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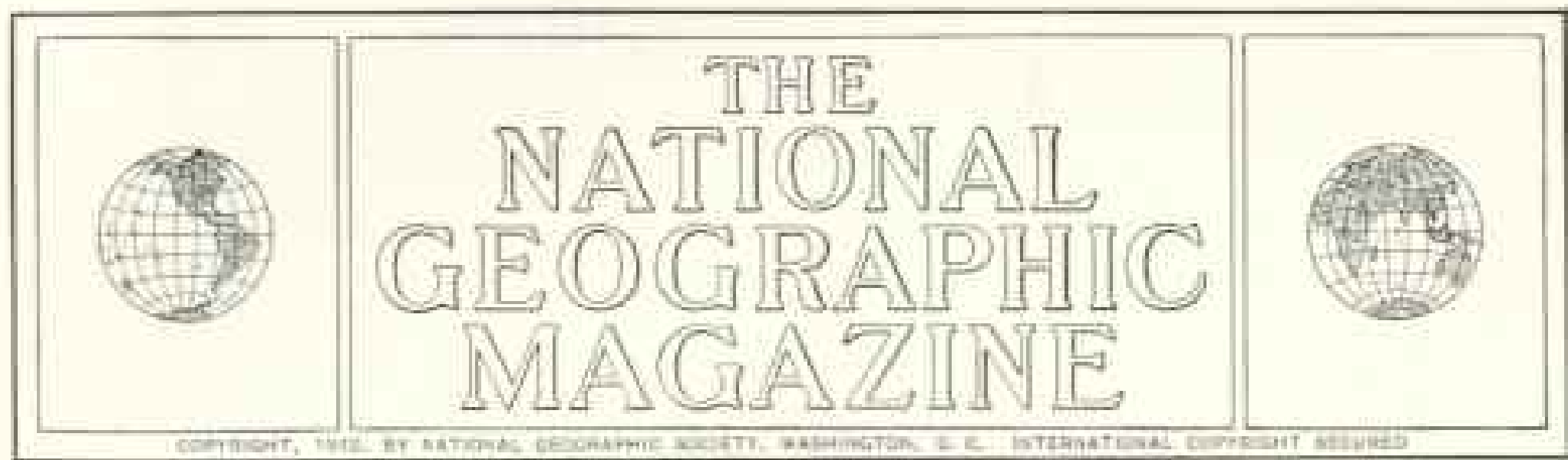
11 Natural Color Photographs

HANS HILDENBRAND

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BEYOND THE GRAND ATLAS

Where the French Tricolor Flies Beside the Flag of the Sultan of Morocco

By V. C. SCOTT O'CONNOR

AUTHOR OF "A VISION OF MOROCCO"; "THE SILK OF EAST"; "THE CHAIR OF KASHMIR"; "ISLES OF THE AEGEAN"; "THE SCENE OF WAR"; AND OTHER BOOKS OF TRAVEL.

MOROCCO, long an empire guarded from the coveting eyes of Europe by the will of a proud and exclusive people, remains in her subjection a land tempting to the traveler in search of new and even rude experiences.*

She is a country up-to-date, accessible, civilized; yet barbarous, antique, and forbidden. She is French, Spanish, Berber, Arab, and Jew. She has been nursed for a thousand years on the subtle policies of the Orient, though farther west than the greater part of Europe.

Her emperors, some of whom were lords and masters of Spain, built great cities and castles and palaces and fortresses, before America had come out of the Land of Dreams. They endowed universities and colleges for the cultivation of learning, the terms of whose foundations resemble those at Oxford and Cambridge; with some of which they were contemporary. The same cloistered beauty is to be found in both; the same lofty ideals of faith and devotion.

They assembled in their prime, great armies for the conquest of the world, and fleets that swept the Christian seas. Though children born of the desert, they arrogated to themselves great pretensions; claiming the Divine Right, not merely as kings but

as saints by lineage. Their tombs, where ruin has spared them, remain as lovely as any in the world; their gardens of running waters are still a delight to those permitted to enter them.

And yet, half the population of this country lives on in the ways of Abraham, Isaac, and Jacob.

WHERE 20 CENTURIES HAVE BEEN COMPRESSED INTO 20 YEARS

She is an Eastern land in the marrow of her bones, though placed in Africa; and she has been penetrated through centuries by European influences, which lie deep under the surface of her oriental life. Her camel caravans remain coeval with the airplane; and a tribesman of the desert, wounded in battle, can find himself carried through the air to a French hospital across the whole width of impenetrable Atlas. Twenty centuries have here been compressed into as many years.

She includes within her borders mountains almost as stately as the Rockies or the Alps; valleys profound and lovely; cedars as noble as those of Lebanon; olive groves like those of Delphi; vines that grow wild, or are as cultivated now as those of Provence; cities like Fès which belong to the Arabian Nights, and Marrakech the Granada of Morocco, which glows in her fierce sunlight girdled by palm

* See, also, "Across French and Spanish Morocco," by Harriet Chalmers Adams, in the NATIONAL GEOGRAPHIC MAGAZINE for March, 1925.



Photograph from V. C. Scott O'Connor

FRENCH AVIATORS MANEUVER OVER AZROU

With the advent of the French, Morocco advanced in one step from an almost primitive life to that of the automobile and airplane. Tribesmen wounded in French service are no longer surprised when they are transported by airplane and ambulance to an up-to-date hospital in one of the larger cities. To the markets and souks in Azrou come the tribesmen of the Beni Mguild who make their wandering home in the surrounding plains, which extend to the foothills of the Atlas. The Beni Mguild furnished the Almoravides with contingents when they overran Spain (see text, page 275).



Photograph by Gilbert Râtel.

NAKED FEET HELP TO PRESERVE THE QUIET OF MADRASSEH BOU INANIA IN FÈS

This combination college and mosque was built and endowed 143 years before the discovery of America. While it is in a sad state of repair to-day, its graceful arches, intricately carved cedar panels and screens, and marble floor show to what fine detail the Moors carried their building art when at the height of their power. Many of the rich carvings on the walls are quotations from the Koran.



Photograph by Gillet-Ratel

ANY EGGS TO-DAY, LADY?

As their forefathers have done for generations, egg and chicken sellers display their wares, in baskets and on the "hoof," on the shady side of a street of Fès. Languid pigeons rest on the crumbling mud wall behind, within easy reach, but difficult to grasp.

oases, within a day's march of snow-covered summits, "white as salmon" as Drake observed them in the course of his circumnavigation of the world; cities and peoples passionate with the fury and excess of Africa, yet profoundly inspired by the worship of the One God, their compassionate and merciful Allah!

For these and other reasons, this country grips one, though the world be at one's disposal; and I come to find that each visit I pay there, intending it to be the last, becomes but the doorway to another.

In this I discover a special reason; for I am caught, like those who live and rule and fight there, in the process of a continual advance. Each year the pacified frontier of this violent and poetic land marches on into regions unknown. Each year I find some new tract become accessible; old castles unsuspected, and chieftains living in them in medieval state; clans and tribesmen at war, now gathered into the fold; maps that record a twelve-months' progress, with all sorts of lines and spots and

frontiers marked on them, each with its fascinating tale of valor or industry to tell.

And yet, this advance which seems as inevitable as the march of a Roman legion, meets every now and then with sharp and compelling vicissitudes. Out of the clear sky of this Africa there rises, as suddenly as the simoon, a cloud no bigger than a man's hand, and swiftly it threatens to overwhelm and to ruin all!

WHERE YOUNG FRENCHMEN FIND OPPORTUNITY FOR ADVENTURE

The history of Morocco is one of violent unrest and order in continual balance. I should like to tell that story and its implications over the last twenty years.

Since the magnificent failure of Abd-el-Krim, who all but broke the power of Spain in Africa and went near to reconquering Morocco from the French, the Tricolor now blows beside the flag of the Sultan over nearly all of French Morocco; *but not quite*. There are regions in Great Atlas where die-hards still maintain their



Photograph by Dr. Gilbert Grosvenor

THE HORSESHOE GATE OF BOU JELOUD FRAMES A VIEW OF SOUKS AND MOSQUES

The larger minaret, with graceful square tower tipped with spire and balls, is Madrasseh Bon Inania, the pride of Fés (see page 263). The smaller tower, crowned with a huge stork's nest, is the mosque Sidi Lezzaz. The faint figure of a stork may be dimly discerned.

freedom, delivering shrewd blows at their conqueror from time to time; and in the desert spaces of Sahara, horsemen and cameleers who ride acknowledging no lord.

It is these gentlemen who keep France busy, and offer her young men opportunities of advancement and adventure, beyond that borderland known as the Zone of Security. I can imagine—for I have felt it myself—the attraction of such a life for a man grown tired of his boulevards and the charms of an overripe civilization; but it is closely sealed. No traveler may enter it without a strict permission, and there are places where even a French permit does not run.

It is not very difficult to have your throat cut if you cross that line. The *rebkas*, or secret messengers of France, faithful to their salt, frequently endure that fate. Nameless, unknown, they perish, leaving no ripple behind them.

But the sands of this colored and attractive life are running out, and short of another European war or some violent uprising in Asia, the triumph of France seems

assured. None the less, these last pages of her story remain romantic enough; telling a tale of policy and arms, fanaticism and pride; of resistance, surrender, and swift revolt, that await a scribe.

But France in Morocco has not produced her Kipling. I doubt if she ever will. One great traveler she has produced, the Vicomte de Foucauld; and one administrator of genius, the Maréchal Lyautey, grown white-haired and old in the service of France.

A PANORAMA OF THOSE WHO PARTICIPATE
IN THE ADVENTURE

All kinds of people have taken a hand in this adventure; crafty and ambitious chieftains and fighting prophets; smooth diplomatists and hard-hitting commanders of the Foreign Legion; Christians, Infidels, and Jews; generals as lean as their swords—*trempés*, as they say—tempered, by a life in the Sahara, friends in their youth of De Foucauld and Laperrine; realists yet mystics like the people of the desert themselves, and quite the best kind of man you can hope to meet in northern



Drawn by C. E. Riddiford

"MOROCCO IS AN EASTERN LAND, THOUGH PLACED IN AFRICA"

"She includes within her borders mountains as stately as the Rockies, valleys profound and lovely; cities which glow in fierce sunlight within a day's march of snow-covered summits."

Africa; meharists of the camel corps who swagger about in their vast white *pantolons*; flight commanders who cross the Atlas, dropping bombs upon the gathering tribes, and making new maps from the air; royal princes with an urge for adventure; drummers and army contractors out for pelf; ladies of high rank and great virtue, and ladies of many charms who possess neither; innkeepers and *cantiniers*; French children who become the attached companions of retired die-hards; drivers of armored cars and lorries sprung from half the nations of Europe, with weird personal histories, and a knack of extricating themselves from every adventure, or dying game; literary gentlemen whose home is in Paris and whose public resides in France; *missions-scientifiques*; hydrologists; Deputies of the French Republic, shepherded

in flights; newspaper men, unwelcomed; Marshals of France with famous names; the Resident General of Morocco himself, carefully guarded and surrounded with pomp and ceremonial observance; and something like 30,000 *légionnaires* (mostly Germans) who, having no country of their own, fight for that strange thing—the Honor of the Legion—and do the work of France for a few cents a day; Ishmaelites all. *Hail Cæsar!*

Upon the other side, and almost as quixotic, is their friend the Dissident, who provides the occasion and the battle ground for all this adventure; a queer chap, with an odd love of freedom and of his native hills; a bit of a troubadour; somewhat of a patriot and fighter for the Faith; gallant, truculent, treacherous, and cruel; but always very much of a man, with a keen sense



Photograph by Braanon De Cou

LATTICEWORK TEMPERS THE HEAT OF THE NOONDAY SUN IN MEKNÈS

During the long summer the Moroccan sun is blinding and the heat suffocating, but in the fall and especially in the spring, after the rains, when the barren plains turn to green, the weather is delightful. Along the narrow, winding streets small shops huddle in alcoves. In place of plate-glass fronts are carved wooden doors, left open in daytime. Wares, all exposed to the dust and flies of the street, range from bright Moroccan tooled leather and hammered brass to sides of beef or mutton (see Color Plate III).

of humor allied with a strict attention to business. Awhile ago he raised a laugh throughout Morocco by stealing two care-free gentlemen of the Resident General's household with their respective ladies; and returning them, a little damaged, in exchange for five million francs and a gramophone of the very latest design, with all recent improvements, duly specified.

The Berbers, to whose category he belongs, have always been "agin" whatever government there has been in the land; willing, as gentlemen, to follow any great leader to plunder and war; unwilling to follow anyone for long; the real nucleus of the Moslem armies who conquered Spain, and near of kin to those who marched across the Alps with Hannibal to the walls of Rome. The name of Hannibal is still, I am told, to be found among them.

During the World War they furnished battalions whose record of valor was of the highest quality, irresistible in attack; and it is with them that France must make her account. She will probably end by assimilating them, for she has a great gift that way, and the Berber has a European mind; but—there is the question of religion.

THE ROUTE IMPÉRIALE

These, then, are the people, and this the kind of region of which I am concerned here to tell the tale. To know them at all you have to penetrate the Atlas; cross it, and travel into the desert regions beyond, where they become lost in the immensity of that half-known world we call the Sahara.

There are several ways across; some in the keeping of Berber lords and chieftains



Photograph by Dr. Gilbert Grosvenor

ONE OF THE STRANGE AND EXOTIC CASTLES OF MOROCCO AT KHENIFRA (SEE, ALSO, OPPOSITE PAGE.)



Photograph from V. C. Scott O'Connor

EN ROUTE TO THE OASES OF TAFILALET: AUTOMOBILES PASS IN REVIEW BEFORE THEIR ARMORED CAR CONVOY AND THE FRENCH FOREIGN LÉGIONNAIRES



Photograph by Dr. Gilbert Grosvenor

KHENIFRA WAS THE KEY TO FRENCH MOROCCO DURING THE TRYING DAYS OF THE WORLD WAR

News of Europe's great conflict spread like wildfire among the Berber tribes, and a Holy War was declared to drive out the French. Repeated attacks were made upon Khenifra, but all went well for the French until the garrison made a surprise sortie against the camp of the enemy 10 miles away. Returning, this force was practically annihilated by the fierce Zaian tribe, with a loss of 800 men. A revenging column defeated and dispersed the tribes, and thenceforth the French stayed within these walls until after the war. To-day, all is quiet at Khenifra; even the Zaian have come into the French fold and are fighting battles for their new overlords (see, also, text, page 318).



Photograph by Dr. Gilbert Gruvenar

EL HASSAN, POWERFUL CHIEF OF THE ZAÏAN TRIBE

One day the fourteen sons of the late Moha Ou Hammou, who had long resisted bitterly the French advance, appeared at the enemy camp and surrendered. When the French commander suggested that the Zaïan chief might well follow the example of his sons, Moha sent word that he had ordered his sons to render allegiance to the French, but that he was too old to change his habits. He continued his defiance and was eventually shot and killed by men commanded by his own sons. By directing them to surrender, he saved for his sons his vast property and made sure that one of them would become chief. El Hassan, in the dark robe, can neither read nor write, such accomplishments being regarded by the Berbers as too effeminate for the chieftain of 15,000 horsemen (see, also, illustration on opposite page). At left, Gen. M. E. J. de Loustal.

who hold or have held baronial sway in the mountain passes; others in those of confederate tribes, loosely knit together in republican communities, continually in flux, and perpetually at war. Three of these ways I have frequented in the last two years, but this is the story of one—the Route Impériale.

It runs, this highway as old as time and new as yesterday, from Meknès, the capital of Moulay Ismaïl, the Louis Quatorze of

Morocco (in whose days King Charles II and Samuel Pepys, between them, gave up their English hold on Morocco, so changing the destiny of this world), across the Middle and the Grand Atlas, and the valley of the Moulouya River, which divides them the one from the other; to the Oases of Tafilalet, the cradle of the present dynasty of Morocco, and the bourne of all ambitious travelers to Morocco (see map, page 266).



Photograph by Dr. Gilbert Gouvenor

THE "BIG TOP" OF CHIEF EL HASSAN IS WOVEN OF CAMEL AND GOAT HAIR

This black tent differs from that of any other nomad tribesman only in size and in the fact that it is lined inside with draperies woven by the women of the chief. The earthen floor is carpeted with rich purple rugs. El Hassan, chief of the vanquished Zaian tribe, now allied with the French, owns 5,000 cattle, 8,000 horses, and 20,000 sheep and employs secretaries to keep the records of his flocks and herds. When the chief is not in the field with his tribe, he lives in the luxurious castle of his ancestors at Khenifra (see, also, illustrations, pages 269 and 270).



Photograph by Gillet-Ratel

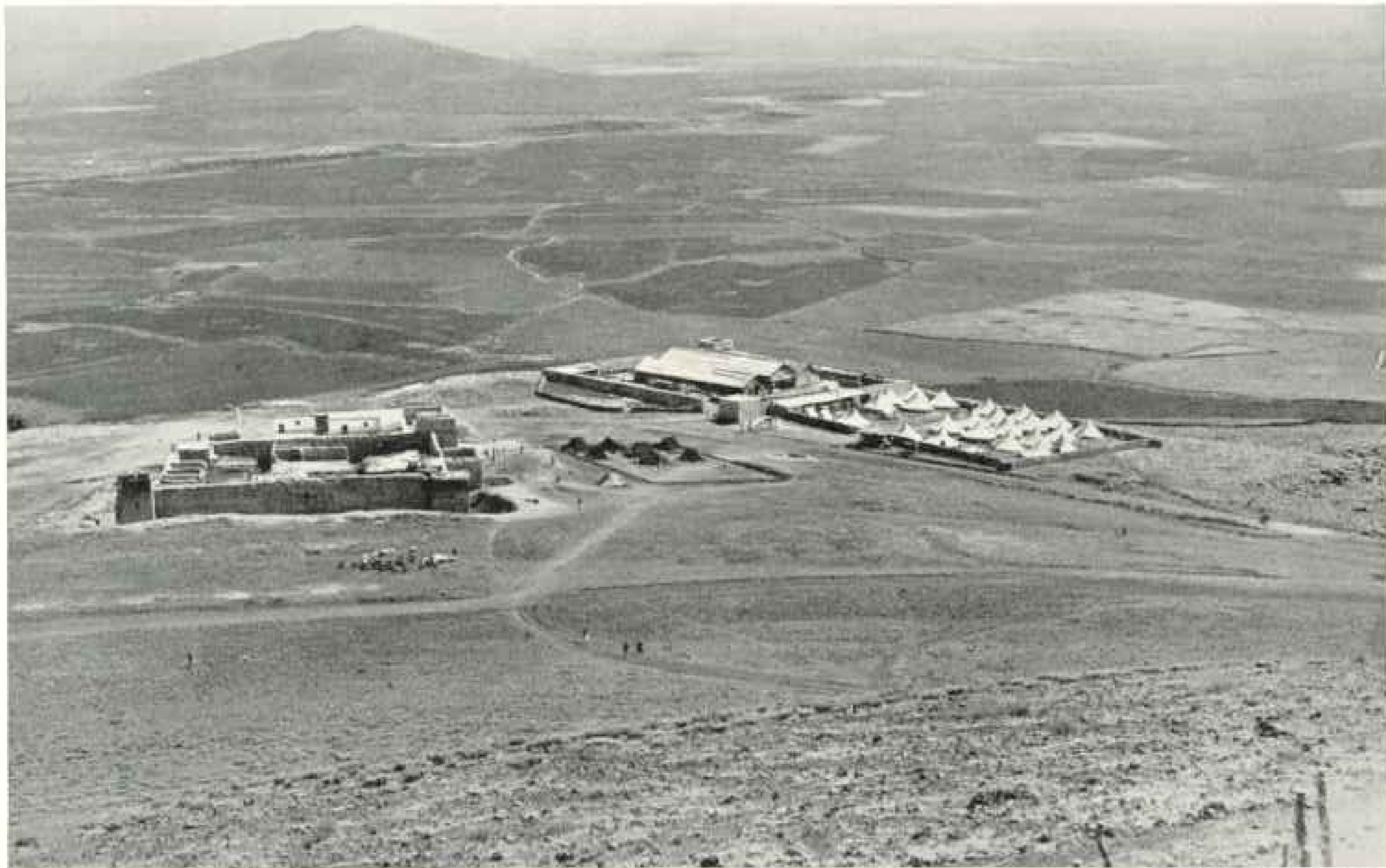
HOODED CLANSMEN WELCOME FRENCH OFFICIALS



Photograph by Flandrin.

HERDS OF SHEEP GRAZE IN THE SHADOW OF KASBA TADLA, A NOBLE REMNANT FROM MOROCCO'S DAYS OF MIGHT

The citadel, erected by Moulay Ismaïl the Bloodthirsty, is one of the most impressive in all Morocco. Repairs and reconstruction have not changed its original aspect appreciably. Its builder maintained here a garrison of 3,000 negroes to hold the surrounding country in subjection. Now it is a French stronghold.



Photograph by Flandrin

AN ISOLATED FRENCH OUTPOST IN THE TIMHADIT REGION, MIDDLE ATLAS MOUNTAINS

By day the surrounding country is quite safe, but at night lone wanderers do well to keep within the protecting walls of the fort. In such strongholds the garrison usually consists of a group of French Foreign *Légionnaires* or perhaps Berber *Mokhazni* cavalry (French territorial troopers). Some Berber tribesmen have pitched their low black tents between the walls of the ancient fort at the left and the more modern one, in whose compound conical army tents are set in regular rows. Cattle graze near by under the watchful eyes of a shepherd.



THE CHIEFTAIN OF TIMHADIT VISITS AZROU

The splendid old man of Arab descent (center), whose fine gray charger is fitted with green saddle cloth and harness richly embroidered in gold, has many wives, many children, many flocks, and many men under arms.



Photographs from V. C. Scott O'Connor

A FRENCH COMMANDER RECEIVES A MOORISH CHIEFTAIN

The flag is that of the Second Regiment of the Foreign Legion, a corps famous for its feats of arms in northern Africa and now consisting almost entirely of German volunteers. A ceremony at Azrou.



Photograph by Flandrin

FROM THE AIR, TIMHADIT CRATER RESEMBLES A LARGE SHELL HOLE.

Beyond Azrou the forest ends and the Imperial Road enters a mountainous region of dead volcanoes and lifeless lava flows. The French military outpost at Timhadit clings to the edge of a crater's rim (see text below).

It is open to everyone now as far as Azrou, in the Middle Atlas, famous in the early years of the Protectorate as an advanced outpost of France, but now becoming a civilian place; of little inns, and a market place the haunt of trading Jews and proud swaggering clansmen of the Beni Mguild, whose flocks and herds and 8,000 tents may be seen upon the pasture lands to the high waters of the Moulouya.

These, who once carried the Almoravides to power, and furnished their contingents for the invasion of Spain, are now fast settling down to ways of peace; but in the cedar forests there is still need for watch and ward. As my car runs through in the daylight hours, Berber sentinels stand with their rifles laid beside them in the forest, their belts full of cartridges ready for use. At night their armed horsemen ride, patrolling the road for France.

The forest ends; an upland world of old volcanoes and mountain tarns and hill-sides white with snow takes its place. The snow lingers here into these early days of spring, in splashes which make tiger patterns on the hills. Ages have gone by

since these volcanoes broke the quiet of this world; but the rents through which the red lava flowed, and the projectiles flung from their bowels, still relate that tale.

TIMHADIT POST CROWNS THE RIM OF A CRATER

At Timhadit, a military post renowned in the story of France and Morocco, crowns in the most dashing manner the rim of an extinct volcano, 6,000 feet above sea level. Its once-fiery crater is buried in winter under heavy falls of snow, which isolate this outpost and block the highway. Skis are then the fashion.

Eighteen miles away in the Berber hills, at a height of 9,000 feet, is the fortress of Bekrit, often isolated in the past and cut off from the rest of Morocco, save when relieving columns could fight their way to it.

I wish that I could stay to tell the reader that romantic tale of frontier valor and feats of arms, worthy of the pen of a Washington Irving. But here am I now in a wild borderland through which the



Photograph from V. C. Scott O'Connor

A FASHION NOT YET INTERNATIONAL

The women of Azrou beautify themselves by stenciling with henna designs on their hands, feet, and ankles.

Guigo River winds between walls of black basalt and lava, on its way to the far-distant civilized city of Fès; while above it, dominating its life, is the fortress, perched like an eagle's nest upon the summit of cliffs whose walls drop sheer 2,000 feet to the river's edge.

This stream has run in its day with blood and fire; yet in its quiet hours it flows a clear blue water that might pass for a little English stream.

Scenes of a luminous beauty now captivate my eyes where the Lake of Sidi Ali reflects in its tranquil surface the image of the sky. Flocks of Berber sheep graze here beside it in the care of lonely shepherds; and colonies of storks reflect their

black and white wings as they feed in its shallows, or make wide circles in the sky. A dead volcano rises from its shores, its cone still littered with the missiles once flung from its vent. The mountains that inclose it are bright with the retreating snow.

Here, in this lovely spot, destined to become before long one of the pleasure haunts of Morocco, there is no house or habitation, but only an outpost of the Foreign Legion; rude and threatening with its barbed wire and guns, and heavily blockaded in winter by the snows. I spend the night here at the invitation of the young officer in command, and it becomes bitter cold as we sit over his wood fire and he tells me of his life, and of his friends "the enemy," and of the légionnaires he loves, though he rules them with a rod of iron. His little German corporal takes

photographs with an expensive camera and when I cross the shallows takes me over on his back! "What brought you here?" I inquired. "A love affair," says he.

SCENES FROM NAPOLEONIC DAYS

Into this lonely world, "as old as Carthage," there comes, as I wait, the Resident General and High Commissioner of France with a sudden flare and entry; his staff of General officers, an escort of Spahis in scarlet, and Berber Mokhazni cavalry in blue cloaks, decorated with rows of medals won in the World War, the testimony of valor. The horsemen of the tribes assembled to meet the Resident, close their ranks and charge, firing their muskets into the air and

raising their war cries; last remnants of an age of chivalry that is passing from our midst.

At the head of them, and in advance of their own chieftains, rides an old French officer; erect in his saddle, his sword at the salute. The stars and medals on his breast speak of many a battle and combat. A hundred years have altered much in France; but behind the façade of our times, many a Baron de Marbot, many a soldier of the Old Guard, lives on; and sometimes I wonder what would happen to France if she got another Napoleon!

This place, so silent and quiet yesterday, is now transformed into an assemblage of all the notables of the hills. The black-and-white Berber tents are pitched in order on the plain; and scores of horsemen are now galloping about, their little barbs prancing with pride and excitement, the sun shining upon their saddlecloths of crimson and green and gold, their long muskets enriched with circlets and bands of silver and ivory; their women clad in bright colors, beating their castanets, crying out their "You-yous," after the manner of the classic Greeks; and dancing with slow ritual the ancient dances of the Berber clans.

BERBERS ARE WHITE-SKINNED

A white-skinned people, no one really knows their origin. The men are lean and swift in action; the women often beautiful with their dark antimonied eyes and slender painted fingers; the children charming. Fierce and turbulent, the Berber is a man—gay and spendthrift of his life.



Photograph from V. C. Scott O'Connor

MOROCCAN MUSICIANS BLOW TILL THEIR CHEEKS SEEM READY TO BURST

Usually accompanied by drummers and graceful boy dancers in the guise of girls, the trumpeters are always the center of a crowd in the souks. By varying the tempo of their blasts, they regulate the speed and contortions of the dancers.

A banquet is prepared in the great tent of the chieftain of Timpladit, with carpets of bright colors laid upon the floor, and cushions of silk and velvet embroidered with gold for his guests to recline on. The roast meats, that have been cooking in the sun on brushwood fires, are brought in in procession, raised high on skewers like spears, and placed upon the floor; while the chieftain's sons with a polished courtesy wait upon his guests. A scene from the Middle Ages!

From under the rim of the tent, as we lie at ease, we look upon the beauty of the blue waters of the lake and the snow upon



Photograph from Lieutenant Johnston

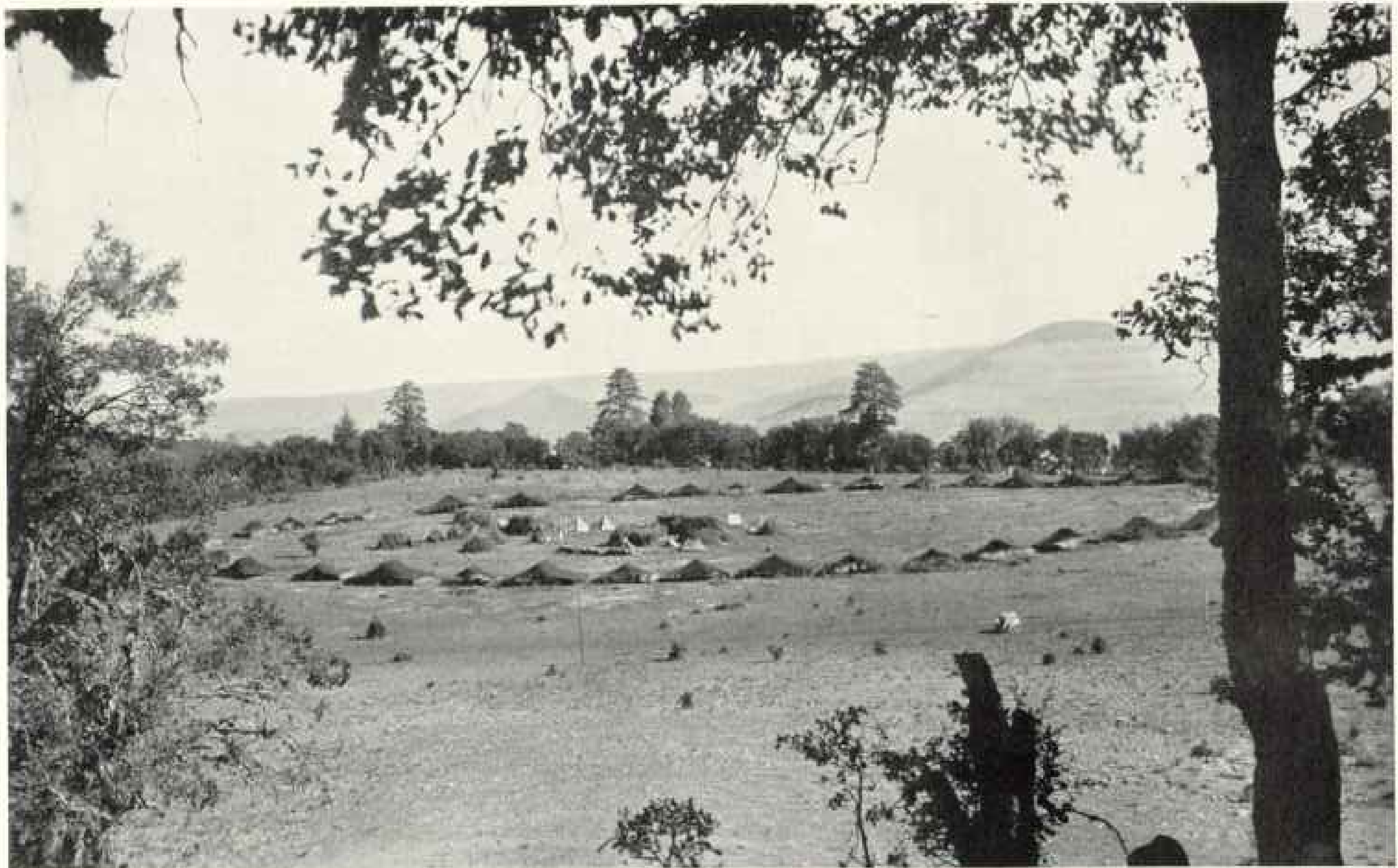
THE RESIDENT GENERAL AND HIGH COMMISSIONER INSPECTING TROOPS WHO FIGHT UNDER THE TRICOLOR IN MOROCCO



Photograph from V. C. Scott O'Connor

THE CHARGE OF A LIGHT BRIGADE NEAR ITZER, IN THE VALLEY OF THE MOULOYA

Tribesmen stage a dashing display of military prowess to the accompaniment of much gun-firing for the especial benefit of the French Resident General and High Commissioner (see text, page 280).



Photograph by Flandria

TRIBESMEN DITCH THEIR TENTS IN A CIRCLE TO PROTECT THEIR CATTLE

At night the herds are driven into the inclosure and the space between the tents is filled with thorny brush. The Beni Mguild people migrate in summer to the headwaters of the Moulouya River, in the Grand Atlas, but when winter comes they seek the rich pasture lands of the valleys and cedar forests of the Middle Atlas (see page 275) and the plains. They carry all their possessions with them—purple-black tents, cattle, women, and children. This hard life has made them a rugged lot, and they are a constant source of trouble to the French in the extension of their sphere of control.

the hills beyond. A few years more and all this life will have passed away.

THE HOT BREATH OF THE DESERT IS
NOW FELT

The Imperial Road, soon to become one of the great arteries of northern Africa, now enters a forest of cedars, through whose dark avenues and swaying boughs there is disclosed, like a sudden apparition, the long and glittering array of the highest peaks of the Atlas, strung in a line upon the horizon. Ten thousand feet below those still unconquered heights, and unseen from this belvedere, the Moulouya River takes its way to sea, to old Spanish presidios of 450 years ago. This is one of the great inspiring views of Morocco.

The half-finished road on which I am traveling now drops swiftly past the fortress of Itzer to the Moulouya, whose passage no traveler familiar with this land can make without emotion, for it is one of the great dividing places of its history.

Here now is a region utterly unlike that we have traversed from the Atlantic; a desiccated, waterless land, through which the river, replenished in summer by the Atlas snows, flows, a stranger.

The geography of this valley is written for the eye to see, in the steppes through which the river has burrowed its way, invisible in places, to its present level. From its banks steep pyramids and tables rise, whose nakedness reveals the long story of a dying and denuded world; and though Grand Atlas ahead of us is still a barrier, I feel already the hot breath and thirsty mouth of the desert.

This is the *goras* region, illuminated and transformed into magical waves of color at the rising and setting of the sun. There are regions in Persia, in Colorado, and in Texas which are its near of kin.

And yet afar off, upon the horizon, a snow-laden peak 10,000 feet high glitters like an iceberg above a heat-ridden world.

THE ROAD TO TAFILALET

French enterprise, persistence, and valor have made our swift journey possible so far, and I reflect that only once before in the history of this land has the Atlas been crossed by a European army—when a Roman legion marched from the city of Volubilis, whose ruins subsist, to impress upon the ancestors of the Berbers the invincible might of Rome.

But we are not yet across the Grand Atlas. His highest peak confronts us, a mighty barrier; and none may travel on the new road to Tafilalet, that ancient mysterious and forbidden region of oases, without military sanction.

Yet is it an old road, frequented through the ages and at the hazard of their lives, by caravans laden one way with the dates and Morocco leather of Tafilalet, the gold dust and ostrich plumes of Timbuctoo; the other with corn and oil and the necessaries and marvels of the West.

All the early romance of trade and barter is here, and many men have died for it. Armies and great princes have gone this way to conquest; while from the hungry south, the Puritans of Islam have come up like locusts in their flight, to purge the luxurious cities of their wealth, to seize at the points of their swords all that desert hearts can covet, and, themselves to perish at last of the faults they set out to redeem.

We are arrived here at an epochal moment, when the great tide is flowing from west to east, escorted by the trumpets and battalions, the machine guns and the airplanes of France. The history of the future is being written here, and the epic adventure is entering upon its last phase. Soon, it may be, all this country will be open to the world.

ACROSS THE VALLEY OF THE ZIZ (SEE
PAGES 294, 295)

Crossing by high passes and wide and desolate valleys, imprisoned within successive chains of hills and defended by new fortresses and guns—themselves liable to sudden annihilation at the hands of the insurgent clans—the New Road takes its way, invincibly, to the broad valley of the Ziz. Fated never to reach the sea, that river will yet, before it perishes in the desert sands, make fruitful lands that could not otherwise live. Like all else in Morocco, it is a creature of strange and violent contrasts. The rude hills that inclose it are bare and stern, their massive forms look as though they would defy time itself. Yet on a near approach are they manifestly worn and graven with the fingers of decay. Deep gashes line and furrow their sides. Wind and rain and earth convulsion make of them a battle ground.

