic discusfion, deny the legitimacy of this pretended investigation of causes, saying that this doctrine is in direct opposition to the procedure of the mind in acquiring the knowledge of causes. Since the fact of impulse is not really obser-whilitimved in the celestial deslections, nor in the motions of pulse itself heavy bodies, the law cannot be inferred. They fay is never cbthat it is not even necessary to show that the phenomena of the celestial motions are unlike the phenomena of impulse, although this can be done in the completest man-It is enough that neither the fluid nor the impulse are observed; and therefore they are in the right when they affert, that there is inherent in, or accompanies all the bodies of the fystem, a power by which they deslect

to one another. See OPTICS.

The debate is foreign to our present purpose, which is only to show how the observation and arrangement of phenomena terminates in the discovery of their causes, or the discovery of the powers or properties of natural

This is a talk of great difficulty, as it is of great importance. There are two chief causes of this diffi-

1. In most of the spontaneous phenomena of nature there is a complication of many events, and some of them escape our observation. Attending only to the most obvious or remarkable, we conjoin these only in our ima-Causes of gination, and are apt to think these the concomitant the difficult events in nature, the proper indication of the cause, and ty of philothe subjects of this philosophical relation, and to suppose sophical inthat they are always conjoined by nature. Thus it was vestigation. thought that there refided in a vibrating chord a power by which the fensation of found was excited, or that a chord had a founding quality. But it appears clearly from observation that there is an inconceivable number of events interpoled between the vibration of the chord and the fenfitive affection of our ear; and therefore, that found is not the effect of the vibration of the chord, but of the very last event of this series; and this is com-

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pletely demonstrated by showing that the vibration and the found are not necessarily connected, because they are not always connected, but require the interpolition of

air or of some other elastic body.

These observations show the necessity of the most accurate and minute observation of the phenomena, that none of those intermediate events may escape us, and we be thus exposed to the chance of imaginary connections between events which are really far afunder in the procedure of nature. As the study has improved, mistakes of this kind have been corrected; and philosophers are careful to make their trains of events under one name as short as possible. Thus, in medicine, a drug is no longer confidered as a specific remedy for the disease which is fometimes cured when it has been used, but is denominated by its most immediate operation on the animal frame: it is no longer called a febrifuge, but a fu-

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2. When many natural powers combine their influence in a spontaneous phenomenon of nature, it is frequently very difficult to discover what part of the complicated effect is the effect of each; and to state those circumstances of fimilarity which are the foundation of a phyfical law, or intitle us to infer the agency of any natural power. The most likely method for insuring success in such cases is to get rid of this complication of event, by putting the subject into such a situation that the operation of all the known powers of nature shall be tufpended, or fo modified as we may perfectly understand their effects. We can thus appreciate the effects of fuch as we could neither modify nor suspend, or we can discover the existence of a new law, the operation of a

This is called making an experiment; and is, of all, the most effectual way of advancing in the knowledge of nature, and has been called EXPERIMENTAL PHILO-

It feems, however, at first fight, in direct opposition to the procedure of nature in forming general laws. These are formed by induction from multitudes of individual facts, and must be affirmed to no greater extent than the induction on which they are founded. Yet it is a matter of fact, a physical law of human thought, that one fimple, clear, and unequivocal experiment, gives us the most complete confidence in the truth of a general conclusion from it to every similar case. Whence this anomaly? It is not an anomaly or contradiction of the general maxim of philosophical investigation, but the most refined application of it. There is no law more general than this, that " Nature is constant in all her operations." The judicious and fimple form of our experiment infures us (we imagine) in the complete knowledge of all the circumstances of the event. Upon this fupposition, and this alone, we consider the experiment as the faithful representative of every possible case of the conjunction. This will be more minutely confidered af-

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explained.

The last branch of philosophic occupation is the explanation of fubordinate phenomena. This is nothing explanation more than the referring any particular phenomenon to of fubordi- that class in which it is included; or, in the language nate pheno- of philosophy, it is the pointing out the general law, or that general fact of which the phenomenon is a particu-Jar instance. Thus the feeling of the obligations of virtue is thought to be explained, when it is shown to be a

particular case of that regard which every person has for View of his dearest interests. The rise of water in pumps is explained, when we show it to be a particular case of the pressure of sluids, or of the air. The general law under which we show it to be properly arranged is called the PRINCIPLE of the explanation, and the explanation itself is called the THEORY of the phenomenon. Thus Euler's explanation of the lunar irregularities is called a theory of the lunar motions on the principle of gravita-

This may be done either in order to advance our own knowledge of nature, or to communicate it to others. If done with the first view, we must examine the phenomenon minutely, and endeavour to detect every circumstance in it, and thus discover all the known laws of nature which concur in its production; we then appreciate the operation of each according to the circumstances of its exertion; we then combine all these, and compare the refult with the phenomenon. If they are fimilar, we have explained the phenomenon. We cannot give a better example than Franklin's explanation of the phenomena of thunder and lightning. See LIGHTNING, and

ELECTRICITY Index.

If we explain a phenomenon from known principles, we proceed fynthetically from the general law already established and known to exert its influence in the prefent instance. We state this influence both in kind and degree according to the circumstances of the case; and having combined them, we compare the refult with the phenomenon, and show their agreement, and thus it is explained. Thus, because all the bodies of the folar fystem mutually gravitate, the moon gravitates to the sun as well as to the earth, and is continually, and in a certain determinate manner, deflected from that path which fhe would describe did she gravitate only to the earth. Her motion round the earth will be retarded during the first and third quarters of her orbit, and accelerated during the fecond and fourth. Her orbit and her period will be increased during our winter, and diminished during our summer. Her apogee will advance, and her nodes will recede; and the inclination of her orbit will be greatest when the nodes are in syzigee, and least when they are in quadrature. And all these variations will be in certain precise degrees. Then we show that all these things actually obtain in the lunar motions, and they are confidered as explained.

This summary account of the object and employment in all philosophical discussion is sufficient for pointing out its place in the circle of the sciences, and will serve to direct us to the proper methods of profecuting it with fuccess. Events are its object; and they are confidered as connected with each other by causation, which may therefore be called the philosophical relation of things. The following may be adopted as the fundamental proposition on which all philosophical discussion proceeds, and under which every philosophical discussion or disco-

very may be arranged:

" Every change that we observe in the state or condi-Fundamention of things IS CONSIDERED BY US as an effect, indi-tal proposicating the agency, characterifing the kind, and determin-tion of phiing the degree of its INFERRED caufe."

As thus enounced, this proposition is evidently a phyfical law of human thought. It may be enounced as a necessary and independent truth, by faying, every change in the state and condition of things IS AN EFFECT, &c.

View of And accordingly it has been fo enounced by Dr Reid *; and its title to this denomination has been abundantly * Esays on der it as possessing this quality. We are speaking of phithe intellec- losophy, which is something contingent, depending on tual Powers the existence and constitution of an intellectual, being fuch as man; and, in conformity to the view which we have endeavoured to give of human knowledge in the fubjects of philosophical relation, it is quite sufficient for our purpose that we maintain its title to the rank of an univerfal law of human thought. This will make it a first principle, even although it may not be a necessary

> All the proof necessary for this purpose is universality of fact; and we believe this to be without exception. We are not to expect that all mankind have made, or will ever make, a formal declaration of their opinion; but we may venture to fay that all have made it, and continually do make it, virtually. What have the philosophers of all ages been employed about but the discovery of the causes of those changes that are incessantly going on? Nil turpius physico (fays Cicero) quam fieri sine causa quidquam dicere. Human curiosity has been directed to nothing fo powerfully and fo constantly as to this. Many abfurd causes have been assigned for the phenomena of the universe; but no set of men have ever faid that they happened without a cause. This is so repugnant to all our propensities and instincts, that even the atheistical fect, who, of all others, would have profited most by the doctrine, have never thought of advancing it. To avoid fo shocking an absurdity, they have rather allowed that chance, that the concourse of atoms, are the causes of the beautiful arrangements of nature. The thoughtless vulgar are no less folicitous than the philosophers to discover the cause of things; and the poet expresses the natural and instinctive passion of all men, when he fays,

> > Felix qui potuit rerum cognoscere causas.

And this anxiety is not to nourish, but to get rid of superstitious fears: for thus

- metus omnes, et inexorabile fatum Subjecit pedibus, strepitumque Acherontis avari.

Had men never speculated, their conduct alone gives fufficient evidence of the universality of the opinion. The whole conduct of man is regulated by it, nay almost wholly proceeds upon it, in the most important matters, and where experience feems to leave us in doubt: and to act otherwise, as if any thing whatever happened without a cause, would be a declaration of infanity. Dr Reid has beautifully illustrated this truth, by observing, that even a child will laugh at you if you try to perfuade him that the top, which he misses from the place where he left it, was taken away by nobody. You may persuade him that it was taken away by a fairy or a spirit; but he believes no more about this nobody, than the master of the house when he is told that nobody was the author of any piece of theft or mischief. What opinion would be formed, fays Dr Reid, of the intellects of the juryman, on a trial for murder by perfons unknown, who should say that the fractured skull, the watch and money gone, and other like circumstances, might possibly have no cause? he would be pronounced infane or corrupted

We believe that Mr Hume is the first author who has View of ventured to call the truth of this opinion in question; Bacon's Philosophy, and even he does it only in the way of mere possibility. He acknowledges the generality of the opinion; and he only objects to the foundation of this generality: and Controhe objects to it merely because it does not quadrate with verted by his theory of belief; and therefore it may happen that Mr Hume fome men may have no fuch opinion. But it must be observed on this occasion, that the opinion of a philosopher is of no greater weight in a case like this than that of a ploughboy. If it be a first principle, directing the opinions and actions of all, it must operate on the minds of all. The philosopher is the only person who may chance to be without it: for it requires much labour, and long habits refolutely maintained, to warp our natural fentiments; and experience shows us that they may be warped if we are at fufficient pains. It is also worthy of remark, that this philosopher seems as much under the influence of this law as ordinary mortals. It is only when he is aware of its not tallying with his other doctrines that his fcruples appear. Observe how he with are speaks when off his guard: "As to those impressions neoristwhich arise from the senses, their ultimate cause is, in encymy opinion, perfectly inexplicable by human reason; and it will always be impossible to decide with certainty whether they arise immediately from the object, are produced by the creative power of the mind, or are derived from the Author of our being."

