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THE
CYCLOPÆDIA APPENDIX.

AN APPENDIX

TO THE

ENCYCLOPÆDIA BRITANNICA

FOR 1898.

TAKING UP THE IMPORTANT TITLES FOUND IN THE ENCYCLOPÆDIA AND GIVING
ALL THE INFORMATION THAT IS NEW OR RECENT CONCERNING THEM,
INCLUDING A VALUABLE WAR GLOSSARY.

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International Cyclopædias, and Regular Contributor to Appleton's Annual Cyclopædias

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PREFACE.

In presenting this work to the intelligent reading public the publishers believe that they are supplying an *actual need*, and one that every user of a cyclopædia of any sort will at once appreciate. No large cyclopædia is, or possibly can be really up to date; even before the last volume is issued the early volumes contain *some* matter that must necessarily be old.

The aim of the Cyclopædia Appendix is to take every important title found in a general cyclopædia and to give the knowledge that is new or recent concerning it—knowledge that it is difficult for the reader to find elsewhere.

As a matter of fact, two-thirds of the information that the average reader daily seeks is concerning events that have happened during the past two or three years. No cyclopædia in use to-day gives the information sought, because it was published prior to that time.

It is believed that the Cyclopædia Appendix, in giving *all such* information, will prove to be the most useful volume in the library.

THE PUBLISHERS.

APPENDIX

TO THE ENCYCLOPAEDIA BRITANNICA.

1898.

ABBAS II., khedive of Egypt, was born July 14, 1874; confirmed in the succession Jan. 12, 1892, and formally invested April 14. After an inspection of the troops in January, 1894, he made disparaging remarks about the army; and the annual budget, published the same month, bewailed the debt and heavy taxes, and proposed a decrease in the army of occupation and the dismissal of foreign officers. Under British remonstrance, however he retracted, and Jan. 26 issued an order praising the native and British officers. April 14, 1894, Riaz Pasha resigned the prime ministry, his associates retiring with him, and Nubar Pasha succeeded. In June the khedive went to Constantinople, visiting the sultan June 25, and subsequently visited several European countries. Dec. 2 he officially opened a steam tramway, constructed by the Suez Canal Company, between Ismailia and Port Said. Nubar Pasha resigned the premiership Nov. 11, 1895, on account of age, and Mustapha Fehmy Pasha, minister of war and marine, succeeded him. See EGYPT.

ABBAY, EDWIN AUSTIN, artist was born in Philadelphia, Pa., in 1853. Perhaps his most important painting is the *Search for the Holy Grail*, a decorative treatment of the frieze of the large delivery-room in the new Boston Public Library, opened in 1895. In the same year he published *The Comedies of William Shakespeare*, with 131 drawings, 4 vols., large 8vo.

ABBOTT, AUSTIN, lawyer, was born in Boston, Mass., Dec. 18, 1831. In 1894 he completed *A Digest of New York Statutes and Reports*, of which he had been joint editor with his brother Benj. Vaughan Abbott, till 1884, and editor by himself subsequently. He also published *New Cases selected Chiefly from Decisions of the Courts of the State of New York* (1894).

ABBOTT, CHARLES CONRAD, M.D., naturalist, was born in Trenton, N. J., June 4, 1843. Among his latest works are *Travels in a Tree-Top* (1894); *The Birds Among Us* and *A Colonial Wooing* (1895); and *When the Century was New and Birdland Echoes* (1897).

ABBOTT, EDWARD, clergyman and author, was born in Farmington, Me., July 15, 1841. In 1895 he again became editor of the *Literary World*, Boston, which office he had filled years ago.

ABBOTT, LYMAN, D.D., editor of the *Outlook*, New York, and pastor of Plymouth Church, Brooklyn, was born in Roxbury, Mass., Dec. 18, 1835. He published *New Streams in Old Channels* (selections from his writings, 1894); *The Theology of an Evolutionist* (1897); and, with C. H. Morse and Herbert Vaughan Abbott, edited *The Plymouth Hymnal for the Church*, *The Social Meeting*, and *The Home*.

ABBOTT, W. L., M.D., naturalist and explorer, was born in Philadelphia, Pa., in 1861. He has presented to the National Museum at Washington, D.C., a large

collection of prepared skins, skeletons, and skulls of animals and birds from different regions of Africa and Asia. In June, 1895, he sent a large number from the Pamirs, including the skins of 228 birds and over 100 mammals, of which more than half have been hitherto unknown to science. With these were a number of stones on which are engraved prayers and charms.

ABD-UL-HAMID, sultan of Turkey, was born Sept. 22, 1842; proclaimed sultan, in succession to his brother Murad V., Aug. 31, 1876. He is said to give industrious attention to the administration of the government. Outrages upon Armenians in 1894 and 1895 brought earnest remonstrance from England and the other Powers to which reform had been promised in the treaty of Berlin. After many denials and evasions the Porte ordered a commission of inquiry in November, 1894; and in May, 1895, the Powers united in recommending a plan of reform. The Porte rejected their recommendations; but under pressure, in June a change was made in the ministry, and the reforms approved. New outrages led to an imperative note from the Powers to the Porte in August, 1895. Events were hastened by riots among the Armenians in Constantinople and elsewhere in September and October, when many Armenians were massacred by Turkish mobs, the police not resisting but even joining in the outrages. In October, 1895, a Russian war-ship arrived at Constantinople from the Black Sea squadron, the other ships remaining near the mouth of the Bosphorus. The British Mediterranean squadron was held within easy reach of the Dardanelles. The sultan was slow to assent to the demand of the Powers, being said to fear assassination or overthrow by the young Turkish party, which demands reforms for Turkish communities as full as are granted to Armenians. Some outbreaks of Turks in Constantinople were bloodily suppressed in October, 1895. At length an irade was issued approving the plan of reform, with some modifications. Early in November the sultan requested of the British authorities protection against threatened local attacks. A great Moslem demonstration had been arranged for Nov. 1, but was countermanded in fear of the consequences, the sultan declaring that he intended to proclaim a constitution, but later cancelling this notice. Revolutionary placards were posted even at the Porte, and massacres are reported in many places. Kiamil Pasha, the grand-vizier, was dismissed Nov. 5, and Nov. 7 a new ministry was announced with Rifat Pasha as grand-vizier. At the same time the Porte relieved the Ottoman Bank, in Constantinople, of its obligation to pay gold for notes, so relieving the financial stringency. At a banquet in Guild-hall, London, Nov. 9, Lord Salisbury delivered a speech which was understood as a distinct warning to the sultan that the disorders of Turkey must be reformed, and an assurance that the European Powers would be united in enforcing this demand. Subsequently Germany objected to any attempt to coerce Turkey, and in January, 1896, a friendly understanding, if not an actual alliance, was reported between Turkey and Russia, by which in case of war the Dardanelles would be closed to the war-ships of all nations. See ARMENIANS; HARFOOT; TURKEY.

ABDURRAHMAN KHAN, ameer of Afghanistan, was born in 1830, and acknowledged ameer by the British government in 1880. In January, 1894, he was appointed K. C. C. S. I. by Queen Victoria, and in July was invited to visit England. His subsidy of £120,000, received from England, was increased in 1894 to £180,000. Though sometimes thought in sympathy with Russia, his severe illness in October, 1894, caused great uneasiness in England. Under agreement with the Indian government, a commission was sent in 1894 to define the boundaries on the frontiers of Khyber, Kurram, and Beluchistan. Some of these under Colonel Turner had an encounter Nov. 3, with a large body of Waziri tribesmen,

and lost 20 soldiers and 23 followers, the Waziri loss being about 250. During the summer of 1897 there were serious tribal uprisings in the Swat Valley, along the Indo-Afghan frontier, and for a time the ameer was suspected by the British of conniving at them. In September the British agent at Kabul, at the ameer's request, submitted to him a statement concerning the anxiety of the government, and showing the points on which it desired specific declarations. To this the ameer replied in his own handwriting, repeating his previous statements that his subjects did not dare openly to take any part in the fighting, and that they had been drawn secretly into the trouble by the Mullahs, whose conduct he strongly condemned. Directly afterward, the ameer issued orders that his troops be withdrawn from the detached outposts so that they might be kept together under the control of officers able to prevent them from joining in the fighting. Later in the month a deputation of Afridis and Orakzais which started for Kabul to solicit the ameer's aid against the British was turned back at Jelalabad by his orders. For details of the uprising see INDIA, BRITISH.

ABERDEEN, JOHN CAMPBELL, EARL OF, sits in the House of Lords as Viscount Gordon; the governor-general of Canada, was born Aug. 3, 1847. The popularity of his administration was acknowledged by a welcome and reception given him and his countess by the mayor and corporation of Halifax, Aug. 1, 1894, when the city hall was crowded with a brilliant assembly, and Lord Aberdeen made a felicitous address. In the summer of 1895 he went to Manitoba, and conferred with the governor of the province as to the public school question. The conference somewhat relieved the strain of the crisis. The difficulty, however, was rather alleviated than removed, and in November members of the cabinet were threatening resignation if the legislature of the Dominion should interfere with the Manitoba schools. See CANADA.

ABERDEEN UNIVERSITY, Aberdeen, Scotland, chancellor, the Duke of Richmond and Gordon; lord rector, the Marquis of Huntley; principal, Sir William Dugdale Geddes, LL.D. In conjunction with Glasgow University it sends J. A. Campbell, LL.D., as its representative to parliament. In the last term of 1894 there were 23 professors, and 695 students. The library contained more than 80,000 volumes.

ABYSSINIA, an independent kingdom in North Africa. In 1894, Menelik, king of Shoa and acknowledged practically as negus or emperor of Abyssinia since the death of John, formally repudiated the treaty with Italy made in 1889, on the ground that his consent had been obtained by fraud, and a control obtained over the country which he never intended to give. The Italians maintained control however in the city and district of Massowah, and held by force the protectorate, Menelik becoming simply a rebel leader in the more remote regions. The advances of the Italians on the direction of Erythrea (*q. v.*) led to war between them and Menelik, and the province of Tigre was annexed by the Italians in November, 1895, only to be surrendered later on when Menelik inflicted a severe defeat on the Italians. A treaty of peace between Abyssinia and Italy was signed Nov. 15, 1896, which abrogated the treaty of Ucciali in 1889, under which the whole country was practically made an Italian protectorate. The new treaty recognized the absolute independence of Abyssinia and the conditions imposed by Menelik. See BARATIERI, ORESTE; DONGOLA: ITALY.

ACADEMIE FRANÇAISE, the French Academy, founded in 1635. In 1894 four members were elected to fill vacancies in the forty memberships, viz.: José Maria de Hérédia, Feb. 22; Albert Sorel, May 31; Paul Charles Joseph Bourget,

May 31; and Henri Houssaye, Dec. 6. In 1895 Jules Lemaitre was elected; in 1896 Jacques Anatole Thibault France, Marquis Costa de Beauregard, Gaston Bruno Paulin Paris, Claude Adhemar (Andre Thuriet), and Louis Jules Andre Comte Vandal were chosen; and in 1897, Albert Comte de Mun and Gabriel Hanotaux. At the beginning of 1898 two chairs were vacant.

ACADEMY OF DESIGN, NATIONAL, a society of artists, founded in New York in 1826. The new academicians elected May 9, 1894, were Francis C. Jones, J. Carroll Beckwith, and Alfred Kappes; associates: Harry W. Watrous, William H. Howe, Cecilia Beaux, B. West Clinedinst, Edmund C. Tarbell, and Henry O. Walker. The council for 1894-95 consisted of President Thomas Waterman Wood, Vice-President Horace W. Robbins, Corresponding Secretary J. C. Nicoll, Recording Secretary George H. Smillie, Treasurer J. D. Smillie, Edwin H. Blashfield, H. Bolton Jones, Thomas Moran, James M. Hart, Olin L. Warner, and Walter Shirlaw. The Thomas B. Clarke prize of \$300 was awarded at the annual exhibition of 1894 to Harry W. Watrous, and at the exhibition of 1895 to Henry O. Walker. The Julius Hallgarten prizes of \$300, \$200, and \$100 were awarded in 1894 to Edmund C. Tarbell, Edith Mitchell, and Mrs. J. F. Murphy; and in 1895 to George R. Basse, Jr., Charles C. Curran, and Francis Day. The Norman W. Dodge prize of \$300 was awarded in 1894 to Clara T. MeChesney, and in 1895 to Edith Mitchell Prellwitz. These prizes are not open to the academicians. The academy school for 1894-95 opened Oct. 1, 1894. The instructors were Edgar M. Ward, Charles Y. Turner, Francis C. Jones, J. D. Smillie, Olin L. Warner, Frederick Dielman, and Professor Thomas Eakins. There were between 200 and 300 students. The annual distribution of prizes was made May 11, 1894, the most important being the Havemeyer Traveling scholarship of \$750 for study abroad under supervision of the academy, which was given to Harry M. Walcott, of Rutherford, N. J., who also received \$100 from the Hallgarten school prize fund and the Suydam silver medal. In September, 1894, the academy building at the corner of 23d Street and 3d Avenue was bought by the Metropolitan Life Insurance Company, the academy having however the use of the building for more than a year. The sale is said to have given the academy \$610,000 for reinvestment.

ACTORS' FUND OF AMERICA, a beneficiary society of actors, incorporated in New York in 1882: President, Louis Aldrich; secretary, Daniel Frohman; headquarters, 12 West 28th Street, New York. The annual report, June 5, 1894, showed the assets to be \$224,546.82, against \$230,325.17 the year before. The total receipts for the year were \$38,923.63; expenditures, \$43,201.18, of which \$31,926.51 was paid for relief, funeral, physicians' expenses, medicines, etc., in different cities. The persons relieved from the beginning numbered 4,669, and the burials 736; money spent for such assistance, \$266,701.01. The 14th annual meeting was held in New York June 4, 1895. The treasurer's report showed a cash balance from the year before, \$29,034.64; receipts for the year, \$37,647.30; disbursements, \$37,956.78; of which \$29,079.54 were for relief, etc.; cash invested in bonds and mortgages, \$180,000; total assets June 4, 1895, \$224,162.44. The number of persons relieved during the year was 521. The fund receives from the city of New York one-half of the theatrical license fees amounting during the year to \$11,650. The report for the year ending June 1, 1897, showed amount of fund, \$209,100; receipts since organization, \$500,000; disbursements for all purposes, \$332,000; annual members, 1,000; life members, 85; and honorary members, 21.

ADAMS, CHARLES FRANCIS, lawyer and railroad manager, was born in Boston, May 27, 1835. In 1894 he published *Antinomianism in the Colony of Massachusetts Bay, 1636-38*; and in 1895 *Charles Francis Adams, in the American Statesmen Series*.

ADAMS, CHARLES KENDALL, LL.D., president of the University of Wisconsin, was born in Derby, Vt., Jan. 24, 1835. He was editor-in-chief of the revised *Johnson's Universal Cyclopædia*, published in New York in 1893-95. He published in 1895 *Democracy and Monarchy in France*.

ADAMS, HERBERT BAXTER, associate professor of history in Johns Hopkins University, Baltimore, Md., was born in Amherst, Mass., April 16, 1850. He has published the *Life and Writings of Jared Sparks, comprising Selections from his Journals and Correspondence* (2 vols., Boston, 1894). For a number of years he has edited the series of contributions to *American Educational History*, published by the U. S. Bureau of Education.

ADAMS, WILLIAM TAYLOR (widely known as OLIVER OPTIC), author, was born in Medway, Mass., July 30, 1822; died in Boston, Mass., March 27, 1897. At the age of seventy-three he had written 126 books and more than 1,000 short stories. His last publications include *American Boys Afloat and A Victorious Union* (1893); *Asiatic Breezes; or, Students on the Wing* (1894); and *In the Saddle across India; or, Live Boys in the Far East, and A Lieutenant at Eighteen* (1895).

ADELBERT COLLEGE. See WESTERN RESERVE UNIVERSITY.

ADIRONDACKS, a forest region of northern New York. The report of the State engineer in 1894 showed that there are included in the State park owned by the State 550,000 acres, mostly in virgin forest. Common complaint declaring that the law of 1893, which allowed the cutting of evergreen trees not less than 12 inches in diameter, was greatly abused, a mass-meeting was held in Utica, N. Y., Feb. 7, 1894, which urged the repeal of that law, protested against the sale of any of these lands, and urged further legislation in protection of the forest and the water supply dependent on it.

ADRIAN COLLEGE, Adrian, Mich., Methodist Protestant; co-educational; had at close of 1897, 16 professors and instructors; 225 students; 6,000 volumes in the library; \$80,000 in productive funds; \$5,000 in gifts; \$30,000 in income; President, D. C. THOMAS, A.M., PH.D.

AËRIAL NAVIGATION. On July 31, 1894, Hiram S. Maxim experimented with a flying machine, the lifting power of which was an aeroplane driven forward by a steam propeller. The machine, with its engine weighed, 8,000 lbs. It was lifted from the rails on which it ran, and so strongly as to break away from the upper rails meant to hold it down. It was brought to a stop by shutting off the steam, but not before it was broken and disabled. The power of the machine to rise in the air was however demonstrated. Aug. 10, Mr. Maxim read a paper describing this experiment before the mechanical section of the British Association at Oxford. He claimed that he had made the first machine that would lift itself, its motive power, its fuel and water, and its engineer. He believed that flying machines, however perfected, could not be profitably used for transportation of passengers or freight because of the expense and inevitable danger; but that, like torpedoes, they would prove of most formidable use in war. Prof. Samuel P. Langley, of the Smithsonian Institution, Washington, was present, and substantially confirmed the claims and views of Mr. Maxim from his experiences in the same department of investigation. Col. George E. Waring published

in 1894 *Aerial Navigation*, translated from an essay in Dutch by J. G. W. Fijrije Van Salverda, formerly administrator of public works in the Netherlands, which expressed sanguine hopes of practical results from Prof. Langley's experiments.

AFGHANISTAN, a country in Asia, now about 500 miles in breadth and 600 miles in length from the Herat boundary to the Khaibar, and having an estimated area of 300,000 square miles. It forms the northeastern portion of the great Iran plateau, has a population of about 4,000,000 tribesmen, constantly in revolt and only kept in approximate subjection by frequent military expeditions from Kabul, the capital. The eastern and southern boundaries long remained uncertain, but the basis of a delimitation was settled in 1893 at a conference between the ameer and Sir Mortimer Durand, and the boundary agreed on, with the exception of the Khaibar-Asmar section, has since been demarcated. The ameer agreed that Chitral, Bajaur, Swat, and Chilas should be included within the British sphere of political influence, while he himself was to retain Asmar and the Kunar valley above it, as far as Chanak, and the tract of Birmal. Subsequently, Kafiristan was included within the boundaries under the ameer's control, and since 1896 has been garrisoned by his troops, and Waziristan was placed wholly under British influence. The northern boundary was settled in the course of the delimitation of the Pamirs by Great Britain and Russia in 1895. Under these agreements, the countries surrounding Afghanistan in 1898 were, on the north, the Central Asian States, under the influence of Russia; on the west, Persia; on the south, the British Political Agency of Beluchistan; and on the east, the mountain tribes scattered along the northwestern frontier of India, and included within the sphere of British influence. See ABDURRAHMAN KHAN.

AFRICA. See ABYSSINIA: CAPE COLONY: DONGOLA: EAST AFRICA: EGYPT: ERYTHREA.

AGRICULTURE. The following is a summary of the condition of the agricultural industry in the United States in the year ending December 31, 1896:

Wheat.—The first spring report showed a winter wheat condition of 77.1, but from May till harvest time there was a steady decline, the condition in July being 75.6. Spring wheat showed a condition of 99.9 in June and 78.9 in August, but this also declined from various causes. Winter and spring wheat combined showed a condition of 74.6 when harvested. The general average yield per acre in October was scarcely 12.4 bush. per acre, which was 10 per cent. short of that of the previous year. On the Pacific slope and in the New England States the general condition was better than elsewhere.

Corn.—The spring was favorable for early planting, and the amount finished by May 1 was 79.6 per cent., more than an average. The average condition on July 1 was 92.1, on Aug. 1, 96, Sept. 1, 91, and Oct. 1, 90.5; and the final return of yield showed an average of 28.2 bush. per acre. On an acreage 1.3 per cent. less than that of the preceding year, a yield 7.6 per cent. greater gave a total product 6.2 per cent. greater; hence the crop exceeded by that percentage any other ever produced in the history of the country. This immense crop came principally from a territory including Virginia, Kentucky, North Missouri, Nebraska, and northward.

Cotton.—In Mississippi and Texas planting was delayed by wet weather; elsewhere growth was retarded by drought. The average condition fell from 97.2 in June to 64.2 in September.

Statistics.—Corn, 2,283,875,165 bush., from 81,027,156 acres, value \$491,006,967; wheat, 427,684,346 bush., from 34,618,646 acres, value \$310,602,539;

oats, 707,346,404 bush., from 27,565,985 acres, value \$132,485,033; barley, 69,695,223 bush., from 2,950,539 acres, value \$22,491,241; rye, 24,369,047 bush., from 1,831,201 acres, value \$9,960,769; buckwheat, 14,089,783 bush., from 754,898 acres, value \$5,522,339; potatoes, 252,234,540 bush., from 2,767,465 acres, value \$72,182,350; hay, 59,282,158 tons, from 43,083,134 acres, value \$388,145,614; and tobacco, 403,004,320 lbs., from 594,749 acres, value \$24,258,070—total value, \$1,464,654,922.

The following table shows the quantity and value of the corn and wheat crops in the various States for the year ending Dec. 31, 1896:

States and Territories.	Corn.		Wheat.	
	Bushels.	Value.	Bushels.	Value.
Maine.....	546,860	\$257,024	170,940	\$143,590
New Hampshire.....	1,161,720	522,774	51,387	51,387
Vermont.....	1,004,322	757,642	205,372	191,554
Massachusetts.....	1,845,560	848,658	.....	.....
Rhode Island.....	300,832	117,408	.....	.....
Connecticut.....	1,773,004	744,092	.....	.....
New York.....	17,862,798	6,730,340	6,349,968	5,587,972
New Jersey.....	9,325,398	3,357,132	1,535,260	1,384,191
Pennsylvania.....	52,475,090	17,316,750	17,737,286	14,721,947
Delaware.....	4,033,676	1,233,419	1,758,816	1,530,170
Maryland.....	19,936,128	6,379,561	7,878,769	6,633,317
Virginia.....	38,067,986	12,181,750	5,724,913	4,579,930
North Carolina.....	29,504,148	10,916,535	4,621,922	4,836,195
South Carolina.....	15,781,374	7,259,432	957,962	852,533
Georgia.....	22,829,654	14,116,751	1,699,872	1,512,886
Florida.....	4,860,940	2,576,208	.....	.....
Alabama.....	32,445,675	14,000,284	304,194	382,056
Mississippi.....	27,673,390	12,308,292	37,927	81,100
Louisiana.....	15,565,030	7,001,294	.....	.....
Texas.....	82,228,617	13,213,733	4,529,210	3,396,004
Arkansas.....	22,729,264	10,067,826	1,290,730	805,111
Tennessee.....	71,803,446	20,130,165	6,628,462	4,965,062
West Virginia.....	21,689,160	7,374,314	4,056,511	3,164,679
Kentucky.....	80,052,348	29,233,087	6,076,861	5,302,134
Ohio.....	123,691,367	25,975,311	21,809,016	17,044,012
Michigan.....	40,041,030	9,610,063	15,719,808	13,234,714
Indiana.....	133,468,265	25,268,670	20,647,440	16,517,952
Illinois.....	284,572,764	51,223,098	28,668,146	21,214,428
Wisconsin.....	38,876,671	8,555,806	8,808,350	6,239,335
Minnesota.....	34,446,974	6,544,925	46,599,061	31,692,361
Iowa.....	321,719,541	45,040,736	11,473,152	7,113,354
Missouri.....	176,768,649	35,283,730	16,594,473	11,616,131
Kansas.....	247,734,004	44,501,321	30,794,452	19,400,205
Nebraska.....	228,539,128	38,817,053	19,369,692	11,216,249
South Dakota.....	31,136,959	5,694,051	27,583,450	17,101,239
North Dakota.....	974,540	243,635	29,848,501	10,103,641
Montana.....	34,696	20,764	1,294,240	794,798
Wyoming.....	62,073	8,118	221,135	138,958
Colorado.....	2,852,928	1,627,054	2,797,182	1,706,281
New Mexico.....	388,160	213,488	818,097	539,944
Arizona.....	.....	.....	333,500	266,800
Utah.....	216,250	110,288	2,803,753	1,366,552
Nevada.....	.....	.....	186,630	124,221
Idaho.....	.....	.....	2,404,112	1,562,673
Washington.....	95,452	54,408	8,358,192	6,185,062
Oregon.....	297,638	106,677	10,247,141	7,377,942
California.....	2,202,573	1,167,364	45,097,165	37,390,672
Oklahoma.....	.....	.....	2,694,755	1,769,193
Total.....	2,383,875,165	\$491,006,967	427,684,346	\$310,602,539

The official estimates for the year ending Dec. 31, 1897, showed: Corn, 1,902,967,933 bush., from 80,095,051 acres, valued at \$501,072,952; and wheat, 530,-

149,168 bush., from 39,465,066 acres, valued at \$428,547,121. The States with the largest production of corn were: Nebraska, 241,268,490 bush.; Illinois, 232,928,085; Iowa, 220,089,149; Missouri, 171,923,882; and Kansas, 162,442,728; and of wheat, Minnesota, 59,891,104; Kansas, 47,998,152; Ohio, 38,049,133; Indiana, 32,675,201; and California, 32,394,020.

The quantity and value of the oat and barley crops in the various States for the year ending Dec. 31, 1896, was officially reported as follows:

States and Territories.	Oats.		Barley.	
	Bushels.	Value.	Bushels.	Value.
Maine.....	5,869,880	\$1,810,663	378,093	\$162,567
New Hampshire.....	1,160,558	406,195	156,316	82,847
Vermont.....	4,716,306	1,462,655	603,735	247,531
Massachusetts.....	549,864	192,433	55,170	31,999
Rhode Island.....	112,350	37,014	11,949	6,659
Connecticut.....	641,016	198,715	.....	.....
New York.....	49,916,064	12,978,177	4,984,965	1,924,636
New Jersey.....	3,620,490	1,013,737	.....	.....
Pennsylvania.....	36,086,821	8,691,837	176,317	70,527
Delaware.....	548,071	115,095	.....	.....
Maryland.....	2,040,192	469,244	.....	.....
Virginia.....	8,492,290	2,207,907	.....	.....
North Carolina.....	5,777,256	2,022,940	.....	.....
South Carolina.....	2,954,708	1,418,938	.....	.....
Georgia.....	5,085,288	2,084,968	.....	.....
Florida.....	549,782	291,358	.....	.....
Alabama.....	4,454,870	1,826,497	.....	.....
Mississippi.....	1,599,273	763,880	.....	.....
Louisiana.....	845,450	117,433	.....	.....
Texas.....	12,668,860	4,307,412	28,320	14,160
Arkansas.....	5,075,456	1,573,391	.....	.....
Tennessee.....	7,295,418	1,873,469	27,902	12,556
West Virginia.....	5,847,872	1,077,404	.....	.....
Kentucky.....	10,515,981	2,528,835	57,291	10,916
Ohio.....	32,553,689	5,534,127	519,379	208,764
Michigan.....	80,079,300	5,715,659	1,283,709	539,154
Indiana.....	34,433,297	8,599,318	110,615	36,303
Illinois.....	84,581,652	12,687,233	409,820	127,044
Wisconsin.....	65,297,675	11,093,805	8,914,045	2,414,892
Minnesota.....	56,796,336	8,514,560	11,330,350	2,266,070
Iowa.....	105,641,835	12,657,323	10,246,664	2,151,739
Missouri.....	19,850,490	3,374,981	18,093	8,496
Kansas.....	23,808,753	3,750,189	86,659	19,065
Nebraska.....	34,062,631	3,750,189	967,478	172,478
South Dakota.....	17,337,345	2,354,468	3,308,736	628,660
North Dakota.....	11,238,788	2,022,982	3,791,872	796,233
Montana.....	3,050,770	945,739	142,525	78,389
Wyoming.....	417,312	221,173	.....	.....
California.....	2,690,724	789,317	257,220	118,331
New Mexico.....	231,157	88,463	23,579	15,223
Utah.....	998,132	313,671	172,519	72,438
Idaho.....	1,362,168	390,650	162,272	37,700
Washington.....	3,017,772	1,267,109	1,042,444	416,378
Oregon.....	8,854,316	1,271,325	67,841	39,678
California.....	1,827,171	803,355	19,857,094	9,521,805
Total.....	707,346,404	\$132,485,633	69,695,223	\$22,491,241

The official estimates for the year ending Dec. 31, 1897, showed: Oats 698,767,809 bush., from 25,730,375 acres, valued at \$147,974,719; and barley, 66,685,127 bush., from 2,719,116 acres, valued at \$25,142,139. The States with the largest production of oats were: Iowa, 103,721,100 bush.; Illinois, 92,798,496; Wisconsin, 62,125,310; Nebraska, 51,731,095; and New York, 45,953,036; and of barley, California, 20,277,927; Minnesota, 9,241,328; Iowa, 9,163,560; and Wisconsin, 7,860,328.

The quantity and value of the potato and hay crops in the various States for the year ending Dec. 31, 1896, was officially reported as below :

States and Territories.	Potatoes.		Hay.	
	Bushels.	Value.	Tons.	Value.
Maine.....	8,108,100	\$3,081,078	939,192	\$9,626,718
New Hampshire.....	2,223,504	1,045,047	566,006	7,313,081
Vermont.....	3,499,136	1,014,749	1,064,799	10,843,231
Massachusetts.....	2,900,232	1,633,132	794,376	12,043,766
Rhode Island.....	684,390	369,571	79,585	1,321,111
Connecticut.....	2,580,782	1,187,160	488,961	7,192,616
New York.....	34,333,911	10,649,712	3,434,328	41,348,165
New Jersey.....	4,244,470	1,550,800	455,807	6,540,830
Pennsylvania.....	21,181,098	6,718,866	2,712,805	32,960,581
Delaware.....	395,708	198,848	56,696	728,463
Maryland.....	2,154,240	640,372	273,207	3,288,569
Virginia.....	3,591,474	1,231,101	636,082	6,500,523
North Carolina.....	1,446,401	621,337	177,616	1,990,372
South Carolina.....	231,920	153,067	190,963	2,161,622
Georgia.....	303,820	227,865	189,735	2,066,572
Florida.....	38,100	82,104	9,407	122,291
Alabama.....	498,576	229,232	92,383	965,373
Mississippi.....	412,020	255,452	83,236	787,413
Louisiana.....	511,555	388,782	46,650	410,888
Texas.....	671,008	323,386	324,922	2,337,278
Arkansas.....	1,408,374	778,185	187,652	1,111,745
Tennessee.....	4,130,258	852,103	403,807	4,775,114
West Virginia.....	3,561,342	1,104,016	591,396	5,789,767
Kentucky.....	3,940,005	1,300,202	492,479	4,375,051
Ohio.....	17,405,285	4,325,374	2,204,308	17,480,162
Michigan.....	18,337,528	3,184,130	1,342,871	13,093,546
Indiana.....	8,855,640	2,213,010	2,138,631	15,353,371
Illinois.....	16,800,788	4,368,205	2,840,933	18,153,662
Wisconsin.....	12,616,344	2,397,165	1,790,575	11,817,333
Minnesota.....	10,076,280	2,116,006	2,043,556	10,683,377
Iowa.....	20,060,540	4,413,819	8,023,804	36,024,317
Missouri.....	7,857,642	2,435,869	3,298,201	15,996,253
Kansas.....	7,465,368	2,015,803	4,031,887	13,316,122
Nebraska.....	11,383,020	2,845,735	3,250,096	7,380,019
South Dakota.....	6,048,384	1,399,677	2,683,331	8,371,038
North Dakota.....	3,310,206	665,143	727,805	2,407,259
Montana.....	841,840	209,389	476,996	3,271,575
Wyoming.....	409,786	198,032	363,805	2,611,848
Colorado.....	2,846,390	1,367,789	1,673,325	10,924,254
New Mexico.....	53,424	96,328	109,745	624,406
Arizona.....			103,501	965,434
Utah.....	863,090	276,371	489,702	2,448,510
Nevada.....	256,310	97,288	397,949	1,733,321
Idaho.....	623,836	188,657	592,161	2,365,173
Washington.....	1,781,230	712,590	569,449	4,037,393
Oregon.....	1,269,345	596,745	1,232,336	8,123,418
California.....	1,772,640	939,499	2,838,140	18,149,169
Total.....	252,240,540	\$74,182,350	59,282,158	\$388,145,614

The official estimates for the year ending Dec. 31, 1897, showed: Potatoes, 164,015,964 bush., from 2,534,577 acres, valued at \$89,643,059; and hay, 60,664,876 tons, from 42,126,770 acres, valued at \$401,390,728. The States with the largest production of potatoes were: New York, 21,060,098 bush.; Wisconsin, 14,731,992; Michigan, 12,602,880; Iowa, 12,036,300; Minnesota, 11,413,760; Pennsylvania, 10,650,780; Nebraska, 9,076,053; Ohio, 7,310,226; Illinois, 6,450,120; South Dakota, 5,093,202; Kansas, 4,882,080; Missouri, 1,104,114; Colorado, 3,106,134; Indiana, 3,003,621; and North Dakota, 2,355,843; and of hay, Iowa, 6,711,309 tons; New York, 6,009,899; Kansas, 4,063,605; Pennsylvania, 3,690,439; Nebraska, 3,069,885; California, 2,716,099; Ohio, 2,619,976; Illinois, 2,602,541; Missouri, 2,546,304; Indiana, 2,399,511; Minnesota, 2,378,537; South Dakota, 2,358,388; Michigan, 2,100,699; and Wisconsin, 1,972,420.

The production of rye and buckwheat in the various States during the year ending Dec. 31, 1896, was as follows, by quantity and value:

States and Territories.	Rye.		Buckwheat.	
	Bushels.	Value.	Bushels.	Value.
Maine.....	17,874	\$11,976	1,046,121	\$397,526
New Hampshire.....	19,855	14,296	80,562	50,754
Vermont.....	60,227	39,148	357,808	143,121
Massachusetts.....	218,438	122,907	45,713	24,228
Connecticut.....	228,444	130,213	53,932	27,505
New York.....	3,487,856	1,534,657	4,992,754	1,847,319
New Jersey.....	932,770	438,402	257,301	100,347
Pennsylvania.....	4,509,664	2,110,542	4,369,219	1,660,303
Delaware.....	.....	.....	6,569	1,968
Maryland.....	270,802	129,085	174,041	85,280
Virginia.....	419,810	201,509	85,662	40,261
North Carolina.....	383,610	272,363	31,040	18,624
South Carolina.....	19,390	47,322	.....	.....
Georgia.....	121,822	123,040	.....	.....
Alabama.....	16,152	14,214	.....	.....
Texas.....	27,027	18,108	.....	.....
Arkansas.....	22,040	16,038	.....	.....
Tennessee.....	153,576	92,146	31,488	19,523
West Virginia.....	153,753	86,102	293,592	146,796
Kentucky.....	323,983	174,951	.....	.....
Ohio.....	498,452	184,288	227,574	97,857
Michigan.....	1,139,933	364,779	565,306	214,850
Indiana.....	611,387	220,103	149,504	73,391
Illinois.....	1,540,328	523,712	81,779	36,801
Wisconsin.....	3,816,233	1,250,387	533,303	225,489
Minnesota.....	1,043,437	313,031	189,772	77,807
Iowa.....	1,400,228	406,066	252,558	116,177
Missouri.....	204,371	96,056	60,386	42,270
Kansas.....	87,492	282,022	.....	.....
Nebraska.....	1,053,844	232,280	191,080	65,540
South Dakota.....	30,415	8,212	.....	.....
North Dakota.....	21,264	4,678	.....	.....
Colorado.....	65,306	40,490	.....	.....
Utah.....	79,060	31,224	.....	.....
Washington.....	36,225	18,112	.....	.....
Oregon.....	71,412	42,847	5,250	3,570
California.....	559,062	335,437	12,903	5,032
Total.....	24,369,047	\$9,960,769	14,089,783	\$5,522,339

The official estimates for the year ending Dec. 31, 1897, showed: Rye, 27,363,-324 bush., from 1,703,581 acres, valued at \$12,239,647; and buckwheat, 14,997,451 bush., from 717,836 acres, valued at \$6,319,188. The States with the largest production of rye were: Pennsylvania, 5,365,226 bush.; New York, 4,467,140; Wisconsin, 3,638,576; Michigan, 1,579,800; Kansas, 1,550,388; New Jersey, 1,218,016; Illinois, 1,217,153; Iowa, 1,113,776; Minnesota, 1,012,409; and Nebraska, 1,008,984; and of buckwheat, New York, 5,667,310 bush.; Pennsylvania, 5,038,488; Maine, 848,260; Wisconsin, 735,804; and Michigan, 552,840. Rye was grown in forty-seven States and Territories, and buckwheat in thirty.

The total acreage of the foregoing crops was 195,392,352, and the total value of the crops \$1,712,329,553. The most notable production of the year was wheat, which had an increase over the totals of the previous year of 92,464,822 bush. in quantity and \$117,944,582 in value. In this crop Kansas made a jump from 30,794,452 bush. in 1896 to 47,998,152 in 1897; Minnesota, from 46,599,-

061 to 59,891,104; Ohio, from 21,800,016 to 38,049,133; Indiana, from 20,647,440 to 32,675,201; and Nebraska, from 19,320,602 to 27,152,647.

The following table shows the acreage of the tobacco fields of the United States by States and Territories, with the production and value of the crop in the year ending Dec. 31, 1896, as reported by the United States Department of Agriculture.

States and Territories.	Acres.	Pounds.	Value.
Massachusetts	1,975	9,199,500	\$388,940
Connecticut	6,579	10,197,450	1,325,868
New York	8,259	8,389,360	271,149
Pennsylvania	13,884	16,244,280	1,299,526
Maryland	15,995	9,277,400	398,915
Virginia	92,002	57,961,299	3,013,386
North Carolina	134,567	68,629,170	5,490,334
Alabama	2,147	1,009,060	191,454
Arkansas	2,959	1,327,500	146,625
Tennessee	53,351	33,211,660	2,464,816
West Virginia	5,119	3,653,680	313,283
Kentucky	196,715	143,623,850	6,032,202
Indiana Territory	32,012	23,688,880	1,066,000
Indiana	11,967	8,130,760	365,884
Illinois	3,302	2,457,280	237,242
Wisconsin	3,975	5,088,000	275,840
Missouri	10,580	7,406,000	669,540
All other	3,750	2,437,500	341,250
Total	564,740	403,004,320	\$24,258,070

For later statistics, see INDUSTRY, AGRICULTURAL.

AGRICULTURE, COLLEGES OF. In 1895 there were in the United States 64 colleges of agriculture and the mechanic arts endowed by act of Congress, 1862 (national land-grant act). The recent additions were made in Idaho, Montana, South Carolina, and Washington (State). Of the total, 15 were for colored students.

AKRON, a city, capital of Summit county, O.; on the Ohio and Erie canal and the Balt. & O., the Cleve., Ak. & Col., the Erie, the Pitts., Ak. & West., the Pitts. & West., and the Valley railroads; forty miles south of Cleveland; pop. (1890), 27,601; (1896) estimated, 39,000. It is a manufacturing city, having (1890) over \$14,000,000 in industrial investment and an output valued at nearly \$13,000,000. The assessed valuations, 1896 were: Real estate \$11,475,550, personal \$5,104,450—total, \$16,580,000; tax rate \$23.20 per \$1,000. The bonded debt Feb. 20, 1897, was \$359,250; sinking fund \$20,000. Local transit 1895 was controlled by the Akron street railway, incorporated 1894, extending to Cuyahoga and Silver Lake, and operating 20 miles of track, and the Akron & Cuyahoga Falls Rapid Transit road, chartered 1894, extending to Cuyahoga Falls and Barberton, O., and operating May 1, 1895, 16 miles of track; both trolley roads. In 1897 there were 12 publications of all kinds.

ALABAMA, one of the United States of North America; admitted to the Union Dec. 14, 1819; seceded Jan. 11, 1861; readmitted June 25, 1868; counties, 66; capital, Montgomery.

State Officers, 1898.—Governor (elected for 2 years, salary \$3,000 per annum), Joseph F. Johnston; secretary of state, James K. Jackson; treasurer, George W. Ellis; auditor and comptroller, Walter S. White; adjutant-general, Robert F.

Ligon; attorney-general, W. C. Fitts; superintendent of public instruction, John O. Turner; commissioner of agriculture, Isaac F. Culver; chief justice supreme court, Robert C. Brickell; associate justices, Thomas N. McClellan, Thomas W. Coleman, James B. Head, and Jonathan Haralson; clerk, Sterling A. Wood—all Democrats.

Legislature, 1897.—Democrats, senate, 22, house, 74; joint ballot, 96. Populists, senate, 9; house, 23; joint ballot, 32. Republicans, senate, 2; house 3; joint ballot, 5. Democratic majority, senate, 11; house, 48; joint ballot, 59.

Elections.—In the State elections in August, 1896, there was a total of 218,831 votes cast for governor, of which the Democratic candidate (Johnston) received 128,541, and the Fusion candidate (Goodwyn), 89,290; Democratic majority, 39,251. The Congressional elections resulted in the choice of 1 Populist and 8 Democratic candidates. In the Presidential election, the Democratic candidate received 131,226 votes; the Republican, 54,737; the National Democrat, 5,671; and the Prohibitionist, 2,147.

Farm Products.—Reported Jan. 1, 1897: Corn, 32,445,075 bush., from 2,595,606 acres, value \$14,600,284; wheat, 394,184 bush., from 49,273 acres, value \$335,056; oats, 4,454,870 bush., from 318,205 acres, value \$1,826,497; rye, 16,152 bush., from 2,019 acres, value \$14,214; potatoes, 438,976 bush., from 6,859 acres, value \$329,232; hay, 92,385 tons, from 65,989 acres, value \$905,373; and tobacco, 1,009,090 lbs., from 2,147 acres, value \$161,454—total value, \$3,586,426.

Farm Animals.—Reported Jan. 1, 1897: Horses, 129,619, value \$5,032,297; mules, 129,739, value \$6,358,007; cows, 305,355, value \$3,395,548; cattle, 491,929, value \$3,384,129; sheep, 252,133, value \$316,074; and swine, 1,885,876, value \$4,763,724—total value, \$23,249,779.

Cotton Crop.—The total crop in the season of 1894-5 was 825,746 bales; season of 1895-6, 1,000,000 bales; season of 1896-7, 833,789 bales.

Mineral Output.—The total production of iron ore, 1894, was 1,182,362 long tons of red hematite and 310,724 of brown, total 1,493,086 long tons, value \$1,340,895. The State ranked third in this product, having dropped one point in the year. In October, 1895, the indications were that the output of the year would far exceed that of 1894. At that time the returns from the coal mines showed that the product of coal for the year would be about 6,000,000 tons, or almost 2,000,000 tons more than 1894, and 750,000 tons more than the phenomenal year 1893. In 1897 the output was 5,868,271 tons, an increase over 1896 of 122,654 tons.

Finances.—The balance on hand in the State treasury April 13, 1894, was \$43,669.35. The outstanding debt Oct. 1, 1894, comprised \$6,804,400 in bonds due 1906 (class A); \$578,000, due the same year (class B); \$963,000, due same year (class C); and \$954,000, due 1920—total \$9,299,400. Authority exists for the issue of \$249,600 additional bonds for exchange with outstanding ones. The total assessed valuation of taxable property, 1894, was \$243,171,677; the State tax rate was 5 mills; and the amount of taxes levied \$1,217,281. In 1895 the assessed valuation of all taxable property was \$241,338,024, and amount of taxes, \$1,328,817. The total bonded debt, June, 1896, was \$9,299,400.

Banks.—On Oct. 2, 1894, there were 27 national banks, with a combined capital of \$3,694,000, which held \$1,108,500 in United States bonds, an excess of \$378,750 over the required amount. These banks had outstanding on loans and discounts an aggregate of \$6,388,466, represented by demand paper with individual or firm names, \$390,314; the same, secured by stocks, bonds, and other personal securities, \$448,723; time paper with two or more individual or firm

names, \$2,367,964; time paper with single individual or firm name, \$1,211,306; and the same, secured by stocks, bonds, or other personal securities, \$1,970,159. The State banks June 30, 1891, numbered 11, and had capital \$592,400, deposits \$340,889, and total liabilities \$1,213,108. The same date there were 4 stock savings banks, with capital \$380,000, savings deposits \$102,347, and total resources \$855,420. On Oct. 31, 1897, there were 26 national banks, with \$3,455,000 capital, \$1,201,077 outstanding circulation, \$6,570,755 invested in loans and discounts, \$6,047,181 in deposits, and \$1,959,776 in reserve, and 11 State banks, with \$751,900 capital, \$944,336 deposits, \$2,212,777 resources, and \$270,460 surplus.

Commerce.—There is one port of entry, Mobile. The imports of foreign merchandise during the fiscal year ending June 30, 1895, amounted in value to \$1,009,281, and the exports of domestic merchandise to \$5,173,303. In the year ending June 30, 1897, the imports were \$848,129 and the exports, \$10,131,189.

Internal Revenue.—During the fiscal year ending June 30, 1894, the collections of internal revenue aggregated \$112,582.45, from the following sources: Distilled spirits, \$51,490.85; tobacco, \$15,458.31; fermented liquors, \$38,451.49; oleomargarine, \$5,609.60; and penalties, \$1,572.20. The collections from the same sources in the year ending June 30, 1895, were \$88,719.83; year ending June 30, 1896, \$136,317; year ending June 30, 1897, \$158,999.