And yet again, wherever the river flows, it is accompanied by fortified villages and aspiring towers, the homes of republican



Photograph by Claudin

THE CEDAR IS THE MONARCH OF THE MOROCCAN FOREST

Found only in the higher regions, at altitudes of 3,500 to 7,500 feet, these green giants occasionally grow to the height of a thirteen-story building. The French are conserving the Middle Atlas forests in the territories which they control, but the natives destroy great tracts by their crude lumbering methods—felling the trees by burning the trunks at the ground. Perhaps Sultan Moulay Ismail galloped on his favorite charger beneath these towering cedars, for many of them have reached the ripe age of 400 years.



Photograph by Vlaenderin.

ALL MOROCCO COMES TO BUY AND BE ENTERTAINED AT MARRAKECH

Crowds gather in Djemaa El Fna Square during daylight hours. They form circles around the public entertainers, who have plied their trade here from generation to generation. Snake charmers, dancers and musicians, story tellers, vegetable vendors, and all the curious market folk typical of Morocco attract the seething throng. The Koutoubia, that famous minaret built by Spanish prisoners to celebrate their own defeat by El Mansour at Alarcos, broods over the square. When it was erected, 800 years ago, it was found that an observer could view the inner courts and ladies' quarters of the surrounding houses; whereupon the Sultan required that its muezzin be blind.



Photograph from V. C. Scott O'Connor

EVEN THE SECLUSION OF A SULTAN'S PRIVATE OLIVE GARDEN IS PENETRATED BY THE AERIAL CAMERA

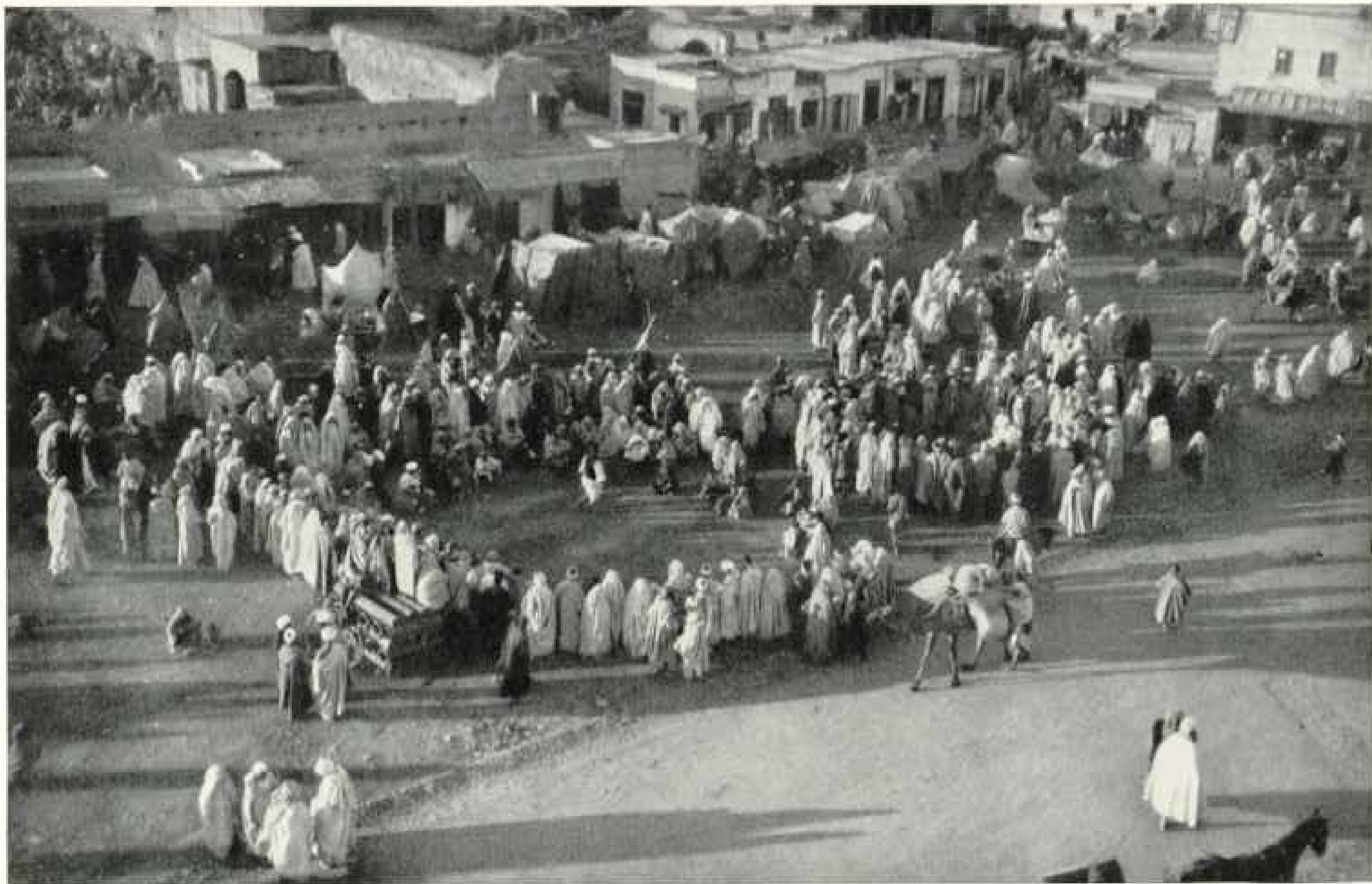
Quite in contrast to the drab, treeless plains surrounding Marrakech is this beautiful, wall-enclosed oasis, which formerly could be viewed only by the special guests and friends of the Moslem potentate. In the midst of regularly planted rows of olives is a clear pool, with a pavilion at one end, where the Sultan formerly whiled away the hot hours of a summer's day.



Photograph by Branson De Cui

TIME HAS TAKEN ITS TOLL FROM THE RED WALLS OF MARRAKECH, BUT IN RETURN HAS ADDED TO THEIR PICTURESQUENESS.

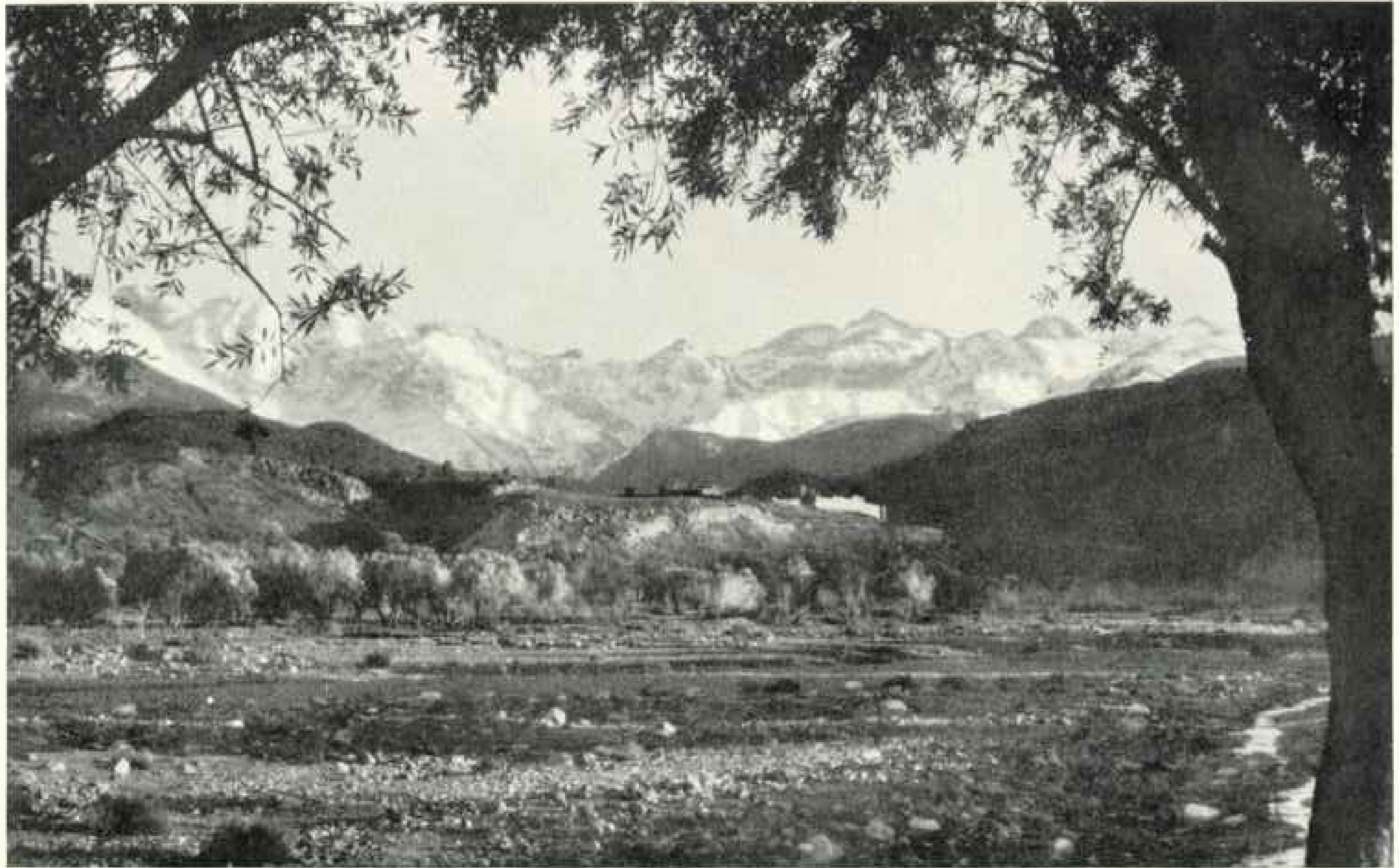
The southern capital and largest city in Morocco is set amid groves of 90,000 palm trees and close to the snow-peaked Atlas. While to-day the administrative headquarters of France is at Rabat, the chieftains of the Glaoua, Goundafa, and the Mtouga live in luxurious palaces at Marrakech. The Red City, so called because of the color of its buildings and underlying soil, was the Imperial City under the Almohade Sultans, conquerors of Spain and the acknowledged rulers of western Islam in their time (see illustrations, pages 283 and 285).



Photograph by Felix

A STORY TELLER HOLDS SPELLBOUND HIS CREDULOUS AUDIENCE IN THE SOUKS OF MARRAKECH

He may be reciting some timeworn tale of an Infidel battle of long ago, because word of mouth is one of the ways of recording history in this land of few books and newspapers, or he may be extolling the goods of some neighboring merchant. And no stranger audience ever assembled than these groups of gaping onlookers. A tribal chieftain may rub elbows with a slave of The Glaoui, or stand next to a veiled woman with sparkling eyes and the golden slippers of the professional dancer. A noble patriarch with princely bearing and burnoose white as snow may twirl his beads next to a group of husky Mokhazni cavalymen with silver daggers at their belts and World War medals on their blue cloaks.



Photograph by Dr. Gilbert Grosvener

A MOUNTAIN FORTRESS NESTLES ON THE FRINGE OF THE WHITE-ROBED GRAND ATLAS

Wide, straight highways radiating in all directions from Marrakech, even penetrating the High Atlas, are lined with thousands of shade trees—planes, locusts, poplars, and eucalyptus—planted by the French Government.



Photograph by Gillot-Rutel

WHEN THE SULTAN GOES TO WORSHIP HE IS ACCOMPANIED BY FOOT GUARDS AND MOUNTED COURTIERS

As is the custom with Moslem sovereigns, this stately ceremony of Mourish splendor takes place every Friday at Rabat. The people turn out in multitudes and foreign visitors are always on hand to see the procession, a reminder of the glory that was Morocco's in her heyday.



Photograph by Gillot-Ratel

TO THE RHYTHM OF DRUM AND FIFE, HE SLASHES HIMSELF WITH A KNIFE

Religious fanatics with bloodshot eyes and wild mien collect curious and morbid crowds when they mutilate themselves in the market places of Morocco. Sometimes in their frenzy the zealots put burning torches in their mouths, or bite and chew thick bunches of cruel thorns, or, uttering weird cries, throw themselves beneath the hoofs of mounted dignitaries.

communities, of powerful chieftains, and of hereditary saints who combine in their persons the secular and the spiritual life, have a finger in every pie, and use their influence, as it suits them, in favor of peace or war. In times of national excitement they become a focus of revolt.

Canals and irrigation channels, the outcome of millenniums of experience, take off from the river and nourish their corn-fields and their orchards, as they flow past their high and battlemented walls. Seen from afar off, with the hard African sunlight flaming on their yellow towers, these skyscrapers of the desert present the picture of a fantastic age. But the world that seethes within them scarcely bears out that impression. There is no candor and no beauty there. They inclose a world of dilapidation; of dark and low-browed passages like tunnels, which break the fierceness of the summer sun and are inspired by a manifest fear and the love of secrecy.

In one corner you will find there, stables and rooms almost impenetrable to light, in

the next a house of prayer built of rude timber and cubes of mud, but supplied with all the ceremonial requirements of worship; a Holy of Holies that looks toward Mecca, a place of ablution, a minaret from which the Imam can call his faithful to prayer. For the Moslem, whether he worship in Alhambra or on his knees in the desert sand, never wavers in one jot or tittle from the ritual of his forefathers.

The Kaid, or chieftain of the village, has a house; it may be taller and better than those of his neighbors, with a ceremonial chamber laid with colored rugs, in which he receives his guests with the formal hospitality of centuries of usage. Here, in this part of the valley, at Mzizel, and in the company of a young French officer who exercises a diplomatic and military control over the region, I have spent many fine mornings riding out with an escort of cavalry to these fortified places, and sharing with him the ritual of salutation and the hospitality of stately and interesting personages. But travelers who came here be-



Photograph by Dr. Gilbert Grosvenor

BLOOD-LETTING BY "CUPPING"

After these Marrakech surgeons, who operate upon their patients for every manner of ill in the open market place, have completed the treatment, they leave the pots of blood sitting uncovered on the ground, where they attract myriads of flies. The donkeys of the ailing loll in the shade until their masters are ready to mount and ride away.

fore the new order was established had other tales to tell. It would not be safe to come here alone.

THE FOUNT KHENEG, OR GREAT GORGE OF THE ZIZ

The river, which is now our guide, takes its way, bountiful and gladdening to the hearts of men; until at Kerandou we reach a crisis in its life, and in our own small business of travel. For till now, keeping strictly to the road, we have been permitted to travel unaccompanied, if we chose; but from here on no one may go except with a caravan protected by armored cars and outflanking parties of the friendly tribes; and this once only in every ten days.

The narrow passage of the Fount Kheneg lies ahead; the river writhing and twisting and doubling on itself like some cosmic python caught in its iron grip. Into this strangling place, renowned in the history of the land, the new road enters and becomes engaged like the river, in a fierce struggle with the last barriers of the Atlas, before it can emerge upon the open plains.

Rivers are there greater and mightier than the Ziz; but none more surprisingly beautiful than here where it is lost in a succession of palm groves and orchards and cornfields; enameled in the heart and secrecy of tragic cliffs whose gaunt forms are worn into fantastic lines, blood-red, yellow, gray, purple, and mauve, by ages of its toil and eons of despair; the landmarks of a dying world.

Along this rift that the river has made through incalculable years, are strung some twenty miles of castles, fortresses, strongholds, villages; the evident children of jealousy and fear; and each a law unto itself, till now.

No traveler—and many making history have marched this way—has ever come through without the sanction, enforced or granted, of these Guardians of the Pass. But the river, which is the oldest traveler of all, pursues its course, asking no man's leave; and the beauty of its verdure, of its wild battlements whose every sierra, starkly engraved upon the sky, is now commanded by a blockhouse or patrolled by

armed men, offers one of the strangest and most affecting contrasts in the world.

For Nature and man are equally violent here; yet the palm fronds in their millions sway in the breeze, the petals of the roses, and the bloom upon the almond trees, fall to the ground; and the pale turquoise river flows on, past them all, to its death in the desert sands.

ARMORED CARS DASH THROUGH THE DEFILE

Through this defile our armored cars bristling with machine guns, the heavy canions that have killed the old caravans, and a score of other vehicles, grind and squeal and rage upon the half-finished road; taking their way in hurricane clouds, half-stifling their inmates, and covering the trembling ears of corn, the scarlet lips of the pomegranate flowers, with an impalpable dust that one day will consume them all.

The great defile ends at last near the fortress and market town of Ksar es Souk (see page 295); and every one feels a sense of relief at escaping from its toils. The convoy drivers, hard-bitten men accustomed to rough usage, relax from their labors and start telling tales of their experiences. "Six times," says one, "I have been fired at in coming through. Once I had a French colonel beside me in the front seat. His head drooped over my wheel and I said to myself, 'The Colonel has fallen asleep.' But when I touched him I saw that he was dead. One can hear nothing on this brute of a road. Another time it was a case of a soldier of the Legion who deserted. He got away; but the Partisans, warned to keep a sharp lookout for him, saw him leaping about like a hare among the rocks trying to escape. He wouldn't listen to them, so they shot him. What else could they do? His grave is at the next post. Who was he? *Mon Dieu!* Who knows what anybody is in the Legion?"

The Hammada now lies before us, a steppe featureless as the Australian Desert, its surface smooth and hard under our wheels. The lorries, restricted till now to a single line, scatter like boys released from school and race each other; the armored cars, fore-and-aft, catch the general infection; their yellow towers glowing in the sun, the wicked-looking muzzles of their guns thrust out against the sky.

Everybody now makes all the noise he can; everyone is glad of relief from the Kheneg.

Ten miles of this joyous racing bring us to the fort of Meski, behind whose walls the cliffs drop sheer to the Ziz, which we had forgotten, stealing on its way through palm oases, unseen, unheard. The place is of a surprising beauty; and at the river's edge where cavalymen and *Légionnaires* go down to water their horses, there is a spring that makes a pool at the mouth of the limestone cavern from which it issues. This clear blue water is sacred, and throughout the ages it has charmed and touched the hearts of men. For this, and because twenty thousand tribesmen here gave battle to the French, Meski is famous.

Again our river is lost to sight and mind, till upon a sudden the cars racing over the waterless plain turn sharply aside, and disclose its chasm and its flood, winding in lazy coils between palm oases at the foot of towers and battlements and fortified homes, overshadowed by its giant cliffs.

The river has worn its way to that far-down level as if seeking oblivion. We cross it; the track descending in dangerous diagonals the cliffs, where a tributary canyon offers an approach. This place, still guarded by a pair of guns, has been for generations the haunt of throat-cutters and bandits who took toll of the slow-moving caravans.

We pull up at the fortress of Aoufous, clamped against a cliff; its inclosing walls and its houses in tier below tier, gleaming through the fronds of the palm trees by the river. By its banks the pomegranates shed their scarlet bloom, the corn blades whisper together; an oriole flashes his golden wings; and water, taken in a hundred little channels, fertilizes the soil. Nature in this land can never be anything but austere, aloof, and violent; yet is she diversified at times with flowers and birds and butterflies on the wing.

The men who live here take color from their surroundings. They are treacherous and arrogant, the strong bullying the weak. They are cruel and oppressive and full of guile, yet faithful to their own ideals; kneeling humbly at the hours of prayer to worship their God; their Jehovah, or Allah, the Compassionate, the Merciful, the Just. In the shadows of the palm trees, under the bright stars that move, they proclaim



Photograph from V. C. Scott O'Connell

A FORTIFIED VILLAGE PERCHED LIKE AN EAGLE'S EYRIE ON A CLIFF OF THE
FOUM KHENEG

This great gorge of the River Ziz, where it battles through the last defense of the Grand Atlas, is Morocco's Khaibar Pass. For centuries caravans have paid toll with their goods—sometimes with their lives—to the guardians of the pass. While the French have reconstructed the road, many of the rebel tribes have not yet submitted to the new rulers, and even guarded travelers often are the targets for random snipers concealed among the rocks (see text, page 28).



PARTISAN HORSEMEN DRAW UP THEIR CHARGERS BENEATH THE YELLOW-BROWN WALLS OF TAROUDANT



Photographs by Flandrin

TWO-THIRDS OF THE AREA WITHIN THE WALLS OF TAROUDANT IS DEVOTED TO CENTURIES-OLD FRUIT GROVES AND GARDENS. The city, once capital of the Sous Province, is famous for its orange-blossom perfume, slippers, leather bags, weapons, and daggers. Its importance diminished rapidly after 1760, when Agadir, its port, was for a time closed to marine commerce.



Photographs from V. C. Scott O'Connor.

STALWART LEADERS WHO HAVE ACCEPTED FRENCH RULE IN
THE ATLAS

Every clan or tribe when it submits is expected to take its part in defending the newly acquired territory and in protecting travelers who go through.



A FRENCH GUARDIAN OF THE PEACE IN MOROCCO'S NO
MAN'S LAND

His birthplace was a quiet village in France; now he commands an armored car (see page 297) and looks a desperate fellow (see text, page 290).



Photograph from V. C. Scott O'Connor

THE GORGE OF THE ZIZ IS RICHLY COLORED AND OF SURPRISING BEAUTY

Cutting through a waterless and barren plain, this fertile valley of palm lands and orchards is invisible to yards behind the summits of its high cliffs. If it were not for the Ziz, whose main source is the snows and glaciers of the Atlas, these green gardens and walled villages would soon disappear and become one with the sands of the Sahara (see text, pages 280 and 288).



Photograph from V. C. Scott-O'Connor

THE TOWERS OF THE KSAR ES SOUK RISE WHERE THE ZIZ EMERGES VICTORIOUS FROM THE GORGE OF THE FOUM KHENEG. The river's troubles have only begun, however, for all along its winding course the valuable water is diverted to give life by irrigation to the green gardens and native villages which cling to its banks. Finally, the Ziz disappears in the thirsty Sahara (see page 290).



GUNS WHICH SAW SERVICE IN THE WORLD WAR NOW COMMAND TAFILALET OASES

From a distance the citadel of Erfoud, which rises abruptly from the plains, suggests the prow of a great battleship. Here French officers and sentries keep a sharp lookout for warlike tribes lest they debouch from the Sahara to prey upon the rich towns and irrigated lands watered by the Ziz and Gheris rivers (see text, opposite page).



Photographs from V. C. Scott O'Connor

JEWESSES ASSEMBLED ON THE WALLS OF THE GHETTO AT ERFOUD

They have handsome faces and bright black eyes and wear robes of scarlet. Beneath their yellow and red veils they carry small cushions on their heads. It is not advisable to venture at night beyond the walls of the New Town, which is guarded by French guns on the towering citadel (see text, page 298, and illustration above).



Photograph from V. C. Scott O'Connell

AN AUTOMOBILE AND ARMORED CAR FORD THE ZIZ

Beyond the fringe of palms and the ancient fort at the left is the beginning of the great Sahara, through which the mighty Ziz attempts to force its way, only to perish by absorption (see text, page 280).

their loves in melancholy songs; attain their heart's desire, and soften toward the children of their loins.

Death continually intervenes in their lives; battle and murder and pestilence; the sudden hammer strokes of Fate; of that Kismet whose mystic power holds them in its grasp and assuages their vain regrets.

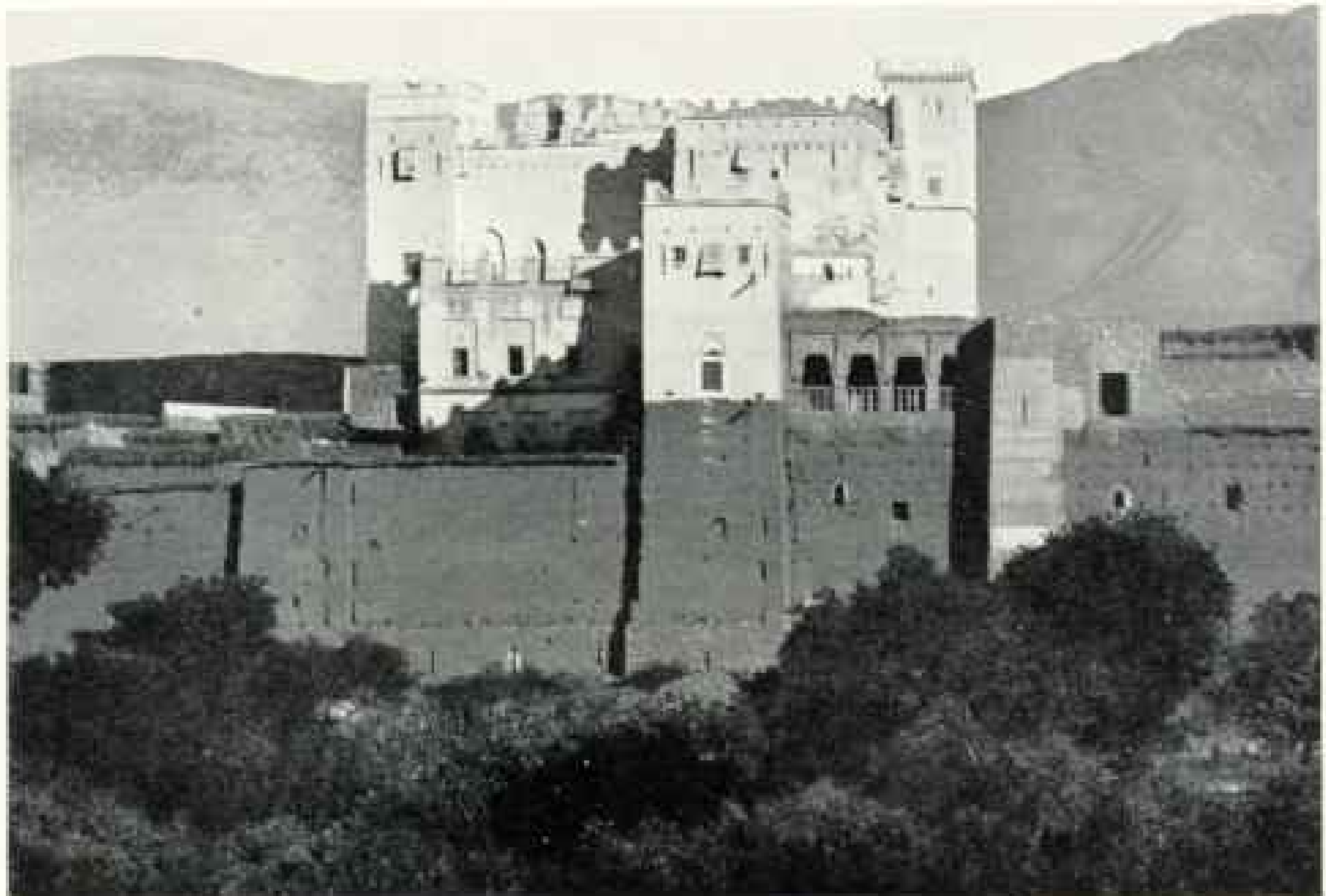
Our convoy is racing now once more across the oases and the desert places, till upon the skyline, like the ram of a ship of war, there projects the fortified hill named Erfoud, of Tafilalet, menacing in its impact against the sky.

It is the master of this world; for it commands the long lines of oases, watered by the Ziz and the Gheris, which here uniting have sustained through centuries of turmoil and unrest a population of two hundred thousand souls, and myriads of date palms—a metropolis of the Sahara. The waters spread out in a wide network of channels, giving life to a world that without them would be dead; and though the desert that encircles them be empty, here under the palm trees and in the interiors of the fortified *ksour* (villages),

there is assembled a community of men seething with life and passion.

THE HIDDEN WORLD OF THE "KSOUR"

Hardly anybody knows what goes on there. The *ksour* are the meeting places of caravans, of plotters and die-hards from the desert and the hills; of emissaries from far-off sanctuaries who wish no good to the Christian invader; of raiders who lay their plans in secret, to fall upon a column crossing the desert, or some peaceful trader whose only desire is to pass unseen; of chieftains with a lust for power, subtle and politic, waiting upon events; of men of the Sword and men of the Book; divines learned in the traditions of the Prophet; fighters to whom there is no field of flowers like a battle field; Jews who have borne through centuries every species of indignity, and now wait for the coming of another race, their passport to freedom, prosperity, and power; princes of the blood royal of Morocco, living out their lives in exile, far from the court; spies and informers; slaves in whose murky eyes there is no illusion of any coming fortune; women with veiled faces secreted behind high



Photograph by Gillot-Ratel.

THE MOUNTAIN RETREAT OF "THE EAGLE OF TELOUET" (SEE PAGE 300)

A palace and fortress combined, this feudal castle of the Glaoua clan resembles those of medieval Europe. Behind its bastioned walls and high towers, the Moroccan nobleman lives in luxury with his retainers. He is absolute master of his little world, from the ladies of his harem and their slaves to the swaggering clansmen and unfortunate prisoners chained in his dungeons. The author stayed in a French Foreign Legion post near by, but Si Hammon played the rôle of a royal host, sending over in baskets, on the heads of a procession of slaves, a complete dinner of baked meats and couscous. A gift of a beautiful carpet followed (see text, page 301).

walls; women who toil like beasts of burden in the sun; and women, "the daughters of joy," who sing and adorn themselves for the warrior fresh from his fight and the trader with his new-gotten wealth.

All this life, secret or open, lies within the sweep of our eyes from this fortress of Erfoud, whose guns of the World War look hungrily across the oases, and at command could fling dismay and ruin into that ant heap of men; reducing it to the shambles to which Sidjilmassa, that famous city that once flowered here in the desert, fell.

But the guns are silent, and for yet a season Tafilalet remains a closed book. We may not enter there. Indeed, so near are we to "insecurity" now, that even in the lower town, within the walls of the new French settlement, none may venture to go beyond them after dark; and the withdrawal of these guns might mean a massacre.

This new town of Erfoud is built on the banks of our river, to which at sunrise and

at dark the Jewesses go down to fill their waterpots. They are unlike any others of their race in Morocco, and look as if they had been left over here from some lost world, which is probably true. They are robed in scarlet embroidered or stamped with little sprigs of flowers, and carry a small cushion on their heads under a red-and-yellow veil which flows down upon their shoulders (see page 296).

The older women have grave, handsome faces; the younger ones, with their dark eyes and amber skins, are of considerable beauty; and they go laughing to the river, where they stand up to their knees in its clear waters to fill their ancient pots.

The scene is one for a painter; overlooked by the red cliffs of the fortress, and burnished by the gold of the sun. The head of their community is the Jew David, whose warehouses multiply and whose wealth increases daily. His agents and his emissaries are everywhere. For there is



Photograph from V. C. Scott O'Connor

WHEN SNOW BLOCKS THE ROAD TO TĒLOUET

Bare-legged retainers clear the pass to the Glaoui's castle, high in the Grand Atlas. This tribe has collected tolls, in lives and property, for centuries from travelers using this important pass. Scenery which rivals that of the Swiss Alps lies in these mountains (see text, page 306).



Photograph by Gillet-Raid

THESE RED WALLS AND YELLOW TOWERS ARE A WELCOME SIGHT TO TRAVELERS

The Kasba of Ounila, near Telouet, set in the midst of a barren and snow-clad Atlas wilderness, with the blue waters of the Ounila flowing around its base, makes an unforgettable picture.



Photograph by Flandria

THE GLAOUÏ (RIGHT) AND HIS NEPHEW, "THE EAGLE OF TELOUÏT"

This chieftain, whose tribe holds Telouët, the most important pass in the Grand Atlas, no longer leads his warriors in the field, but lives in retirement in his palace at Marrakech. The Glaoui, who is a Hadji, having made the pilgrimage to Mecca, and who is also Pasha of Marrakech, autographed this photograph for the author (see text, below).

no door so firmly closed in Morocco that a Jew, however persecuted, cannot enter.

II

LORDS OF THE ATLAS AND THEIR CASTLES

Morocco, with a population three-fourths of that of New York City, can boast of more fortified cities and castles than the whole of the United States and Canada.

The statistic is eloquent of the character and history of a land in which "the last enchantments of the Middle Ages" mingle with a primitive barbaric violence, and the mechanical paraphernalia of our current civilization.

I take no sides in this matter. A man can be willing to fight another, or fly at a hundred miles an hour, without losing his sense of beauty or his love of the undeniable charm of an old world that is passing away; and nowhere are these varied interests better served than in Morocco, and in the territories of its highland chieftains and Berber lords, known as the Grand Kaïds.

The chieftain who by dint of a certain family aptitude for combining diplomacy with valor, and because he holds the most important of the Atlas passes, is the Glaoui, Pasha of Marrakech and Lord of Telouët. The history of the rise of this family to a front place in Morocco is interesting, but too long for me to tell it here.

I will say only that as Pasha of Marrakech, the present lord, Hadji (he has made the pilgrimage to Mecca) Thami El Glaoui lives in an oriental palace compounded of Alhambra and the Ara-

bian nights, with veiled gardens within its high walls, full of orange trees and scented flowers, and musical with the murmur of his plashing fountains and the songs of wild birds in sanctuary there.

Inaccessible when his guarded door is closed, impenetrable behind his velvet mask, he is yet as subtly aware of the balance of power in Europe and the things of this world as any Florentine prince of the Renaissance. No one can be more polite, no one more cruel; and yet he has brokers in Paris and in London and he plays golf!

Frail and delicate to look at, he has led his contingents to battle with a reckless

disregard of consequences, while his official duties at Marrakech, and his other affinities keep him constantly in the city.

STRANGE SECRETS OF A FORMIDABLE CASTLE

He seldom visits now his ancestral castle of Telouet, set in a mountain pass that has long commanded one of the oldest trade routes of Africa, between the Atlantic and the Sahara. He leaves his dignity there to be sustained by his nephew, Si Hammou, a typical white Berber, whom men call "The Eagle of Telouet."

Of what goes on in the intimacies of that strange and formidable place, only a few have knowledge. For Si Hammou is master there in a world of his own; of men, women, and children; of wives and concubines; of slaves and freemen, cattle and horses, camels and motor cars; of subservient Jews and proud clansmen who swagger about in the distinctive robe of the Glaoui, with a cinnamon or scarlet sun woven upon its black background of goats' hair; of embrasured walls and cloud-capped towers; of dungeons and dark places secreted from the light of day, in which a man visited with his displeasure may linger and die unseen; of chambers adorned with silks of luxury and carpets woven on his looms, from whose windows fair ladies, the playthings of an hour, look out upon his Atlas snows, and orchards innocent with the springtime bloom.

I was received by Si Hammou at Telouet upon a letter from The Glaoui, and was offered by him accommodation for a night



Photograph by Dr. Gilbert Grosvenor.

THE NATIONAL EMBLEM OF MOROCCO SHOULD BE THE STORK

These ungainly birds build mammoth nests on any point of vantage, whether it be a lowly fodder stack or some valued Moslem shrine. The native never interferes with such building operations (see, also, illustrations, pages 268, 303, and 319). In the foreground note the child wearing a "pigtail," by which, according to Moroccan tradition, it may be lifted to Paradise.

in the castle; but it was the period of Ramadan, when men are weak from fasting, and, for this and other reasons, I preferred the more kindly hospitality of the French outpost, whose little finger is stronger now than all the towers and walls of The Glaoui.

Si Hammou, however, after the patriarchal manner of a Berber chieftain, sent across to me there a complete dinner of baked meats and *couscous*, carried in fourteen covered baskets upon the heads of a rhythmic procession of his slaves; together with the gift of a carpet from his looms, which now lies under my writing table.

These hospitalities were due entirely to a recommendation from Marshal Lyautey, the most loyal and generous of friends; to whom, and to many a French officer in these distant regions where hotels are not, I owe a debt I find it hard to repay.

EXOTIC CASTLES RISE ALONG THE DRĀA

The Glaoui lordship extends over a vast area that here follows the streams that descend from Atlas to Sahara, changing their names continually, until they merge at last in the Drāa, whose fate it is to perish before it reaches the salt waters of the sea.

It is along the multiple course of this river and its affluents, that men who away from it would perish and die, live at ease in their rich oases; multiplying their children, their flocks and their herds; and building for themselves the strange exotic castles and kasbas that are to be found only in this region of Morocco.

These Babylonian mansions that contain in them I know not what reminiscence of Egypt and the Equator, are built of river boulders and hammered earth and lime. Long concealed behind the Atlas, they are now coming to be known beyond its limits; but few travelers are yet permitted to look upon them, the country in which they are secreted being still regarded as "unsafe."

At Ouarzazat, where another scion of the Glaoui family holds sway, there is a whole series of them along both banks of that desert stream, still ice-cold from the Atlas snows (see page 316).