Among these alternatives he never thought of their

not being derived from any cause.

But it is not enough to show that this is a physical law of the human mind: we have assumed it as a first principle, the foundation of a whole science; therefore not included in or derived from any thing more general. Mr Hume's endeavours to prove that it is not a necesfary truth, show with sufficient evidence that most attempts to derive it in the way of argument are petitiones principii; a thing very commonly met with in all attempts to prove first principles. It cannot be proved This proby induction of facts that every event has a cause, be-position a cause induction always supposes an observed fact or ciple inca-event. Now in by far the greatest number of events pable of the causes are unknown. Perhaps in no event what-proof. ever do we know the real cause, or that power or energy which, without any intervention, produces the effect. No man can fay, that in the simplest event which he ever observed, he was fully apprifed of every circumstance which concurred to its production. We fuppose that no event in nature can be adduced more fimple than the motion of a suspended glass ball when gently ftruck by another glass ball; and we imagine that most of our readers will fay that he perfectly fees every thing which happens in this phenomenon. We believe, too, that most of our readers are of opinion that a body is never put in motion but by the impulse of another, except in the cases of animal motion; and that they are disposed to imagine that magnets put iron in motion, and that an electrified body moves another by means of an interpoled though invisible fluid some. how circulating round them. Now we must inform such readers, that unless the stroke has been very smart, so fmart indeed as to shatter the glass balls, the motion of the suspended ball was produced without impulse: that is, the two balls were not in contact during the stroke; and the distance between them was not less than the

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Bacon's Philosophy

We must say farther, than it is not certain that even the most violent stroke, such as would shatter them to pieces, is enough to bring them into real contact. The proofs of this fingular position are too long for this place; but the evidence will be fufficiently feen by confulting the article OPTICS.

Unless, therefore, our readers are willing to allow that the suspended ball was put in motion by a repulfive force inherent in one or both balls, they must acknowledge that they do not fully know all the circumstances of this so simple phenomenon, or all the train of events which happen in it; and therefore they are reduced to the necessity of supposing, although they do not fee it, an intervening fluid or matter, by the immediate action of whose adjoining particles the motion is produced.

This being the case in the simplest phenomenon that we can pitch upon, what shall we say of the numberless multitudes which are incomparably more complex: Must we not acknowledge that the efficient causes, even in the vulgar fense of the word, the immediately preceding events, are unknown, because the conjunctions are not observed? and therefore it cannot be said that it is from experimental induction that this truth gains universal belief. Experience, so far from supporting it as a direct proof, feems rather the strongest argument against it; for we have no experiment of unquestionable authority but the narrow circle of our own power exerted on our thoughts and actions. And even here there are perhaps cases of change where we cannot say with certainty that we perceive the efficient cause.

Nothing feems to remain, therefore, but to allow that this phyfical law of human judgement is inflinctive, a constituent of the human soul, a first principle; and incapable of any other proof than the appeal to the fcelings

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Simply to fay, that every change is confidered as an effect, is not giving the whole characters of this phyfical law. The cause is not always, perhaps never, observed, but inferred but is inferred from the phenomena. The inference is therefore in every instance dependant on the phenomenon. The phenomenon is to us the language of nature: It is therefore the fole indication of the cause and of its agency: it is therefore the indication of the very cause, and of no other. The observed change therefore characterises the cause, and marks its kind. This is confirmed by every word of philosophical language, where, as has already been observed, the names of the inferred powers of nature are nothing but either abbreviated descriptions of the phenomena, or terms which are defined folely by fuch descriptions. In like manner, the phenomenon determines the cause in a particular degree, and in no other; and we have no immediate measure of the degree of the cause but the phenomenon itself. We take many meafures of the cause, it is true; but on examination they will be found not to be immediate measures of the cause, but of the effect. Assuming gravitation as the cause of the planetary deviations from uniform rectilineal motion, we say that the gravitation of the moon is but $\frac{1}{1000}$ th part of the gravitation of a stone thrown from the hand: but we fay this only from observing that the deflection of the stone is 3600 times greater than the simultaneous deflection of the moon. In fhort, our whole knowledge of the cause is not only founded on our knowledge of the phenemenon, but it is the same. This will be found a

goodh part of an inch, and probably much greater. remark of immense consequence in the prosecution of View of philosophical refearches; and a strict attention to it will Bacon's not only guard us against a thousand mistakes into which Philosophy. the reasoning pride of man would continually lead us, but will also enable us fully to detect many egregious and fatal blunders made in confequence of this philosophical vanity. Nothing can be more evident than that whenever we are puzzled, it would be folly to continue groping among those obscure beings called causes, when we have their prototypes, the phenomena themsclves, in

Such is the account which may be given of philofophy, the study of the works of God, as related by causation. It is of valt extent, reaching from an atom to the glorious Author of the Universe, and contemplating the whole connected chain of intelligent, fenfitive, and inanimate beings. The philosopher makes use of the descriptions and arrangements of the natural hittorian as of mighty use to himself in the beginning of his career; confiding in the uniformity of nature, and expecting that fimilarity in the quiescent properties of things will be accompanied by some resemblances in those more important properties which constitute their mutual dependences, linking them together in a great and endlefsly ramified chain of events.

We have endeavoured to afcertain with precision the peculiar province of philosophy, both by means of its object and its mode of procedure. After this it will not require many words to point out the methods for profecuting the fludy with expedition and with fuccefs. The rules of philosophizing, which Newton premises to his account of the planetary motions, which he fo fcrupuloufly followed, and with a fuccess which gives them great authority, are all in strict conformity to the

view we have now given of the subject.

The chief rule is, that fimilar causes are to be affign- The chief ed to fimilar phenomena. This is indeed the fource of rule of phiall our knowledge of connected nature; and without it iofophifing the universe would only present to us an incomprehen-explained fible chaos. It is by no means, however, necessary to enjoin this as a maxim for our procedure: it is an instinctive propenfity of the human mind. It is absolutely necessary, on the contrary, to caution us in the application of this propenfity. We must be extremely confident in the certainty of the refemblance before we venture to make any inference. We are prone to reason from analogy: the very employment is agreeable; and we are ever disposed to embrace opportunities of engaging in it. For this reason we are satisfied with very slight resemblances, and eagerly run over the confequences, as if the resemblances were complete; and our researches frequently terminate in falsehood.

This propenfity to analogical reasoning is aided by another equally strong, and equally useful, when properly directed; we mean the propenfity to form general laws: it is in fact a propenfity to discover causes, which is equivalent to the establishing of general laws. It appears in another form, and is called a love of or taste for simplicity; and this is encouraged or justified as agreeable to the uniformity and fimplicity of nature. "Natura semper sibi similis et consona," says Newton; "Frustra sit per plura, quod sieri potest per pauciora," fays another. The beautiful, the wife economy of nature, are phrases in every body's mouth; and Newton enjoins us to adopt no more causes than are sufficient to

explain.

65

A true

cause explained.

View of explain the phenomena. All this is very well, and is Bacon's true in its own degree; but it is too frequently the fub. Philosophy, terfuge of human vanity and self-love. This inordinate admiration of the economy and fimplicity of nature is generally conjoined with a manifest love of fystem, and with the actual production of some new system, where from one general principle fome extensive theory or explanation is deduced and offered to the world. The author fees a fort of refemblance between a certain feries of phenomena and the consequences of some principle, and thinks the principle adequate to their explanation. Then, on the authority of the acknowledged fimplicity of nature, he roundly excludes all other principles of explanation; because, says he, this principle is sufficient " et frustra fit per plura," &c. We could point out many instances of this kind in the writings of perhaps the first mathematician and the poorest philosopher of this century; where extensive theories are thus cavalierly exhibited, which a few years examination have shown to be nothing but analogies, indistinctly observed,

and, what is worfe, inaccurately applied.

To regulate these hazardous propensities, and keep philosophers in the right path, Newton inculcates another rule, or rather gives a modification of this injunction of fimplicity. He enjoins, that no cause shall be admitted but what is real. His words are, that no causes Shall be admitted but fuch as are true, and sufficient to account for the phenomena. We apprehend that the meaning of this rule has been mistaken by many philosophers, who imagine that by true he means causes which really exist in nature, and are not mere creatures of the imagination. We have met with fome who would boggle at the doctrines of Aristotle respecting the planetary motions, viz. that they are carried along by conducting intelligent minds, because we know of none such in the universe; and who would nevertheless think the doctrine of the Cartesian vortices deserving of at least an examination, because we see such vortices exist, and produce effects which have fome refemblance to the planetary motions, and have justly rejected them, folely because this refemblance has been very imperfect. We apprehend Newton's meaning by these words is, that no cause of any event shall be admitted, or even considered, which we do not know to be actually concurring or exerting some influence in that very event. If this be his meaning, he would reject the Cartefian vortices, and the conducting spirits of Aristotle for one and the same reason; not because they were not adequate to the explanation, nor because such causes do not exist in nature, but because we did not see them anyhow concerned in the phenomenon under confideration. We neither see a spirit nor a vortex, and therefore need not trouble ourfelves with enquiring what effects they would produce. Now we know that this was his very conduct, and what has diftinguished him from all philosophers who preceded him, though many, by following his example, have also been rewarded by fimilar success. This has procured to Newton the character of the modest philosopher; and modest his procedure may, for distinction's fake, be called, because the contrary procedure of others did not originate fo much from ignorance as from vanity. Newton's conductor in this was not modesty, but fagacity, prudence, caution, and to fay it purely, it was found judgement.