Railroads.—The single-track railroad mileage Dec. 31, 1893, was 3,627.89, which was increased during 1894 to 3,642.39. This mileage is independent of second, third, siding, and other tracks. The State board of assessment in 1896 fixed the valuation of the railroads at \$42,186,809; mileage 1896, 3,700.59.

Post-offices.—Reported Jan. 1, 1897: First-class 3; second-class 3; third-class 30 (presidential 36); fourth-class 2,185; money order offices 311; limited money order offices 14.

Publications.—Reported March, 1898: Daily, 17; semi-weekly, 2; weekly, 181; bi-weekly, 1; semi-monthly, 6; monthly, 12—total, 219.

Churches.—The Baptist is the strongest denomination in the State, and is followed by the Methodist Episcopal, South, the Roman Catholic, the Methodist Episcopal, and the Protestant Episcopal. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Alabama, 3,850 evangelical Sunday schools, 23,725 officers and teachers, and 205,240 scholars; total members, 228,965.

Schools.—The last biennial report at hand shows: Children of school age, 550,522 (white 309,628, colored 240,894), appropriations from State taxes, interest on the 16 section fund, United States surplus revenue fund, and poll tax, \$627,911.66. There are 7 universities and colleges of liberal arts, with 69 instructors and 1,283 students (male 957, female 326) in all departments; income 1892 3, \$102,114; volumes in libraries, 27,600; value of scientific apparatus and libraries, \$98,360; value of grounds and buildings, \$704,500; and aggregate of productive funds, \$353,000. In the school year 1895-6 the school population was 610,300; total enrollment, 319,526; average daily attendance, 201,000; number of teachers, 7,181; value of school property, \$1,373,000; and total expenditure, \$663,359.

Libraries.—In 1896 there were reported 28 public libraries of 1,000 volumes each and upward, with a total of 117,337 bound volumes and 35,121 pamphlets.

Population.—In 1890, 1,513,017, of whom 757,456 were males; 755,561 females; 1,498,240 natives; 14,777 foreign born; 833,718 whites; and 679,299 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 1,675,000.

ALABAMA AGRICULTURAL AND MECHANICAL INSTITUTE, Auburn, Ala.; non-sectarian; co-educational; had at close of 1897, 33 professors and instructors; 361 students; 11,011 volumes in the library; \$253,500 in productive funds; \$61,043 in income; president, W. Le Roy Brown, M.A., LL.D.

ALABAMA, UNIVERSITY OF, Tuscaloosa, Ala.; non-sectarian; co-educational; had at close of 1897, a medical department in Mobile; 19 professors and instructors; 173 students; 15,000 volumes in the library; \$300,000 in productive funds; \$27,000 in income; president, James K. Powers, LL. D.

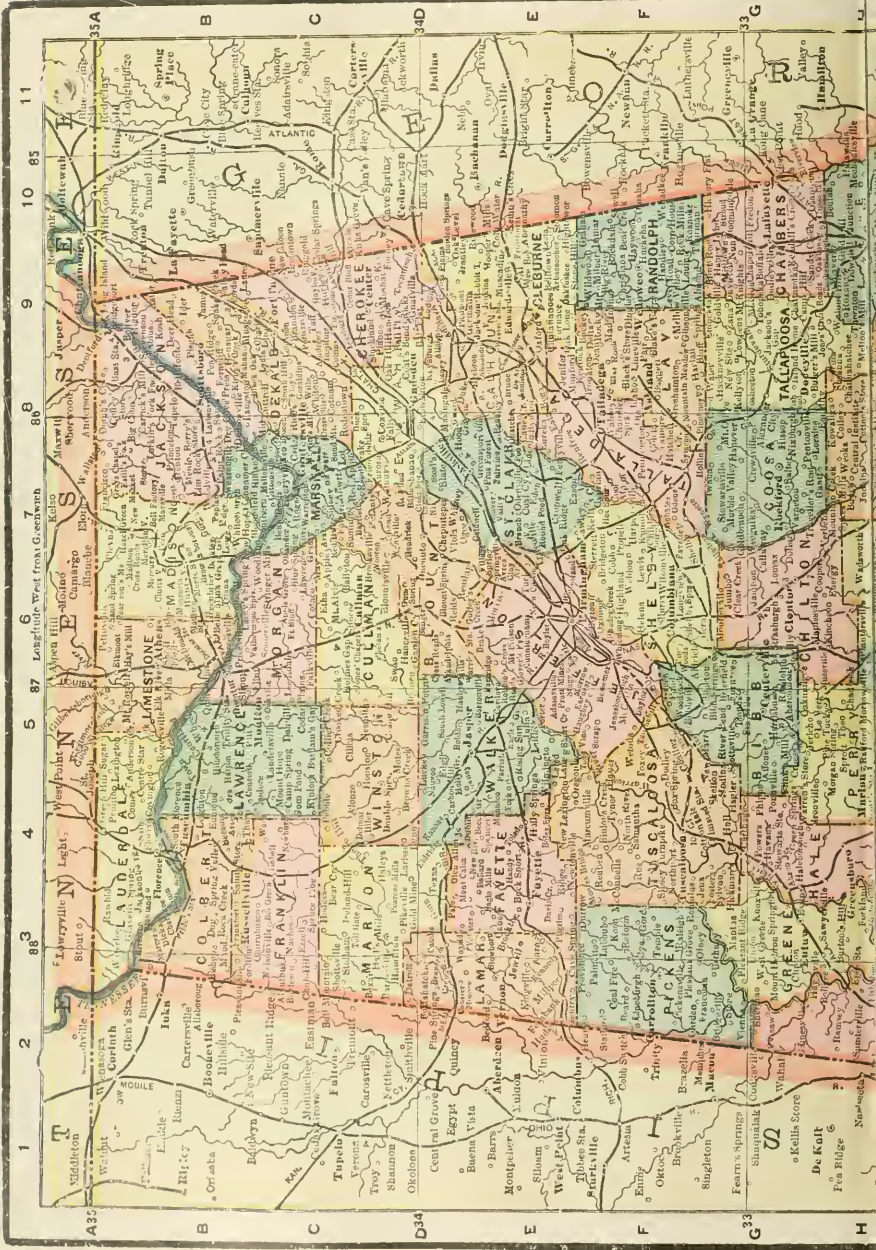
ALAMEDA, city, Alameda county, Cal.; pop. (1890), 11,165; (1894) estimated 14,500. The assessed valuation 1893 was \$12,019,795, net debt Jan. 1, 1894, \$171,750; city tax rate \$9.50 per \$1,000; State and county tax rate \$10 per \$1,000. Local transit is controlled by the Alameda, Oakland and Piedmont electric railroad, on a capital of \$500,000. In 1897 there were a monthly, a semi-monthly, and 2 daily periodicals.

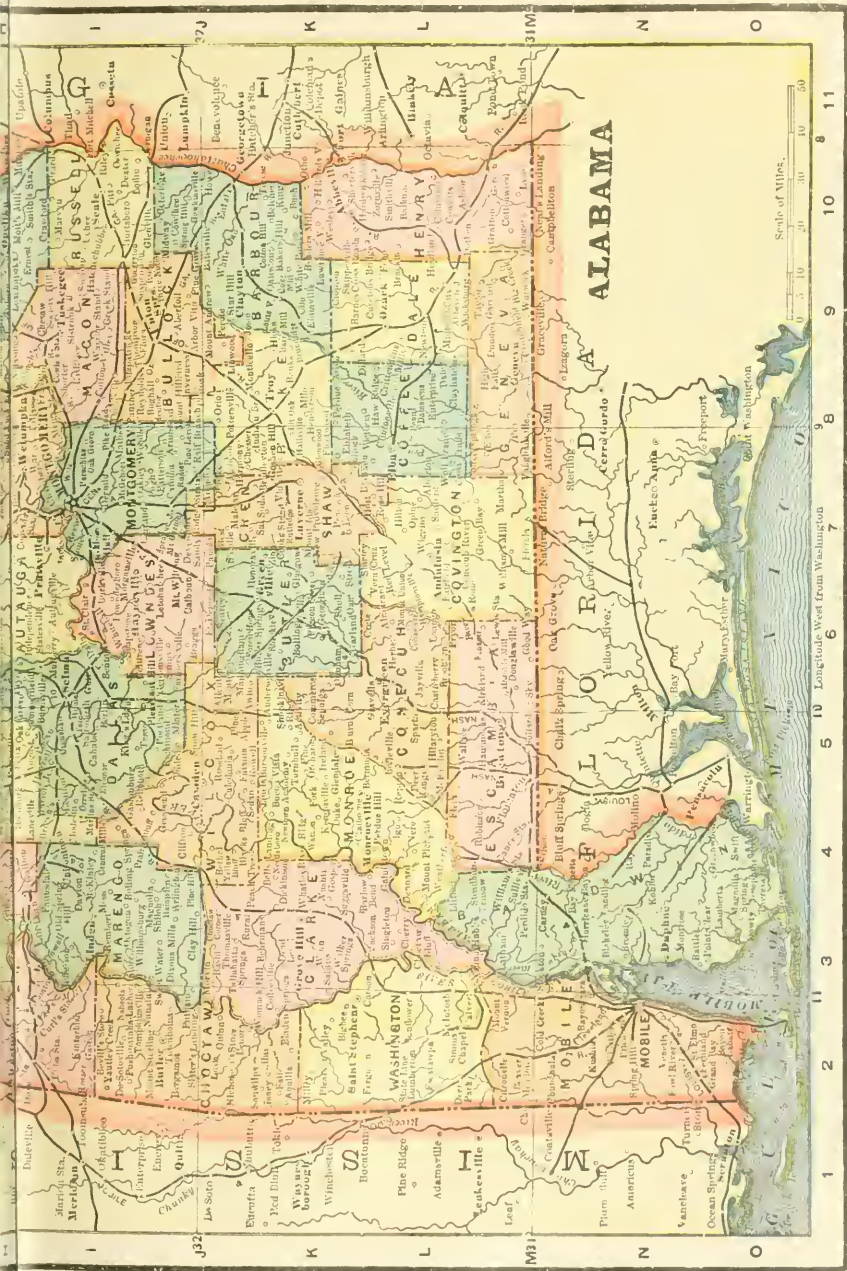
ALASKA, an unorganized territory of the United States of North America; purchased from Russia and formally transferred Oct. 18, 1867; districts 7; seat of administration, Sitka.

Executive Officers, 1897-1901.—Governor (appointed for 4 years, salary \$3,000 per annum), John G. Brady, Republican; judge of United States district court, Charles S. Johnson; United States district attorney, Burton E. Bennett; United States marshal, James M. Shoup; United States collector of customs, Joseph W. Ivey; general agent of education, Sheldon Jackson; assistant agent, William Hamilton.

Government.—It was under military government till 1884, when a district government was established and a land office opened. There is no local governing body, such as legislature or council; all executive officers are appointed by the president or under his authority; and the laws are mainly regulations of the United States treasury department and the general enactments of Congress. The necessity and advantage of applying to Alaska the form of government provided for the territories grow more evident daily, because of the vast area and the difficulties of internal communication. Several bills for this purpose have been introduced in Congress, but nothing has been done beyond gradually increasing the number of executive officers. The territory constitutes a United States customs district, and is a part of the United States internal revenue collection district of Oregon. The principal settlements are Juneau, a mining center on Douglas Island; Sitka, on Baranof Island; Wrangell, a gold transit port near the mouth of the Stikine River; St. Paul, a fur-trading center, on Kadiak Island; Unalaska, a base of supplies for whalers; St. Michael, the trading port of the Yukon Valley, on Norton Sound; and New Metlakatla, a thrifty industrial colony, on Annette Island.

Mineral Resources.—Up to 1895 there had been no attempt to make a thorough geological survey of the territory, and though various precious metals were known to exist in large quantities, mining operations were carried on in few places and without improved methods. In the spring of 1895 several hundred miners went to the interior to work the rich placers that had been discovered along the Yukon River, and the Federal government organized an expedition under Drs. Becker and Dall, of the geological survey, to investigate the mineral properties. So far the most successful mines found are in the mainland belt or zone, which extends in a northeast by southeast direction, almost in a straight line from the Arctic Ocean into Mexico. It varies in width from 2 to 20 miles, and contains





ALABAMA

Scale of Miles.

0 5 10 20 30 40 50

Longitude West from Washington

81 82 83 84 85 86

30 31 32 33 34 35

1 2 3 4 5 6 7 8 9 10 11

some of the best mines in Mexico, the Western States, and Douglas Island, Gold Creek, Berners Bay, and the placer mines of the Yukon Valley, in Alaska. The most productive placers on Forty Mile and Miller creeks lie directly in its path. Gold mining is now carried on in the districts of Sumbum, Snettishban, Grindstone Creek, Sheep Creek, Gold Creek, Lemon Creek, Montana Creek, Douglas Island, Sitka, Unga, and Kadiak. One company at Juneau, the Alaska Treadwell, has one of the largest quartz mills in America, operating 240 stamps. In 1894 it treated 240,000 tons of ore, which yielded \$768,000 gross, and \$441,000 net profit. An adjoining mill, owned by the same company, operated 60 stamps with proportionate results. In this district the ore is of low grade, is cheaply worked, is in a ledge 400 feet thick, and is worked as an open quarry. The Treadwell property is on a metal-bearing belt that extends more than 100 miles, and is an immense system of lodes containing gold, silver, copper, zinc, and iron. At Silver Bow Basin, on Gold Creek, large quantities of gold have been taken from the hillsides by hydraulic operations. Placer mining is being carried on at Cook's Inlet and elsewhere along the coast, the stretch from Lynn Canal to the Straits of Fuca showing geological conditions similar to those at Juneau. Silver is being taken out on Douglas Island and along Sumbum Bay, lead, in the short summer season, at Golevin Bay, just beneath the Arctic circle and the most northern site of any known metallic mining; lead ores rich in silver are abundant at Glacier Bay; large, dark-red, non-transparent garnets have been found in black schist near the mouth of the Stikine River; and the rare mineral, jade, found in no other part of the United States, can be obtained in many places north of the Kowak River, 150 miles from its mouth. Marble also promises well on development. Reports received in November, 1895, represented that the largest strike of gold on Cook's Inlet was made in July at Cañon Creek, 35 miles from tidewater, where dirt was found that yielded \$50 in gold to the pan. The field was amicably divided between the prospectors, who worked day and night till September, when the season closed. It was expected that fully 1,000 miners would winter in the Yukon basin, and that 2,000 would be working the Cook Inlet field in the summer of 1896. The deputy collector of customs estimated that \$400,000 in gold was taken out of the Birch Creek field during the summer of 1895. Circle City, the center of operations on the Yukon River, had 150 dwellings, 15 saloons (one fitted up at an expense of \$10,000), 3 stores, an opera house that cost \$6,000, a bakery, and a population of 500.

Since the summer of 1897, when reports of extraordinary discoveries of gold in the neighborhood of the Klondike and Yukon Rivers began to be made public, there has been an unprecedented rush of miners, speculators, and adventurers to the region from all parts of the world. The extraordinary condition so suddenly developed found the governments of the United States and the Dominion of Canada inadequately prepared for a proper administration of their respective territories. In the first weeks of the rush both governments assented to mutual arrangements for the police, customs and postal services, wholly tentative in character, and toward the close of the year they began to get the most imperative branches of the administrative service provisionally installed. The first authoritative description of the part of the great gold belt within the accepted boundaries of Alaska was that contained in a special report by Dr. Charles D. Walcott, director of the United States Geological Survey, submitted to Congress in January, 1897. The report was based on returns from an expedition he had sent out in 1896 to determine the coal and gold deposits along the line of the coast from Sitka to Bering Sea. Dr. Walcott, in his report, said:

"The party crossed to the headwaters of the Yukon by the Chilkoot Pass and proceeded by boat down the Yukon to Forty Mile Creek. They found on arrival there that they could traverse the country in all directions, through cañons and over mountains, by having Indians act as packers. The party traversed the valley of the Yukon from the British boundary on the east to the mouth of the river on the west. All of the known placer deposits were examined and the origin of the gold in them was traced to the quartz veins along the headwaters of the various streams entering the Yukon. Sufficient data were secured to establish the presence of a gold belt 300 miles in length in Alaska, which enters Alaska near the mouth of Forty Mile Creek, and extends westward across the Yukon Valley at the lower Ramparts. Its further extent is unknown." The most interesting part of the report was the following preliminary return of "A Reconnaissance of the Yukon District in Alaska by the United States Geological Survey in 1896:"

"A party consisting of J. Edward Spurr and two geologic assistants crossed the Chilkoot Pass about the middle of June and passed down the Yukon River in a small roughly built boat, to the crossing of Forty Mile Creek. The main purpose of the journey was the investigation of the gold resources along the Upper Yukon, and haste was made to reach the district occupied by the gold-bearing formations. Most of the available time was devoted to the examination of the auriferous rocks and gravels. The main object of the expedition having been accomplished, the party continued down the river to its mouth, and from there procured transportation to San Francisco by steamer. Running in a direction a little west of northwest through the territory examined is a broad, continuous belt of highly altered rocks, which crosses the area actually examined approximately as shown on the map. To the east this belt is known to be continuous for 100 miles or more in British territory. The rocks constituting this belt are mostly crystalline schists, associated with marbles and sheared quartzites, indicating a sedimentary origin for a large part of the series. In the upper part a few plant remains were found, which suggest that this portion is probably of Devonian age. These altered sedimentary rocks have been shattered by volcanic action and they are pierced by many dikes of eruptive rock. Besides the minor volcanic disturbances, there have been others on a large scale, which have resulted in the formation of continuous ridges or mountain ranges. In this process of mountain building the sedimentary rocks have been subjected to such pressure and to such alteration from attendant forces that they have been squeezed into the condition of schist, and often partly or wholly crystallized, so that their original character has in some cases entirely disappeared. In summarizing, it may be said that the rocks of the gold belt of Alaska consist largely of sedimentary beds older than the carboniferous period; that these beds have undergone extensive alteration, and have been elevated into mountain ranges and cut through by a variety of igneous rocks. Throughout these altered rocks there are found veins of quartz often carrying pyrite and gold. It appears that these quartz veins were formed during the disturbance attending the uplift and alteration of the beds. No quartz or vein mining of any kind has yet been attempted in the Yukon district, mainly on account of the difficulty with which supplies, machinery, and labor can be obtained; yet it is certain that there is a vast quantity of gold in these rocks, much of which could be profitably extracted under favorable conditions. The general character of the rocks and of the ore deposits is extremely like that of the gold-bearing formations along the southern coast of Alaska, in which the Treadwell and other mines are situated, and it is probable

that the richness of the Yukon rocks is approximately equal to that of the coast belt. It may be added that the resources of the coast belt have been only partially explored."

Concerning the methods of getting to the heart of the mining region, Dr. Walcott said: "An overland route should be surveyed and constructed to the interior of Alaska. All the best routes which can be suggested pass through British territory, and the co-operation of the two governments would be mutually beneficial, since the gold belt lies partly in American and partly in British possessions. At the present time Mr. Spurr thinks that the best route lies from Juneau by way of the Chilkat Pass overland to the Yukon at the junction with the Pelly. This trail has already been gone over with pack horses by a pioneer named Dalton, who reports a good grazing country and no great obstacles to overcome. The Chilkat Pass is considerably lower than the Chilkoot, over which the geological survey party of 1896 passed. If a wagon road, or even a good horse trail could be built as indicated, the cost of provisions and other supplies would be greatly reduced; many gravels now useless could be profitably worked, and employment would be afforded many men. With the greater development of placer diggings would come the development of mines in the bed rock."

In February, 1898, E. Hazard Wells, an agent of the United States War Department, reported to the secretary: "There are undoubtedly large deposits of gold in Alaska, rivaling those of the British Northwest Territory. I noticed excellent mineral indications upon the Tanana River and in other localities in 1890. I discovered a true fissure vein of quartz, eight feet in diameter, with well-defined casing rocks, upon the upper Tanana. This quartz evidently contained metal. Specimens which I secured to take out to San Francisco for assay there were subsequently lost in a river catastrophe. Numerous creeks entering the upper Tanana revealed colors of gold in the sands. All of the gold-bearing streams of Alaska, as far as discovered, viz., Birch Creek, Miller Creek, Forty Mile Creek, Sixty Mile Creek and Seventy Mile Creek, head in the vicinity of the Tanana River and flow away to the northeast. On the southwestern side and heading near the Tanana are the noted Copper and Sushitna Rivers, the latter being the gold-bearing stream which recently came into prominence through the placer discoveries on Cook's Inlet. The Copper River is popularly supposed to be located in the heart of a mineral belt. It is a reasonable deduction that if all of the streams flowing away from the Tanana to the northeast and southwest bear gold the Tanana itself must cut through a gold-bearing country. This opinion is shared by nearly all of the old-time miners now located in Dawson. Recently excellent prospects were discovered upon American Creek, a tributary of the Yukon in Alaska, just below Forty Mile Creek. Miller Creek, Birch Creek and other streams within the boundaries of Alaska in the Yukon Valley still offer inducements to placer miners. I do not believe that any better mining region will be discovered in Alaska than will be found in the great Tanana Valley." See also *KLONDIKE GOLD FIELD*.

Seal Industry.—The fur-seal rookeries are on the Prybilof group of islands near the center of that part of Bering Sea lying within the boundary of the territory ceded to the United States, and about 1,500 miles due west of Sitka. The islands are St. Paul, area 33 square miles; and St. George, area 27 square miles. The islands are destitute of vegetation excepting grass, moss and wild flowers. The seals occupy the islands from the middle of May to December. Owing to the indiscriminate slaughter of the seals in the last few years, the only existing rookeries are those of Alaska, one in the Russian part of Bering Sea, and a third

on Lobos Island, South America. The law prohibits the killing of fur-seals in Alaska or the waters thereof, excepting by the lessees of the seal islands, and by them only of male seals over one year old, and in June, July, September, and October. In spite the watchfulness of the authorities, the law is so grossly violated that the governor fears that the business of fur-sealing will have passed into history within a few years if the violations are not checked. See *BERING SEA QUESTION*; *SEAL CLAIMS COMMISSION*; *SEAL CONFERENCE, INTERNATIONAL*.

Fisheries.—While the fur-seal, sea otter, and other valuable sea animals are annually decreasing, the supply of food fishes seems inexhaustible. Besides cod, halibut, and salmon, the waters of Alaska contain over 100 species of food fishes. The catching and canning of salmon has become a leading industry. The average annual pack, since the over-production of 1891, has been 650,000 cases. There are 24 salting establishments which ship annually about 1,000 bbls. of salmon. A single establishment turns out an average of 1,000 bbls. of salted herring, 400,-000 gals. of herring oil, and 1,000 tons of fish fertilizer per annum.

Commerce.—During the fiscal year ending June 30, 1894, the imports of foreign merchandise had a value of \$80,490, and exports, \$2,663; and in that ending June 30, 1895, the imports aggregated \$45,224, and exports, \$9,852. In the latter year the entrances at the custom-house were 28 sailing vessels of 6,171 tons and 53 steam vessels of 32,038 tons; and the clearances were 24 sailing vessels of 4,463 tons and 39 steam vessels of 24,645 tons. In the year ending June 30, 1897, the value of imports was \$83,461; of exports, \$27,206.

Education.—The governor reports that the natives of Alaska, unlike the North American Indians, do not recede before the march of civilization, but rather follow in the wake of the white man. In 1895 the United States Department of Education maintained in Alaska 16 day schools, with 24 teachers, and 7 contract schools, with 49 teachers and employees. The Russian Greek Church has an orphanage and 6 day schools in which English is taught. There were also 15 mission schools, with 61 teachers and missionaries, maintained by various religious denominations. Eight contract schools were cut off in 1895, and the remainder were closed in 1896, owing to the opposition to such schools. As the Mission Society and other organizations conducting schools are under all the expense they can bear, the former contract schools must be absorbed by the regular schools of the government. The congressional appropriation for educational work in Alaska has been reduced from \$50,000 to \$30,000 for 1895-6, and for 1896-7 the commissioner urged the need of \$50,000. Besides the government and mission schools, the Presbyterian Board of Home Missions has a successful training and industrial school for natives at Sitka.

Reindeer Preserve.—A unique feature of government work is the introduction of domestic reindeer from Siberia to furnish a source of food supply for the Eskimos. When the project was first broached it received ridicule instead of an appropriation in Congress. Private parties, however, supplied means, and 16 deer were bought in 1891 and 171 in 1892. For the fiscal year ending June 30, 1894, Congress appropriated for this purpose \$6,000, and for the fiscal years 1895 and 1896, each, \$7,500. Altogether 387 head of deer were purchased; and from these 548 fawns were born. The deer are in charge of experienced Lapp herders. In the winter of 1897-8, the government purchased a large herd for the immediate purpose of carrying relief most expeditiously to the mining camps, where, it was believed, several thousands of persons were in danger of starvation; but in February, 1898, it decided to abandon the proposed expedition, as no longer necessary; to sell the accumulated stores; and to retain the deer.

Boundary Question.—The boundary line is fixed by treaties between the United States and Great Britain and between Russia and Great Britain, and since 1892 the United States and Great Britain have had surveying parties in the field to definitely mark the lines laid down in those treaties. In June, 1895, sensational rumors began to appear to the effect that Great Britain laid a claim to nearly 30,000 square miles of Alaskan territory, under a recent definition of the boundary between Alaska and British America. These rumors soon had it that Great Britain had had an independent survey made quietly, and had practically taken possession of the tract claimed. Judge Delaney, then United States circuit court judge of Alaska, in November, believed that it was the intention of the British to move the southeast boundary to the west, locating it in Behm Canal, a channel west of Portland Canal, which is the line recognized by the United States under the treaties. By thus moving the line the British would acquire the large tract mentioned, secure a port at Pyramid harbor, and control the growing interests of the Yukon River and valley. Professor Duffield, superintendent of the United States Coast and Geodetic Survey, said that practically all the gold in Alaska was in United States territory, as determined by the recent survey; that all the essential points for a delimitation of the boundary had been marked; and that all that remained to be done was for the United States and Great Britain to determine how the line mentioned in the treaty as being "ten marine leagues from the shore" should be run. It is believed that much confusion arose from gross errors in old maps of the region, and the jealousies of United States and British mining parties who have flocked thither within two years. On Jan. 30, 1897, a treaty for defining the boundary line between the United States and British possessions was signed in Washington, of which the following is the full text:

ARTICLE I.

Each government shall appoint one commissioner, with whom may be associated such surveyors, astronomers, and other assistants as each government may elect. The commissioners shall at as early a period as practicable proceed to trace and mark under their joint directions and by joint operations in the field so much of the one hundred and forty-first meridian of west longitude as is necessary to be defined for the purpose of determining the exact limits of the territory ceded to the United States by the treaty between the United States and Russia of March 30, 1867. Inasmuch as the summit of Mount St. Elias, although not ascertained to lie in fact upon the one hundred and forty-first meridian, is so nearly coincident therewith that it may conveniently be taken as a visible landmark, whereby the initial part of said meridian shall be established, it is agreed that the commissioners, should they conclude that it is advisable so to do, may deflect the most southerly portion of said line so as to make the range with the summit of Mount St. Elias, such deflection not to extend more than twenty geographical miles northwardly from the initial point.

ARTICLE II.

The data relating to the determinations already made at this time by either of the two governments concerned, of points on or near the one hundred and forty-first meridian for the purpose of fixing its position, shall be submitted by each government to the commissioners, who shall decide which of the results of the determinations shall be adopted by them. In case of disagreement between the commissioners as to the correct geographical co-ordinates of one and the same

point determined by either of the two governments separately, a position midway between the two locations in question of the one hundred and forty-first meridian shall be adopted, provided the discrepancy between them shall not exceed 1,000 feet. In case of a greater discrepancy a new joint determination shall be made by the commissioners.

ARTICLE III.

The location of the one hundred and forty-first meridian as determined hereunder shall be marked by intervisible objects, natural or artificial, at such distances apart as the commissioners shall agree upon, and by such additional marks as they shall deem necessary, and the line when and where thus marked, in whole or in part, shall be deemed to permanently define for all international purposes the one hundred and forty-first meridian mentioned in the treaty of March 30, 1867, between the United States and Russia, and in the treaty of Feb. 28 (16), 1825, between Great Britain and Russia. The location of the marks shall be described by such views, maps, and other means as the commissioners shall decide upon, and duplicate records of these descriptions shall be attested by the commissioners jointly, and be by them deposited with their respective governments, together with their final report hereinafter mentioned.

ARTICLE IV.

Each government shall bear the expenses incident to the employment of its own appointees and of the operations conducted by them, but the cost of material used in permanently marking the meridian and of its transportation shall be borne jointly and equally by the two governments.

ARTICLE V.

The commissioners shall diligently prosecute the work to its completion, and they shall submit to their respective governments from time to time, and at least once in every calendar year, a joint report of progress, and a final comprehensive report upon the completion of the whole work.

The present convention shall be duly ratified by the president of the United States of America by and with the advice and consent of the senate thereof, and by her Britannic Majesty, and the ratification shall be exchanged at Washington or in London as soon as possible within twelve months from the date hereof.

In faith whereof, we, the respective plenipotentiaries, have signed this convention, and have hereunto affixed our seals.

Done in duplicate in Washington, the 30th day of January, 1897.

RICHARD OLNEY.

JULIAN PAUNCEFOTE.

Post-offices and Periodicals.—In 1897 there were 22 post-offices of the fourth-class, of which 5 were money-order offices; and one of the third-class; and a monthly and 4 weekly periodicals.

Population.—According to the revised census report, Alaska had in 1890 a total population of 32,052, viz., males, 19,248; females 12,804; natives 15,381; foreign-born 16,671; whites 4,298; colored, Indian 23,531, mixed 1,823, Mongolian 2,288, all others 112. The Indian population by tribes was: Eskimo, including Aleut, 14,012; Athapascan, 3,439; Koluisehan (Thlingit), 4,737; Chimesyan (Tsimpséau), 952; and Skittagetan (Haida), 391.

ALBANY, city, capital of Albany county, and of the State of New York; population (1890) 93,313; (1896) estimated, 100,000. The city in 1890 had \$17,270,705 invested in manufacturing, and an output valued at \$25,531,486. The debt Jan. 1, 1897 was: General bonds \$2,187,000, water bonds \$1,582,000—total, \$4,069,000; sinking funds, \$1,142,000; net debt, \$2,927,000. Excluded from the debt statement were outstanding street improvement bonds, and a railroad loan of \$250,000. The assessed valuations of taxable property 1896 were: Real estate, \$58,331,725; personal, \$6,323,380—total \$64,658,105; tax rate \$22 per \$1,000. Local transit was controlled 1895 by the Albany Railway Co., which operated five lines of trolley in the city and suburbs, and also operated the Water-vliet turnpike and railroad connecting with Troy. The total trackage June 30, 1895, was 35 miles; capital stock \$1,250,000; funded debt, \$780,000; cost of roads and equipment, \$2,054,324; assets and liabilities \$2,127,220. In 1897 there were 27 publications, of which 7 were daily, 10 weekly, 7 monthly.

ALBION COLLEGE, Albion, Mich., Methodist Episcopal; co-educational; had at close of 1897, 32 professors and instructors; 477 students; 12,000 volumes in the library; \$225,000 in productive funds; \$12,000 in gifts; \$28,000 in income; president, L. R. Fiske, D.D., LL.D.

ALBIONI, MARIETTA, one of the most distinguished contralto singers of the century, was born in Cesena, Italy, in 1824, died in Paris, June 23, 1894. Though long retired from the stage she continued to sing in private; and her voice preserved its full beauty almost up to the day of her death.

ALDEN, EDWARD KIMBALL, D.D., clergyman, was born in Randolph, Mass., April 11, 1825; died in Boston, Mass., April 30, 1896. In 1894 he retired from the office of secretary of the American Board of Commissioners for Foreign Missions, which he had held since 1876, and in which latterly he had been recognized as a leading opponent of so-called liberal views.

ALDEN, HENRY MILLS, LL.D., editor and author, was born at Mt. Tabor, Vt., Nov. 11, 1836. He has been editor of *Harper's Magazine* since 1868. In 1895 he published a volume entitled *A Study of Death*.

ALDEN, ISABELLA (McDONALD), author, was born in New York in 1841. She was for several years the editor of *Pansy*, a juvenile magazine, and writes under the pseudonym Pansy. She published in 1894 the latest of a long series of Pansy books, under the title *Wanted*.

ALDRICH, THOMAS BAILEY, author and poet, was born in Portsmouth, N. H., Nov. 11, 1836. He published in 1894 *Unguarded Gates and Other Poems*; and in 1895 a new holiday edition of *The Story of a Bad Boy*, with illustrations by A. B. Frost, and *Later Lyrics*.

ALEXANDER I., King of Servia, was born in 1876; ascended the throne in 1889, and dismissed his ministry by a *coup d'état* and assumed kingly power, April 13, 1893. On May 21, 1894, he issued a proclamation, restoring the constitution of 1869, and abrogating all laws contrary to it, thus inaugurating severe repressive measures against the radicals. This act was received with indignation by the Russian government, which however declared it would interfere.

ALEXANDER III., Czar of Russia, was born March 10, 1845; succeeded to the throne in 1881, and died Nov. 1, 1894. In February, 1894, his physician advised a southern residence for his health. In March, 1894, the Marquis of Dufferin declared in a public speech that the influence of the czar was strong for the maintenance of peace in Europe. On May 18 the czar issued an imperial

ukase taking away from all ministers, governors, and other high dignitaries the power they had before exercised of appointing and dismissing their official subordinates, and establishing under his direct supervision the special committee of control which existed for a few years under the Czar Nicholas. This change will make all favoritism in regard to promotions impossible, and will prevent the arbitrary discharge of subordinates. On June 22 it was reported that the police had discovered mines under the railway by which the czar was about to travel; but his journey was postponed. In September alarming rumors were circulated as to the czar's health. In October these were confirmed and official bulletins from Livadia, where he was staying, were published in St. Petersburg, saying that his condition had grown much worse, and general debility and weakness of the heart were increasing. It was understood that he was suffering from cancer of the kidneys, and he died at Livadia.

ALEXANDER, MRS. ANNIE (pseudonym of Mrs. Annie Hector), novelist, was born in Ireland in 1825. In 1894 she published *A Ward in Chancery*.

ALEXANDRIA, city, capital of Alexandria county, Va.; population (1890), 14,339; (1897, estimated) 16,500. In 1896 it had a total assessed valuation of \$5,167,000, a net bonded debt of \$793,065, and 4 periodicals, of which 2 were daily. It had an electric railroad to Mt. Vernon and Washington.

ALFRED UNIVERSITY, Alfred, N. Y., non-sectarian; co-educational; had at close of 1897, 20 professors and instructors; 185 students; 10,620 volumes in the library; \$273,950 in productive funds; \$32,990 in income; president, Rev. Booth C. Davis, A. B.

ALGER, HORATIO, JR., author, was born at Revere, near Boston, Mass., Jan. 13, 1834. He published in 1894, *Victor Vane, the Young Secretary*; and *Only an Irish Boy, or Andy Burke's Fortunes and Misfortunes*; and in 1895, *Adrift in the City, or Paul Conrad's Plucky Fight*.

ALGER, RUSSELL ALEXANDER, politician, was born in Lafayette, O., Feb. 27, 1836; admitted to the bar in 1859; engaged in the lumber business in Grand Rapids, Mich.; served through the civil war, and at its close was brevetted major-general of volunteers; and was governor of Michigan in 1885-87. In 1897 he became secretary of war in President McKinley's cabinet. He is a man of large wealth and active philanthropy, and has been mentioned several times in connection with the Republican presidential nomination.

ALLEGHENY, city, Allegheny county, Pa.; population (1890), 105,287; (1896, estimated) 120,000. The city in 1890 had a manufacturing investment of \$22,253,243 and an output valued at \$26,878,979. In 1896 it had a total assessed valuation of \$79,843,625, and in 1897 a total bonded debt of \$5,655,295 (including a water debt of \$2,931,000); sinking fund \$862,146; net debt, \$4,793,149. On Feb. 19, 1895, the citizens voted to increase the municipal debt to the extent of \$1,400,000 in a 4-per cent. loan, from which \$500,000 will be used for street improvements, \$400,000 for extending the water plant, \$300,000 for condemning and acquiring toll roads, and \$200,000 for extending the sewer plant. At the time of the election the city debt was nearly \$5,500,000 below the legal limit. In 1897 the value of city property was estimated at \$8,000,000. In 1897 there were 9 periodicals, of which 3 were weeklies and 4 monthlies.

ALLEGHENY COLLEGE, Meadville, Pa.; Methodist Episcopal; co-educational; had at close of 1897, 20 professors and instructors; 329 students; 14,000 volumes in the library; \$200,000 in productive funds; \$20,000 in gifts; \$28,500 in income; president, William H. Crawford, D. D.

ALLEN, CHARLES GRANT BLAIRFINNIE (better known as GRANT ALLEN), author and naturalist, was born in Kingston, Canada, Feb. 24, 1848. He is considered one of the best scientific authors of the evolutionary school, and has ably contributed to the exposition of the Darwinian theory. His late publications include *Force and Energy*; *The Atlas of Cædullus*; *Under Sealed Orders*; *The British Barbarians*; (1895); and the first two volumes of a series of art guides, *Paris and Florence* (1896); *An African Millionaire and Evolution of the Idea of God* (1897).

ALLENTOWN, city, capital of Lehigh county, Pa.; population (1890) 25,228; (1897); estimated 33,000. The city in 1890 had an industrial investment of \$6,977,981, and an output valued at \$876,565. In 1896 the assessed valuations were: Real estate, \$17,365,000; personal, \$135,000—total, \$17,959,805; city tax rate \$3.50 per \$1,000. The bonded debt Feb. 1, 1897, was \$349,400; (including water debt, \$69,200); sinking fund, \$55,142; net debt, \$294,258. Local transit is controlled by the Allentown and Lehigh Valley Traction Co., which negotiated Jan. 17, 1895, a consolidated mortgage for \$2,000,000. The company had 53 miles of electric road, connecting the city with Bethlehem, South Bethlehem, Fountain Hill, West Bethlehem, the Catasaugas, Copley, Whitehall, Scigfrieds, Northampton, Aineyville and the more immediate suburbs. In 1897 there were 12 periodicals, 4 of which were daily, 5 weekly, and 3 monthly.

ALLISON, WILLIAM BOYCE, lawyer, was born in Perry, O., March 2, 1829; was elected United States senator from Iowa as a Republican in 1872, 1878, 1884, 1890, and 1896. In his last election he received all the Republican votes—12, and Judge W. L. Babb (*q. v.*) all the Democratic votes—6, in the State senate, and 74 votes out of 94 in the house. On the organization of the senate in December, 1895, he was appointed chairman of the committee on appropriations and a member of that on finance.

ALLIANCE, CHRISTIAN AND MISSIONARY, a religious society organized in New York in 1887; president, Rev. A. B. Simpson; secretary, A. E. Funk; treasurer, David Crear; principal office 692 8th Avenue, New York. It carries on in New York The Door of Hope, at 102 East 61st Street, an institution for the reform of fallen girls, founded and superintended by Mrs. E. M. Wittmore, who also opened, June 1, 1894, Door of Hope, No. 2, at Tappan, N. Y., for the more delicate class of girls received. In 1897 the Christian and the International Missionary Alliances were united. Under control of the consolidated organization are a Missionary Training Institute, an Institute for the Training of Home Workers, the Berachah Home, the Berachah Orphanage, and 225 missionaries in India, the Kongo Free State, China, Japan, and Haiti, on which it expends about \$225,000 yearly.

ALMA COLLEGE, Alma, Mich., Presbyterian; co-educational; had at close of 1897, 17 professors and instructors; 230 students; 15,000 volumes in the library; \$83,500 in productive funds; \$7,000 in gifts; \$1,500 in income; president, August F. Bruske, D.D.

ALMA-TADEMA, LAURENCE, B.A., artist, was born in Dronryp, Netherlands, June 8, 1836. He was elected an associate member of the painting section of the French Institute in 1891; received the degrees of M. D. from Dublin University in 1892, and D.C.L. from Durham University in 1893; and published the *Wings of Icarus* (1894) and *Love's Martyr* (1895).

ALPENA, city, capital of Alpena county, Mich.; population (1890) 11,281; (1894) State census, 12,139. In 1897 it had a daily and 2 weekly newspapers, an excellent harbor, large steam sawmills, hemlock extract works, and sulphate, paper, and spool factories.

ALSACE-LORRAINE, a reichsland of the German Empire since 1871. The returns have shown a steady emigration from the province into France, and an immigration from Germany. Feb. 13, 1894, the German reichstag repealed the law conferring exceptional powers on the governor of Alsace-Lorraine, though repeal was opposed by the Conservatives, Imperialists, and National Liberals.

ALTGELD, JOHN P., lawyer, was born in Germany, in 1847. He came to the United States in boyhood; enlisted in the Union army when sixteen years old; was admitted to the bar in Missouri; removed to Chicago in 1875; served a term as a judge of the Superior Court; and was governor of Illinois in 1893-97. In July, 1894, the riotous strikers in Chicago and vicinity counted upon the sympathy of Governor Altgeld, especially because of his pardon of the anarchists in 1893; and he protested July 5 and 6, 1894, against the sending of troops to Chicago by the president. But Mr. Cleveland, while answering his communications, was not moved by his protest. In January, 1897, he was defeated for the United States Senate by William E. Mason, Republican.

ALTON, city, Madison county, Ill.; population (1890) 10,294. In 1894 it had a debt of \$60,500 and a total assessed valuation of \$1,707,475; total tax rate \$40.40 per \$1,000. Local transit is controlled by the Alton Railway and Illuminating Co., a corporation resulting from the consolidation of several others in August, 1895, operating 9 miles of electric road, connecting the city with Upper Alton, East Alton, and North Alton, beside an electric light and power plant. In 1897 there were 3 daily and 4 weekly periodicals. The city has important manufactures and a large river trade, and is a noted shipping point for general produce.

ALTOONA, city, Blair county, Pa.; population (1890) 30,337; (1895) 35,500. The city in 1890 had an industrial investment of \$7,955,423, and an output valued at \$10,486,019. The bonded debt Feb. 1, 1897, was \$909,000, sinking fund \$28,941, net debt \$880,059, and the assessed real estate valuation (personal property not assessed) \$15,763,000; total tax rate \$21 per \$1,000. The Altoona school district had (1896) a debt of \$256,500, assessed valuation \$14,503,287, and estimated population 39,000. Local transit is controlled by the Altoona & Logan Valley Electric Railway Co., which, in addition to its own plant, owns a majority of the stock of the City Passenger railway. In 1896 it operated 26 miles of its own track, extending to Bellwood and Hollidaysburg, and 7½ miles of the City Passenger line. There are 5 daily and 3 weekly periodicals.

ALUMINUM. In January, 1894, the Carnegie works at Homestead, Pa., tried the experiment of rolling 6-inch beams of aluminum for government vessels. The metal was heated enough to char a pine board and then rolled. It broke, however, and the experiment was postponed. Early in 1894 Commander Montreuil, of the French expedition into Central Africa, took with him a flat-bottomed ferry-boat, constructed of aluminum. It weighed only 2,000 pounds, but had a capacity of 15 tons. The same year a second-class torpedo boat, built of aluminum with a mixture of 6 per cent. copper, was constructed for the French government by Yarrow & Co., of England. The cost of the alloy was from 70 cents to \$1.20 a pound, being about double the cost of steel for the same purpose. Aluminum was largely used in the upper plates of the yacht Defender, built by the Herreshoff's at Bristol, R. I., much lightening the upper part of the hull. These plates were made in Pittsburg, Pa., and were from 5-16 to 3-8 of an inch thick, the longest being 18 feet, and the widest 38 1-2 inches. The heaviest plate weighed 200 pounds, while a like plate of Tobin bronze would weigh 600, and

the entire saving in weight on the boat was about 5 tons. In August, 1895, the manufacture of aluminum from bauxite by electrolysis was tested at Niagara Falls by the use of the new dynamos there. The electric current was carried through the pulverized oxide for twenty-four hours, and the separated metal accumulated at the carbon-lined bottoms of the pots, and was ladled out like lead heated to a red heat, but was whiter than silver on cooling. The capacity of these works was said to be about 5,000 lbs. of pure aluminum a day, worth 50 cents a pound. During 1894-95 the metal began to be used for military accouterments and many kinds of domestic utensils. It has also been substituted for silver, as not tarnishing, in silver gilding for sign painting and bookbinding. The United States Geological Survey reported the production of aluminum in 1894 to have been 550,000 lbs., valued at \$316,255 as compared with 339,629 lbs., valued at \$266,903 in 1893; and 259,885 lbs., valued at \$172,824, in 1892.

ALVEY, RICHARD HENRY, jurist, was born in St. Mary's county, Md., in 1826; was twice elected chief judge of the fourth circuit of Maryland, became chief justice of the Court of Appeals; appointed chief justice of the Federal Court of Appeals in the District of Columbia in 1893; and a member of the Venezuela Commission Jan. 1, 1896.

AMBROSIUS, JOHANNA, poet, was born in Lengwethen, East Prussia, Aug. 3, 1854. She was the second child of a poor workingman; received a limited education in the village school; was married when twenty years old; and began to write when thirty. In 1894 Prof. Schrattenthal, of Vienna, noticed her contributions to local newspapers, and toward the end of that year collected and published them in book form, under the title of *Gedichte*. Twelve editions were sold before the end of a year, and the Empress of Germany is said to have presented the author a cottage and provision for her declining years.