It is impossible here for me to describe their fantasies; to relate their human story; or to convey the conviction that overtakes me when I am there, of having fallen upon a strange and other world; African, violent, and barbaric, yet of a singular refinement and of a romantic beauty. Nor may I dwell upon the feeling that assails me when I leave them, that they are doomed to vanish and to pass away. I know in a sense that already have I come here too late; for had my traveler's fortune brought me to Morocco but twenty years ago, or less, I might have ridden like some other men I know, with the *Harbas* of Glaoui, and witnessed a society then in its prime.

There is no permanency here. These people are nomads at heart; power is transitory, and a few years of neglect suffice to bring even the loftiest and the most embattled of these towers down to the earth from which they were taken. Nor as the

French peace advances is there likely to be much longer need for them to continue.

But a few years ago the last of the great sultans of Morocco passed by here, worn with the stress of his life and the toils of this his last journey, though he knew it not. He was accompanied by his little son, Abdul Aziz, in whose short reign the old Morocco was to expire; and when they reached the Glaoui Pass at Telouet, in the cold and the snow, it was, for all the royal standards and customary state of the Commander of the Faithful, just touch and go whether the Glaoui of the day would welcome his master or entrap him. He chose the loyal course, went out to meet him with his men and the kindly succor that all men need after a long and harassing journey.

The Sultan was received into the castle of his vassal at Telouet, and the fortunes of the Glaoui were made. It is a story that is part of the drama of Moorish history and it is well known; but I have heard it from the lips of the Sultan Abdul Aziz himself. It is impossible for me to forget it here.

THE OASIS OF OUARZAZAT

At Ouarzazat, where I arrived late one night in a canyon whose brakes were in a perilous way, by the new road that was still unfinished and without a parapet, I was taken into their house by the Political Officer and his wife, and made a member of the mess of the Fourth Foreign Legion.

In the company of its officers, or alone with a Mokhazni, whose medals spoke of his share in the war, I rode about in the valley; visiting the chain of its kasbas, each, as it seemed to me, more attractive than the last. At one of these an Italian corporal of the Legion got on behind me, for there was no other horse just then, and we forded the shallow river and rode up the hills, like a pair of Andalusians on their way to a fair.

At Ait Ben Abbon as the lovely evening closed in, and the storks feeding in the green cornfields took wing and flew home to their nests on the high towers of his castle, I saw the sheik descending from it in his Glaoui robe, with its crimson sun inscribed upon it (they say it is not a sun at all, but a memory of the slash a Glaoui got across his loins in battle); and followed by his slaves, carrying the evening meal, of which presently he and I and the corporal partook together.

At Skoura, upon the fringes of "security," there is a whole colony of these



Photograph by Flandrin

STORKS TO-DAY RAISE THEIR BROODS WHERE ONCE THE WARRIORS OF ISLAM
STOOD WATCH (SEE, ALSO, PAGES 268, 269, AND 319)

The castle of the Oudaiya stands on a hill of Rabat at the mouth of the Bou Regreg, overlooking the blue Atlantic and sparkling white Salé. Its empty walls and lonely towers still bid mute defiance to "Infidel" ships that sail close by. When Yakoub El Mansour, the Victorious, was away conquering the rich cities of Spain, this kasha was garrisoned by the tribe of the Oudaiya, by whose name it is still remembered. Connected with the kasha was a college where the young corsairs of Salé were trained (see, also, Color Plate I).



Photograph by Capt. Paul Martel

KASBA GOUNDAFI FROM ITS MOUNTAIN PERCH DEFENDS THE PASS TO TAROUDANT

Before the advent of the French in Morocco, the men of the Kaïd Goundafi often waylaid travelers as they crossed the Atlas on the road from Marrakech to the Sous. While the grim castle is practically deserted except for negro retainers of the Kaïd, its arched aqueduct now dry, its impressive gateway, square towers, dismal dungeons, and sumptuous guest rooms attest its former importance (see text, page 315).



Photograph by Flandrin

THE CAMEL AND THE DONKEY OF MOROCCO HAVE NOT YET GONE THE WAY OF THE HORSE IN EUROPE AND AMERICA

Tahanaout, encircled by crumbling walls and groves of ash, cherry, and pomegranate trees, eyes from its mountain slopes the caravan route to Asni. Nestling among the peaks of the lower Atlas below Marrakech, Asni is often referred to as the "Chamonix of the Atlas," although it is without snow or waterfalls.

kasbas in an oasis through which the river flows in a hundred canals and rivulets. The pathways in this human maze twist and turn interminably, crossing each narrow water by a humpback bridge (usually with a hole in it where the keystone has become dislodged), now in graceful curves that wind with the stream, under the hanging boughs of orchards whose bloom falls in a shower as we hit them in passing; now at a sharp right angle under the walls of a projecting house; or, unexpectedly, across the wide stony waste of the central stream.

"THE LEGION A PURGATORY, NOT A HELL"

As time pressed, for we had a long way to go before dark, and The Glaoui's brother had detained us with his hospitalities, his son, mounted on a fiery little barb, went off at a breakneck speed, leaving us to follow him through this fantastic maze. We had no option, for horses following in such conditions will not be stayed.

Night came down upon us in the desert, with a red sunset that transfigured a cruel and beautiful world; across which a little gazelle, with a cotton-white patch at her tail, went twinkling like light over a chaos of stones with a grace that no other creature can rival.

"Yes!" said our colonel at mess, reflectively sipping his wine, "it is necessary to take care in these oases. Our poor Lieutenant M—— came down in one the other day. I sent him across the Atlas by airplane to the hospital at Marrakech, where he is lying now with a broken back. Not much hope for him, I am afraid."

This fiery little colonel is one of the jolliest chaps I have met in Morocco; with thirty years of Africa and the Legion behind him, he is hard as nails; and though stern upon occasion, of an exuberant gaiety, with a reputation for being good to his men.

"What I say, Monsieur O'Connor, to those who run us down, is this: the Legion is a purgatory, not a hell.

"A man who wishes to purge himself of his sins and make good can always do so under my command."

And that, if you allow for Africa and the cafar, seems to be the truth about the Legion.

Returning from Quarzazat, where I had occasion to meet Pelletier d'Oisy, the French airman, fresh from his flight to Japan, and now on his way to make maps and photographs of the desert oases be-

yond the border, I visited the Kasba of Ounila, within a ride of Telouet. It owes its peculiar charm to the purity of its style; its red walls, with their yellow towers and loopholes and African embellishments, making a perfect picture in the middle of the barren and snow-clad hills. The clear blue stream of the Ounila flows round it, watering its cornfields and orchards and the roots of its magnificent old walnut trees.

The Khalifa, unlike the old Eagle of Telouet, is known for his kindly and welcoming manners; and his people take after him. Jacques Majorelle, the only French painter who has been allowed in this Atlas, has made more than one beautiful picture of this kasba, now safely stored away in private collections in New York; and my only regret has been, and is, that in the course of these travels I have not had a painter of talent for my companion. An opportunity awaits the right man here. I should be glad to hear from him.

ARISTOCRATS IN AN EPHEMERAL LAND

I have confined myself so far to the territories of The Glaoui beyond the Atlas. But there are other lords whose ancestors, like his, seized the passes through their country, and levied a toll upon the lives and possessions of all who went by. Two of these, the Goundafi (page 304) and the Mtougui, still hold the trade routes between Morocco proper and the rich valley of the Sous, long coveted by German political emissaries and seekers after business, and a proximate cause of the World War.

Both the old chieftains, who had been making history when the French came in, are dead; their successors, feeble and ineffective, have lost much of their power, and they tend to disappear. I retain a recollection of seeing the old Mtougui riding on his way to court at Marrakech, supported in the saddle on each side of his stooping figure—for he was stricken with age—by the hands of willing retainers. A pure Berber of the old stock, his ancestors, like any Cameron of Lochiel or Campbell of Argyll, had held their place in the mountains for two hundred years; the only real aristocrats in a land ephemeral and continually changing.

The present Goundafi lives in privacy in Marrakech. But a car carried me up in a couple of hours to his foothills at Tinnal, where the famous dynasty of the Almohades, whose standards once flew over

IN THE LAND OF CRUEL DESERT AND MAJESTIC MOUNTAIN



RABAT RISES, GLEAMING WHITE, BY THE MOUTH OF THE RIVER BOU REGREG.

It is one of the four Moroccan cities in which tradition permits the Sultan to reside. The present ruler spends most of his time here, for it is also the center of the French administration. Salé, just across the river, was famous in other days as a stronghold of Barbary pirates.



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Natural Color Photographs by Garvais Courtellemont

A COURT IN THE RESIDENCE OF AN ARISTOCRAT OF FÈS

To enter one of these palaces is to pass from the squalor of an oriental street scene into an enchanted realm where Moorish fantasies are expressed in marble and fine mosaics. The music of plashing fountains and the fragrance of flowers are an accompaniment here to a life of luxurious ease.



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Natural Color Photograph by Gervais Courtellemont

THE CRENELATED WALLS AND CRUMBLING PALACES OF MEKNÉS ATTEST A VANISHED GLORY

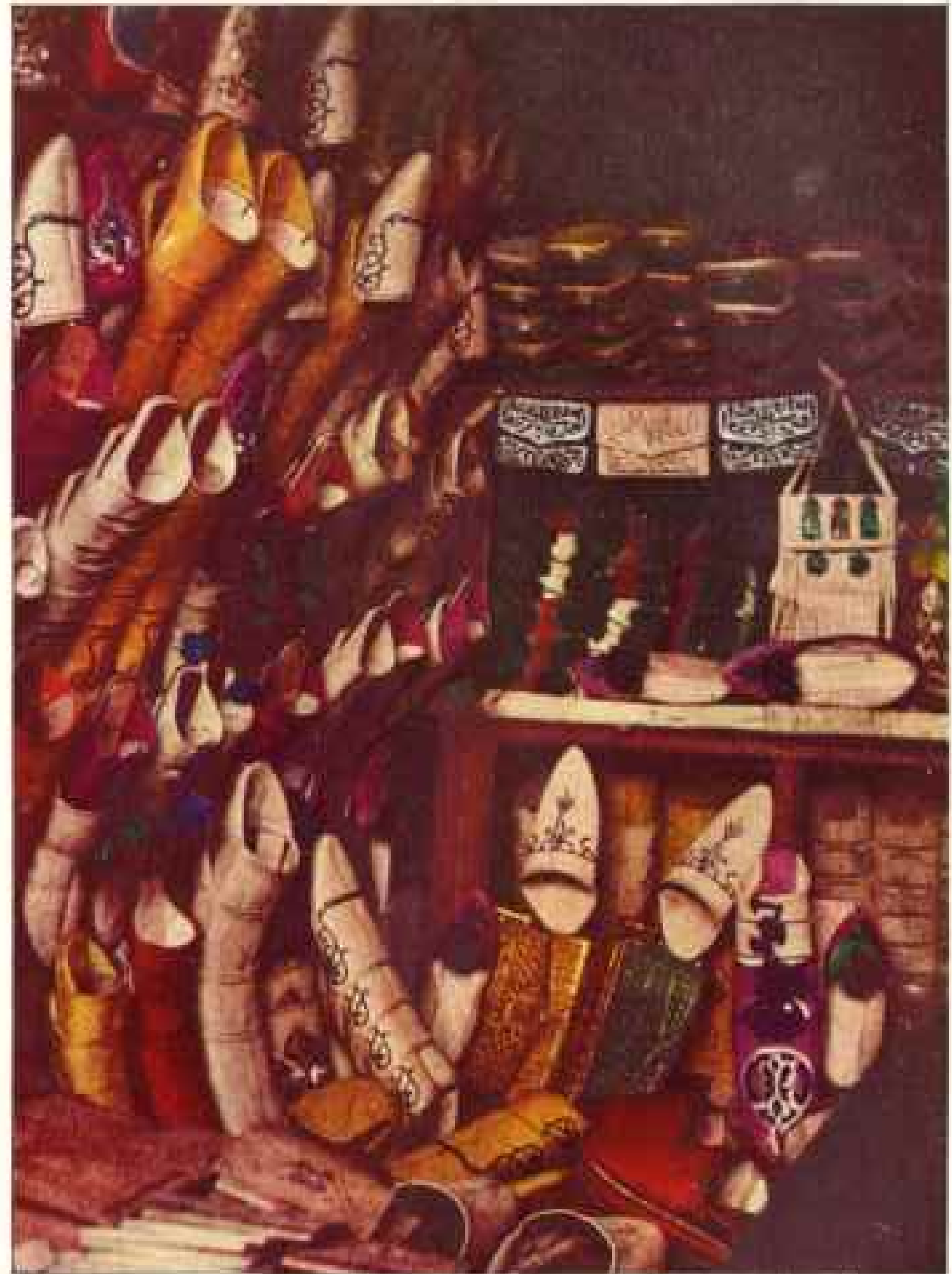
The great Sultan Moulay Ismail made this city his capital and during his reign (1672-1727) it enjoyed a period of particular brilliance and prosperity. Moulay Ismail modeled his kingship after his contemporary, the Grand Monarch of France (Louis XIV). The group of palaces, gardens, and monuments which he built at Meknès came to be known as the Versailles of Morocco. The city lies between Rabat and Fes and has a present-day population of 30,000.



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MODERN MOROCCAN ARTISTRY IS SEEN TO BEST ADVANTAGE IN THE DECORATION OF FINE LEATHER.

Other domestic arts have suffered a decline through the centuries, but the fame of Morocco's leather work remains undimmed. At Rabat a school has been established which provides for a selected group of craftsmen expert instruction in dyeing with vegetable colors, tooling designs on metal, fine wood-carving, and illuminating vellum.



Natural Color Photographs by Gervais Courtellemont.



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Natural Color Photograph by M. Flaudrin

FEMININE RESIDENTS OF TINMAL ATTIRE THEMSELVES FOR A HOLIDAY

Their fancy slippers, white robes, and ornaments of gold and silver coins are reserved for special occasions. For everyday use they wear the blue working costumes illustrated on the opposite page. Tinmal, in the territory of the powerful Atlas baron, Goundafi, is the burial place of several Almohade princes. One of their number erected a mosque here which even to-day, although in a state of ruin, is among the art treasures of Morocco.



© National Geographic Society

BERBER WOMEN ENJOY GREATER FREEDOM THAN IS GENERALLY ACCORDED THEIR MUSLEM SISTERS IN OTHER LANDS

They go unveiled, manage their own households, and have some property rights. On the other hand, it falls to their lot to do most of the hard work, and if they have not borne sons they are frequently abandoned in old age. Berber women drawing water from a well at Tinnal.

Natural Color Photograph by M. Flandrin



© National Geographic Society
 ONLY BROKEN SHELLS REMAIN OF THE MERINID SULTANS' TOMBS
 From a hill above Fès they look down over the capital made glorious by
 the prowess of that princely house whose monuments they are.



Natural Color Photographs by Gervais Courtellemont.
 A DOORWAY OF THE RAHIA PALACE, MARRAKECH
 When duty calls the French Resident General to Morocco's southern
 metropolis, this modern Moorish building is his residence.



© National Geographic Society

Natural Color Photographs by Gervais Courtellouout

MOROCCO'S NATIONAL SAINT LIES BURIED IN THE ZERHOÛN HILLS AT MOULAY IDRIS

Idriss Ben Abd Allah, descendant of the Prophet, founded the first dynasty of Moslem rulers in Morocco, toward the end of the eighth century. He was poisoned after a short reign and was buried at the place which now bears his name. The city, seen in the distance, is a stronghold of Islamic fervor and twice each year is the scene of an important religious festival—the ritual dances of the Hamadcha sect.



SPLENDID CEDAR FORESTS CLOTHE THE SLOPES OF THE ATLAS MOUNTAINS
Some of the trees attain enormous circumference, but seldom grow to great height. Carved cedar is used extensively and effectively for decorating mosques and palaces. A grove near Azrou.



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Natural Color Photographs by Germain Coustellanont.

AWAITING TREATMENT AT THE HOSPITAL DISPENSARY IN FES

The French have established for the native population in Morocco numerous medical centers. Units in light motor ambulances travel about to the smaller and more remote places treating the sick, vaccinating, and giving instruction in hygiene and sanitation.

Spain, rose to greatness from small beginnings; and there the Goundafi, abandoning his eyrie in the mountains, has built himself a small Eastern palace by the waters of the River Nfis. His old castle at Talaat n'Yakoub commanding the lower valleys, and still the image of a feudal keep, is now all but abandoned. Every European traveler in earlier days has recorded its inhospitality.

It was in the palace of to-day that I passed my first night as the guest of his Khalifa, and listened in the hours of wakefulness to his fountains plashing in the marble court, as the moon came and went and the scent of his orange gardens was blown through my bedchamber.

ON HORSEBACK ACROSS THE ATLAS

A day's ride on horseback, accompanied by a Mokhazni in his long blue military cloak, brought me to the old fierce castle on its hill at a height of 5,000 feet; once the terror of rebellious vassals as of all wayfaring men, but now given up to negro slaves and ancient retainers, who would not open the great door of the castle until assured that I had a permit, and even then reluctantly. Its courtyard was crowded with camels and horses, and swarms of black children with their mothers, the bond slaves of their lord. The great aqueduct that once nourished the castle, has ceased to flow, and clearly the days of this haughty old place are numbered.

I spent the night in the village under the shade of its century-old walnut trees, the haunt of wayfaring men; but in the house of a man who, though I had no introduction to him, received me with the greatest kindness and proved himself to be a scholar and a gentleman. He had a terrace open to the sky, which he laid with richly colored rugs; and he gave me green china tea perfumed with fresh mint from his garden.

The evening meal also he had served there, at my request, when day came to an end and the stars were bright in the sky; while my soldier who had been in France with the Moorish battalions helped me to carry on a conversation that revealed his cultivated mind. A stranger I came and a stranger I left; yet the memory of his unforced hospitality remains fresh in my mind.

Ahead of us now lay the Col of Tizi N Test, 6,100 feet in height and flanked by the snow-white crests of the Atlas; the

horses climbing continually, and few travelers on the road, until it so narrowed that it became but a sword-cleft in the mountains, in which a handful of brave men might well have defied an army. Dangerous it was in the days now fleeting, when travelers marching here were at the mercy of its lord; dangerous it is still in inclement weather. Beyond it were lush upland pastures and meadows deep in turf, the grazing lands in summer of the clan; and white patches of snow that made a dazzling pattern in the ilex woods.

I had been warned by the General commanding at Marrakech that the season was too early for travel, and that a snowstorm in the pass might overtake me and compel me to return. I was rewarded as I came to the end of the steep ascent, with one of the great views of Morocco. The entire valley of the Sous lay in the sunlight at my feet, under a curtain some thousands of feet above it, of gray drifting clouds whose ragged fringes came swarming over the barriers of the Anti-Atlas that separates this world from the Mauretanian Plains, like those Blue Men of the Litham (Tuaregs) who in the past swept here across their deserts and their barren hills to victory, and the purging of Islam.

The clouds, as they came on, grew dark and thunderous, and the evening sky was lit with their fiery zigzags; but I had crossed the pass. The rain, as I drew near my lodging for the night, filled each river bed and boulder-strewn ravine with a passionate torrent of mud and water, and threatened to make the road to Taroudant impracticable.

I passed the night in good company, for the Sheiks of the neighboring tribes had come in to greet me. An ample dinner of chickens and couscous was served; round which we all sat together and ate with our fingers; the manners of my friends perfect, and free from reserve. For the Berber is a freeman, and of a temper which, though easily roused, is naturally gay and lighthearted.

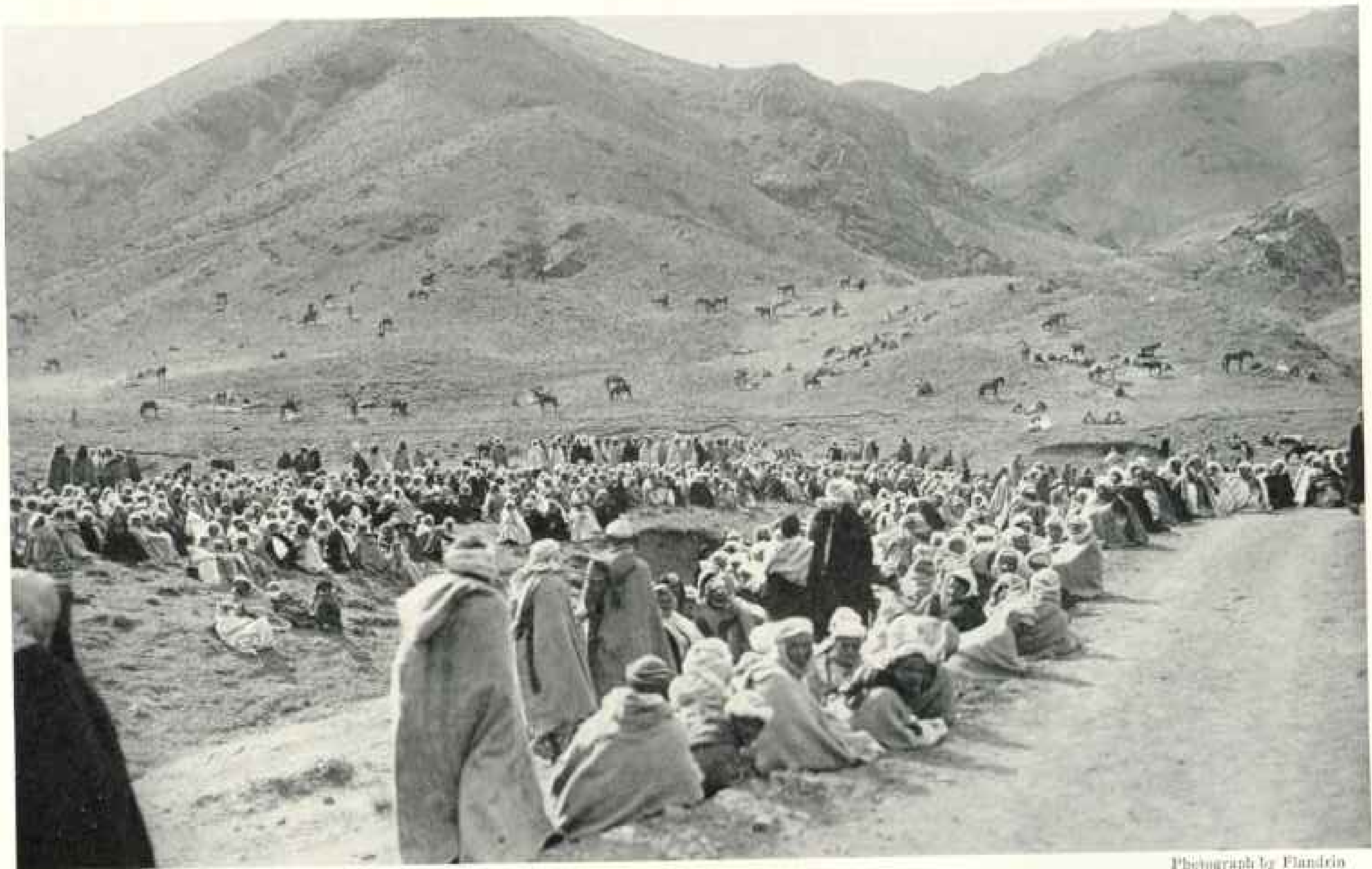
After the ceremony of mint tea was accomplished, fresh cushions were supplied, upon which all reclined; while a deal chest with an enormous padlock was brought in and laid before one of the company, who with the conscious air of a proprietor produced an Ali-Baba key from under his waist belt and, raising its lid, disclosed a gramophone!



Photograph by Flandrin

MOROCCAN SKYSCRAPERS IN THE GRAND ATLAS NEAR QUARZAZAT

Built of river boulders, earth, and lime, these castles are reminiscent of those erected by the ancient Babylonians (see text, page 302). Many forgotten kasbas along the course of the Drâa and its affluents are gradually being brought to light, as the French push farther into the interior and expand their zone of "security."



Photograph by Flandrin

THE GLAOUA CLANSMEN ARE PROUD OF THEIR RACE AND FIGHTING ABILITIES.

The jurisdiction of these modern feudal lords follows the streams and rivers which have their source on the south side of the Grand Atlas and flow into the Drâa and thence into the Sahara. The Glaoua to-day are allies of the French in extending the latter's sphere of influence in the Atlas. When they gather in the valley and tether their horses on near-by grassy slopes, the clansmen from a distance resemble flies on the side of a giant green melon.



Photograph by Flandrin

A HENT MOULD'S HOME IS WHERE HIS SHEEP GRAZE BEST

Everyone was delighted, and as a compliment the loud speaker, or trumpet, was turned full upon their guest. The tunes were Moorish tunes, and the nasal voice of the singer alternately soothed and excited the company. After I had borne with the loud speaker as long as politeness required, I turned it gently round to the ear of its proprietor. A twinkle of laughter ran round the circle, as the tables were turned upon him, and the evening closed in very cheerfully, though the rain ran down the walls of my chamber in little brown streams and splashed in the courtyard outside.

The Mokhazni, who bore me company, respectful but equal, was careful at the appointed hours to rise and pray; proclaiming in his sonorous voice the message of Islam, "God is but one God and Mohammed is the prophet of God"; to which, since this was his country, I took no exception.

The following day the sun shone out, and the people hung flowers from their mules and horses and the women cried out their "You-yous" of welcome; for the rain had come as a blessing upon their crops, and this, after their eastern way, they attributed to my coming, a guest.

Of Taroudant (see page 292), that walled city that is one of the gems of Morocco, and of Agadir, where the first tocsin of the World War was sounded, I have no room here to speak; nor of the kasbas, that flank upon each side of the valley

of the Sous; nor of Tiznit, that frontier city whose drums still proclaim each morning the dignity of the Sultan; nor of the hills beyond the Anti-Atlas, where as yet few are permitted to enter. For still there are tribesmen there who resist the advance of France, and prefer the hardships of the desert to all her blandishments.

III

I close with a reference to Khenifra (pages 268-9), in the country of the Zaian, in the Middle Atlas, where the last of the great chieftains of Morocco rose to power with the suddenness of a thunderstorm. Moha Ou Hammou was his name. He gave his daughter in marriage to the Sultan, and in another age might well have seized the crown. For the Zaian were a formidable confederacy, and he was a great man, fierce and pitiless to those who withstood him. But he came too late in the history of his country. The French occupation of Morocco had begun, and he would accept no compromise. He was killed in battle fighting against one of his sons who had gone over to the new power. I stayed in his castle in 1922, and met there three of his sons—big men with bushy black beards like Assyrian kings. One of these, Bou-Azza, the bravest of them all, riding fiercely ahead of the French battalions, was killed in charging his clansmen who had not yet submitted.

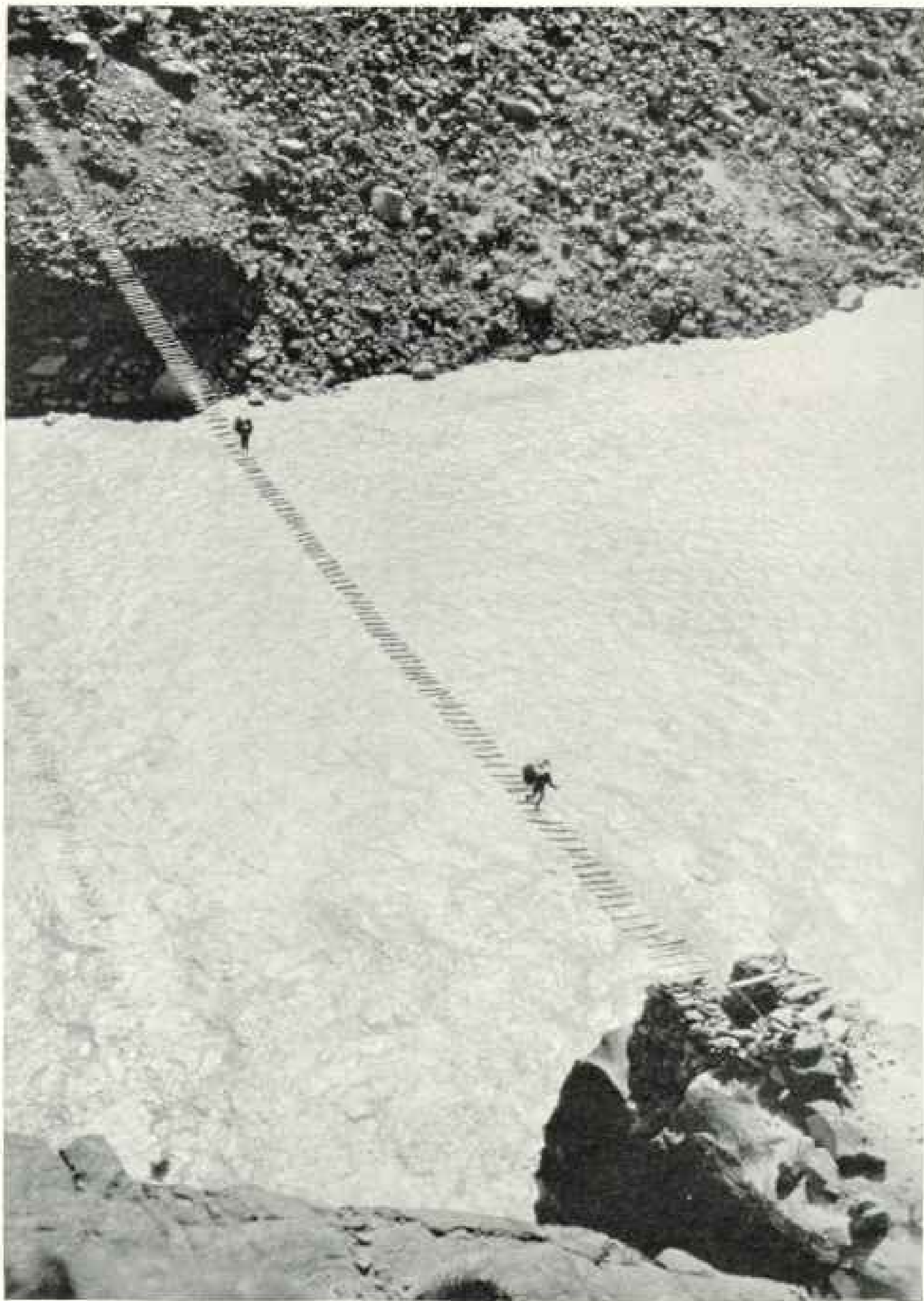
Such is life in the Berber Hills.



Photograph by V. C. Scott O'Connor

LOOPHOLED TOWERS WATCH OVER THE MOULOUYA VALLEY

It is not safe to travel here by night, even though the valley is in the hands of the French, because warlike tribes still are in control on the near-by slopes of Djebel Ayachi, the summit of the Grand Atlas. From a canal in the foreground a man is replenishing his leather water sack. Here the storks, who are models of conjugal fidelity, raise their young in huge nests unmolested.



Photograph by André Sauvage, Citroën-Haardt Expedition

TRANSPORTING SUPPLIES FOR THE TRANS-ASIATIC EXPEDITION ACROSS THE
HUNZA RIVER

Cross-pieces of wood a full step apart on sagging wires, with a strand above for a handrail, afforded precarious footing over the raging torrent, but the coolies bore their loads unconcernedly.

FIRST OVER THE ROOF OF THE WORLD BY MOTOR

The Trans-Asiatic Expedition Sets New Records for Wheeled Transport in Scaling Passes of the Himalayas

BY MAYNARD OWEN WILLIAMS, LITT. D.

SPECIAL STAFF REPRESENTATIVE OF THE NATIONAL GEOGRAPHIC SOCIETY

With Illustrations from Photographs by the Author

In the October, 1931, issue of the NATIONAL GEOGRAPHIC MAGAZINE, Dr. Williams described the experiences of the Citroën-Haardt Expedition from Beyrouth through Syria, Iraq, Persia, and Afghanistan to Srinagar, capital of Kashmir—a distance of 3,445 miles. The journey from Srinagar to Kashgar, in Sinkiang (Chinese Turkestan), described in the following pages, presented greater hardships and perils than any other portion of the scientific Expedition's route. The resourceful leader of the party, M. Georges-Marie Haardt, succeeded in piloting two of his tractor motor cars over snow-blocked passes and across trails which had been obliterated by avalanches to regions never before reached on wheels. Dr. Williams's narrative, brought back by courier because wireless communication has been interrupted by political conditions in China, concludes with the arrival of the Expedition at Aksu (see map, page 324). Subsequently M. Haardt and his associates of the Western Group joined at Urumchi the scientists of the China Group, who had left Peiping for Sinkiang in tractor motors April 6, 1931. On November 25 the united party left Urumchi for Peiping, where it arrived early in February. Thence the Expedition will proceed to Saigon, in French Indo-China. An account of the journey through China will appear in an early issue of THE GEOGRAPHIC.—EDITOR.

IN URUMCHI, with winter setting in and the cold desert route to Peiping lying ahead, both groups of the Citroën-Haardt Trans-Asiatic Expedition were happily united.

With the Jhelum on a rampage and the Kashmir Valley a lake, the cars which had blazed an unbroken trail eastward from Beyrouth were stranded in Srinagar. The relief cars from Peiping, which were to meet us in Kashgar, were immobilized in the Turfan Depression, a thousand miles away by an air line which no crow could follow and live.

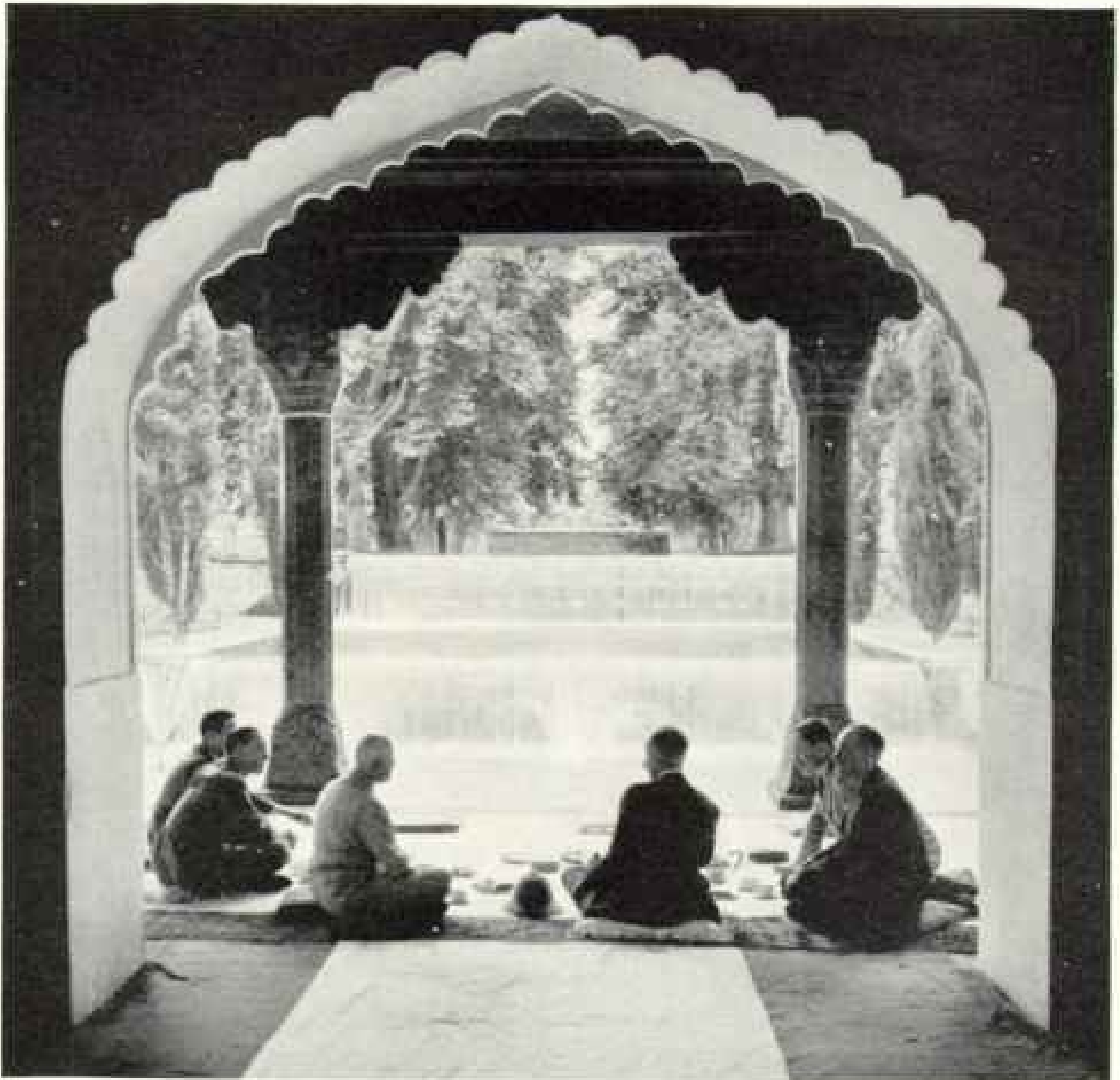
BRITISH OFFICIALS COÖPERATE FULLY

The probable impossibility of crossing the "Roof of the World" by motor was the reason for having two sets of tractors, driving toward the heart of Asia from both sides at once. In Srinagar all expert opinion was that we would not go far toward Gilgit. But M. Haardt, the leader, decided to push on with two of his seven cars until some definite barrier or lack of time should stop the adventure.