For the bonds of nature, the supposed philosophical

causes are not observed; they are inferred from the phe- View of nomena. When two fubitances are observed, and on-Paron's ly when they are observed, to be connected in any feries of events, we infer that they are connected by a natural power: but when one of the substances is not feen, but fancied, no law of human thought produces any inference whatever. For this reason alone Newton stopped short at the last FACT which he could difcover in the folar fystem, that all bodies were deflected to all other bodies, according to certain regulations of distance and quantity of matter. When told that he had done nothing in philosophy, that he had discovered no cause, and that to merit any praise he must show how this deflection was produced; -- he faid, that he knew no more than he had told them; that he faw nothing caufing this deflection; and was contented with having described it so exactly, that a good mathematician could now make tables of the planetary motions as accurate as he pleased, and with hoping in a few years to have every purpose of navigation and of philosophical curiosity completely answered; and he was not disappointed. And when philosophers on all fides were contriving hypothetical fluids and vortices which would produce thefe deflections, he contented himself with showing the total inconfiftency of these explanations with the mechanical principles acknowledged by their authors; showing that they had transgressed both parts of his rule, their causes neither being real nor fufficient for explaining the phenomena. A cause is sufficient for explaining a phenomenon only when its legitimate confequences are perfectly agreeable to these phenomena.

Newton's discoveries remain without any diminution or change: no philosopher has yet advanced a step fur-

But let not the authority, or even the fuccess, of This doc-Newton be our guide. Is his rule founded in reason ? trine sound-It furely is. For if philosophy be only the interpreta-ed in reation of nature's language, the inference of causes from the phenomena, a fancied or hypothetical phenomenon can produce nothing but a fanciful cause, and can make no addition to our knowledge of real nature.

All hypotheles therefore must be banished from philefophical discussion as frivolous and useless, administering to vanity alone. As the explanation of any appearance is nothing but the pointing out the general fact, of which this is a particular instance, a hypothesis can give Danger of no explanation: knowing nothing of cause and effect hypotheses. but the conjunction of two events, we fee nothing of causation where one of the events is hypothetical. Although all the legitimate confequences of a hypothetical principle should be perfectly similar to the phenomenon, it is extremely dangerous to assume this principle as the real cause. It is illogical to make use of the economy of nature as an argument for the truth of any hypothefis: for if true, it is a physical truth, a matter of fact, and true only to the extent in which it is observed, and we are not entitled to fay that it is fo one step farther; therefore not in this case till it be observed. But the proposition that nature is so economical is false; and it is aftonishing that it has been so lazily acquiesced in by the readers of hypotheles: for it is not the authors who are deceived by it, they are generally led by their own vanity. Nothing is more observable than the prodigious variety of nature. That the same phonomena may be produced by different means is well known to the aftro-

Philosophy.

View of nomers, who must all grant, that the appearances of motion will be precifely the fame whether the earth moves round the fun like the other planets, or whether the fun with his attendant planets moves round the earth; and that the demonstration of the first opinion is had from a fact totally unconnected with all the deflections or even with their causes: for it may be afferted, that Dr Bradley's discovery of the aberration of the fixed stars, in consequence of the progressive motion of light, was the first thing which put the Copernican fystem beyond question; and even this is still capable of being explained in another way. The Author of Nature feems to delight in variety; and there cannot be named a fingle purpose on which the most inconceivable fertility in resource is not observed. It is the most delightful occupation of the curious mind and the fensible heart to contemplate the various contrivances of nature in accomplishing similar ends.

As a principle therefore on which to found any maxim of philosophical procedure, this is not only injudicious, because imprudent and apt to mislead, but as false, and almost fure to mislead. In conformity to this observation, it must be added, that nothing has done so much harm in philosophy as the introduction of hypotheses.

Authors have commonly been fatisfied with very flight refemblances, and readers are easily misled by the appearances of reasoning which these resemblances have countenanced. The ancients, and above all Aristotle, were much given to this mode of explanation, and have filled philosophy with abfurdities. The flightest resemblances were with them sufficient foundations of theories. It has been by very flow degrees that men have learned caution in this respect; and we are forry to say that we are not yet cured of the disease of hypothetical systematizing, and to fee attempts made by ingenious men to bring the frivolous theories of antiquity again into credit. Nay, modern philosophers even of the greatest name are by no means exempted from the reproach of hypothetical theories. Their writings abound in ethers, nervous fluids, animal fpirits, vortices, vibrations, and other invisible agents. We may affirm that all these attempts may be shown to be either unintelligible, fruitless, or false. Either the hypothesis has been such that no consequence can be distinctly drawn from it, on account of its obscurity and total want of resemblance to any thing we know; or the just and legitimate consequences of the hypothesis are inconsistent with the phenomena (N). This is remarkably the case in the hypo- View of these which have been introduced for the explanation of Bacon's the mechanical phenomena of the universe. These can Philosophy. the mechanical phenomena of the universe. These can be examined by accurate science, and the consequences compared without any mistake; and nothing else but a perfect agreement should induce us even to listen to any hypothesis whatever.

It may here be asked, Whether, in the case of the most perfect agreement, after the most extensive comparison, the hypothesis should be admitted? We believe that this must be left to the feelings of the mind. When the belief is irrefistible, we can reason no more. But as there is no impossibility of as perfect an agreement with some other hypothesis, it is evident that it does not convey an irrefragable title to our hypothesis. It is faid, that fuch an agreement authorifes the reception of the hypothetical theory in the fame manner as we must admit that to be the true cypher of a letter which will make perfect fense of it. But this is not true: in decyphering a letter we know the founds which must be represented by the characters, and that they are really the constituents of speech: but in hypothetical explanations the first principle is not known to exist; nay, it is posfible to make two cyphers, each of which shall give a meaning to the letter. Inflances of this are to be feen in treatifes on the art of decyphering; and there has been lately discovered a national character (the ogam discovered in Ireland) which has this property.

We conclude our criticism on hypothetical explanations with this observation, that it is impossible that they can give any addition of knowledge. In every hypothefis we thrust in an intermediate event between the phenomenon and some general law; and this event is not feen, but supposed. Therefore, according to the true maxims of philosophical investigation, we give no explanation; for we are not by this means enabled to affign the general law in which this particular phenomenon is included: nay, the hypothesis makes no addition to our list of general laws; for our hypotheses must be felected, in order to tally with all the phenomena. The hypothesis therefore is understood only by and in the phenomena; and it must not be made more general than the phenomena themselves. The hypothesis gives no generalisation of facts. Its very application is founded on a great coincidence of facts; and the hypothetical fact is thrust in between two which we really observe to be united by nature. The applicability therefore of the hypothefis

(N) It has often been matter of amusement to us to examine the hypothetical theories of ingenious men, and to observe the power of nature even when we are transgressing her commands, Naturam expellat furca, tamen usque revertitur. The hypothesis of an ingenious man is framed in perfect conformity to nature's dictates: for you will find that the hypothetical cause is touched and retouched, like the first sitting of a picture, till it is made to resemble the phenomena, and the cause is still inferred, nay explained, in spite of all his ingenuity, from the phenomenon; and then, instead of desiring the spectators to pay him his due praise, by saying that the picture is like the man, he insists that they shall say, what gives him no credit, that the man is like the picture. But alas: this is seldom the case: The picture is generally an anamorphosis, unlike any thing extant in nature, and having parts totally incongruous. We have seen such pictures, where a wood is standing on the sea, and an eye is on the end of an elephant's trunk; and yet when this was viewed through a proper glass, the wood became an eyebrow to the eye, and the proboscis was a very pretty ringlet of hair. We beg indulgence for this piece of levity, because it is a most apposite illustration of a hypothetical theory. The resemblance between the principle and phenomenon is true only in detached unconnected fcraps, and the principle itself is an incongruous patchwork. But by a perverfion of the rules of logic, all these inconsistencies are put out of view, and the explanation is something like the phenomenon.

View of Bacon's Philosophy.

68

On what

occasions

they may

be useful.

hypothesis is not more extensive than the similarity of facts which we observe, and the hypothetical law is not more general than the observed law. Let us then throw away entirely the hypothetical law, and infert the obferved one in our list of general laws: it will be in different language from the hypothetical law, but it will express the same facts in nature.

It is in experimental philosophy alone that hypotheses can have any just claim to admission; and here they are not admitted as explanations, but as conjectures ferving

to direct our line of experiments.

Effects only appear; and by their appearance, and the previous information of experience, causes are immediately ascertained by the perfect similarity of the whole train of events to other trains formerly observed; Or they are fuggested by more imperfect resemblances of the phenomena; and these suggestions are made with stronger or fainter evidence, according as the resemblance is more or less perfect. These suggestions do not amount to a confidential inference, and only raife a conjecture. Wishing to verify or overturn this conjecture, we have recourse to experiment; and we put the subject under consideration in such a situation, that we can fay what will be the effect of the conjectural cause if real. If this tallies with the appearance, our conjecture has more probability of truth, and we vary the fituation, which will produce a new fet of effects of the conjectured cause, and so on. It is evident that the probability of our conjecture will increase with the increase of the conformity of the legitimate effects of the fupposed cause with the phenomena, and that it will be entirely destroyed by one disagreement. In this way conjectures have their great use, and are the ordinary means by which experimental philosophy is improved. But conjectural fystems are worse than nonsense, filling the mind with false notions of nature, and generally leading us into a course of improper conduct when they become principles of action. This is acknowledged even by the abettors of hypothetical fystems themselves, when employed in overturning those of their predecessors, and establishing their own: witness the successive maintainers of the many hypothetical fystems in medicine, which have had their short-lived course within these two last centuries.

Let every person therefore who calls himself a philofopher resolutely determine to reject all temptations to this kind of fystem-making, and let him never consider any composition of this kind as any thing better than

the amusement of an idle hour.

After these observations, it cannot require much disof philoso- cussion to mark the mode of procedure which will insure

phical pro- progress in all philosophical investigations.