AMERICAN PROTECTIVE ASSOCIATION. The Supreme Council held its annual session at Des Moines, Ia., in May, 1894, with 300 delegates representing every State and Territory in the Union, besides Canada, England, and Australia. May 5 the following officers were elected: W. J. H. Traynor, of Detroit, president; Adam Fawcett, of Ohio, vice-president; Charles J. Beatty, of Saginaw, Mich., secretary. In September, 1894, the headquarters of the society was transferred to Washington, D. C.

AMERICAN UNIVERSITY, Washington, D. C., Methodist Episcopal; co-educational; for post-graduate work only. A site was secured early in 1894, and in May \$150,000 was obtained for the erection of the first building. The trustees reported that it would cost \$5,000,000 to start the university, and \$10,000,000 for its full equipment, of which \$475,000 were reported as raised, largely by personal solicitation. At the meeting of the trustees, Dec. 8, 1897, assets were reported aggregating \$1,000,000. The College of History, a marble building 176 ft. long, 90 ft. deep, and 59 ft. high, was then practically completed. Chancellor, Bishop John F. Hurst, D.D., LL.D.

AMES, OLIVER, iron manufacturer and ex-governor of Massachusetts, was born at North Easton, Mass., Feb. 4, 1831; died there Oct. 22, 1894.

AMHERST COLLEGE, Amherst, Mass., non-sectarian; had at close of 1897, 34 professors and instructors; 390 students; 69,000 volumes in the libraries; \$1,500,000 in productive funds; \$100,000 in gifts; \$106,000 in income; president, Merrill E. Gates, LL.D., LL.D.

AMITY COLLEGE, College Springs, Ia., non-sectarian; co-educational; had at close of 1896, 12 professors and instructors; 245 students; 2,500 volumes in the library; \$70,000 in productive funds; \$6,000 in income; president, J. M. Littlejohn, PH. D., D. D.

AMSTERDAM, city, Montgomery county, N. Y., population (1890) 17,336. Its annual production of knit goods averages \$15,000,000; linseed oil, \$15,000,000; carpets, \$6,000,000; brooms, 5,000,000; paper boxes, 3,000,000; paper, 2,000 tons; and steel springs, 2,000. In 1897 it had a bonded debt of \$752,424, and assessed valuations, real \$7,675,245, personal \$1,153,100—total, \$8,828,345. In 1897 it had an electric street railroad, 3 national banks and a monthly, 2 daily and 2 weekly periodicals.

ANARCHISTS. In January, 1894, the *Matin*, a Paris newspaper, published a list of eighteen bloody outrages which had taken place within ten years and the most of them within two years. It also published what it considered a complete list of anarchist papers published in Europe and America. Of these 1 was Dutch, 10 German, 11 French, 8 Italian, 9 Spanish 2 Spanish and Italian, 2 Portuguese, 2 Tzechish, and 6 English, of which 2 were published in the United States. The same month the police in Rome found, among some papers seized, the rules of the Italian anarchist societies, which required that all new members swear solemnly, in the presence of their colleagues, to labor mentally and physically to effect the triumph of the Social revolution, and meanwhile to obey blindly the orders of their superiors, even at the risk of life and without regard to their dearest affections, and to recognize in advance the justice of punishing all who break their oath of secrecy. Vaillant, who threw a bomb with murderous effect upon the floor of the French Chamber of Deputies, Dec. 9, 1893, was convicted in January, 1894, and executed in February, though great efforts were made by his friends to induce President Carnot to grant a reprieve. Emile Henry was convicted April 29, 1894, of causing the bomb explosions in Paris of Feb. 12, and was guillotined May 21. May 4, 1894, Guiseppe Fornaro and Francesco Polti were convicted of bomb-throwing in London, and were sentenced to imprisonment for twenty and ten years respectively. May 7, 1894, at a socialist meeting in Hyde Park, London, some speakers began violent utterances, but were interrupted and beaten by the crowd. May 21, 1894, six men, convicted of bomb-throwing and attempted assassination, were executed at Barcelona, Spain. President Carnot was assassinated June 24, 1894, at Lyons, by an Italian anarchist, Sante Ironimo Caserio. June 28, an anarchist named Granier, when about to be arrested in his lodging at Montpellier, Paris, for complicity in the murder of the president, committed suicide. The police of Paris and Marseilles believed that the assassination was in revenge for the execution of Vaillant and Henry, and that the conspirators met and assigned the deed by lot to Caserio. Aug. 13, 1894, Enrico Lucchesi, after killing Guiseppi Bandi, an editor at Leghorn, Italy, confessed that he had been designated to it by five comrades. On the same day four Bohemians were sentenced at Jung-Bunzlau, Bohemia, to imprisonment for different terms for circulating an anarchist paper. March 4, 1895, a man named Olivieri was arrested in Rome for threatening King Humbert. He was said to be the same who in 1890 threw into the Emperor William's carriage, during his visit in Rome, a letter denouncing Germany and the house of Hohenzollern. Exciting debates in the French Chamber of Deputies resulted in the passage, July 26, 1894, of an anti-anarchist bill by a vote of 268 to 163. Aug. 16, 1894, a bill was enacted by the United States Congress for the exclusion and deportation of alien anarchists. Jan. 7, 1895, Signor Celli, attorney-general of the province of Milan, Italy,.

who had been energetic in suppressing anarchists, was assassinated by one of them, who was subsequently captured. Feb. 28 Signor Crispi declared to the Italian Chamber of Deputies the government's reasons for proclaiming a state of siege in Sicily, anarchist leaders having resorted there in numbers, anarchist meetings in Marseilles having incited Sicilian insurrection, and Giuseppe de Felice, a member of the Chamber, having been arrested. He showed documents incriminating De Felice in the encouragement of the revolution, and on the strength of these the Chamber ordered his arraignment. In recent years 1894 was the most prolific in anarchist outrages, and since then there have been but few extreme cases. In 1897 an unsuccessful attempt on the life of the King of Italy was made on April 22; Señor Canovas del Castillo, premier of Spain, was assassinated at Santa Agueda, on Aug. 8, by an Italian named Angiollo, who was executed Aug. 20; President Borda, of Prugny, was murdered at Montevideo on Aug. 25; an unsuccessful attempt on the life of President Diaz, of Mexico, was made on Sept. 17; and President Morales, of Brazil, was murderously assaulted on Nov. 5, at Rio Janeiro, and though he escaped with his life, Marshal Bettancourt, minister of war, was mortally wounded in defending him.

ANDERSON, city, capital of Madison county, Ind.; population (1890) 10,741; (1896) estimated 21,040. The assessed valuation 1896 was \$7,929,055, and total debt, March 1, 1897, \$154,500. In 1897 it had a trolley track with 11 miles of track, and 3 daily and 2 weekly periodicals.

ANDOVER THEOLOGICAL SEMINARY, Andover, Mass., Congregational; had at the close of 1897, 8 professors and instructors; 52 students; 51,000 volumes in the library; \$800,000 in productive funds; \$17,500 in gifts; \$45,000 in income; president, George Harris, D.D.

ANDREWS, ELISHA BENJAMIN, D.D., LL.D., educator, was born in Hinsdale, N. H., Jan. 10, 1844; became president of Brown University in 1889; and was one of the United States commissioners to the international monetary conference in Brussels in 1892. In July, 1897, objection was raised in the corporation of the university to the continued public advocacy of the free coinage of silver at the ratio of 16 to 1 by President Andrews, in consequence of which he resigned both the presidency and his professorship, to take effect on Sept. 1 following. The incident created a sensation in educational circles, and Dr. Andrews received tempting proposals for service elsewhere. After a number of conferences, the corporation, on Sept. 1, voted to request him to withdraw his resignation, and he did so a few days afterward. His recent publications include a *History of the United States* (2 vols., 1894); *An Honest Dollar: A Plea for Bimetallism* (1894); and *The History of the Last Quarter Century in the United States, 1870-95* (2 vols., 1896).

ANGELL, JAMES BURELL, LL.D., educator and diplomatist, was born in Scituate, R. I., Jan. 7, 1829; graduated at Brown University in 1849; professor of modern languages and literature there in 1853-60; president of the University of Vermont in 1866-71; and since 1871 president of the University of Michigan. In 1880-82 he was United States Minister to China; in 1887 was appointed a member of the United States Fishery Commission, and also a regent of the Smithsonian Institution; and in April, 1897, was appointed United States Minister to Turkey. While in China Dr. Angell also served as chairman of a special commission to negotiate a commercial treaty between that country and the United States.

ANN ARBOR, city, capital of Washtenaw county, Mich.; population (1890) 9,431; (1894) State census, 11,069. In 1897 it had an electric street railroad connecting with Ypsilanti, and 18 periodicals, of which 2 were daily, 7 weekly, and 7 monthly.

ANNISTON, city, Calhoun county, Ala.; population (1890) 9,998; (1895) estimated 11,000. In 1895 it had assessed valuations, real \$3,883,040, personal \$917,680—total \$4,800,720; tax rate \$14 per 1,000; and 1896 a total debt of \$295,000, 2 large cotton mills, iron, steel, and brick works, rolling and planing mills, an electric street railroad, 2 national banks, and a daily, 3 weekly, and 2 monthly periodicals.

ANSONIA, co-extensive town and city, New Haven county, Conn.; population (1890) 10,342. The tax valuation in 1895 was \$3,300,258, and total debt in 1896 \$340,000. The Stokes Memorial Library, presented to the town 1892 at a cost of \$100,000, and with 30,000 volumes, was closed November, 1894. In 1897 there were a national bank (capital \$200,000, surplus \$100,000), a savings bank (deposits \$1,118,167, surplus \$35,215), and a daily and a weekly newspaper.

ANTHONY, SUSAN BROWNELL, reformer, was born in South Adams, Mass., Feb. 15, 1820; made an argument before the House Judiciary Committee in advocacy of woman suffrage on Jan. 28, 1896, that being the fourteenth committee of Congress before whom she had appeared.

ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND. President for 1897-98, E. A. Brabrook, c.b.; hon. secretary, O. M. Dalton; offices, 3 Hanover square, W. London. The institute publishes a quarterly journal.

ANTIOCH COLLEGE, Yellow Springs, O., non-sectarian; co-educational; had at the close of 1896, 12 professors and instructors; 214 students; 7,000 volumes in the library; \$100,000 in productive funds; \$6,000 in income; president, D. A. Long, D. D., LL. D.

ANTIQUARIAN SOCIETY, AMERICAN. President, Stephen Salisbury; vice-presidents, George F. Hoar and Edward Everett Hale; council, Samuel A. Green, Egbert C. Smyth, Samuel Swett Green, Edward L. Davis, J. Everts Greene, G. Stanley Hall, John D. Washburn, Thomas C. Mendenhall, James P. Baxter, and William B. Weeden; secretary for domestic correspondence, Charles Francis Adams; treasurer, Nathaniel Paine. The annual meetings are held at Worcester, Mass., in October. The American membership of the society is limited to 140; membership outside the United States not restricted.

ANTWERP UNIVERSAL EXPOSITION: opened May 5, 1894, by the King and Queen of the Belgians, in the presence of 40,000 persons; closed Oct. 2. There were exhibits from the Congo State, and, in the order named, from France, Germany, Great Britain, India, and the United States. The exhibit from Belgium was, of course, much the largest. The French exhibitors received 159 grand prizes, more than any other nation; Great Britain and her colonies received 23 grand prizes and 331 awards of all classes; the United States received 122 awards of various classes. There was a reproduction of Antwerp in the sixteenth century; streets in Cairo and Constantinople; and Oriental side-shows, as in Chicago.

ARBITRATION. What was known as the *Misiones* boundary question arose between Brazil and the Argentine Republic. It concerned the ownership of a strip of land between Ignassa and the Uruguay River, with an area of 11,823 square miles, and population of about 7,000, forming the judicial division of the Brazilian State of Parana. The question was submitted for arbitration to President Cleveland, Feb. 10, 1894; Dr. Zeballos, Argentine Minister at Washington, representing his country, and Baron de Rio-Branco and Gen. de Castro-Cerquina

representing Brazil. The president announced his decision in favor of Brazil, Feb. 6, 1895, and the Argentine government acquiesced. The Paris house of Dreyfus claimed in 1894, 20,000,000 francs which had been deposited by Chile in the Bank of England. The money had been realized from the sale of guano, and was deposited to cover money due to the creditors of Peru, among whom was the house of Dreyfus. The claim was submitted in 1894 for arbitration to the Swiss Federal Tribunal. Among the more important acts recently looking toward more general arbitration of international questions are the following: The house of representatives July 27, 1894, ordered a favorable report on the Springer arbitration bill. The British government, during 1894, took decisive measures to prevent the fitting out at Glasgow or Newcastle of vessels of war for either China or Japan, strictly enforcing the foreign enlistment act. The French Chamber of Deputies July 8, 1895, adopted a motion suggesting that the government open negotiations as soon as possible with the United States for the conclusion of a permanent treaty of arbitration. The New York Chamber of Commerce, Nov. 7, 1895, called attention to a recent article in *The University Law Review*, which describes the growth of international arbitration, and urges the crystallizing into law of the practice of to-day general with the United States and common with other nations, and looking toward the establishment of a great international tribunal of arbitration. It appeared that since the year 1816 there have been 112 international arbitrations between different European nations, the United States, and the States of Central and South America, nearly all within the last fifty years, and the United States has arbitrated its claims 30 times, 7 times with Great Britain. In December, 1895, the International Arbitration Society at London adopted resolutions that, while regretting the attitude taken by President Cleveland, they hoped the difficulty would yet be settled by arbitration. Jan. 14, 1896, the International Arbitration League declared that the Venezuela difficulty was "a trumpet call" to English speakers both sides of the Atlantic in favor of arbitration. Jan. 27, 1896, a memorial, signed by some of the most eminent Englishmen, was published in several London papers urging a treaty by which all disputes between Great Britain and the United States shall be referred to a permanent tribunal representing both nations. See BOUNDARY LINES: INTERNATIONAL ARBITRATION.

ARCHAEOLOGY. It is difficult to select from the great number of interesting archaeological discoveries of 1894 and 1895. Early in 1894 eight Roman coins were found by a Mashona native in Matabeleland, in the vicinity of the famous ruins of Zimbabwe. Two of these have on the obverse a female head with the words Helena Augusta; four have the figure of a man with the words *Constantius Caesar*; and the reverse of one is thought to represent Romulus and Remus suckled by the wolf. M. de Morgan, in 1894, discovered at Dashur, Egypt, a quantity of jewelry and some tombs adorned with admirable frescoes. The discovery of a stele bearing the cartouche of a high priest of Heliopolis, the oldest son of Sufcon, fixes the date of these monuments in the beginning of the fourth, or end of the third dynasty. Early in February he found two undisturbed tombs, one of which contained a sarcophagus with the painted name Ita, the mummy being adorned with necklaces and bracelets, and having near her a bronze poniard with gold jeweled handle. The body was covered with beads of pearl, gold, carnelian, lapis-lazuli, and Egyptian emerald. The name on the sarcophagus in the second tomb is the Princess Khnoumnet, and this mummy was more splendidly jeweled, and with it were two gold crowns richly jeweled. The gold in these ornaments weighed 1,782 grams. These princesses were of the twelfth dynasty. M. Ed.

Naville reported in February and March, 1895, from Deir-el-bahari, the excavation of the middle platform near the Hathor shrine. Sculptures of vultures and asps have been erased by enemies of the worship of Amon. One fragment shows Egyptians cutting large branches from a tree shown to be ebony. In a rock-hewn burial chamber three large wooden coffins were found, two having five wooden hawks carved upon them, and each having at the feet a wooden jackal. These bodies were a priest, his mother, and his aunt, of the Saitic epoch. Dr. Waldstein wrote from Athens, Greece, that the excavation of the Heraion of Argos has been carried on successfully during the season of 1895, showing a beautiful stoa with walls of most perfect Greek masonry. Within are nine Doric pillars, all the bases *in situ*. There are interesting fragments of statues. The building shows the change from the Mycenaean to the Argive supremacy. The heads are worked in a vigorous manner with execution not inferior to those of the Parthenon. They are most important remains of the fifth century B.C. At Eretria, Greece, Prof. B. B. Richardson reported in June, 1895, the laying bare of a large building, in one room of which stood the tubs of the city laundry. Here was found among other fragments a fine archaistic head of Dionysos, bearded. The most important discovery of 1894 in Italy is that of the temple of Jupiter Anxur, at Terracina. This building is mentioned by Livy, Virgil and Servius. The arches of the substructure have long been known, but were attributed to the Goths. Accidental discovery of a wall and cornice led Signor Pio Capponi to investigation which seemed to identify it with the historic temple of Jupiter. Remains of mosaic pavement confirmed this judgment; and Signor Capponi was enabled to push the excavations till the entire plan of the temple, 33.5 m. by 19.7 m. was uncovered. A short distance to the east was found the cave of the oracle, and along the east side many votive objects, and an inscription showing that Venus had a sanctuary in the large temple. The trustees of the British Museum published in the fall of 1895 an Arabic MS., which contains in Coptic a treatise in 25 chapters on Christian Theology, and a special treatise on the cult relating to images of Christ and the saints by Theodoros, Bishop of Harran. Its date is 877 A.D. See HITTITE INSCRIPTIONS: MESA, LA ENCANTADA: NIVEN, WILLIAM.

ARCHER, WILLIAM, dramatic critic, was born in Perth, Scotland, in 1856. He published in 1894, *Hannele: a Dream Poem*, by Gerhart Hauptmann (translated); and edited the same year with Robert W. Lowe *Dramatic Essays of Leigh Hunt and William Hazlitt* (2 vols.).

ARCHITECTS, AMERICAN INSTITUTE OF, organized in 1857; elected the following officers at the annual meeting in Detroit, Mich., Oct. 1, 1897: President, George B. Post, New York; first vice-president, W. L. B. Jenney, Chicago; second vice-president, C. Howard Walker, Boston; treasurer, S. A. Treat, Chicago; secretary, Alfred Stone, Providence; directors, Edward H. Kendall, New York; Cass Gilbert, St. Paul; James S. Rogers, Detroit; W. G. Preston, Boston; George W. Rapp, Cincinnati; Edmund W. Wheelwright, Boston; Glenn Brown, Washington; George A. Fredericks, Baltimore. The institute has 25 chapters, 461 fellows, and 55 honorary members. Its object is to unite in fellowship the architects of this continent, and promote the cause of architecture.

ARCTIC EXPLORATION. Lieut. Robert E. Peary, C.E., U. S. N., sailed on his second Arctic expedition in 1893, taking with him his wife, and a party of scientific helpers, sending home his vessel, the *Falcon*, and going into camp on the west coast of Greenland. Here a daughter was born to him in September. Most of the winter of 1893-94 was devoted to preparations for inland sledge ex-

ploring. March 6, 1894, with 18 men, 12 sledges, and 92 dogs, he set out for Independence Bay. Dr. Vincent was sent back incapacitated by illness. March 19, their camp was pitched 5,500 feet above the sea. In a fierce storm some of the dogs were frozen solid. After covering one-fourth of the distance to Independence Bay, the loss of many dogs, and other hardships, compelled them to return. They had surveyed and mapped out 150 miles of coast-line hitherto unknown. The relief auxiliary expedition sailed from Brooklyn, June 20, 1894, Henry S. Bryant, leader, and the party including Prof. Wm. Libbey, of Princeton, as geographer; Prof. T. C. Chamberlain, of the University of Chicago, as geologist; and Dr. Axel Ohlin, of Sweden, zoölogist. They opened communication with Peary Aug. 1, and reached Falcon Bay Aug. 20. Aug. 26 they returned, leaving only Lieutenant Peary and two volunteers, Lee and Henson, to complete their explorations in the next season. A second relief party brought these back in September, 1895. Peary's survey covers 1,000 miles, counting the indentations of the coast of Greenland. The direction of the coast, the bays indicated, and the islands make a new map. Gen. A. W. Greely says that this survey carries exploration 200 miles above the German explorers of 1870, and has extended the knowledge of the coast northward two degrees. Eleven islands are accurately marked, which are not on previous charts. About 100 glaciers are precisely located, where before only 10 were known and these not accurately. The observations in meteorology, geology, biology, and Eskimo ethnology have greatly advanced the cause of science. They did not get as far north as their predecessors; being within 16 miles of Independence Bay when the dogs utterly broke down, and they barely got back with their lives; but the real success of the expedition in scientific results surpasses all recent attempts, while it has been gained at a minimum expense of money and without loss of life. F. G. Jackson sailed from England in the steamer *Windward*, in September, 1894. His party landed near Cape Flora, Franz Josef Land, Sept. 7, and erected log houses, roofed with canvas, the lodging house lined with felt, and sent back their vessel. March 10, 1895, Jackson and two others went north with 2 ponies and 2 sledges. They found the general elevation of the country 2,500 ft. above the sea, covered with ice, their way interrupted along the coast by high basaltic cliffs. The temperature fell to -45° . They reached $81^{\circ} 20'$ north latitude, and there left two boats for use later. They made a second journey in April-May, finding the temperature often -50° . Their surveys greatly altered the map of Franz Josef Land. The *Windward* took them supplies in the summer of 1895, and returned with their report in October, expecting to go back in 1896. Jackson assured himself that Franz Josef Land reaches to within 470 miles of the pole, and proposed another exploring trip. Robert Stein, of the United States Geological Survey, under an advisory committee, including Gen. A. W. Greely, Prof. T. C. Mendenhall, and Commodore G. W. Melville, planned an expedition in 1894 to rescue the Swedish naturalists Björling and Kallstenius, and explore Ellsmere Land; but being unable to charter the vessel he needed, he abandoned the expedition in May. Walter Wellman sailed from Bergen, Norway, April 24, 1894, on the steamer *Ragnvald Jarl*. His party reached 81° north May 12, when sudden cold storms and ice blocked further progress. They surveyed the coast of Northeast Land, adding four capes and one island to the map. July 1, Wellman and seven others started north over the ice with an aluminum boat. The boat showed great strength, but July 4 they had to turn back. They reached their party July 22, one of them having to be carried with a broken leg. Aug. 4 they sailed for Norway. Dr. F. A. Cook sailed from New York June 30, 1894, on the steamer *Miranda*,

accompanied by Profs. W. H. Brewer, of Yale, G. F. Wright, of Oberlin, and B. C. Jillson, of Pittsburg, as geologists; L. L. Dyehe, of Kansas University, as zoölogist; E. P. Lyon, of Chicago, as biologist; and others. They collided with an iceberg July 17, but July 29 sailed from St. Johns, N. F., for Greenland. Aug. 7 they reached Sukkertoppen, 63° 25' north. Sailing from here Aug. 9 they ran on a hidden rock, but floated off and moored in a harbor. Deeming the vessel unsafe for further exploring, they hired the fishing schooner *Rigel*, and put the passengers on her and towed her back toward St. Johns Aug. 21. But Aug. 23 it was necessary to abandon the *Miranda*, with the loss of baggage, instruments and collections, so that the party came home with small results of their work. See NANSEN, FRIDJOF; PEARY, ROBERT EDWARD: POLAR RESEARCH.

ARGENTINE REPUBLIC: a federation of 14 States and 9 Territories, on the east coast of South America; population, according to census of May 10, 1895, 3,952,990; including Indians and persons not enumerated, 4,092,990; capital, Buenos Ayres. The budget estimates for 1897 showed: Revenue, in gold, chiefly import and export duties, \$32,078,000, and in paper, largely from the use of credit and from internal taxes, \$63,700,000; expenditure, in gold, mainly for public debt account, \$16,303,955, and in paper, \$109,128,372. In October, 1895, the president asked Congress for authority to negotiate the conversion of all bonds of the foreign debt to one 4 per cent. bond, stating that all the national and provincial obligations might be covered with \$370,000,000, leaving a gold reserve of \$30,000,000, and in 1896 a bill was adopted and approved providing for the unification of the national and provincial foreign debts. At the beginning of 1896 the national debt was reported at, external, £55,519,123; internal, £22,964,392—total, £78,483,515 (\$381,431,882). The imports in 1896 were valued at £22,400,000, and the exports at £23,200,000. The government negotiated a loan of \$5,000,000 in London with which to establish a state bank, and Congress passed a bill granting an annual subsidy of \$100,000 to a steamship company, which agrees to make 18 trips annually between Buenos Ayres and New York. A cabinet crisis and a popular demonstration against the government were averted in August, 1895, by the resignation of the minister of war and navy and the reorganization of those departments. The Southern Railway is to be extended from Bahia Blanca to Neuquen, which will open up some of the richest agricultural and grazing lands in the republic; and in connection with this agreement the government is considering a proposition to grant free lands to all settlers in the Rio Negro valley. The modifications in the treaty made by the United States Senate were approved by the Argentine Senate Sept. 24, and certain amendments proposed by the United States were postponed for further consideration. The boundary dispute with Chile has been settled amicably. In accordance with the Argentine convention, Chile agreed to the removal of the San Francisco landmark, allowing the boundary line to pass through the highest peaks of the Andes, and giving Argentina an additional 600 leagues of territory. The boundary delimitation in Tierra del Fuego has been approved. As a result of the boundary settlement an effort has been made in both countries to secure a mutual agreement to cease buying materials of war. There are 30 different railways in the republic, aggregating 8,766 miles, of which 5 belong to the state and 10 are guaranteed by it. A comparatively new development is the trade in live cattle and sheep between the republic and Europe. Between Jan. 1 and Aug. 22, 1895, the exportation of live cattle averaged 7,000 steers and 41,000 head of sheep per month, each month showing an increase over the preceding one. During 1895 the republic was free from serious disturbances, all public and private efforts tending to the development of its vast resources.

ARGON, a probably new element which owes its discovery to investigations of Prof. William Ramsay and Lord Rayleigh. They found that nitrogen liberated from chemical compounds was lighter than atmospheric nitrogen. Their work led to the conclusion that there was an undiscovered element in the air. It is separated by acting on air with red-hot copper filings to separate the oxygen. The residual gas is dried and passed over white-hot magnesium filings. The magnesium combines with the nitrogen, producing a solid nitride and leaving argon as a gas. The argon amounts in volume to about 4 per cent. of the nitrogen. The argon is treated repeatedly by a substantial duplication of the above process, some days being required to dispose of all the nitrogen. Another method of preparation is to pass electric sparks, preferably from platinum terminals, through the nitrogen mixed with oxygen. This gradually burns up the nitrogen. Its oxide can be absorbed by caustic alkali, leaving argon as a gas. Argon has a characteristic spectrum. Its specific gravity ($H=1$) is between 19 and 21. It is about 2½ times as soluble in water as nitrogen. Its critical temperature ($-121^{\circ} C.$) and boiling point ($-187^{\circ} C.$) are lower than those of oxygen. Prof. Olszewski succeeded in solidifying it to white crystals melting at $-189.6^{\circ} C.$ It seems to be incapable of combining with anything. It has been found in cleveite and in a meteorite. There is still much doubt concerning its true status.

ARGYLL, GEORGE JOHN DOUGLAS CAMPBELL, K.G., K.T., P.C.: 1st duke of, in the peerage of the United Kingdom, 8th duke of, in the peerage of Scotland, was born in Ardincaple Castle, Dumbartonshire, Scotland, in 1823. On July 30, 1895, he was married, for the third time, to his cousin, Ina Erskine McNeill, at Ripon. His recent publications include *The Burdens of Belief*, poems (1894), and *The Philosophy of Belief* (1896).

ARIZONA, one of the Territories of the United States of North America; organized Feb. 14, 1863; counties, 12; capital, Phoenix.

Territorial Offices, 1897-1901.—Governor (appointed by the president for four years, salary \$2,600 per annum), Myron H. Coffey; secretary, Charles H. Akers; treasurer, C. W. Johnstone; auditor, G. W. Vickers; adjutant-general, R. A. Lewis; attorney-general, C. M. Franzier; superintendent of public instruction, A. P. Sherman; chief justice supreme court, Webster Street; associate justices, Richard E. Sloan, Fletcher M. Doane, and George R. Davis; clerk, Lloyd Johnston, all Republicans. The official term of the governor expires with that of the administration under which he is appointed.

Legislature, 1897.—Council, 12 members; house, 24; Democrats, council 9, house 22; Republicans, council 3, house 2; Democratic majority, council 6, house 20.

Elections.—In the territorial elections for a delegate in Congress in 1896 there was a total of 11,050 votes cast, of which the Democratic candidate (Smith) received 6,065; the Republican candidate (Doran) 4,090, and the Populist candidate (O'Neill) 3,895; Democratic plurality, 1,975.

Farm Products.—Reported Jan. 1, 1897 (incomplete): Wheat, 333,500 bush., from 11,500 acres, value \$266,800; and hay, 103,501 tons, value \$905,694. The value of all agricultural products was estimated at \$1,650,000. The industry is rapidly developing, and besides cereals the land yields under cultivation almost every fruit and vegetable known to the temperate and semi-tropical zones. The territory contains the largest unbroken forest area in the United States.

Farm Animals.—Reported Jan. 1, 1897: Horses, 52,498, value \$1,133,129; mules, 1,026, value \$25,815; cows, 16,872, value \$380,461; cattle, 517,400, value \$6,577,011; sheep, 828,666, value \$1,301,172; and swine, 26,076, value \$126,208.—total value \$9,544,099.

Mineral Output.—Since the repeal of the silver-purchasing clause of the Sherman law, the output of silver has steadily decreased, and that of gold increased. Mining reports of 1895 show: Output of gold, \$4,260,000, which was nearly double that of 1894, and four times that of 1893; silver, \$1,750,000 oz., a decrease in value from that of 1894 of over \$500,000; copper 49,661,289 lbs., value \$6,207,611; and lead, value \$350,000, making the total value of bullion exports \$11,955,111 for the year and \$113,739,126 for the last 19 years. There never was a time in the history of Arizona when a larger number of mining enterprises were being put into operation, and more development work was being done than in the early part of 1897. Among the notable finds were those of gold in the Estrella Mountains, within 20 miles of the city of Phoenix, and of copper in the Galiura range. The advance in the price of copper gave a great stimulus to the industry, particularly in the mountain ranges around Tucson. In the early months of the year the monthly output of copper was over 5,000 tons, indicating an annual value of \$14,000,000. The famous O'Neill onyx mines, 80 miles north of Phoenix, were purchased by an Eastern syndicate, which began rushing operations in anticipation of an increased demand, as the new tariff placed a prohibitory duty on Mexican onyx. The production of precious metals in 1897 was reported as follows: Gold, \$3,392,991; silver, \$143,693; ores and base bullion, \$8,698,821—total, \$12,235,505.

Finances.—At the end of the fiscal year 1894, the treasury showed a balance for the first time, \$5,832, and by reduction of salaries and other economies, it was able to redeem \$50,485 of the territorial debt during the fiscal year 1895. The aggregate debt Jan. 1, 1897, was \$2,323,847, including a floating debt of \$209,817; of the total, \$1,374,899 was the indebtedness of counties, cities and school districts, making the net territorial debt \$948,948. The total assessed valuation of taxable property 1894 was \$27,061,974; 1895, \$27,518,332; 1896, \$28,047,176.

Banks.—On Oct. 31, 1896, there were 5 national banks, with a combined capital of \$400,000, which held \$100,500 in United States bonds, an excess of \$500 over the required amount. These banks had outstanding on loans and discounts an aggregate of \$647,449; held in coin and coin certificates, \$162,655; and had outstanding of their own bills \$136,978 out of an issue of \$333,360. The territorial banks numbered 7, and had capital \$237,644, resources \$1,042,382, deposits \$703,079, and surplus \$75,188.

Commerce.—The territory has no port of entry; its foreign trade is entered at Pacific ports, and its domestic comprises chiefly its agricultural and mineral productions. In the fiscal year ending June 30, 1895, the imports amounted in value to \$278,396, exports, \$818,278. Among domestic shipments besides the precious metals were agricultural products, value over \$1,779,000; lumber, 35,000,000 ft.; wool, 2,904,130 lbs.; sheep, 48,596; and hides, 72,500.

Railroads.—The single track railroad mileage Dec. 31, 1893, was 1,161.97, which was increased during 1894 to 1,355.46. The new trackage included the completion of the Santa Fe, Prescott & Phoenix railroad to the latter city. The legislature of 1896 7 passed an act to the effect that all new railroad lines on which active work should be commenced within one year from the passage of the act should be exempted from all county, municipal, and territorial taxation for a period of fifteen years. Under this act there were filed in September, 1897, 31 separate notices of intention to construct new railroads, which would aggregate 3,000 miles in length.

Post-offices.—Reported Jan. 1, 1897: Second-class, 3; third-class 7 (presidential 10); fourth-class 186; money order offices 46.

Publications.—Number of all kinds reported in 1898, 48.

Churches.—The Roman Catholic is the strongest denomination, and is followed by the Latter-day Saints, the Methodist Episcopal, South, the Methodist Episcopal, the Baptist, the Presbyterian, the Protestant Episcopal, and the Congregational. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Arizona 50 evangelical Sunday schools, 378 officers and teachers, and 2,670 scholars—total members, 3,048.

Schools.—In 1896 the public school population was 19,920; enrollment, 12,889; average daily attendance, 7,641; number of teachers, 324; value of school property, \$428,935; and expenditure in the year, \$214,009. A new building was being erected for the normal school, a reform school was about to be opened at Flagstaff, and a number of high schools were to be established under an act of the legislature of 1894. There are also about 700 children enrolled in private and denominational schools which cost about \$10,000 per annum.

Libraries.—In 1896 there were reported 4 public libraries of 1,000 volumes each and upward, with a total of 17,472 bound volumes.

Schoolhood.—On July 25, 1894, the United State Senate committee on territories ordered a favorable report on a bill providing for the admission into the Union of the territories of Arizona and New Mexico on the same general line as the one for the admission of Utah; but Congress adjourned without further action. The agitation for admission was kept up, but up to March, 1898, without practical results.

Population.—In 1890, 59,620, of whom 36,571 were males; 23,049 females; 40,825 natives; 18,795 foreign-born; 55,580 whites; and 4,040 colored, including 1,170 Chinese and 1,512 civilized Indians. The total Indian population in 1895 was about 37,000. Governor Hughes estimates the whole legal population at 77,000, a gain of 7,000 in a year.

ARIZONA, UNIVERSITY OF, Tucson, Ariz., non-sectarian; co-educational; had at the close of 1896, 22 professors and instructors; 100 students; 1,720 volumes in the library; \$74,587 invested in grounds and buildings; \$46,272 in scientific apparatus; \$46,605 in income; president, Howard Billman.

ARKANSAS, one of the United States of North America; admitted to the Union June 15, 1836; seceded March 4, 1861; readmitted June 22, 1868; counties, 75; capital, Little Rock.

State Officers, 1897-9.—Governor (elected for 2 years, salary \$3,500 per annum) Daniel W. Jones; secretary of state, Alexander C. Hull; treasurer, Ransom Gulley; auditor, Clay Sloan; attorney-general, E. B. Kinsworthy; superintendent of public instruction, Junius Jordan; commissioner of agriculture, W. G. Vincenheller; land commissioner, J. P. Ritchie; chief justice of supreme court, Henry G. Bunn; associate justices, Simon P. Hughes, C. D. Wood, Burrill B. Battle, and James E. Riddick; clerk, P. D. English—all Democrats.

Legislature, 1897.—Democrats, senate 30, house 85, joint ballot 115; Populists, senate 1, house 13, joint ballot 14; Republicans, senate 1, house 2, joint ballot 3; Democratic majority, senate 28, house 70, joint ballot 98.

Elections.—In the State elections in 1896 there were 141,891 votes cast for governor, of which the Democratic candidate (Jones) received 91,114; the Republican candidate (Remmel), 35,836; the Populist candidate (Files), 13,990; and the Prohibition candidate (Miller), 851; Democratic plurality, 55,278. The elections for Congress resulted in the choice of all the Democratic candidates. In the presidential election the Democratic candidate received 110,103 votes; the Republicans 37,512; and the Prohibition 833.

Farm Products.—Reported Jan. 1, 1897: Corn, 29,723,854 bush., from 2,201,767 acres, value \$10,997,826; wheat, 1,260,720 bush., from 157,590 acres, value \$895,111; oats, 5,075,456 bush., from 31,216 acres, value \$1,573,391; rye, 22,940 bush., from 2,294 acres, value \$16,058; potatoes, 1,468,274 bush., from 24,886 acres, value \$778,185; hay, 187,632 tons, from 159,010 acres, value \$1,414,745; and tobacco, 1,327,500 lbs., from 2,950 acres, value \$146,025—total value, \$15,821,341.

Farm Animals.—Reported Jan. 1, 1897: Horses, 240,330, value \$6,356,207; mules, 145,519, value \$4,985,923; cows, 266,244, value \$3,309,413; cattle 418,523, value \$3,377,357; sheep, 170,075, value \$218,512; and swine, 1,375,586, value \$3,196,861—total head, 2,616,277; total value, \$21,434,273.

Cotton Crop.—The total crop in the season of 1894-5 was 665,217 bales; season of 1895-6, 850,000 bales; season of 1896-7, 605,643.

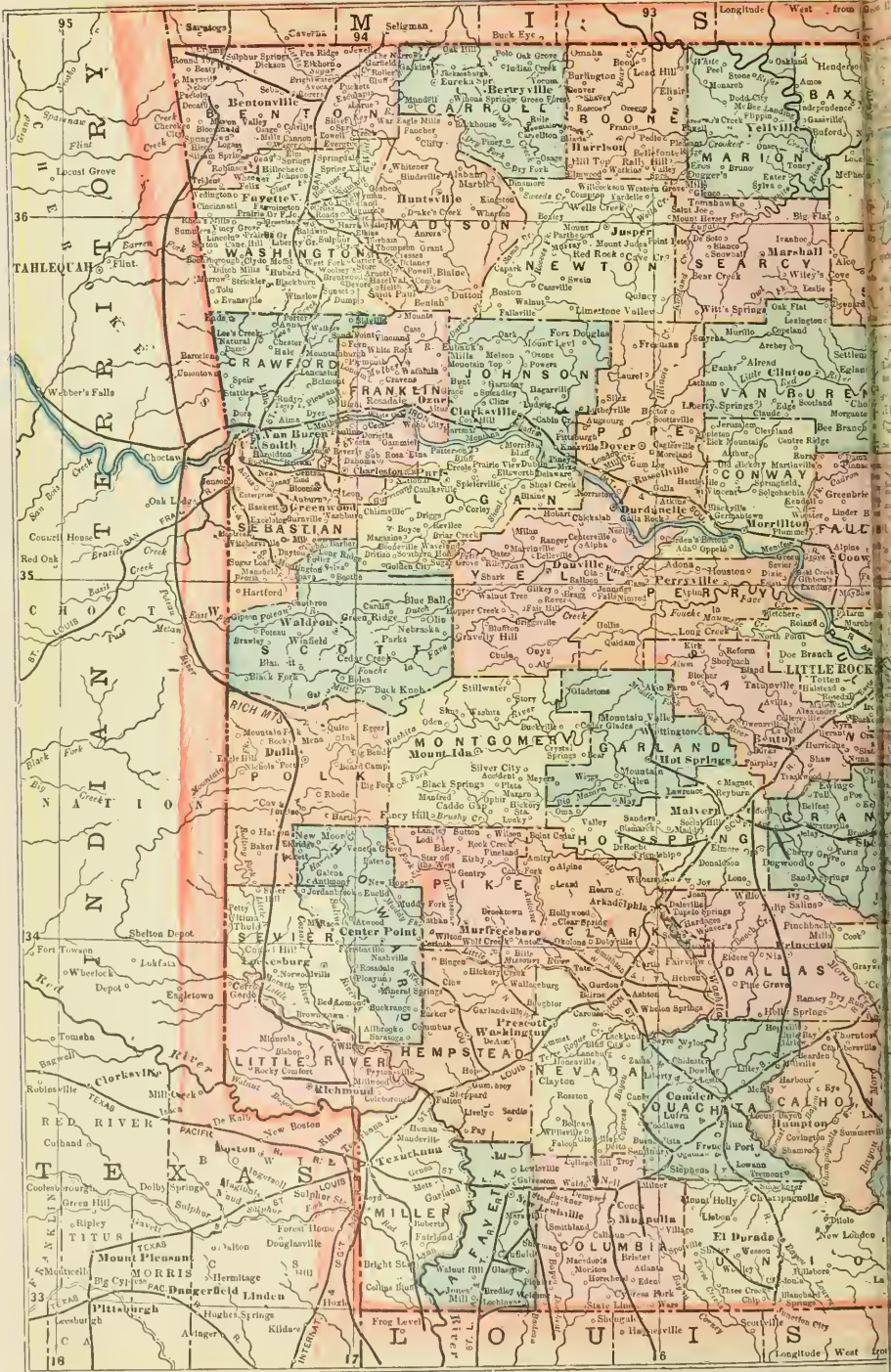
Crop Averages.—Reported Nov. 1, 1895: Corn, bushels per acre, shelled, 21.5, quality 95; Irish potatoes, bush. per acre, 70, quality 95; tobacco, lbs. per acre, 698, quality 95; hay, tons per acre, 1.20, quality 95; cotton, lbs. per acre, 183; sorghum, gals. per acre, 93; sugar cane product compared with that of previous year, 105; grape product compared with a full crop, 77; apples, the same, 91; and pears, the same, 93.

Manganese.—One of the three largest manganese ore regions in the United States is in Arkansas. There are two districts, one in Independence and Izard counties, the other extending from Pulaski county to Indian Territory. The production 1894 was 1,934 lbs., and the shipments, including most of the ore mined 1893, were nearly 4,000 lbs.

Finances.—The recognized debt on June 1, 1896, was \$1,665,000, overdue interest \$2,773,995—total \$4,438,995, about one-half of which is due to the Federal Government as representative of the Smithsonian Institution, the State claiming as an offset unsettled accounts against the government. The unrecognized debt, due 1900, aggregates \$8,706,773. In 1893 the assessed valuations aggregated \$173,526,484; 1894, \$173,762,244; 1895, \$173,758,764.

Banks.—On Oct. 2, 1894, there were 8 national banks in operation, with a combined capital of \$1,050,000, which held \$238,500 in United States bonds, an excess of \$1,000 over the required amount. These banks had outstanding on loans and discounts an aggregate of \$2,242,235, represented by demand paper with individual or firm names \$109,229; the same secured by stocks, bonds, and other personal securities \$149,415; time paper with two or more individual or firm names \$1,073,241; time paper with single individual or firm name \$344,528; and the same secured by stocks, bonds, or other personal securities \$565,822. The combined outstanding circulation was \$261,680. The State banks, June 30, 1894, numbered 33, and had capital \$1,630,232, deposits \$2,375,607, resources \$4,744,917, and surplus and profits \$525,329. On Oct. 31, 1896, there were 9 national banks, with \$1,220,000 capital; \$314,295 outstanding circulation; \$2,355,437 invested in loans and discounts; \$1,605,060 in deposits; and \$489,123 in reserve; and 21 State banks, with \$888,682 capital, \$1,527,901 deposits; \$2,961,423 resources; and \$413,368 surplus.

Internal Revenue.—During the fiscal year ending June 30, 1894, the collections of internal revenue aggregated \$103,336.03, from the following sources: Distilled spirits, \$93,307.44; tobacco, \$5,098.88; fermented liquors, \$1,860.83; oleomargarine, \$2,810; and penalties, \$258.88. The collections from the same sources in the year ending June 30, 1895, were \$84,952.61; June 30, 1896, 89,642.14; June 30, 1897, \$90,674.57.



Railroads.—The single track mileage Dec. 31, 1893, was 2,369.91, which was increased during 1894 to 2,404.66. The railroad assessment 1893 as \$19,305,467, and 1894, \$19,923,353, of which \$8,966,209 was against the Iron Mountain road. The mileage in 1896 was 2,544.

Post-Offices.—Reported Jan. 1, 1897: First-class, 1; second-class, 5; third-class, 32 (presidential, 38); fourth-class, 1,704; money-order offices, 290.

Publications.—Reported March, 1898: Daily, 25; semi-weekly, 2; weekly, 219; semi-monthly, 3; and monthly, 14.

Churches.—The Methodist Episcopal, South, is the strongest denomination in the State; and is followed by the Regular Baptist, Colored; the Regular Baptist, South; the African Methodist, Episcopal; the Disciples; and the Methodist Episcopal. At the Eighth International Sunday School Convention held in Boston, Mass., June 23-26, 1896, there were reported for Arkansas 2,050 evangelical Sunday schools, 13,962 officers and teachers, and 151,000 scholars—total members, 164,962.

Schools.—In 1891 there were 425,349 children of school age, of whom 285,159 were enrolled in the public schools. The total revenue for school purposes 1893 was \$1,280,041, and 1894, \$1,283,715; expenditures, 1893, \$1,532,186, 1894, \$1,444,301. The common school fund apportionment 1894 was \$310,504. There are 5 universities and colleges of liberal arts, with 46 instructors and 1,111 students (male 658, female 453) in all departments; income, 1892-93, \$27,530; volumes in libraries, 9,200; value of scientific apparatus and libraries, \$12,500; value of grounds and buildings, \$255,000; and aggregate of productive funds, \$15,500. In 1896 the public school population was 453,100; enrollment, 296,575; average daily attendance, 171,948; number of teachers, 6,673; value of school property, \$1,679,338; and expenditure in the year, \$1,232,986.

Libraries.—In 1896 there were reported 17 public libraries of 1,000 volumes each and upward, with a total of 87,600 bound volumes and 37,502 pamphlets.