The Gilgit trail is reserved for the favored few. But never were any more favored than we. British officials of the Government of India did all in their power to assist us, and their personal hospitality was one of our chief delights. Never had the scanty population helped so unwieldy a caravan on its way. Never had the syncopated rhythm of pioneering motors been yoked with the slow but familiar progress of horse and coolie along this daring path.

Travelers as far as Gilgit may have wondered why motor traffic is not common; for, on the whole, the route is surprisingly good. But interrupting the general excellence are grades too steep, hairpin turns too sharp, trails too narrow, underpinning and side walls too infirm.

Nor is this condition subject to facile, or final, amelioration. The engineers who see their erratic highway start its hibernation under the winter's snow have no idea where they will find it when summer comes. Theirs is the never-ending toil of Sisyphus. Just before our passage, the worst landslides in many years had buried,



MEMBERS OF THE EXPEDITION ENJOY THE BEAUTY OF A SRINAGAR GARDEN

M. Haardt is seated at the center of the group, with M. Audouin-Dubreuil, second in command, at his left and Dr. Williams, the National Geographic Society's representative, at the extreme left.

abducted, or ruined essential stretches of the road. Villainous floods had done the rest.

Impromptu paths already linked the unharmed portions; but a crumbling track, to which the pony men must anchor their animals by stretching them upgrade between bridle and tail, is no fit place for a three-ton motor car.

For a brave rider on a sure-footed horse, the Gilgit route to Kashgar* is the ride of

* See, also, in the NATIONAL GEOGRAPHIC MAGAZINE, "By Coolie and Caravan Across Central Asia," by William J. Morden, October, 1927; "The Desert Road to Turkestan," by Owen Lattimore, June, 1929, and "On the World's Highest Plateaus," by Hellmut de Terra, March, 1931.

rides; but invading this region by motor was declared insanity. The fact that the "Golden Scarab," the name given one of the cars, covered 207 miles of virgin trail between some of the world's highest mountains, and waded over the 13,775-foot Burzil Pass in belly-deep snow under a blazing summer sun is noteworthy, not only for the mechanical achievement but also for its psychological effect on the minds of those who had regarded the mountain wall as an impassable barrier.

The first wheeled vehicles of any type to reach Gilgit were airplanes, but the first to arrive *on* wheels were the "Golden Scarab" and the "Silver Crescent." And

there the latter still remains, its own monument to their joint triumph (see p. 341).

THE START FROM SRINAGAR

On the 12th of July we start from Srinagar. Messrs. Hackin, Jacovleff, Vassoigne, and Sivel, forming a scouting and road-repair party, are already ten days ahead, in the mountains. Our joint leader, Audouin-Dubreuil, with Le Fèvre, Sauvage, and Laplanche, will leave eight days behind us, carrying a portable wireless and thus prolonging our contact with the world.

The Chief of the Expedition, M. Haardt, Col. Vivian Gabriel, Pecqueur, Jourdan, Morizet, Ferracci, Gaufreteau, Cecilien, Normand, Corset, Leroux, and I form the main party, accompanied by the two cars. By dividing into three groups, coolies and ponies can be used by each in turn in the worst spots.

From windows of nut-brown wood, black-haired Kashmiri girls in vivid gowns smile upon us as we start. An abandoned fort, now haunted by countless spirits; misty mountains far away; tall poplars with their feet in the darkening flood; then night.

In the morning, at Bandipur, to the north of Srinagar, the usual chaos of departure, but with the oddest baggage ever seen. Leather-covered *yakdons* (wooden chests), familiar to all Central Asian travelers; small coils of cable on which the porters pounce, only to slink away when they have felt their weight; spare wheels with doughnut tires slung sandwichwise astride half-hidden ponies; axles and gear boxes awkwardly swung between four protesting coolies; cinema tripod, carried upright like a young tree; cameras, sleeping sacks, tool boxes, cases of food, green tents, and boxlike beds—150 pony loads for our group alone.

Wisps of gossamer float above the wading willows in Wular Lake. What a setting for an impressive departure! But the cars are already around the hill. One porter after another disappears and the baggage animals straggle away in unimposing groups. Servants mount the best ponies and escape before they are detected.

ADVANCING ON FOOT

I am told that the zigzag ascent from Bandipur Bridge to Tragbal, 9 miles in $4\frac{1}{2}$ hours, was a triumph for the cars.



Drawn by James M. Darley

THE ROUTE BETWEEN SRINAGAR AND KASHGAR (SEE, ALSO, PAGE 324)

Through a land of mighty rivers, over snow-filled passes and over lofty plateaus, the Expedition's caravans pushed forward to overcome every obstacle and reach their goal in Sinkiang.

Certainly they were at the resthouse, nicely arranged in a verdant alpine pasture, amid tall pines, when I arrived. At 9,340 feet



Drawn by A. H. Buristead

THE ROUTE ACROSS ASIA, FROM BEYROUTH TO PEIPING, OVER THE "ROOF OF THE WORLD" (SEE, ALSO, MAP, PAGE 323)



CANALS, LAGOONS, AND THE RIVER JHELUM ENCOURAGE BOAT LIFE AT SRINAGAR



GOING IS COMPARATIVELY EASY ON THE ROAD TO BUNJI IF OVERHANGING ROCKS STAY PUT
Avalanches such as that which delayed the caravan at Doian (see, also, illustration, page 326) may wipe out miles of the trail at any moment.



HAULING A CAR OVER SUCH GOING WOULD GIVE ANY ONE A HEADACHE.

Unconscious of the camera, the coolie at the extreme left registers complete exhaustion as he rests for a moment on the trail between Burzil and Astor.



REPAIRING A ROAD OBLITERATED BY A MILE-SQUARE LANDSLIDE

Near Doian a mountain side had slipped, leaving confusion in its wake. To drive a path through it cost the men two days and nights of bitter toil (see text, pages 336 and 340).



THE FIRST CAR NEARS THE SUMMIT OF BURZIL PASS

Despite the 13,775-foot altitude, the machines forged forward under their own power. An army of coolies tugging on ropes provided insurance against disastrous side slips (see text, page 332).

the air was delightful, a wood fire an added charm.

This was the life!

No magic wand had turned into a horse the mouse suggested to me as a riding animal, so on Bastille Day I went ahead on foot. All around were heavily wooded slopes bathed in morning mist. Behind me an ominous rumble, and for the first time this majestic silence was torn by the roar of a motor. Led by the apelike but mighty Ramana, a gang of coolies strained the cars around a narrow bend, and on they came, impressive in their slow relentlessness, beneath the overhanging boughs of mighty evergreens.

For hours I stumbled upward with my large camera, while a Hunza lad puffed along behind with my films. The hairpins retarded the tractors, and by cutting corners or climbing ridges I was able to keep ahead, expose my day's supply of films, and then stroll along the broad back of the Tragbal Pass, expecting to be overtaken. When a car moves, a pedestrian is left behind. When it stops, he forges ahead. So with coolie and pack animal for 200 miles.

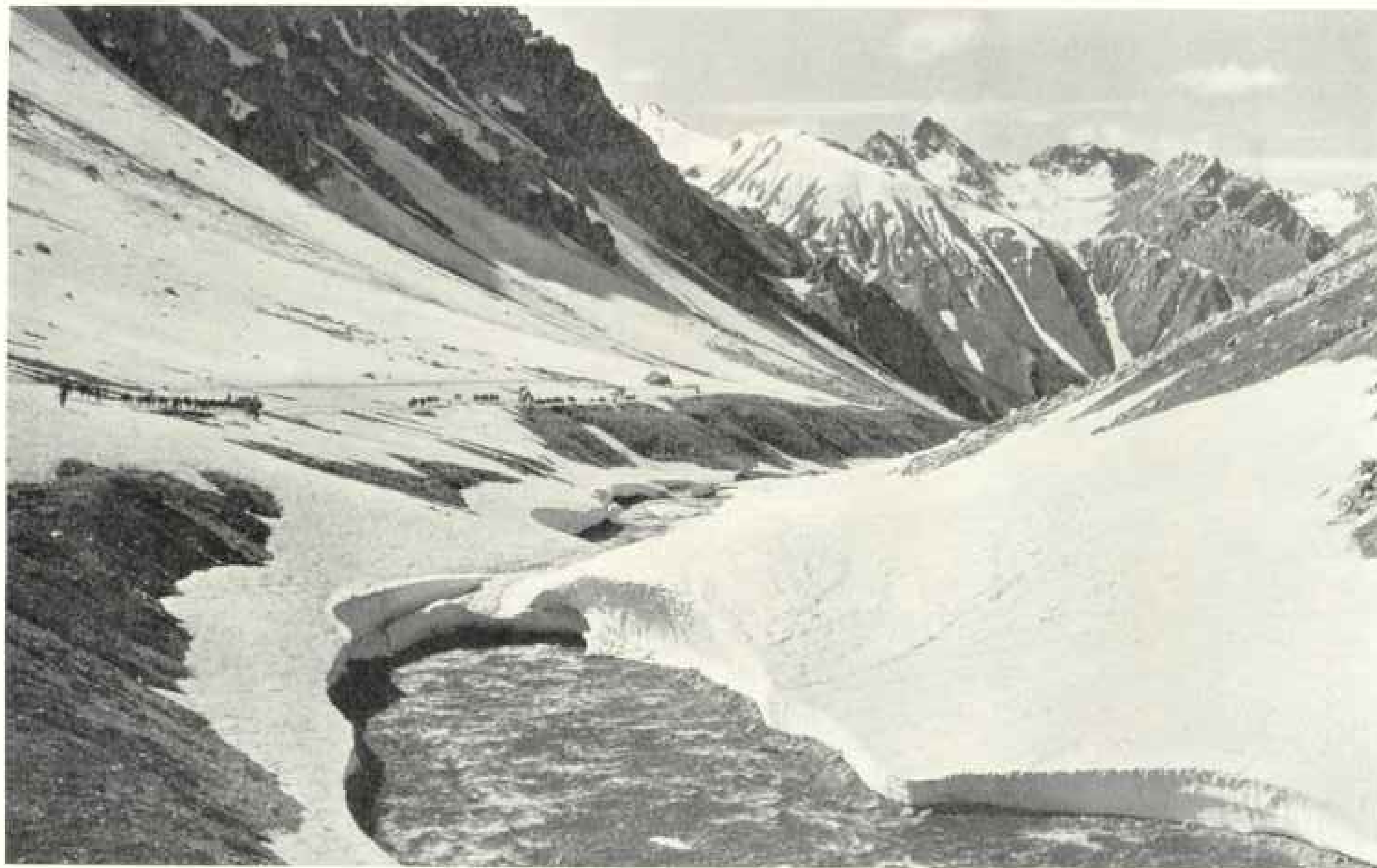
Tramping along the 11,000-foot ridge came an Englishman and his wife.

"The Burzil is deep in snow. Our ponies floundered about so badly that we had to come back. You'll never get the cars across."

Here was frank opinion from one who knew conditions.

Although the trail is open only for five months, the post goes through the year around. Two mail-runners overtook me, bent low under their heavy sacks. To them, carrying a camera was not "sahib's" work. In vain they urged me to add it to their burdens. But I did accompany them down a breakneck short cut to the hut where their relief was waiting to go on with the mails.

A light rain began to fall. The sky was too dark for photography; so I kept on down among the pines to Kuragbal, past a broken bridge and a rocky stream bed which would surely bother the cars. The morning's hurried climb had winded me. After only 15 miles afoot, in spite of the bracing climate and the joy of the open trail, I was thirsty and tired.



BURZIL PASS MEANT 10 HOURS' WADING IN SNOW UNDER A BURNING SUN

In midwinter the Burzil is not extremely difficult, provided there is no blizzard at the time of the attempt; but in midsummer the crossing must be made early in the morning, before the sun melts the snow (see text, page 331).



NOTHING CAN BE MORE WELCOME TO BURZIL TRAVELERS THAN THE HUT AT THE TOP

The way over the roof of the Himalayas claimed heavy toll of human life before the British took over the Srinagar-Gilgit route and established rest-houses along it and a substantial stone shelter at the summit of the pass.



NOT A SHELL HOLE, BUT A BIT OF ROAD NEAR ASTOR

Landslides have a disconcerting habit of carving across the trail gullies that present obstacles even to a tractor (see text, page 335).

The next morning we crossed the Kishanganga on the first of many bridges. The technique varied only slightly, according to the length and strength of each. The cars were more or less unloaded or dismantled and hauled across with two light ropes on the steering wheel to keep them to the straight and narrow way. Thus the collapse of a bridge would involve no risk of life.

Once the cars took the easy road to Gu-rai, there was no hope of catching up on foot. It was a keen pleasure to wander along in the quiet shade, with the foaming river at one side and thick forest on the other. A shot broke the silence and our Kashmiri game-bird *shikari* showed me a limp mass of gray-blue and yellow which only a moment before had been a bird.

After lunch time it rained, but M. Haardt and I mounted ponies and rode on to where the cars were stopped by an even weaker bridge. Spread about in the mud, they looked like giant meccano sets that had fallen off a shelf.

On the steep slopes, women in pancake hats with triangular amulets dangling from the rims were gathering the soft gray

artemisia which grows in Kashmir and Russia and is used for making santolin.

Along the road to Peshwari, wild flowers color the valley. Orchidlike snapdragons, wild thyme, and columbine stood out among unknown varieties, and on a peculiar kind of evergreen the cones were royal blue.

BAD NEWS FROM THE EAST

For us, Peshwari was a mere halting place; but to the third group, nine days later, it was the scene of romance. For weeks we had been without news from the East. Night after night Laplanche had combed the ether with no result more thrilling than a concert in Java or time-signals from Moscow. Then, without warning, across the Takla Makan Desert and the Himalayas came the bad news: the China Group definitely stopped in Urumchi; Captain Point a prisoner!

Then a hurried appeal: "Passez notre trafic. On nous esgourde."

"What does that mean?" asked Audouin-Dubreuil.

"'On nous esgourde?'" repeated Sauvage. "'They're listening in; they're spy-

ing on us! One must know his slang."

Far into the night these four cronies, led by Audouin-Dubreuil, discussed the meaning of all this. Years of patient planning set at naught. The Central Asian rendezvous broken up. Perhaps real danger for our comrades beyond mountain and desert. Certainly a new weight of anxiety for our chief.

It was not till our own arrival in Urumchi, three months later, that we heard how pick-up and phonograph had been used to mask this secret message. When it was relayed to M. Haardt, on July 26, he was knee-deep among the parts of his two cars, completely dismantled because of a mile-long destruction of the route between Astor and Dashkin. Things were none too encouraging.

But when the cars passed Peshwari everything was going well. We left to our right the little postal station of Minmarg, 9,300 feet above sea level but buried in wild flowers, and turned up the side valley toward the dread Burzil. A bridge across an ice chasm seeming too weak, the cars plunged up to their chins in the icy flood and climbed steeply to the resthouse, more than two miles above sea level. They must lift themselves another half mile before crossing the pass.

After lunch I climbed to the snow fields. Breathing was heavy and progress slow. We discovered that, for us, breathing was hardest, not at the highest points along our route, but at about 12,000 feet, and during the night. Even after we had been considerably higher and become accus-



ONLY A FEW LOOSE STONES BETWEEN LIFE AND DESTRUCTION

The "Golden Scarab" clings to a cliff on the Gilgit Road. When a portion of the footing dropped away beneath it, the tractor was left on a precarious perch 40 feet above a mountain torrent (see text, page 333).

tomed to the rarefied air, breathing again became harder on descending to the 12,000-foot level.

TEN-HOUR FIGHT TO CROSS THE PASS

The best way to cross the Burzil is to do it before the sun comes up and melts the snow. If there is no blizzard, it is not too difficult, even in midwinter, and a tiny shelter, perched on a 40-foot tower, shows over what depths of snow the dak-runners carry the mail (see page 329). But in late July the snow does not freeze deep, and we needed daylight for our pioneering efforts.

Before the three-mile snow field there are several smaller ones, tip-tilted side-



HUNZA IS A MAN'S COUNTRY

When asked how many children he has, the Baltit father is prone to enumerate only his sons, with a degree of pride in proportion to the number. The comely little chap in occidental attire is obviously the apple of his sire's eye.

ways at a dangerous angle. By nightfall two of these had been passed, after digging deep trenches for the uphill tractor bands. The mechanics slept in their bags on the snow, ready to start the long wallow to the top at dawn.

The big day was one of rare beauty, with fine clouds and a blazing sun. The snow was melting rapidly and rivulets of water filled every possible path. Our friend Major Irwin accompanied us with his picked mules, and their helpless floundering gave a hint of the difficulties overcome by our heavy tractors.

The motors, even in this rarefied atmosphere, performed splendidly. So did the gangs of coolies who hauled at long ropes to keep the machines from side slip. Heavy iron teeth were added to the tractor treads and the cars moved steadily ahead; but the front wheels wallowed deep and the whole machine had a tendency to slip sideways toward the river. The fight to cross the pass lasted for ten strenuous hours (see, also, pages 327-329).

My pony was brave but useless, sinking to his belly at almost every step. Once

on foot, I was soon soaked with sweat and my expensive snow goggles, so carefully ground to my lens prescription, but lacking adequate ventilation, clouded over so that I could not see.

COOLIES CHEER WILDLY

Our transport animals, badly blown, reached the top soon after noon and were halted in the circle of dry ground cleared by sun and wind between the small hut and the eight-foot snow banks. If the cars could not make the grade before dark, food and sleeping sacks must be held. But the pony men had not bargained for any such delay. They protested that they must go on. Having neither food nor shelter for themselves or their animals, their case was a good one, but Colonel Gabriel, who could talk to them in their own language, induced them to wait.

Unless they're trying to sell you something, the Kashmiris are not a demonstrative race; but when the second car reached the pass, the coolies cheered wildly. Some insisted that they had had enough—and no wonder; but others volunteered to see the

cars off the snow fields.

Ferracci was all for camping there; but Colonel Gabriel and I had walked on around the ridge and found only a mile or so of snow beyond. He suggested going on. After a late-afternoon lunch the cars continued rooting their way through the snow and were soon on the excellent road leading toward Gilgit. Neither blizzard nor avalanche had marred our passage.

The Great Himalayas lay behind!

The next day the "Scarab" nearly came to grief. When I caught up, it was perched 40 feet above a mountain torrent, shouldering a precipice and with most of its left tractor poised in mid-air (see page 331). Getting it around that rocky corner involved enough pulleys, cables, and "fixed points" to give an engineer headache. A new wall was constructed by two

brawny Hunza men, to whom heavy stones were lifelong playthings. It took the place of the wall that had nearly brought disaster when it collapsed.

As soon as the cars were past the danger zone, Colonel Gabriel and I rode through magic beauty down the valley to Godai. The setting sun still lighted the green slopes to the east, and all around us were such flowers as few gardens can boast. Clusters of spiræa and lupine were grouped about wild rosebushes, heavy with blossoms and higher than our horses' heads.

We passed two miserable mountain villages, the women wearing sunbonnet hats with metal plaques sewed to the droopy brims, the men sitting silent and glum.



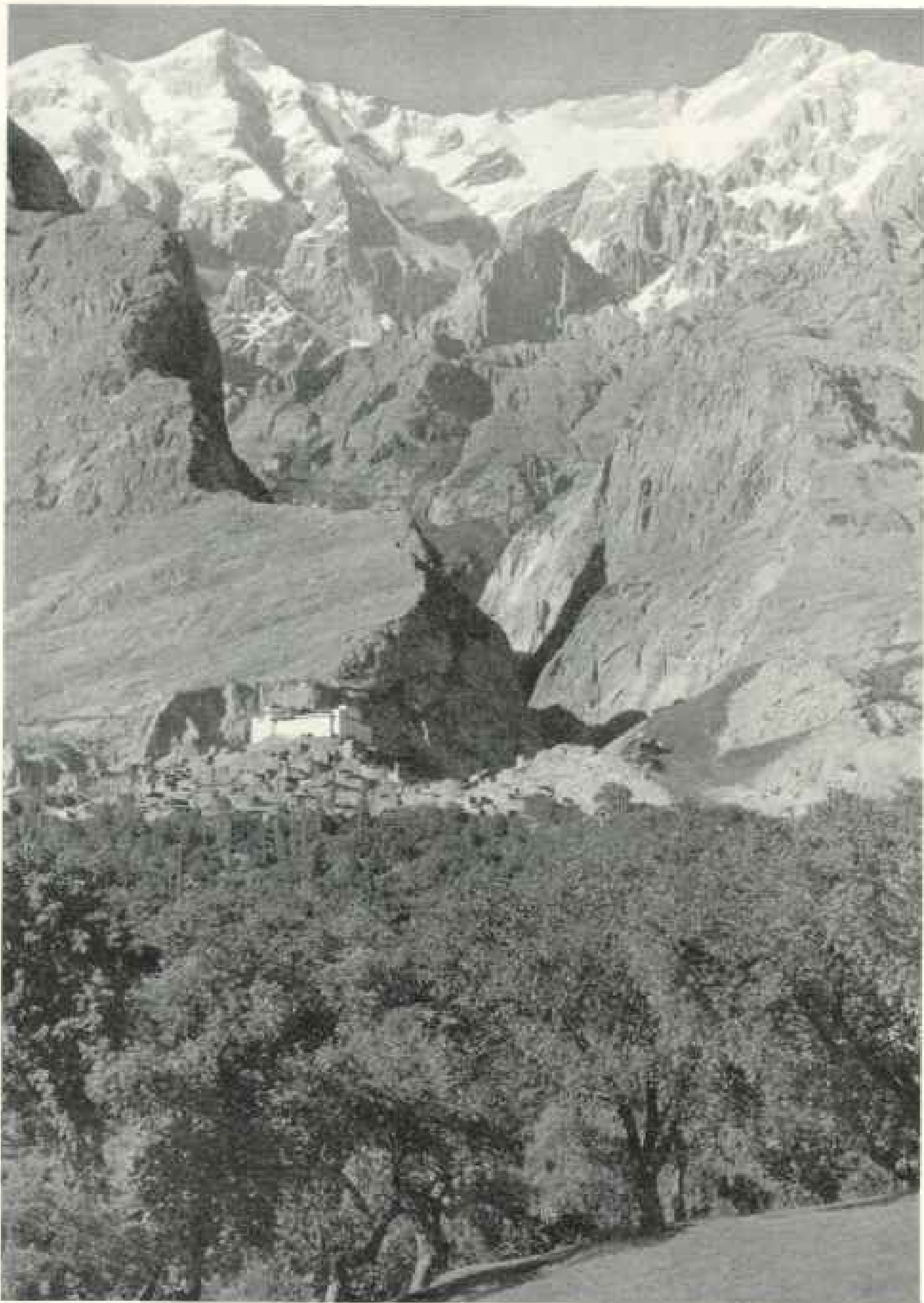
INTRICATE CARVING GRACES A BALTIT DOORWAY

Though the palace of the Mir of Hunza has little architectural distinction, it presents some charming features (see, also, illustration, page 334, and text, page 342).

The children, perched at the very edge of the flat roofs, were torn between curiosity and fear. They were like poor little animals—and some of them as naked.

Before night settled down we passed a mirrorlike overflow glowing at the foot of tall pines. After dark we could hardly distinguish the path, which often overhung the torrent, but the thunder of huge boulders, grinding down the river bed, was ever in our ears. Like all Gilgit travelers, we now noticed a nerve-tingling tendency on the part of our ponies to hug the outer edge of the trail.

In the morning, at a turn of the valley, we had a fine view of one shoulder of Nanga Parbat, beyond a tumble-down village set



THE PALACE OF THE MIR OVERLOOKS THE GROUP OF VILLAGES KNOWN AS HUNZA

Though a rambling, commodious Eastern building with no architectural pretense, it is the show place of Baltit (see text, page 342). From its grounds can be seen the roofs of the capital city, many of them splashed with the color of drying red corn and golden apricots.

in fields of gold-ripe grain. At 7,500 feet the sun was warm. Crossing high above great whirlpools on two bridges, just far enough apart to necessitate considerable manual labor, was hot work.

Toward night a gusty storm sprang up, and as I rode across in the high wind the Gurikot suspension bridge danced and swayed in a way that frightened my pony.

There is a fine bungalow at Gurikot, but tents, cook, and bedding had gone on to Astor, where Major Irwin kindly invited me to share his room. M. Haardt and the cars arrived the following noon, all the men having slept in their clothes. The unequal rhythm of horse and motor had begun to impose its penalties.

A MUD-FLOW BALKS THE MOTORS

Halfway between Astor and Dashkin a mud-flow had burst from the cliffs on the opposite bank, raising the water level, covering several hundred yards of the trail, and eating away the hillside to the west, so that only a sheer wall of earth remained. At one place ponies had to be unloaded before they could pass, and the trail continued over the debris of a former landslide. This time the cars were definitely stopped (see page 330).

While M. Haardt and Ferracci explored the route, Dr. Jourdan and I climbed to Ramah, a green paradise, from which there are fine views of Nanga Parbat. The path rises 2,700 feet in three miles, and the surprise at finding a level polo field and a flock of rosy-cheeked young Englishmen at the top lessened the disappointment of having the five-mile-high mountain hidden by clouds.

This delightful retreat from the heat and sand-flies of Gilgit is well worth knowing, and our hosts made ours a delightful excursion. When they arrived, Sauvage and Le Fèvre made a real ascent, reaching a height of more than 16,000 feet, obtaining extraordinary photographs, and sliding down a snow slope at the speed of an express train. But Dr. Jourdan and I returned to the resthouse to find our chief deep in thought.

A lesser leader would have quit right there, for "Mile Seven" was a nightmare for weeks afterward. The cars, stripped even of headlights and windshields, went through acrobatics which would break an ordinary auto's back; but finally there was

nothing to it but carry them past the break in the trail.

COLONEL GABRIEL SETS AN EXAMPLE

Food and bedding had gone on to Dashkin. The ponies had gone high up in the mountains to graze. The coolies lacked food and a place to sleep. Even those at Dashkin would have mutinied had it not been for the rare ability of Colonel Gabriel, who also helped greatly in getting the pieces moved.

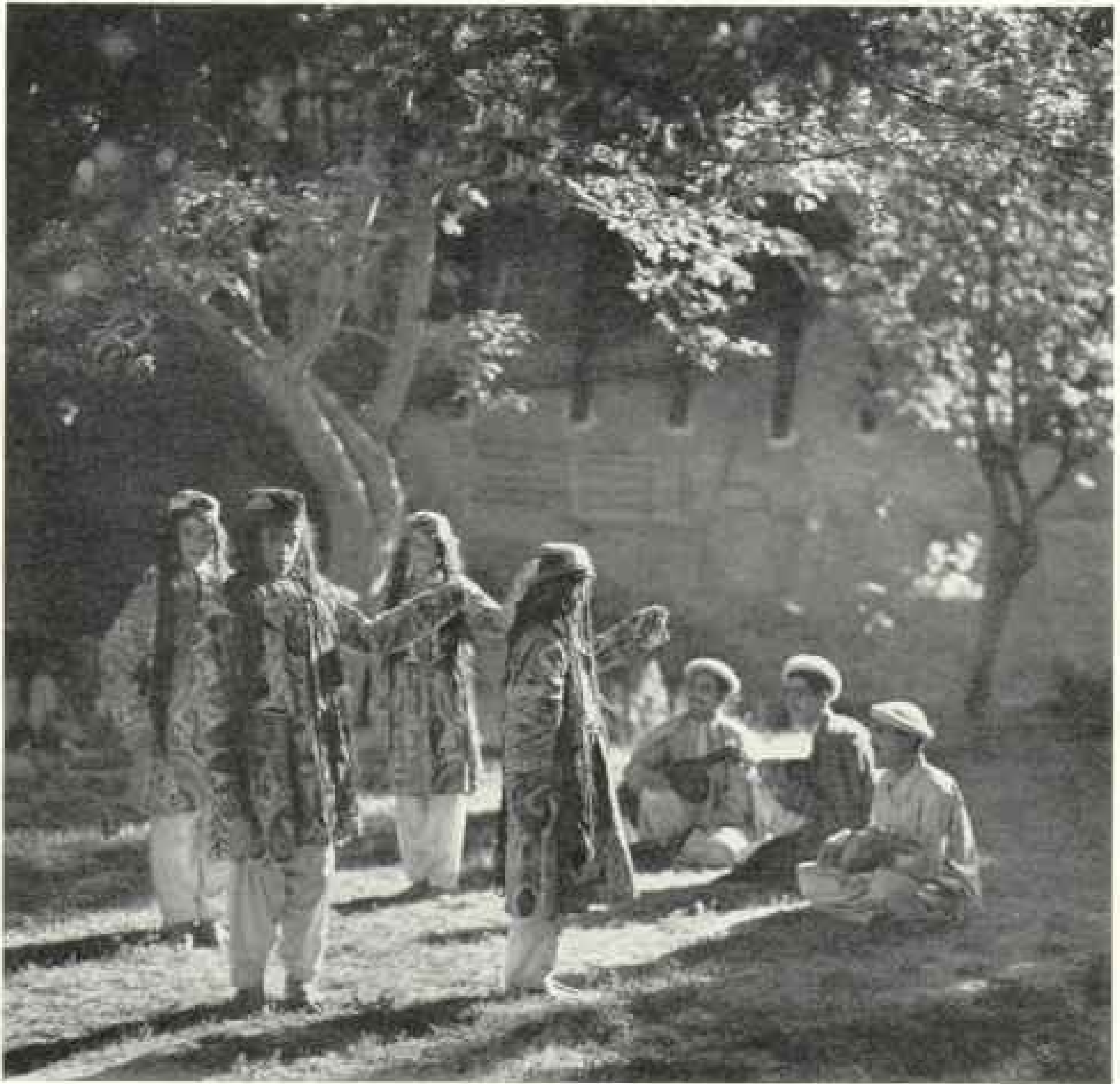
"What these poor devils need is a good example," he said. So this confidant of kings and ministers shouldered a load and started up the trail.

I joined a gang, and together we carried one of the two motors for a mile in less than an hour. Struggling along with these fellow toilers, with the rough pine trunk to which the motor was wired scarring my shoulder, I conceived a hearty sympathy for the native carriers. My shoes were better than their rawhide foot-wrappings. I was better nourished and larger, but I soon had to depend more on my grin and manner than on my strength to encourage them.

In one day that small band of half-starving coolies, who pleaded for food instead of money, carried two motor cars past the break. Having seen a basket-load of small parts scattered among the bushes and delicate bearings covered with sand, the fact that the "Scarab" did 88 miles more and the "Crescent" 71 was to me proof positive of coolie loyalty and mechanics' skill.

Reassembling the cars on a narrow path but little more promising than that over which they had been carried constituted a tacit pledge to make all this trouble and delay worth while. But progress was slow. Inches of rock were broken away to enable the cars to squeeze past; small metal gang-planks were laid down endlessly, one after the other, where the crumbly outer edge of the path overhung the distant river; the inner edge of one hairpin after another was broken down so that the sturdy machines could turn in their tracks and mount a new incline; cables strained the cars inward on rocks where a slip meant a crash. There was not a bit of breathing space until the men reached Dashkin.

This miserable hamlet of goitered men, slovenly women, and rumors of leprosy occupies a site of unusual beauty, thou-



DANCING BOYS ENTERTAIN GUESTS AT THE MIR'S GARDEN PARTY

Memories of the stage of Shakespeare's day are recalled by these graceful but effeminate performers at the royal palace in Baltit (see text, page 343).

sands of feet above the bed of the gorge. When we first reached there the light of the moon peering through the clouds touched the opposite slope with spirit glow. It was as if some Titan's children, caught playing with phosphorous matches (a slight anachronism), had hurriedly wiped their hands across miles of mountain side.

Twelve thousand feet was the level of hard breathing (see page 331), eight thousand of hard eating. Flies with electricity in their feet, as Sauvage said, were the reason. It was thought that there would be none in the mountains; so the fly-spray was left in Srinagar. But the flies of Astor, Dashkin, and Doian are champions, and not till we fought a two weeks' losing

battle with those of Misgar did we meet their equal.

VAST SLIDE OF EARTH BLOCKS THE WAY

Beyond Dashkin there is a shady forest, with clear springs and the song of birds. Then one rounds a ridge and descends on Doian. There the scene was enough to break a man's heart. Again, determination in the face of seemingly insuperable obstacles was the prime requisite of success.

For nearly four miles the trail zigzags down toward where a mountain shoulder narrows the valley, losing half a mile of altitude in the process.



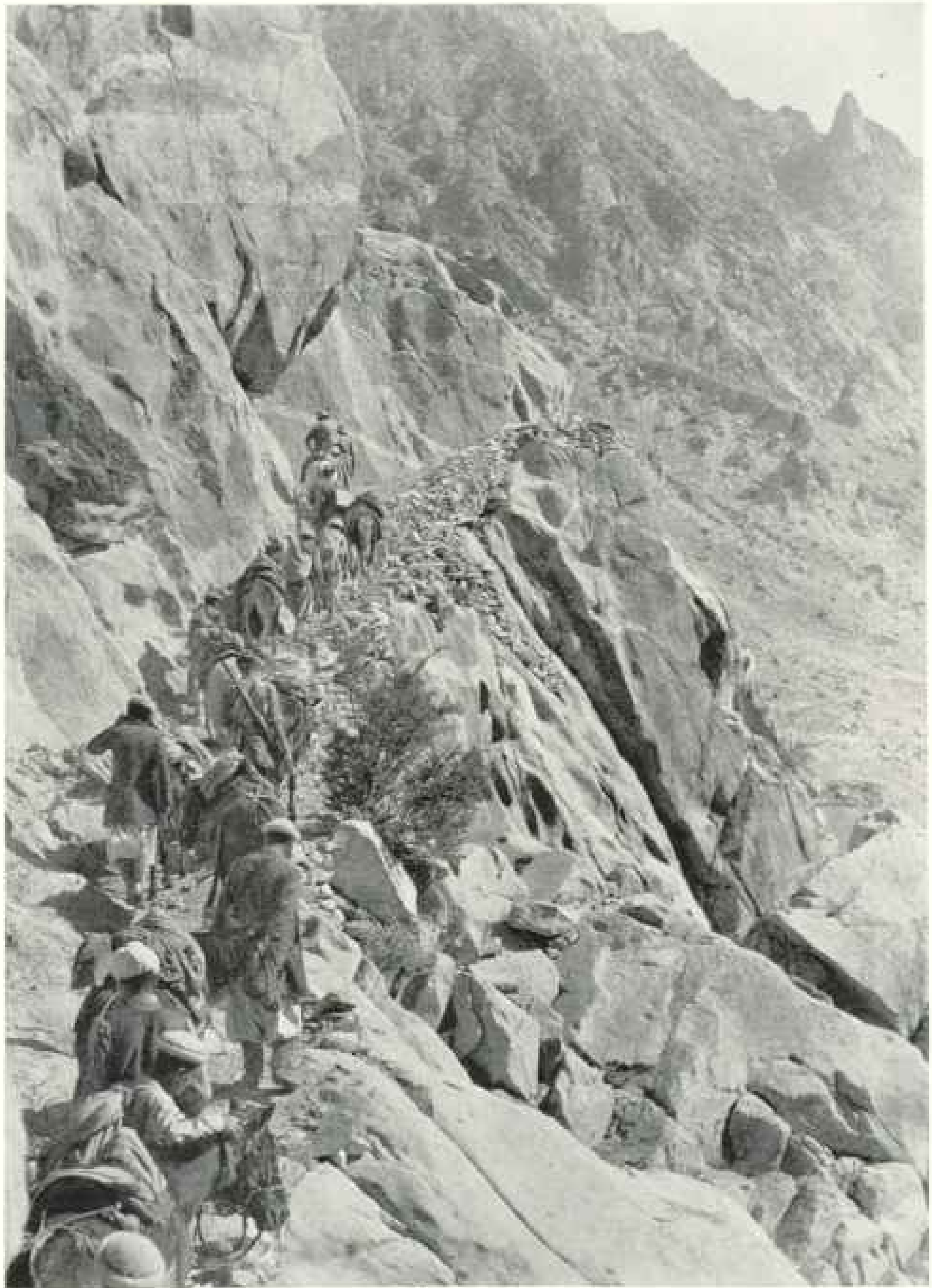
IN THE HIMALAYAS FIREWOOD IS SOMETIMES MORE VALUABLE THAN GOLD

Fuel is hard to obtain in parts of Central Asia, and when firewood is to be had for sale at all it is weighed out carefully. The scales used at this village on the Gilgit-Kashgar Road are crude, but they serve their purpose.