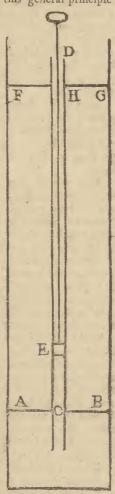
The fphere of our intuitive knowledge is very limited; and we must be indebted for the greatest part of our intellectual attainments to our rational powers, and it must be deductive. In the spontaneous phenomena of nature, whether of mind or body, it seldom happens that the energy of that natural power, which is the principle of explanation, is fo immediately connected with the phenomenon that we fee the connection at once. Its exertions are frequently concealed, and in all cases modified, by the joint exertions of other natural powers: the particular exertion of each must be considered apart, and their mutual connection traced out. It is only in this way that we can discover the perhaps long

train of intermediate operations, and also see in what View of marmer and degree the real principle of explanation con- Bacow's Philosophy. curs in the oftenfible process of nature.

In all fuch cases it is evident that our investigation (and investigation it most strictly is) must proceed by steps, conducted by the fure hand of logical method. To take an instance from the material world, let us listen to Galileo while he is teaching his friends the cause of the rise of water in a pump. He says that it is owing to the pressure of the air. This is his principle; and he announces it in all its extent. All matter, fays he, is heavy, and in particular air is heavy. He then points out the connection of this general principle

with the phenomenon. Air being heavy, it must be supported; it must lie and press on what supports it: it must press on the surface AB of the water in the ciftern furrounding the pipe CD of the pump; and also on the water C within this pipe. He then takes notice of another general principle which exerts its subordinate influence in this process. Water is a fluid; a fluid is a body whose parts yield to the fmallest impression; and, by yielding, are eafily moved among themfelves: and no little parcel of the fluid can remain at rest unless it be equally pressed in every direction, but will recede from that fide where it fustains the greatest pressure. In consequence of this fluidity, known to be a property of water, if any part of it is preffed, the preffure is propagated through the whole; and if not refisted on every fide, the water will move to that fide where the propagated preffure is not refifted. All these subordinate or collateral propositions are supposed to be previously demonstrated or allowed. Water therefore must vield to the pressure of the air unless pressed by it on every side, and must move to that side where it is not withheld by fome opposite pressure. He then proceeds to

show, from the structure of the pump, that there is no opposing pressure on the water in the infide of the pump. " For (fays he) suppose the piston thrust down till it touches the surface of the water in the pipe; suppose the piston now drawn up by a power fufficient to lift it, and all the air incumbent on it; and suppose it drawn up a foot or a fathom—there remains nothing now (fays he) that I know of, to press on the furface of the water. In short (fays he), gentlemen, it appears to me, that the water in the pump s in the same situation that it would be in were there no air at all, but water poured into the ciftern to a height AF; fuch, that the column of water FABG preffes on the furface AB as much as the air does. Now in this case we know that the water at C is pressed up-



69 True mode cedure.

The fyn-

thetic method.

wards with a force equal to the weight of a column of water, having the section of the pipe for its base and CH for its height. The water below C therefore will be pressed up into the pipe CD, and will rise to G, so that it is on a level with the external water FG; that is, it will rife to H. This is a necessary consequence of the weight and pressure of the incumbent column FABG, and the fluidity of the water in the cistern. Consequences perfectly fimilar must necessarily follow from the weight and pressure of the air; and therefore on drawing up the pifton from the furface C of the water, with which it was in contact, the water must follow it till it attain that height which will make its own weight a balance for the pressure of the circumambient air. Accordingly, gentlemen, the Italian plumbers inform me, that a pump will not raise water quite fifty palms; and from their information I conclude, that a pillar of water fifty palms high is fomewhat heavier than a pillar of air of the same base, and reaching to the top of the atmosphere."

Thus is the phenomenon explained. The rife of the water in the pump is shown to be a particular case of the general fact in hydrostatics, that fluids in communicating vessels will stand at heights which are inversely as their densities, or that columns of equal weights are in equi-

This way of proceeding is called arguing à priori, the fynthetic method. It is founded on just principles; and the great progrefs which we have made in the mathematical sciences by this mode of reasoning shows to what length it may be carried with irrefiftible evidence. It has long been confidered as the only inlet to true knowledge; and nothing was allowed to be known with certainty which could not be demonstrated in this way to be true. Accordingly logic, or the art of reasoning, which was also called the art of discovering truth, was nothing but a fet of rules for fuccessfully conducting this mode of argument.

Under the direction of this infallible guide, it is not furely unreasonable to expect that philosophy has made fure progrefs towards perfection; and as we know that the brightest geniuses of Athens and of Rome were for ages folely occupied in philosophical refearches in every path of human knowledge, it is equally reasonable to suppose that the progress has not only been fure but great. We have feen that the explanation of an appearance in nature is nothing but the arrangement of it into that general class in which it is comprehended. class has its diffinguishing mark, which, when it is found in the phenomenon under confideration, fixes it in its class, there to remain for ever an addition to our flock of knowledge. Nothing can be loft any other way but by forgetting it; and the doctrines of philosophers must be stable like the laws of nature.

We have feen, however, that the very reverse of all this is the cafe; that philosophy has but very lately emerged from worse than total darkness and ignorance; that what passed under the name of philosophy was nothing but fystems of errors (if systems they could be called), which were termed doctrines, delivered with the most imposing apparatus of logical demonstration, but belied in almost every instance by experience, and affording us no affiftance in the application of the powers of nature to the purposes of life. Nor will this excite much wonder in the mind of the enlightened reader of

the present day, who reslects on the use that in this dia- View of lectic process was made of the categories, and the me-Bacon's thod in which those categories were formed. From first principles fo vague in themselves, and so gratuitously assumed, ingenious men might deduce many different conclusions all equally erroneous: and that this was actually done, no furer evidence can be given, than that hardly a lifetime elapfed in which the whole system of doctrines which had captivated the minds of the most penetrating, have been oftener than once exploded and overturned by another system, which slourished for a while, and then was supplanted by a third which shared the same fate. Here was an infallible proof of their error, for instability is incompatible with truth.

It is allowed by all that this has been the case in those branches of study at least which contemplate the philofophical relations of the material world, in astronomy, in mechanical philosophy, in chemistry, in physiology, in medicine, in agriculture. It is also acknowledged, that in the course of less than two centuries back we have acquired much knowledge on these very subjects. call it philosophy, or by what name you will, so much more conformable to the natural course of things, that the deductions made from it by the fame rules of the fynthetic method are more conformable to fact, and therefore better fitted to direct our conduct and improve our powers. It is also certain that these bodies of doctrine which go by the name of philosophical systems, have much more stability than in ancient times; and though fometimes in part superseded, are seldom or never wholly exploded.

This cannot perhaps be affirmed with equal confidence with respect to those speculations which have our intellect or propensities for their object: and we have not perhaps attained fuch a reprefentation of human nature as will bear comparison with the original; nor will the legitimate deductions from fuch doctrines be of much more service to us for directing our conduct than those of ancient times: and while we observe this difference between these two general classes of speculations, we may remark, that it is conjoined with a difference in the manner of conducting the fludy. We have proceeded in the old Aristotelian method when investigating the nature of mind; but we fee the material philofophers running about, paffing much of their time away from books in the shop of the artisan, or in the open fields engaged in observation, labouring with their hands, and bufy with experiments. But the speculatift on the intellect and the active powers of the human foul feems unwilling to be indebted to any thing but his own ingenuity, and his labours are confined to the closet. In the first class, we have met with something like success, and we have improved many arts: in the other, it is to No mlet to be feared that we are not much wifer, or better, or hap-truth,

Here, therefore, must furely have been some great, fome fatal mistake. There has indeed been a material defect in our mode of procedure, in the employment of this method of reasoning as an inlet to truth. The fact is, that philosophers have totally mistaken the road of discovery, and have pretended to set out in their investigation from the very point where this journey should have terminated.

pier, for all our philosophic attainments.

The Aristotelian logic, the syllogistic art, that art o much boafted of as the only inlet to true knowledge,

But the

View of the only means of discovery, is in direct opposition to Bacon's the ordinary procedure of nature, by which we every Philosophy day, and in every action of our lives, acquire knowledge and discover truth. It is not the art of discover-

ing truth, it is the art of communicating knowledge, art of com- and of detecting error : it is nothing more than the apmunicating plication of this maxim, 'whatever is true of a whole knowledge. class of objects, is true of each individual of that class." This is not a just account of the art of discovering truth, nor is it a complete account of the art of reasoning. Reasoning is the producing belief; and whatever mode of argumentation invariably and irrefiftibly produces belief, is reasoning. The ancient logic supposes that all the first principles are already known, and that nothing is wanted but the application of them to particular facts. But were this true, the application of them, as we have already observed, can hardly be called a discovery; but it is not true; and the fact is, that the first principles are generally the chief objects of our refearch, and that they have come into view only now and then as it were by accident, and never by the labour of the logician. He indeed can tell us whether we have been mistaken; for if our general principle be true, it must influence every particular case. If, therefore, it be false in any one of these, it is not a true principle. And it is here that we discover the source of that sluctuation which is fo much complained of in philosophy. The authors of fyftems give a fet of confecutive propositions logically deduced from a first principle, which has been hastily adopted, and has no foundation in nature. This does not hinder the amusement of framing a system from it, nor this fystem from pleasing by its symmetry; and it takes a run: but when some officious follower thinks of making some use of it, which requires the comparison with experience and observation, they are found totally unlike, and the whole fabric must be abandoned as unfound: and thus the fuccessive fystems were continually pushing out their predecessors, and presently met with the fame treatment.

How was this to be remedied? The ratiocination was feldom egregiously wrong; the fyllogistic art had ere now attained a degree of perfection which left little room for improvement, and was fo familiarly understood by the philosophical practitioners, that they feldom committed any great blunders. Must we examine the first principles? This was a task quite new in science; and there were hardly any rules in the received fystems of logic to direct us to the successful performance of it. Aristotle, the fagacious inventor of those rules, had not totally omitted it; but in the fervour of philosophic speculation he had made little use of them. His fertile genius never was at a loss for first principles, which anfwered the purpole of verbal disquisition without much risk of being belied on account of its dissimilitude to nature; for there was frequently no prototype with which his fystematic doctrine could be compared. His enthufiaftic followers found abundant amusement in following his example; and philosophy, no longer in the hands of men acquainted with the world, conversant in the great book of nature, was now confined almost entirely to reclufe monks, equally ignorant of men and of things. But curiofity was awakened, and the men of genius were fretted as well as disgusted with the disquisitions of the schools, which one moment raised expectations by VOL. XVI. Part I.

the fymmetry of composition, and the next moment blafted them by their inconfiftency with experience.