Population.—In 1890, 1,128,179, of whom 585,755 were males; 542,424 females; 1,113,915 natives; 14,264 foreign-born; 818,752 whites; and 309,427 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 1,360,000.

ARKANSAS COLLEGE, Batesville, Ark., Presbyterian; co-educational; had at close of 1897, 6 professors and instructors; 98 students; 3,500 volumes in the library; \$25,000 invested in grounds and buildings; president, Eugene R. Long, PH.D.

ARKANSAS INDUSTRIAL UNIVERSITY, Fayetteville, Ark., non-sectarian; co-educational; had at the close of 1897, 60 professors and instructors; 850 students; 7,234 volumes in the library; \$227,000 invested in grounds and buildings; \$130,000 in productive funds; \$54,000 in income; president, J. L. Buchanan, LL.D.

ARMENIANS, a Christian people occupying the high plains and valleys of a country east of Asia Minor and northeast of Syria, 2,500,000 of them living within the borders of Asiatic Turkey, while 1,200,000 are in Russia, and 150,000 in Persia, and many live in the different Turkish cities, being often leading bankers, merchants and skilled artisans, and many are in different parts of Europe and the United States. In 1894 it was estimated that there were 2,000 in the State of Massachusetts. Important stations of American Congregational and Presbyterian Missions have been maintained in Turkish Armenia, comprising in 1894, 15 stations, 188 out-stations, with 153 American laborers and 791 native help-

ers, 112 churches, and 11,481 members, and 46,864 Sunday school adherents. This mission has also 4 theological schools, 29 theological students, 31 colleges and schools for boys, with 1,343 pupils, and 20 colleges and schools for girls, with 1,121 pupils. There are also 312 common schools, with 16,833 pupils; and the contribution of the natives to the American Board of Missions was \$34,758. In March, 1894, there were reports of special outrages by the mountain Kurds who had been organized recently by the sultan into the Hamedieh, or irregular cavalry. They have always been predatory tribes, dwelling in the mountains, and harrying the civilized people of the valleys. Recently their chiefs had been called to Constantinople and given military rank. These Kurds, partly uniformed, ignore all civil local authorities, and as organized greatly increased their outrages on the property and persons of the Armenians. Revolutionary Armenians, called Hunchagists, have formed societies in Turkey, England, and America, and have tried to meet oppression with violence. One attempted, March 25, 1894, to kill the Armenian patriarch in Constantinople, as unfit for his office. The patriarch escaped, but soon resigned. Under color of suppressing insurrection, troops were massed in August in the neighborhood of Mush, and presently reports came out from Sassun, southwest of Mush, of terrible outrage and murder. Later confirmatory reports showed that in August and September not less than 27 villages had been ravaged and destroyed by Kurds, with the help of regular troops, and from 6,000 to 10,000 men, women, and children massacred, hundreds of women being violated before being murdered, and other atrocities of brutal cruelty beyond description being committed. These reports were denied by the Turkish officials in Constantinople and the Turkish legation in Washington, but were so confirmed that earnest remonstrances were laid before the Porte by the representatives of the European powers and the United States; and Nov. 30, 1894, the sultan sent a commission to investigate them. This commission reported in May, 1895, practically confirming the reports, which by that time were substantiated by multiplied testimony, and had been followed by reports of other like outrages. Many Armenians were arrested and tried for insurrection and sedition, the trials, by report of the *London Daily News* in February, 1895, being wholly farcical and unjust. Meanwhile multitudes of Armenians were fleeing over the border into Russia, although not a few of them were attacked and murdered by Kurds on their journey. In May, 1895, the representatives in Constantinople of the European powers united in pressing upon the sultan the necessity of reform in Armenia, and their recommendation, though rejected at first, was formally accepted in June, in anticipation of a united naval demonstration. In July, American missionaries at Mush, trying to help the impoverished and ruined people, were greatly retarded by the Turkish officials, while the Kurds continued their depredations. New outrages were continually reported, and a more imperative remonstrance came from the powers in August. Oct. 2, 1895, several hundred Armenians in Constantinople attempted to lay the grievances of their countrymen before the sultan. Their patriarch dissuaded them, but they pressed on to the palace, and in a conflict with the police about 60 Armenians and Turks were killed. There was from this continual rioting and bloodshed in Constantinople, about 500 from the crowd were arrested, and it was said that many were murdered in prison. Mobs looted the Armenian shops, and murdered the people, the police giving no protection. It was reported Oct. 11 that 700 had been killed. These disorders were no doubt intensified by the violence of the Young Turkish party, which demanded reforms for others besides Armenians, and was understood to threaten even the life of the sultan. Hundreds of Arme-

nians in Constantinople took refuge in their churches, and could hardly be persuaded that their lives were safe elsewhere. The ambassadors of the powers urged upon the Porte, Nov. 5, that the whole military strength of the empire be applied to put an end to the massacres which still continued. Nov. 9 Babri Pasha, who had been dismissed from his official position on the representations of the British ambassador because of his ill-treatment of Armenians, was decorated by the sultan as a reward for good services, and many others were so honored who had been infamously prominent in Armenia. Nov. 12 the Turkish garrison at Zeitun, between Erzerum and Trebizond, surrendered to a body of Armenians, who occupied the Zeitun barracks, with their arms, ammunition and supplies. Further reports continued through November, 1895, of massacres and outrages, and it was estimated that 20,000 persons were killed in the first three weeks of that month. Nov. 15 news came of the sacking of the Armenian missionary college and headquarters at Harpoot. The property destroyed was valued at \$100,000. About 800 Armenians were killed there, but the American missionaries escaped to a place of security. It was said Nov. 19, 1895, that the representatives of the powers were convinced that the sultan was unable to control events, whatever his wish might be. The representatives of the United States in Constantinople reported Jan. 11, 1896, that in the provinces of Diarbekir and Harpoot 176 towns and villages, containing 8,050 Armenian houses, had been burned. The Armenians in those places numbered 92,000, and of these 15,845 were killed. About the same time the French ambassador estimated the entire number of Armenians massacred at 50,000. Jan. 22, 1896, the United States Senate adopted resolutions urging the European Concert to enforce the treaty of Berlin; and promising all support to the president in defending the rights of American citizens in Armenia. Large sums of money were sent for the relief of those made destitute by the outrages. American missionaries in Armenia distributed this relief; and in January, 1896, the work of distribution was undertaken by the Red Cross Society, and its president, Clara Barton (*q.v.*). See HARPOOT.

ARMIES OF THE WORLD. The following is a summary of the military strength of the nations, as reported 1895:

Argentine Republic.—Regular army, 1,398 officers and 6,498 men; national guard, 480,000 officers and men.

Austria-Hungary.—Peace footing, 23,445 officers and 330,807 men; war footing, 45,238 officers and 1,826,940 men; landsturm in war, over 4,000,000.

Belgium.—Peace footing, 3,504 officers and 46,262 men; war footing, 154,780 officers and men; Garde Civique, 42,732 officers and men.

Bolivia.—Peace footing, 367 superior and 654 subordinate officers and 950 men; war footing, a national guard in which all male citizens are enrolled.

Brazil.—Peace footing, 1,600 officers, 30,000 men, and 20,000 gendarmerie; military service obligatory since 1875.

British Empire.—Regular army, 7,496 commissioned officers, 1,027 warrant officers, 15,989 sergeants, 3,673 musicians, and 127,162 rank and file; Reserves, regular, first and second classes, 84,450 officers and men, militia, 110,506, yeomanry, 11,790, volunteers, 262,520; total home and colonial forces, 644,575; regular forces on Indian service, 73,125; grand total, 717,700 officers and men, of whom 665,506 were classed as effectives. The net cost of the British army for 1894-5 was £18,080,900 (£87,873,171).

Chile.—Regular army, by law 1892, 526 officers and 6,000 men; national guard, 51,090 officers and men.

China.—The Eight Banners, 323,800 officers and men; Ying Ping (national army), 6,459 officers and 650,000 men; active armies of Manchuria, the Centre, and Turkestan, strength unknown; and Territorial (local militia), 200,000 in peace and probably 600,000 in war.

Colombia.—Peace footing, 5,500 officers and men; war footing, annually fixed by Congress; in emergency, the president can raise all troops needed.

Costa Rica.—Peace footing, 600 officers and men, and 12,000 militia; war footing, 34,000.

Denmark.—Peace footing, 778 officers and 13,152 men; war footing, 1,214 officers and 42,919 men, besides a reserve of 16,500 officers and men, and two citizens' corps aggregating 17,000.

Ecuador.—Peace footing, 3,341 officers and men; war footing, national guard, 30,000.

Egypt.—Regular, 60 English officers and 13,000 men; British army of occupation, 3,000 officers and men.

France.—Peace footing, 28,785 officers and 598,024 men, with 140,912 horses, of whom 26,125 officers and 527,737 men are stationed in France, 2,125 officers and 56,787 men in Algeria, and 535 officers and 13,500 men in Tunis. The 1895 estimate of men liable to military service was: Active army and its reserve, 2,350,000; territorial army, 900,000, territorial reserve, 1,100,000—total 4,350,000, of whom about 2,000,000 would be available for war. The budget estimates for war purposes, excluding cost of the navy, for 1895, were, ordinary, 607,261,898 fr. (\$121,452,379), extraordinary, 40,823,907 fr. (\$8,164,780).

German Empire.—Peace footing, 22,534 officers and 562,014 men, with 96,844 horses; war footing, strength not officially published, but believed to aggregate over 3,000,000 trained officers and men. There are 434 field batteries, 17 fortified places of the first class, 19 other fortresses, 21 army corps districts, and one divisional district. The budget estimate for cost of the imperial army 1895 was 480,021,900 marks (\$114,245,212).

Greece.—Peace footing, 24,076 officers and men, war footing, mobilized force, 100,000; reserves, 104,500; territorial army, 146,000.

Guatemala.—Peace footing 3,718 officers and men; war footing, in addition, reserve militia, 67,300.

Haiti.—Peace footing 6,828 officers and men, and special guard of 10 officers and 650 men.

Hawaii.—Peace footing, household guards, 65 officers and men; war footing, all natives on call.

Honduras.—Peace footing, 500 officers and men, and 20,000 militia.

Italy.—Permanent army, under arms, 14,705 officers and 252,117 men; on unlimited leave, 5,942 officers and 566,138 men; mobile militia, 5,606 officers and 521,452 men; territorial militia, 11,634 officers and 1,815,329 men—total officers and men, 3,192,923.

Japan.—Imperial guard, 282 superior officers and 6,660 non-commissioned officers and men; six divisions, 2,434 superior officers and 46,958 non-commissioned officers and men; reserves, 91,190 officers and men; landwehr, 106,088; and the Jesso militia—total peace footing, 4,358 officers and 265,390 men. The army in the war with China used a rifle of native invention and make.

Kongo Free State.—Peace footing, 143 European officers, 146 sergeants, and 9,000 native troops.

Korea.—Peace footing, 5,000 officers and men stationed at Seoul; war footing, 10,000 and upward indefinitely.

Madagascar.—Regular army, 8,000 officers and men; standing army, 20,000; available mobile force, over 50,000.

Mexico.—Peace footing, 2,270 officers and 37,103 men; war footing, including reserves, 165,000; every male capable of carrying arms is liable for military service from his 20th to his 50th year.

Monaco.—Regular army, 5 officers and 70 men, and a guard of honor.

Montenegro.—No standing army; all males physically able are trained as soldiers and liable for service; number of such, 36,726, for whom there are 40,000 rifles.

Morocco.—Peace footing, 16,000 officers and men, and 18,000 militia; war footing, in addition, about 40,000.

Nepal.—Standing army 25,000 officers and men, and 17,000 regulars in and about the capital.

Netherlands.—Peace footing, 1,821 officers and 19,750 men; war footing, 69,000 men, officers not reported, besides the landsturm—all capable of bearing arms—and a corps of sharpshooters; *Dutch East Indies*, purely colonial force, 1,384 officers and 33,339 subordinate officers and men; *Dutch West Indies*, militia of 27 officers and 373 men, civic guard of 57 officers and 1,163 men, and garrison of 20 officers and 386 men; *Curacao*, 35 officers and 614 men.

Nicaragua.—Peace footing, 2,000 officers and men; war footing, the same with reserve of 10,000 and national guard 5,000.

Norway.—Troops of the line and reserves, 900 officers and 30,000 men; not over 18,000 troops can be put under arms, even in war, without consent of the Storting.

Orange Free State.—Standing army, at capital, 52 officers and men, and 350 artillerymen as a reserve; available war strength 17,381.

Paraguay.—Standing army, 82 officers and 1,345 men; every citizen 20–35 years old liable to war service.

Persia.—Standing army 24,500 officers and men; nominal 105,500; liable to be called for service 53,520.

Peru.—Peace footing, 5,900 officers and men.

Portugal.—Peace footing, 34,172 officers and men; war footing, 150,000; colonial forces 8,880 officers and men besides native troops.

Romania.—Peace footing, 2,936 officers, 335 employés, and 48,500 men; territorial army, 81,843 officers and men; war footing, not definitely fixed; every male liable to service between his 21st and 46th year.

Russia.—Peace footing, European army, 30,574 officers, 750,944 men, and 139,966 horses; Asiatic army, East Siberia, 773 officers and 24,993 men; West Siberia, 557 officers and 10,799 men; Turkestan, 1,280 officers and 38,168 men; Finland army, 345 officers and 9,939 men—total 33,529 officers, 835,143 men, and 155,478 horses; local and auxiliary troops, 105,000 officers and men; war footing, field troops, Cossacks, and reserves, 54,957 officers, 2,512,143 men, and 497,415 horses.

Salvador.—Standing army, 1,000 officers and men; militia, 18,000.

Santo Domingo.—Small army and reserve at the capital of each province; universal liability for war.

Serbia.—Standing army, 18,000 officers and men; war footing, 210,000.

Siam.—Standing army, 12,000; no armed militia; all males liable for war service.

South African Republic.—No standing army; males liable for war service, 23,923.

Spain.—Peace footing, 115,735 officers and men; war footing, 1,083,595; annual contingent of recruits, 80,000; troops in the Philippines, 9,870; in Cuba (ordinarily), 21,000; in Porto Rico, 3,400. Several large detachments were sent to Cuba in 1895.

Sweden.—Peace footing, 1,953 officers, 1,781 non-commissioned officers, 1,644 musicians, 634 civil and civil military persons, and 32,842 men.

Switzerland.—No standing army; war effective, *anszug*, 134,932 officers and men; *landwehr*, 80,298; *landsturm*, 273,296.

Turkish Empire.—The army comprises the *Nizam* (regular force and reserves), *Redif* (*landwehr*), and *Mustahfiz* (*landsturm*), and has a war strength of 700,620 officers and men. The great difference between the number of males reported liable for military service and those whom the government can place under arms in an emergency was painfully shown during the atrocities in Armenia and elsewhere in 1895.

United States.—See ARMY OF THE UNITED STATES.

Uruguay.—Permanent army, 223 officers and 3,221 men; armed police, 3,200 officers and men; civilian force, 3,264.

Venezuela.—Standing army, 7,280 officers and men; national militia (males 18 to 45 years old), subject to call, 60,000; total available for war service, 250,000.

ARMOR AND ARMOR PLATES. During 1894 a series of trials was made at the government proving-grounds at Indian Head, Md., of armor plates furnished by the Carnegie Company, Homestead, Pa., and the Bethlehem Company, Bethlehem, Pa. The plates were representative of those furnished for the United States vessels, *Puritan*, *Katabalin*, *Monadnock*, *Indiana* and *Oregon*. These were curved, 4, 11½, 12, 17, and 18 inches thick, of nickel-steel, hardened by the Harvey process, and with an oak backing of 36 inches. They were subjected to shot and shell of the newest pattern, weighing 250, 800, and 850 pounds. The thickest plates were in some instances pierced, and some were cracked and broken and the backing exposed; but in other cases the heaviest pointed projectiles only dented the plate, and were broken or the points fused by the heat of the impact with the plate in which they were imbedded. The tests were thought by some of the officers to show that the Harveyizing process was without value in the thickest plates, however valuable it has been proved to be in plates 6, 8, 10, or even 12 inches thick. On the whole, the trials exhibited a duel between the heaviest and most perfect projectiles thrown from the most powerful guns on the one side, and the most perfect armor plates on the other side; with success now of the guns and now of the armor; but the Official Annual of the Intelligence Office of the United States Navy Department, issued in October, 1894, declared that the superiority of the Harvey process of hardening armor has been invariably recognized, and adopted by all the leading manufacturers and nations. In November, 1895, it was reported that the Russian government had accepted the tenders of the Bethlehem and Carnegie Companies to furnish three-quarters of all the armor plates for the two new war ships then building, their competitors having been four French firms, three British, two German, and one Russian. It was also said that the Bethlehem Company proposed, at the invitation of the Mikado, to establish in Japan a mill for armor plate and other large iron work. During 1894 it was reported that the armor plates of the *Monterey* were defective. These had been made by the Carnegie Company, and it was said that plates had been doctored, blowholes being plugged, so that they passed inspection though known to be defective by the makers; but it was maintained for the company that slight and unimportant defects were magnified by the testimony of workmen who had

had trouble with the company; and that whenever real faults appeared, the company had honestly acknowledged them, and borne the proper penalty and forfeit. A temporary interest was excited in 1894 by the exhibition, by different inventors, of what was called a bullet-proof coat or cuirass. The first of these inventors was a tailor of Mannheim, Germany, named Dowe, who allowed himself, when clothed in his coat, to be shot at with the war rifle used in the German army. Shots which would pierce a block of oak were held imbedded in the coat. A horse was covered with a coat, and was unhurt, though bullets were imbedded in the material. Dowe exhibited his coat successfully in London, May 23, before the Duke of Cambridge and other military officers. He said that it contained no iron or steel. June 1 Hiram Maxim exhibited a cuirass of his invention, made of a thin plate of steel incased in felt, and only half as thick as Dowe's coat. It was tested at the Erith and the Firth gun-works, England, and showed power to resist bullets which would pierce a steel target half an inch thick. July 12 a bullet-proof shield was exhibited in Brooklyn, N. Y., by W. J. Lennard, and July 21, before army officers at Governor's Island, New York. Lennard wore his shield in Brooklyn, standing 35 feet from the marksman. This was forbidden by the army officers for fear of accident. The shield was $2\frac{1}{2}$ inches thick, 17 inches long, and 13 wide, covered with what looked like blue cloth, and fastened on by straps. It was fired at with Winchester and Springfield rifles, and the bullets were imbedded in it, but did not pierce through. Lennard said that it was made of cotton, felt, wool, and a chemical compound of mineral and vegetable parts. It weighed 11 pounds, while a steel plate of like resistance would weigh 25 or 30. July 17, a bullet-proof coat was exhibited at Passaic, N. J., by Ignatius Lucas, a German machinist, before members of a shooting club, who used their own ammunition and Winchester rifles and the Mannlicher rifle used in the German army. No bullet penetrated more than half an inch.

ARMOUR INSTITUTE OF TECHNOLOGY, Chicago, Ill., founded in 1892; non-sectarian; co-educational. It included in 1897 (1) a scientific academy; (2) a technical college, with departments of mechanical engineering, electricity and electrical engineering, chemistry and chemical engineering, architecture, and library science; and departments of (3) domestic arts; (4) commerce; (5) music; and (6) kindergartens. At the close of 1897 it had 40 professors and instructors; 1,000 students; 15,000 volumes in the library; \$438,000 invested in scientific apparatus; \$500,000 in grounds and buildings; \$1,500,000 in productive funds; \$96,648 in income; president, F. W. Gunsaulus, D.D.

ARMY OF THE UNITED STATES. The army, on June 30, 1897, consisted of 10 regiments of cavalry, 5 artillery and 25 infantry, and the Engineer Battalion, recruiting parties, ordnance department, hospital service, Indian scouts, those engaged in the United States Military Academy, and the signal and general service; in all 2,179 officers and 25,353 enlisted men. During 1894-95 the number of officers on detached duty was reduced, by assignment to their commands as far as possible, the secretary of war reporting in November, 1895, 35 officers then at department headquarters, and 33 on recruiting service. Those assigned as military instructors of the National Guard of the States, however, were increased from 92 to 128, and those acting as Indian agents from 5 to 19. For the coast defense there has been established and equipped a gun factory at Watervliet, N. Y., able to turn out yearly 35 guns of the types required. The government has also, by contract, contributed toward the establishment of a private plant for gun manufacture which will meet any unusual demand. Only 3 of the

18 important ports—New York, San Francisco, and Boston—have completed systems of defense. It is estimated that the complete defense of all the ports will cost \$82,000,000, and take 10 years. The army is distributed in 8 departments, each under its department commander. The ranking major-general, in command of the army, is Gen. Nelson A. Miles, promoted on the retirement of Gen. J. M. Schofield, Sept. 29, 1895. The duty of the army for the most part is in garrisoning the forts in different parts of the country, and in defending Western settlers from wild Indians and peaceable Indians from lawless whites. In February, 1895, Congress revived the grade of lieutenant-general for the benefit of Maj.-Gen. John M. Schofield, who had commanded the army since 1888. On Jan. 1, 1898, the number of citizens liable to military duty was 10,139,788. The authorized strength of the organized militia of the several States was 116,125, and the aggregate active force was 113,460.

ARNOLD, SIR EDWIN, K.C.L.E., C.S.I., poet, was born in Rochester, England, June 10, 1832. In 1893 he published a dramatic work, *Adeuma; or, the Japanese Wife*, and *The Book of Good Counsels* from the Sanscrit of the Hitopadesa; 1894, *Wandering Words*; and 1895, *The Tenth Muse and Other Poems*. He was married to a Japanese woman in 1897, and the same year published the poem, *At Dargat*.

ARTISTS, SOCIETY OF AMERICAN, founded in New York in 1877, and incorporated in 1882; object the advancement of the fine arts; membership in 1897, 117, including nearly all the foremost artists of America. President John La Farge; vice-president, Kenyon Cox; secretary, G. R. Barse, Jr.; treasurer, Samuel Isham. The society holds an annual exhibition, at which, however, its members have no privileges of exhibition beyond others, and no work of art is accepted except on its merits as judged by a jury. At this exhibition each year is awarded the Webb prize, founded by Dr. W. Seward Webb in 1887, for best landscape by an American artist under 40 who has not previously taken the prize. Each year also the society purchases for the Shaw Fund, founded in 1892 by Samuel T. Shaw, a figure composition in oil selected by the jury. The fund is \$1,500 annually, and the picture becomes the property of Mr. Shaw. Headquarters of the society No. 215 West Fifty-seventh Street, New York.

ASHANTEE, a kingdom in Guinea, on the west coast of Africa, between Liberia and Dahomey, since 1873 nominally tributary to the British Gold Coast Colony; population estimated 1,000,000–3,000,000; capital, Coomassie, or Kumassi. In October, 1895, the British government sent an ultimatum to the king, demanding that he place this country under British protection, with a resident commissioner, on the ground that he had violated his treaty obligations. The king rejected the ultimatum, saying that he preferred war, for which he was fully prepared, to accepting the British terms. A strong force of imperial and native troops was at once ordered to Coomassie to force the king to terms, and it was expected that this force would be able to advance by the middle of December. On Nov. 15 the king sent two messengers to the governor of the Gold Coast Colony at Accra, but the latter declined to receive them, regarding them as not qualified to treat with the British as representatives of the king. On the 19th Lord Suffield and Mr. Sutherst, representing the king in London, assured the colonial secretary that the king would accede to the British demands, and would pay the cost of preparing the expedition against him. It was agreed that if the king would indorse this pledge no troops would be dispatched. Such a settlement would give Great Britain absolute control of a territory of about 40,000

square miles, rich in gold and agricultural lands. In December following it was reported that the people had deposed King Prempeh for submitting to the British, and that the war party had placed his mother on the throne.

ASHEVILLE, city, winter health resort, and capital of Buncombe county, N. C.; population (1890) 10,235; (1896), estimated 12,000. The net debt Jan. 1, 1897, was \$764,187; and the assessed valuations in the previous year aggregated \$3,670,925. It has 8 hotels, 75 boarding houses, a steam road to Craggy Mountain, electric street railroads, 2 national banks, important manufactories, and daily and weekly periodicals.

ASHEVILLE COLLEGE, Asheville, N. C., non-sectarian; for women only; had at the close of 1897, 15 professors and instructors; 135 students; 2,000 volumes in the library; \$100,000 invested in grounds and buildings; \$3,000 in scientific apparatus; president, Archibald A. Jones, B.A.

ASHLAND, city, capital of Ashland county, Wis.; population (1890) 9,956; (1896) estimated 13,000. The tax assessment in 1896 was \$4,625,000; total tax, \$35 per \$1,000; net debt, 1897, \$423,811. The city is the shipping port for the famous Gogebie iron range, and has 3 national banks, electric street railroad, and 2 daily and 5 weekly newspapers.

ASTOR LIBRARY, New York, founded with a bequest of \$400,000 by John Jacob Astor in 1849. It continued to occupy in 1898 the building in Lafayette Place, which had grown three times as large as the original building, and contained about 270,000 volumes, which were free for reference, but could not be taken from the building. In March, 1895, the trustees agreed with the trustees of the Lenox Library and the Tilden Trust for the consolidation of the three bodies under the name of the New York Public Library, Astor, Lenox and Tilden Foundations. See NEW YORK PUBLIC LIBRARY.

ASTORIA, city, capital of Clatsop county, Ore.; population (1894) 6,184; (1895) estimated 10,000. In 1894 it had an assessed valuation on a 50 per cent. assessment, of \$2,856,692; and 1895, a total debt of \$416,050. It is a port of entry; exports large quantities of lumber, cereals, and flour, and has valuable ocean and salmon fisheries, steamship and packet traffic, electric street railroad, and 3 daily and 4 weekly newspapers.

ASTRONOMY. The development of dry-plate photography brought about a radical change in astronomical methods. The extreme sensitiveness of dry plates enabled them to be used to photograph the heavens, thus giving bases for new and most accurate measurements of position. Then the photography of the lines and bands of the spectra of celestial bodies enabled the displacements of the spectrum due to motions of the bodies toward or away from the earth to be determined with an approximation to accuracy. The lines of the spectrum owe their position to the length of the waves of light producing them, the short waves producing the violet end of the spectrum and the long waves the red. The position of any part of the spectrum is a rigorous measure of the length of the wave producing it. If a distant sun moves toward us it shortens all the waves of light which emanate from it, as it were squeezing them together. If it moves away the reverse ensues. Hence a displacement of characteristic lines of the spectrum toward the violet is observed if the body moves toward the earth, and *vice versa*. The measurement of these minute displacements is vastly facilitated, or only made possible by modern methods, and the measurements have led to most remarkable results. Distant stars have by the spectroscopic and photographic dry plate been resolved into double stars, and the periods of revolution of one about the other

have thus been determined in hours. This has been done for stars which the best telescopes could not resolve into two bodies. To the sun the spectroscope has been applied with the result of the discovery of new lines appertaining to a hypothetical metal called helium. The sun's chromosphere is seen at total eclipses. Ordinarily the effulgence of the sun is such as to preclude any direct view of it. But by the spectroscope it can be studied at any time, and the great prominences of the chromosphere have shown new lines in the spectrum which have been attributed to a new metal called, as above stated, helium. In consequence of this brilliant investigation Prof. Ramsay and Mr. Crookes have investigated a new gas produced from the mineral cleveite, which seems to show the lines of helium, and is possibly terrestrial helium. Prof. Ramsay claims also to have discovered helium in a meteorite. Saturn's rings have been investigated with some important results. Trouvelot in 1870-76, Croftell in 1875-77, Meyer in 1881, and more recently Keeler, have studied the constitution of the rings, and the latter, using modern spectroscopic methods, has enunciated the theory that the rings are composed of innumerable small satellites revolving about the planet. This theory is now accepted as true. Some minor planets or asteroids have been measured by Professor Barnard as follows: Diameter of Ceres 485 miles, of Pallas 304 miles, of Vesta 243 miles, of Juno 118 miles. The spectroscope has given us the first real estimate of the diameter of a fixed star. Algol has an obscure companion, and their motions have been determined. The velocities being known, the diameters of Algol and its companion become calculable. The figure arrived at is: For Algol, 1,000,000 miles; for its companion, 800,000 miles. The orbital velocity of Algol is 25 miles a second; of its companion, 54 miles a second; distance from center to center, 3,200,000 miles; mass of Algol four-ninths and of its companion two-ninths that of the sun. Dr. Arthur Auwers has published the results of German heliometer observations of the sun's parallax. They give it a value of $8.896'' + 0.0216''$ corresponding to the greatly diminished distance from the earth of 91,000,000 miles. Mars has been the subject of very elaborate theorizing, certain parallel and reticulated markings on its surface suggesting a possibility of life on its surface. The so-called Schiaparelli canals of Mars were held by some to be partly or entirely of artificial construction. At the Lick Observatory Professor Campbell has applied very powerful methods, and has found no atmosphere of Mars, a result in conflict with general belief. The canals were specially studied during 1894 and found to certainly exist. The discovery of new planets and comets goes on apace, twenty-three planets and five comets being added to the list in 1894 alone. Measurements of the newly discussed fifth satellite of Jupiter have been published by the Lick Observatory, giving it an eccentric orbit of 11 hours, 56 minutes, 22 seconds, 0.618.

The British Royal Astronomical Society, in February, 1894, presented its gold medal to S. W. Burnham, formerly of the Lick Observatory, for his work on double stars and other discoveries, and in February, 1895, honored in like manner Dr. Isaac Roberts, for his photographs of sun clusters and nebulae published in 1894. The photometry of the light of the stars has been attacked by a selenium cell by Mr. Wilson, of Danamora, Westmeath, with close approximation in some cases to results obtained by visual methods. The principle employed was the effect of light on selenium in modifying its electric properties.

ASTRUP, ERVING, Arctic explorer, was born in Christiania, Norway, in 1865, and was found dead in the Lille Elvedal Valley, Norway, Jan. 21, 1896. He accompanied Peary's North Greenland expedition of 1891; returned from that region in 1894; lectured in the United States in 1895; and was engaged for the Swedish Antarctic expedition of 1896.

ATCHISON, city, capital of Atchison county, Kan.; population (1890) 13,963; (1897) 15,501. In 1896 the total assessed valuation was \$2,292,110, and total tax rate, \$65.20 per \$1,000. The total bonded debt January, 1897, excluding bonds of the board of education, was \$684,600. The city has large grain elevators, mills, railroad machine shops, electric street railroad, 3 national banks, and 2 daily and 3 weekly newspapers.

ATHENS, AMERICAN SCHOOL OF CLASSICAL STUDIES AT, established at Athens, Greece, in 1882. It is nominally a branch of the Archaeological Institute of America, but is conducted by an independent committee of representatives of American colleges, of which each college contributes \$250 a year for its maintenance. In May, 1895, 22 colleges were represented as contributors. The revenue for the year 1894-95 was estimated as \$8,000. The school occupies a site given by the Greek government, and its building, erected by private subscription, together with the lot, is valued at \$46,000. There is an endowment of \$50,000. The expenses for the year 1893-94 were \$6,611.96. Volumes in library in May, 1895, 3,000. Students have the use of the library of the English school near by, a similar institution maintained by English universities and colleges. Prof. Thomas D. Seymour, of Yale, was President of the Board of Directors. The managing committee in November, 1895, re-elected Dr. Charles Waldstein of Cambridge University, professor of the history of art for the year 1896-97. Dr. Waldstein's connection with Cambridge allows him to be present in Athens only part of the year. Prof. Rufus B. Richardson is director of the school, his appointment being for five years. Prof. T. D. Goodell, of Yale, was elected professor of the Greek language and literature for 1894-95; Prof. B. J. Wheeler, of Cornell, for 1895-96; Prof. Herbert Weir Smith, of Bryn Mawr, for 1896-97, and Prof. Abraham Lincoln Fuller, of Western Reserve, for 1897-98. The American Institute of Archaeology in 1895 voted a fellowship of \$600 for the school, and the managing committee voted a second fellowship of \$600—\$800, to be given in competitive examination to students and graduates of the co-operating colleges. The committee on publications was authorized in 1894 to make a collection of lantern slides to illustrate Greek art and scenery, to be kept in some central place and lent for exhibitions. Besides the study of known remains of Greek art and civilization, the school has been engaged, under the direction of Dr. Waldstein and Prof. Richardson, in independent excavations at Argos and Eretria, with interesting and valuable results. The American School has been associated helpfully with the similar schools maintained in Athens by the French, Germans, English and Greeks, of which it was reported in September, 1895, that the available funds were as follows: French, \$15,000; German, \$12,000; English, \$10,000.

ATLANTA, city, capital of Fulton county, and of the State of Georgia; population (1890) 65,533; (1897) estimated 115,000. In 1890 its manufacturing industries had a capital investment of \$9,508,962, and an output valued at \$13,071,037. The assessed valuations 1896 were: Real, \$43,522,967, personal, \$11,668,230—total, \$55,131,197, and city tax rate \$12.50 per \$1,000; and the total bonded debt, 1897, was \$2,952,000, water debt \$1,173,000. The city owns its waterworks, valued at \$3,000,000, and other property valued at \$2,573,650. There are 100 churches with seating capacity of 60,000; 17 banks with capital and surplus of over \$1,000,000; clearing association of 10 city banks, which reported May 25, 1895, deposits \$5,374,000, loans and discounts \$5,580,643; public library of 20,000 volumes; 100 miles of electric railway; 6 cotton mills with 122,000 spindles; 6 colleges for colored students; 4 medical colleges;

institute of technology; 14 grammar schools for white and 5 for colored pupils; 3 military schools; annual trade \$150,000,000; and a quarterly, 5 daily, 25 weekly, 4 semi-monthly, and 26 monthly periodicals.

ATLANTA EXPOSITION, Sept. 18—Dec. 31, 1895; officially, the Cotton States and International Exposition. The initial object of the second great exhibition held in the "Gate City of the South" since the civil war was to show to the world every feature of the great development being made in the Southern States; but gradually the object broadened to a demonstration of what was newest in the whole realm of invention, mechanics, science, industries, and arts. The exposition was installed in Piedmont Park, a tract of 189 acres, 2 miles from the center of the city, in preparing and beautifying which over \$300,000 was expended. The principal buildings, besides those erected by States and foreign governments, numbered 13, and included an administration building; auditorium; United States government building, containing exhibits of the army, navy, state, interior and agricultural departments, the geological survey, and the fish commission; and special buildings for exhibits of manufactures and liberal arts, machinery, agriculture, minerals and forestry, transportation, fine arts, electrical inventions, women's work, and illustrations of the advancement of the negro race. The total cost of buildings and outdoor attractions exceeded \$2,000,000. Each of the Southern States displayed its distinctive industries and economic interests. Mexico, the Central American States, and several South American and European countries were well represented. No pecuniary aid was sought from the Federal government, but Congress authorized the admission of foreign exhibits free of duty and constituted the exposition plant a bonded warehouse for such articles, and the government officers labored zealously for the success of the enterprise.

On the afternoon of Sept. 18, President Cleveland, in his summer home at Buzzard's Bay, pressed a golden button and instantly the ponderous machinery, 1,000 miles distant, began to move, cannon roared, and 60,000 people cheered the opening of the exposition. The address of the day was delivered by Judge Emory Speer, of the United States Court at Macon; Mrs. Joseph Thompson, chairman of the Woman's Board, followed; Booker T. Washington, a former slave, now president of, the Tuskegee Normal and Industrial Institute, spoke on behalf of the Negro Board; a dedicatory ode by Frank L. Stanton was read by Albert Howell; an address by Governor Atkinson, of Georgia, was read by George Brown; Charles H. Collier, president of the exposition company, reviewed the work of organization, and then, telegraphing to President Cleveland that all was ready, the president opened the exposition by an electric spark. During the exposition a number of national congresses were held in Atlanta, and among the notable special events were "Blue and Gray Day," Sept. 21; "Liberty Bell Day," Oct. 8; "Bankers' Days," Oct. 16-17; "President's Day," Oct. 23; "Pennsylvania Day," Nov. 14; "Massachusetts Day," Nov. 15; "Brooklyn Day," Nov. 23; "Manhattan Day," Nov. 25; "Atlanta, Savannah, Inman, and South Carolina Day," Nov. 28; "Wheelmen's Day," Nov. 30; "New Jersey Day," Dec. 4; "Maryland Day," Dec. 7, etc.

ATLANTA UNIVERSITY, Atlanta, Ga., opened 1869; non-sectarian; co-educational; had at close of 1897, 24 professors and instructors; 300 students; 9,400 volumes in the library; 10,000 invested in scientific apparatus; \$250,000 in grounds and buildings; \$33,000 in productive funds; \$20,000 in gifts; \$22,000 in income; president, Horace Bumstead, D.D.

ATLANTIC CITY, city, summer resort, Atlantic county, N. J.; population (1890) 13,055; (1895) State census, 18,329; In 1897 it had a bonded debt of \$1,093,210, and net debt of \$1,117,783; and 1896 assessed valuations: Real, \$11,910,914, personal, \$1,177,040—total, \$13,090,954; total tax rate \$19 per \$1,000; 86 hotels with a capacity of 100 and upward, 180 others with total capacity of 10,000, and 100 boarding houses with total capacity of 1,000; and 3 daily and 5 weekly newspapers.

AUBURN, city, capital of Adroseggin county, Me.; population (1890) 11,250. In 1896 the total assessed valuation was \$6,284,895, and tax rate, \$24 per \$1,000; bonded debt excluding water debt, \$273,000; water debt, \$108,000; resources \$134,178. The city has purchased the waterworks of the Auburn Aqueduct Co., valued at \$350,000, and assumed payment of \$58,700 of the company's bonds. In 1897 it had 2 national banks, 2 savings banks; loan and building association; 3 insurance companies; 2 trust companies; and a monthly periodical.

AUBURN, city, capital of Cayuga county, N. Y.; population (1890), 25,858; (1896) estimated 32,000. In 1896 the assessed valuations were: Real \$9,513,625, personal \$1,684,671—total, \$11,198,296; and in 1897 the total bonded debt was \$800,654, which included a water debt of \$393,000. The city has manufactories of agricultural implements, carpets, woolen and iron goods, and boots and shoes; electric street railroad; 2 national banks; and 2 daily and 6 weekly newspapers. Since 1893 the city has owned its waterworks plant.

AUBURN THEOLOGICAL SEMINARY, Auburn, N. Y.; Presbyterian; had at close of 1897, 10 professors and instructors; 105 students; 31,000 volumes in the library; \$300,000 invested in grounds and buildings; \$635,000 in productive funds; \$28,275 in gifts; \$36,453 in income; president, Henry M. Booth, D.D., LL.D. In January, 1894, the Welch Memorial Building was completed and dedicated. It contains six large lecture rooms, each with an adjoining room for the private study of the professor; and connected with it is the Willard Memorial Chapel, a recent gift by the daughters of Dr. Sylvester Willard, which was completed later in the year.

AUGSBURG SEMINARY, Minneapolis, Minn.; Lutheran; had at close of 1897, 7 professors and instructors; 187 students; 2,000 volumes in the library; \$60,000 invested in grounds and buildings; \$50,000 in productive funds; \$3,596 in gifts; \$8,136 in income; president, Georg Sverdrup.

AUGUSTA, city, capital of Kennebec county, and of the State of Maine; population (1890) 10,527. In 1896 the assessed valuations were: Real, \$4,473,669; personal, \$1,774,960—total, \$6,248,629; total tax rate, \$20.60 per \$1,000; and total debt, \$280,317. There are 3 national banks, 2 savings banks, loan and building association; a trust company; electric railroad extending to Gardiner; and a daily, 5 weekly, 2 semi-monthly, and 15 monthly periodicals.

AUGUSTA, city, capital of Richmond county, Ga.; population (1890) 33,300; (1897) estimated, with suburbs, 46,000. In 1890 its manufacturing industries had a capital investment of \$7,770,688, of which \$5,337,362 was in cotton mills, and an output valued at \$9,244,850. In 1896 its assessed valuations were: Real, \$16,588,350, personal, \$5,931,832—total, \$22,520,182; city tax rate, \$12.50 per \$1,000, total rate \$23.27; and in 1897 the total debt, all bonded, was \$1,719,800, and city property included the Augusta canal, value \$1,500,000, waterworks value \$600,000, and real estate value \$200,000. There are 52 churches, evenly divided between white and colored people; 12 cotton mills in the city and suburbs with

total capital of \$7,170,000; 80 miles of streets; 23 miles of electric railway track; 8 banks with aggregate capital of \$1,125,000; annual trade \$65,000,000; 10 steam railways; 2 hospitals; public library; the Medical Department of the University of Georgia; and 4 daily, 4 weekly, and 2 monthly periodicals. The annual receipts of cotton average 200,000 bales, value \$6,000,000—\$8,000,000, and consumption by local mills 85,000 bales. The city has the reputation of never having defaulted in the payment of the principal or interest of its debt.

AUGUSTANA COLLEGE, Rock Island, Ill., Lutheran; co-educational; had at close of 1897, 26 professors and instructors; 512 students; 15,000 volumes in the library; 12,000 in scientific apparatus; 195,000 in grounds and buildings; 60,000 in productive funds; \$28,819 in income; president, O. Olsson D.D., PH.D.

AURORA, city, Kane county, Ill.; population (1890) 19,688; (1897) estimated 27,000. In 1896 the total assessed valuation was 3,732,268; total tax rate, \$55.50 per \$1,000; total city debt, 1897, net \$162,245; township and school debt additional \$86,000. Of the water bonds, \$46,000 was payable Feb. 1, 1895, another \$46,000 will be due Feb. 1, 1900, and two other payments of \$46,000 and \$30,000, the last due Aug. 1, 1914, will extinguish this debt. The city contains the main locomotive and car shops of the Chicago, Burlington and Quincy railroad, the repair shops of the Chicago and Iowa railroad, large cotton and woolen mills, watch factories, stove works, ice-freezing machine works, 5 national banks, electric railroad plant, and 5 daily and 5 weekly newspapers.

AUSTIN, ALFRED, poet, was born in Headingly, England, May 10, 1835. He was appointed poet laureate, in succession to Lord Tennyson, in 1895. His recent publications include *The Garden That I Love* (1894); *Jameson's Ride*, his first official poem (1896); *England's Darling* (1896); and *The Conversion of Winckelmann and Other Poems* (1897).

AUSTIN, city, capital of Travis county, and of the State of Texas; population (1890) 14,575. In 1896 the assessed valuations were: Real, \$8,325,759, personal, \$3,759,748—total, \$12,085,507; tax rate \$17.73 per \$1,000; and in 1897 the bonded debt was \$1,652,000; sinking fund \$23,371; net debt \$1,628,630. After a litigation of several years over the 1890 issue of bonds for the construction of a dam across the Colorado river, and the establishment of water and electric lighting plants for the city, the State Supreme Court May 25, 1893, declared the city bonds legal obligations. The amount involved was \$1,400,000, and a tax is now levied for the payment of interest and the creation of a sinking fund. The city has large manufacturing and commercial interests, 5 national banks, electric street railroad, and 2 daily, 11 weekly, and 9 monthly periodicals.

AUSTIN COLLEGE, Sherman, Tex., Presbyterian; had at close of 1897, 9 professors and instructors; 125 students; 10,000 volumes in the library; 45,000 invested in grounds and buildings; \$7,000 in scientific apparatus; \$70,000 in productive funds; \$9,000 in income; president, T. R. Sampson, D.D.

AUSTRALIAN LAND-TITLE AND TRANSFER SYSTEM, a system of public registration of land-titles and transfers, introduced in Australia by Sir Richard Torrens, and from him known as the Torrens system. It has been in use in Manitoba, Canada, since 1885, and prevails in some localities in England and Germany. It was adopted by the legislature of Illinois in 1895, conditionally upon its ratification in particular counties; and in November, 1895, was adopted by popular vote of Cook County, including the city of Chicago, by a vote of 82,507 to 5,308. It provides for the public registration of titles and the public guaranty of their validity. Any one may register his title upon payment

of a moderate fee, and will receive a certificate, and the registrar is required to publish a weekly list of first registrations; and keep it posted in his office for six months; and enter the registration upon the tract index in his office. He must give to the owner a certificate of registration; and this certificate, if not attacked successfully in the courts in the meantime, will after five years be conclusive evidence of title. Tax titles will not be registered till the holder has had undisputed possession of the tax-sale property for 10 years, and has paid taxes thereon 7 years. The certificates of title may be used as negotiable securities. Certificates are made out in duplicate, and numbered consecutively. One copy must remain in the registrar's office forever as record of title; the duplicate being given to the owner, whose name must be set forth with full particulars for identification. The certificate must show all mortgages, encumbrances, liens, and charges; and must be received in every court as conclusive evidence of the title of the property. Transfers are accomplished by deed, mortgage, or lease. On the death of the owner, lands so registered are treated as personal estate. Notices of judgments, etc., must be filed with the registrar before they become liens on the property. An indemnity fund is created by a tax of one-tenth of one per cent. on the value of the property certified for the first time, which is held to protect innocent persons who suffer loss under the operation of the law. The fee for registration is \$15, and this covers all expenses up to the granting of the certificate; and for each certificate and its registration the fee is \$2.