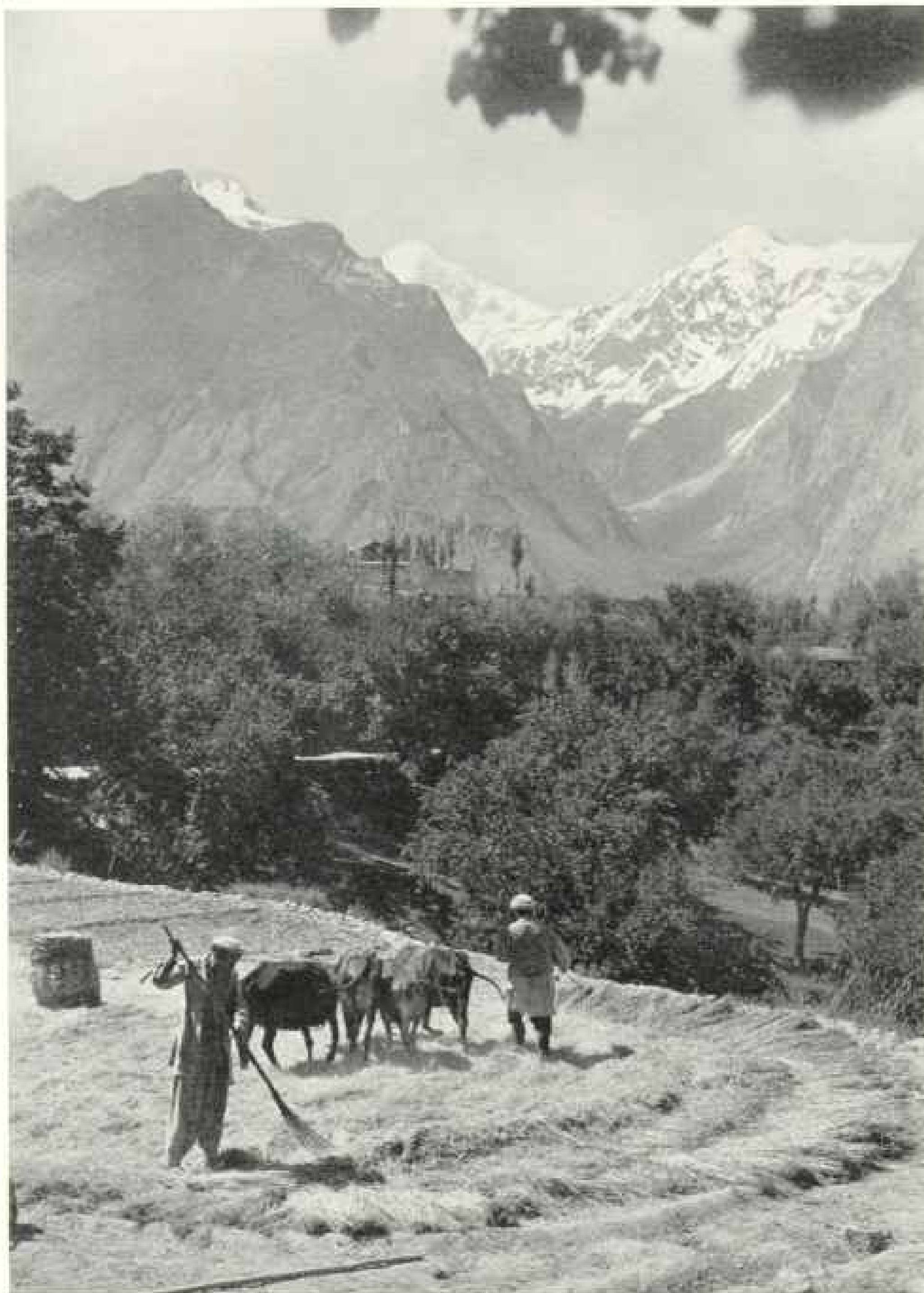
LEADER HAARDT ENJOYS A CHAT WITH THE MIR OF HUNZA

The ruler of the miniature mountain kingdom was a delightful host (see text, page 342). He is here assisted by his youngest son.



PART OF THE BALTI-TO-GULMIT TRAIL HANGS IN MID-AIR

No one subject to vertigo on high places should attempt this stretch of road, but the lover of mountain grandeur finds it magnificent (see text, page 342).



CATTLE HELP THE HUNZA FARMERS TO THRESH THEIR GRAIN.

Tiers upon tiers of fertile fields support agriculture around the village of Baltit. The region glows with rich color and the fruit orchards yield abundantly (see text, page 342).



AMONG THE KIRGHIZ, YAK TAILS ASSUME BOTH SECULAR AND RELIGIOUS SIGNIFICANCE

They are frequently hung over temples or other holy places to keep away evil spirits and are used for the same purpose at funerals. They also are used to brush the flies away. Yaks are docile enough with their owners, but sometimes take violent dislike to a European and will assume the offensive.

Shortly before our arrival, a square mile of mountain side had slipped, leaving enormous crevasses and pressure ridges, with outstanding rocks as big as a house, barring the way. The movement of this earth glacier had occurred within a few hours (see page 326).

Ponies seeking a new track had zig-zagged back and forth amid the disorder in a way that no motor car could copy unless its chassis were made of soft rubber. Four miles of steep pony track must be replaced by a two-mile descent, more direct but steep.

In spite of the daring of our mechanics and the extraordinary qualities of our cars, the credit for the Doian achievement belongs to a small group of peasants who, in two days and nights, drove a rough and rugged but possible path through that infernal chaos.

Each series of zig-zags was traversed by a direct line, bypaths avoided the largest boulders, and the cars tobogganed downward without considering the possibility of return.

The dreaded switch-back up the mountain proved easy, but on the descent, near Ramghat, were scores of hairpins wedged in between solid rock in such a way that they could not be avoided. Tired out with back-breaking labor, a mechanic could sit down on a rock mass past which he had squeezed his car an hour before.

Captain Greenwood, of Bunji, is a bit of a wag. His hospitable home is called "Ye Olde Pigge and Whistle" and at his garden

gate, 150 miles from the nearest automobile, was a sign, "Park your cars here." On August 1, M. Haardt took him at his word, and most of the population came to admire. At opposite ends of Devil's Valley, Nanga Parbat and Rakaposhi, totaling ten miles of altitude, looked down on the sweltering town (see map, page 323).

At 9 in the evening, Colonel Gabriel and I started for Gilgit, now only 34 miles away. As we rode over the soft sands, the road inspector told of men beaten to death or dead of thirst on this section. The Indus, seething like a snake pit be-

neath the big suspension bridge, was touched with moon glow and deep gloom. Along the cornice path in the western cliffs we rode through a world of marble and ebony.

I had dozed off for the steenth time, telling myself that a rock-hung bridle path is no place to sleep, and that here was an experience to be savored to the full, when my pony suddenly stopped. I woke to see the inspector peering forward at two forms crouched or lying in our path.

"What a target we make against the sky!" I thought. But it was only the mail-runners taking an unauthorized but pardonable rest.

THE LIMIT OF MOTOR ADVANCE

In Gilgit we invaded the charming home of Captain Berkeley, who was absent, and, what with a splendid library and delicate chinaware, felt almost civilized.

On August 4 the cars came into well-earned glory. Hundreds of lads and grown men ran along in the dust behind. Ramana, perched high on the "Silver Crescent," was little short of heaven. The bazaar emptied itself into the streets. Ferracci and his men tried to look unconcerned. And everybody cheered. It was a great show.

M. Haardt now had to wish farewell to Colonel Gabriel, who, having conducted the diplomatic relations and seen us through, now set out alone on the return trip, which I learn hung up a record in trail endurance and nerve. Captain Clark, the only Englishman in sandfly-bitten Gilgit, lavished hospitality and unstinted praise on us; and



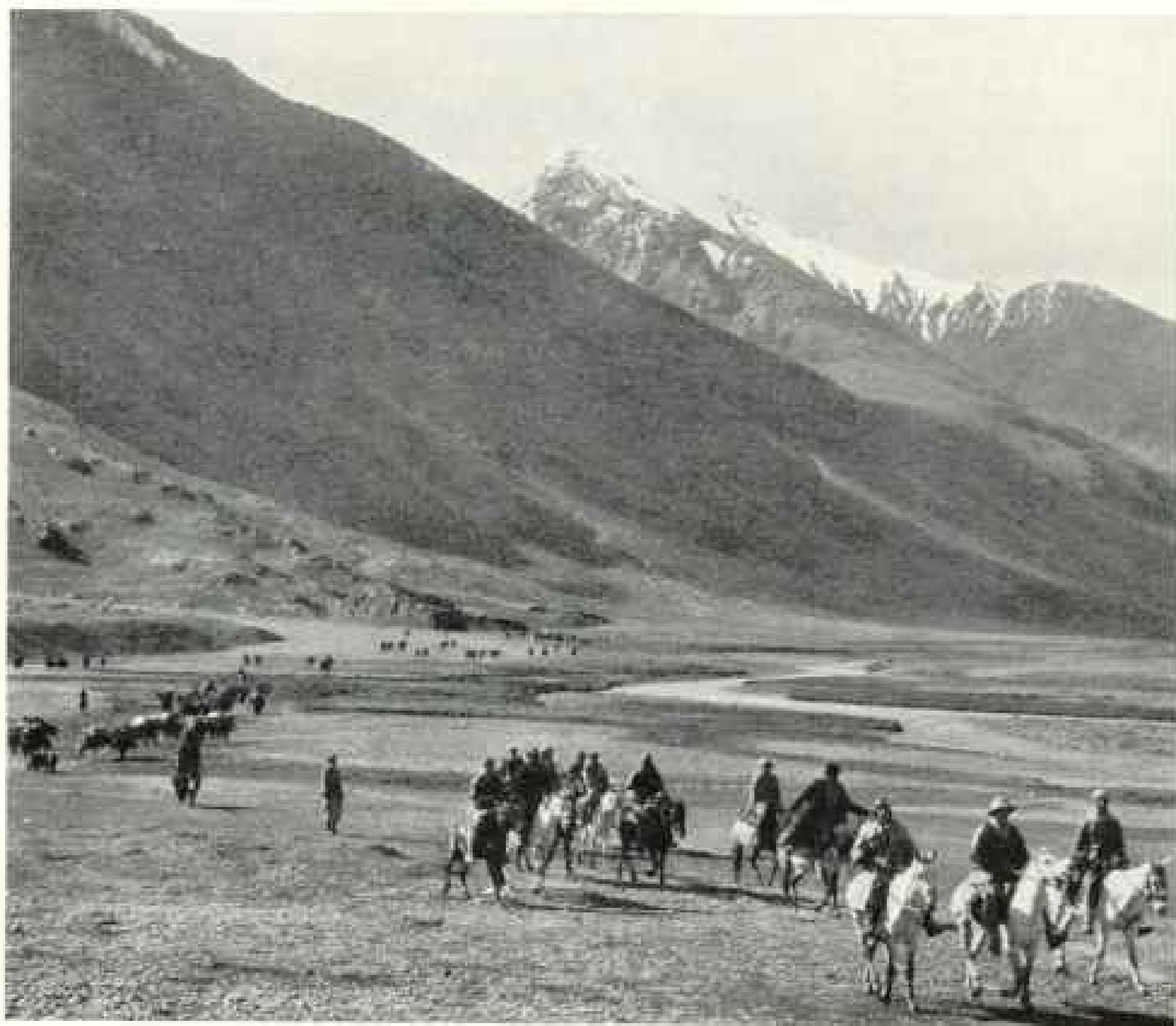
HE EXCELS IN HANDLING COOLIES

With flashing smile he cheered the weary toilers to amazing efforts in the rough going beyond Gulmit.

the "Silver Crescent," having served its purpose, was presented to the town.

The "Scarab" crossed the Gilgit River, cut the corner inside the splendid aviation field, and headed toward the Hunza Gorges. The first day's run—and what a day!—ended at Nomal, 207 miles from Bandipur Bridge.

There were moist eyes, fervent farewells, champagne (1904), and the inevitable separation. Having planned and executed this record-breaking achievement together, M. Haardt and Ferracci could now quit with honor. With the time at their disposal exhausted, the limit of their motor advance had been reached. As we rode out of Nomal that August afternoon,



SUMMER CARAVAN TRAVEL IS DELIGHTFUL IN THE PAMIR

This region is the home of the *Ovis poli*, Golden Fleece sought by sportsmen Jasons from all over the world (see in the NATIONAL GEOGRAPHIC MAGAZINE, "By Coolie and Caravan Across Central Asia," by William J. Morden, October, 1927).

five dismal figures standing on a high bluff were silhouetted against the sky.

Five Frenchmen forced to bow to the Verdun challenge, "They shall not pass!" when spoken by the eternal hills that bar the mountain route to Chinese Turkestan.

It is impossible here to describe at length that tightrope-walker's route from Chalt to Misgar—a man-built track between giant peaks. Exact description would seem insincere to those who, having made the trip, have become anesthetized to beauty and danger (see, also, pages 338 and 343).

Photographs alone can suggest those massive walls of everlasting ice; those precarious paths now hung in mid-air, now lost in the turbid torrent; those peaceful Hunza villages with orange splashes of drying apricots on flat mud roofs amid the green; those friendly folk offering fruits

at every turn; those Gothic Karakoram peaks bathed in tints which change with every shifting of cloud and sun.

From our matchless camping site at Hindi, we saw a mile-long avalanche burst into clouds of snow dust and settle to rest on the amazing flank of Rakaposhi, king of the Kailas Range, its summit more than three vertical miles above our heads. At Gulmit, beyond the green and gold of field beans and ripened grain, the Karakoram peaks in the Little Gubjal wore a Joseph's coat of ever-changing hues.

HOSPITALITY IN BALTIT'S CASTLE

Until 1891, the men of Hunza and Nagar levied tribute on all who passed by. Their welcome is as enthusiastic as ever, but a more delightful host than Mir Mohammed Nazim Khan would be hard to find. We



HANGING TO THE CLIFF BY AN EYELASH

From the edges of high precipices the trail between Baltit and Gulmit (see, also, illustration, page 338) swoops suddenly to the depth of a river canyon.

climbed to his hill-crest castle at Baltit (see page 334), dwarfed by an overhanging mountain, and found the walls covered with the photographs of his distinguished friends. Most prominent of all is the beloved Queen Victoria, whose large colored portrait had been graciously provided by the makers of Mellin's Food (see, also, pages 333 and 337).

The aggressive virtue of the European was evidenced by the gift of many alarm clocks, which our genial friend had had the sense to regard as mere mementoes, without the daily necessity of strangling each in turn.

Our dinner in the quiet garden of the Mir's "White House," built in 1925 and decorated with *Ovis poli* heads, was a memorable occasion. Our jovial host, who swears that his barbed beard is dyed and that he's not the gallant he once was, is the

very embodiment of Old King Cole, and pipe, bowl, and fiddlers are all there. A proud Maulai, follower of the Aga Khan, the Mir of Hunza regards his "dry" neighbor, the Mir of Nagar, as an inhibited Sunni, and my failure to join in the drinking made me a "mullah" at once—a dishonor which two of the Mir's sons courteously shared.

After the splendidly served meal, during which two orchestras, one of strings and the other of reeds and drums, played, four shadowy dancing "girls," clad in polychrome Khotan silks and long braids of hair from Kashgar, performed several graceful dances which, since the artists were really young boys, seemed highly effeminate (see page 336). The story is that an Afghan fugitive from Kabul, now Hunza's chief musician, planted this tiny patch of melody in the heart of the Karakoram.



WATERS FROM THIS MIGHTY RIVER OF ICE FLOW IN TWO DIRECTIONS

The glacier lies near the point where China, India, Russia, and Afghanistan impinge upon each other. On one side its waters flow to the Amu Darya (Oxus) basin and on the other to that of the Tarim. Members of the Expedition camped near here (see text, page 349).



A LOFTY KIRGHIZ CAMP BEYOND KILIN PASS

The tribesmen wander about seeking pasture for their flocks and herds. Felt tents, or yurts, which are easily transported and which serve to keep out cold and wet, provide them shelter. These are a friendly, hospitable people and, although they have little to offer, are generous with what they have.



THE UBIQUITOUS YAK TAKES HIS PART IN AN IMPORTANT HOME INDUSTRY

In felt-making, after the wool has been placed within a roll of matting (see below) the whole is hitched to a yak and dragged up and down the valley for miles. The photographs on this page and at the top of the opposite page were made at Khasbel (see text, page 349).



KIRGHIZ FELT-MAKERS AT WORK

Clean fluffed wool is spread evenly on a strip of matting, moistened, and rolled into a cylinder (see above). Felt is an extremely important item in the domestic economy of these nomads.



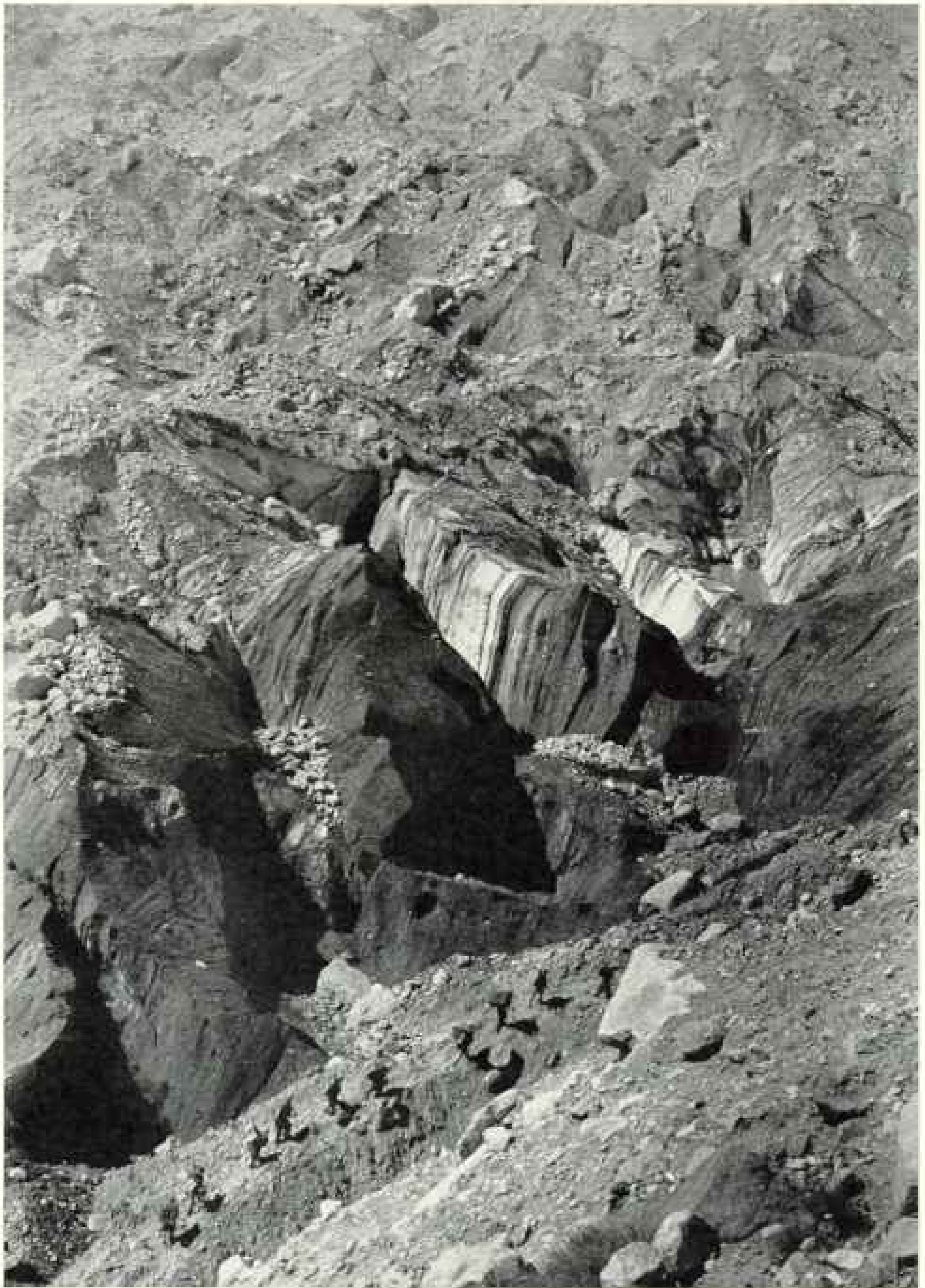
HUMAN ROLLERS PUT THE FINISHING TOUCHES ON HOMEMADE FELT

After being dragged about by yaks (see opposite page), the cylinders are opened, the wool and matting separated, and the former is again rolled, this time under the forearms of workers who operate with machinelike precision.



A YAK DAIRY BEYOND KILIK

These quadruple-purpose mountain animals are hardier than cows and yield a rich, nourishing milk. Some of the tribes sprinkle it on the foreheads of men and animals, as they are about to set off on a journey, to insure good fortune.



SCENES OF TITANIC UPHEAVAL BORDER THE GILGIT-KASHGAR ROAD

On such a trail the smallest pack is a burden, but the coolies struggled on under enormous loads. The footing is nowhere secure, loose rocks slipping about at every step. At any moment half a mountain side may slide away and, if it does no worse damage, block progress for hours.

The Mir is a perfect cinema actor, and his running comment as he smiled and gesticulated before the camera made us regret that sound-recording apparatus is not yet adapted to the juggling of pack animals, for Burushaski is an orphan language without living relations. M. Hackin, at Misgar, tried for weeks to discover some family language connections, but without success.

By the time one has reached the 37-mile Batura Glacier, superlatives have lost their punch, but even the Himalaya's best ice river is less than half as long. As everyone knows, the snout of a glacier, however dignified, is much dirtier than that of a pig, and we touched little ice on our way across. But stones, dislodged down seemingly innocuous cracks, sent ominous warnings from an unsuspected underworld, and it was a relief to rescue our last pony and climb the clifflike lateral moraine up which our sturdy Kanjutis bravely struggled under their 60-pound loads.

AN 800-MILE HORSEBACK RIDE BEGINS

At Misgar, between Karakoram and Hindu Kush, we were at the terminus of the telegraph, the center around which our life revolved. We others little knew through what nightmares our chief passed during those anxious days. One day our entry into Sinkiang was definitely refused. Within a few hours there came premature word that permission was on the way. Then the glad news that we could press on toward our comrades in China.

While waiting we were joined by our colleagues of the third group—a joyful reunion after 48 days. From beyond the Kilik, Jacovleff sent incomparable sketches of the life he, Pecqueur, and Sivel were leading in a Kirghiz camp, with yaks for companions and marmots as spectators. On September 1 our party of nine started the delightful 800-mile horseback ride which ended October 8 at Aksu (see map, page 324).

In preparation for crossing the Kilik, 15,600 feet high, we tested our oxygen tubes, submitted to blood-pressure tests, and filled our pockets with dried fruits and sugar. This pass proved so easy and unimpressive that the following day we added the Wakhjir, 500 feet higher, to our achievements, discovering an unmapped lake on the way and lurching in

Afghanistan opposite a glacier whose waters are divided between the Amu Darya and Tarim basins, later to die in the thirsty hearts of Russian and Chinese Turkestan (see, also, page 344).

We had left India, entered China, paralleled at close hand the Russian frontier, and crossed into Afghanistan, all within 30 hours. The boundary between India and Sinkiang is not yet fixed, but the natural boundary is the Hindu Kush.

At Khosbel we touched the life of the Kirghiz (see pages 346 and 347).

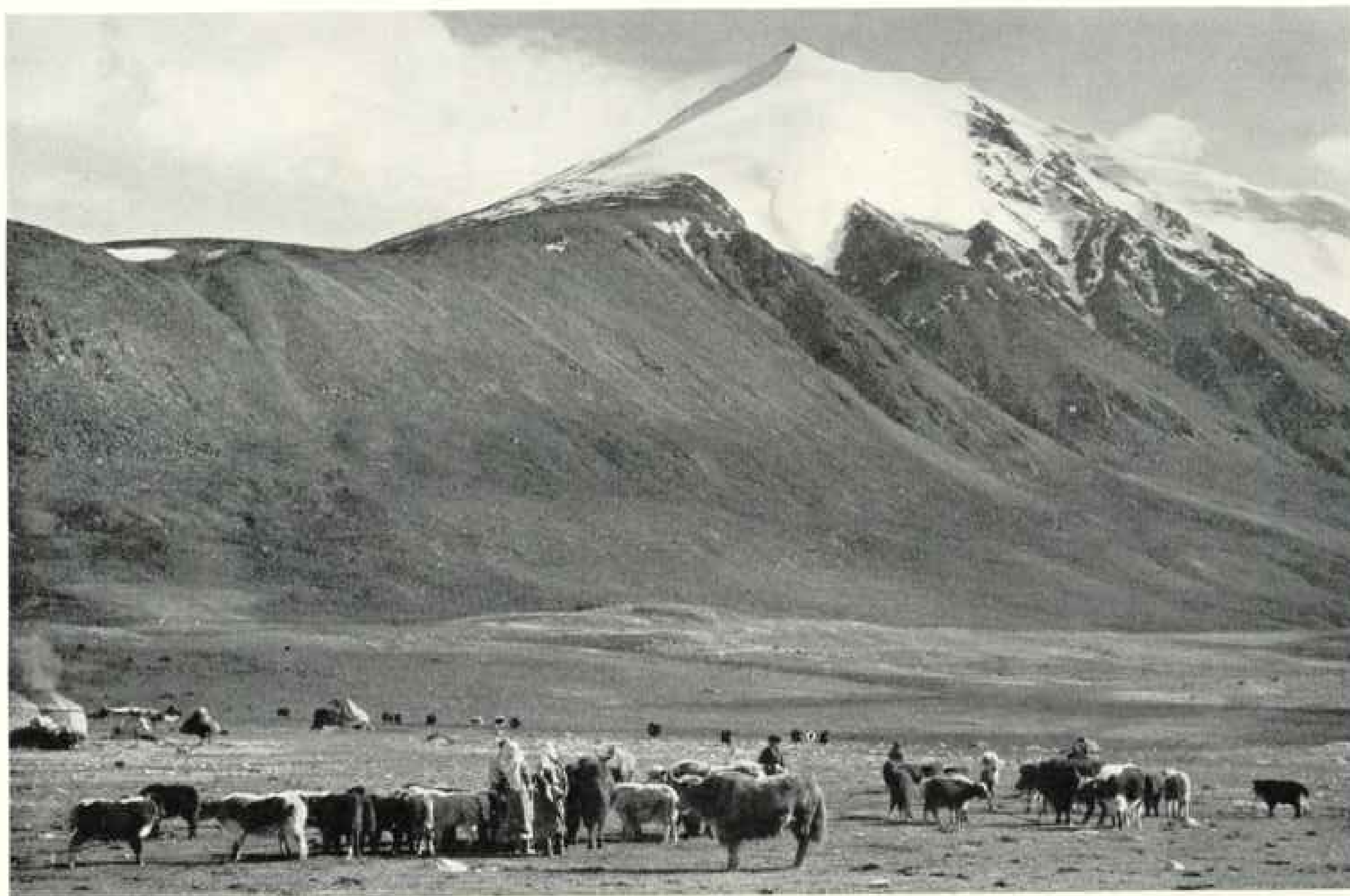
I translate from Le Fèvre's unedited notes the impression which this tiny Kirghiz camp made on him: "Before these men in quilted gowns, in boots and fur-brimmed caps, we find something of that for which we were willing to forsake for 18 months all that was dear to us in France—a humanity which, on our first contact with it, has an ancient dignity.

"Our sudden arrival in this majestic setting, this quick communion with humans still strange to us, this hospitable camp soaking in the sun, the table set by our Hindu servants, the turbans, the Kirghiz bonnets, the *chalaps* (rolled brimmed caps) of Hunza, the come-and-go of countless coolies, the riding horses freed from their saddles, the donkeys from their burdens, and the faint blue smoke of the first campfires rising toward heaven's all-inclusive dome—all this should leave in us a vivid souvenir of this, the most satisfying day of our pilgrimage toward the East."

At Beyik we were met by Jacovleff, Sivel, and our caravan of fine-looking camels and ponies from Kashgar. Commandant Pecqueur had gone on to Tashkurghan to expedite our entry into China.

SLOW CAMEL TRANSPORT CAUSES HARDSHIP

Unhappy is the lot of the travel writer among his fellow vagabonds, all too ready to believe and denounce him. He fixes the site of an encampment with mathematical precision, but when his critics arrive the nomads have moved. He praises some outlandish dainty only to have his successor fall into the hands of a poorer cook. He feasts on melons or gorges himself on grapes, and if those who follow him arrive out of season his reputation is ruined. He sees one charming woman, thus crediting her whole tribe with pulchritude,



THOUGH NEARLY 2,000 FEET HIGHER THAN THE BURZIL, KILIK PASS PROVED EASY

Some of the members of the Expedition made the ascent with such little difficulty that they also climbed to the 16,100-foot Wakhjir (see text, page 349).
At the left are the yurts of the nomads who are guarding their yak herd in the foreground.



"BOUS-KASSHIA," OR MOUNTAIN POLO, AS PLAYED BY SARIKOLI TRIBESMEN OF SINKIANG

Mounted on yaks or ponies, the object of the players is to capture and retain the headless body of a sheep. One rider dashes among them and drops the shaggy booty when the others least expect it. Then follows a scramble of heads, horns, and hoofs from which some one emerges with the prize. This is but the signal for another mêlée. A favorite method is to tuck the trophy between leg and saddle, as has the smiling man on horseback at the left.



A KIRGHIZ TODDLER POSES FOR EXPEDITION PHOTOGRAPHERS

Wandering about among his elders was this three-year-old of Khosbel, who proved an excellent "movie" actor.



PHOTOGRAPHING A CENTRAL ASIAN POTENTATE

The Amban of Tashkurghan is Governor of Sarikol, a long strip of country along the eastern rim of the Pamir plateau. His is one of the most unpopular posts in Eastern Turkestan, for the capital, at an altitude of more than 10,000 feet, has a climate which has been described as three months of spring and nine months of winter. The writing on the wall is an appeal to the people to exert every energy for the welfare of the State.



THE AMBAN OF TASHKURGHAN FACED THE CAMERA CHEERFULLY

This representative of Chinese governmental authority extended to members of the Expedition a most cordial welcome and entertained them at dinner (see text, page 354).

and condemns all who follow to a fruitless search for beauty.

One author accused the stately and reliable camel of being a frivolous and unreliable beast of burden. His description was so devastatingly convincing that our apparatus was sent forward on ponies.

That left the food, tents, and bedding for camel transport. The dromedaries arrived at Beyik several hours late, started later, got lost on the way, and we slept on the ground in a yurt which was far less cheerless than the drafty Pamirs. The day had begun with snow, risen to sunny warmth at lunch time, and cooled down to September chill at 11,000 feet. In spite of Jourdan's fidelity as vestal through that long, cold night, we slept little.

To cap the climax, the pony herd milled about, destroying one charge after another, and one runaway horse tossed up a wave of provisions from which a lone bottle of medicinal stimulant escaped unscathed.

Having lived under the supercilious but knowing eye of the camel for years, I saw to it that my tent and bedding traveled by the faster ponies, and that my precious plates and cameras enjoyed the security of camel transport.

The precision of our caravan, once we recovered it, was something to wonder at. Like trains stopping at parallel platforms, one string after another filed up, knelt to the light flogging of ropes on its collective neck, and stalked away, leaving its burden nicely aligned before our tents. Then the



A MASTERPIECE OF SURASHI MILLINERY

The most elaborate type of Kirghiz headdress has a visor of small shells and buttons, and long ear flaps decorated with pearl buttons and edged with tiny silver bells. From these flaps depend long coral and silver ornaments. A tasseled head cape reaches to the waist behind.

camels, who had already done a day's work, were walked around in circles until their rude meal was spread before them.

Our reception by the friendly Amban of Tashkurghan was all that could be desired. It was at the Amban's dinner that my companions became acquainted with the disagreeable "bottoms-up" feature of Chinese hospitality.

At least once for each of the innumerable courses and often between, one of your hosts fixes you with un pitying eye, raises his tiny metal cup of Chinese wine or brandy, and each must drain the cup at a gulp and show its bottom to his fellow-victim. Choosing to stick to tea, I was annoyed at

finding it increasingly alcoholic until I discovered that my neighbor was using my teacup as a secret substitute for his inhospitable stomach.

THE EXPEDITION ENTERS CHINA

Like stay-at-homes, the globe-trotter sometimes encounters coincidences. One of the strangest occurred while we were sipping tea in preparation for the Amban's dinner. Betrayed by a commendable generosity, we had offered to bring our phonograph to the function, but on our arrival found a much finer one, the property of the waggish Military Governor.

Phonographs are better known in Tashkurghan than are national hymns, and when the "Marseillaise" rang out from the Governor's machine, the fact that we sprang to our feet required a long explanation, filtered from French through Russian to Chinese. The playing of the French

national air at this Sino-Gallic dinner had been quite by accident.

Thin paper customs labels were pasted on our yakduns, a letter was graciously added, saying that if the rain washed off the labels it was heaven's fault, not ours, and we lightheartedly entered the China toward which we had pushed on for months, often with scant hope. As we rode away, the Amban, the Military Governor, and their staffs came out to the three-walled reception or departure pavilion and offered us a *chah-jan*, which in this case consisted of tea, Chinese cakes, and Soviet candies wrapped in lessons on the use of the metric system.

At Karasu Karaul we were at the very foot of the "Father of Snow Mountains," Muztagh Ata, but September snow engulfed us and the view was ruined. In a snow mist so dense that one could hardly tell land from sky, we rode over the Ulugh Rabat Pass, almost as high as the Burzil, but a mere hump on our high plateau route.

A SERVANT PROBLEM ARISES

On that ride I noticed, and M. Hackin confirmed, a phenomenon which was new to both of us. There were distinct shadows of our horses in the snow on the side toward the morning sun, which was hidden by clouds denser than those to the northwest.

Although a light snow continued to fall and the sky was too dark for color photographs, our afternoon at Subashi was all too short. I would gladly have accepted the Beg's hearty invitation to stay a week. Even our Kashmiri servants could not break the spell of cordiality, though they tried to bar some of the tribal leaders from their own yurts during a phonograph concert and the dignified servant of Audouin-Dubreuil, so much more superior than any of us, asked our host to carry a camp bed to its proper place. Even Asia has its servant problem.

Twenty-six exceptionally fine yurts, mostly soft cream color with dull-red decorations where roof joined circular side walls, composed the encampment. Handsome old men squatted about, holding sturdy youngsters inside their padded gowns, and at my request the women put on their finest headdresses (pp. 354, 360).