They faw that the best way was to begin de novo, to throw away the first principles altogether, without exception or examination, and endeavour to find out new ones, which should stand the test of logic; that is, should

in every case be agreeable to fact. Philosophers began to reflect, that under the unno-The meticed tuition of kind nature we have acquired much use thod of inful knowledge. It is therefore highly probable, that pointed out her method is the most proper for acquiring knowledge, by nature. and that by imitating her manner we shall have the like

We are too apt to flight the occupations of children, whom we may observe continually busy turning every thing over and over, putting them into every fituation, and at every diffance. We excuse it, faying that it is an innocent amusement; but we should say with an ingenious philosopher (Dr Reid), that they are most feriously and rationally employed: they are acquiring the habits of observation; and by merely indulging an undetermined curiofity, they are making themfelves acquainted with furrounding objects: they are struck by fimilitudes, and amused with mere classification. If some new effect occurs from any of their little plays, they are eager to repeat it. When a child has for the first time tumbled a spoon from the table, and is pleased with its jingling noise on the sloor, if another lie within its reach, it is fure to fhare the fame fate. If the child be indulged in this diversion, it will repeat it with greediness that deserves our attention. The very first eager repetition shows a confidence in the constancy of natural operations, which we can hardly ascribe wholly to experience; and its keenness to repeat the experiment, shows the interest which it takes in the exercise of this most useful propensity. It is beginning the study of nature; and its occupation is the same with that of a

ed a new law of nature. Such (fays this amiable philosopher) is the education of kind nature, who from the beginning to the end of our lives makes the play of her scholars their most instructive lessons, and has implanted in our mind the curiofity and the inductive propenfity by which we are en-abled and disposed to learn them. The exercise of this inductive principle, by which nature prempts us to infer general laws from the observation of particular facts, gives us a species of logic new in the schools, but old

Newton computing the motions of the moon by his fublime theory, and comparing his calculus with observa-

tion. The child and the philosopher are equally employ-

ed in the contemplation of a similarity of event, and are anxious that this fimilarity shall return. The child,

it is true, thinks not of this abstract object of contemplation, but throws down the spoon again to have the

pleasure of hearing it jingle. The philosopher suspects

that the conjunction of events is the consequence of a general law of nature, and tries an experiment where this conjunction recurs. The child is happy, and eager

to enjoy a pleasure which to us appears highly frivolous;

but it has the fame foundation with the pleasure of the

philosopher, who rejoices in the success of his experi-

ment : and the fact, formerly a trifle to both, now ac-

quires importance. Both go on repeating the experiment, till the fact ceases to be a novelty to either : the

child is fatisfied, and the philosopher has now establish-

3 D

View of as human nature. It is certainly a method of discovery; Bacon's for by these means general principles, formerly unknown, have come into view.

Is a just logic.

It is a just and rational logic; for it is founded on, and indeed is only the habitual application of, this maxim, " That whatever is true with respect to every individual of a class of events, is true of the whole class." This is just the inverse of the maxim on which the Aristotelian logic wholly proceeds, and is of equal authority in the court of reason. Indeed the expression of the general law is only the abbreviated expression of every particular instance.

This new logic, therefore, or the logic of induction, must not be confidered as subordinate to the old, or founded on it. See Logic, Part III. chap. 5. In fact, the use and legitimacy of the Aristotelian logic is founded on the inductive.

All animals are mortal; All men are animals; therefore All men are mortal.

This is no argument to any person who chooses to deny the mortality of man; even although he acknowfedges his animal nature, he will deny the major pro-

It is beside our purpose to show, how a point so general, fo congenial to man, and fo familiar, remained fo long unnoticed, although the disquisition is curious and satisfactory. It was not till within these two centuries that the increasing demand for practical knowledge, particularly in the arts, made inquisitive men see how useless and insufficient was the learning of the schools in any road of investigation which was connected with life and business; and observe, that society had received useful information chiefly from persons actually engaged in the arts which the speculatists were endeavouring to illustrate; and that this knowledge confisted chiefly of experiments and observations, the only contributions which their authors could make to science.

The Novum Organum of Bacon, which points out the true method of forming a body of real and useful knowledge, namely, the study of nature in the way of description, observation, and experiment, is undoubtedly the noblest present that science ever received. It may be confidered as the grammar of nature's language, and is a counter-part to the logic of Aristotle; not explod-

ing it, but making it effectual.

As the logic of Aristotle had its rules, fo has the Baconian or inductive; and this work, the Novum Organum Scientiarum, contains them all. The chief rule, and indeed the rule from which all the rest are but derivations, is, that " the induction of particulars must be carried as far as the general affirmation which is deduced from them." If this be not attended to, the mind of man, which from his earliest years shows great cagernels in fearthing for first principles, will frequently afcribe to the operation of a general principle events which are merely accidental. Hence the popular belief in omens, palmistry, and all kinds of fortune-telling.

This rule must evidently give a new turn to the whole track of philosophical investigation. In order to discover first principles, we must make extensive and accurate observations, so as to have copious inductions of facts, that we may not be deceived as to the extent of the principle inferred from them. We must extend our acquaintance with the phenomena, paying a minute attention to what is going on all around us; and we must View of study nature, not thut up in our closet drawing the picture from our own fancy, but in the world, copying our lines from her own features.

To delineate human nature, we must see how men act. To give the philosophy of the material world, we must

notice its phenomena.

This method of studying nature has been profecuted during these two last centuries with great eagemess and fuccess. Philosophers have been busy in making accurate observations of facts, and copious collections of them. Men of genius have discovered points of refemblance, from which they have been able to infer many general powers both of mind and body; and refemblances among these have suggested powers still more

general.

By these efforts investigation became familiar; philosophers studied the rules of the art, and became more expert; hypothefes were banished, and nothing was admitted as a principle which was not inferred from the most copious induction. Conclusions from such principles became every day more conformable to experience. Mistakes sometimes happened; but recourse being had to more accurate observation or more copious induction, the mistakes were corrected. In the present study of nature, our steps are more slow, and and rectihesitating and painful; our conclusions are more limited takes. and modest, but our discoveries are more certain and progressive, and the results are more applicable to the purposes of life. This pre-eminence of modern philosophy over the ancient is seen in every path of inquiry. It was first remarkable in the study of the material world; and there it still continues to be most conspicuous. But it is no less to be seen in the later performances of philosophers in metaphysics, pneumatology, and ethics, where the mode of investigation by analysis and experiment has been greatly adopted; and we may add, that it is this juster view of the employment which has restored philosophers to the world, to society. They are no longer to be found only in the academies of the fophiits and the cloifters of a convent, but in the discharge of public and private duty. A philosophic genius is a genius for observation as well as reflection, and he fays, Homo fum, humani à me nihil alienum puto.

After faying fo much on the nature of the employ-Estimate of ment, and the mode of procedure, it requires no deep the philosepenetration to perceive the value of the philosophical phic chacharacter. If there is a propenfity in the human mind racter. which diffinguishes us from the inferior orders of sentient beings, without the least circumstance of interference, a propenfity which alone may be taken for the characteristic of the species, and of which no trace is to be found in any other, it is difinterested intellectual curiosity, a love of discovery for its own sake, independent of all its advantages.

We think highly (and with great justice do we think fo) of our rational powers; but we may carry this too far, as we do every ground of felf-estimation. To every man who enjoys the chearing thought of living under the care of a wife Creator, this boafted prerogative will be viewed with more modesty and distidence; and He has given us evident marks of the rank in which He esteems the rational powers of man. In no case that is of effential importance, of indispensable necessity, not on-

for difcovering ge-neral prin-

ciples,

In chief

View of ly to our wellbeing but to our very existence, has He Bacon's left man to the care of his reason alone; for in the first Philosophy instance, He has given us reason

To guide the helm, while passion blows the gale.

We should powers.

80

think mo-defty of our rational dividual or the continuance of the race to man's notions of the importance of the task, but has committed them to the furer guards of hunger and of fexual defire. In like manner, He has not left the improvement of his noblest work, the intellectual powers of the foul of man, to his own notions how important it is to his comfort that he be thoroughly acquainted with the objects around him. No: He has committed this also Importance to the fure hand of curiofity: and He has made this fo of our instrong in a few fuperior fouls, whom He has appointed to give light and knowledge to the whole species, as to abstract them from all other pursuits, and to engage them in intellectual refearch with an ardour which no attainment can ever quench, but, on the contrary, inflames it the more by every draught of knowledge.

> - But what need words To paint its power? For this the daring youth Breaks from his weeping mother's fondling arms In foreign climes to rove. The penfive fage, Heedless of sleep, or midnight's hurtful vapour, Hangs o'er the fickly taper.-Hence the fcom Of all familiar prospects, though beheld With transport once. Hence th' attentive gaze Of young aftonishment. Such is the bounteous providence of Heaven, In every breaft implanting the defire Of objects new and strange, to urge us on With unremitting labour to attain The facred stores that wait the rip'ning foul In Truth's exhauftless bosom. Aikenside.