AUSTRIA-HUNGARY, a dual empire in Europe; area, Austria, 115,903 square miles; Hungary, with Croatia, Slavonia, and the town of Fiume, 125,039—total, 240,942; population (Dec. 31, 1890), Austria, 23,895,413; Hungary, etc., 17,463,473—total, 41,358,886; reigning emperor, Francis Joseph I., proclaimed Emperor of Austria, Dec. 2, 1848, and King of Hungary, June 8, 1867. Early in 1894 a Farmers' Congress held in Vienna adopted a series of resolutions expressing a popular demand for electoral reform; and the government brought out in the reichsrath, March 4, a programme which proposed to add to the 353 deputies, elected by four groups, a fifth group composed of citizens who pay five florins annually in direct taxation, or workmen who are members of insurance societies, thus largely extending the suffrage. These proposals, however, met with little favor as quite inadequate. Late in November the ministry announced that the government refused to go beyond its fundamental principle that the electorate shall be divided into social strata. It would concede that the laboring classes should be empowered through their corporations to send representatives to the chamber of deputies, but would take no steps toward universal suffrage. Continued expressions of popular discontent led the government to bring forward its measure in June, 1895, but with no popular favor. A demonstration of workmen was attempted in Vienna June 10, but was forbidden by the police. But some 10,000 gathered in the streets, and there was much disorder. The measure was as unpopular in the reichsrath, each of the existing parties feeling that they would lose some votes by its success. The labor leaders continued to advocate universal suffrage with unflinching persistence. In February, 1894, the government introduced a civil marriage bill in the Hungarian chamber. It was earnestly opposed by the ultramontane party, but was taken up by a decisive vote of the chamber, and passed its second reading in April, but was rejected by the upper house. The ministry offered to resign, but consented to continue, and the lower house passed the bill again May 21. Prime Minister Weyerle then wished the emperor to create new peers enough to insure its passage through the upper house; but the emperor refused, and Weyerle and his colleagues resigned.

May 31. Count Khün Hedervary in vain attempted to form a ministry, and Dr. Wekerle again took office, and June 22, under pressure from the emperor, the bill passed the upper house. It makes marriage and divorce civil functions, regulated by uniform law throughout Hungary. In October, bills were approved defining the relations of church and state, regulating civil marriages, requiring registration of births and deaths, and determining the status of children of mixed marriages, the clericals and conservatives opposing and the liberals carrying the measures, which received the emperor's sanction Dec. 10, 1894. A bill declaring absolute freedom of worship, and one for the official recognition of Judaism, were passed by the lower house, but defeated in the upper. Dec. 28, 1894, Dr. Wekerle again resigned, and Jan. 11, 1895, Baron Banffy, president of the chamber of deputies, and a liberal as pronounced as Wekerle, became Hungarian prime minister. He again offered the rejected bills, and March 22 they were carried through the upper house by the casting vote of the president, though the clause recognizing persons of no religious belief was stricken out. In April the papal nuncio to Austria actively opposed the bills, and this act was publicly denounced by Baron Banffy, who announced, May 1, that a protest had been sent to the pope. In fact his protest had been detained for consideration by the imperial minister of foreign affairs, Count Kalnoky, and May 2 it was announced in Vienna that Count Kalnoky did not sanction the attack on the nuncio, and at the same time Count Kalnoky resigned. The emperor refused to accept the resignation, and there were explanations; but the liberals insisted that Kalnoky should openly apologize to Banffy and should exact reparation from the Vatican. Kalnoky finally resigned, the nuncio was recalled, and May 14 the Hungarian upper house again refused to grant equal rights to those professing no religion, and May 16 they passed the bill removing the disabilities of Hebrews. In November, 1895, it was reported that the new civil-marriage law was considerably increasing the number of marriages, the peasants, who regard it as ungodly, hastening to marry before the new law went into effect, while many who were unable to marry under the old restrictions, because of religious differences, hailed the new liberty.

In February, 1894, there were 72 arrests in Prague of persons said to belong to the Omladina, a secret society which was thought to have inspired the murder of Rudolf Mrva. The trials closed Feb. 21 with the acquittal of two, and the conviction of the others of seditious conduct, and their sentence to terms of imprisonment varying from two to eight weeks. The death of the illustrious Hungarian patriot Kossuth, March 20, 1894, led to resolutions of respect and public honor in the Hungarian chamber of deputies, and his funeral was celebrated April 1 at Budapest with great respect and popular emotion. In December, 1894, the government secured from the Rothschild syndicate a loan of 76,000,000 florins (\$36,000,000) in gold to complete the reform of the currency of the empire.

In May, 1895, there were riotous demonstrations in Vienna, ostensibly anti-Semitic, but in fact largely socialistic, as the anti-Semitic movement both in Austria and Germany is also an anti-capitalistic movement. It was connected with the popular discontent at the postponement of electoral reform. The municipal elections returned 64 anti-Semites, 62 liberals, and 12 independents. This gave the anti-Semites the right to the vice-presidency of the council, which carries with it the office of deputy-mayor. They chose Dr. Lüger, the anti-Semitic leader in the reichsrath. The mayor, Dr. Gruebl, declined to be associated with Lüger, and resigned, whereupon the latter was elected burgomaster, but by a majority so narrow that he was unwilling to accept office. The masses, holding

that he was hindered by Jewish machinations, broke out into riot, and May 29 a mob seized the city hall. Another vote for burgomaster gave no requisite majority. May 30 the government dissolved the Vienna council, appointing an imperial commissary to govern the city, with the assistance of fifteen councillors—seven liberals, seven anti-Semites, and one neutral—Dr. Lüger being excluded from taking part in the administration. June 17, 1895, Prince von Windischgratz, who had been imperial prime minister since 1893, resigned. He was succeeded by Count Taaffe, who in turn was succeeded in November 1895, by Count Badeni. See BADENI, COUNT CASIMIR FELIX; HUNGARY; VIENNA.

AUTHORS, BRITISH SOCIETY OF, an association organized 1883, for the same purposes as the later American Authors' Guild, with over 800 members, and open to all persons. Its governing council of thirty is self-perpetuating. It has opened a spacious authors' club-room and publishes a periodical, *The Author*. The most noted writers are among its members, and Lord Tennyson was its president until his death.

AUTHORS CLUB, an organization with headquarters in the city of New York, whose objects are defined by its constitution to be "promotion of social intercourse among authors, the acquisition and maintenance of an appropriate library, and the execution of other fitting literary purposes." It was founded in 1882, and incorporated in 1887. It has no president, but is governed by an executive council of nine members, of whom three retire each year. The qualification for membership is thus stated: "Any person shall be eligible to membership who is the author of a published book proper to literature, or of creditable literary work, equivalent to such book. Technical publications and newspapers, as such, shall not be considered literature for the purposes of this section." At first the meetings of the club were held at the houses of the members; later, rooms were occupied in 24th Street, and in 1891 apartments for the club were specially constructed in the Carnegie Hall building, 7th Avenue and 56th Street, and here it has its permanent home. The membership numbers about 160. The meetings are held on alternate Thursday evenings, with Saturday receptions for ladies in the winter season. The club has two libraries—one consisting of the publications of its members, the other a collection of literary biography. In 1893 it published a sumptuous volume entitled *Liber Scriptorum*, containing 109 articles written specially for it by the members, each of which was signed by its author in each of the 250 copies.

AUTHORS, FRENCH SOCIETY OF (*Société des Gens de Lettres*), a society organized 1837, especially for the protection of authors in their rights. At first much opposed, it has grown to be a dominant power. Any man of letters is eligible. An elective committee of 24 is in control. In the first 30 years \$216,800 was collected, mostly from pirating publishers. Its pension fund provides for aid in work, for the sick, and for age. The society publishes a journal, the *Chronique*, and also a bulletin of items for editors of literary journals.

AUTHORS' GUILD, AMERICAN, organized in New York, 1892, under the title of the Association of American Authors, now entitled the American Authors' Guild (under which name it was incorporated 1895), has for its objects the promotion of a professional spirit among authors, and a better understanding between authors and publishers by some practical means of securing accurate returns of sales; also, to advise authors as to the value of literary property and the different modes of publishing; to see that contracts are drawn so as to secure authors' rights; to settle disputes in these matters by arbitration or at law; to

secure any reforms needed, as in copyright and postal rates; and in general to guard literary property and advance the interests of American authors and literature. All persons engaged in literary pursuits are eligible to membership. Surplus moneys from fees or bequests are to be held as a pension fund for necessitous members. The initiation fee is \$5; the annual dues \$3; life-membership, \$50. The membership has increased to about 300, including many noted writers. The Guild Hall is 226 West 58th Street, New York City.

AVALON COLLEGE, Trenton, Mo., United Brethren; co-educational; had at close of 1897, 10 professors and instructors; 200 students; 1,000 volumes in the library; \$50,000 invested in grounds and buildings; \$5,000 in gifts; \$8,000 in income; president, C. J. Kephart, D.D.

BABB, WASHINGTON IRVING, jurist, was born near Burlington, Ia., in 1844; entered the Iowa Wesleyan University, 1860, but left to join the Union army, 1862; returned to the university, 1864, and completed the course; studied law and was admitted to the bar, 1868; settled in Mount Pleasant to practice; was twice elected a district judge, and was the unsuccessful Democratic candidate for governor of Iowa, 1895.

BADEN, GRAND DUCHY OF, one of the States of the German empire; population (1895) 1,725,464; capital, Carlsruhe; reigning grand duke, Friedrich I. The budget is voted for a period of two years; estimates for 1896, revenue 79,168,591 marks, expenditure 86,551,695 marks; deficiency to be made up from surplus of former years. The only public debt is that incurred for railway construction, which amounted 1896 to 335,998,769 marks. The revenue included the share of the duchy in the customs receipts of the empire, 12,984,552 marks, and the expenditures, the duchy's contribution to the empire, 14,229,020 marks. Nearly two-thirds of the population are Roman Catholic, and somewhat more than one-third are Protestant. Education is general and compulsory. The elementary schools are maintained by the communes, aided by the State. At the end of 1894 there were 2 universities; 16 gymnasia, and progymnasia; 19 realgymnasia, realprogymnasia, oberrealschulen, and realschulen; 24 other middle schools; 1,613 elementary schools, with 5,572 teachers and 316,962 pupils; a technical academy; and 189 technical, agricultural, and other special schools—in all, 1,864 institutions, with 7,483 teachers, and 348,262 students and pupils. More than half of the area of the duchy is now under cultivation. The chief crops are wheat, spelt, rye, barley, oats, beets, turnips, and potatoes; principal mineral productions, salt and building stones; leading manufactures, silk ribbons, felt and straw hats, brushes, leather, paper and cardboard, clocks, musical instruments, machinery, chemicals, and cigars. There are over 900 miles of railway belonging to the duchy, the greater part of which is owned by the State.

BADENI, COUNT CASIMIR FELIX, Austrian statesman, was born in Poland, Oct. 14, 1846; received a university education; entered the Austrian civil service; became district chief at Zolkiew, 1871; was called to the ministry of the interior, 1873; appointed governor of Galicia, 1888; and accepted the office of prime minister of Austria-Hungary, Sept. 15, 1895. He belongs to a noble family, is conservative in politics, and has proved himself an able administrator. In April, 1897, because of inability to maintain a Liberal majority in the recently elected reichsrath, he resigned with his cabinet; but the emperor declined to accept the resignations, and the ministers remained in office till Nov. 28, when they again resigned, and a new cabinet was organized by Baron von Gautsch. On Sept. 25, 1897, Count Badeni was slightly wounded in a duel with Dr. Wolff, the German Nationalist leader. See AUSTRIA-HUNGARY: HUNGARY: VIENNA.

BAGIRMI, a sultanate of Central Africa, between Lake Chad, the Lower Shari River, and the Sokoro hills west of Lake Fitri, inhabited by the Barmaghé Mohammedan negroes. By the Franco-German agreement of Feb. 1, 1895, it was reserved, with all the region east of the Shari, to the French sphere of influence.

BAHIA, one of the provinces of Brazil; also the capital of the same and the second largest commercial city in the republic; population, province (1890) 1,683,141; city (1892) estimated, 200,000. United States Consul McDaniel reported May 1, 1895, that general business showed a marked improvement; that building operations were more active than ever; that an extensive coaling depot has been completed on land reclaimed from the sea; and that the manufacture of cotton goods has reached larger proportions than in any other city in Brazil. One stock company with capital of \$1,600,000 was completing a large plant, facing the bay; another with the same capital was operating two large cotton factories and a boot and shoe factory; and a third with capital of \$880,000 controlled six factories, with an annual consumption of 2,228,600 pounds of raw cotton.

BAILEY, JAMES MONTGOMERY, author and humorist, known as "The Danbury News Man," was born in Albany, N. Y., Sept. 25, 1811; died in Danbury, Conn., March 4, 1894. At the time of his death he was proprietor of the *Danbury News*, which he founded in 1870, and in connection with which his reputation as a humorist was made. He was also a life member of the Connecticut Humane Society, the Connecticut Historical Society, and the Fairfield County Historical Society, and of many other organizations and fraternities, and president of the local Board of Trade.

BAIRD, HENRY MARTYN, PH.D., D.D. LL.D., educator and historian, was born in Philadelphia, Pa., Jan. 17, 1832. In 1894 he contributed to the *Methodist Review* an important historical article on *Refugee Churches in England*; and in 1895 he published *The Huguenots and the Revocation of the Edict of Nantes* (2 vols., 8vo), being the third in a series of works of which the earlier were, *The Rise of the Huguenots in France* and *The Huguenots and Henry of Navarre*.

BAKER, JAMES, English journalist and author. During 1894 he contributed to the *London Times*, *Pall Mall Gazette*, *Morning Post*, and *Globe*; and published *Pictures from Bohemia with Pen and Pencil*, with profuse illustrations (reprinted in the United States); and *A Forgotten Great Englishman*.

BAKER, LUCIEN, lawyer, was born in Gorham, Fulton county, O., 1846; graduated at Adrian College, Mich.; admitted to the bar of Monroe county, Mich., 1868; and has practiced since in Leavenworth, Kan. He has been city attorney and State senator, and an unsuccessful candidate for county attorney, and Congress, and was elected United States senator as a Republican in 1895. He is a brother of John H. Baker, United States district judge for the Indiana district, and has been conspicuous in opposing Populism.

BAKER UNIVERSITY, Baldwin, Kan., Methodist Episcopal; co-educational; had at close of 1897, 23 professors and instructors; 532 students; 6,000 volumes in the library; \$100,000 invested in grounds and buildings; \$40,000 in productive funds; \$3,000 in gifts; \$16,000 in income; president, Lemuel H. Murfin, A.B.

BAKU, one of the provinces of Asiatic Russia, on the Caspian Sea; also the capital and seaport of the same; population (1893), province, 785,096; city (1897), 112,253. The province contains the most productive petroleum (locally naphtha) oil wells in the world, the owners of which, aided by the government authorities, are now seeking to control the oil trade of Europe and Asia and to

exclude the petroleum production of the United States. In October, 1895, negotiations were pending between Russia and Italy for a commercial treaty under which Italy would adopt a preferential tariff on Russian petroleum. To meet the competition of the United States, the Russians are reducing expenses and figuring closely, and the railways are aiding them by low transportation rates. Between Aug. 12 and Sept. 12, 1895, there were shipped from Baku by rail alone 11,386 cistern carloads of oil. Russian crude oil only yields 30 per cent. of refined oil, against 90 per cent. in the case of American. At Baku the oil is estimated and sold by weight, the unit being the pood, or 36,112 pounds.

BALDWIN, JAMES MARK, M.A., PH.D., psychologist, was born in Columbia, S. C., Jan. 12, 1861. He was educated at Princeton College and the universities of Leipsic and Berlin; became instructor in French and German at Princeton College in 1886, professor of philosophy in Lake Forest University in 1887, and in Toronto University in 1889; and has been professor of psychology at Princeton since 1893. He contributed many articles to the revised edition of *Johnson's Universal Cyclopedia* in 1894-5, and among his recent publications are *Mental Development in the Child and the Race: Methods and Processes* (1895), and *Social Interpretations of the Principles of Mental Development* (1897). The latter is substantially the work for which he was awarded the gold medal of the Royal Academy of Science and Letters of Denmark, in a competition for the best work on a general question in social ethics.

BALDWIN UNIVERSITY, Berea, Ohio, Methodist Episcopal; co-educational; had at close of 1897, 18 professors and instructors; 322 students; 5,000 volumes in the library; \$131,565 invested in grounds and buildings; \$5,000 in scientific apparatus; \$126,000 in productive funds; \$9,000 in income; president, Millard F. Warner, D.D.

BALFOUR, RT. HON. ARTHUR JAMES, P.C., LL.D., D.C.L., F.R.S., statesman and author, was born July 25, 1848. In 1894 he contributed to the *International Journal of Ethics* an article on *Naturalism and Ethics*; and in 1895 he published in London and New York *The Foundations of Belief*. He became first lord of the treasury and leader of the House of Commons, June, 1895.

BALFOUR, GERALD WILLIAM, chief secretary for Ireland, was born in Edinburgh, Scotland, 1853; brother of the Rt. Hon. Arthur J. Balfour, and nephew of the Marquis of Salisbury; educated at Eton and Trinity College, Cambridge; private secretary to his brother when president of the Local Government Board, 1885; M. P. for the central division of Leeds since 1885; married a daughter of the 1st Earl of Lytton, 1887; and member of the Labor Commission, 1891. On the accession of the conservative ministry under the Marquis of Salisbury, June 25, 1895, he was appointed chief secretary for Ireland, a post held by his brother, 1887-91.

BALL, SIR ROBERT STAWELL, LL.D., F.R.S., astronomer, was born in Dublin, Ireland, July 1, 1840. He furnished to the *Smithsonian Institution Reports* in 1894 papers entitled: *Atoms and Sunbeams*, and *Wanderings of the North Pole*; and published in 1894 *The Story of the Sun*; and in 1895, *An Atlas of Astronomy*.

BALLANTYNE, ROBERT MICHAEL, author, was born in Edinburgh, Scotland, and in 1825; died in Rome, Italy, Feb. 8, 1894. He produced 62 stories in 74 volumes, among them *The Coral Island*; *The World of Ice*; *Ungava*; *The Dog Crusoe*, and *The Young Fur Traders*. He was also an accomplished watercolor artist.

BALLOT REFORM. In 1895, every State in the United States, excepting Georgia, Louisiana, North Carolina, and South Carolina, had adopted some reformed plan of balloting, based on the Australian system and modified to suit local conditions. The first States that adopted a reformed plan were Massachusetts, for the whole State, and Kentucky, for the city of Louisville, both in 1888. Subsequent experience and legislation have led to a variety in the forms of the ballot which in brief are: (1) in New York and New Jersey, there is a separate ballot for each party ticket, and pasters are allowed; (2) in all other States which have reformed their ballot system, there is a single ballot, usually called a "blanket" ballot, because of its size, on which the voter indicates his choice—for a straight vote—by marking a cross in the circle at the head of the column containing the nominees of his party, and for a scattered or split vote, by making a cross in the space before the desired name. Two forms of the single ballot are in use: (a) one, following the Australian plan, in which the titles of the offices are arranged alphabetically, the names of the candidates and of the party following; (b) one which groups all names and offices by parties. In the New York State election, in November, 1895, the single ballot had ten columns, one for each organization that had made regular nominations, and another column containing only the titles of the offices to be filled, with a space on the left to indicate the choice by making a cross, and a space beneath the title of office, in which the voter could write the name of any person for whom he desired to vote, whose name was not printed in any of the party columns of the ballot. This ballot was the largest that has ever been used. Each of the ten columns was headed by a registered party emblem, the circle in which to indicate the choice for a straight vote, and the name of the party organization; and the parties making full nominations had nineteen names. For several days prior to the election each of the large parties had "voting schools," in which voters were instructed in the manner of voting the ballot. All of the old-time "scratching" of ballots is avoided in each variety of the reformed methods.

A newer feature of ballot reform is the substitution for the ballot paper, which is folded and deposited by hand, of voting machines, which are contrivances that both record the votes and count them, enabling inspectors to see at any moment how many votes have been cast and for whom. No machine has as yet (1898) come into general use, but several States have authorized their employment, and others have referred the question of their adoption to local option. Three varieties of the voting machine have been legally sanctioned: (1) the Myers, in which the single ballot is placed in a frame having a push-knob for each candidate, the voter indicating his choice by pushing the knob opposite his candidate's name, when the machine indicates the vote on a dial at the back of the frame, and locks the knobs of all other candidates for the same office (before a second voter is ready, all knobs are unlocked); (2) the McFammany, which contains on its face a slot for each office, beneath which is a card bearing the names of the candidates for the office seen through the slot, the voter's choice being indicated by turning a wheel till the name of his candidate appears, when he pushes a knob which punctures the tally-sheet; and (3) the Rhines, in which the names are arranged as in the Myers by parties and offices, slip names are inserted in the push buttons, and separate tally-sheets for each candidate with vertical serial numbers are placed beneath the face, the voter pushing a button which places a punch in such a position for each name that when the lid of the machine is closed the next number on each tally-sheet is punctured.

BALTIC AND NORTH SEA CANAL, an important waterway extending from Kiel, on Kiel Bay, at the southwest corner of the Baltic Sea, 61 miles south-westerly across Schleswig-Holstein to Brunsbüttel on the Elbe, near its debouchure into the North Sea. It is 200 feet wide and 28 deep, to give passage to the largest ships. It was constructed by an appropriation by the German Imperial Government amounting to \$25,000,000, and by the Prussian Government of \$12,500,000, and was officially opened Sept. 29, 1894. The work was, however, far from complete at that time, and the great naval celebration of the opening was not till June, 1895. June 19 the emperor and suite arrived at Hamburg, where, at a civic banquet, he declared that the great work was in the interests of peace, not war. June 20 the emperor's yacht *Hohenzollern* entered the canal from the North Sea, and was followed through by twenty-three vessels of different nations. June 21 the emperor laid the keystone of the canal at Kiel, which will form the pedestal of a statue of the emperor William I., under whom the work was begun. June 22 there were maneuvers of the German fleet in Kiel Bay. More than 80 warships of different nations took part in the celebration, of which there were from Germany 30, Sweden and Norway 11, Great Britain 11, Denmark 6, the United States 4, Austria-Hungary 4, Russia 3, France 3, Spain 3, the Netherlands 2, Roumania 2, Portugal 1, and Turkey 1. An important feature of the canal is the bridges by which it is crossed. Four lines of railway pass over these, and two of them over fixed bridges so high that full-masted vessels may pass beneath with only the lowering of the royal mast, the height being 137 ft., 9 $\frac{3}{4}$ inches. These two bridges have an arched span of 511 ft., the longest in Germany. The other railways pass by swing bridges with the pivot in the canal bank. The registered tonnage of the traffic between the North Sea and the Baltic was estimated for 1895 at 18,521,212 tons, having increased about 50 per cent. since 1880. It is believed that the saving per ton for vessels taking the canal route will average 25 cents. The toll rates have been fixed so low as to pay but a small interest on the cost of construction.

BALTIMORE, city, port of entry, co-extensive with Baltimore City county, Md.; population (1890) 434,439; (1896) estimated 500,000. Mayor Latrobe reported Jan. 1, 1895, cash balance Dec. 31, 1893, \$572,381.54; receipts from all sources 1894, \$12,914,068.98—total, \$13,486,450.52; expenditures 1894, \$13,217,503.86—balance Dec. 31, 1894, \$268,946.66. The debt Jan. 1, 1895, was \$31,126,626 (including water debt \$6,576,500); sinking funds and other assets \$6,733,246; net debt \$24,393,380. The annual report of the city register, issued in 1898, showed that the debt was increased by \$2,648,558.52 during 1897. The debt was figured to be \$36,150,576.95. Stock of the various loans sold during the year was: Funding, 1936, entire loan, \$1,453,300; six-million loan of 1940, \$534,400; four-million loan of 1945, \$665,400. This shows a total gross increase of \$2,653,100 in the debt, but stock amounting to \$4,541.48 was redeemed during the year. The report also showed that the unissued stock of the \$6,000,000 loan amounted to \$725,600, and that of the \$4,000,000 loan to \$2,579,500. The \$5,000,000 loan has practically been exhausted. The general fund, however, owed it \$28,653.04, and \$44,008.76 was due to the \$6,000,000 loan. The \$1,000,000 loan, from which comes the money to extend the water supply, on the other hand, owed the general fund \$31,478.81. The sinking funds held by the finance commissioners were increased in 1897 by \$852,526.91. The total of these funds was \$4,376,398.48. The net floating debt at the beginning of 1898 was not much over \$200,000, if that high. The assessed valuations for taxation Jan. 1, 1895, were: Real estate \$244,775,740, personal

\$75,946,737—total, \$320,722,477; and in 1896: Real, \$246,137,249; personal, \$79,607,139—total, \$325,744,388, with tax rate \$21.77 per \$1,000. There were 179 public schools, of which 165 were day schools, with 1,557 teachers and 59,808 enrolled pupils, and 69 night school teachers and 2,215 pupils, besides 30 special teachers for all the schools. The estimate for current expenses of the schools 1895 was \$1,210,590. In the fiscal year ending June 30, 1897, the imports of merchandise aggregated in value \$11,371,193, and the exports \$85,692,651, a decrease in a year of \$2,105,437 in imports, and an increase of \$19,293,746 in exports. The clearances were 117 sailing vessels of 58,673 tons and 488 steam vessels of 918,503 tons, and the entrances, 141 sailing vessels of 56,196 tons and 329 steam vessels of 577,439 tons. In 1895 there were 23 national banks (capital \$13,326,950), 6 State banks (capital \$1,123,500), 2 trust and deposit companies (capital \$1,500,000), a fidelity and trust company, and 19 private banking-houses. There were over 250 miles of cable and trolley railway lines, comprising a rapid transit equipment representing an investment of over \$20,000,000. A tax on the gross receipts of the street railway companies, amounting in 1895 to \$250,000, furnishes the cost of maintaining the public park system, for which the city has a world-wide reputation, and of acquiring new tracts. An additional park of over 400 acres was acquired 1895, at a cost of \$710,000, which will also be paid for from this tax. The new park is the old Clifton estate of Johns Hopkins. In 1897 Baltimore had 78 periodicals, of which 9 were daily, 1 semi-weekly, 33 weekly, 1 semi-monthly, 29 monthly, 1 bi-monthly and 4 quarterly.

BALUCHISTAN, a country in southern Central Asia, bordering on Afghanistan, British India, and Persia; comprising Independent Baluchistan, Quetta and the Bolan (administered by the British government), British Baluchistan, and the territory of some Afghan and Baluch tribes on the border of India; total area, about 130,000 square miles; population of Independent and British Baluchistan, about 500,000; seat of administration, Quetta; Khan, Mir Mahmood. Since 1893, when Khudadad Khan, found guilty of having murdered his minister and other subjects, was permitted to abdicate in favor of his son, Mir Mahmood, the region has been quite pacific. Serious trouble was threatened early in 1894; but the firmness of the new Khan overcame it. He has given evidence of a desire to cultivate close relations with the British, and has offered to equip and maintain at his own expense a military force which shall be at all times at the disposal of the British Indian government. The Bolan and Sind-Pishin railways are under the control of the British; surveys have been made for a railway from Karachi to the fortified city of Quetta, passing through Khelat, the largest city; and a submarine cable has been laid from Karachi to the Persian gulf, touching at Gwadar, whence a telegraph line has been extended to Quetta. In 1894 the imports at Las Bela and Khelat aggregated 51,500Rx (about \$113,300), and the exports 112,800Rx (about \$248,160), the entire trade being with British India. In August, 1897, three of the principal chiefs were arrested at Quetta, on suspicion of disaffection to the government, and to prevent their joining in the uprising along the Indian frontier. See **ABDURRAHMAN KANS; AFGHANISTAN; INDIA, BRITISH.**

BAMBERG, city in Bavaria, Upper Franconia, Germany; noted for its manufactures of porcelain and jewelry; population (1895) 38,949. The principal articles of export to the United States are, in order of value, baskets and basketware; china, glass, porcelain, stone and earthenware; wine, brandy, beer and liquors; and hops.

BARLEY. See **AGRICULTURE.**

BANCROFT, HUBERT HOWE, historian, was born at Granville, O., May 5, 1832. He published in 1894, separately in Spanish and English, *Resources and Development of Mexico*, and in 1896 offered to sell his great library on Pacific coast history, valued at \$500,000, to the New York Public Library for \$300,000.

BANGKOK, city, capital of the Kingdom of Siam; population (1894) estimated 600,000, chiefly Chinese. U. S. Minister Barrett reported July 8 1895, that the city was one of many Oriental ports that would furnish ample cargoes for United States merchantmen should our shipping interests ever regain their former hold in that part of the world, and that the British, French and Germans were striving vigorously to control the Siamese carrying trade, all of which centers in Bangkok. During the calendar year 1894, 516 vessels entered the port, not one from the United States. Great Britain had the majority, 371, and Germany was second with 62. The total tonnage was 414,583. Of the total value of cargoes brought into port by 412 vessels, \$17,083,456, English vessels carried \$14,787,742, or about 80 per cent. At present the foreign trade is principally with Singapore, Hong Kong, the British Shan States, and Yunnan.

BANGOR, city, port of entry, capital of Penobscot county, Me.; population (1890) 19,103; (1897) estimated, 23,000. During the fiscal year ending June 30, 1897, the imports of merchandise aggregated in value \$1,094,912, and exports, \$1,303,911. The assessed valuations 1896 were: Real, \$9,504,233, personal \$4,157,225—total, \$13,661,458; tax rate \$27.50 per \$1,000; total debt March 1, 1897, \$1,798,906 (including water debt \$500,000 and floating \$17,500); sinking fund \$1,483,721; net debt \$315,185. In 1897 there were 5 national banks, 2 savings banks, a trust and banking company, a private bank, an electric street railway extending to Brewer, and 3 daily, 4 weekly, and 2 monthly periodicals.

BANGS, JOHN KENDRICK, journalist and author, was born in Yonkers, N. Y., in 1862; was graduated at Columbia College and its law school; gave up the intention to practice law for journalism; and has become widely known as a humorist. In 1894 he was the unsuccessful Democratic candidate for mayor of Yonkers. His publications include *Three Weeks in Politics* and *The Water Ghost and Others* (1894); *The Idiot and Mr. Bonaparte of Corsica* (1895); *The Bicyclers and Three Other Farces*, and *A House-Boat on the Styx* (1896); *A Rebellious Heroine* and *The Pursuit of the House-Boat* (1897), etc. He has lectured for charity on *The Evolution of the Humorist from Adam to Nye*.

BANK OF ENGLAND, established in 1694; has ordinary banking and issue departments, wholly separate but under the same management; amount of notes issued limited to value of metallic securities. On Oct. 28, 1897, the circulation rested on the following security: Gold and bullion, £29,644,045; government debt, £11,015,100; other securities, £5,784,900—total issues, £46,444,045. The banking department reported capital, £14,553,000; surplus, £3,158,898; deposits, £4,903,657; other liabilities, £141,371—total liabilities, £62,756,926. The assets comprised: Government securities, £12,723,657; other securities, £28,575,153; notes, £19,173,990; coin, £2,284,126—total, £62,756,926. The metallic reserve and securities of the issues department are not subject to the other liabilities of the bank. Notes may be issued on silver bullion to the extent of one-fifth of its metallic reserve. See BANKING SYSTEMS, FOREIGN.

United Kingdom.—The government owes the bank £11,015,100, on which it pays 2½ per cent. interest till April 5, 1903. After that date it will pay 2½ per cent., unless the bank has given six months' notice declining to accept that rate; in which case the debt may be paid off without further notice, and until payment

the interest will remain 2½. At the half-yearly general court of the directors and company, March 15, 1894, it was announced that the chief cashier, Mr. May, had been guilty of grave irregularities, and had been obliged to resign. To meet all possible loss £250,000 had been set aside. At the half-yearly general court following, Sept. 13, it was announced that the net profits for the half-year were £587,429, as against £635,904 for the previous half-year; and a half-year's dividend of £4 per cent., interest and profits, was made, as against £4 10s. per cent., for the previous half-year. The leading cause of the diminished profits was said to be due, not to any fresh losses, nor any necessity to increase the provision to cover losses, but to an unprecedented accumulation of the reserves in the hands of the bank, and the very low value of money during the period. In March, 1894, the liabilities on the Baring liquidation amounted to £3,537,667, of which the debt due to the Bank of England was £3,450,000. During the subsequent half-year the liabilities were reduced to £2,481,985, and the debt due the bank to £2,409,000; and Nov. 21, 1894, the liquidation was finally closed, the remaining securities, valued at about £2,000,000 being transferred by the bank to a syndicate which relieved the bank of further responsibility.

BANKING SYSTEMS, FOREIGN. In 1895 the United States comptroller of the currency, aided by the ambassadors, ministers, and consuls of the United States, undertook to gather information concerning foreign banking systems. Replies were received from 23 countries, those from 21 giving in detail the information desired. The following is a brief summary of the foreign methods thus ascertained:

Belgium.—Kinds: Banque Nationale, commercial and co-operative banks, mortgage companies. All banks except Banque Nationale may allow interest; no legal provisions governing deposits; no official approval of plan of organization; branch banks permitted; license fee based on earnings required except from Banque Nationale, which is taxed on its circulation, limited to three times its coin reserve and guaranteed by available assets. The State is not a shareholder in any bank. Annual statements required of some banks; monthly of others.

Canada.—Kinds: Government and postal savings banks, commercial banks, mortgage companies, private bankers. A special act of parliament, proof of contribution of capital, and treasury board approval of organization required; management by directors; in nearly all cases double liability imposed on shareholders for claims; no government examinations; monthly reports and special ones when called for; no reserve required; loans not allowed on bank stock, real estate, nor completed ships; branch banks permitted; government not a shareholder; in insolvency, bank notes are first lien on assets, Dominion and provincial claims second, depositors third; in general, banks issue circulating notes equal to paid-up capital, and accumulate a redemption fund; smallest denomination \$5.

Chile.—Kinds: Banks of issue and mortgage banks. Compliance with civil and commercial code applying to joint-stock companies, capital stock partly paid, articles of association filed with public officers and published in newspapers, and approval of the president of the republic required; mortgage banks have managers appointed by president of republic; directors responsible for obligations contracted in their time; shareholders liable for amount of stock held; banks of issue report monthly to the minister of finance, others file reports annually; branch banks permitted; government not a shareholder; no taxes for banking privileges; general insolvency laws applicable to all banks; circulating notes

cannot exceed 150 per cent. of stock, and are guaranteed by deposit of securities in the mint.

China.—Kinds: No incorporated banks, foreign banks, private banks. Report of organization to local officials and their approval required; government not a shareholder; branch banks permitted; interest allowed on deposits; no taxes imposed for privileges; no report of condition required; all banks expected to aid the government with loans and subsidies, circulation unrestricted; no provisions for redeeming bank notes; government money deposited in banks; banks guarantee customers' paper and issue letters of credit; a private bank in each province acts as a government treasury and receives taxes.

Denmark.—Kinds: National Bank of Copenhagen, and private and savings banks. National bank established by special act; capital provided by taxes on real estate, shareholders owning stock equal to their taxes; private banks required to notify public officers of formation and file by-laws; savings banks organize under a special act and by-laws must be sanctioned by the king; shareholders (excepting savings banks) liable for amount for stock held; monthly and annual reports required of all; the National Bank must keep a cash reserve of 25 per cent. in coin of its circulation; deposits received and interest paid by all; the National Bank alone permitted to issue national bank notes, secured by metal reserve and other securities.

Ecuador.—Kinds: Commercial banks and mortgage companies. Government officials determine when requirements are complied with; 40 per cent. of capital required for starting; shareholders liable for amount of stock held; branch banks permitted; government not a shareholder; tax imposed on circulation; matters of loans, securities, cash reserve, and surplus fund left to directors; government calls for reports on condition and makes examinations when advisable.

France.—Kinds: Bank of France, commercial, provincial, and colonial banks. The Bank of France is chartered by the Chambers, has capital of 182,500,000 fr. (\$36,500,000), is managed by a governor, 2 deputy governors, 15 councilors, and 3 inspectors, and makes weekly, semi-annual, and annual reports; shareholders liable for amount of investment; loans restricted to 80 per cent. on government securities and 75 per cent. on others; legal reserve fund 10,000,000 fr. (\$2,000,000) beside real estate for banking purposes; surplus fund provided for; deposits (smallest 500 fr.) payable at sight without interest at the bank or any branch; government not a shareholder; branch banks compulsory; banks taxed 4 per cent. on dividends and render special services; notes payable in coin and redeemed in gold; circulation authorized to extent of 4,000,000,000 fr. (\$800,000,000).

Germany.—Kinds: Imperial Bank, commercial and circulation banks, and mortgage companies. The Imperial Bank is organized under a special statute, is governed by directors under the chancellor of the empire, and supervised by five bank curators. The government shares the profits of this bank, which must not pay interest on more than its capital and reserve. Circulation banks organize under a special statute, commercial banks by making an entry in the commercial register, and mortgage banks under grants by the different States; certification of compliance with law made by the chancellor or federal council for banks of issue, the State governments for mortgage companies, and the commercial court for commercial banks; imperial law fixes the capital of banks of issue and bank statutes that of other banks; banks of issue make weekly and annual reports, others annual; shareholders of all are liable to full-paid stock held; the Imperial Bank has no restrictions as to loans, others have; cash reserve of one-third of

circulation required; branch banks permitted; no tax for granting bank charter; the States share in profits of banks of issue; insolvency governed by general bankruptcy law; redemption of notes secured by one-third cash or bullion and remainder by discounts payable in three months, with at least two solvent sureties.

Guatemala.—Kinds: Commercial banks and banks of circulation. All regulations for transaction of business must be filed and approved by the government; semi-annual reports required; government experts examine; subject of loans left to directors; cash reserve of two-thirds circulation required of some banks, none for others; accumulation of surplus fund optional with directors; interest generally allowed on time deposits; branch banks permitted; government not a shareholder; no tax for privileges; unlimited amount of notes of issue allowed, but sufficient funds must be held for their redemption.

Haiti.—Kinds: National Bank of Haiti and private banks. Special statutes regulate organization and management; government not a shareholder; deposits of Haitian currency and United States gold received without interest; branch banks permitted; monthly reports; no tax for banking privileges; bank is fiscal agent of government; private bankers pay a foreigner's license; national bank only issues currency, redeemed in United States gold.

Hawaii.—Kinds: Postal savings and private. A license fee and filing of list of shareholders required; savings banks only pay interest, 5 per cent.; government not a shareholder; branch banks permitted; no bank notes issued; insolvent banks treated as other insolvents.

Italy.—Kinds: Banks of issue only reported on; requirements established by law; no officer's duty to determine compliance; capital must be currency or gold ingots held in bank; members of parliament cannot be bank managers; general supervision by ministry of agriculture, industry and commerce, and the treasury department; extraordinary examinations made every two years; Bank of Italy cannot loan on its own shares; real estate mortgages taken only for doubtful debts and disposed of within three years; government not a shareholder; branch banks permitted; tax on circulation in excess of capital; notes redeemed in currency; security for circulation currency or gold ingots equal to capital.

Netherlands.—Kinds: Bank of Netherlands and private banks; royal sanction and deed of foundation filed are required to start; government not a shareholder, but shares in profits of the Bank of Netherlands, which alone issues circulation; branch banks permitted; weekly balances and annual reports required; no provision as to shareholders' liability.

Paraguay.—Kinds: Government, commercial, and private. Formal application and filing of articles of association required; no general provisions regarding capital; some banks have government privileges by special arrangement; annual reports published and distributed among shareholders; no restrictions regarding deposits; interest paid generally; branch banks permitted; private banks pay annual license of about \$170 in gold; circulating notes redeemed through the custom-house.

Peru.—Kinds: Commercial banks and loan companies. Municipal officers determine compliance with law; government not a shareholder; branch banks permitted; shareholders liable for amount of investment; tax of 5 per cent. on net profits; interest allowed; monthly and semi-annual reports.

Portugal.—Kinds: Bank of Portugal and commercial banks. Consent of government necessary to start; capital must be fully paid in; shareholders liable for amount of investment; Bank of Portugal managed by a governor, 10 directors, and fiscal board of 7; reports weekly, other banks monthly; restricted interest

allowed; government not a shareholder; branch banks permitted; insolvent banks administered by government commissioner; Bank of Portugal only issues circulation; no provision for redemption.

Russia.—Kinds: Imperial Bank, commercial and discount banks, savings and co-operative banks, loan and mortgage companies. Banks are chartered on certificate of minister of finance on compliance with law; special requirements regarding capital for each bank; shareholders elect council of administration, and are liable for amount of investment; monthly reports to minister of finance and examinations by public officers; deposits limited by charters; interest payments optional; government not interested in banks excepting the Imperial, a part of the treasury department; branch banks permitted; net profits taxed 3-5 per cent. Imperial Bank only issues circulation; notes legally redeemable in gold and silver, but this provision is ignored.

Switzerland.—Kinds: State and private banks. Banks of issue must have at least 500,000 fr. (\$100,000) in paid-up capital, and may receive deposits and pay interest; general government not a shareholder; but some cantons are; tax of one per cent. on average circulation; cantons may tax up to 6 per cent.; banks may issue notes to double amount of capital on consent of federal council; the federal treasury redeems notes of retired banks.

Turkey.—Kinds: Imperial Ottoman Bank, private banks, and limited liability companies. Imperial Bank under nominal supervision of imperial commissioner; imperial firman required for limited liability companies, and government passes on organization proceedings; capital, management and shareholders' liability fixed by the statutes of the bank; no reports required; no provisions for examining banks other than the Imperial; branch banks allowed; reserve determined by the statutes in each case; government not a shareholder; interest allowed; Imperial Bank only issues notes, for which it pays a tax, and must hold a reserve in cash of 33 per cent. of the value of the notes.

United Kingdom.—Kinds: Bank of England (*q. v.*), joint-stock, postal savings, and private banks. Regulations for organization in special statutes. On Jan. 2, 1895, there were 104 joint-stock banks in England and Wales, with £43,862,887 (\$216,373,632) capital, and 2,468 branches; 10 in Scotland, with 995 branches; 9 in Ireland, with 484 branches; and 32 in the colonies, with 1,733 branches. There were 24 banks incorporated in England doing business in foreign countries. The joint-stock banks in the United Kingdom had a total capital and reserve of £123,910,000 (\$602,202,600) and total deposits of £647,391,000 (\$3,146,320,260).

Uruguay.—Kinds: Private banks (national bank now insolvent). Banks file statutes declaring amount of capital and providing for management, passed on by government and attorney-general; branch banks permitted; banks of circulation taxed \$2,000 per annum, others \$1,000, and all banks \$6.50 per annum on each \$1,000 of declared capital; circulation restricted to double amount of capital (limited 1895 to two banks); circulating notes redeemable in gold; government was shareholder in insolvent national bank; circulating notes of insolvent banks are preferred claims.

Venezuela.—Kinds: Commercial banks, circulation banks, and mortgage companies. Banks pay license fee and file deed and rules; examinations by government inspector; government not a shareholder; cash reserve of 25 per cent. of capital of circulation banks and mortgage companies required; interest usually allowed; branch banks permitted; quarterly reports; circulation must not exceed 50 per cent. of capital; notes redeemed in currency by the banks; insolvent banks liquidated by the government.

BANKS AND BANKING. The annual report of the United States comptroller of the currency for the year ending Oct. 31, 1896, showed that on that day there were 3,679 national banks in operation, having a combined authorized capital of \$650,014,895, held by 288,902 shareholders. The banks had circulating notes outstanding aggregating \$211,412,820, of which \$208,988,172 was secured by United States bonds, and the balance by lawful money deposited with the treasurer of the United States, and the gross increase in circulation in the year was \$21,099,429. Of total resources of \$3,262,685,313.83 loans and discounts were credited with \$1,893,268,839.31, and money of all kinds in hand \$362,165,733.85. Liabilities were represented by individual deposits \$1,577,891,058.73, surplus and undivided profits \$336,342,834.70, and secured outstanding circulation \$207,944,019.50. During the year 28 banks were organized, with aggregate capital \$3,245,000; the corporate existence of 26 banks with capital \$3,153,800 was extended; 1 bank with capital \$100,000 retired on expiration of its corporate existence; 37 banks with capital \$3,745,000 went into voluntary liquidation; receivers were appointed for 27 banks.

On June 30, 1896, there were 5,708 banks incorporated under State authority, and in active operation, of which reports were received from 3,708 banks of circulation, 988 mutual and stock banks for savings, and 260 loan and trust corporations. The State banks of circulation had a combined capital of \$210,133,835; deposits \$695,659,914; loans, \$702,505,798; bonds and stocks, \$97,234,561, and resources, \$1,107,187,508. The business of the year showed a decrease in deposits of about \$16,750,509; and in resources, \$40,358,310, and an increase in loans \$4,817,730, and in bonds and stocks \$5,245,865. Of the savings banks 667 were mutual and 311 stock associations. Excepting 11 banks in Ohio, Indiana, West Virginia, and Wisconsin, the mutual banks were confined to the Eastern and Middle States. The loans of the mutual banks aggregated \$845,788,348; bonds and stocks \$865,177,508; deposits \$1,688,190,603, and resources \$1,849,906,921; and the totals of all savings banks were: Loans, \$1,055,187,769; bonds and stocks, \$905,201,687; savings deposits, \$1,907,156,277; and resources, \$2,143,307,163. The business of the year showed the following increases: Loans, \$19,590,627; bonds and stocks, \$63,393,988; deposits, \$91,108,670; and resources, \$89,542,835. The average interest paid was a trifle less than 4 per cent; and the average amount due each depositor increased in the year from \$371.36 to \$376.50. The loan and trust companies had capital, \$111,146,973; loans, \$462,158,337; bonds and stocks, \$201,164,551; deposits, \$586,468,156; and resources, \$91,348,131. The private banks reported combined capital \$22,310,086; deposits, \$59,116,378; loans, \$59,663,379; bonds and stocks, \$7,226,590; and resources, \$94,348,131.