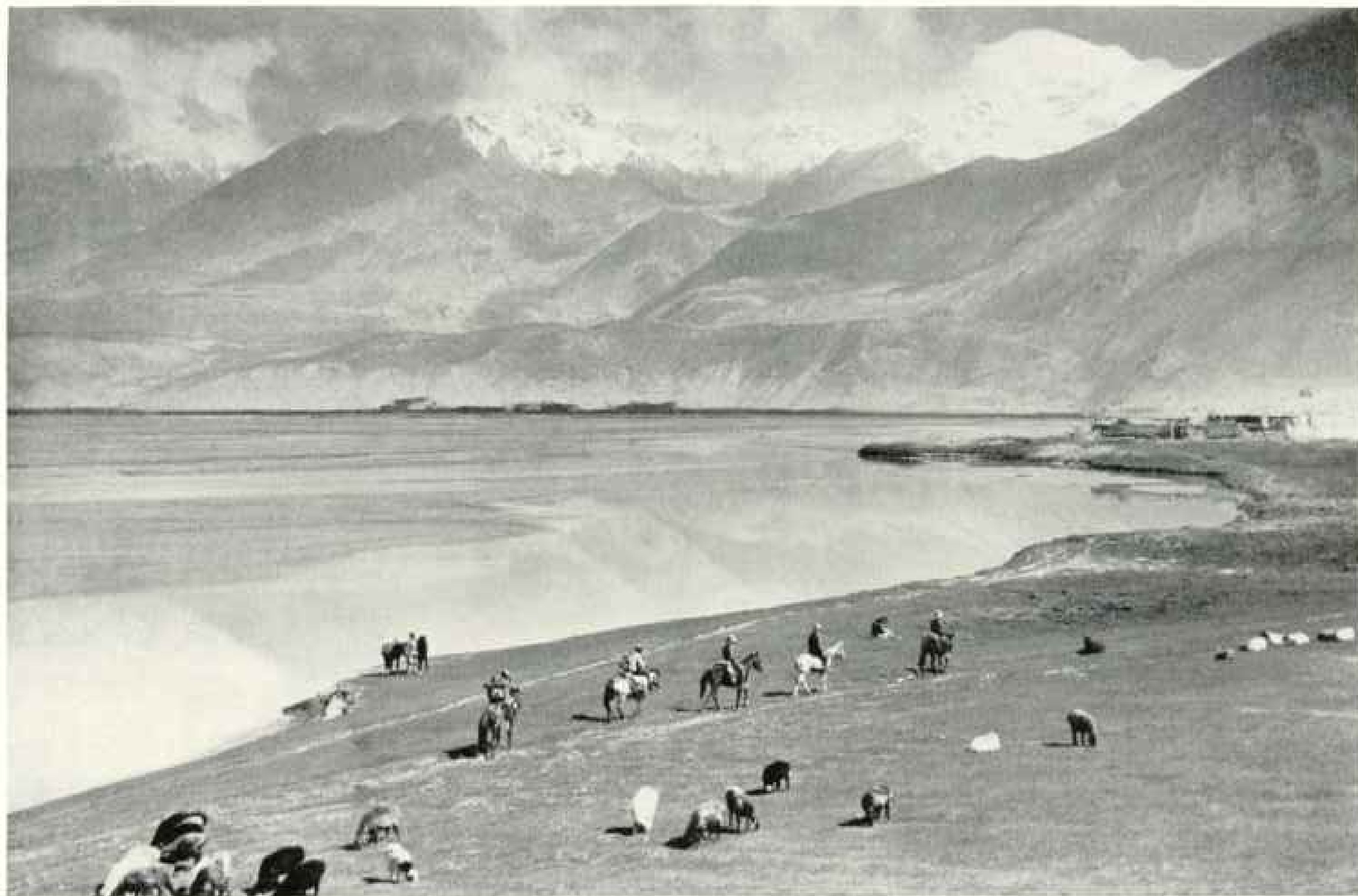
HE'S NOT SURE THAT HE LIKES BEING SHOT BY A CAMERA
Kirghiz children are shy among strangers and quiet even with their own people.

Two or three riders dash off to round up the yaks, and the cows and calves are attached to long hair ropes before the women milk the cows or allow the calves to divide the labor. The whole scene is one of idyllic charm.

To Le Fèvre the nomad is something poetic. "These people have not surrendered to civilization," he says. "One feels that they live beyond the reach of the artificial world. Free with their herds, their horses, and their vast smokeless horizons, they love the virgin earth. Formidable horsemen, they win our admiration."

So much for the Asiatic "savage" as seen by the cultured Frenchman.

After a day of accidents, with a total of five falls from horseback and one excellent



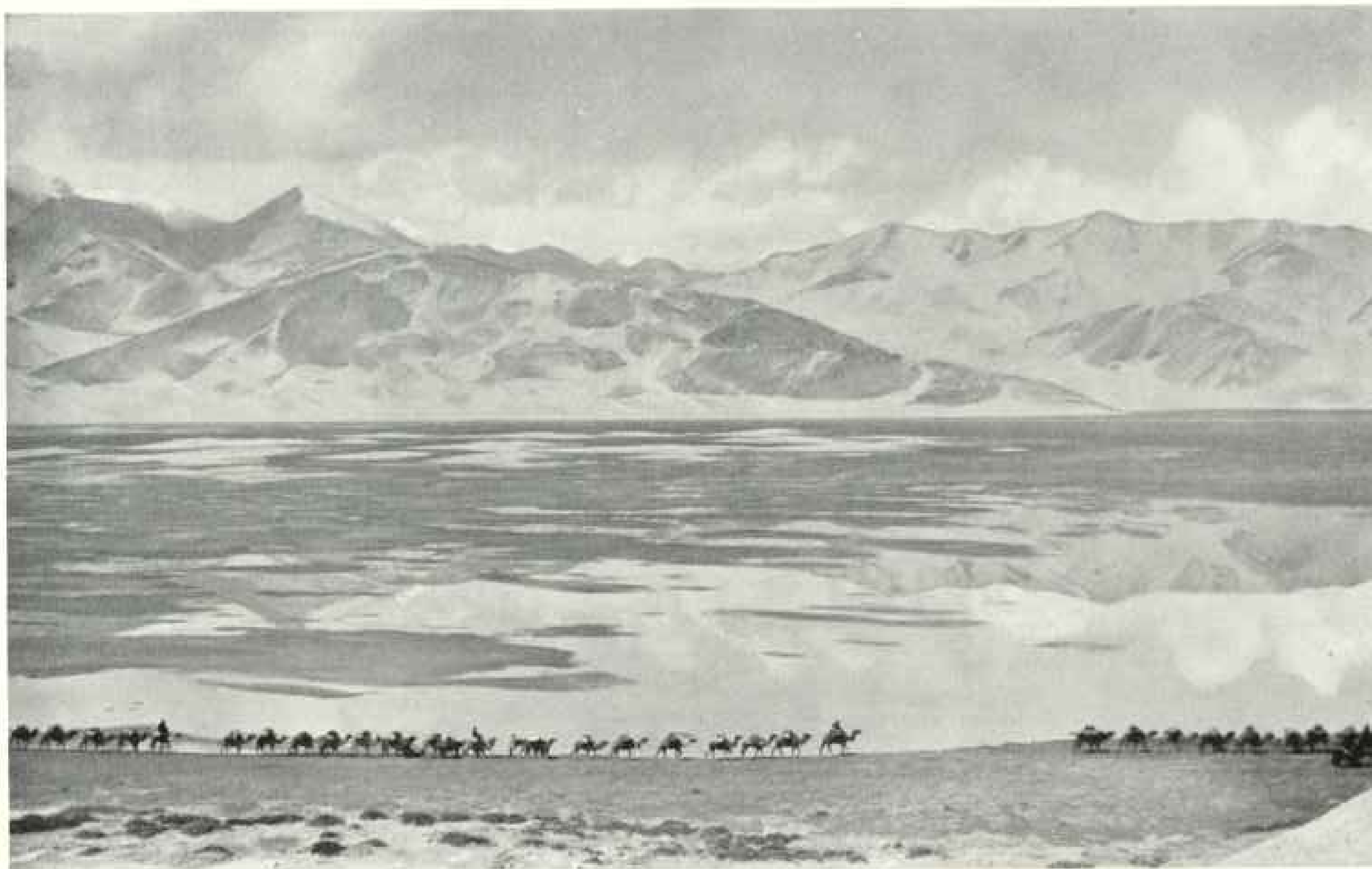
APPROACHING A VILLAGE ON THE SHORES OF BULUNKUL

As members of the Expedition skirted the shore of this mountain lake they passed through flocks of grazing sheep. Most of the wealth of the nomadic inhabitants of the high Central Asian plateau is in live stock.



FLANKED BY VAST SNOW MOUNTAINS, THE EXPEDITION'S CARAVAN FOUND ITS WAY ACROSS THE HIGH PLATEAUS
OF CENTRAL ASIA

After the automobiles which had come from Beyrouth had to be abandoned (see text, page 341), pack animals took their places until four cars of the China unit were reached at Aksu (see, also, text, page 363).



AS IN AGES PAST, CAMELS STILL PROVIDE DEPENDABLE TRANSPORT FOR INNER ASIA: SKIRTING THE WATERS OF BULUNKUL LAKE
To carry the Expedition's supplies and equipment required a large number of pack animals. Camels, yaks, and ponies were used. Generally speaking, the first named, although not so fast as the ponies, proved the best carriers for fragile objects.



LONG LEGS STAND THE CAMELS IN GOOD STEAD WHEN FORDING THE COLD RIVER GEZ

Back and forth through this swift stream the caravan's long-suffering animals had to cross during the course of their journey between Tolchtai and Tashmalk (see text, page 362).



THE YAK IS A VERITABLE DEPARTMENT STORE AMONG BEASTS

It has the head of a cow, the tail of a horse, and the grunt of a pig. Its meat and milk are food and drink and its dung a fuel. It is a beast of burden, a sometimes spirited charger, and a household companion. Le Fèvre, of the Expedition, remarked that it seemed to be able to do everything except lay eggs. Kirghiz from the region between Tashkurghan and Kashgar.



YOUNGER WOMEN OF THE STEPPES

Although their rough, outdoor life makes them hard-featured and weather-beaten by middle life, they are often rosy-cheeked and attractive in youth. They tend the flocks and herds, milk the yaks, cook, make the family's clothes, weave carpets, make felts, and rear families.

horseman soaked to his waist in fording a stream, we came to Bulunkul. From his yurt at nightfall M. Haardt had a splendid view of Kungur. "It was like a magic-lantern show, with men in padded gowns of green and orange and blue sliding across the opening and the mighty mountain motionless beyond."

West of Bulunkul a mantle of sand hangs down the mountain side. The following day we saw the long line of dunes from which this vagabond streamer depends. We cantered across the dry bed of the vastly shrunken lake and watched the long camel caravan pass between us and the water mirror—a rare opportunity, since this is usually a windy corner near the entrance of the rugged gorge of Gez (see page 358).

Captain Sherriff, who had proved himself a warm friend, now on his way home from Kashgar, joined us at lunch near one of Kungur's glaciers, and we sat long at table before going our different ways.

CAMELS AS MOUNTAIN CLIMBERS

All must walk a considerable portion of this rock-ribbed—and skinny—route, but my Yarkand pony "Midnight" had worn through his shoes and was limping badly. Far into the night, after a long morning afoot, I tramped along that tortuous trail. Why, during the long starless march, I didn't break a leg I can't say; but just before dark I caught up with the camels and they proved excellent guides. "Midnight" did his best to cheer things up by nuzzling my back whenever, as was often the case, the long line stopped.



PASSENGERS IN A KASHGAR "TAXI"

The vehicle has no springs, but, as a compensating factor, neither has it a meter. The front seat is rather close to the "horsepower."

It was a trying tramp, but probably never since Beyrouth had I so lived. Adversity makes one feel. Never had I realized how useful is a dark spot of dung in indicating the right path. Whenever the bells on the last camel broke from a dull boom to a metallic clatter, I learned to judge the distance to that rough spot and watch my step.

The trail goes up and down, now near the water's edge, now playing pickaback on a tiny corner of the massive king of the Kashgar Range. Once, before it got too dark, I watched the long line of camels top a rise. Their legs were invisible. Their necks jerked forward ahead of their burdens. They looked like hunchbacked tortoises snapping at the sky.



A VARIETY OF STRANGE CARTS SERVE THE RIDING PUBLIC OF KASHGAR

Brightly colored vehicles, with knobby-rimmed wheels, round roofs, and an awning over horse and driver, are frequently seen upon the streets. Sometimes long streamers of red and yellow hang from the horses' silver-studded bridles.

The driver of our fourth group of camels was a cheery lad, mostly felt boots and smile. He took all this as a matter of course. Along about 10 it was discovered that a small piece of tent bracing was lost. You and I would have consigned that wooden trifle to quick ashes. But back went that lad, alone amid the rocks. Half an hour later he rejoined us. He had the lost bit of wood in his hand, and he was singing. I mentally took off my hat to him.

The next morning we shod five horses, and our alpinist camels showed what they could do at fording. The mountains had dwindled away into marl cliffs like the buttresses of giant cathedrals; the same sort of high grass that marked the end of the Sahara crossing during the "Black Journey" * rose beside our trail, and we camped inside a mud inclosure at Tokhtai.

From there to Tashmalik our camels forded back and forth across the swift Gez River, here flowing between blood-red

cliffs. Turki traders, waist deep in the cold water, were helping their mouse-gray donkeys; docile sheep were carried or steered on their way, and another caravan, longer than ours, stalked patiently toward the plains (see page 359).

THE DUSTY PLAIN IS REACHED

My companions pushed on eagerly, but these Red Gates to the Tarim Basin entranced me and I was loath to leave the mountains. "Midnight" suddenly stepped into a hole, soaking his own muzzle and my feet. But what matter? The cliffs to the right were striped with chocolate, those to the left touched each quiet pool with blood. Ahead was the long, level line of the dusty plain.

Tashmalik is not a village in the oriental sense. Its homes, protected by high mud walls edged with bramble, are scattered widely amid fields of corn, cotton, hemp, rice, and melons. Poplar and willow trees indicate the position of paths or irrigation ditches. As far as we could see, except behind us, *trees* rose against a seemingly broader sky.

* See "Through the Deserts and Jungles of Africa by Motor," by Georges-Marie Haardt, in the NATIONAL GEOGRAPHIC MAGAZINE for June, 1926.

Our camping place was beside a still stream. On a square raised platform surrounded by a small canal, rugs and felts had been spread, and a row of Turks in fur-brimmed caps, quilted gowns, and soft boots brought bowls of tea, pyramids of peaches, and great melons whose succulent pulp melted in our mouths. The camels knelt to deposit their loads, our green Whympet tents rose in neat alignment, and our Kashmiris, squatting around the fire, sucked avidly at their water pipes to still their trembling hands, which were closed tight to form a mouthpiece.

By dusty highways, sometimes sunk to a level far below that of the fields of ripening grain, we rode on to Tokuzak, a tiny town with the first bazaar we had seen in months. Small groups of gowned horsemen chatted together as they rode along, and veiled women went by on donkey back, sometimes followed by a manservant on foot.

THE KASHGAR VEIL WORKS MAGIC

In pre-war days, when stylish hats were huge affairs, I remember seeing a Syrian queen who, as she drew nearer, proved to be a laundress with her bundle of linen on her head. By such magic do oriental women achieve distinction. So with the Kashgar veil.

It is a commonplace affair, more than chin length and without charm. Held in place by a fur-brimmed cap, it is as grotesque as the horse-hair veils of Bokhara. But the Kashgar women are not fanatics. More often than not their veils are negligently draped back over the round cap, giving to the whole a tricorne effect which, by inexplicable magic, makes these Central Asian dames sisters of those mysterious Venetian damisels whose provocative millinery seems designed for the eye of Casanova himself.

At Kashgar, which we entered on September 19, I was greeted by a former student of the American University of Beyrouth. He was born in Kashgar, speaks his native Turki, Turkish, Persian, Russian, English, and French—and hardly a

word of Chinese! Although the attractive Turki youngsters often resemble Chinese, thus confusing the two races, an adult Chinese is almost as much a novelty as is a European.

Market day in Kashgar!

At the foot of a blue-and-green old mosque façade were piles of gaily-painted spinning wheels and cradles. Hanging in the breeze, long streamers of rough homespun still dripped with dye.

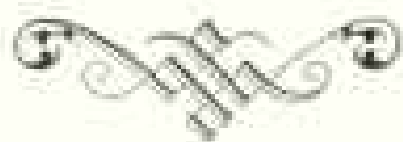
All through the city, new mosques being built. In the central square, great piles of Kashgar's justly famous melons, shiny piles of excellent bread, padded garments of somber tones, fur-brimmed caps with crowns of blue or gold brocade. Not far away a whole street of tiny silk or velvet skullcaps beloved by both sexes.

THE END OF THE HIMALAYAN HOLIDAY

In the heart of this mud-walled city, made colorful by its population, is the Tao Tai's yamen. Not in many years has there been so sumptuous an affair as the dinner which he gave to M. Haardt in honor of our arrival in Chinese Central Asia from far Beyrouth. Our horses pranced to the quick crash of trumpets, as the guard of honor snapped to a smart salute. The meal was admirably served and every courtesy was shown us.

It was almost with regret that we set out on our delightful ride across desert and oasis to where our comrades, with four cars, larger and finer—"Golden Scarab," "Silver Crescent," Heavy Cinema, and Popote—awaited us at Aksu. But we were forbidden to take photographs, and a travel story without pictures is too often a wordy affair.

The essential thing was that we were safely over the mountain wall before winter's blizzards set in, happy to be in Central Asia, delightfully received by the Chinese officials, and once more united with our friends. Our Himalayan holiday was over—a brilliant phase in the Citroën-Haardt Expedition's long journey to far Cathay.





Photograph by Carl J. Luther

SHOOTING THROUGH THE SLUICES OF THE ISAR IS A REGULAR SUNDAY PASTIME

The city of Munich has established a vast park area on each side of the river, and here crowds gather to get a second-hand thrill as they watch expert "faltboaters" rush by on the swift-gliding stream.

ENTERING THE FRONT DOORS OF MEDIEVAL TOWNS

The Adventures of an American Woman and Her Daughter in a Folding Boat on Eight Rivers of Germany and Austria

BY CORNELIA STRATTON PARKER.

THERE are three appropriate ways of arriving at a medieval town—on foot, on horseback, and by a modest boat of sorts from the river. In these rushing motor days, the first two have decided drawbacks; the third is the perfect method of approach.

Most strongholds of the Middle Ages were on rivers and, what is more, for most of their existence the towns expected you by river and built accordingly. The one way they never dreamed of your arriving was in a train of cars. They knew nothing of railroads for hundreds of years, and when an invention so out of keeping with the medieval world did lay its tracks in the direction of old towns, usually they were kept at a commercial distance.

There is, of course, for every old town, the railroad station, built about 1870, of red or yellowish brick or gray stone, funereal and sooty. Across the cobbled street is the *Gasthaus zum Bahnhof* or the *Hotel de la Gare*, as sooty and funereal, too often, as the station.

You look down *Haupt Strasse*, 1870 to 1890, glare at a factory chimney or two, and ask yourself why you bothered to get off at this particular town anyway. But keep on in the direction of the river—an old gabled house on a corner, in the next block three gabled houses with mellow carved woodwork, the *Rathaus*, or City Hall!—all your heart could desire! And across the square a welcoming inn, built in 1678. Well, well, this is better.

Your for the most part unnecessary baggage stored in a front bedroom of the inn, you prowl on down still farther toward the river. Now you know for sure and certain why you've come. You stand on the 15th-century stone bridge and look back to the 16th-century arched gateway leading to the crooked street, lined with crooked timbered houses, which ends at the *Rathaus Platz*.

"Why, this town is perfect!" you exclaim. But the last picture you have of it—or shan't we be so cruel as to remind you?—will be that 1870-1890 *Haupt Strasse*, leading to the 1880 *Bahnhof Hotel* and the sooty, ugly 19th-century station.

"PADDLE PEOPLE" PLY THE RIVERS

But not yet. You turn your head up the river, along the remains of the old town walls. What is that speck coming downstream? Paddles, catching the glint of the late afternoon light? A small blue boat with a yellow top, a bright blue flag at the bow emblazoned with a gold-creatured pattern of sorts.

A figure steps out in long, flappy, dark-blue trousers gathered in at the ankles, gives a last look in a little book, and wanders up the bank and over the grass, picking her way politely, so as never to step on the town laundry, not yet gathered in.

She vanishes through a second ancient gate a bit upstream from the bridge. In a moment she is back, smiling. "Two beds!" she calls. Another form in long, blue, flappy trousers gets out of the boat; they unload a rucksack or two; then you behold them pick up the boat and disappear with it through the arch. Another speck rounds the bend of the river . . . and disappears through the same ancient arch . . . and another.

Ah, wanderer, you behold the chosen of the earth, the "paddle people," the joyous owners of *Faltboote*, or collapsible boats—if you will spoil a good word—off for the night at the canoe station, marked in the river guidebook as the *Guesthouse of the Anchor*.

And the boats? Did the river guidebook not say there was place for fifteen? And the people? There are beds for the moneyed which cost, piled high with snow-white leather bolsters, perhaps all of 35 cents for the night, but maybe less.



Photograph by L. Kemeter

FALTBOT ENTHUSIASTS WHEEL THEIR DISMEMBERED CRAFT THROUGH THE STREETS OF MUNICH



Photograph by Carl J. Luther

WAITING FOR THE TRAIN THAT WILL TAKE THEM OFF TO A FALTBOTING RIVER

Such scenes are common throughout Germany in summer, when many thousands of young folks spend their holidays on the rivers. Note the wheeled contrivance for transporting the boat (see text, page 382).



Photograph by Carl J. Luther

FALTBOATING DEMANDS A MINIMUM IN THE WAY OF WARDROBE

Bathing suits or merely trunks are worn by many of those who travel the rivers in small boats. Not only is greater freedom of action possible in such attire, but it is a more comfortable way to take a ducking. Besides, there is little room aboard for baggage. The boaters are adjusting their *Spritzdecken* (spray covers) before venturing into rapids.

For those who must reckon more carefully, there is "straw in company," at about ten cents a head—and two feet. And there are those who have saved perhaps twenty marks (\$5) for their entire vacation and not a pfennig more to be had—you haven't seen them. They are busy pitching their tents in groups of four, eight, twelve, up the river, down the river, carrying bundles of hay from near-by farmers for their mattresses, and soon smoke will be curling up under the potatoes (see page 389).

For it is summer in Germany, and ten thousand, fifty thousand—for all I know, a hundred thousand—young people are paddling down the rivers of the Fatherland. And we ourselves, in the impeccable *Gold Bug II*, purchased in July, 1931, at Bad Tölz on the Isar, south of Munich.

THE AUTHOR BUYS A FALTBOAT

I remember asking a German tourist agency in London if it might not be possible to buy a second-hand faltboat (fold-

ing boat), for \$75 seemed quite an outlay for one summer. The man shook his head without waiting to consider. No one would ever sell his faltboat unless it were in such dreadful shape that it wouldn't be fit for anyone to use. What a price would be needed to pry us loose from ours!

On July 3 we had no idea what a faltboat looked like. That day we were shown one in a house in Munich. The proud owners let it down from the ceiling in the hall, and our entranced eyes announced to our already made-up minds, "We will have one just like it!"

On July 7 we took a bus up the Isar Valley from Munich to Bad Tölz, deposited the rucksack in a Bavarian inn at least two hundred years old, and found our way to what Bavaria calls a factory, the faltboat factory.

It was an erstwhile brewery, showing low and comfortable between an ancient barn and a mellow stone-and-timbered



Drawn by C. E. Kiddliff

"OF THE EIGHT RIVERS WE PADDLED, NO TWO WERE ALIKE"

After purchasing their collapsible boat at Bad Tölz, near Munich, the author and her daughter covered 734 miles over the Isar, Inn, Salzach, Danube, Weser, Drau, Main, and Lahn.

outhouse turned storeroom. Perched on a little wagon under some trees, a boy was reading a newspaper salvaged from the road. A few chickens clucked about, deceiving themselves as to nourishment. Certainly we had been misdirected. No, the boy assured us, yonder was the factory.

An old woman was brushing about in an already-spotless room stacked with slender blue-and-yellow one-seater boats, stretched over their new lacquered wooden frames. We wanted to buy a boat? It was pretty late (4:30). Perhaps we had better come back to-morrow. The engineer and the manager would be there to-morrow.

The eighth of July we bought our beautiful two-seater, the only two-seater left in

Bad Tölz. I tried to take a picture of it in the factory, as the ruddy Bavarian workman was showing us how to fit the various parts of the wooden frame into the eighteen-foot-long, a bit under three-foot-wide, boat, rubberized sailcloth for the bottom, yellow waterproof canvas the top. But I could not place the camera far enough away from the boat to get it all in, so restricted was the busy little workroom.

OFF ON A TRIAL VOYAGE

On the ninth of July four of us started off for Fall, up the Isar, two young Bavarian friends of the manufacturer going along in order to demonstrate to us, two totally ignorant Americans, how one



THE AUTHOR'S ENSIGN WAVES JAUNTILY ON THE LAKE

One discerning Teuton actually recognized it for what it was intended—a gold bug on a blue field. The junior member of the ship's crew ventured the opinion on first sight that it represented a bolster leaking slightly at the corners (see text, page 380).



Photographs from Cornelia Stratton Parker.

WHAT THE WELL-DRESSED WOMAN WEARS IN A FALTBOT WHEN IT RAINS

And the author found that it does rain in Germany, sometimes for days on end. It is at such times that the estimated value of one's faltbodyat reaches its lowest ebb (see text, page 370).

ventures forth to see the world in this pre-war invention of a fellow Bavarian.

By train, by bus, we reached Fall, two double boats rolled compactly in their three sacks each—one for the folded boat, one for the curved ribs, seats, backs; a longer narrow sack for the paddles and sections of lengthwise frame.

Enraptured, on the grassy banks of the Isar at Fall we watched our own treasure take form and stretch out taut to its perfect proportions. An experienced Bavarian youth in the aft seat of each boat, a very inexperienced American in the fore, we paddled back to our starting point down the rushing gray-green Isar, fir-clad mountains rising on either side.

About midnight my sunburned shoulders moved unrestfully; then raised themselves confusedly in the dark of the old Bavarian inn. What a tumult! Bells, bugles, treading of feet! I poked my head out the window above the potted geraniums and gazed sleepy-eyed up the steep main street of Bad Tölz. The sky was flaming red. Fire! In two minutes I was dashing up the hill, stepping on my own shoelaces, clutching a Swiss rain cape about a pair of gaudy New York pajamas.

Our faltboat factory was burning to the ground! Along with all the rest of Bad Tölz, helpless I watched it burn, the only building in all Bavaria which meant anything personal in my life, except, perhaps, for the moment one old Bavarian inn. I could have wept for the anguish of it. We had bought the last boat to be manufactured that season.

The next morning, with something of a heavy heart, we paddled on down to Munich; but it is difficult to keep a heavy heart long in a faltboat. We shipped the boat by train to Salzburg and got it together on the banks of the Salzach—alone? No, not alone. With the help of all strange nearby Austrian cavaliers, who sent us out into the Austrian waters with a bunch of roses tied to our flagstaff.

We were in our own *Gold Bug II*, launched to see the world and no one to fall back upon in our green inexperience.

Down the Salzach to the Inn, down the Inn to the Danube, down the Danube to Vienna. After those eight days you could never have named a price for the *Gold Bug II* we would have listened to. For the three days we paddled the Drau in south

Austria we pined with a deep melancholy all souls not possessed of a blue-and-yellow faltboat. What in all the world could be compared to paddling down the Drau?

After a solid week of being poured upon from Bamberg to Wertheim on the Main, we would have considered some sort of a deal—say, twice what we paid for the boat. After the three cloudless days on the Weser from Münden to Hameln, only over our dead bodies could you have gotten possession of so much as a rib of our pride and joy.

As for the Lahn, six days on the Lahn from Marburg to Bad Nassau—don't bother to discuss any terms. That boat is ours forever.

THE JOYS AND PERILS OF WILD RIVERS

Of the eight rivers we paddled the wet summer of 1931—1,181 kilometers of river sights (which sounds more than to say 734 miles)—no two were alike. The Isar and Drau were both classed as "wild" rivers; yet even they were wild with a difference.

As to wild rivers in general, paddlers get to be like mountaineers. You don't climb a 14,000-foot mountain after the first six 14,000-foot mountains to behold the world at your feet, or for the sake of stretching your muscles, but to see how near you can come to breaking your neck without breaking it.

Thus the paddler of hardened character cares not a whit whether he is approaching a medieval walled town, or if peasants are haying along quiet fertile banks, but is there water ahead which is pretty sure to capsize him if he isn't careful and skilled? There must be the sound of rushing torrents, rapids to shoot, whirlpools—yes, bring on a dam and let him lunge over it.

Do you mention to him gingerly that the Weser winds through gloriously wooded hills; that Marburg, Wetzlar, Limburg are cities one surely could visit from the Lahn with pleasure, he snorts. The Weser? One could fall asleep paddling the Weser and still be alive at nightfall. The Lahn? Is a person ninety already that he picks a river with no more current than a canal? Now, one day on the Enns in Austria—now there's a river! And by the time he has told you about one day on the Enns you are gooseflesh and a trifle faint.

One of us was too old for more than two wild rivers, the other too young. Being

TYROL, THE HAPPY MOUNTAIN LAND



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Natural Color Photograph by Hans Hildobrenndt

LÄNGENFELD, NESTLING IN AN ALPINE VALE, SEEMS TO DEFY THE MARCH OF TIME

An architecture which features corner windows, projecting gables, and highly decorative wooden balconies lends a distinctive air of mellow antiquity to many villages in the Tyrol. Here, bracing air and beneficent mineral springs combine with the man-made attractions to invite health seekers.



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Natural Color Photograph by Hans Hübnerbrand

TYROL'S MOUNTAIN-GIRT CAPITAL SERVES AS A GATEWAY TO AUSTRIA

Many visitors make their first acquaintance with the erstwhile realm of the Hapsburgs at Innsbruck. Located on the banks of the Inn River, it occupies the site of an ancient Roman military station at the junction of the Brenner and Arlberg passes. The city is an attractive community of about 70,000, and, despite a rapid growth during the last 30 years, maintains much of its medieval atmosphere and dignity. The monument rises from Maria-Theresien Strasse and commemorates an early 16th-century victory over the Bavarians.



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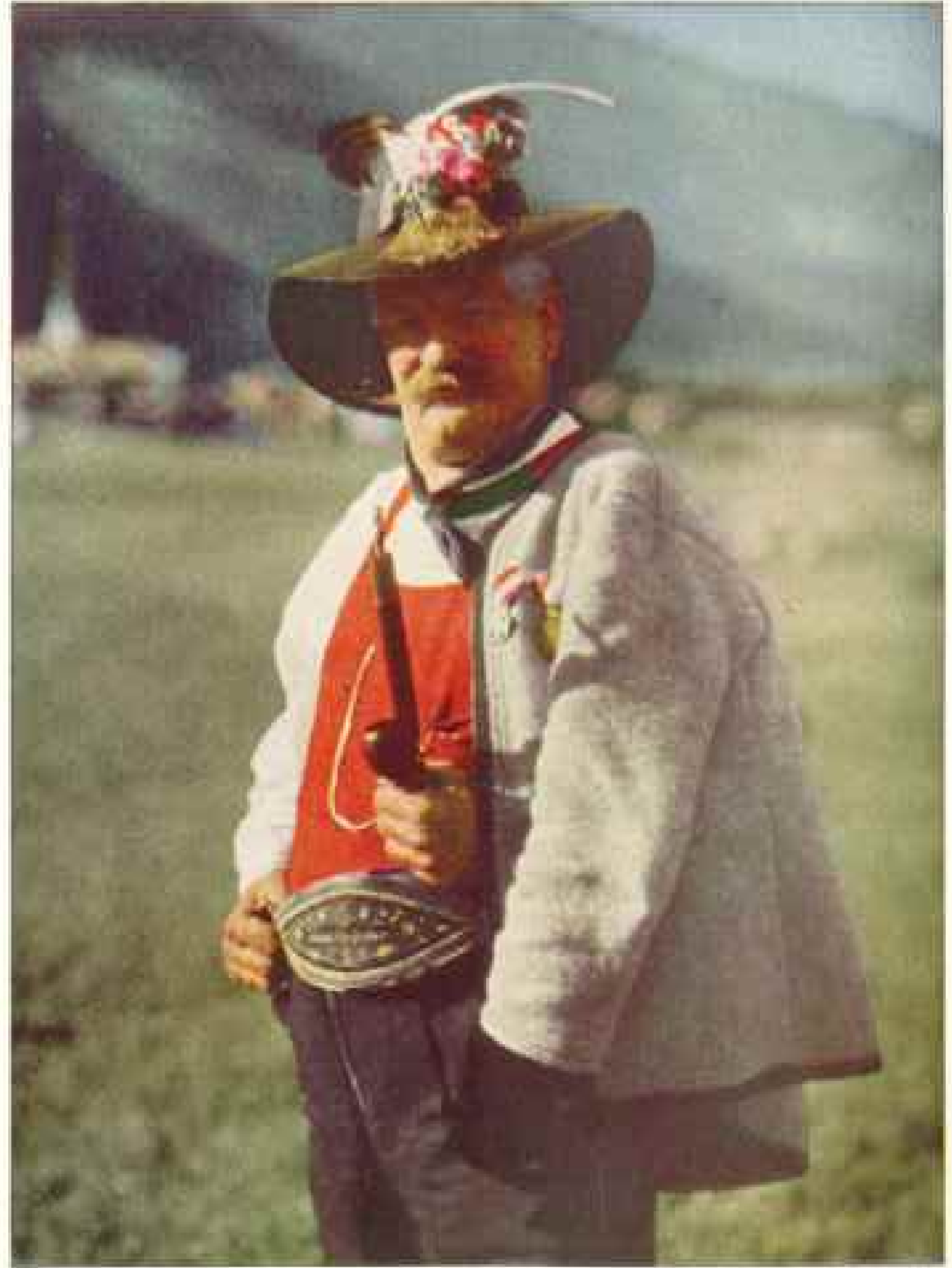
Natural Color Photograph by Hans Hildebrand

GROWN FOLK AND CHILDREN ALIKE WEAR THE NATIONAL COSTUME

Details of masculine dress vary in different sections of the Tyrol, but essential elements are much the same throughout the province. Black shorts, white stockings, embroidered belts, short jackets, and either very broad brimmed hats or a headgear similar to the "overseas cap" with no brim at all, come near to being standard apparel for dress occasions. The color of jacket and hatband sometimes serves to distinguish the people of a particular village, but green is a general favorite for trimmings. Tyrolese take pride in their folk costumes and are bringing their children up to wear and appreciate them.



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Natural Color Photographs by Hans Hildbrandt

THEY HAIL FROM A VALLEY OF DANCE AND SONG

The peasants of the Zillertal are a merry, friendly folk, and their wide pastoral valley is one of the most celebrated in all Tyrol, both for its beauty and the prowess of its carolers and zither players. They are proud of the fact that one of their number introduced the Tyrolese yodel to the world. The gold tassels worn on their hats are peculiar to this section, but flower and feather decorations are found throughout the province.



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Natural Color Photograph by Hans Hildebrand

EVERGREENS CONCEAL THE RUGGEDNESS OF OETZTAL'S FLANKING SLOPES

By way of this valley one reaches some of the finest and wildest mountain and glacier regions of Tyrol. Here, to gain a livelihood, man must do battle with an infertile soil and a climate that brings snow for at least half the year. The hardships of existence make him a bit less given to gaiety than those of his fellow-countrymen who make their homes in more favored localities.



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MOUNTAIN MAIDS OF SCHARNITZ

Mountain climbing and hiking might be termed the national Tyrolese sports. Magnificent scenery, an exhilarating climate, and the friendly hospitality of its people, attract many thousands of visitors to this land of rugged, snow-crowned peaks and green alpine valleys. The girls are carrying small kegs of brandy to revive the spirits of weary climbers, while the young man guides visitors safely up the trail that leads to the 9,725-foot Zugspitze on the Tyrol-Bavarian border. For those who do not enjoy the ardors of mountain climbing, an aerial railway ascends to within 500 feet of the summit and affords fine views.



Natural Color Photographs by Hans Hildenbrand

A JOVIAL ZUGSPITZE GUIDE



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Natural Color Photograph by Hans Hildenbrand

A SEXTET FROM INNSBRUCK PRESENT THEIR VERSION OF THE TYROLESE BLUES

No corner of Europe offers a brighter pageant of costume and countenance than Tyrol. Cheerfulness and good will are encountered everywhere and frequently find expression in songs and folk dances.



© National Geographic Society

Natural Color Photograph by Hans Hildenbrand

A FLOWER-DECKED FARMHOUSE AT ZELL ON THE ZILLER

Man and Nature combine to paint the Zillertal in brilliant hues. The valley is extremely rich, too, in folklore. Elves and sprites and fairies and goblins are reputed to make it their home and to interest themselves in the affairs of its residents, generally to their benefit but sometimes to their confusion.

human, we were more than willing for enough current to carry us along pleasantly without need to puff and blow for every kilometer covered.