But human life is not a fituation of continual neceffity; this would ill fuit the plans of its beneficent Author: and it is from induction of phenomena totally opposite to this, and from such induction alone, that we have ever thought of a wife Creator. His wifdom appears only in His beneficence. Human life is a scene filled with enjoyment; and the soul of man is stored with propenfities and powers which have pleafure, in direct terms, for their object. Another striking distinction of our nature is a continual disposition to refinement, of which few traces are to be found in the actions of other animals. There is hardly a gift of nature fo grateful in itself as to please the freakish mind of man till he has moulded it to his fancy. Not contented with food, with raiment, and with shelter, he must have nice cookery, ornamental drefs, and elegant houses. He hunts when he is not hungry, and he refines sexual appetite into a most elegant passion. In like manner he has improved this anxious desire of the knowledge of the objects around him, so as to derive from them the means of fubfiftence and comfort, into the most elegant and pleasing of all gratifications, the accumulation of intellectual knowledge, independent of all confideration of its advantages. And as every man has a title to the enjoyment of fuch pleasures as he can attain without injuring his neighbour; fo it is allowable to fuch as have got the means of intellectual improvement, without relinquishing the indispensable

focial duties, to push this advantage as far as it will go: View of and, in all ages and countries, it has been confidered as forming the greatest distinction between men of easy Philosophy fortune and the poor, who must earn their subfistence by the sweat of their brow. The plebeian must learn to work, the gentleman must learn to think; and nothing can be a furer mark of a groveling foul than for a man of fortune to have an uncultivated mind.

Let us then cherish to the utmost this distinguishing Ought to propenfity of the human foul: but let us do even this be cherringed as far as like philosophers. Let us cultivate it as it is: as the it is subserv handmaid to the arts and duties of life; as the guide vient to the to something yet more excellent. A character is not to duties of be estimated from what the person knows, but from life. what he can perform. The accumulation of intellectual knowledge is too apt to create an inordinate appetite for it : and the man habituated to speculation is, like the mifer, too apt to place that pleafure in the mere possession, which he ought to look for only or chiefly in partypon, which to defin control of the state the pudicions use of his favourite object. Like the miler, too, his habits of hoarding up generally unfit him for the very enjoyment which at letting out he proposed to himiess. Seldom do we find the man, who has devoted his life to scientific pursuits for their own fake, poffessed of that superiority of mind which the active employ to good purpose in times of perplexity; and much feldomer do we find him poffessed of that promptitude of apprehension, and that decision of purpose, which are necessary for passing through the difficult fcenes of human life. But we may use the good things of this life without

abusing them; and by moderation here, as in all other

pursuits, derive those solid advantages which philosophy is able to bestow. And these advantages are great. To enumerate and describe them would be to write a great volume. We may just take notice of one, which is an obvious confequence of that strict and simple view which we have given of the fubject; and this is a modest opinion of our attainments. Appearances are all Limits of that we know; causes are for ever hid from our view; our knows the powers of our nature do not lead us fo far. Let us ledge. therefore, without hefitation, relinquish all pursuits which have fuch things as ultimate principles for objects of examination. Let us attend to the subordinations of things which it is our great bufiness to explore. Among these there is such a subordination as that of means to ends, and of instruments to an operation. All will acknowledge the absurdity of the project of viewing light with a microscope. It is equally absurd for us to exdom, by our intellectual powers. We have a wide field of accessible knowledge in the works of God; and one of the greatest advantages, and of the most sublime pleafures, which we can derive from the contemplation, is the view which a judicious philofophical refearch will most infallibly give us of a world, not consisting of a number of detached objects, connected only by the sleeting tie of coexistence, but an universe, a system of beings, all connected together by caufation, with innumerable degrees of fubordination and fubferviency, and all cooperating in the production of one great and glorious The heart which has but a fpark of fenfibility must be warmed by such a prospect, must be pleased to find itself an important part of this stupendous machine; and cannot but adore the incomprehenfible Ar-

Our difpofition to refinement.

3 D 2

just notions

View of tift who contrived, created, and directs the whole. Let Eacon's us not liften, then, to the timid admonitions of theologi-[Philotophy cal ignorance, which shrinks with superstitious horror from the thoughts of accounting for every thing by the Philosophi- powers of nature, and considers these attempts as an apcal disquisi-proach to atheism. Philosophical disquisition will, on the contrary, exhibit these general laws of the universe, of God and that wonderful concatenation and adjustment of every of our own thing both material and intellectual, as the most striking instance of incomprehensible wisdom; which, by means fo few and fo fimple, can produce effects which by their grandeur dazzle our imagination, and by their multiplicity elude all possibility of enumeration. Of all the obtlacles which the weakness, the folly, or the sinful vanity of men, has thrown in the way of the theologian, there is none fo fatal, fo hostile to all his endeayours, as a cold and comfortless system of materialism, which the reasoning pride of man first engendered, which made a figure among a few speculatifts in the last century, but was foon forgotten by the philosophers really bufy with the observation of nature and of nature's God. It has of late reared up its head, being now cherished by all who wish to get rid of the stings of remorfe, as the only opinion compatible with the View of peace of the licentious and the fenfual: for we may fay Bacon's to them as Henry IV. faid to the prince of Wales, "Thy wish was father, Harry, to that thought." In vain will the divine attempt to lay this devil with the metaphyfical exorcisms of the schools; it is philosophy alone that can detect the cheat. Philosophy fingles out the characteristic phenomena which distinguish every fubstance; and philosophy never will hesitate in saying that there is a fet of phenomena which characterise mind and another which characterife body, and that thefe are toto calo different. Continually appealing to fact, to the phenomena, for our knowledge of every cause, we shall have no difficulty in deciding that thought, memory, volition, joy, hope, are not compatible attri-butes with bulk, weight, elasticity, sluidity. Tuta sub ægide Pallas; philosophy will maintain the dignity of human nature, will detect the fophisms of the materialifts, confute their arguments; and she alone will restore to the countenance of nature that ineffable beauty, of which those would deprive her, who would take away the supreme Mind which shines from within, and gives life and expression to every feature.

P H

tus.

Philosophy, and Physics. See NATURAL Philosophy,

Experimental PHILOSOPHY. See EXPERIMENTAL Philosophy.

Moral PHILOSOPHY. See MORAL Philosophy. PHILOSTORGIUS, an ecclefiaftical historian of the 4th century, was born in Cappadocia, and wrote an abridgment of ecclefiaftical history, in which he treats Athanasius with some severity. This work contains many curious and interesting particulars. The best edition is that of Henry de Valois in Greek and

Latin. There is also attributed to him a book against

PHILOSTRATUS, FLAVIUS, was an ancient Greek author. He wrote the Life of Apollonius Tyanensis, and fome other things which have come down to our time. Eusebius against Hierocles calls him an Athenian, because he taught at Athens; but Eunapius and Suidas always speak of him as a Lemnian : and he hints, in his Life of Apollonius, that he used to be at Lemnos when he was young. He frequented the schools of the fophists; and he mentions his having heard Damianus of Ephefus, Proclus Naucratitas, and Hippodromus of Lariffa. This feems to prove that he lived in the reign of the emperor Severus, from 193 to 212, when those fophists flourished. He became known afterwards to Severus's wife Julia Augusta, and was one of those learned men whom this philosophic empress had continually about her. It was by her command that he wrote the Life of Apollonius Tyanensis, as he relates himself in the same place where he informs us of his connections with that learned lady. Suidas and Hefychius fay that he was a teacher of rhetoric, first at Athens and then at Rome, from the reign of Severus to that of Philippus, who obtained the empire in 244.

Philostratus's celebrated work is his Life of Apol-

HI

lonius; which has erroneously been attributed to Lu- Philostracian, because it has been printed with some of that author's pieces. Philostratus endeavours, as Cyril obferves, to represent Apollonius as a wonderful and extraordinary person; rather to be admired and adored as a god than to be considered as a mere man. Hence Eunapius, in the preface to his Lives of the Sophists, fays that the proper title of that work would have been. The Coming of a God to Men; and Hierocles, in his book against the Christians which was called Philalethes, and which was refuted by Eusebius in a work still extant, among other things drew a comparison between Apollonius and Jesus Christ. It has always been supposed that Philostratus composed his work with a view to discredit the miracles and doctrines of our Lord, by fetting up other miracles and other doctrines against them, and this supposition may be true; but that Apollonius was really an impostor and magician may not be fo.certain. He may, for what we know, have been a wife and excellent person; and it is remarkable, that Eusebius, though he had the worst opinion of Philostratus's history, says nothing ill of Apollonius. He concluded that that history was written to oppose the history of Jesus; and the use which the ancient infidels made of it justifies his opinion; but he draws no information from it with regard to Apollonius. It would have been improper to have done so; since the sophistical and affected style of Philostratus, the sources from whence he owns his materials to have been drawn, and, above all, the abfurdities and contradictions with which he abounds, plainly show his history to be nothing but a collection of fables, either invented or at least embellished by himfelf.

The works of Philostratus, however, have engaged the attention of critics of the first class. Grævius had intended to have given a correct edition of them, as appears

Philyra.

Philostra- appears from the preface of Meric Casaubon to a dissertation upon an intended edition of Homer, printed at London in 1658, 8vo. So had Bentley, who defigned to add a new Latin version of his notes; and Fabricius fays that he faw the first sheet of Bentley's edition printed at Leipsic in 1691. Both these designs were dropped. A very exact and beautiful edition was published at length at Leipsic, 1709, in folio, by Olearius, profesior of the Greek and Latin tongues in that univerfity; who has proved himself perfectly qualified for the work he undertook, and shown all the judgement, learning, and industry, that are required in an excellent editor.

See APOL-BLOUNT

At the end of Apollonius's Life there are 95 letters LONIUS, and which go under his name. They are not, however, believed to be his; the style of them being very affected, and like that of a fophist, while they bear in other respects all the marks of a forgery. Philostratus says that he faw a collection of Apollonius's Letters in Hadrian's library at Antium, but had not inferted them all among these. They are short, and have in them little elle than moral fentences. The Lives of the Sophists contain many things which are to be met with nowhere elfe. The Heroics of Philostratus are only a dialogue between a vintuer of Thracian Chersonesus and a Phœnician, in which the former draws characters of Homer's heroes, and reprefents feveral things differently from that poet; and this upon the faith of Protefilaus's ghoft, who had lately vifited his farm, which was not far from the tomb of this hero. Olearius conjectures, with much probability, that Philostratus's defign in this dialogue was fecretly to criticife fome things in Homer, which he durst not do openly on account of the great veneration then paid to him, and for fear of the odium which Zoilus and others had incurred by cenfuring him too freely. The images are elegant descriptions and illustrations of some ancient paintings and other particulars relating to the fine arts; to which Olearius has fubjoined the description of some statues by Callistratus; for the same reason that he subjoined Eusebius's book against Hierocles to the Life and Letters of Apollonius, namely, because the subjects of these respective works are related to each other. The last piece is a collection of Philostratus's Letters; but some of these, though it is not eafy to determine which, were written by a nephew to our Philostratus, of the same name, as were alfo the last eighteen in the book of images. This is the reason why the title runs not Philostrati, but Philostrasorum quæ supersunt omnia.