The following table is a summary of all the banks above considered:

Items.	State Banks.	Loan and Trust Companies.	Savings Banks.	Private Banks.
Loans	\$702,505,798	\$462,158,337	\$1,055,187,769	\$905,201,687
United States Bonds	726,888	37,849,637	14,822,215	2,862,116
Other Banks	96,377,672	681,660,911	698,773,322	4,841,774
Cash	10,008,641	36,801,871	35,510,228	6,747,561
Capital	210,133,835	111,146,973	22,310,086	22,005,086
Surplus and Profits	336,342,834	342,713,612	171,714,800	7,906,623
Deposits	695,659,914	586,468,156	1,907,156,277	59,116,378
Total Resources	\$1,107,187,508	\$865,292,156	2,143,307,163	\$94,348,131

Similar information relative to national banks, banks other than national, and the total of all banks appears in the following table:

Items.	3,676 National Banks.	5,780 Other Banks.	9,456, all Banks.
Loans.....	\$1,893,268,839	\$2,379,515,283	\$4,172,784,122
United States Bonds.....	280,057,145	189,089,316	469,096,461
Other Bonds, etc.....	188,995,353	1,021,788,073	1,210,783,426
Cash.....	343,143,362	169,198,691	512,341,963
Capital.....	648,590,325	499,831,399	1,048,371,724
Surplus and Profits.....	336,342,834	302,602,702	638,945,536
Deposits.....	1,613,062,537	3,276,710,910	4,889,773,447
Total Resources.....	3,263,685,314	4,200,124,365	7,463,810,269

See CURRENCY: FINANCES, NATIONAL: GOLD: MONEY.

BAPTISTS. The American Baptist Year Book for 1895 reported 27,091 ordained ministers; 37,910 churches, with 3,637,421 members, and church property valued at \$80,285,034; 22,016 Sunday schools, with 152,767 officers and teachers, and 1,500,834 pupils. The current expenses of the churches were \$8,046,668; benevolent contributions, \$3,626,023. New churches organized during the year numbered 790; buildings dedicated 273, of which 122 report values aggregating \$1,257,990. There were 7 theological seminaries, with 67 instructors and 937 pupils, and property valued at \$3,514,103; 35 universities and colleges, with 722 instructors, 9,385 pupils, and property valued at \$19,370,888; 27 seminaries for female education exclusively, with 411 instructors, 3,433 pupils, and property valued at \$3,780,049; 56 seminaries and academies, male and co-educating, with 397 instructors, 12,774 pupils, and property valued at \$3,845,146; 34 institutions for colored race and Indians, with 259 instructors, 4,808 pupils, and property valued at \$1,417,438. There were 29 charitable institutions in 18 States and Territories, with property valued at \$1,526,721. The American Baptist Publication Society reported the issue of 49 publications, of which 737,000 copies had been printed; 18 periodicals for Sunday schools; sales and receipts for merchandise and periodicals were \$497,807.48, in the different houses, of which that in Philadelphia was the most important, the others standing in the following order of importance: Chicago, Boston, St. Louis, New York, Atlanta, Dallas. The assets of the society after new appraisal amounted to \$912,893, liabilities \$20,831. The missionary department of the society reported receipts of \$127,649, of which \$49,768 was contributed by churches, Sunday schools, and individuals; it had maintained two chapel cars continuously at work in the West, and a third car was dedicated in May. The number of missionaries and workers was 116; days of service 26,116; miles traveled 512,548; books sold, 28,878, and given away, 1,786; paces of tracts distributed, 566,744; sermons and addresses, 18,927; prayer meetings held 5,837; churches constituted 48; Sunday schools organized 285. The Bible department received \$29,297 from various sources. The American Baptist Education Society received during the year from different sources \$53,366, and paid to different educational institutions, to aid in their endowment \$48,017, and for other purposes over \$5,000 more.

The Free Baptist Churches were reported in 1895 as having 1,323 ordained ministers; 1,550 church organizations, with 85,563 members, and church prop-

tery valued at \$2,662,120; benevolent contributions: Foreign missions \$20,099, home missions \$8,115, education \$2,625, Woman's Mission Society \$22,248. The total receipts of the Education Society for the year were \$3,419, and the invested funds amounted to \$8,665, with liabilities of \$5,000. The denomination had 1 theological seminary, and 12 colleges and seminaries, with 1,234 students, of whom 69 were preparing for the ministry. There were maintained 32 missionaries in India, who reported 818 members, and 51 baptisms during the year, a native Christian community of 1,522 persons, 2,714 pupils in Sunday schools, and 3,199 in day and other schools.

The Baptist Union for Great Britain and Ireland reported in 1895, 33 associations and 4 colleges; chapels 3,793; churches, 2,871; chapel-seats, 1,264,017; members, 349,688; local preachers, 4,643; pastors in charge, 1,913; baptisms, 17,626; Sunday school teachers, 49,009; pupils, 506,094.

Reports for 1896 showed in the United States 1,551 associations; 27,774 ordained ministers; 40,064 churches; 3,720,235 members; 23,302 Sunday schools, with 163,570 officers and teachers, and 1,779,886 scholars; value of church property, \$81,648,246; and contributions for all purposes, \$11,755,119. There were 7 theological seminaries; 36 universities and colleges; 29 seminaries for women exclusively; 64 seminaries and academies for men exclusively, and co-educational; and 33 institutions for negroes and Indians—in all, 169 institutions with 2,067 professors and instructors, 36,016 pupils and students, \$18,611,695 in endowments, and \$36,126,870 in property.

The Colored Baptist Church in the United States, according to reports at the end of 1895, had 18 State organizations; 443 associations; 12,833 ordained ministers; 13,593 churches; 1,687,526 members; 10,485 Sunday schools, with 545,849 scholars; 55 high schools and colleges; \$9,794,342 in church property; \$1,774,650 in school property; and \$254,000 in educational endowments.

The Baptists in the world were thus summarized at the end of 1896: In North America, 41,227 churches, 28,475 ordained ministers, and 3,856,584 members; in South America, 18 churches, 14 ministers, and 729 members; in Europe, 3,965 churches, 3,121 ministers, and 454,520 members; in Asia, 1,017 churches, 593 ministers, and 111,177 members; in Africa, 63 churches, 91 ministers, and 5,975 members; and in Australasia, 230 churches, 153 ministers, and 18,089 members—in all, 46,520 churches, 32,447 ministers, and 4,417,074 members.

BAR ASSOCIATION, AMERICAS, organized in 1878, for the purpose of advancing the science of jurisprudence, promoting the administration of justice and uniformity of legislation throughout the Union, upholding the honor of the profession of the law, and encouraging cordial intercourse among the members of the Bar. Its membership in 1897 was about 1,500. President, William Wirt Howe, New Orleans; a vice-president from each State; Secretary, John Hinkley, 215 N. Charles St., Baltimore; treasurer, Francis Rawle, Philadelphia; executive committee, the officers named and James M. Woolworth, Omaha; Alfred Hemenway, Boston; Charles C. Allen, St. Louis; and Charles N. Gregory, Madison, Wis.

BARATTIERI, ORESTE, military officer, was born in Condino, Austrian Tyrol, Nov. 13, 1841. He was educated in Austria and at the University of Pavia; joined Garibaldi's volunteers and landed with the Thousand at Marsala 1859; distinguished himself in that campaign and afterward entered the Italian army as captain; received the medal for military valor in the campaign of 1866, edited *The Military Review*; was promoted major 1876; and first went to Abyssinia as colonel 1886. There he organized an effective native army under Italian officers.

For his successful administration he was commissioned a general and appointed governor of the province of Erythrea 1893. Since then he had been almost constantly engaged in warfare with the dervishes. In 1894 he captured Kassala, suppressed the treason of Ras Mangasha in a battle at Adi Sadi, defeated Batha Agos and Menelik, and placed Italy in complete control of Abyssinia. He was given a grand reception in Rome in July, 1895. In December following, 14 Italian officers and 700 men were killed in a surprise by 25,000 natives, believed to have been an act of treachery on the part of Ras Makonnen, who had made overtures for peace; and General Baratieri promptly began concentrating his forces at Makalle, whither reinforcements from Italy were being hastened. See ABYSSINIA; ITALY.

BARCELONA, one of the provinces of Spain, in Catalonia; also capital and seaport of the same; first city in Spain in importance of manufactures and second in commercial interests: population (1887) province 899,264; city 272,481. The principal articles of export to the United States are, in order of value, corks, tartar, glycerine, licorice, skins, almonds, and wine. United States Consul Bowen reported June 12, 1895, that the industry of marble sawing was being rapidly developed; that the city was producing more than the local demand of bricks, common and painted tiles and floor mosaics; that fancy glass and stained windows, equal to the best from Italy and France, were being manufactured; and that looking-glasses were being made, but were inferior to those of the United States.

BARING-GOULD, SABINE, clergyman and author, was born in Exeter, England, in 1834. In 1894 he published *Book of Fairy Tales, Cheap Jack Zita, Deserts of Southern France* (2 vols.), *Kitty Aline, The Queen of Love, and Mrs. Curgenven of Curgenven*; in 1895, *Grettir the Outlaw: A Story of Iceland, A Book of Nursery Songs and Rhymes, and Volm*; and in 1896, *Curiosities of Older Times, The Broom-Squire and Bladys of Steppony* (1898).

BARLEY. SEE AGRICULTURE.

BARLOW, JANE, Irish author, she published in 1894 a story entitled *Kerrigan's Quality*, giving characteristic delineations of Irish character. She also contributed in 1894-95 several short stories and sketches to English magazines, and published in 1895 a volume of poems entitled *Bojland Studies*, and in 1896 one entitled *Strangers at Lisconnel*.

BARMEN, town in Rhenish Prussia, Germany; principal seat of ribbon manufacturing on the continent; population (1890) 116,248. The principal articles exported to the United States are, in order of value, silk, silk goods, velvets, ribbons, braids, etc., ironware, steel, cutlery, etc., dyes, drugs, chemicals, etc., and hat bands and ribbons.

BARNARD COLLEGE, Manhattan Borough, N. Y., a college for women exclusively, organized in affiliation with Columbia University in 1889. Columbia University makes itself responsible for the instruction given in Barnard, and for its standards of education, the president of Columbia being authorized to permit at his discretion professors and other instructors of Columbia to teach at Barnard; and Columbia University giving her degrees to Barnard students who meet the requirements, which are as nearly as possible identical with those of Columbia. The undergraduate curriculum is in effect identical with that of Columbia for three years, though there are some limitations in the senior and post-graduate studies. In January, 1895, the New York City chapter of the Daughters of the Revolution resolved to endow a professorship of colonial and revolutionary his-

tory at Barnard, and until the endowment was completed to raise each year a sufficient sum to sustain a lectureship on that period. In 1894 \$100,000 was given to the college for a building upon condition that it should be within 1,000 feet of Columbia University. June 28, 1895, the college secured and partly paid for a site for building on the west side of the Boulevard between 119th and 120th Sts., and in December, 1895, the treasurer reported that during the year \$250,000 had been raised for all purposes; but that for building, scholarships, and current expenses \$500,000 should be raised in the coming year. At the close of 1897 there were 200 students. Dean, Emily J. Smith, A.B.

BARNARDO'S HOMES, a group of refuges for orphan and waif children, began in 1866 by Dr. Barnardo, then a medical student in the London Hospital. In 1897 they comprised 24 mission branches and 86 distinct homes, of which 65 were in London, 17 in various English counties, 3 in Canada, and 1 on the island of Jersey. One of the most typical is that in the village of Ilford, Essex, which includes 52 detached cottages, is solely devoted to the bringing up of girls on the family system and had 1,000 inmates. Boys also are reared in branch homes, or boarded out in rural districts under supervision. Industrial training is a feature in the homes, and at Stepney Causeway there are shops in which 14 different trades are taught to older boys. There is also an emigration agency connected with the homes, which sends each year about 500 selected inmates to Canada and other British colonies; there being two distributing homes in Ontario, and an industrial farm of 10,000 acres in Manitoba. There were in the English homes in 1897 about 5,000 boys and girls; nearly 9,400 have been sent to the colonies since the work began, of whom 98 per cent. have proved successful; and in all more than 32,000 children of all ages have been cared for. Head offices, 18 to 26 Stepney Causeway, London, E.

BARNATO (real name Isaacs), BERNARD, promoter of the great Kafir boom, was born in London, England, of Hebrew parents; and committed suicide by jumping from a steamship while on the voyage from Cape Town to Southampton, June 14, 1897. Of his age and early antecedents but little is known. It is said that his first occupation was that of an acrobat, contortionist, and sidewalk juggler, and that subsequently he was attached to a circus and spent some time on the dramatic stage. Since 1873, however, his record reads like a thrilling, old-time romance, full of remarkable deeds, leading to the possession of fabulous wealth and the conduct of financial operations far surpassing those of the memorable South Sea Bubble. He went to the Kimberley diamond mines, South Africa, in 1873; bought his first claim in 1876; owned four claims and floated them into his first company in 1881; bought the Stewart ground in 1884; and practically owned two-thirds of the diamond mines by 1885. Among his fortunate "finds" was Cecil J. Rhodes, afterward premier of Cape Colony, with whom it is believed he established a partnership. In 1886 gold was discovered 300 miles north of Kimberley, in the Witwatersrand district of the Transvaal, on the site of the city of Johannesburg. Barnato, by various schemes, secured possession of the greater part of the region, and began his career as a promoter of mining stocks in 1891. A second boom was started in 1892, and London, Paris, and Berlin caught the fever in turn. By 1895, Johannesburg had developed into a city of 70,000 population, with all essential metropolitan advantages. The Barnato mining region had proved to be the richest in South Africa, the gold production in 1894 giving the Transvaal third place on the list of gold countries. From 1887 till Jan. 1, 1895, these mines yielded 10,110,000 tons of ore and 6,544,584 ounces of gold, valued at \$110,000,000, and the stock dividends paid aggreg-

gated \$23,000,000. Another boom in Kaffirs, or shares in the various corporations that Barnato promoted to work these mines, developed in 1895, especially in London, and created more excitement than previous ones. Barnato took up his residence in London, was reported to be the richest man in the world and credited with being worth over \$100,000,000, lived like a Croesus, and was courted by adventurers and financiers alike. When, during the summer, an attack was made on the Kaffir stocks he threw many millions of dollars into the market, supporting the boom, and doubtless averting for a time an inevitable financial crash. For this act he was given a grand banquet at the Mansion House by the lord mayor, who was severely rebuked for extending this exceptional honor. Subsequently, he was identified with the complications which followed the Jameson raid (see JAMESON, LEANDER STAR: CAPE COLONY: and SOUTH AFRICAN REPUBLIC); interceded with President Krüger for the Uitlanders and the raiders; and contributed \$20,000 to the fund for paying the fines of the captured party. In 1895 he gave the lord mayor of London \$75,000 for the poor of the city.

BARR, AMELIA EDITE, author, was born in Ulverton, Lancashire, England, March 29, 1831. In 1894 she published *The Lone House*, and *The Beads of Tasmer*; and in 1895 *The Mate of the Easter Bell and Other Stories* a volume entitled *Short Stories*, and *Bernicia*, and in 1896 *A Knight of the Nets*; and in the *Century Magazine* a serial on *Life in the Hebrides*.

BARRIE, JAMES MATTHEW, author, was born at Kerriemuir, Forfarshire, Scotland, May 9, 1860. July 9, 1894, he was married at Kerriemuir to Miss Mary Ansell, who had acted a part in his play, *Walker*, London, in 1892. The same year his play, *The Professor's Love Story*, was produced in England and in the United States. He published in 1894, a story entitled *Better Dead*, and in 1896, *Margaret Ogilvy*, an affectionate sketch of his mother, and in *Scribner's Magazine* a novel entitled *Sentimental Tommy*, said to have been written at Kerriemuir ("Thrums"), and like his earlier books, with the Clyde and its scenery for the background.

BARROWS, JOHN HENRY, D.D., clergyman, was born in Medina, Mich., July 11, 1847. He edited in 1894 the report of the *World's Parliament of Religions*, of which in 1893 he had been the principal organizer and promoter; and in 1895 he resigned the charge of the first Presbyterian Church, Chicago, in order to visit the principal universities in India, and there deliver, under the patronage of the University of Chicago, a course of lectures on Christianity. His plan was first to spend ten months in theological and literary preparation at Göttingen, Germany; after which he hoped to strengthen the foundations upon which Hinduism and Hindu social life may be reconstructed.

BARRY, JOHN WOLFE, C.E., civil engineer, was born in Scotland, in 1836. His most distinguished work was the new Tower Bridge in London, completed in 1894 at a cost of £30,000,000. He was associated as engineer in this work with Sir Horace Jones, who had charge of the architecture. The bridge was inaugurated with grand celebration by the Prince of Wales, June 30, 1894, on which occasion Mr. Barry was decorated with the order of the Bath.

BARTHELEMY SAINT-HILAIRE, JULES, politician and author, was born in Paris, France, Aug. 19, 1805; and died there Nov. 24, 1895. He worked with enthusiasm and youthful energy almost to the time of his death; being engaged in 1893-95 upon a biography of *Cousin* (3 vols., 1895), and in commenting upon the philosophy of Aristotle and perfecting his translation, which is considered the standard French translation of the works of that philosopher.

BARTHOLDI, FREDERIC ARGESTE, sculptor, was born in Colmar, Alsace, April 2, 1834. In 1895 he finished a bronze group representing Lafayette and Washington, which was unveiled in Paris, in the Rue Etats Unis, Dec. 1. It was formally accepted for the city by M. Bompard, vice-president of the municipal council, and an address was delivered by Mr. Morss, consul-general of the United States.

BARTON, CLARA, president of the American National Red Cross Society, was born in Oxford, Mass., about 1830. In May, 1894, the mayor of Beaufort, S. C., the commandant of the United States naval station at Port Royal, and a number of prominent citizens of the region, united in addressing to her a public letter of thanks for her work, and that of the Red Cross Society, of which she was president, in the relief of many thousands of persons in the Sea Islands and their vicinity who suffered in August, 1893, from storms and tidal waves. In 1895 she resided in Washington, D. C., her expenses, and those of the American Branch of the Red Cross Society, which is handsomely housed in a mansion once the headquarters of General Grant, being defrayed from her own private fortune. In 1896 she spent several months in Armenia, personally directing the distribution of relief, and in February, 1898, went to Cuba to minister to the sick and starving.

BASEL, BASLE, or BALE, canton in Switzerland; also one of the most important cities in the confederation; population (1894) canton, exclusive of city, 63,873; city, 80,410. The principal articles exported to the United States are, in order of value, hides and skins; watches and watch materials; silk and mixed ribbons; aniline colors; spun waste silk; dyestuffs and chemicals; cheese and knit goods.

BASEL, UNIVERSITY OF, Basel, Switzerland; founded in 1459. It included in 1895 the faculties of theology, law, medicine, and philosophy; with 85 instructors and 437 matriculated students, besides those not matriculated but attending lectures; volumes in the library 160,000, and 4,000 valuable manuscripts.

BATES COLLEGE, Lewiston, Me.; organized in 1864; Free Baptist; co-educational; had at close of 1897; 18 professors and instructors; 300 students; 18,000 volumes in the libraries; \$250,000 in grounds and buildings; \$30,000 in scientific apparatus and libraries; \$338,000 in productive funds; \$12,000 in gifts; \$46,000 in income; president, George C. Chase, D. D. LL. D. The Latin school at Lewiston and Cobb Divinity School are in affiliation with the college.

BATON ROUGE, city, capital of East Baton Rouge parish and of the State of Louisiana; population (1890) 10,178; (1895) estimated 12,500. In 1891 the assessed valuations were: Real \$1,600,000, personal \$400,000—total, \$2,000,000; and on April 1, 1895, a total debt of \$34,800, comprising a balance of capital loan \$13,200, due Jan. 1, 1900, but subject to prior call, and a floating debt of \$21,600. In 1897 it had a national bank, a State bank, and a savings bank, and a daily and 4 weekly newspapers.

BATŪM, city and important seaport of Asiatic Russia, on the southeast coast of the Black Sea; population (1891) 19,891. It is the maritime shipping point for all the petroleum products of the Baku oil region, as well as of the entire Caucasus field, and, though not engaged in refining oil, it has many flourishing branches of work dependent on the oil industry. The principal articles exported to the United States are manganese ore and licorice. See **BAKU**.

BATTLE CREEK, city, Calhoun county, Mich.; population (1890) 13,197; (1894) State census, 15,522. In 1896 it had a total debt of \$170,000 of which

\$130,000 was the water debt, and the assessed valuations were: Real, \$3,983,942; personal, \$1,016,058—total, \$5,000,000; total tax rate, \$29.60 per \$1,000. In 1897 there were a national bank, a State bank, a savings bank, an active board of trade, Battle Creek College and large publishing plant (Seventh-day Adventists), medical and surgical sanitarium, Haskell Home for Orphans, James White Memorial Home (two buildings), Nicholas Memorial Hospital, high school and 7 ward schools, St. Philips parochial school, large engine and agricultural implement works, several flour mills, and 2 daily, 7 weekly, and 7 monthly periodicals.

BAVARIA, a kingdom included in the German Empire since 1871; area, 29,539 square miles; population (1895) 5,818,544; king, Otto Wilhelm Luitpold, born April 27, 1848, but without rule because insane, the regent being his uncle, Prince Luitpold, born March 12, 1821; appointed regent, June 10, 1886. More than seven-tenths of the population are Roman Catholics. The Roman church has 2 archbishoprics, 6 bishoprics, 211 deaneries, and 2,902 parishes; and the Protestant Church has a general consistory, three provincial consistories, 80 deaneries, and 1,077 parishes. School attendance is compulsory, and elementary schools are maintained in all parishes. There are also nearly 500 agricultural schools. Of denominational schools there are about 5,090 Catholic, 1,900 Protestant, 90 Jewish, and 130 mixed. The revenue for 1897 was estimated at 345,356,505 marks; expenditure, the same. The debt, 1895, was 1,386,875,020 marks, of which 1,034,460,400 marks was incurred in railroad construction. The greater part of the railroad system belongs to the State, and the receipts for many years have far exceeded the interest on the railroad debt. Nearly one-half of the kingdom is now under cultivation, one-sixth in pasture, and one-third in forest.

BAYARD, THOMAS FRANCIS, LL.D., diplomatist, was born in Wilmington, Del., Oct. 29, 1828; appointed the first United States ambassador to Great Britain, March 30, 1893. During his official residence in London, Mr. Bayard was the recipient of marked honors and attentions, and was treated as the most intimate representative of President Cleveland. Sir Charles Tupper, the Lord High Commissioner at London for the Dominion of Canada, pronounced him to be one of the best representatives ever sent to England by the United States, and a man of exceeding popularity in British official and social life. In September, 1895, a storm of indignation arose in British and American official circles over the publication in London by Lord Sackville of a pamphlet, containing severe strictures on the people and public men of the United States, and expressing surprise that Mr. Bayard should have been received as American ambassador by Great Britain, when, while secretary of state, he had wantonly insulted in person the British representative. Lord Sackville had been British minister to the United States 1881-89, and his recall had been asked by President Cleveland for the indiscretion of writing a political letter, which was published during the presidential campaign of 1888. Mr. Bayard took no notice of this attack on him, and the British press and public generally condemned Lord Sackville's pamphlet. Another attack was made on the ambassador Dec. 10, 1895, when Representative Barrett, a new member of Congress from Massachusetts, introduced a resolution in the House of Representatives calling for the impeachment of Ambassador Bayard for "high crimes and misdemeanors," because of words spoken in an address delivered by the ambassador before the Edinburgh Philosophical Institution on Nov. 7, which were construed into an attack on the policy of protection.

During the debate that ensued, the resolution was amended by striking out the words "by impeachment or otherwise," leaving it a call for inquiry into the facts alleged and a report on what should be done in the premises. A second amendment, also by Representative Barrett, directed the committee to inquire likewise into the matter of another address, delivered at Boston, England, on Aug. 2. The resolution as amended and with the preamble withdrawn was adopted and referred to the Committee on Foreign Affairs. Another resolution, by Representative McCall, of Massachusetts, requesting the president to communicate whether he had taken steps to ascertain if the alleged speeches had been made, and what steps, if any, he had taken to recall or censure the ambassador, was similarly referred. On Nov. 13 Mr. Bayard received the freedom of the city of Dundee, Scotland, and on Dec. 16 made the inaugural address at the opening of the Haushalter water-color exhibition of Venetian scenes, in London. As an evidence of the esteem in which Ambassador Bayard was held officially, it may be added that Lord Salisbury, the British prime minister, sent him an advance copy of the official reply of Great Britain to the inquiry of the United States government concerning the Anglo-Venezuelan disputes.

BAY CITY, city, capital of Bay City county, Mich., population (1890) 27,839; (1894) State census, 30,039. On the opposite shore of Saginaw River is West Bay City, which, though corporately separate from Bay City, is so identical with it in commercial interests that the two places are locally considered as one, and spoken of as the Bay Cities. By the State census 1894 the cities had a combined population of 42,376. They are 4 miles up the river from Saginaw Bay, and are noted for their ship-building, lumbering, and salt-shipping interests. In 1896 the assessed valuations were: Real estate, \$8,466,520; personal \$2,365,286—total \$10,831,806; tax rate \$22.83 per \$1,000. Property is assessed at 70 per cent. of actual value. The bonded debt, Feb. 1, 1897, was \$651,000; sinking fund, \$28,000; net debt, \$623,000, which included a water debt of \$362,000. In 1897 there were 2 national banks, 2 State banks, a savings bank, and in the two places 2 daily and 6 weekly newspapers, and local transit was provided by the Bay Cities Consolidated railway, which operated 25 miles of trolley track.

BAYONNE, city, Hudson county, N. J.; population (1890) 19,033; (1895) State census, 19,856. In 1896 it had a bonded debt of \$1,614,000, floating debt \$177,157, sinking fund \$112,393, net debt, \$1,678,764. The assessed valuation 1895 aggregated \$12,435,070, and the total tax rate was \$23.50 per \$1,000. In 1897 it had a trust company and a monthly and 5 weekly periodicals. The city is on the line of the great Hudson county boulevard extending from the Kill von Kull, opposite Staten Island, to the northern boundary line of Hudson county near Fort Lee.

BAYREUTH, a city of Bavaria, the home of Wagner and the place of his musical festivals. The festival in July, 1894, attracted great numbers, and included the representation in the magnificent theater of *Parsifal*, *Tannhäuser*, and *Lohengrin*. The widow of Wagner takes an active part in the management of the festival. A school for the gratuitous teaching and training in musical style of the singers engaged in the performances is in successful operation here. In 1897 *The Nibelungen Ring* and *Parsifal* were performed.

BAZIN, RENE FRANCOIS NICHOLAS MARIE, publicist, novelist, and editor, was born in Angers, France, Dec. 26, 1855. He published in 1894 a novel entitled

Humble Amour; and the same year his story *Une Tache d'Encre*, first issued in 1888, had a 10th edition and was crowned by the French Academy.

BEARD, WILLIAM HOLBROOK, painter and author, was born in Painesville, O., April 13, 1825. In 1894 he published *Action in Art*, with illustrations from his own drawings.

BEARDSLEY, AUBREY, artist, was born in Brighton, England, in 1874; died March 16, 1898. He illustrated Oscar Wilde's *Salome* in 1893-94; and early in 1894 became art editor of *The Yellow Book*, drawing each cover, and many of the illustrations within. He designed and drew a series of new and striking posters, and wrote and illustrated *The Story of Venus and Tannhäuser* (1895); and *Under the Hill*, a novel (1896).

BEATRICE, city, capital of Gage county, Neb., population (1890) 13,036. It is a manufacturing city, and 1897 had 3 national banks, a State bank, a private bank, an electric street railway, and 2 daily and 4 weekly newspapers. The assessed valuations exceed \$1,500,000, and the total debt of the city in 1897 was \$415,000.

BEBEL, FERDINAND AUGUST, social-democratic author and leader in the German Reichstag, was born in Cologne, Germany, Feb. 22, 1840. In 1895 he acted as treasurer of his party, and for fear of seizure he carried the available funds to Zurich, Switzerland, being accompanied by other leading German socialists. He created great excitement in the Reichstag by a speech delivered Dec. 11, 1895, when he violently attacked the speeches of the emperor at the Sedan anniversary and at Breslau, referring to him as "a certain somebody." This phrase excited an uproar, and the president threatened him; but Bebel insisted that personal reference to the emperor was necessary in discussing the question of *Vöise-majeste*, and that free and even violent discussion was the only safeguard against violent revolution.

BEDFORD COLLEGE, London, England, a college for women, modeled upon the plan of Newnham and Girton; lecturers at the close of 1894, 19; students, 146.

BEECHER, EDWARD, D.D., clergyman and author, older brother of Henry Ward Beecher, was born in East Hampton, L. I., N. Y., Aug. 27, 1803; and died in Brooklyn, N. Y., July 28, 1895.

BEERBOHM-TREE (last name assumed), HERBERT, actor, was born in London, England, in 1853; educated in England and Germany; became a clerk to his father in London 1870; joined an amateur dramatic society; made his first professional appearance at the Globe theater, London, 1878; leased the Comedy theater 1887; and has been manager of the Haymarket theater since 1888. He made his first visit to the United States 1895, appearing at Abbey's theater, New York, Jan. 28, in *The Ballad-Monger* and *The Red Lamp*. In 1897 he opened his new theater, Her Majesty's, in the Haymarket. He is an actor of remarkable versatility, and is considered the best stage manager in England, as well as the best make-up man and character delineator.

BEER. Returns made to the *Brewers' Journal* show that there were manufactured in the United States during the fiscal year ending June 30, 1897, 34,423,-094 barrels of beer, against 35,826,093 barrels in 1896, and 33,469,661 in 1895. There was also reported the importation at New York of 1,915,650 gallons in casks, and 1,048,994 gallons in bottles. In Arizona, California, Colorado, Kentucky, Michigan, Missouri, Nebraska, Nevada, New Hampshire, New Jersey,

New Mexico, New York, North Dakota, Ohio, Pennsylvania, South Carolina, South Dakota, Utah, Wisconsin, and Wyoming there was a decreased production. Increases were reported in Alabama, Alaska, Connecticut, Delaware, District of Columbia, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Louisiana, Maryland, Massachusetts (the largest), Minnesota, Montana, Oregon, Rhode Island, Tennessee, Texas, Virginia, Washington, and West Virginia. There were about 1,900 breweries in operation. The largest sales during the year were in New York City, 4,639,682 barrels; Chicago, 2,744,375; Milwaukee, 2,076,376; St. Louis, 2,026,407; Brooklyn, 1,908,423; Philadelphia, 1,902,331; Boston, 1,237,107; Newark, 1,199,979; Cincinnati, 1,114,243; Baltimore, 645,102; and Buffalo, 629,222.

The whole number of breweries in the world in 1894 was reported by *Gambrius*, the general brewers' organ in Vienna, as 44,531, as compared with 45,318 in 1893; but the amount of beer produced was given at 207,361,258 hektoliters (176,686,400 barrels U. S.), as compared with 204,600,390 hektoliters (174,344,100 barrels) in 1893. In Germany the number of breweries was greater in 1894 than in 1893, but the number was less in every other country, while on the other hand the product was generally increased. The principal beer-producing countries are given below, no country being named which did not report as many as 1,000 breweries in 1894. Germany had 22,833 breweries, and produced 55,499,467 hektoliters (47,290,600 barrels U. S.) of beer; Great Britain and Ireland, with 9,240 breweries, produced 52,774,324 hektoliters (44,954,000 barrels U. S.); America, North and South, with 2,112 breweries, produced 50,102,700 hektoliters (42,692,200 barrels); Austria-Hungary, with 1,775 breweries, produced 18,357,077 hektoliters (15,812,000 barrels); Belgium, with 2,900 breweries, produced 9,571,746 hektoliters (8,157,700 barrels); France, with 2,611 breweries, produced 8,443,685 hektoliters (7,191,500 barrels); and Russia, with 1,161 breweries, produced 4,621,270 hektoliters (3,953,876 barrels).

BEERS, HENRY AUGUSTIN, author and professor of English in the Sheffield Scientific School of Yale University, was born in Buffalo, N. Y., July 2, 1847. In 1894 he published *From Chaucer to Tennyson*; and *A Suburban Pastoral and Other Tales*; and in 1895 *The Ways of Yale*, and *Initial Studies in American Letters*.

BEET SUGAR. It was estimated in Brussels, in review of the sugar beet crop of Europe for 1894, that the deficiency in France, Belgium, and the Netherlands would be 50,000 tons of raw sugar; while on the other hand Germany, Austria-Hungary, and Russia would have a surplus of 600,000 tons. It was reported in 1894 that a beet-sugar factory was building at Verina, Gijon, Spain, and the industry was getting established in that country. The United States government maintained experimental stations as to the growth of beets and the manufacture of beet sugar during the years 1891-95, the most important of these being at Schnyler, Nebraska. There were stations in Kansas, Nebraska, California, and Louisiana. There was little practical success, though the results in information as to methods of cultivation and manufacture may prove ultimately of value. The expenditure up to Aug. 23, 1895, was about \$500,000; and at that time the secretary of the department of agriculture thought it best to close the stations and leave the production to private enterprise. In Europe the territory used for sugar beet culture was less in 1897 than in 1896. The following table shows the principal countries in which the industry is carried on, and the acreage of cultivation:

Countries.	1897. *Hectares.	1896. *Hectares.	Increase or Decreases. Per Cent.
Germany.....	436,993	425,004	+ 2.8
Austria-Hungary.....	302,350	347,490	-12.8
France.....	231,110	249,960	- 7.3
Russia.....	399,500	357,150	+11.9
Belgium.....	52,930	71,375	-25.7
Holland.....	32,344	44,385	-27.1
Sweden.....	23,965	28,360	-16.5
Denmark.....	12,800	12,330	+ 4.5
	1,492,800	1,534,962	- 2.7

* One hectare is equivalent to 2.471 acres.

The Statistical Beet Sugar Association, of Magdeburg, estimated the production of sugar and molasses in 1897-98 as follows: Germany, 1,790,000 tons, as compared with 2,281,000 tons in 1896; Austria, 822,000 tons, as compared with 927,000 tons in 1896; and France, 751,000 tons as compared with 703,400 tons in 1896. Fuller estimates for the same period by *El Fomento Industrial y Merantil* of Madrid were as follows: "Germany is expected to produce from 1,750,000 to 1,950,000 tons; Austria, from 750,000 to 830,000 tons; France, from 750,000 to 830,000 tons; Russia, from 750,000 to 830,000 tons; Belgium, from 215,000 to 250,000 tons; Holland, from 120,000 to 145,000 tons; and other countries, 185,000 tons, making a total of 4,500,000 tons. In 1896-97, the crop was 4,915,749 tons. Comparing this with the coming crop, there will be a deficit of 416,000 tons. Taking the maximum quantity, the increase would be 164,000 tons; the medium, a deficit of 156,000 tons. The maximum, however, is more likely to be the case."

BELFAST, city, and seaport, Antrim county, Ireland; population (1891) 255,950. The principal articles exported to the United States are linens, cotton manufactures, hemp, flax, tow, etc., onions, beer and ale, and thread.

BELGIUM, a constitutional, representative, and hereditary monarchy of Europe; area, 11,373 square miles; population (1895) 6,410,783; king, Leopold II. The liabilities of the kingdom, almost wholly incurred for works of public utility in 1895, aggregated 2,246,366,647 francs. The budget for 1897 showed, ordinary revenue, 386,923,178 francs; ordinary expenditure, 386,295,842 francs. In 1895 the imports had a value of 2,904,948,026 francs, and the exports, 2,604,862,583 francs. The merchant marine numbered 59 vessels, of 86,213 tons, and during the year 14,476 vessels, of 13,670,002 tons, entered and cleared the ports. Internal communications comprised (1895) 5,690 miles of public roads; 1,363 miles of navigable waters; 2,839 miles of railway, the greater part owned by the State; 847 post offices; and 4,045 miles of public telegraph lines, with 973 stations. Sept. 20, 1894, a royal decree was published, dissolving the senate and chamber of representatives, and fixing Oct. 14 for the first election under the new franchise law establishing compulsory manhood suffrage. The electorate was divided into three classes, the members of which have each one, or two, or three votes. All male citizens, 25 years old and over, who have resided one year in a district have one vote, but all married men and widowers who pay five francs or more personal tax have two votes, and those with a certain moderately high

educational qualification have three: this latter class including all the priesthood, fully 10,000. Voting is compulsory. About one-half have only one vote. The election of Oct. 14, 1894, was indecisive in several constituencies, and supplementary elections were held a week later. The returns showed 104 clericals, 29 socialists and radicals, and 19 liberals. By the animosity between socialists and liberals, the clericals had a strong effective majority. Parliament met Nov. 13, 1894. The Flemish delegates took the oath in Flemish, the Walloon delegates, who are largely socialistic, and speak French, protesting. Thirteen anarchists were arrested, charged with complicity with the dynamite outrages at Lieges in April, 1894. After a prolonged trial five were acquitted Feb. 9, 1895, two were sentenced to penal servitude for life, and the rest were sentenced to various terms of imprisonment. Contrary to the spirit, if not to the letter of the new constitution, the government, in harmony with the large clerical majority, brought in a bill making religious instruction compulsory in the public schools. There were only some 150 of these, more than half of them being in Brussels, the denominational schools having been fostered since 1884 by public subsidies, and many public schools having been closed. But the bill excited much popular opposition, July 23 and 29, 1895, radical and socialist demonstrations being made in Brussels and elsewhere, over 100,000 delegates coming to Brussels to protest. The bill, however, was passed, and approved by the king, Sept. 17, 1895. The military force of Belgium in 1895 was reported at a total peace strength of 93,686; consisting of 64,900 infantry, 7,200 cavalry, 18,862 artillery, and 2,724 engineers and train; total war strength, 257,286. The population capable of bearing arms, including those engaged in the general and local administration, railroads, necessary tillers of the soil, and others who would not be spared in the field except as a last resort, was 1,460,000. Feb. 2, 1895, a convention was signed between Belgium and France, defining the right of pre-emption with regard to the Kongo Free State which France has claimed since 1894. This was said to assure to France access to the valley of the Nile. Jan. 4, 1895, it was announced that the government had decided to propose to the Chamber to annex the Kongo Free State to Belgium. The King of Belgium had given an annual subsidy of \$200,000, the Kongo State being regarded as his private possession, but had exhausted his fortune, and wished to present his costly possession to the kingdom as a colony. The Belgians, however, were averse to holding such a colony, and declined the king's offer; but the chamber voted a subsidy of \$5,000,000 for constructing the Kongo railroad, stipulating that the Kongo State shall not enter into any financial engagement without consent of the Belgian government until 1900, when Belgium will finally decide for or against adopting it as a dependency. (See Kongo.)

BELKNAP, GEORGE EUGENE, naval officer, was born in Newport, N. H., Jan. 22, 1832; entered the United States navy Oct. 7, 1847; was promoted rear-admiral Feb. 12, 1889; and was retired Jan. 22, 1894. His naval career was remarkable for the length of active service. He was on sea service 24 years and 4 months, on shore or other duty 18 years and 2 months, and was unemployed only 4 years and 10 months.

BELLAIRE, city, Belmont county, O., population (1890) 9,934. In 1897 it had a total debt of \$175,126, sinking fund \$23,451, net debt \$151,675, tax valuation (1896) \$2,993,780, a national bank, a savings bank, and 2 daily and 6 weekly newspapers.

BELLAMY, EDWARD, author, was born in Chicopee Falls, Mass., March 26, 1850; educated at Union College; admitted to the bar in 1874; and became an

editorial and magazine writer. His publications include *Six to One, a Nantucket Idyll* (1877); *Dr. Heidenhoff's Process* (1879); *Miss Ludington's Sister* (1885); *Looking Backward* (1888); and *Equality* (1897). *Looking Backward* had a phenomenally large sale, and originated a socialistic agitation, out of which grew numerous Utopian social communities.

BELLEVILLE, city, capital of St. Clair county, Ill., population (1890) 15,361. In 1896 it had assessed valuations: Real \$1,703,650, personal \$582,196—total \$2,285,846; and 1896 a total debt of \$124,450. It has a national bank, a savings bank, electric street railway, and 5 daily and 6 weekly newspapers.

BELOIT COLLEGE, Beloit, Wis., non-sectarian; co-educational; had at close of 1897, 24 professors and instructors; 457 students; 24,000 volumes in the library; \$314,000 invested in grounds and buildings; \$100,000 in scientific apparatus; \$415,000 in productive funds; \$30,340 income; president, Edward D. Eaton, D.D., LL.D. In 1898, Emerson Hall, for women students, was being erected at a cost of \$30,000, a gift of Dr. D. K. Pearsons.

BEMIS, EDWARD WEBSTER, PH.D., educator, was born in Springfield, Mass., April 7, 1860; graduated at Amherst College 1880; was a pioneer lecturer in the University Extension System 1887-88; professor of economics and history, Vanderbilt University, 1889-92; and associate professor of economics, University of Chicago, 1892-95. His removal from the last post by President Harper, on the ground that the tendency of his teachings was injurious to the university, provoked severe criticism and correspondence, in the main favorable to Professor Bemis. He published *History of Co-operation in the United States* (1888); *Municipal Ownership of Gas* (1891); *Local Government for the South and Southwest* (1893); *Popular Election of United States Senators* (1893); and *Relation of Labor Organizations to the American Boy and to Trade Instruction* (1894). In October, 1895, he was engaged as associate editor of the *The Bibliotheca Sacra* to date from Jan. 1, 1896.

BEN HUR, TRIBE OF, a fraternal organization founded in 1894; supreme temple, Crawfordsville, Ind.; subordinate courts 378; members, 13,339; supreme chief, D. W. Gerard, Crawfordsville, Ind.; supreme scribe, F. L. Snyder, Crawfordsville, Ind.

BENSON, EDWARD WHITE, D.D., Archbishop of Canterbury, Primate of the Church of England, was born in Birmingham, England, July 14, 1829; died in Hawarden, Wales, Oct. 10, 1896. In 1894 he published a volume of sermons addressed to his diocese in his third visitation, under the title *Fishers of Men*.

BENZON, MARIE THERESE (MADAME BLANC), author, was born in Seine-Port, France, Sept. 21, 1840. In 1895 she published *The Condition of Women in the United States: a Traveler's Notes*, translated by Abby Langdon Alger.

BERGEN, city, seaport, and capital of province of Bergen, Norway; population (1891) 53,684. In the quarter ending March 31, 1895, the exports declared here for the United States aggregated in value \$63,276.47, and in that ending June 30, \$99,172.98, the last being an increase of \$57,645.73 over the total for the corresponding quarter 1894. The principal articles were codliver oil, wood pulp, herrings, and skins.

BERING SEA QUESTION. In April, 1894, laws were enacted by both the United States and Great Britain to carry into effect the award of the Bering Sea arbitration tribunal of 1893, affixing penalties for illegal sealing, and authorizing, with certain limitations, the search and seizure of sealers by the naval and revenue forces of the other nation. There still awaited adjudication the compensation due to sealers whose vessels had been illegally seized by United States

cutters prior to the establishment of a close season in 1890. May 10, 1894, a new treaty regulating sealing in Russian waters was ratified at Washington. June 7, 1894, the British ambassador gave to the secretary of state a list of British claims amounting to \$542,169, proposing a commission to examine and pass upon them. Aug. 21, 1894, the secretary replied that it might be best to pay a lump sum to Great Britain of \$425,000. This was promptly agreed to by the ambassador, and was recommended to Congress by the president; but was not approved by Congress, it being said that many of the British claims were for constructive or consequential damages, which had not been approved by the tribunal, and which the precedent of the Alabama award expressly disallowed; while it was also said that some of the vessels were not really owned by British subjects, but by Americans. Meanwhile the report of the navy department showed that the regulations were very ineffectual, the amount of illegal sealing great, and the waste and destruction of seals threatened their entire extermination. Jan. 19, 1895, the regulations agreed upon by Great Britain and the United States were proclaimed, but were opposed by Canadian sealers. Jan. 30, 1895, an order from the British privy council, under agreement with Russia, prohibited the faking of seals by British vessels within a zone of ten marine miles from the Russian coasts of Bering Sea, or within a thirty-mile zone around the Kommandorsky and Robbin Islands. Nov. 16, 1895, word was received in Washington that a British sealing schooner had been condemned by the British Court of Admiralty for violation of the regulations. Nov. 22, 1895, an order of privy council reaffirmed the order of Jan. 30. In 1895 Dr. Leonhard Stejneger, of the Smithsonian Institution was detailed to investigate and report upon the condition of seal life about the Commander Islands, owned by Russia. He confirmed the havoc reported, by which the annual catch of 50,000 had been reduced to 16,000; and declared it was due to pelagic sealing, and was noted outside the Bering Sea territory. He did not, however, fear the extermination of the seals, because pelagic sealing requires so large an outlay that it will be abandoned as it becomes unprofitable. It was reported in December, 1895, that the terms of agreement for the settlement of claims between Great Britain and the United States were nearly perfected and would be laid before the senate in a few days. See SEAL CLAIMS COMMISSION: SEAL CONFERENCE, INTERNATIONAL.