On the other hand, a river map sprinkled with red danger crosses, with red exclamation marks; a river with waves dashing at you from the banks of a curve, whirlpools opening all of a sudden an inch from the bow of your boat, a torrent surging over boulders, churning itself into breakers six times the height of your craft! My gray hairs entitle me to some peace on a vacation.

DAMS DETER FALTBOTTERS

We had no intention whatever of shipping ourselves and *Gold Bug II* from Vienna down across all Austria to the Drau; we were bound for Budweis on the Moldau, to paddle on down through Prague to the Elbe and Dresden. But faltboating provides you with a new grievance against this modern world. What it does to rivers! Nor is what it does any more aggravating half the time than not being able to find out what it does.

We had set our hearts on getting acquainted with Czechoslovakia via the Moldau. Could I buy a river guide to the Moldau in Vienna? No! (And travel a strange new river without a river guide I, at my advanced age, will not.)

Did the Czechoslovakian tourist agency in Vienna know anything about the Moldau? Oh, they had pamphlets galore on the healing baths to be taken in this riverside town and that, and yes, surely, the scenery was lovely. Dams? What about dams? They really didn't know if there were any dams on the Moldau or not.

Guidebooks, ordinary tourist guidebooks, are about as much use to the faltboater as to the aviator. Does one ever mention rapids ahead or dams? Somebody bicycled the Moldau, but never mentioned dams. Somebody else motored along the Moldau. Dams? He couldn't remember any dams. At last—one Austrian who had paddled the Moldau. Gracious lady, you are not considering paddling the Moldau? You and your daughter, alone? Ach, gracious lady, let me use all my influence to dissuade you. In every three kilometers of the Moldau there are now two dams. You will spend your life carrying your boat around dams.

He, that paddler, may have been exaggerating. A man in a hardware store told us about the Drau. Indeed, he told us about the Mur and Drau, both in south Austria. He changed our lives.

We turned to the Drau.

After one day in a faltboat you get a river complex. As we crossed obliquely from Vienna in the northeast of Austria to Lienz, ten hours away in the southwest, we became obsessed with the possibilities of paddling every stream in sight from the train windows.

As we rode along those miles beside the Mur we clutched each other at every rapid, at every dam, at every unexpected rock projecting suddenly from midstream. When we reached the Drau at Velden, the rain coming down in torrents, banks overflowing, rapids churning themselves into light-brown foam, we decided we needed coffee in the diner to give us courage for the dawn.

A DELIGHTFUL INTERLUDE AT LIENZ

It might have been a bit of stalling, and yet Lienz, its valley, its towering Dolomites, were so fascinatingly lovely we could not start off the next day. Besides, hadn't we overheard an Austrian woman on the train talk of a charming inn on a small mountain lake high above Lienz? Could we do less than swim in that lake and have lunch at a table under pine trees overlooking mountains and clear, still water?

As we crossed the wooden bridge over the Drau next morning, we peered at the water gauge. Small comfort that there was a rise of several feet still possible before the water reached the last and highest mark, when it seemed several onrushing feet too high as it was. By to-morrow. . . .

The sun beat down on our grateful souls as we climbed to the Tristachersee, and swam, and sunbathed, and ate a lunch, for twenty-five cents each, at a table under pine trees, with as lovely an outlook as romantic heart could ever sigh over. We fully decided that next year we would spend the entire summer right there. We fully decided to spend the entire summer next year in, on, and around every south Austrian lake we found ourselves gazing upon.

There was the imposing old castle of Bruck on the Isel, behind Lienz, to be prowled around in the early evening. A twenty-year-old guidebook had reported



Photograph by L. Kemeter

FEW RIVERS OF EUROPE CAN OFFER GRANDER SCENERY THAN THE SALZACH

Its swift glacial waters hold a particular attraction for paddlers, despite the fact that there are numerous places in its upper reaches where no boat can navigate.

Schloss Bruck a hotel. Our contemplated visit of friendly investigation proved the inconvenience of relying on twenty-year-old guidebooks.

Our modest and guileless approach apparently was the signal for the infuriated barkings of what sounded like fifty dogs, though at this distance I am willing to admit there may have been but five. Signs on all entrances warned against said dogs, and not merely requested you to keep out, but ordered the same. A spinster lady now inhabits the castle.

We decided it was time to return to our Tyrolean inn and finish sewing the homemade yellow bug on the homemade blue ensign, that the seafaring world might gaze upon us with befitting awe and admiration.

We asked a lone youth at breakfast next morning if he could tell what the yellow thing was; whereupon he turned scarlet to the ears and hid his face in his coffee. The sensitive soul of the creative artist within us was pained. But the waitress called out

almost immediately, "A bug!" Ah, the thrill of achievement! The daughter had felt my first design looked more like a bolster leaking slightly at four corners.

How bravely the little flag flapped, and with what force the head wind did blow, and how unmanageably swift seemed the current, as we made a very bad launching of ourselves that hot noon. We got used to the wind, we got used to the current; the scenery we never did get used to. It was achingly glorious every kilometer of the way. This Drau we had been fearful of, when the wind died down we sped along, boisterously exulting over every detail of the Tyrolean world and ourselves and our boat. We sang to the skies and sped on.

AN IRRESISTIBLE LURE

Late that afternoon we turned our boat upside down on the banks of the Drau near Greifenburg, hired a car, since the last bus had left, and drove the steep, tortuous road of one view after another up to the love-



Photograph by Mrs. Heinrich Wack

BURG AARDECK'S LONE TOWER IS A LANDMARK IN THE VALLEY OF THE AAR

Castles, both ruined and restored, crown many a hill along the rivers of Germany and Austria. They serve to recall medieval times, when the barons whose strongholds they were levied tribute on all who passed up or down the streams.

best mountain lake of the summer, the Weissensee. Supper we ate on a terrace under the sky, overlooking lake and sunset-colored mountains.

We had planned to return to our boat early the next morning. Instead, we spent the whole next day on the Weissensee, boating, swimming, sunbathing, telling ourselves over and over that we had never found a spot so to our liking. Here we would indeed spend next summer!

The next day, back on the Drau, only increased our enthusiasm for water and boats. Mountains, crags, a lone castle on its cliff, an old wooden bridge across the swift-flowing stream—had man or beast ever made use of it?—picnic lunch on a small sandy beach, without sign of man, in a wilderness of beauty.

For the night, Wudmat, far along, and weary arms, and hunger. Supper was served us under gnarled apple trees beside the river, while three women bustled about

to prepare our beds. And for all of that—supper (six eggs!) and comfortable beds—the charges were about 55 cents for the two of us. Verily, there seems no dark side to faltboating.

Our host talked himself out of two paying guests for breakfast the next morning when he began to recount the charms of the Faakersee, another Austrian mountain lake not so far distant. By foot and bus we reached that lovely body of water at the foot of the Mittagkogel, the great gray mass we had gazed upon from every bend in the Drau the evening before in all its sunset tinges. We swam again, we had breakfast in the sun on a terrace overlooking lake and mountains, and were back to our own *Gold Bug II* by 11.

A WILD RIDE IN WHITE WATER

I do not know whether to mention that Sunday as evidence of our paddling efficiency in being alive to tell the tale, or as



Photograph by Carl J. Luther

AT HIGH WATER AN EXPERIENCED FALTBOTTER DOESN'T BOTHER TO PORTAGE

If one knows how to go about it and has sufficient nerve, it is possible to go over a weir instead of around it.

proof that we still had far to go before we could manage a boat in bad water without shaking with the terrors. Every second we had to keep our wits about us; and yet right now I can see the miles of glorious scenery ever opening out ahead, the wooded hills and rocky mountains, the jagged cliffs, the bends, the gray-green rushing water.

We knew rapids were waiting for us that day, but by the time we stopped for late lunch in a soft green meadow we were sure the worst must be over.

All innocence and unconcern, we were off. Never do I plan to live through such agonizing moments again. It is, perhaps, not so important that we never could understand why we failed to capsize, as that we didn't. Waves which looked to our overwhelmed souls as high as the Atlantic Ocean rushed toward us, now at this angle, now another, and broke over the boat.

One of us froze with fright, unable to move an arm to paddle. The other kept a modicum of wits about her simply by paddling like possessed. Perhaps it helped. Surely we should have been lost had we not met each curled onrushing wave as

near as possible head on. Once we were out of danger (and of course the whole thing really must have been over in a moment), both of us were shaking from head to foot.

When we read in the book that longer rapids lay ahead, we plain put our tails between our legs and decided for ever so many good reasons that we would land and pack up at a village called Weizelsdorf. It was a good twenty miles short of Völkermarkt, the town where we had thought to take our farewell of the Drau; realistically measured, some two hours of paddling; yet who could have timed the decades of our lives we should have been spending in those churning Gleinach rapids?

So, about six miles after our own special rapids, we landed on a hot, pebbly beach, took the boat apart, washed and dried and packed it—always about a good hour's labor—strapped it on its folding wagon of two wheels, and wove our lost way through some marshy woods to a lone and lost-looking and very hot station. The only other habitation to be seen was a station hotel and restaurant across the road.



Photograph from Cornelia Stratton Parker

TAKING A HIGH ONE ON THE UPPER INN

From above Innsbruck to its junction with the Danube at Passau, the River Inn is a popular stream for paddlers. Only one dam occurs in all that stretch to mar the pleasure of four days' paddling and drifting.

We shipped the boat far north to Bamberg on the Main, deciding a nice, peaceful, quiet German river was our due, ate supper under chestnut trees, and ourselves took the bus to yet another Austrian lake. Indeed, we lost our hearts to five more lakes, which made eight all told, all in that one lovely region of the Austrian Tyrol and Kärnten. The temperature of those lakes reaches 68 degrees Fahrenheit and more; our bathing suits never were given a chance to dry between swims.

GERMANY'S RIVERS OFFER A DIFFERENT KIND OF THRILL

Once again we crossed all Austria; yet this time another part of the land. A train may be no fitting means of arriving at a medieval town, but the views from the car windows during that trip from Spittal to Salzburg were enough to forgive a railroad all its sins.

The Main, the Weser, the Lahn!

The Lahn is a river to give something of almost every kind of faltboating; you could even try some good old rapids, had you a continued mind for that sort of thing. Yet

not, of course, rapids as we old-timers knew them! Too, it has the most varied offerings for the eyes, including some miles of the only out-and-out boring scenery, or lack of scenery, with which we were afflicted all summer. But what a trifle, that one short stretch, compared to the woods, the meadows, the hills, the towns, the castles, the ancient churches, monasteries, cathedrals, and again and again the wooded hills!

The boat was waiting for us at the less-important Marburg station, near the river and beyond the last dam and the last buildings. We wheeled it down to an arch of the bridge which crossed the Lahn near the station, deciding that for the last time we were to put the boat together this season we should like to have some privacy about it—just once.

There are invariably just so many males from four to seventy, in this world, with nothing to do, who are sure two females alone cannot get anything right. Now and then men and youths came to our aid who knew more about faltboats than we. Usually the fonts of all wisdom and much



READY FOR A WEEK-END AFLOAT

All that now remains for the athletic Fräulein to accomplish is to convert her packages into an assembled faltboat (see text, page 370).



HE PICKS UP HIS BOAT AND WALKS—TO THE RIVER.

One of the most commendable features of a faltboat is the ease with which it may be handled, either in or out of the water.

Photographs by Carl J. Luther



Photograph by Mrs. Eva Geold

A SUNDAY AFTERNOON ON THE ISAR AT WOLFRATSHAUSEN

The village is prettily located, not far from Munich, and attracts many river sportsmen from that city. It was on the Isar that the author made her first trial of the faltboat (see text, page 308).



Photograph by L. Kemmer

SALZBURG CASTLE PERCHES HIGH ABOVE THE TOWN

A fortress has crowned the hill for nearly a thousand years and the present one since 1500. The town, which has a population of 38,000, is important both historically and as a resort. It is situated on the banks of the Salzach River and is surrounded by mountains.

advice had never seen a boat put together before, but that fact could not save their masculine dispositions from pain and unrest lest we try to proceed without their help.

Under the arch at Marburg we worked in noiseless stealth; but, of course, no sooner did we carry the boat out from under and let it carefully down into the water than the ever-present group collected above us on the bridge, watching us store away rucksacks, lunch, rain jackets, guide-books.

"HEIL," THE HAIL, AND FAREWELL OF TEUTONIC SPORTSMEN

There has come to be a regular faltboat greeting, just as there is the same word for mountaineer and skier. It is dear to the sportsman's ear, that short German expression heard in Switzerland, in Germany, in Austria—"Heil!"

"Heil!" stranger calls to stranger on a Swiss pass. "Heil!" calls the skier stemming around a curve above the tree-line. "Heil!" calls one faltboat to another, and the small boy on the bridge calls "Heil!"

"Heil!" you call back, as you paddle under. The guests at a riverside café call "Heil!" as you paddle by. "Heil!" you answer.

And "Heil!" we called back to Marburg, and "Aufwiedersehen!" too. Marburg, its hill crowned with the 13th to 15th-century castle, where once Luther and Melancthon had their wordy battles with the Swiss Zwingli under the protection of Philip the Generous.

Just under the castle walls we had lunched on a terrace overlooking town and river. The 13th-century church of St. Elizabeth was in churchly disarray at the moment, getting a thorough cleaning for its next short hundred years. The four-hundred-year-old university was still vacationing; students fill the river with their faltboats on a spring or summer Sunday.

At first, adrift on our eighth river, all we could do was compare the cozy, narrow Lahn with the majestic Danube, and chuckle at the chumminess of the Lahn. The friendly banks were lined with ever so gently moving reeds and soft, uneven willows, watched over by tall, more serious trees. Higher on the banks peasants sang



Photograph by Carl J. Luther.

A CANOE STATION ON THE ISAR

Here a party of "paddle people" may find a safe place to keep the boats, a good meal, and a clean and comfortable bed—all at a very reasonable cost.

at their haying, wooded hills for a background. Over all the sun shone through a light autumn haze.

And then a dam, our first dam of the two-hundred-year-old variety, built for a two-hundred-year-old mill; a little friendly dam you can shoot over in a faltboat if the water is high enough, as it is in the early spring, and no end of fun that must be. In summer you land a short distance upstream, heave the boat up onto the grassy bank, strap the two wheels to one end, and off you stumble to the first propitious spot for setting yourselves in the water again.

Five dams we carried or wheeled 110 pounds of boat and belongings around that first day. Sometimes it was a simple, almost pleasurable, affair; sometimes it meant we felt ripe for revolution. For how could we guess that "Brennesseln," which the book was warning us against, meant nettles? Indeed, all summer long river guidebooks were constantly warning us against all manner of things our German failed to cover—mud, fences, black-berry bushes, steep, slippery banks. Ach, what an idea, this faltboating!

But with the first shove away from the bank the world was ours again; besides, the next dam, a mile or so distant, might be a simple one to manage. And was there not always current to rely on after a dam?

After the fourth weir, Wehr Roth, shoes washed clear of mud and stowed away, we were happily off with speed of current plus paddling, when cr-un-ch—aground! The first time that had happened! No running aground on the Danube.

June rolled up her flappy "Training-hosen" and waded off to measure depths. I got out and held the boat lest minus our two hundred and sixty pounds it take itself downstream. A faltboat draws so little water one is continually amazed to see what shallows are passed over without so much as a scratch.

When the river reached June's knees I caught up to her and we were off again, but only for a stretch. An ominous clap of thunder turned our eyes upward to black, lowering heavens. The summer had injured us to hour-long paddling in the rain, protected by our rubber jackets and the yellow spray cover which fastened around



Photograph by Paul T. Rupp

MANY SMALL GERMAN VILLAGES ARE LIVING PICTURES FROM THE MIDDLE AGES

Wertheim on the Main is such a town, with its quaint cobbled streets and ancient, steep-roofed houses. One of the joys of fallboating is the opportunity it affords to visit these fascinating communities, little changed through the centuries.

our waists. But a thunderstorm in full force, we had learned by cruel experience, was another story. Even the most hardened fallboater prefers to be on land for a thunderstorm.

We spied a viaduct carrying the road across a shallow dent in the land. Boat made fast, holes in the yellow canvas usually filled with our own two persons covered over with the rubber jackets, we retired to our arched shelter and let the heavens do their worst. Rain came down in crashing torrents.

A peasant left his wagon up above and also sought our arch; whereupon we bestowed unending sympathy upon one another over the general state of the universe. The combination of hard times and much rain makes twice as long conversation as either subject alone.

As so often happens, the world was lovelier than ever after the storm. For the next few hours of the Lahn we felt we had seen nothing all summer so appealingly green and soft and winding and tree-lined. A castle wet and gloomy in the midst of its high woods, a stretch of current to carry

us along more happily than ever, a ruin crowning its hill, the little steep village long outlasting barons, quiet pools with cows gazing unconcernedly at us and the fresh wet world, waiting only for the call to the evening's milking, a group of houses, old, old, the church steeple rising tall and pointed against dark wooded hill.

Where spend the night? Inns seemed exceptionally scarce along the Lahn and it was growing dusk.

It began to get dark, it got darker, it got pitch dark, and never a sign of human habitation.

Not many a river would one relish paddling the first time at night. We would have landed and slept in a haystack by preference, except that it was too dark to make out a haystack, and surely much of it would have been soaking wet from the storm if and when desecrated.

A RUINED CASTLE PROVIDES A WELCOME SHELTER

At last, far ahead, we glimpsed one faint light. Cold, starving, weary-armed, we were rescued by a tiny inn which provided



Photograph from Cornelia Stratton Parker

SOME OF THE RIVER FOLK CARRY THEIR SHELTER WITH THEM

There are those who prefer to sleep thus, in their own tent, rather than enjoy the hospitality of an inn. Others do so as a matter of economy; for, despite the reasonable rates charged by most village hostelries, many a vacation fund is too slender to stand even their modest tariffs (see text, page 367).

us with supper and a bedroom, with walls five feet thick, high above a roaring dam. The next morning we discovered the queer little "hostelry"—inn seems too stylish a word—was part of an ancient ruined castle, which explained the thickness of our walls.

Below us on the weir was the old, deserted mill. Charges for supper, bed, and breakfast, 60 cents apiece. It was all very primitive, to be sure, but then it was part of a castle!

A partridge birthday lunch next day in the old university town of Gieszen, and the last three dams where we had to carry or wheel the boat around.

Every one of the twenty-three Lahn dams to come boasted a lock or locks of sorts—a fine, roaring old stream it must have been in the days of the Garden of Eden. As it is, curbed and tampered with and made navigable for ladies from across the seas, when the gates of a lock loom dark ahead you call from the boat, "Durchschleusen, bitte!" (at least that is what we called, with results), with perhaps a yodel

or two in case the lockmaster and his wife and children are all haying at a distance.

From a deserted landscape, man or woman, boy or girl, at length emerges, resigned to fate.

In due course, lock gates are opened, just enough to let a *Gold Bug II* through; then closed. The lock water anon goes down, down, down. Gates are opened enough to let one *Gold Bug II* out. Man, woman, boy, or girl comes down the steep stone steps to the river. You place the large sum of twelve and a half cents in outstretched hand; are thanked warmly; wished the best of journeys; everybody thanks everybody else all over again—and you are gliding along again in the current. No more labor to it than that (see page 394).

IN WETZLAR, SCENE OF GOETHE'S
"WERTHER"

Wetzlar; only as far as Wetzlar that second day. We asked a man on the bank where we might put up our boat for the night. "Right here in our boathouse," calls the man. He dashes along to a landing,



Photograph by Carl J. Luther

BREASTING A BIT OF WHITE WATER

Faltboating has its thrilling moments as well as its periods of lazy ease. When white water is encountered, both skill and nerve are necessary to get through without a spill (see text, pages 370 and 382).

helps us get the boat into a building filled with faltboats. A charming, jolly, good-looking woman in an apron comes out and asks us if we would like to spend the night at the clubhouse. They keep one room ready for faltboaters.

"It's very primitive," she explains. "Don't think you must stay if it doesn't please you." The Wetzlar Rudder Club, 1880, owns a handsome building, tree-shaded, with gay blue tables and chairs on the gravel terrace between house and river. Our room pleases us very much, and we accept their hospitality with deep gratitude. Is there anything we might like cooked?

First, however, before our late supper under the trees by the river, we delight our hearts with Wetzlar, fascinating, hilly, for over six hundred years prior to 1803 a free imperial town, immortalized by Goethe, who lived there in 1772 and fell in love with Lotte.

We were shown the town with pride and minute understanding by a member of "our" boat club whose family had been people of more or less importance in Wetzlar for exactly one thousand years.

Could I have possessed a magic wand it would have been used to halt clocks and calendars, that we might settle for days in cobbled, winding, gabled Wetzlar, with its strange, dignified conglomeration of 12th to 15th-century cathedral, its ruined 12th and 13th-century castle across the wooded valley, and there read "Werther" in the very town where Goethe's story took place. Incidentally, Wetzlar is the home of an important optical industry.

The next day it poured without stopping. We could not have been detained in more delightful surroundings than the combination of that rare town just across the river from the boathouse and the club itself, so hospitable to us, two unknown Americans. All during the day men and boys were passing in and out (there were some four hundred members), or stopped for a glass of beer or a game of cards in the social room. Each greeted us, sewing, reading, writing in our corner; many asked questions of our trip.

Now and then a gramophone record would be started twirling, and the three womenfolk present, Frau Hartbrod (Mrs.



Photograph by Carl J. Lathier

THE BOW PADDLER SOMETIMES SERVES ALSO AS WAVE-BREAKER

Hardbread), the housekeeper who had welcomed us so genially from the very start, my daughter and I, with about four men apiece for partners, would start twirling ourselves.

And of course we wrote in the guest-book. Up and down the rivers of Germany and Austria you write in the guest-book the name and make of your boat, where you started from, where you are paddling to, a drawing, an original verse or two, and how much you thank everybody for everything (and curse the weather).

Off next day in the sunshine, cheered by a group of our new friends. That noon the current was so perfect we decided to eat lunch in the boat and drift down the Lahn at the same time.

"Guten Appetit!" called every peasant kindly from his field, as we glided by and waved. We had planned to eat lunch away in the castle of Braunsfels on its hill, but locks took much more time than we had allowed. There were days of the Lahn yet to paddle, and clocks, the world bereft as it is of magic, were not standing still.

At Weilburg, "Pearl of the Lahn," we became so excited about paddling through

the dark, spooky canal, tunneled right under the town, built on a bend of the river, that we forgot all about getting excited over the town itself until we were shooting along merrily in the current after the two Weilburg dams. Next time we shall not miss Weilburg, with its chateau-crowned rocky ridge descending steep on three sides to the river.

The scenery after Weilburg was yet lovelier than the first day—cliffs, wooded hills with or without a hamlet or village along their crests, green meadows:

A DISMAL-LOOKING HOTEL SURPRISES

That evening the most terrific thunderstorm of the summer forced us to seek shelter in a dismal, deserted, erstwhile factory village, its one towering and forbidding brick chimney doing smokeless duty these years past.

The Railway Hotel, relic of more enterprising days, looked its name and appeared as dismal and deserted as the village; but two such soaked-to-the-skin mortals as we could indulge in no fastidiousness.

To point a lesson, Fate saw to it that it was none other than the Railway Hotel



DETAILED MAPS AID THOSE WHO SEEK ADVENTURE ON GERMAN RIVERS

Like the road maps which are so indispensable to motorists, river maps are prepared for the convenience of faltboaters. They warn of shoals and rapids and dams and give information about inns.



Photographs by Carl J. Luther

THE RIVER BANKS AT EINÖD LOOK AS IF AN ESKIMO NAVY HAD ARRIVED

On a Sunday in summer the water front of this Bavarian town on the Isar is dotted with boats which bear a marked resemblance to the fragile but capable kayak of far northern waters.

which fed us the most delicious supper we were served all summer, mixed with discussions on Shakespeare, the morals of the younger generation, the Balkans, and French manners, with the more or less deserted but not overly dismal proprietor and the frozen ferryman. After which we retired to the most spotless room in all Germany.

That fifth day on the Lahn was one of joys unending — scenery to exult over practically all day long, plus Runkel, with its 12th-century castle, as fascinating from the river and from within as young or old could desire; Deirn and its castle, the 8th-century church of Dietkirchen, one of the oldest in all Germany, seeming part of its very rocks above the river; and then Limburg. One would, of course, seek out the Lahn for Limburg alone.

Way down the river the paddler spies the towers of Limburg's 13th-century cathedral, seven of them. But even more of a joy to us were the steep, crooked streets winding up to the cathedral on its hill, with their carved and timbered houses, gabled and mellow. Each new corner was a new delight. To crown a day of never-to-be-forgotten sights, we slept that night in Diez, guarded by one of the most imposing castles in the land. Our top-story hotel bedroom looked across the little town to the ancient castle, once stronghold of the Counts of Diez and Nassau.

THE LAST DAY ON THE LAHN

The sixth day we paddled from Diez, which we could not manage to leave until



Photograph by Carl J. Luther

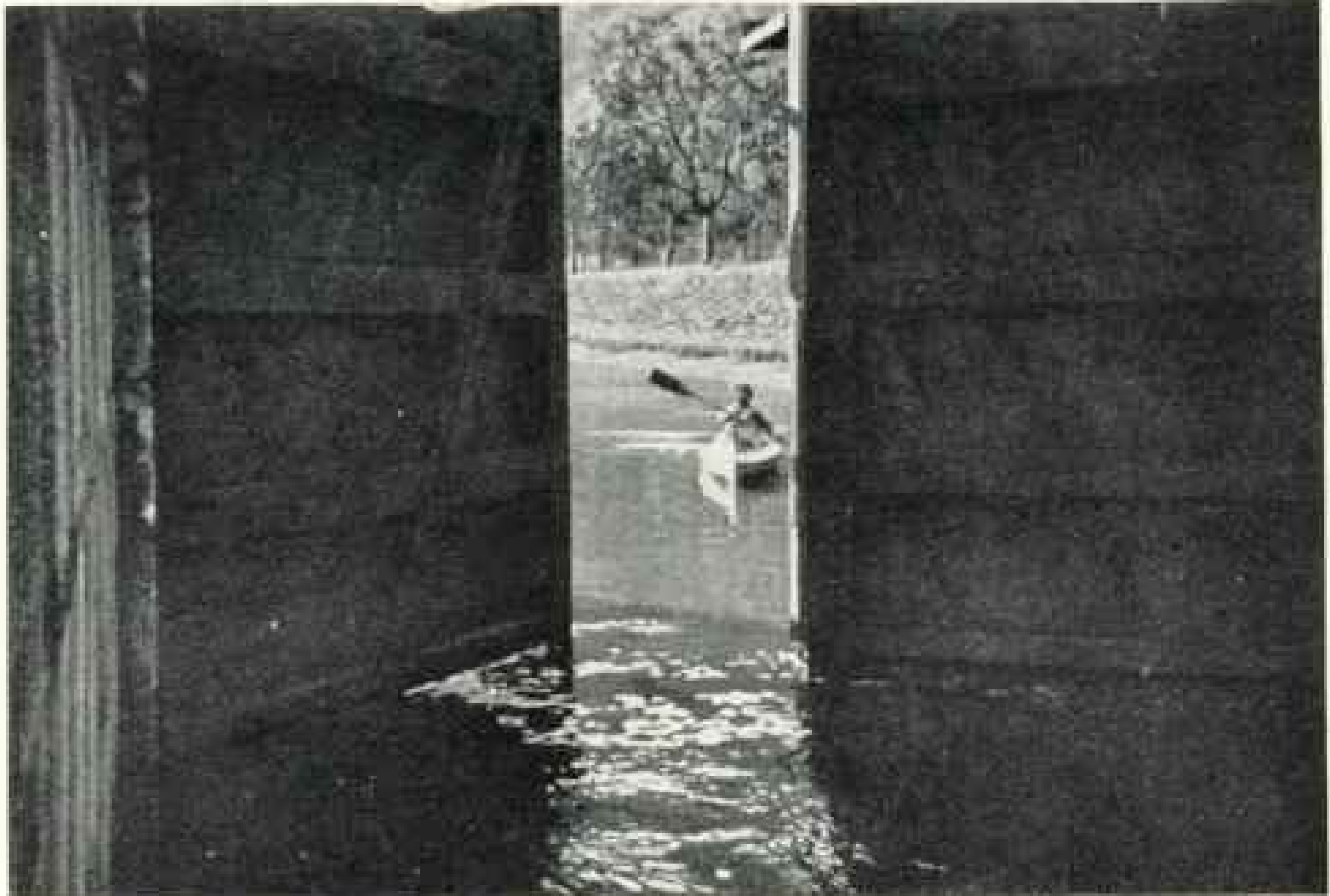
"PADDLES HIGH"

In rough waters this is a basic rule of faltboating. If it is not observed, one strong wave can, by merely striking against a paddle, upset the boat.

noon, to Laurenburg, where a crushed-strawberry hotel, with blue parasols over its small terrace tables, all snug against the wooded hills steep behind, looked too tempting to pass. We spent the night in an inn by the river, under the ruins of an 11th-century stronghold of the Counts of Nassau.

For the next day, and our last, we had sunshine, ruined castles, castles not so ruined.

At one cloister on its hill, a white-cowled monk, in answer to our ring, takes one sorrowful look at our erring, blue, flappy trousers and is relieved to announce no visitors are allowed.



Photograph from Cornelia Stratton Parker.

WHEN THE GATES OF A LOCK UNFOLD FOR A FALTBOAT

For the equivalent of about 12½ cents, obliging lockkeepers opened the gates of their locks wide enough to permit the author's boat to pass through and be let down to the lower level (see text, page 389).

By the time we reach Bad Nassau we realize that if we are to catch the Rhine steamer we must get money from a bank, pack the boat together, freight it to Switzerland, buy our own tickets, and make a train within an hour. What a last mad undoing of our beloved *Gold Bug II*; nor have we time to see about sending it to Switzerland and its winter quarters, but a friendly German baggageman says he will tend to everything for us; just run along. And we run. We make the Rhine steamer, we glory over each castle, yet every little while we clutch one another and ache a little—faltboats coming!

"Heil!" we call to every one, and wave frantically, and hope they know that we know just what it is like to be where they are.

"We've got to faltboat down the Rhine," we tell ourselves over and over. It is estimated that on a good week-end in summer there are at least ten thousand faltboats paddling here and there down that one river—say, fifteen thousand paddlers blessing the memory, if unconsciously, of that south German engineer who before the accursed war invented a boat to bring joy to men's hearts.

Heil! you to-be-forever-sung Bavarian!

Notice of change of address of your NATIONAL GEOGRAPHIC MAGAZINE should be received in the office of the National Geographic Society by the first of the month to affect the following month's issue. For instance, if you desire the address changed for your May number, The Society should be notified of your new address not later than April first.

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TO carry out the purposes for which it was founded forty-four years ago the National Geographic Society publishes this Magazine monthly. All receipts are invested in the Magazine itself or expended directly to promote geographic knowledge.

ARTICLES and photographs are desired. For material which the Magazine can use, generous remuneration is made. Contributions should be accompanied by addressed return envelope and postage.

IMMEDIATELY after the terrific eruption of the world's largest crater, Mt. Katmai, in Alaska, a National Geographic Society expedition was sent to make observations of this remarkable phenomenon. Four expeditions have followed and the extraordinary scientific data resulting given to the world. In this vicinity an eighth wonder of the world was discovered and explored—"The Valley of Ten Thousand Smokes," a vast area of steaming, spouting fissures. As a result of The Society's discoveries this area has been created a National Monument by proclamation of the President of the United States.

AT an expense of over \$50,000 The Society sent a notable series of expeditions into Peru to investigate the traces of the Inca race. Their discoveries form a large share of our knowledge of a civilization waning when Pizarro first set foot in Peru.

THE Society also had the honor of subscribing a substantial sum to the expedition of Admiral Peary, who discovered the North Pole, and contributed \$35,000 to Admiral Byrd's Antarctic Expedition.

NOT long ago The Society granted \$25,000, and in addition \$75,000 was given by individual members to the Government when the congressional appropriation for the purpose was insufficient, and the finest of the giant sequoia trees of California were thereby saved for the American people.

THE Society's notable expeditions to New Mexico have pushed back the historic horizons of the Southwestern United States to a period nearly eight centuries before Columbus crossed the Atlantic. By dating the ruins of the vast communal dwellings in that region The Society's researches have solved secrets that have puzzled historians for three hundred years. The Society is sponsoring an ornithological survey of Venezuela.

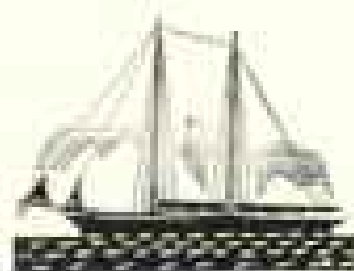
TO further the study of solar radiation in relation to long range weather forecastings, The Society has appropriated \$65,000 to enable the Smithsonian Institution to establish a station for six years on Mt. Brückner, in South West Africa.

HAMILTON *ships to* GREENLAND



Captain "Bob" Bartlett with two native Greenlanders

with CAPTAIN "BOB" BARTLETT



INTO the heavy fogs and bergs about East Greenland ploughed the good ship *Morrissey* early last summer. Its captain, Robert A. (Captain "Bob") Bartlett. Its purpose, to secure important oceanographic data and rare Greenlandic flora and fauna.