> There were many persons of the name of Philostratus among the ancients; and there were many other works of the Philostratus here recorded, but no others are extant besides those we have mentioned.

> PHILOTIS, a fervant maid at Rome, faved her countrymen from destruction. After the siege of Rome by the Gauls, the Fidenates affembled an army, and marched against the capital, demanding all the wives and daughters in the city as the only conditions of peace. This demand aftonished the senators; and when they refused to comply, Philotis advised them to fend all the female flaves difguifed in matrons clothes, and the offered to march herfelf at the head. Her advice was followed; and when the Fidenates had feasted late in the evening, and were quite intoxicated and fallen

afleep, Philotis lighted a torch as a fignal for her countrymen to attack the enemy. The whole was fuccessful; the Fidenates were conquered; and the fenate, to reward the fidelity of the female flaves, permitted them to appear in the drefs of the Roman matrons.

PHILOXENUS, an officer of Alexander, who received Cilicia at the general division of the provinces. -A fon of Ptolemy, who was given to Pelopidas as an hostage. A dithyrambic poet of Cythera. He enjoyed the favour of Dionysius tyrant of Sicily for fome time, till he offended him by feducing one of his female fingers. During his confinement Philoxenus composed an allegorical poem called Cyclops; in which he had delineated the character of the tyrant under the name of Polyphemus, and represented his mistress under the name of Galatæa, and himself under that of Ulysses. The tyrant, who was fond of writing poetry, and of being applauded, removed Philoxenus from his dungeon; but the poet refused to purchase his liberty by saying things unworthy of himself, and applauding the wretched verses of Dionysius, and therefore he was sent to the quarries. Being let at liberty, he some time after was asked his opinion at a feast about some verses which Dionyfius had just repeated, and which the courtiers had received with the greatest applause. Philoxenus gave no answer, but he ordered the guards that surrounded the tyrant's table to take him back to the quarries. Dionyfius was pleafed with his pleafantry and with his firmness, and immediately forgave him. Philoxenus died at Ephefus about 380 years before Christ.

PHILTER, or PHILTRE, (Philtrum), in Pharmacy, &c. a strainer.

PHILTER, is also used for a drug or preparation, which it is pretended will excite love .- The word is formed from the Greek φιλέω, " I love," or φιλος, " lover."

Philters are diffinguished into true and spurious, and were given by the Greeks and Romans to excite love. The spurious are spells or charms, supposed to have an effect beyond the ordinary laws of nature by fome magic virtue; fuch are those faid to be given by old women, witches, &c .- The true philters are those supposed to work their effect by some natural and magnetical power. There are many grave authors who believe the reality of thefe philters, and allege matter of fact in confirmation of their fentiments: among the rest, Van Helmont, who fays, that upon holding a certain herb in his hand for some time, and taking afterwards a little dog by the foot with the fame hand, the dog followed him wherever he went, and quite deferted his former master; which he pretends to account for thus: The heat communicated to the herb, not coming alone, but animated by the emanations of the natural spirits, determines the herb towards the man, and identifies it to him: having then received this ferment, it attracts the spirit of the other object magnetically, and gives it an amorous motion .- But this is mere cant; and all philters, whatever facts may be alleged, are mere chi-

PHILYCA. See PHYLICA, BOTANY Index.

PHILYRA, in fabulous hiftory, was one of the Oceanides, whom Saturn met in Thrace. The god, to escape from the vigilance of Rhea, changed himself into a horse, to enjoy the company of Philyra, by whom he had a fon half a man and half a horse, called Chiron.

Philyra Philyra was fo ashamed of giving birth to such a monster, that she entreated the gods to change her nature. She was accordingly metamorphofed into a tree, called by her name among the Greeks.

PHIMOSIS, in Medicine, a diforder of the penis, in which the prepuce is fo first or tenfe, that it cannot be

drawn back over the glans. See SURGERY. PHINEHAS, or, as the Jews pronounce it PINEHAS, was the fon of Eleazar, and grandfon of Aaron. He was the third high priest of the Jews, and discharged this office from the year of the world 2571, till towards the year 2590. He is particularly commended in Scripture for the zeal he showed in vindicating the glory of God, when the Midianites had fent their daughters into the camp of Israel, to tempt the Hebrews to fornication and idolatry. For Zimri having publicly entered into the tent of a Midianitish woman named Cozbi, Phinehas arose up from among the people (Numb. xxv. 7, &c.), took a javelin in his hand, entered after Zimri into that infamous place, and stabbed both man and woman at one blow, in those parts that were chiefly concerned in this criminal commerce. Upon which the plague or diftemper ceafed with which the Lord had already begun to punish the Israelites. This

happened in the year of the world 2553, Then the Lord faid to Mofes, Phinehas the fon of Eleazar the high-priest has turned away my wrath from the children of Ifrael, because he has been zealous in my cause, and has hindered me from destroying them: wherefore acquaint him, that I give him my covenant of peace, and the priesthood shall be given to his posterity by a perpetual covenant, because he has been zealous for his God, and has made atonement for the crime of the children of Ifrael. This promife that the Lord made to Phinehas, to give him the pricithood by a perpetual covenant, interpreters observe, evidently included this tacit condition, that his children should continue faithful and obedient; fince we know that the priesthood paffed out of the family of Eleazar and Phinehas to that of Ithamar, and that it returned not to the posterity of Eleazar till after about 150 years.

This is what we find concerning the translation of the high-priesthood from one family to the other. This dignity continued in the race of Phinehas, from Aaron down to the high-priest Eli, for about 335 years. See

The manner and causes of this change are unknown. It re-entered again into the family of Eleazar, under the reign of Saul, when this prince having put to death Abimelech, and the other priests of Nob, he gave the high-priesthood to Zadok, who was of the race of Phinehas. At the same time, David had Abiathar with him, of the race of Eli, who performed the functions of high-prieft. So that after the death of Saul, David continued the priesthood to Zadok and Abiathar conjointly. But towards the end of David's reign, Abiathar having espouled the interest of Adonijah, to the prejudice of Solomon, he was in disgrace, and Zadok only was acknowledged as high-prieft. The priefthood continued in his family till after the captivity of Babylon, and even to the destruction of the temple. But from the beginning of Zadok's priesthood alone, and the exclusion of Abiathar, to the ruin of the temple, is

We read of another memorable action of Phinehas,

in which he still showed his zeal for the Lord. This Phinchas, was when the Ifraelites that were beyond Jordan had Phineus raifed upon the banks of this river a vast heap of earth (Josh. xxii. 30, 31.). Those on the other side fearing they were going to forfake the Lord, and fet up another religion, deputed Phinehas and other chief men among them, to go and inform themselves of the reason of erecting this monument. But when they had found that it was in commemoration of their union and common original, Phinehas took occasion from thence to praise the Lord, faying, "We know that the Lord is with us, fince you are not guilty of that prevarication we fulpected you were."

We do not exactly know the time of the death of Phinehas. But as he lived after the death of Joshua. and before the first servitude under Chushan-rishathaim, during the time that there were neither kings nor judges in the land, and every one did what was right in his own eyes (Judges xvii. 6. xviii. 1. xxi. 24.); his death is put about the year of the world 2590. It was under his pontificate that the flory of Micah happened, as also that of the tribe of Dan, when they made a conquest of Laish; and the enormity that was committed upon the wife of the Levite of the mountain of Ephraim (Judges xx. 28.). Phinehas's fuccessor in the high-priesthood was Abiezer, or Abishuah.

The Rabbins allow a very long life to Phinehas, There are some who believe he lived to the time of the high-priest Eli, or even to the time of Samson. Others will have it, that he was the same as Eli, or rather as the prophet Elias, which would still prolong his life for feveral ages.

PHINEUS, in fabulous history, was a fon of Agenor, king of Phonicia, or according to some of Neptune. He became king of Thrace, or, according to the greater part of mythologists, of Bithynia. He married Cleopatra the daughter of Boreas, called by fome Cleobula, by whom he had Plexippus and Pandion. After her death, he married Idea the daughter of Dardanus. Idea, jealous of his former wife's children, accused them of attempts upon their father's life and crown, or, as others affert, of attempts upon her virtue; on which they were condemned by Phineus to be deprived of their eyes. This cruelty was foon after punished by the gods; for Phineus fuddenly became blind, and the Harpies were fent by Jupiter to keep him in continual alarm, and to fpoil the meats which were placed on his table. He was afterwards delivered from these dangerous monsters by his brothers-in-law Zetes and Calais, who purfued them as far as the Strophades. He likewife recovered his fight by means of the Argonauts, whom he had received with great hospitality, and whom he instructed in the easiest and speediest way of arriving in Colchis. The causes of the blindness of Phineus are a matter of dispute among the ancients; some supposing that this was inflicted by Boreas for his cruelty to his grandfon; while others attribute it to the anger of Neptune, because he had directed the fons of Phryxus how to escape from Colchis to Greece. Many, however, imagine that it proceeded from his having rashly attempted to develope futurity; while others affert that Zetes and Calais put out his eyes on account of his cruelty to their nephews. The fecond wife of Phineus is called by some Dia, Eurytia, Danae, and Idothea .- He was killed by Hercules.

Phlebato-

PHLEBOTOMY, the opening of a vein with a my, proper sharp-edged and pointed instrument, in order , to let out a certain quantity of blood either for the prefervation or recovery of a person's health. See

> PHLEGM, in the animal economy, one of the four humours whereof the ancients supposed the blood to be composed. The chemists make phlegm or water an elementary body; the characters of which are fluidity, infi-

pidity, and volatility.