BERKELEY TEMPLE, an institutional church, reorganized from the Berkeley Street Congregational Church, Boston, Mass., in 1888; pastor, Rev. Charles A. Dickinson, D.D. In 1895 the church reported 1,020 members, 103 having been received during the year; 425 families; Sunday school members 645; benevolent contributions of the church \$5,118, and of the Sunday school \$625; home expenses \$18,000. Together with ordinary church work, including a Christian Endeavor Society and Brotherhood of Andrew and Philip, there was maintained a regular service in Armenian; a Young Men's Institute, with reading-room, gymnasium, lyceum, outing club, and various classes; a Boys' Brigade, with a class in Sloyd; temperance guild, which took 800 pledges during the year; a reform work for intemperate and fallen women, and work for poor families; a Dorastry, reaching about 300 young women; an orphanage for 40 boys and a home for working girls at Westminster, Vt.

BERLIN, capital of the Kingdom of Prussia, and since 1871 of the German Empire. The great brewers of Berlin, being owners of the principal halls in which the socialists held meetings, refused in the summer of 1894 to rent them for that purpose; whereupon the socialists resolved to boycott the Berlin brewers and bought only beer imported from Bavaria and the south. The associated

brewers of Berlin and its vicinity sent a circular letter to the southern brewers protesting against the importation of beer, which was seriously affecting the manufacture in Berlin; but the latter ignored the letter. On the other hand the socialists and social-democrats found the workmen more and more ignoring the boycott. Nov. 21, 1894, being the birthday of his mother, the ex-Empress Frederick, the emperor called the Reichstag to meet in the new building in Berlin on that day. The builders protested that it could not be ready, and ultimately the opening session was not held till December. It then took place with great display of the rich and splendid structure, and a congratulatory speech from the emperor; but the enthusiasm of the occasion was marred by the refusal of the socialist deputies to rise and join in the cheers called for by the president. In the summer of 1895 an International Art Exhibition was held in Berlin. A large number of American artists took part in the exhibition, and were much praised by the German critics. In November, 1895, was published the latest report of the city savings bank. It showed on deposit 162,842,028 marks (\$40,710,507), being 11,566,766 marks (\$2,891,681) more than the year before. The payments into the bank during the year numbered 526,295, of which 178,960 were in sums from 1 to 21 marks, 162,212 in sums from 21 to 61 marks. The increase of depositors was from 484,363 in 1894 to 509,732 in 1895. Of these depositors 159,732 had a credit ranging from 1 to 61 marks, 88,527 from 61 to 151 marks, and 75,685 from 151 to 301 marks, showing that the depositors were mostly poor persons. There were 76 offices for receiving deposits in all parts of the city. The cash capital of the bank was 176,430,978 marks (\$44,107,744) *i.e.*, 13,588,950 marks (\$3,397,237) in excess of the deposits. Of the profits 1,112,306 marks (\$278,074) had been thus far expended for works of public utility. The new census of Prussia, completed in 1895, shows that the population of Berlin had increased only 36,288, or 2.2 per cent., for four and a half years, being reported in November, 1895, as 1,757,898, although the population of the kingdom had increased more than 5 per cent., and the increase of Berlin between 1870 and 1890 had been over 50,000 a year. The centenary of the birth of the Emperor William I. was celebrated with much splendor in March, 1897. On the 22d a magnificent bronze statue of him was unveiled, and on the 23d there was a grand historical procession through the streets of the city.

BERLIN, UNIVERSITY OF, Berlin, Germany; established in 1809. At the beginning of 1895 it had the four departments of theology, with 531 students; jurisprudence, with 1,625; medicine, with 1,279; and philosophy, with 1,544; total of matriculated students, 4,979, besides 3,471 non-matriculated, of whom many were foreigners. There were in all departments 372 professors and teachers. At the close of 1895 there were 5,368 unmatriculated students, of whom 3,778 were from Prussia, 814 from elsewhere in Germany, 219 from the United States, 198 from Russia, 102 from Switzerland, 57 from Austria, 32 from Great Britain, 31 from Hungary, and 22 from France. The faculty of theology was Protestant. In 1894 the medical department received a bequest from Dr. Adolph Düsterhoff of 100,000 marks, the interest of which gives a special prize twice a year to the most diligent worker. The library contained 300,000 volumes. In November, 1895, a students' club of a novel kind was opened in Berlin for the study and discussion of modern social questions. Its organization had been opposed by the late rector of the university, Dr. Pfeleiderer, on the ground that students should not discuss politics or risk contagion of socialistic principles; but Dr. Wagner, the present rector, gave it his approval. At its inauguration

it was maintained that its idea was not political, but for the forwarding of "university extension," and such work as that of Toynbee Hall in London.

BERMUDA (also SOMERS'S) ISLANDS, a group of 360 islands in the Atlantic Ocean, 580 miles east of North Carolina, constituting a British colony with representative government; population (1893) 15,952. The last local statistics available (reported in 1897) showed: Imports, £304,895; exports, £101,163; debt, £46,600; revenue, £34,256; expenditure, £31,717. Nearly all the export produce goes to the United States and Canada, and the bulk of the food supplies are imported therefrom. The total tonnage of vessels entered and cleared 1893 was 354,043, nearly all British. In the year ending June 30, 1897, the commerce with the United States was: Imports, \$621,831; exports, \$854,832—total trade, \$1,476,663, an increase in imports, decrease in exports, and increase in bulk of trade of \$29,942 over the previous fiscal year.

BERMUDEZ, REMIGIO MORALES, president of Peru, was born in Pica, Peru, Sept. 10, 1836; died at Lima, March 31, 1894. He was president from 1890 till his death.

BERNE, the most populous canton of Switzerland; also city and capital of the same; population, canton (1894) 541,051; city (1893) 47,620. During the six months ending June 30, 1895, the exports here declared for the United States aggregated in value \$392,638.99, an increase of \$45,222.39 over the total of the corresponding period 1894. The principal articles were cheese, silk tissues, and knit goods.

BERNE, UNIVERSITY OF, Berne, Switzerland; founded in 1832; organized on the model of the German universities; and having, at the close of 1895, the four faculties of theology, law, medicine, and philosophy; instructors 88; students matriculated, 605, besides the foreigners, of whom some were women, attending the lectures.

BERNHARDT, ROSINE SARAH, actress, was born in Paris, France, Oct. 22, 1844. In 1894 she had a very successful season at Daly's theater, London, appearing in Sardou's new play, *Gismonda*. In 1895 she made a tour in Italy and Spain, having a cool reception in Italy, but at Madrid being supported in *The Sphynx* by Maria Guerrero, one of the most popular of Spanish actresses; and winning the most enthusiastic praises in *La Tosca*, *Gismonda*, and *Mingla*. She revisited the United States in 1896. In December of that year a festival was given in her honor in Paris, after which she appeared in *Phédre* and *Rome Fanéme* at the Renaissance theater. She produced De Musset's *Lorenzaccio* at the Adelphi, London, in 1897.

BERTHELOT, PIERRE EUGENE MARCELIN, specialist in synthetic and thermo-chemistry, and professor of organic chemistry in the College de France, was born in Paris, Oct. 25, 1827. His achievements in the line of chemical synthesis 1895 astonished not only the scientific world, but agriculturists, manufacturers, and other producers of staple articles, for he demonstrated that sugar, tea, coffee, cocoa, tobacco, and alizarin (the essential principle of the madder-root, used as the basis of dyes), and indigo, can be made by synthetic chemistry, equal in all respects to the cultivated or manufactured articles, and at far less cost. He has published numerous scientific works, has been highly honored at home and abroad, and on Nov. 1, 1895, was appointed minister of foreign affairs in the cabinet of M. Bourgeois.

BESANT, MRS. ANNIE, theosophist, was born in London, England, Oct. 1, 1847. After a long visit to India she returned to England in April, 1894, and took up her residence at the Theosophical European Headquarters in Regent's Park, London. In 1897 she made a six months' tour of the United States, lecturing on *The Human Aura; Materialism Undetermined by Science*; and other topics. See her autobiography, *Through Storm to Peace* (1893).

BESANT, SIR WALTER, author, was born in Portsmouth, England, in 1836; collaborated for several years with the late James Rice in romance writing; was for a long time secretary to the Palestine Exploration Fund; first chairman of the executive committee of the Incorporated Society of Authors; knighted in May, 1895. Of his individual novels probably the best known is *All Sorts and Conditions of Men*, which inspired the establishment of the celebrated People's Palace, in London. His latest publications include *Beyond the Dream of Avarice* (1894), and *The Master-Craftsman* and *The City of Refuge* (1896).

BESSEMER, SIR HENRY, inventor, was born in Hertfordshire, England, in 1813; died in London, March 14, 1898. His discovery of the means of rapidly and cheaply converting pig iron into steel by blowing a blast of air through the iron when in a state of fusion was the result of costly and laborious experiments which extended over a long period and in which the end was attained only after many and disheartening failures. The invention revolutionized the whole iron trade of the world in the short space of thirty years. He was president of the Iron and Steel Institute of Great Britain; was knighted in 1879; and had Bessemer, Ala., Bessemer, Mich., and several other places named after him.

BEVERLY, city, incorporated (1894), Essex county, Mass.; population (1890) 10,821; (1895) State census, 11,802. In 1896 the assessed valuations were: Real estate, \$10,940,700; personal, \$3,231,800—total \$14,172,500; total tax rate, \$14.80 per \$1,000; and total debt, \$1,015,700. The city has electric street railroad connecting with Peabody, Salem, and Gloucester, a horse-car line to Wenham, manufactories of leather and ladies' boots and shoes, large cod fishery interests, national and savings banks, and a daily, 2 weekly, and 2 monthly periodicals.

BIBLE SOCIETY, AMERICAN, organized in New York, in 1816. The seventy-ninth annual report, presented May 9, 1895, shows that the receipts during the year from church collections were \$20,828.00, individual gifts \$6,711.47, through auxiliary societies, \$31,993.86; total gifts, \$59,533.33; legacies, \$159,916.32; interest on investments, \$26,261.56; rents, \$37,557.17; miscellaneous receipts, \$1,856.27; sales of books and purchase account, \$238,699.61; total receipts, \$526,821.26, besides \$12,121.57 received for permanent investment. The society holds in trust invested funds, only the income of which can be used for benevolent purposes, amounting March 31, 1895, to \$410,435.08; special funds amounting to \$34,701.22, the income of which is applied by direction of the donors to certain specific uses; while certain other funds available for the benevolent work of the society amount to \$146,806.64. The society disbursed during the year \$508,803.16, and its drafts for \$18,447.40 were still outstanding. The appropriations for the foreign work of 1894-95 were \$176,665. Translations and revisions of parts of the Bible were secured in Kusaen, Bulgarian, Kurdish, Siamese, Korean, different dialects of Chinese, and the languages of Laos and the Marshall Islands. The volumes of the Scriptures printed at the Bible House were 1,051,400; imported, 6,376; printed abroad, 762,628; purchased abroad, 138,270; aggregate circulation abroad, 735,221. The issues of the society since its organization have

been 59,955,558 copies. During the year 101,196 copies of the Scriptures or parts of them were sent to foreign lands, or 12,859 more than in any previous year. Of these 92,475 went to Cuba and Latin America, and increased numbers were sent to Venezuela, Mexico, Austria, Japan, and China. The visitors of the society visited 516,798 families in the United States, of whom 119,244 were found without the Scriptures; and Bibles or Testaments were supplied to 34,299 destitute families, 19,983 individuals, and 609 Sunday schools. In 1896-97 the issues were 1,513,499 copies, and the total since organization was 63,219,540.

BIBLE SOCIETY, BRITISH AND FOREIGN, organized in London, March 7, 1804. The annual report presented May 1, 1895, showed that the receipts for the year were: From subscriptions, donations, collections, and legacies, \$688,879.91; from sales, \$467,764.52; from special funds, \$10,172; total, \$1,166,816.66. The society had issued from the Bible House, London, 1,651,566 Bibles and portions of the Bible; and from depots in foreign countries 2,185,656; total issue for the year 3,837,222, an increase of 172,766 over the preceding year. The issues since 1804 had numbered 143,396,230. The society had co-operated with other societies in translating and revising translations of the Bible: the work of 1894-95 including new translation or revision in 124 languages and dialects: the languages and dialects of translation since 1804 having numbered 344. A large force of colporteurs had been employed in many countries; and through them, by co-operation of missionaries, and of different established Christian churches and societies, they have secured during the year the circulation of the Bible in many countries: in France 167,763 copies; Belgium 34,468; Germany, among the Catholic and non-Germanic people, 64,359; Switzerland, 53,568; Austria-Hungary, 161,695; Italy, 189,653; Spain, 51,907; Portugal, 11,664; Denmark, 25,431; North Russia 358,753; South Russia 168,555; Siberia over 60,000; Turkey and Greece, 37,907; Algeria and Tunis, 14,942; in Africa, by the Cape Town agency, besides the work done by many missionaries, 32,120; Madagascar, 13,067; Mauritius, 2,751; Egypt, 24,116; Syria and Palestine, 2,502; Arabia and Abyssinia, 3,508; Persia, 8,511; India, 203,122; China, 288,756; Japan, 113,939; Chile and Peru, 6,012; Argentina, 13,785; Brazil, 19,743. The grants authorized during the year have amounted to \$111,783.76; total payments for the year \$1,074,851.95. Up to 1897 more than 151,000,000 Bibles and portions of the Bible, in 339 languages and dialects, had been issued. The expenditure in 1897 was nearly £204,000.

BIDDEFORD, city, York county, Me., population (1890) 14,443. In 1895 it had 2 national banks, 2 savings banks, a loan and building association, a trolley railway extending to Old Orchard Beach, and 3 daily, 4 weekly, and 2 monthly periodicals. On March 22, 1895, a special freight train of 29 cars, all loaded with cotton goods manufactured in the Biddeford mills and consigned to Shanghai, China, left the city on a direct run to Vancouver. This was the largest single shipment ever made from these mills.

BIERSTADT, ALBERT, artist, was born in Dusseldorf, Germany, Jan. 7, 1830; but since early youth has lived in the United States. His studio contains several large paintings, such as *The Landing of Columbus*, the landscape painted from studies made on the presumed spot; and he is at work on another San Salvador coast view, with magnificent surf; also, on a canvas six feet by ten, from studies in 1895 of Mt. Engadine in the southeastern Alps.

BIGELOW, JOHN, LL.D., author, was born in Malden, N. Y., Nov. 25, 1817. In his will Samuel J. Tilden appointed him his biographer and one of three

trustees of the bulk of his estate, set apart for the establishment of a public library in New York City. Mr. Tilden died Aug. 4, 1886, the trust fund clause of his will was attacked by some of his heirs, and after a memorable litigation the contest was sustained by the Court of Appeals, Oct. 27, 1891. A niece, Mrs. William B. Hazard, voluntarily relinquished to the trustees over \$2,000,000 of her share of the estate, to aid in carrying out her uncle's wishes. On Feb. 22, 1895, a joint committee, representing the Tilden Trust Fund and the Astor and Lenox Libraries, agreed on a plan for the consolidation of those interests and the establishment of a great public library, to be known as the New York Public Library, Astor, Lenox, and Tilden Foundations. The agreement was ratified by the several interests, an act of incorporation was obtained from the legislature, and on May 27, Mr. Bigelow was elected president of the consolidated board of trustees, and appointed chairman of the executive committee and of the committee on library books. He published *The Life of Samuel J. Tilden* (2 vols., New York, 1895). See NEW YORK PUBLIC LIBRARY.

BIGELOW, JOHN, JR., military officer, was born in New York City, son of John Biglow; graduated at the United States Military Academy, and commissioned second lieutenant 10th United States cavalry, June 15, 1877; promoted 1st lieutenant, Sept. 24, 1883, and captain, April 15, 1893; and appointed instructor of military science and tactics at the Massachusetts Institute of Technology, Boston, Aug. 3, 1894. He has published numerous sketches of army life in the West, and *The Principles of Strategy Illustrated Mainly from American Campaigns* (2d ed., enlarged, Philadelphia, 1894).

BIGELOW, POULTNEY, author, was born in New York City, Sept. 10, 1855; second son of John Bigelow; graduated at Yale College and continued his studies in Germany, having for a classmate the present emperor; was admitted to the bar in New York City, but has applied himself to authorship and travel; and was for some time editor of *Outing*, a magazine of recreation. He made a canoe voyage down the Danube, and 1892 was expelled from Russia while gathering material for a book on that country. In December, 1895, he was sent on a mission to Germany by the New York State Insurance Department. He has published *The German Emperor* (1889); *The German Emperor and His Eastern Neighbors* (1892); *Paddles and Politics Down the Danube* (1892); *The Borderland of Czar and Kaiser: Notes from Both Sides of the Russian Frontier* (1894); *White Man's Africa and History of the German Struggle for Liberty* (1897); and many magazine articles.

BILLINGS, JOHN SHAW, surgeon, was born in Switzerland county, Ind., April 12, 1838; was placed on the retired list of the United States army with the retired pay of a colonel, and appointed professor of hygiene in the University of Pennsylvania in 1895; and was chosen superintendent of the consolidated New York Public Library (Lenox, Astor, Tilden), in January, 1896.

BIMETALLISM. The agitation for the adoption of a double monetary standard of value grows in strength in foreign countries, which look to the United States for a practical initial movement; and a remedy for the evils complained of by bimetallicists is still a matter of enactment by the nations interested. Several conferences, international and national, have been held since the memorable but fruitless one in Brussels, 1892, but without notable conclusions. In all, it has seemed essential that the United States, Great Britain, France, and Germany should be united in the movement and unanimous in legislation. Each of these countries has a national league devoted to the propagation of bimetallic princi-

ples. An international conference was held in London, England, in May, 1894, in which the United States was represented by Brooks Adams, of Boston; but nothing beyond the presentation and consideration of learned papers on the subject was accomplished. In December, 1895, a conference in Paris, France, comprising delegates from the bimetallic leagues of Great Britain, France, and Germany, merely agreed on the terms of its principal resolutions, which the British delegates were authorized to induce the American leagues to accept. In April, 1896 another conference was held in Brussels, in which the United States, Great Britain, Germany, Austria-Hungary, France, Russia, Belgium, Denmark, Holland, and Roumania were represented. The object of the gathering was chiefly an exchange of views on the general subject, prior to the calling of an international congress to devise a plan of action; but before separating the delegates constituted themselves a permanent committee, and expressed the opinion that an immediate agreement might result from the re-establishment of bimetalism in the United States, the reopening of the Indian mints for the coinage of silver, the turning into silver of part of the metallic reserve of the Bank of England, and the absorption of a sufficient amount of silver by the various European governments. More in the line of advancement was a resolution introduced into the United States Senate by Senator Chandler (N. H.), on Dec. 6, 1895, providing for the unlimited coinage of gold and silver, in connection with other nations, at the ratio of 1 to 15½. Under the first section, any person might deposit in any United States mint gold or silver bullion not less in value than \$50, and have the same coined, free of charge when the metal needs no refining, the gold into coins provided for by existing laws, and the silver into dollars nine-tenths fine, the weight of the pure silver in each dollar to be 15½ times the 23 $\frac{2}{100}$ grains of the pure gold in the gold dollar, or 359 $\frac{9}{10}$ grains, which, with 39 $\frac{9}{10}$ grains of alloy, will make the total weight of each silver dollar 399 $\frac{9}{10}$ grains, instead of 412½ grains, as under the existing law. The second section provided that payment for such bullion should be made to the depositor in coin or treasury notes; that the silver dollars coined under this law, as well as the regular gold coins and the treasury notes should be a full legal tender for all public and private debts; and that existing silver dollars should be retired and recoined according to the new ratio. The third section provided that this law should take effect when similar laws should have been adopted by the governments of England, France, and Germany, and that when such laws had been passed by the governments named, the president should make proclamation accordingly, and the law should then take effect and be in force. Under the rules the resolution was referred to committee for consideration and report. At a conference of the leading bimetallicists of the United States, at Washington, D. C., Feb. 22, 1895, a new political organization was formed under the name of the American Bimetallic Party. The declaration of principles asserted unalterable opposition to the single gold standard and to the issue by the United States government of interest-bearing bonds in time of peace, and demanded the immediate restoration of the double standard, the unrestricted coinage of both gold and silver at a ratio of 16 to 1 and on terms of exact equality, and the payment of the coin obligations of the government in gold or silver at the option of the government, not at that of the creditor. The conference, in the absence of authority to make presidential nominations, suggested Joseph C. Sibley (Pa.), as a fitting candidate for the party's nomination for president. Gen. A. J. Warner (address, Washington, D. C.), president of the American Bimetallic League, was made chairman of the executive committee of the new party. In the early part of 1895 the hopes of

bimetallists in the United States, Great Britain, and Germany particularly, began to rise high, and advocates of the double standard won hosts of adherents by attributing the industrial depression in each of these countries to the domination of the single standard. As bimetallic leagues increased in number and strength, gold standard and sound money associations sprang up from the opposition.

In the United States the agitation became the most pronounced because of the approaching presidential election. President Cleveland took a strong stand for sound money, but his party was divided, and the free coinage men also drew to their side many influential Republicans. In Congress the free silver men developed such strength on several measures that they declared their ability to elect the next president. The national conventions of the two great parties brought the issue directly to the front. On June 18, 1896, the National Republican party adopted its platform, with the following declaration on the currency question: "The Republican party is unreservedly for sound money. It caused the enactment of the law providing for the resumption of specie payments in 1879; since then every dollar has been as good as gold. We are unalterably opposed to every measure calculated to debase our currency or impair the credit of our country. We are therefore opposed to the free coinage of silver except by international agreement with the leading commercial nations of the world, which we pledge ourselves to promote, and until such agreement can be obtained the existing gold standard must be preserved. All our silver and paper currency must be maintained at parity with gold, and we favor all measures designed to maintain inviolably the obligations of the United States, and all our money, whether coin or paper, at the present standard, the standard of the most enlightened nations of the earth."

The Democratic party in national convention adopted a platform on July 9, containing the following plank: "We demand the free and unlimited coinage of both silver and gold at the present legal ratio of 16 to 1 without waiting for the aid or consent of any other nation. We demand that the standard silver dollar shall be a full legal tender equally with gold for all debts, public and private, and we favor such legislation as will prevent for the future the demonetization of any kind of legal tender money by private contract. We are opposed to the policy and practice of surrendering to the holders of the obligations of the United States the option reserved by law to the government of redeeming such obligations in either silver coin or gold coin."

Because of these declarations there was a large defection from each party. Neither the free silver Republicans nor the sound money Democrats could support the declarations of their parties. The sound money Democrats organized a new party, the National Democratic, and declared in national convention, Sept. 3: "The experience of mankind has shown that by reason of their natural qualities, gold is the necessary money of the large affairs of commerce and business, while silver is conveniently adapted to minor transactions, and the most beneficial use of both together can be insured on it by the adoption of the former as a standard of monetary measure, and the maintenance of silver at a parity with gold by its limited coinage under suitable safeguards of law. Thus the largest possible enjoyment of both metals is gained with a value universally accepted throughout the world, which constitutes the only practical bimetallic currency, assuring the most stable standard, and especially the best and safest money for all who earn their livelihood by labor or the produce of husbandry. They cannot suffer when paid in the best money known to man, but are the peculiar and most defenseless victims of a debased and fluctuating currency, which offers continual profits to the money changer at their cost. Realizing the truths demonstrated by long and

public inconvenience and loss, the Democratic party, in the interest of the masses and of equal justice to all, practically established by the legislation of 1834 and 1853 the gold standard of monetary measurement and likewise entirely divorced the government from banking and currency issues. To this long-established Democratic policy we adhere, and insist upon the maintenance of the gold standard and of the parity therewith of every dollar issued by the government, and are firmly opposed to the free and unlimited coinage of silver and to the compulsory purchase of silver bullion."

The People's party in national convention, July 24, demanded "the free and unrestricted coinage of silver and gold at the present legal ratio of 16 to 1, without waiting for the consent of foreign nations," and "that the government, in payment of its obligations, shall use its option as to the kind of lawful money in which they are to be paid, and we denounce the present and preceding administration for surrendering this option to the holders of government obligations."

The National silver party, July 23, declared as follows concerning the reinstatement of silver: "On this issue we declare ourselves to be in favor of a distinctively American financial system. We are unalterably opposed to the single gold standard, and demand the immediate return to the Constitutional standard of gold and silver, by the restoration by this government, independently of any foreign power, of the unrestricted coinage of both gold and silver into standard money at the ratio of 16 to 1 and upon terms of exact equality, as they existed prior to 1873; the silver coin to be of full legal tender, equally with gold, for all debts and dues, public and private, and we demand such legislation as will prevent for the future the destruction of the legal tender quality of any kind of money by private contract."

The National party, May 29, adopted the following in its platform: "For the purpose of honestly liquidating our outstanding coin obligations, we favor the free and unlimited coinage of both silver and gold, at a ratio of 16 to 1, without consulting any other nation."

For the results of the election, see MCKINLEY, WILLIAM, *Election*.

A resolution introduced in the United States Senate by Senator Teller (Colo.) declaring that government bonds are payable in standard silver dollars, was passed in the Senate, Jan. 28, 1898, by a vote of 47 ayes, to 32 nays, and defeated in the House, Jan. 31, by a vote of 182 nays to 132 ayes. For other events cognate to bimetallism, see MONETARY COMMISSION: MONETARY CONFERENCE, INTERNATIONAL.

BINGHAMTON, city, capital of Broome county, N. Y., population (1890) 35,005; (1895) estimated 43,000. In January, 1897, the total debt, all bonded, was \$436,500, which included an outstanding water debt of \$166,000. The tax valuations, 1896-97, were: Real estate, \$17,913,250; personal, \$1,910,130; included in the above but exempt from taxation, \$116,250; total valuation, \$19,707,430; assessment about three-fourths actual value. The value of property owned by the city exceeds \$2,000,000, of which the water works plant is estimated at \$1,500,000. The public school buildings number 16; public school enrollment, 6,898; teachers, 310; value of public school property, \$381,345; church organizations, 31. There are 2 national banks, 3 State banks, a trust company, a private bank, an electric street railroad, and 3 daily and 7 weekly newspapers.

BIRKENHEAD, a seaport town, Cheshire, England, on the Mersey River, opposite Liverpool; population (1891) 99,181; (1894) estimated 105,627. It is noted for its bridge and ship-building plants, and, by an extensive system of docks and warehouses, its commercial interests have become identical with those

of Liverpool. Passengers and freight are transported from Liverpool to Birkenhead by lighters, steam ferryboats, and a tunnel. To render this transfer more expeditious, it is proposed to improve Liverpool harbor by constructing an outer landing place, and to erect an immense arched suspension bridge over the Mersey between Liverpool and Birkenhead. By these improvements passengers and freight may be taken directly from the Atlantic steamships to Birkenhead without using lighters or ferryboats.

BIRMINGHAM, city, capital of Jefferson county, Ala.; population (1890) 26,178; (1897, per city directory) 62,777. The last reported assessed valuations (for 1893) were: Real, \$20,000,000, personal \$3,000,000—total, \$23,000,000; city tax rate, \$5 per \$1,000. In 1897 the bonded debt was \$1,610,000, floating debt, about \$20,000. There are 3 national banks; 2 trust companies; a savings bank; 2 private banks; a cotton mill; 38 coke and 14 charcoal furnaces (nearly one-sixth of the whole number in the United States); 2 of the largest and best equipped rolling mills in the South; 8 foundries and machine shops; 2 large coal and iron mining corporations; an electric railway operating over 60 miles of track and extending to Bessemer, Pratt City, Ensley, and East Lake; and 3 daily, 9 weekly, and 5 monthly periodicals. In 1897 the city secured the location of two more mammoth cotton mills, the Avondale, with a capital of \$500,000, and to have 30,000 spindles, and the Indian Head, to cost \$600,000 and have 35,000 spindles. Of the former the greater part of the capital was from local sources; of the latter, it was almost exclusively from Boston. Large tracts of land were donated to each concern. There was an unusual activity in local iron, caused by greatly increased orders from Glasgow and Liverpool, and the representative of an English syndicate was seeking the purchase of some idle furnace and rolling mill properties. Local bank clearings in the six months ending Dec. 1, aggregated \$10,362,639, an increase of \$1,250,000 over the same period in the previous year. Strong efforts were made to secure the establishment here of the proposed steel plant of the Federal government.

BIRMINGHAM, city, Warwick county, England; population (1891) 429,171. During the quarter ending June 30, 1895, the exports declared here for the United States aggregated in value \$729,718.19, an increase of \$242,327.73 over the total of the corresponding quarter 1894. The principal articles were hardware (\$263,130); iron and steel and manufactures thereof (\$114,086); saddlery (\$73,893); drugs, chemicals, and dyes (\$57,906); cycles (\$49,714); skins, hides, and furs (\$48,363); china, glass, and earthenware (\$33,453); and metals other than iron and steel (\$17,054).

BIRRELL, AUGUSTINE, barrister and author, was born in Wavertree, near Liverpool, England, Jan. 16, 1850. Besides many contributions, to periodicals, he published in 1894 *Res Judicata*; and a volume of essays, under the title *Men, Women, and Books*.

BISHOP, ISABELLA BIRD, author and traveler, was born in Yorkshire, England, about 1831; made her first trip abroad 1855, when she visited Prince Edward's Island and the United States, and has since circumnavigated the globe three times. In recent years she has spent much time in Japan, and in 1894-5 made her third trip to Korea. She was in Seoul when the war broke out, 1894, and was the first person whose war correspondence reached London. She is a Fellow of the Royal Geographical Society, and is constantly sending it papers on her travels. Her publications include a work on the United States (1866); *Unbeaten Tracks in Japan* (1880); *Among the Tibetans* (1894); *Six Months Among the Palm Groves of the Sandwich Islands* (1894); *Korea and her Neighbors* (1897).

BISHOPS OF THE CHURCH OF ENGLAND, 1898:

See	Ap't'd	Income
Canterbury—Frederick Temple (Abp.)	1896	\$75,000
Suffragan, Dr. William Dalrymple MacLagan (Abp.)	1881	50,000
York—William Dalrymple MacLagan (Abp.)	1881	50,000
Suffragan, Dr. Crosthwaite, Bishop of Beverly.		
" Dr. Hunt, Bishop of Hull.		
London—Mandell Creighton	1896	50,000
Suffragan, Dr. Earle, Bishop of Marlborough.		
" Dr. Ingram, Bishop of Stepney		
" Dr. Wilkinson, assistant bishop for British subjects in N and C Europe.		
Durham—Brooke Foss Westcott	1890	40,000
Suffragan, Dr. Sanford, coadjutor bishop.		
Winchester—Randall T. Davidson	1895	32,500
Suffragan, Dr. Sumner, Bishop of Guilford		
Bangor—Daniel Lewis Lloyd	1890	21,000
Bath and Wells—George W. Kennian	1891	25,000
Suffragan, Dr. C. H. Bromley, assistant bishop.		
Carlisle—John Wareing Bardsley	1891	22,500
Suffragan, Dr. Ware, Bishop of Barrow-in-Furness.		
Chester—Francis John J. Lynn	1889	21,000
Chichester—Dr. E. R. Wilberforce	1895	21,000
Ely—Alycne Spencer Compton	1886	27,500
Exeter—Edward Henry Bickersteth	1885	21,000
Gloicester and Bristol—Charles John Ellicott	1863	25,000
Suffragan, Dr. Samuel E. Marsden.		
Hereford—Dr. John Percival	1895	21,000
Lichfield—James Legge	1891	21,000
Suffragan, Sir I. Stamer, Bishop of Shrewsbury		
Lincoln—Edward King	1885	22,500
Liverpool—John Charles Hyle	1880	17,500
Suffragan, Dr. Royston		
Llandaff—Richard Lewis	1883	21,000
Manchester—James Moorhouse	1886	21,000
Suffragan, Dr. C. Roberts		
Newcastle—Dr. Edgar Jacob	1882	17,500
Norwich—Dr. Sheepsheads	1893	22,500
Suffragan, Dr. Lloyd, Bishop of Thetford.		
Oxford—William Stubbs	1889	25,000
Suffragan, Dr. Bantall, Bishop of Reading		
Peterborough—Dr. E. Carr-Glynn	1896	22,500
Suffragan, Dr. Mitchinson, assistant bishop.		
" Dr. Thicknesse, Bishop of Leicester.		
Ripon—William Boyd Carpenter	1884	21,000
Suffragan, Dr. Pultine, Bishop of Richmond.		
Rochester—Dr. Edward S. Tallot	1895	15,500
Suffragan, Dr. Yeatman, Bishop of Southwark		
St. Alban's—Dr. John Yocum Festing	1891	22,500
St. Asaph—Alfred George Edwards	1880	21,000
St. David's—Dr. John Owen	1897	22,500
Suffragan, Dr. J. Lloyd, Bishop of Swansea		
Salisbury—John Wordsworth	1885	25,000
Soder and Mann—Dr. N. D. J. Stratton	1892	10,000
Southwell—George Ridding	1884	15,000
Suffragan, Dr. Ware, Bishop of Derby		
Truro—Dr. John Gott	1891	15,000
Wakefield—Dr. George R. Eden	1897	15,000
Worcester—John James Stuart Perowne	1891	25,000
Suffragan, Dr. E. A. Knox, Bishop of Coventry		

BISHOPS OF THE METHODIST EPISCOPAL CHURCH IN THE UNITED STATES, 1898:

	Elected
Thomas Bowman	Evansville, Ill. 1872
Randolph S. Foster	Roxbury, Mass. 1872
Stephen M. Merrill	Chicago, Ill. 1872
Edward G. Andrews	New York City 1872
Henry W. Warren	Denver, Col. 1880
Cyrus D. Foss	Philadelphia, Pa. 1880
John F. Hurst	Washington, D. C. 1880
William X. Sindle	Detroit, Mich. 1881
John M. Walden	Cincinnati, O. 1881
Willard F. Mallahan	Boston, Mass. 1884
Charles H. Fowler	Buffalo, N. Y. 1884
William Taylor	Miss. Bishop for Africa 1884
John H. Vincent	Topeka, Kan. 1888
James N. Fitz Gerald	St. Louis, Mo. 1888
Isaac W. Joyce	Minneapolis, Minn. 1888
John P. Newman	San Francisco, Cal. 1888
Daniel A. Goodsell	Chattanooga, Tenn. 1888
James M. Thornburn	Miss. Bishop for India 1888
Charles McCabes	Fort Worth, Tex. 1896
Earl Cranston	Portland, Ore. 1896
Joseph C. Hartzell	Miss. Bishop for Africa 1896

Vermont—Arthur Cranshaw Alliston Hall	1863
Virginia—Francis McNeese Whittle	1868
Robert A. Gibson, conductor	1897
Southern—Alfred M. Randolph	1878
West Virginia—George William Peterkin	1883
Wisconsin—Milwaukee—Isaac L. Nicholson	1891
Fond du Lac—Charles C. Grafton	1889
Washington—Olympia—William M. Barker (missionary)	1893
Spokane—Lemuel H. Wells (missionary)	1892
Wyoming and Idaho—Vacant	1889
Africa—Cape Palmas—S. D. Ferguson (missionary)	1885
China—Frederick R. Graves (missionary)	1863
John McKim (missionary)	1863
Charles C. Penick, late Bishop of Cape Palmas. <i>Retired.</i>	1872
S. J. Schereschewsky, late Bishop of Shanghai, China. <i>Retired.</i>	1877
Thomas Augustus Jagger, late Bishop of Southern Ohio. <i>Retired.</i>	1875
Chaaming Moore Williams, late Bishop of China and Japan. <i>Retired.</i>	1899

BISHOPS OF THE REFORMED EPISCOPAL CHURCH, 1898 :

Charles Edward Cheney	Residence—Chicago, Ill.
William R. Nicholson	Philadelphia, Pa.
Edward Cridge	Victoria, B. C.
Samuel Fallows	Chicago, Ill.
P. F. Stevens	Lancaster, S. C.
James A. Latané	Baltimore, Md.
Edward Wilson	Metuchen, N. J.
Thomas W. Campbell	Brooklyn, N. Y.

BISHOPS OF THE A. M. E. ZION CHURCH, 1898 :

James Walker Wood	Residence—Fayetteville, N. C.
Joseph P. Thompson	Newburg, N. Y.
Thomas H. Lomas	Charlotte, N. C.
Cleora R. Harris	Salisbury, N. C.
Isaac C. Clinton	Lancaster, S. C.
Alexander Walters	Jersey City, N. J.
C. Calvin Petty	Newbern, N. C.

BISHOPS OF THE ROMAN CATHOLIC CHURCH IN THE UNITED STATES, 1898 :

APOSTOLIC DELEGATE.

Archbishop Sebastian Martinelli, Washington, D. C.

See.	ARCHBISHOPS.	Cons.
Baltimore, Maryland	James Gibbons, Cardinal	1868
Boston, Massachusetts	John J. Williams	1869
Chicago, Illinois	Patrick A. Foley	1865
Cincinnati, Ohio	William H. Elder	1857
Des Moines, Iowa	John Hennessey	1866
Milwaukee, Wisconsin	Frederick X. Katzner	1860
New Orleans, Louisiana	P. L. Chapelle	1897
New York, New York	M. A. Corrigan	1873
Portland, Oregon	W. H. Gross	1873
Philadelphia, Pennsylvania	Patrick J. Ryan	1872
St. Louis, Missouri	John J. Kain	1875
St. Paul, Minnesota	John Ireland	1875
San Francisco, California	Patrick W. Riordan	1883
Santa Fe, New Mexico	Vacant	
BISHOPS.		
Albany, New York	Thomas M. Burke	1891
Alton, Illinois	James Ryan	1888
Belleville, Illinois	A. Janssen	1888
Boise City, Idaho	A. J. Glerieux	1885
Boston, Massachusetts	John Brady (Auxiliary)	1891
Brooklyn, N. Y.	C. E. McDonnell	1892
Buffalo, N. Y.	James E. Quigley	1897
Burlington, Vermont	J. S. Michaud	1893
Charleston, South Carolina	H. P. Northrup	1882
Cleveland, Ohio	J. F. Horstmann	1892
Columbus, Ohio	L. A. Watterson	1889
Covington, Kentucky	C. P. Maes	1887
Dallas, Texas	Edward J. Dunne	1893
Davenport, Iowa	H. Cosgrove	1884
Denver, Colorado	N. C. Matz	1896
Detroit, Michigan	John S. Foley	1888
Duluth, Minnesota	James McElfredrick	1889
Eric, Pennsylvania	Tobias Mullen	1868
Fargo, North Dakota	John F. Fitzmaurice, coadj.	1897
Fort Wayne, Indiana	John Shanley	1889
Galveston, Texas	L. Rademacher	1883
Grand Rapids, Michigan	N. A. Gallagher	1882
	H. J. Richter	1881

Green Bay, Wisconsin.....	Sebastian Messmer.....	1892
Guthrie, Oklahoma.....	Theodore Meerschaert.....	1891
Harrisburg, Pennsylvania.....	Thomas P. McGovern.....	1888
Hartford, Connecticut.....	M. Tierney.....	1884
Helena, Montana.....	J. B. Brondel.....	1879
Kansas City, Kansas.....	L. M. Fink.....	1871
Kansas City, Missouri.....	John J. Hogan.....	1868
".....	A. J. Glennon, conductor.....	1896
La Crosse, Wisconsin.....	James Schwebach.....	1892
Laredo, Texas.....	P. Verdagner.....	1890
Lincoln, Nebraska.....	Thomas Bonacum.....	1887
Little Rock, Arkansas.....	Edward Fitzgerald.....	1897
Los Angeles, California.....	Vacant.....	1897
".....	G. Montgomery, conductor.....	1894
Louisville, Kentucky.....	William G. McCloskey.....	1868
Manchester, New Hampshire.....	P. M. Bradley.....	1884
Marquette, Michigan.....	John Vertin.....	1879
Marysville, California.....	Eugene O. Connell.....	1887
Mobile, Alabama.....	Edward P. Allen.....	1897
Nashville, Tennessee.....	Thomas S. Byrne.....	1894
Natchez, Mississippi.....	Thomas Heslin.....	1889
Natchitoches, Louisiana.....	Anthony Durier.....	1887
Nesqueally, Washington.....	Edward J. O'Dea.....	1896
Newark, New Jersey.....	W. M. Wigger.....	1881
New York, New York.....	John M. Farley (Auxiliary).....	1886
Ogdensburg, New York.....	Henry Gabriels.....	1892
Omaha, Nebraska.....	Richard Scannell.....	1887
Peoria, Illinois.....	J. L. Spalding.....	1877
Pittsburg, Pennsylvania.....	R. Gleason.....	1885
Portland, Maine.....	J. A. Healey.....	1875
Providence, Rhode Island.....	M. Harkins.....	1887
Richmond, Virginia.....	A. Van de Vyver.....	1889
Rochester, New York.....	D. F. McQuaid.....	1888
St. Augustine, Florida.....	John Moore.....	1877
St. Cloud, Minnesota.....	Vacant.....	1897
St. Joseph, Missouri.....	M. F. Burke.....	1893
Sacramento, California.....	Thomas Gray.....	1896
Salt Lake City, Utah.....	Lawrence Scanlan.....	1887
San Antonio, Texas.....	J. A. Forrest.....	1895
Savannah, Georgia.....	Thomas A. Becker.....	1868
Scranton, Pennsylvania.....	William O'Hara.....	1888
".....	M. J. Hogan, conductor.....	1896
Sioux City, Iowa.....	Timothy Treacy.....	1896
Sioux Falls, South Dakota.....	Thomas O'Gorman.....	1896
Springfield, Massachusetts.....	Thomas D. Beaven.....	1892
Syracuse, New York.....	P. A. Ludden.....	1887
Trenton, New Jersey.....	James A. McFaul.....	1894
Tucson, Arizona.....	P. Bonrgade.....	1887
Vancouver, Washington.....	J. N. Lemmeus.....	1888
Vincennes, Indiana.....	S. F. Chetard.....	1878
Wheeling, West Virginia.....	P. J. Donahue.....	1894
Wichita, Kansas.....	J. J. Hennessy.....	1888
Wilmington, Delaware.....	John J. Monahan.....	1897
Wilmington, North Carolina.....	Lee Hall.....	1888
Winona, Minnesota.....	Joseph B. Cotter.....	1889

BISHOP, WILLIAM HENRY, author, was born in Hartford, Conn., Jan. 7, 1847. His recent publications are: *A House-Hunter in Europe* (1893); *A Pound of Cure* (1894); and *The Garden of Eden*, U. S. A. (1895).

BISLEY MEETING, the meeting of the National Rifle Association of England, transferred to Bisley from Wimbledon in 1890. For the meeting of 1894 certain changes were made in the third-class target, the bull's-eye of 8 inches diameter being left unchanged, but the diameter of the inner circle being increased from 16 inches to 20, and the diameter of the "magpie" from 24 to 32. The extreme weight of military breech-loaders was fixed at 10 pounds 4 ounces. The extreme limits of length were made from 48 inches to 52 instead of 48 to 55. The maximum caliber was made 315, and the maximum pull of trigger 6 pounds instead of 5. Prizes were won by Volunteers over Regulars; Cambridge University over Oxford; Rugby over other schools; Corporal Apperby over other representatives of public schools; Private Brown of the Cameronians; Royal Navy over Army; Capt. G. C. Gibbs; Scotland taking the Elcho shield and also the national challenge trophy, winning for the seventh time over England and Ireland; and England over Canada, Jersey, and Guernsey. The Queen's Prize

of £250 and gold medal was won by Private Rennie; and prize of £60 by Private McGibbon; £40 by Lieutenant Clemence; £30 by Private Muirhead; and £20 by Lieutenant Mitchell of Canada.

BISMARCK-SCHONHAUSEN, PRINCE KARL OTTO EDWARD LEOPOLD VON, statesman, was born in Schönhausen, near Stendal, Prussian Saxony, April 1, 1815; created count, September 16, 1865; prince, March, 1871; and Duke of Lauenburg in 1890. The prince recovering from serious illness toward the close of 1893, there was much interest in his reported reconciliation with the emperor in January, 1894. In response to kind inquiries from the emperor as to his health he visited the emperor in Berlin Jan. 26, and the emperor returned the visit Feb. 19. There was general public satisfaction expressed in the journals, and the Bourse was favorably affected, though it was said the reconciliation had no political significance. His eightieth birthday occurred April 1, 1895, and was the occasion of the widest celebration throughout the empire. March 23 a resolution was offered in the Reichstag delegating its president, Herr von Levetzow, to convey their congratulations to the prince, but this was opposed by the social-democrats, and defeated by a vote of 163 to 116, some 70 members being said to be absent. The socialist vote created intense excitement, and general condemnation. The members who had voted to congratulate him went in a body to his house March 25, carrying their congratulations in person; the emperor, who talked indignantly of dissolving the Reichstag, went with his congratulations the 27th; the Bundesrath voted congratulations, as did the city council of Berlin; and the president and vice-president of the Reichstag resigned, and new officers were elected the 27th. The emperor seized the occasion to recover something of his waning popularity; and the great national services of the prince were the theme of the journals of every party except the social-democrats, and these kept a discreet silence. There were celebrations with processions, public meetings, and banquets in most of the German cities, and Hamburg was illuminated and had a procession of 4,000 students, who were going to Friedrichsruhe with their congratulations. The visits of congratulation continued through several days, and included civic delegations from forty cities. The town of Suhl, in Thuringia, famous for the manufacture of weapons, gave him honorary citizenship, its letter being a plate of fine steel etched in silver, gold and black, with heraldic designs. The Magdeburgers collected \$16,250 to erect a monument to him in their city. A great gathering was held at the national monument of Germania in the Niederwald, whither thousands traveled from all the Rhineland, including representatives of 36 Rhenish cities. Joy fires were built on hill and mountain tops throughout Germany. But the center of enthusiasm was his home at Friedrichsruhe, where he received many thousands of visitors, over 1,000 postal parcels, most of the presents being valuable works of industrial art, and over 200,000 congratulatory letters, including some from crowned heads. It is said that the numerous honorary orders and decorations which he has received at one time and another number fifty-one, and include every Prussian order that can legally be conferred upon him. The emblems of the Golden Fleece and the Black Eagle must by law return at his death to their royal source, but his other orders will become the property of his heirs, and their monetary value is estimated at \$25,000. An interesting feature of the celebration of the centenary of the birth of Emperor William I., in Berlin, May 22-23, 1897, was the passage of a large procession bearing torches through the park and past the castle at Friedrichsruhe, and the enthusiastic demonstrations paid the ex-chancellor.