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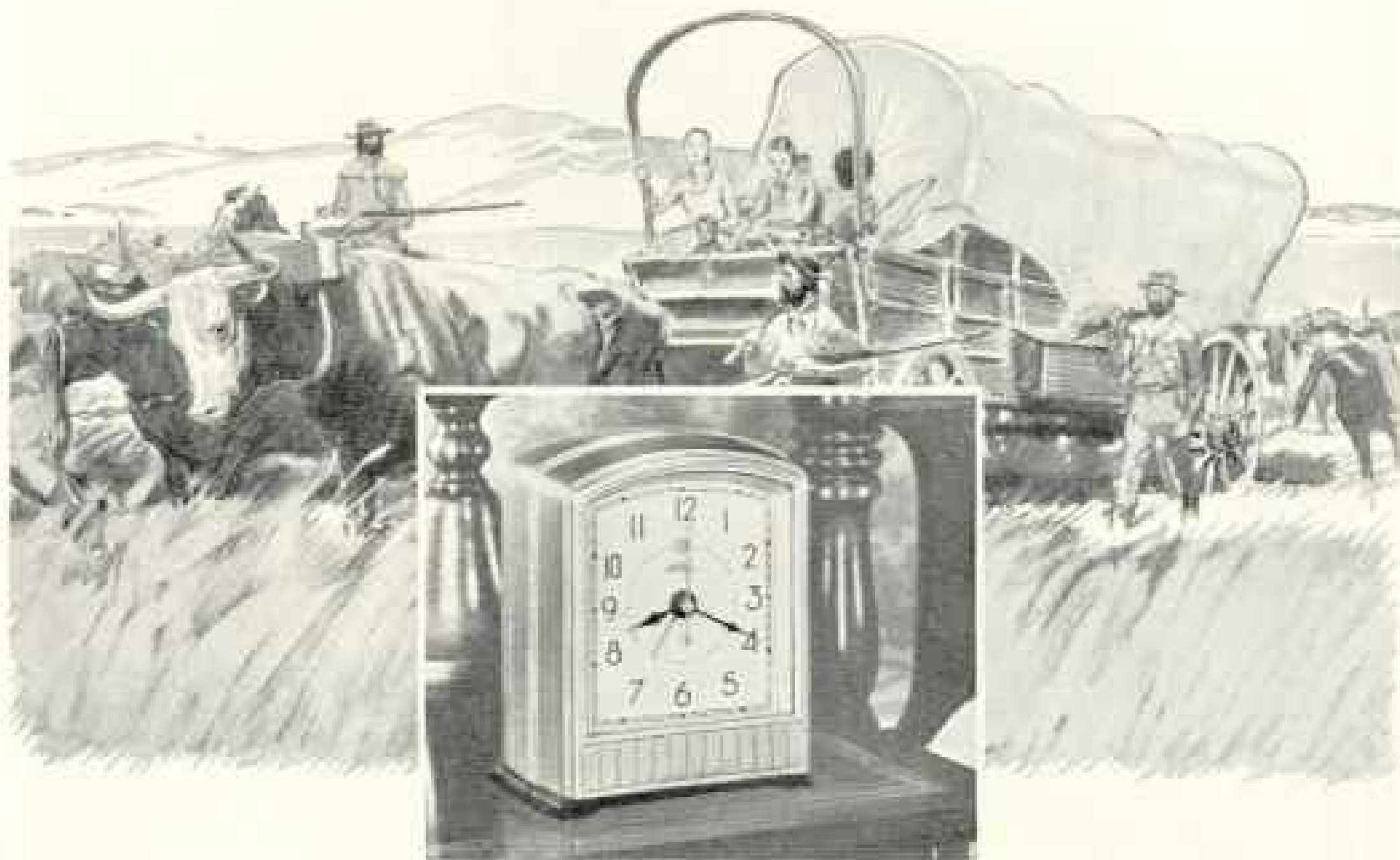
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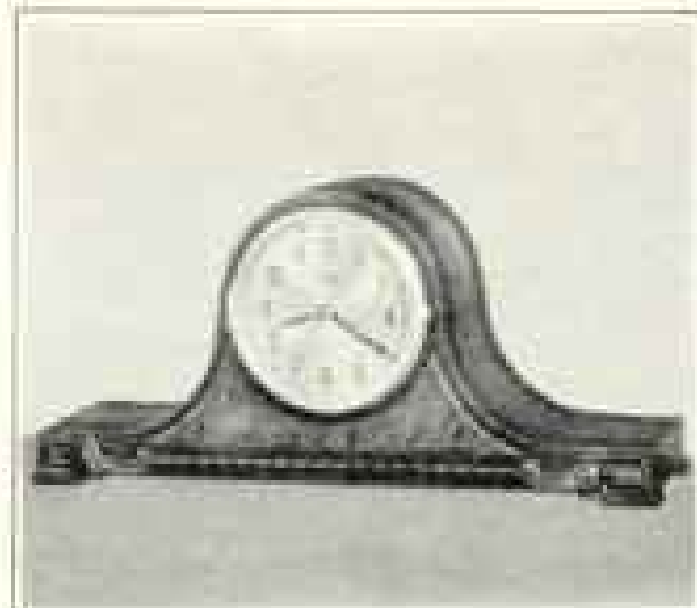


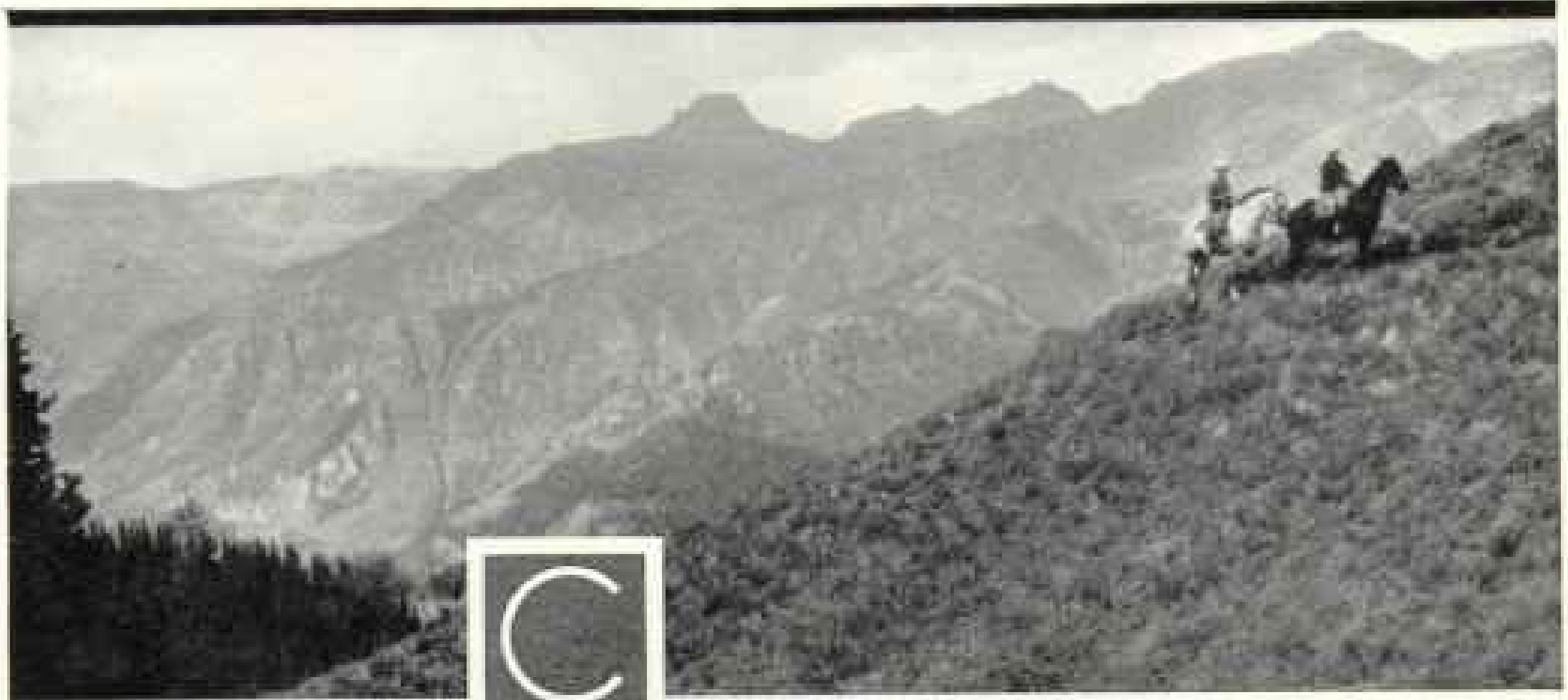
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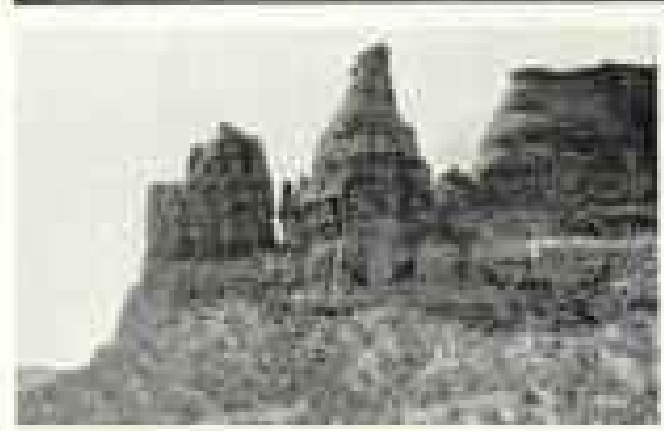
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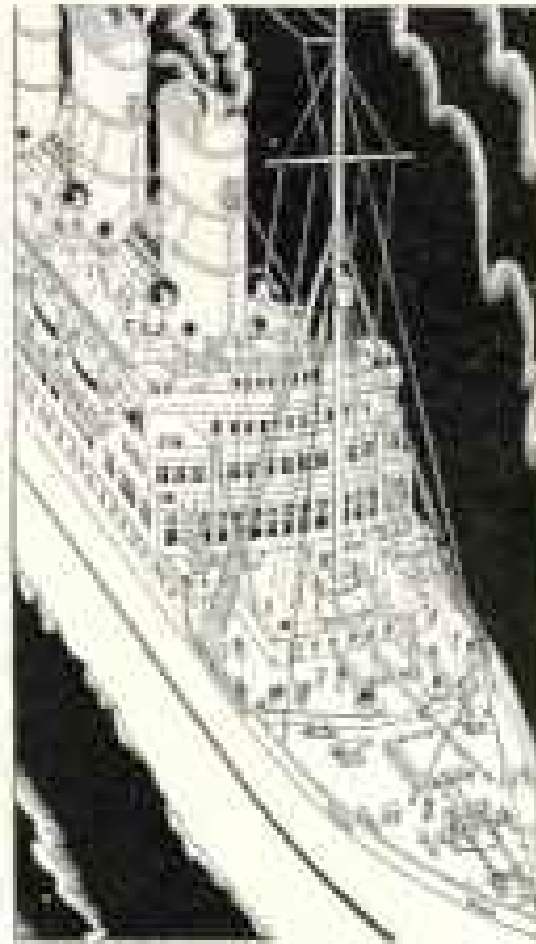
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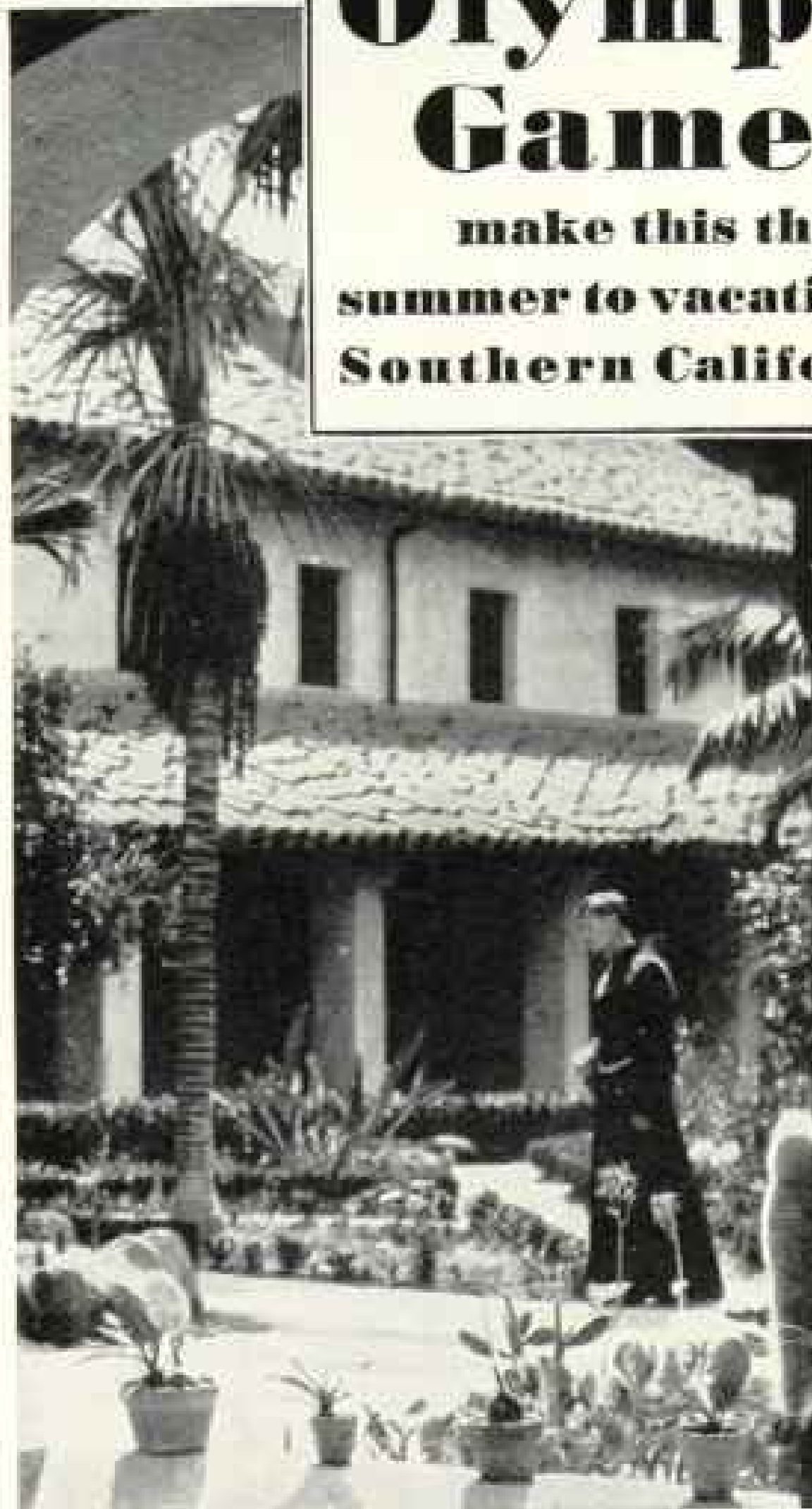
Come for a vacation you'll always remember. Advise anyone not to come seeking employment lest he be disappointed, but for the tourist the attractions are unlimited.

By rail (new low summer fares) from most points in the country, even a two-weeks vacation gives you at least eleven days actually here. And costs while here need be no more than those of an ordinary vacation. For in this year 'round vacationland you escape the "peak prices" necessary in short-season resorts. We prove these statements in a remarkable new book which the coupon below brings you free.

FREE NEW 64-PAGE VACATION BOOK
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The book outlines, day by day, a summer (also a winter) visit to Southern California, including over 100 interesting gravure photographs, map, information about routes, *itemized daily cost figures*, etc. . . . perhaps the most complete vacation book ever published. With it, if you wish, we will send, also free, another book giving Olympic Games details and schedules, with ticket application blanks. Send coupon today. Start planning!

(If you wish *another* beautiful book, "Southern California through the Camera," include 4 cents in stamps to cover mailing cost.)



The charm of an old Spanish Mission



Outdoor symphonies at Hollywood Bowl

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NEVER BEFORE have rates to the Orient been so attractive to American travelers. Round trip summer rates to Yokohama are now equivalent to approximately one-and-one-half minimum rates in first, cabin, second and tourist classes. To Japan, China and the Philippines. De luxe first, second and cabin classes from San Francisco and Los Angeles via Honolulu. Cabin and tourist cabin from Seattle and Vancouver.

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From Pacific Coast to Japan and Return

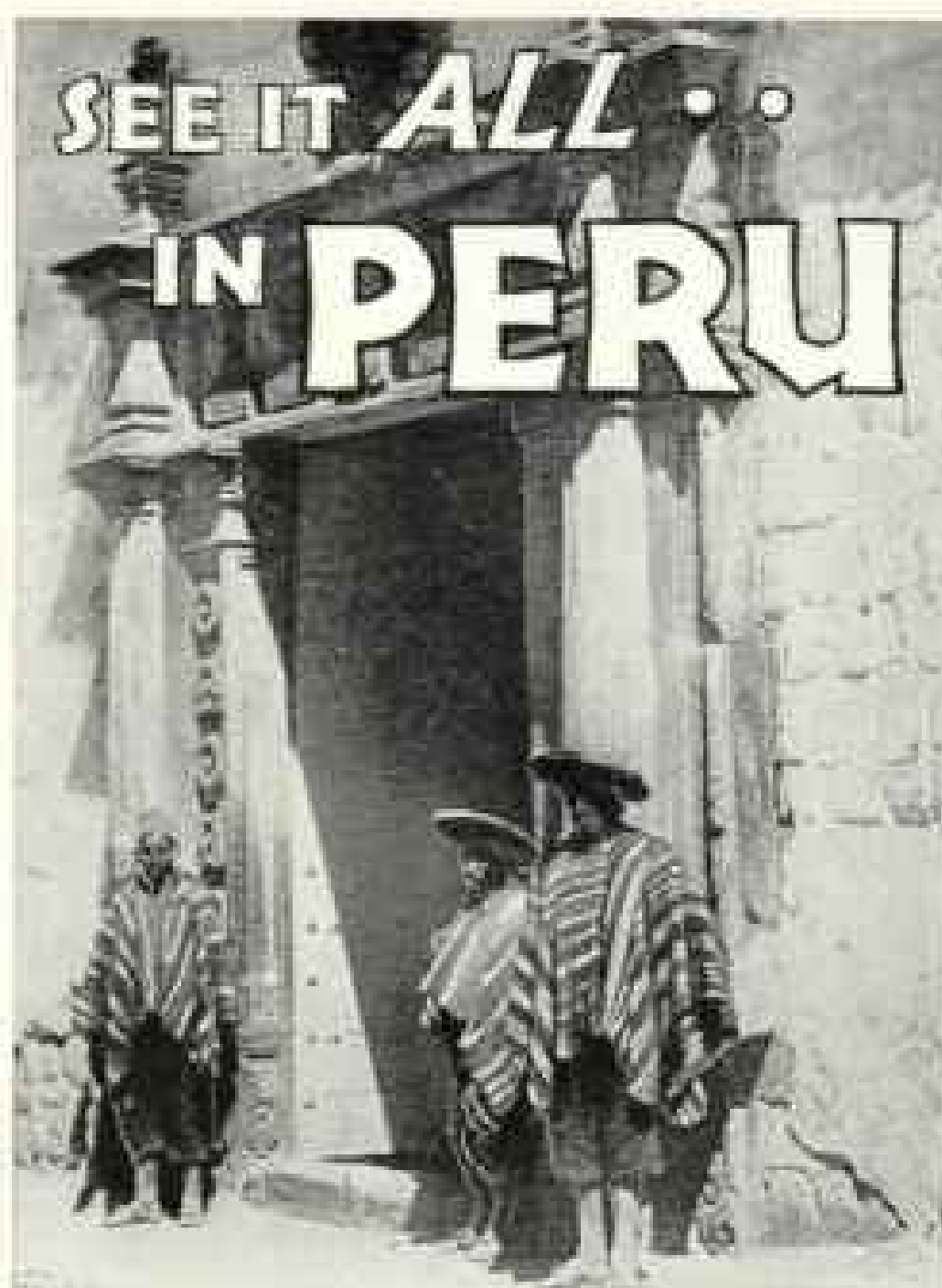
FIRST CLASS	CABIN CLASS	TOURIST CABIN
\$465	• \$375	• \$195 UP

For rates and information apply Dept. 9 or call at

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New York, 25 Broadway, 545 Fifth Avenue • San Francisco, 551 Market Street • Seattle, 1404 Fourth Avenue • Chicago, 40 North Dearborn Street • Los Angeles, 609 South Grand Ave. • or any Cunard Line office. Consult your local tourist agent. He knows.



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One of the crack "Santa" Liners of the Grace Line fleet—newest, largest and fastest to the West Coast of South America—sails for Peru every Saturday, from New York. The complete cruise, to Lima and return, (through the Panama Canal), including many shore visits and a worthwhile stop at Havana, covers 23 joy-packed days and costs as little as \$395, all expenses included. No passports required.

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This Summer...

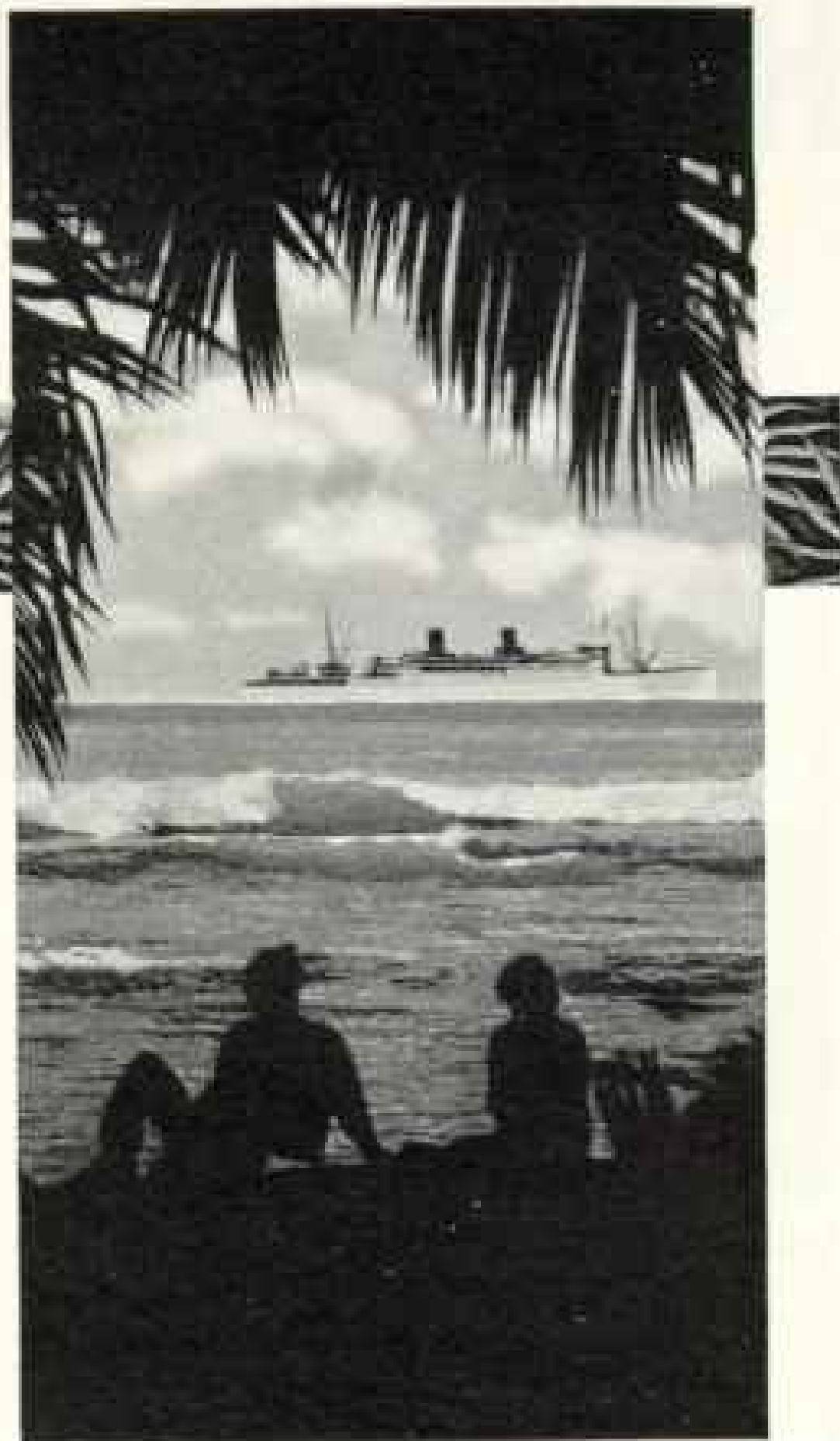


when your ship swings into Honolulu Harbor

SUDDENLY you are in the harbor. Speed boats, outrigger canoes, circle around; a half-pint sea-sled spurts over the waves like a drunken flying fish. Excitement lines the rail. Tug-boats bring laughing, jostling crowds, arms filled with leis. A native band plays the Song of the Islands. Brown heads dot the water, coaxing for coins... Coco palms wave from the shore.

Balmy air, freighted with blossoms. Blue ocean, emerald bay—green hills back of Honolulu. Behind you Diamond Head juts out to sea, shutting away the pressure of everyday realities. There's fabled Punchbowl hill. High Tantalus mountain. You have expected all this, but it is a surprise. Hawaii, the breeze-cooled tropics—a cadence in your blood.

Come to Hawaii now. Spring and summer are lavish with color—flame trees, hibiscus, plumeria, gardenia. There's much to see—fern jungles, tropical fruits, sugar and pineapple plantations. Cliffs, volcanic



craters; flying fish, ancient villages, shops. In July the thermometer may get as high as 85°, but the cooling breeze says let's golf. Swim, fish, ride, hike, cruise by boat or plane among the islands. Rest. Where you can't remember what you came to forget.

New Low Fares April 1

You can comfortably make the round-trip from the Pacific Coast, *all expenses included*, for less than \$300. And you can pleasantly crowd Hawaii into a three weeks holiday. A letter or a wireless phone call direct to our Honolulu headquarters will bring interesting proof.



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(HONOLULU, HAWAII, U. S. A.)

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The Hawaii Tourist Bureau will, upon request, mail you free, authoritative information about the Islands. For a special booklet on Hawaii, illustrated in full color, with picture maps, send 10c to defray cost of handling.

HORN IN ON THIS

\$25,000!

**WRITE A
"BLURB"!**

464 CASH PRIZES THIS MONTH—2 FIRST PRIZES OF \$500 EACH



Here's where you take your shot at some of that \$25,000
Jim wants you Palmolive users to back him up. His Dad wants every Colgate shaver's help. If you haven't tried either of these famous shaving creams, wait now and get into this \$25,000 argument!



SEE those "blurbs" coming out of the men's mouths? Can *you* write one? We're putting up \$25,000 in cash for those who can. Get your pencil out—now!

Here's the idea. In a field of 176 competing brands, Colgate's and Palmolive are the two outstanding leaders. They have won an overwhelming preference over all other shaving creams.

We know that Palmolive users swear there's nothing as good as Palmolive. And Colgate shavers claim that Colgate's beats 'em all in a walk.

What we want is *your* opinion. Do you side with Jim or his Dad in the big Palmolive vs. Colgate's argument? Are you a Colgate fan—or a Palmolive booster? Let's hear from you!

In ONE of the empty "blurb" spaces, or better on a separate sheet of paper, just say *your* say. Write your boost for Colgate's—OR for Palmolive—not both. We're offering 464 cash prizes this month for the best "blurbs" sent to us. Write yours!

Here are the prizes for each month—464 in all!

For best Colgate "blurb"	For best Palmolive "blurb"
1st . . . \$500	1st . . . \$500
2nd . . . 125	2nd . . . 125
3rd . . . 50	3rd . . . 50
9 next . . . 25	9 next . . . 25
20 next . . . 10	20 next . . . 10
200 next . . . 5	200 next . . . 5

SEE OPPOSITE PAGE for contest rules and hints to help you win

\$25,000

"BLURB" CONTEST

read all about
it here

CONTEST RULES

WRITE your "blurb" in one of the empty spaces on the opposite page, or on a separate sheet of paper. Mail with name and address to Contest Editors, Dept. J-3, P. O. Box 1133, Chicago, Illinois. Residents of Canada, address: 64 Natalie St., Toronto 8.

The prize money (totaling \$25,200) is divided into six sets of monthly prizes (each set totaling \$4200). At the end of each month prizes are awarded (see list on opposite page) for the best "blurbs" received during that month, as follows:

February 29	\$4200	March 31	\$4200
April 30	\$4200	May 31	\$4200
June 30	\$4200	July 31	\$4200

(Contest closes July 31, 1932)

Contest is open only to residents of the United States and Canada. Employees of the manufacturers and their families are *not* eligible to compete.

In event of a tie, each tying contestant will be awarded full amount of the prize tied for. Decision of the judges shall be final.

Some hints to help you win

Here are some facts about the world's two largest selling shaving creams—Colgate's and Palmolive. Here are some of the reasons why men prefer these famous shaving creams.

PALMOLIVE

1. Multiplies itself in lather 250 times.
2. Softens the beard in one minute.
3. Maintains its creamy fullness for 10 minutes.
4. Fine after-effects due to olive oil content.

COLGATE'S

1. Breaks up oil film that covers each hair.
2. Small bubbles get down to the base of the beard, hold water against each hair at skin-line and soak it soft where the razor works.
3. Gives a close, skin-line shave due to small bubble action.
4. Gives a lasting, 24-hour shave.

FREE SAMPLES

In case you're one of the few who do not use either Colgate's or Palmolive, they're for sale everywhere. Or—send coupon for generous free samples of both. Mail coupon to Dept. 76, P. O. Box 1133, Chicago, Illinois.

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Address

City State

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DEPARTMENT 11, ROCHESTER, N. Y.
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He wouldn't give in till I fooled him

JIM always pool-pooled the idea that caffeine affected him. He had been working awfully hard and it really was beginning to tell on him. He didn't sleep well and he looked worried.

One night, I changed the coffee — gave him Kaffee Hag Coffee. He never even noticed it, except to say it tasted unusually good. But from then on, I noticed a change. He began to sleep like a top. I told him about "the coffee that lets you sleep" later on. Now he won't drink anything else.

Kaffee Hag Coffee is the purest, finest coffee — with 97% of the caffeine and the indigestible wax removed. You can't tell it from the best cup of coffee you ever tasted.

Try Kaffee Hag Coffee for a week and see if you do not sleep better, feel better — put more enthusiasm and zest into your work.

Serve it for your evening entertainments, too, as all your guests can enjoy fine coffee without risk of a sleepless night. At a new low price. If you aren't entirely satisfied, return the can to us and your money will be refunded. Roasted by Kellogg in Battle Creek.

1832-1932

Goethe
Centennial in Germany

The world of arts and letters gathers at the shrines of Goethe in Germany this year. To mark the 100th anniversary of his passing, the poet's native land pays tribute to the greatest mind of two centuries by the celebration, from March to September, of richly dowered festivals throughout the country. Here, in beautiful Germany, you will be welcomed as an honored guest at these festivals. Booklet No. 10 on the Goethe Centennial will gladly be sent.

German Tourist Information Office
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Toes Straight Ahead

Left foot! Right foot! Up hill and down dale—over hard pavements and country roads as well as indoors, they have carried you millions of steps. If you want them to carry you several more millions of steps in comfort, a little time will be well spent considering that marvelous bit of anatomic engineering, your own foot.

And those healthy little feet of your children—keep them strong as they are now by giving your boys and girls the right kind of shoes and by teaching them to walk softly like an Indian—with toes straight ahead.

Unless all of the twenty-six bones in the foot are kept in their proper places, the long arch which extends from heel to great toe, or the short arch across the ball of the foot, may weaken, sag or fall. Pain in the foot, leg or other parts of the body will follow pressure of displaced bones against sensitive nerves.

Stubborn cases of headache, backache, continued fatigue, poor circulation, indigestion, untidy nerves, spinal disorders, neuritis, rheumatism or pain often mistaken for kidney trouble may have their origin in the feet. Kept strong and well, neither tilted out of proper position nor cramped by ill-fitting shoes, your foot is a sturdy support.

But even if it has been badly used, a foot specialist may, by prescribing foot exercises or scientifically constructed shoes, restore it to a full measure of usefulness.

Misuse (toes pointed out)

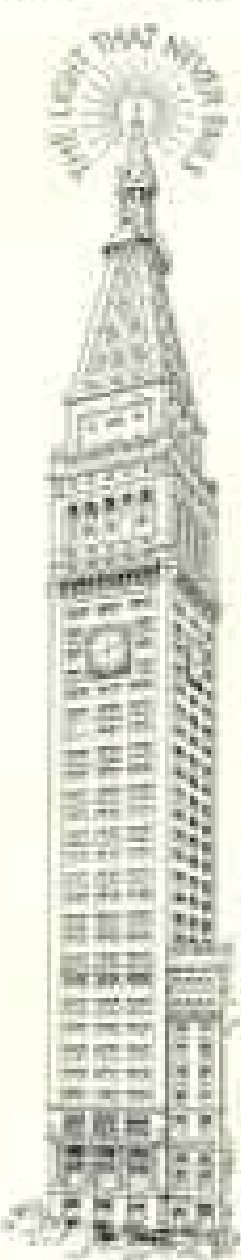
Disuse (lack of exercise)

Abuse (wearing improperly fitted shoes)—these cause not only temporary foot miseries but also fallen arches and other serious injuries.

Do you stand and put your full weight first on one foot, then on the other when buying new shoes? Your foot is longer when you are standing than when you are sitting.

Shoes should have a straight inner edge and should be large enough to permit the toes to lie flat. And most important—the sole of the shoe, under the ball of your foot, should not round down in the center or bend up at the sides. If it does, the short arch may be forced down and flattened by your weight. Feel the inside of the shoe to make sure that the sole is not lower in the middle than at the sides.

When a foot is unable to carry its load uncomplainingly, knees, hips and spine suffer the consequences. A straight body, having good posture, is rarely found above weakened or distorted feet.



Send for the booklet "Standing Up to Life" which tells how to overcome many foot troubles by means of intelligent corrective foot exercises. Address Booklet Dept. 332-N.

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How can any one say what the telephone is worth to you? We set a value on such visible, physical things as wires, poles, switchboards, instruments, operation. We set a price on telephone service based on what it costs us to render it and to assure its continued growth.

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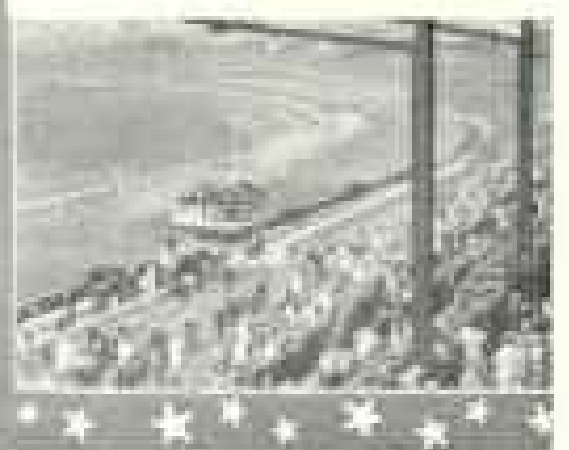
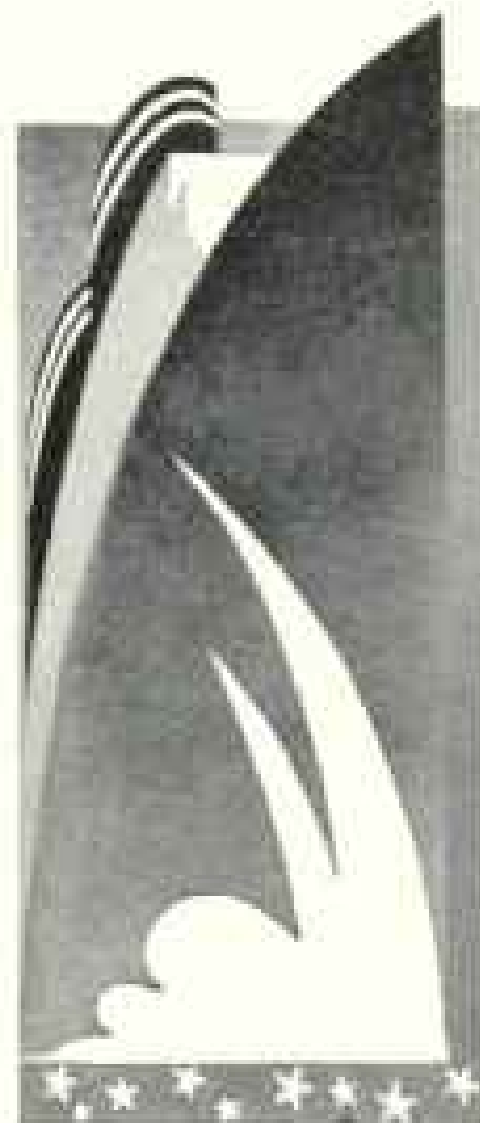
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WARD  LINE



Two reasons for decay

Three rules for fighting it

FILM is found to play an important part in tooth decay . . . to cause unsightly stains

Interesting theories on what makes teeth decay. What to do

AUTHORITIES now believe there are two causes of common tooth decay. One is the lack of essential food elements in diet . . . inferior tooth structure when under-nourished shows a tendency to disintegrate and offers "low resistance" to disease.

The second cause is germs—or to be more accurate, acids manufactured by germs. These dissolve enamel and attack the part beneath.

Pepsodent tooth paste was developed to remove the "outside" enemy of teeth. Only your diet can help you fight trouble from within.

Remove film on teeth

On your teeth a coating forms called *film*. It is most prevalent after eating and on rising in the morning.

Film is ugly. It absorbs the stains from food and smoking. It dims teeth's natural sparkling brilliance.

Amos 'n' Andy brought to you by Pepsodent every night except Sunday—N. B. C. network.

Film attracts the germs associated with decay. It glues them tightly to the tooth's enamel. What's more, film makes an ideal incubator in which germs grow and multiply. Film must be removed *twice every day*.

A new cleansing material

Recently Pepsodent laboratories made a notable discovery—a cleansing and polishing material entirely new and different. This material is unsurpassed in removing stained, destructive film. It imparts a higher brilliance to tooth enamel. And, last of all, this new material is safe—safe, because it's soft, twice as soft as polishing material in common use.

Because of its great safety it is urged for cleansing baby teeth and for polishing delicate enamel. It marks the pinnacle in modern tooth paste.

1. Remove film—

Use Pepsodent tooth paste every morning and every night.

2. Eat these foods—

One or two eggs, raw fruit, fresh vegetables, head lettuce, cabbage or celery, lemon with orange juice, (one quart of milk and other food to suit the taste.



3. See your Dentist—

Adults at least twice a year—children every 3 months and at the slightest suspicion of trouble.



USE PEPSODENT TWICE A DAY — SEE YOUR DENTIST AT LEAST TWICE A YEAR

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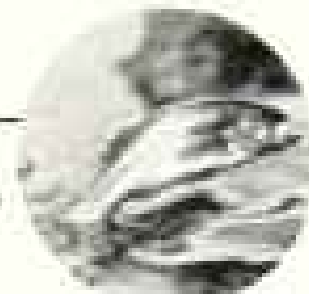
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