PHLEGMAGOGUES, in Medicine, a term anciently made use of for such medicines as were supposed to be endowed with the property of purging off phlegm; fuch as hermodactyls, agaric, turbith, ja-

PHLEGMATIC, among physicians, an appellation given to that habit or temperament of body wherein phlegm is predominant; which gives rife to catarrhs,

coughs, &c.

PHLEGMON, denotes an external inflammation

and tumor, attended with a burning heat.

PHLEGON, who was furnamed Trallianus, was born in Trallis a city of Lydia. He was the emperor Hadrian's freed man, and lived to the 18th year of Antoninus Pius; as is evident from his mentioning the confuls of that year. He wrote feveral works of great erudition, of which we have nothing left but fragments. Among these was a History of the Olym-piads, A Treatise of Long-lived Persons, and another of Wonderful Things; the short and broken remains of which Xylander translated into Latin, and published at Bafil in 1568, with the Greek and with notes. Meurhus published a new edition of them with his notes at Leyden, in 1622. The titles of part of the rest of Phlegon's writings are preserved by Suidas. It is supposed that the History of Hadrian, published under Phlegon's name, was written by Hadrian himself, from this passage of Spartianus: " Hadrian thirsted so much after fame (fays he), that he gave the books of his own life, drawn up by himfelf, to his freedmen, commanding them to publish those books under their own names; for we are told that Hadrian wrote Phlegon's books."

Phlegon's name has been more familiar among the moderns, and his fragments have had a greater degree of regard paid to them than perhaps they deferve, merely because he has been supposed to speak of the darkness which prevailed during our Lord's passion. The book in which the words are contained is loft; but Eusebius has preserved them in his Chronicon. They are these: " In the 4th year of the 202d Olympiad, there was a greater and more remarkable eclipse of the fun than any that had ever happened before: for at the fixth hour the day was fo turned into the darkness of night, that the very stars in the firmament were visible; and there was an earthquake in Bithynia which threw down many houses in the city of Nicæa." Eusebius thinks that these words of Phlegon related to the prodigies which accompanied Christ's crucifixion; and many other fathers of the church have thought the same : but this opinion is liable to many difficulties ; for no man had ever a stronger desire than Phlegon to compile marve'lous events, and to observe the supernatural circumstances in them. How was it then possible that a man of this turn of mind should not have taken notice of

the most furprifing circumstance in the eclipse which it is Phlegon; imagined he hints at, viz. its happening on the day Phlogitton when the moon was at the full? But had Phlegon done this, Eusebius would not have omitted it; and Origen would not have faid that Phlegon had omitted this particular.

It was a matter of controverly some time ago, whether Phlegon really spoke of the darkness at the time of our Lord's passion; and many differtations were written on both fides of the question. This dispute was occafioned by the above passage from Phlegon being left out in an edition of Clarke's Boyle's Lectures, published after his death, at the instance of Sykes, who had suggested to Clarke, that an undue stress had been laid upon it. Whiston, who informs us of this affair, expresses great displeasure against Sykes, and calls "the suggestion groundless." Upon this, Sykes published "A Differtation on the Eclipse mentioned by Phlegon: or, " An Inquiry whether that Eclipse had any relation to the darkness which happened at our Saviour's Passion; 1732," 8vo. Sykes concludes it to be most probable that Phlegon had in view a natural eclipse which happened November 24, in the first year of the 202d Olympiad, and not in the 4th year of the Olympiad in which Christ was crucified. Many pieces were written against him, and to some of them he replied; but perhaps it is a controverfy which concerns the learned world merely, fince the cause of religion is but little affected by it.

Photius blames Phlegon for expatiating too much on trifles, and for collecting too great a number of answers pronounced by the oracles. "His style (he tells us) is not altogether flat and mean, nor does it everywhere imitate the attic manner of writing. But otherwise, the over nice accuracy and care with which he computes the Olympiads, and relates the names of the contests. the transactions, and even oracles, is not only very tirefome to the reader, whereby a cloud is thrown over all other particulars in that book, but the diction is thereby rendered unpleasant and ungrateful; and indeed he is every moment bringing in the answers pronounced by

all kinds of deities."

PHLOGISTON, a term used by chemists to denote a principle which was supposed to enter into the compo-

fition of various bodies.

The bodies which were thought to contain it in the largest quantity are such as are inflammable; and the property which these substances possess of being susceptible of inflammation was thought to depend on this principle; and hence it was fometimes called the Principle of Inflammability. Inflammation, according to this doctrine, was the feparation of this principle or phlogiston from the other matter which composed the combustible body. As its separation was always attended with the emission of light and heat, some chemists concluded that it was light and heat combined with other matter in a peculiar manner, or that it was fome highly elastic and very subtile matter, on certain modifications of which heat and light de-

Another class of bodies which were supposed to contain phlogiston are the metals; and the chemists supposed that the peculiar lustre of the metals depended on thisprinciple. Of this they thought themselves convinced by the evidence of their fenses in two ways; viz. first,

Phlogiston. because by exposing a metal to the action of a long continued heat, it lost its metallic lustre, and was converted into an earthy-like fubstance called calx metallicus or oxide; and fecondly, because by mixing this oxide with any inflammable substance whatever, and subjecting the mixture to certain operations, the inflammable matter, disappeared, and the metal was restored to its former flate and luftre, without fuffering much diminution in quantity, especially if the processes had been conducted with care and attention.

This fact relative to the metals was thought to be a full demonstration of itself, independent of other proofs which were brought to support the doctrine. were, that a combustible body, by the act of inflammation (i. e. by the diffipation of its phlogiston in the form of heat and light), was converted into a body that was no longer combustible, but which might have its property of combustibility restored to it again by mixing the incombustible remains with any kind of inflammable matter, and submitting the mixture to certain processes. In this way the body was restored to its former state of

They were also at some pains to prove that the phlogiston or the principle of inflammability was the same in all inflammable bodies and in the metals. This identity of phlogiston they thought to be evident from the fact, that the calx of a metal might be restored to its metallic state, or that the remains after the combustion of a combustible body might be restored to its original flate of combustibility by the addition of any inflammable body whatever, taken either from the animal, vege-

table, or mineral kingdoms. These and several other facts were brought to prove, not only the existence of phlogiston, but its essects in mixture with other fubstances; and the objections which were made against the doctrine were removed with wonderful ingenuity. The chief objection against it was, that if the inflammation of a combustible body, or the conversion of a metal into calx, depends on the diffipation or extrication of phlogiston; then it must follow, that the remains of a combustible body after inflammation, and the calx of the metal, must be less than the matter from which they were produced: but this is contrary to fact; for when we collect with care all the vapour into which the purest inflammable bodies are converted by combustion, these incombustible remains are much heavier than the inflammable body was from which they were produced, and the calx into which a metal is converted by long exposure to the action of heat is heavier than the metal from which it was produced. This confideration made feveral people doubt of the truth of the doctrine; but the objection was removed by faying, that phlogiston was so subtile, as not only to have no weight, but to poffefs an absolute levity; and that when it was taken from an absolutely heavy body, that body must, by losing so much absolute levity, become heavier, in the fame manner as the algebraifts fay, that a positive quantity is augmented by the subfiraction of a negative quantity. This fophilm fatisfied the minds of most of the chemists, especially those who were algebraifts.

The opinion that phlogiston was heat and light somehow combined with other matter, was proved, not only by the fact, that heat and light were emitted from a combustible body during its combustion, but from the reduction of certain metallic calces to the original me-

tallic state again, at least in some degree, by simple ex- Phlogiston. pofure to heat and light. The white calx of filver for instance, when exposed in close sealed glass vessels to the light and heat of the fun, refumes a black tinge, and is in part restored to its metallic lustre without any addition whatever; but then this restoration, like the others above-mentioned, is attended with a loss of weight.

Besides constituting the principal part of inflammable bodies and metals, phlogiston was thought to be the cause of colour in all vegetable and animal substances. This was concluded from the fact of plants growing white when defended from the action of the fun's rays, and in having their green colour restored by exposure to his rays again; and fo far did the chemists suffer themselves to be deceived, that they actually thought the green colouring matter, which they extracted from fresh plants by certain chemical processes, to be an inflammable fubstance. A very material objection was made to this argument, viz. if plants owe their colour to phlogiston imparted by the sun's rays, why do the fun's rays destroy vegetable colours that are exposed to them? for we know that the fun's rays are very effectual in diminishing the lustre of cloth dyed with vegetable colours, and in bleaching or taking out various stains from linen and other substances. All this was removed by faying, that the fun's rays possessed different powers on living and on dead vegetable matter, and that the living vegetables had the power of absorbing phlogiston from the sun's rays, which dead vegetable matter had not.

Since the existence of phlogiston, as a chemical principle in the composition of certain bodies, is now fully proved to be false, we shall not trouble our readers with any farther observations on it, except adding, that although the chemists were satisfied with the proofs they gave of its reality, they were never able to exhibit it in a separate state, or show it in a pure form, unmixed with other matter.

Phlogiston seems to have been admitted as a principle in the composition of certain bodies, and to have been supposed the cause of certain modifications of matter, merely with a view to explain some of those natural phenomena which the authors of it were unable to explain on other principles. Subfequent discoveries in natural philosophy and in chemistry have represented things in a very different light from that in which the old chemists viewed them. The old chemists knew nothing but chemistry; they seldom extended their views to the observation of objects beyond their laboratories, and it was not till philosophers became chemists, and chemists philosophers, that chemistry began to wear the garb of science. The epoch in which this change began was in the time of Lord Verulam, who first removed the dimness from the chemist's eyes, and to him succeeded the honourable Mr Boyle. Sir Isaac Newton, with the little affiftance which his predecessors in this branch of science afforded him, is in reality the first who established chemistry on scientific ground. It must, however, be acknowledged, that although he made a great progrefs, he left much undone; and fubfequent chemists, who were less accurate observers of nature, admitted principles unwarrantably. From the time of Sir Ifaac Newton till the middle of the 18th century, no real improvement was made in scientific chemistry; and the progress this science has made fince that period is