BISSELL, WILSON SHANNON, LL.D., lawyer, was born in Rome, N. Y., Dec. 31, 1847; appointed postmaster-general of the United States, March, 1893; resigned to resume law practice, Feb. 27, 1895; and was succeeded by ex-Congressman William L. Wilson.

BIZERTE, the most northern town in Africa; fortified seaport of Tunis; population about 8,000. In June, 1895, the French government completed its vast work of connecting Bizerte Lake with the Mediterranean Sea by a ship-canal, on which it had been engaged for three years, and constituted Bizerte a naval port, said to be second in importance and advantages only to Toulon. The lake forms a sheltered basin as large as the city of Paris, and could contain at one time all the naval vessels of the world. The canal, through which the largest men-of-war can pass, is 4,920 ft. long, 393 ft. wide, and 30 ft. deep, and its entrance into the Mediterranean is protected on each side by jetties 3,280 ft. long.

BJORNSON, BJORNSTJERNE, novelist, dramatist, and poet, was born in Koikne, Osterdalen, Norway, Dec. 8, 1832. He published in 1894 a drama on Norwegian family and social life, which was translated into English by Osman Edwards, under the title, *A Gaiuntlet*; and in 1895 a German play in two acts, entitled *Über Unsere Kraft*.

BLACK, WILLIAM, novelist, was born in Glasgow, Scotland, in 1841. In 1894 he published *Highland Cousins*; in 1895-96 *Brisers*, serially in *Harper's Magazine*; and in 1897, *Sunrise*.

BLACKIE, JOHN STUART, educator and author, was born in Glasgow, Scotland, in 1809; died in Edinburgh, March 2, 1895. He was a frequent contributor to periodical literature almost to the time of his death; and in 1895 published *The Ideal of Humanity in the Old Times and the New*. An edition of his *Selected Poems*, with portrait, was published in 1897.

BLACKMORE, RICHARD DODDRIDGE, novelist, was born in Langworth, Berkshire, Eng., in 1825. He published in 1894 *Perlygeross*; in 1895 *Stain by the Doones*; and in 1897, *Darrel: a Romance of Surrey*.

BLAIKIE, WILLIAM GORDEN, D.D., clergyman and author, was born in Aberdeen, Scotland, Feb. 5, 1820. During 1894-95 he contributed to periodicals a number of important papers on biblical, religious, and social subjects; and published *Heroes of Israel* (1894); and *Personal Life of Livingston* (1895).

BLASHFIELD, EDWIN HOWLAND, painter, was born in New York, Dec. 15, 1848. In 1895 he was elected president of the Society of American Artists. In the same year he was engaged in painting the large allegorical pictures, entitled *The Human Understanding and Knowledge of the Ages*, in the decoration of the dome of the new Library of Congress, in Washington.

BLIND, EDUCATION OF THE. In 1895 there were in the United States and Canada 35 public institutions for the blind, with 348 instructors, and 3,489 pupils; volumes in libraries, 77,045; value of scientific apparatus \$21,819; grounds and buildings, \$6,189,436. These institutions were in 26 States and Provinces, and their teachers were associated voluntarily, for mutual discussion and assistance, in the American Association of Educators of the Blind, organized in 1868, and held their biennial meeting at Chautauqua, N. Y., in July, 1894, 26 institutions being represented. Books have been printed for the blind in three different forms of embossed characters, known as the Braille, line letter, and New York point systems. All of these have been used in the different schools. The New York point system, invented by W. B. Wait, superintendent of the

New York Institution, has also been adapted to the printing of music, and was most approved at the Association meeting in 1894; and in that year the entire Bible was printed in it by the American Bible Society. Mr. Wait also brought out in 1894 the kleidograph, an instrument of his invention, by which the blind can readily write in embossed characters, and also the stereograph, by which they can emboss metal plates for printing in embossed characters. The American Printing House for the Blind, established by the State of Kentucky at Louisville, receives \$10,000 a year, the interest on a fund established by the United States Congress for the furnishing of books for the blind. This is supplemented by the Society for Providing Evangelical Literature for the Blind, established in Philadelphia, Pa.; and quite a catalogue of books, secular and religious, was reported in 1892 as available for reading by touch. The New York Institution, established in New York City in 1836, is a typical school of its class. In 1895 it reported 23 instructors, and 235 pupils during the year, of whom 197 remained to the close. Besides ordinary common-school instruction it taught cane-seating, mattress making, sewing and knitting by hand and by machines, embroidery, crocheting, weaving cord laces, and other industries. Physical training with light gymnastics was given to all, and special instruction was given in ordinary typewriting, in which the blind are quite successful. Music, the one art within their reach, is taught with special care, and piano-tuning, for which they show special fitness, is taught as a profession.

One of the most important English institutions is the Royal Normal College and Academy for the Blind, Upper Norwood, London, established in 1872. It is sustained by voluntary gifts, and in 1895 included preparatory, grammar, and high and technical schools, and an academy of music which taught the science and practice of music and pianoforte-tuning, and trained teachers of music. It was reported in 1895 that from 80 to 90 per cent. of the graduates of the college, though almost all taken from the poorest classes, had become self-supporting, their earnings during the year aggregating about \$100,000.

BLOOMINGTON, city, capital of McLean county, Ill.; population (1890) 20,484. In 1895 the assessed valuations were: Real, \$2,628,423; personal, \$933,089—total, \$3,561,512; city tax rate, \$30.70 per \$1,000. In 1896 the city owned the waterworks and electric light plants, and had a bonded debt of \$57,500, floating \$60,000, total \$117,500. There are 3 national banks, 2 State banks, an electric street railway, and 3 daily, 8 weekly, and 4 monthly periodicals.

BLOUËT, PAUL (pen name Max O'Rell), author, was born in Brittany, France, March 2, 1848; educated chiefly at the Polytechnic School, Paris; entered the army as sub-lieutenant 1869; served through the Franco-Prussian war, becoming a prisoner at Sedan; fought against the Commune; and was wounded and pensioned. In 1873 he went to London as a newspaper correspondent; in 1876-84 was head French master of St. Paul's School; and in 1887, 1890, and 1895-96 made lecturing tours in the United States. His best known works are *John Bull and His Island* (1883); *Jonathan and His Continent* (1889); *A Frenchman in America* (1891); and *English Phrases, French Crocodiles* (1893).

BLUEFIELDS, town, capital of the former Mosquito Reservation, now the department of Zelaya, Nicaragua; population (1891) about 5,000. Since the ratification of the Clayton-Bulwer treaty between the United States and Great Britain, 1850, both countries have been at odds concerning the status of the Mosquito Indian Reservation on the east coast of Nicaragua, and till 1894 Great Britain maintained a protectorate over the region. In December, 1893, war broke

out between Nicaragua and Honduras, and in January following, in consequence of the seizure by Honduran troops of Cape Gracias a Dios in Nicaragua, 60 miles north of the Mosquito strip, the United States government sent the war vessel Kearsarge to Bluefields to protect American interests. On Feb. 12 Nicaragua took possession of Bluefields, and proclaimed martial law. This act led to a protest by Chief Clarence, the dispatch of British war vessels to the town, the landing of British marines, and the restoration of Clarence. Subsequently, the Nicaraguan commission undertook to organize a provisional administration for the reservation, but failed. In July, 1894, the natives succeeded in a movement against Nicaragua, restored their government, and expelled the garrison at Bluefields; but in October the Nicaraguans regained possession. In the meantime, both the United States and Great Britain increased their naval fleets in the harbor and the Nicaraguan commission (August) placed Mr. Hatch, the British pro-consul, and several Englishmen and Americans under arrest. On Nov. 20 a convention of Mosquito delegates agreed to submit to the authority and laws of Nicaragua, and changed the name of the reservation to the department of Zelaya in honor of the president of Nicaragua. For the insult to the British flag in the person of Mr. Hatch, Great Britain made a demand on Nicaragua for an indemnity of £15,000, on Feb. 26, 1895, and left the question of personal damages to Mr. Hatch and other Englishmen for future arbitration. The ultimatum led to considerable diplomatic correspondence between the United States and Great Britain, the former insisting (April) that (1) it could not permit the seizure of any Nicaraguan territory, (2) nor the cession of territory by Nicaragua to Great Britain, (3) nor the landing of a British naval or military force for either a permanent or temporary occupation of Nicaraguan territory. Nicaragua replied to the ultimatum by a proposal to submit the entire question to arbitration. This was declined by Great Britain; and in the absence of evidence that Nicaragua would yield to its terms, Great Britain notified that government that if the ultimatum was not complied with by a specified date, a naval force would be landed at Corinto, its principal port, and the receipts of the custom house would be attached for the indemnity. At the last moment the Nicaraguan government opened negotiations with Admiral Stephenson, the British naval commander, and on May 4, agreed to pay the money in London within two weeks. On the following day the British fleet evacuated the port of Corinto, and on May 16 the money was paid as agreed. The question of personal damages was still open in January, 1896. See NICARAGUA.

B'NAI B'RITH, or BENAI BERITH (sons of the covenant), a fraternal order, founded among the Israelites in the United States in 1843. At the close of 1896 it reported 10 grand lodges; 454 subordinate lodges; 31,750 members; benefits paid during the fiscal year 1896-97, \$1,243,000; benefits paid since organization \$39,250,000. President, Julius Bien; secretary, Solomon Sulzberger; both, Manhattan Borough, N. Y.

BOATING. The principal event of 1895 was the sensational and unsatisfactory contest for the American Cup between Lord Dunraven's yacht, *Valkyrie III.*, representing the Royal Yacht Squadron of Great Britain, and the syndicate yacht, *Defender*, representing the New York Yacht Club, in New York Bay. The terms of the new deed of gift of the cup were accepted after tedious preliminaries by the Royal Yacht Squadron, and a challenge was issued by Lord Dunraven in January. To defend the cup a syndicate was formed, consisting of E. D. Morgan, W. K. Vanderbilt, and C. O. Iselin, and a new yacht was built by the Herreshoffs, containing many novel features. The first race was on Sept. 7,

when the *Defender* secured the lead soon after the start, and steadily increased it, winning by 8 minutes 49 seconds, corrected time. The popularity of the contest attracted a vast fleet of all kinds of vessels, and rendered the handling of the yachts extremely difficult. At the close of the first race Lord Dunraven intimated that unless more energetic measures were adopted to keep the course clear of pleasure yachts and excursion steamboats, he should decline a second race. On Sept. 10, while manœvering for position, the yachts came into collision, and the *Valkyrie* tore away a part of the *Defender's* cross-trees, rendering her topmast shrouds practically useless. The *Defender* kept on with the race, however, and finished the course 47 seconds, corrected time, behind the *Valkyrie*. Appeals were made to the regatta committee, which declared that the *Valkyrie* had fouled the *Defender* and gave the race to the latter. On Sept. 12 both yachts appeared for the third contest, but, after crossing the line, the *Valkyrie* withdrew, and the *Defender* sailed the course alone. After his return to England, Lord Dunraven published a charge that the water line of the *Defender* had been secretly lengthened four inches by the addition of extra ballast after she had been officially measured. This charge led to an investigation by an influential committee in New York in December, before whom Lord Dunraven and his witnesses appeared, and the committee decided that the charge had not been proved.

A pleasanter international contest was that for the Seawanhaka-Corinthian trophy for half-raters, between the unbeaten English boat *Spruce IV.* and the American *Ethelwynn*, of the Seawanhaka-Corinthian Yacht Club, also at New York. The first race was started Sept. 22, but from lack of wind was postponed to the following day, when the *Ethelwynn* beat the *Spruce IV.* on a 12-mile course by 7 minutes 41 seconds. On the 24th the 5 hours allowed for covering the course elapsed when the yachts were within a mile from the finish, the *Spruce IV.* leading. This race was resailed the 25th, when the *Spruce IV.* beat the *Ethelwynn* by 23 seconds. On calling the third race, the *Ethelwynn* soon withdrew because of the heavy sea, and the race was given the *Spruce IV.* The fourth race, Sept. 27, was awarded the American yacht, a protest for overlapping made by the *Spruce IV.* not being sustained. The last race, Sept. 28, was won by the *Ethelwynn* easily, and the American yacht was awarded the trophy.

Much interest was taken in the trial races between the *Defender* and the *Vigilant*, to decide which should race the *Valkyrie III.*, in which the former won nine victories.

The principal foreign yachting events were in the Mediterranean, where the *Britannia* took everything till the *Arsa* appeared, when the former only gained second place in all but two races, and where the *Dakotah* won every race in which she sailed, holding the championship for her class; and in England, where the *Britannia* beat the *Arsa* in nearly every race, and the American yacht *Niagara* beat the *Dakotah* and all other boats in her class. In a total of 39 starts the *Britannia* won 32 firsts during the season.

Rowing contests were far less interesting than usual. The Yale-Harvard race, June 28, was won by the Yale crew in 21 minutes and 30 seconds, a result anticipated from its admitted superiority. One July 24, in the intercollegiate race between the crews of Columbia, Cornell, and Pennsylvania, Columbia beat Cornell, and Pennsylvania withdrew before reaching the finish. The Cornell crew, which went to England to take part in the Henley regatta, rowed in two races, the first with the Leanders, in which the latter claimed that they did not hear the word to start, and remained passive, while Cornell went over the course alone; and the second with the Trinity crew, in which the Americans broke down before the finish.

BOERS, descendants of the Dutch colonists who settled at the Cape of Good Hope, in 1652. Their lands were ceded by Holland to England in 1814, and later slavery was abolished without compensation to owners, and in 1836 the most of them migrated northward and founded the farming republics of the Orange Free State and the South African Republic, or Transvaal. These had in 1895 respectively about 80,000 and 120,000 white inhabitants. They are bounded on the northeast by Portuguese possessions near Delagoa Bay, the natural port of the region, but on all other sides by British colonies and dependencies. Great Britain recognized the independence of the Transvaal in 1852, but annexed it in 1877, again, after war, acknowledging its independence in internal administration in 1881, the queen, however, remaining suzerain in external relations. This suzerainty was much restricted in 1884; but the surrounding British territory forbids real independence. In 1886 gold was discovered in the Witwatersrand, or the Rand, in the vicinity of Johannesburg near the Orange Free State border. These mines developed rapidly, the yield in 1887 being 28,754 ozs., but in 1894, 1,837,773; entire yield to the close of 1894, 6,198,767 ozs.; estimated yield of 1895 valued at \$50,000,000; while further development is expected to bring a yield of \$100,000,000 a year. Those attracted to the mines were mainly English and known as Uitlanders, and were believed to constitute a majority of the inhabitants of the republic, Johannesburg having about 60,000, including the lawless elements of a mining town, but being a substantial and handsome city. The full constitutional franchise is limited to those residing in the republic since 1876 and veterans of the war of 1881; while those naturalized after two years' residence can vote for members of the lower legislative house only. There are only 300 voters, it is said, in Johannesburg. The Uitlanders complain of unjust taxation and the lack of schools and police protection. Besides formal petitions for reforms, in December, 1895, they organized a provisional government at Johannesburg, and sent a threatening ultimatum to the capital, Pretoria. Pending the discussion of these, Dr. Leander Star Jameson (*q. v.*), administrator of the territory of the British South African Company, mustered an armed force of 700 near the western border of the Transvaal, and marched toward Johannesburg to co-operate with the Uitlanders. His movement was disowned and forbidden by the British authorities, but he cut the lines behind him, crossed the Transvaal border, Dec. 30, and expected to meet the revolt and give it success. The Uitlanders were intensely excited by his approach, but failed to second him; and the Boers met him with overwhelming force, and after killing and wounding a number of his men, took Jameson and the rest prisoners to Pretoria. The incident was given international interest by the Emperor of Germany, who telegraphed his congratulations to President Krüger in terms offensive to England. See CAPE COLONY; CHAMBERLAIN, JOSEPH; KRUGER, PAUL; ORANGE FREE STATE, and SOUTH AFRICAN REPUBLIC.

BOHEMIA, a former kingdom, now the northernmost province of the empire of Austria-Hungary, Cisleithanian division. There was much excitement in Prague during the trial of those accused of complicity with the Omladina conspiracy, and at its close, Feb. 21, 1894, the larger part of those accused were convicted, and were sentenced to various short terms of imprisonment. Most of the prisoners were very young, and this fact was urged in lightening their sentences. Toward the close of the year there were disturbances in the forest of Dörrengrand about alleged apparitions of the Virgin Mary. Christine Ringel, a girl thought to be inspired, declared that the Virgin would publicly appear on

Jan. 2, 1895, and toward that time multitudes of pilgrims came to see from Bohemia, Moravia, and Silesia. The local authorities, to suppress the excitement, summoned Christine to Braunau, and as she refused to obey, arrested her; but the police were assaulted by the pilgrims, and driven from the forest. In May, 1895, the Austrian Ministry of Commerce took up the project of a canal to connect the Danube with the Moldau and Elbe. This project had been intrusted in 1892 to a committee consisting of representatives of the provincial administrations of Lower Austria and Bohemia, and of chambers of commerce of principal towns, and certain Austrian and German steamship companies. A technical sub-committee reported early in May, 1895, proposing that the canal start from the Danube near Vienna, join the Moldau at Budweis, in Bohemia, and from Budweis that the channel of the Moldau and Elbe be deepened to a minimum of 2.1 meters as far as Aussig, in Northern Bohemia. The full joint meeting of the earlier committee and the Austrian Ministry of Commerce approved these plans; and the ministry authorized the technical preliminary work. The chief political agitation of 1895 was about the demand of the Young Czechs that Bohemia be elevated in the empire to a status equal to that of Hungary. The elections to the provincial Diet were held in November, 1895, and resulted in the choice of 46 Young Czechs, 27 German Liberals, 2 German Nationalists, 2 Czech peasants, 1 Old Czech, and 1 Clerical.

BOK, EDWARD W., journalist, was born near Amsterdam, Holland, Oct. 9, 1863; came to the United States when six years old; was befriended by Henry Ward Beecher; conducted an independent newspaper syndicate; and became a successful advertising manager. In the last capacity he was called to *The Ladies' Home Journal*, of Philadelphia, of which he subsequently became editor-in-chief. He has published *The Young Man in Business* (1894); a notable magazine article, *Why do not Young Men Attend Church?* and *Successward: a Young Man's Book for Young Men* (1895).

BOLIVIA, a republic of South America, area, 567,360 square miles; population (1893), excluding aboriginal Indians, 2,019,549; capital, Sucre; president, inaugurated in 1896, Señor Severo F. Alonso. The republic has no seacoast, having ceded her own to Chile by treaty, under which, however, Chile is obligated to secure her an outlet to the sea. There are 9 departments, 52 provinces, and 374 cantons, administered by prefects, sub-prefects, and corregidores respectively, and each province has a municipal council at its capital. All forms of worship are permitted, but the Roman Catholic is recognized as the State religion. Primary instruction is free and nominally compulsory. In 1895 there were 6 universities, with 104 professors and 1,869 students; 16 secondary schools and colleges, with 84 professors and 2,057 pupils; and 506 primary schools, with 710 teachers and 26,873 pupils; beside a military school with 9 professors and 60 students, 70 schools for the rural Indian population, 160 mission schools, and 3 schools of arts and trades. The government pays nearly half the cost of public education. The budget estimates for 1896 were: Revenue, 6,305,793 bolivianos (44.3 cents); expenditure, 6,727,824; and the external, internal, and miscellaneous debts aggregated 9,493,705 bolivianos. Incomplete trade returns, chiefly from official British sources, indicate annual importations of about \$5,000,000, and exportations of about \$15,000,000. The principal imports are provisions, hardware, wines and spirits, cotton, woolen, linen, and silk goods, and ready-made clothing; and exports, silver, tin, rubber, copper, wool, hides and skins, gold, coffee, and cinchona. A railway connects the Chilean port of Antofagasta with the Bolivian frontier at Ascotan, and extends nearly 500 miles

in Bolivian territory. Concessions for four independent lines have been granted, and the route for an international railway from Bolivia to the Argentine Republic has been surveyed. There are over 2,000 miles of telegraph lines and 87 post offices.

BOLLES, FRANK, educator, was born in Winchester, Mass., Oct. 31, 1856; died in Cambridge, Mass., Jan. 10, 1894. He was graduated at the law department of Columbia University in 1879, and of Harvard University in 1882; founded the Harvard Co-operative Association; won the Bowdoin prize at Harvard with an essay on *International Arbitration*; and became secretary of Harvard University. He was very helpful to students, especially those without friends or means, and was author of *Land of the Lingering Snow; To the North of Bearcamp Water; A Brief Statement of What Harvard University is, How it May be Entered, and How its Degrees May be Obtained; From Blomdon to Smoky, and Other Papers*; and *A Genealogy of the Family of Anthony Dr.*

BOLOGNA, UNIVERSITY OF, Bologna, Italy; founded A.D. 1200; instructors in 1895, 62; students, 1,318; volumes in library, 140,000, besides 9,000 valuable manuscripts.

BOLTON, SARAH KNOWLES, author, was born in Farmington, Conn., Sept. 15, 1841. In 1894 she published *Famous Leaders Among Men*; and in 1895 *Famous Leaders Among Women*; and with Charles Knowles Bolton, *From Heart and Nature*.

BOMBAY, a presidency of British India; also city, seaport, and capital of the same; population (1891) presidency, including Sind and Aden, 18,901,123; city, 821,764. The city is the third most important commercial center in Asia, and is particularly noted for its manufactures of yarn and cotton cloth. Its principal exports to the United States are mother-of-pearl shells, curios, jewelry, and carpets.

BONGHI, RUGGIERO, author and statesman, was born in Naples, Italy, in 1828; died at Torre del Greco, near Naples, Oct. 22, 1895. He contributed to the *Chautauquan* in 1894 an important article on *Italy's Future*, and to the *Athenaeum* an article on *Italian Literature*.

BONNEY, THOMAS GEORGE, D.S.C., LL.D., educator and author, was born in Rugeley, England, July 27, 1833. In 1894 he published *The Story of Our Planet*; and contributed to the *Contemporary Review* an article on *Glaciers*; and in 1895 he edited *Abbeys and Churches of England and Wales*; and a series of illustrations with descriptive text entitled *The Thames from the Source to the Sea*; and with others, *Historic Homes of the United Kingdom*.

BOOKS PUBLISHED. During 1894 there were reported by the *Publisher's Weekly*, New York, not including government works and the minor cheap libraries, works of fiction, 573, theology and religion, 442, law, 400, education and language, 426, juvenile, 315, political and social science, 233, literary history and miscellany, 208, history, 163, physical and mathematical science, 141, biography, 140, poetry and the drama, 133, fine-art and illustrated books, 127, medicine and hygiene, 118, useful arts, 118, description and travel, 116, sports and amusements, 50, domestic and rural, 42, mental and moral philosophy, 42, humor and satire, 10; total new books, 3,837; new editions, 617; total published, 4,484. There were 2,821 books by American writers manufactured in the United States, 577 books by foreign authors made here, and 1,086 imported. The books and other printed matter exported from the United States during the year 1894 were valued at \$2,449,712; as compared with \$2,341,023 in 1893; of which \$540,-

312 was exported to British North America, and \$753,174 to the United Kingdom. Imports of books, maps, engravings, etc., in year ending July 31, 1894, free of duty, \$1,875,286 (1895, \$1,750,810); dutiable, 1894, \$1,584,182, 1895, \$1,580,827; exports, 1894, \$2,620,046, 1895, \$2,316,217. British publications during 1894, besides 1,185 new editions, were as follows: Fiction, 1,315, educational, classical, and philological, 615, theological, biblical, and religious, 476, belles-lettres, essays, etc., 370, year-books and serials in volumes, 328, travel and geographical research, 282, juvenile, 269, history and biography, 256, poetry and the drama, 160, political and social economy and commerce, 141, law, 126, art, science, and illustrated works, 98, medicine, surgery, etc., 97, miscellaneous, including pamphlets, 767; total new books, 5,300; new editions, 1,185; total published, 6,485, as compared with 6,382 in 1893. The *St. Petersburg Zeitung* stated that in Russia 10,651 books were published in 1894, as against 10,242 in 1893; but the number of copies printed declined from 33,750,000 in 1893, to 32,250,000 in 1894. They were in the following languages: In Russian, 8,082, Polish, 894, Hebrew, 519, German, 315, Lettish, 219, Esthonian, 172, Armenian, 124, Georgian, 74, Turkish, 70, French, 61, and 121 in miscellaneous dialects. Their subjects were: Religion, 1,058, fiction, 719, educational, 695, reference, 644, medicine, 544, reports, 342, history and biography, 505, juvenile, 325, law, 278, agriculture, 262, drama, 245. The firm of Ssyutin of St. Petersburg are the leading printers of Russia. The *Droit d'Auteur*, of Berne, Switzerland, official organ of the States which have accepted the Berne Literary Convention, summarized in 1895 the publishing activity of fourteen principal countries of Europe, America, and Asia; and concludes that the United States published in 1894 about 20,000 periodicals, Germany, 10,546, France, 5,800, Great Britain 4,300, Italy, 1,891, Austria-Hungary, 1,691, Spain, 1,136, and other countries each less than 1,000; total, 50,000. Of books scientific and literary, Germany published in 1894 22,570, France, 13,097, Russia, 10,242, Italy, 9,116, British East Indies, 7,658, Japan, 7,334, Great Britain, 6,484, United States, 5,134, and other countries each less than 1,000, making a total of 81,000.

The publications in the United States in 1895 were reported as follows: Fiction, 876; law, 526; theology and religion, 398; education and language, 421; literary history and miscellaneous, 400; juvenile, 250; political and social science, 265; poetry, 175; physical and mathematical science, 149; history, 161; biography, 86; medicine and hygiene, 151; travel and description, 71; fine arts and illustrated books, 103; useful arts, 76; mental and moral science, 44; domestic and rural, 39; sports and amusements, 21; humor and satire, 28; total, 4,243; imported bound or in sheets, 1,226; total issued, 5,469. The *London Publisher's Circular* reported the British publications for 1895 as follows: Fiction and juvenile, 1,544; educational, classical, and philological, 660; religious and theological, 501; belles-lettres, etc., 400; history and biography, 353; year-books and serials in volumes, 311; voyages and travels, 263; poetry and the drama, 231; political economy, sociology, trade, etc., 163; medicine and surgery, 153; arts, sciences, and illustrated works, 96; law, 57; miscellaneous, 749; total new books, 5,581; new editions, 935; total published, 6,516. The *Bibliographie de la France* reported 12,927 books issued in France in 1895; compared with 13,007 in 1894.

During 1897 the production of new books in the United States aggregated 4,171, and of new editions, 757—in all, 4,928, a decrease in a year in new books and an increase in new editions. Of the total, 3,318 books were by American authors and made in the United States; 495 were by foreign authors, made here; and 1,115 were by English authors, and imported bound or in sheets. In Great

Britain the production of new books was 6,244, and of new editions, 1,682—in all, 7,926, an increase in a year of more than 1,400.

BOOTH, BALLINGTON, second son of Gen. William Booth, was born in England about 1845; and became head of the Salvation Army in the United States. On Aug. 14, 1894, he laid the cornerstone of the national headquarters of the Salvation Army in New York City; and June 3, 1895, he dedicated it, at a total cost, with the land, of \$325,000, almost all of which had been contributed by members of the army. He resides at Montclair, N. J. In January, 1896, his father, as commander-in-chief of the Salvation Army, ordered him to turn over his command in the United States to another, and to return to London at once. Ballington refused to obey the order to leave the United States, but on Feb. 21 resigned the command of the army here, and issued a public statement defining the position of himself and wife. In the following month, and in response to numerous requests from influential citizens that he should not abandon the work, he organized a new army, under the name of Volunteers of America, and became its commander-in-chief; declaring that the methods of the Salvation Army in England were not suited to conditions in the United States; he announced the purpose of the new organization to be a hearty co-operation with all the existing Evangelical churches and religious organizations, and to facilitate this co-operation he was ordained a presbyter of "the Church of God in General." See BOOTH, WILLIAM: VOLUNTEERS OF AMERICA.

BOOTH, REV. WILLIAM, known as General Booth, founder of the Salvation Army, was born in Nottingham, England, April 10, 1829. In July, 1894, the fiftieth anniversary of his conversion, and the twenty-ninth of the founding of the Salvation Army, was celebrated at the Crystal Palace, London, by great numbers from all over the world. In September following he came to America, and made a tour of inspection of the Army in Canada and the United States; attending in June, 1895, the dedication in New York of the headquarters just erected, and was everywhere greeted by immense gatherings. His displacement of his son, Ballington, caused a breach in the family, and a serious disturbance in the work of the Salvation Army in the United States and Canada. Friends of the family and the work sought to bring about a reconciliation between Ballington and his father, but without avail. In January, 1898, General Booth made another visit to the United States, and had an interview with Ballington, in the presence of witnesses, but no details were made public. While here he was accorded the honor of opening a session of the U. S. Senate with prayer. See SALVATION ARMY.

BOSNIA AND HERZEGOVINA, two provinces south of the Danube, between Servia and Austria, nominally belonging to Turkey; but occupied and administered by Austria-Hungary since July 13, 1878, when they were intrusted to her by the treaty of Berlin. The population is estimated at 1,500,000, of whom about 600,000 are Oriental Greeks, 500,000 Mohanmedans and 300,000 Roman Catholics. The Austrian army of occupation in 1895 numbered 28,648, besides 12 battalions of native infantry, each of 4 companies, with a total of 4,515. There were 500 miles of railway, and 1,780 miles of telephone. The Sanjak of Novi-Bazaa, though occupied by Austrian troops, is administered civilly by Turkey. The country is peaceful and orderly under the present administration. In 1894 the Servian and Panslavist party spoke against apprehended annexation to Austria-Hungary, but leading statesmen urged that when the time should come annexation would fulfill happily and prosperously the better economic, social, and political movements of the province.

BOSTON, city, port of entry, capital of Suffolk county, and of the State of Massachusetts; population (1891) 448,477; (1895) State census, 494,205. During the fiscal year ending June 30, 1897, the imports of merchandise aggregated in value \$90,178,419; and the exports, \$100,857,281; imports of gold and silver coin and bullion, \$3,724,582; exports, \$15,000; total foreign trade, \$194,765,282. A new steamship line has been established between Boston and Swansea, England, and additional vessels have been added to the Leyland, Cunard, and Warren lines. The city ranks second in the volume of its foreign trade, and first in the amount of wool handled. The total sales of wool, 1894, amounted to 156,503,500 lbs. Of the total imports of this staple, 43,655,944 lbs, or 36 per cent., were received at this port, and of the imports of the finer wools, used in cloth manufacturing, Boston received 21,826,649 lbs, or 67 per cent. As a meat-packing center, Boston ranks second only to Chicago. In 1894 the number of hogs slaughtered here equaled two-fifths of the total that passed through the great slaughter-houses of Chicago during the year ending March 1, 1894, and exceeded the output of Kansas City, Kan., and Omaha, Neb., by 170,000 and 720,000 respectively.

On Feb. 1, 1897, Boston had a city debt proper of \$49,993,326, a Coehuituate water debt of \$18,261,271, and a county debt of \$3,648,000, making a total bonded debt of \$71,902,600. The various sinking funds held \$25,367,587, reducing the debt to \$46,535,013 net. The borrowing capacity of the city on Jan. 30, 1897, was \$1,619,946, under the legislative act limiting the municipal debt; and bonds to the amount of \$1,311,500 inside of the debt limit were authorized. Outside of the debt limit, and authorized by special acts of the legislature, there were outstanding bonds aggregating \$2,950,500, of which \$1,800,000 was for additional water supply, and \$1,000,000 for laying out and constructing high-ways. The assessed valuations in 1896 were: Real property, \$770,261,700; personal, \$210,990,726; total, \$981,252,426; and the tax rate was \$12.90 per \$1,000. In August, 1897, the board of assessors fixed the tax rate for the year at \$13 per \$1,000. The totals of the valuations in the different wards showed a loss in personal property of \$2,311,508, and a gain in real estate of \$33,598,850. The total valuation of the entire city was \$1,012,557,256, the real estate being valued at \$803,860,550, and the personal property at \$208,696,706. The total tax warrant amounted to \$12,981,638. This was divided as follows: State tax, \$870,442, an increase of \$168,117; county tax, \$1,135,836, an increase of \$192,957; city tax, \$10,975,360, an increase of \$138,268. Last year's tax rate warrant was \$12,182,196. The valuations on real estate were: For 1897, land, \$168,044,400; buildings, \$335,816,150—total, \$803,860,550; for 1898, land, \$447,169,700; buildings, \$323,092,000—total, \$770,261,700. The parks of the city have already cost about \$12,000,000, and the Metropolitan Park Commission is authorized to take 6,000 acres of land in "Greater Boston" for park purposes, and to expend \$2,300,000 in their improvement. Under the "Board of Survey Act" (1891-94) there have been laid out Blue Hill, Columbus, and Huntington Avenues, an extension of Commonwealth Avenue, and various other streets, and new sewers have been constructed and projected, at an estimated cost of \$1,278,405 for land damages, and \$1,710,227 for construction of streets and sewers—total, \$3,058,632. In 1897 the commissioners reported that in order to complete the park system in accordance with the plans of the landscape architects, so far as they had been developed, not including those for the Strandway, etc., the following estimates had been prepared: The Fens, \$100,000; Riverway, \$74,000; Leverett Park, \$27,000; Jamaica Park, \$86,000; Arborway, \$65,000; Arnold Arboretum,

\$65,000; Franklin Park, \$575,000; Strandway, Marine Park to H Street, \$70,000; Marine Park, \$634,000; Castle Island, \$283,000; Wood Island Park, \$278,000; North End Park, \$21,000; Charlestown Heights, \$2,000—total, \$2,280,000.

In 1896 the city had 78,561 children of school census age; 79,855 enrolled in the public day schools; 67,780 in average daily attendance; 26 supervising officers; 1,518 regular teachers; 62 kindergartens; 206 buildings used for public school purposes; and public school property valued at \$10,400,000. The expenditures in the school year were \$2,728,603. The accommodations provided by the city for the education of its youth have not kept pace with the growth of the city. The report of the United States comptroller of the currency, for Dec. 17, 1897, contained the following items concerning the national banks in the city: Assets: Loans and discounts, \$145,506,391; overdrafts, \$96,450; United States bonds to secure circulation, \$11,547,000; United States bonds to secure United States deposits, \$265,000; United States bonds on hand, \$105,000; premiums on United States bonds, \$1,198,917; stocks, securities, etc., \$6,864,247; banking houses, furniture and fixtures, \$2,378,410; other real estate and mortgages owned, \$436,031; due from national banks (not reserve agents), \$14,323,223; due from State banks and bankers, \$516,762; due from approved reserve agents, \$27,445,346; checks and other cash items, \$403,851; exchanges for clearing house, \$7,877,090; bills of other national banks, \$1,069,830; fractional paper currency, nickels and cents, \$21,869; lawful money reserve in bank, \$19,211,622, viz.: Gold coin, \$6,704,912; gold treasury certificates, \$1,218,540; silver dollars, \$79,724; silver treasury certificates, \$2,924,882; silver fractional coin, \$171,451; total specie, \$11,099,510; legal tender notes, \$6,542,112; United States certificates of deposit for legal tender notes, \$1,570,000; five per cent. redemption fund with treasurer, \$519,614; due from United States treasurer, \$181,214; total resources, \$239,967,872. Liabilities: Capital stock paid in, \$50,750,000; surplus fund, \$14,950,325; undivided profits, less expenses and taxes paid, \$5,019,944; national bank notes issued, \$10,392,300; less amount on hand, \$250,910; amount outstanding, \$10,141,390; due to other national banks, \$34,302,084; due to State banks and bankers, \$15,587,717; dividends unpaid, \$37,477; individual deposits, \$108,203,918; United States deposits, \$109,158; deposits of United States disbursing officers, \$82,856; bills payable, \$776,717; liabilities other than those stated above, \$6,283; total liabilities, \$239,967,872; average reserve held, 35.07 per cent.

In March, 1895, a sub-committee, appointed to consider the question of a metropolitan water supply, reported a bill providing for the appointment of a metropolitan water board, who shall construct, maintain, and operate a system of waterworks substantially in accordance with the plans and recommendations of the State Board of Health as contained in their report to the legislature of 1895. The estimated cost of the work is \$20,000,000; the new system will supply Boston, Cambridge, Chelsea, Everett, Walden, Medford, Newton, Quincy, Somerville, Waltham, Woburn, Arlington, Hyde Park, Lexington, Melrose, Milton, Revere, Saugus, Stoneham, Wakefield, Watertown, Winchester, and Winthrop; and will utilize the entire present plant of Boston. On Jan. 1, 1898, the water from the Chestnut Hill reservoir and its tributary systems of reservoirs was turned into the pipes of the metropolitan water system, the city of Boston at the same time turning over to the Metropolitan Water Board all its property, with the exception of the distributing system, which comprises simply the pipes on this side of the reservoir.

Under authority of an act of the legislature, a rapid transit subway commission was appointed and a metropolitan elevated railway corporation chartered. The engineering surveys were completed early in 1895, and provided for both surface and sub-surface railways. For the latter, the level of station platforms was planned to be 17 ft. below the surface of the street. The route adopted was: From the junction of Shawmut Ave. and Tremont St., under Tremont St. to Boylston St., under the Tremont St. mall of the Common to Park St.; thence to Scollay Sq. and to the Union Station in Causeway St. There is a branch along Boylston St. to a point in the Public Garden, opposite Church St. Two tracks were constructed, excepting on the section in Tremont St., between Boylston and Parks Sts., which contains four tracks. The work was completed in the autumn of 1897, at a cost of \$5,000,000.

During the summer of 1895 the new Public Library building was formally occupied, the books being removed from the old to the new building under a city appropriation of \$12,000. In the municipal elections on Dec. 10, Josiah Quincy, Democratic candidate for mayor, was elected by a plurality of 4,500, and his party secured full control of all the city departments. The vote on the question of license was 42,752 in favor and 26,266 in opposition, a majority for license of 15,486.

BOSTON UNIVERSITY, Boston, Mass., chartered in 1863; Methodist Episcopal; co-educational; comprising a group of colleges with distinct faculties and administrations; including a college of liberal arts, affiliated with the New England Conservatory of Music, Boston, and the Massachusetts Agricultural College, Amherst; professional schools of theology, law, and medicine; and a school of arts and sciences, for graduates only, conferring the degrees of M.A., Ph.D., D.C.L., M.L., and S.T.D. It had at the close of 1897, 130 professors and instructors; 1,327 students; over 15,000 volumes in the library; nearly \$30,000 invested in scientific apparatus and library; over \$700,000 in grounds and buildings; \$937,000 in productive funds; \$9,000 in gifts; \$154,150 in income; president, W. F. WATSON, S.T.D., LL.D.

BOTTA, VINCENZO, author and professor of languages in the University of the City of New York, was born in a hamlet near Farin, Piedmont, Italy, Nov. 11, 1818; died in New York, October, 1894. By his will his library was left to the university.

BOUNDARY LINES. Territorial expansion by conquest and treaty has led to the establishment of many new boundary lines and to spirited contentions concerning the areas inclosed by them. With a few exceptions the rectification of disputed lines has become a matter for friendly arbitration, and the manner of settling the exceptional cases had not been determined Jan. 1, 1898. In the United States several interstate contentions have been in process of adjustment for several years; but nothing has been determined within two years, nor have new questions of this character arisen. Internationally, however, important boundary changes have been made, and on the above date many disputes were pending, some of which were causing no small fear of serious consequences. The most notable of these are here summarized:

Afghanistan.—Under an agreement between the ameer and Sir Mortimer Durand, a British commissioner has defined the Afghan boundary on the Khyber, Kurram, and Baluchistan frontiers, for the better protection of the British sphere of influence against Russian aggression. See **AFGHANISTAN**.

Alaska.—The boundary line between the United States possessions here and

those of Great Britain was fixed by treaties between the United States and Great Britain, and between Russia and Great Britain. Under an international agreement, the United States Coast and Geodetic Survey and the Canadian boundary commissioner have been at work in re-surveying the line defined in the treaties. On Nov. 1, 1895, all the essential points for a delimitation of the boundary had been marked, and all that remained to be done was for the United States and Great Britain to determine how the clause in the treaty relating to the line "ten marine leagues from the shore" was to be construed, and that was a subject for diplomatic negotiation. The discovery of very valuable gold mines, and a marked development of mining during 1895, led to an unofficial claim on the part of the Canadians to a tract of some 30,000 square miles of the territory supposed to belong to the United States, under the treaties, which, significantly, contained about all the mining region of value. This claim created much excitement and prompted highly sensational rumors. The point at issue was the southeast boundary. Canada, through Great Britain, contended that the true line was much further to the west; that it should be established along what is locally known as Behm canal; and that what is known as the Portland canal is really that charted and called Behm canal in the Russo-British treaty of 1825. The United States held that the Portland and Behm canals were entirely distinct and widely separated, and that the former was the true line as laid down by Russia at the time the United States purchased Alaska. See ALASKA: KLONDIKE GOLD FIELD.

Argentine Republic.—The disputes which threatened war between the republic and Bolivia and Chile were partially settled in 1895 through the efforts of a mixed boundary commission. Argentina gained 600 leagues of territory in El Gran Chaco, formerly supposed to belong to Bolivia, and Chile agreed to the removal of the landmark, San Francisco de Limache, as demanded by Argentina, and to allow the boundary line to pass through the highest peaks of the Andes. A new boundary delimitation in Tierra del Fuego was approved by Argentina in October, 1895.

Bolivia.—A treaty with Chile, conditioned on the surrender by the latter of the provinces of Tacna and Arica, was laid before an extra session of Congress in November, 1895. President Baptista threatened to resign if the treaty was rejected, and the Chileans were firm in resisting the condition imposed. In her contention with Peru, Bolivia refused to accept the President of Colombia as arbitrator, and the President of Brazil was mutually chosen instead.

Brazil.—The atrocities in the Amapa and Carsevenne districts, on the frontier of French Guiana, began to subside toward the close of 1895, owing to an agreement between the Brazilian and French governments to submit to the arbitration of the King of Norway and Sweden the long-standing dispute as to the ownership of a wide stretch of territory between their possessions, and to hold the place under dual control pending a decision. Causes of friction were removed by the French government, which appointed a more conservative governor of Guiana, and by the Brazilian, which undertook to suppress and punish any act of warfare by Cabral or any other chief in the disputed territory.

Central America.—Another attempt in the summer of 1895 to establish a federal union of the Central American Republics was frustrated by the refusal of the presidents of Guatemala and Costa Rica to attend the conference at Amapala, to which each of the five presidents was invited. The principal objection to the proposed union was a demand by Costa Rica for a rectification of the boundary lines between the republics, a demand politically distasteful to each of her neigh-

bors. A long-pending dispute between Guatemala and Mexico, growing out of the expulsion by the former of citizens of the latter from territory claimed by both governments, was settled in 1895 by a treaty, in which Guatemala renounced all claims to the territory, and the question of damages was referred for arbitration to the United States minister to Mexico, whose award was expected early in 1896. In the matter of the dispute between Costa Rica and Nicaragua concerning the boundary line between them, President Cleveland was selected for arbitrator, and he chose E. P. Alexander, civil engineer, to make the technical investigation. The Costa Rican commission proposed to proceed to the measurement of the boundary line from the initial point along the margin of the nearest channel to a point distant three miles from Castell Viejo. The Nicaragua commission argued that the work of making the plan of that part of the boundary had no useful object, because the boundary line is variable, therefore the plans would not represent the true dividing line. This dispute was submitted to Mr. Alexander for decision, and in January, 1898, he decided in Costa Rica's favor.

China.—In the summer of 1895 France negotiated a treaty with China by which the north boundary of the French possessions in Indo-China was completed, and China ceded to France a large territory in the Shan State of Kiang-Hung, which is the buffer State between Siam and China and Tonquin and Burmah. The north and west boundaries of Tonquin between Mong-kai and Lao-kai were definitely fixed 1887; the line between Tonquin and Kwang-se was delimited 1894; and the new treaty relates to the line from Sao-Kai to the Mekong River. By her treaty with Siam, France virtually gained the territory extending vaguely north to Yun-nan and west to the Mekong River, and including a large part of the region which Great Britain desired to have recognized as a permanent buffer State. In September, 1895, trouble arose between the governments of China, France, and Great Britain, over the cession of additional territory by China to France. Great Britain claimed that China had no right to make it, and prepared to occupy that portion of the territory which she asserted was a part of Burmah, and therefore a British possession, and France refused to surrender it. China seems to have solved the difficulty, for in December following she ceded to Great Britain four States on the Burmo-Chinese frontier, having a combined area eight times greater than that of the French cession, and giving British trade direct access to Southwest China. As a result of her war with Japan, China lost the island of Formosa and the extensive Liao-Tung peninsula; but in November, by paying an additional indemnity, and agreeing not to cede the territory to any other nation, she recovered the latter.

Colombia, United States of.—Relations between Colombia, Ecuador, and Peru became seriously strained 1895, over their boundary claims; but in November the three governments agreed to ask the queen regent of Spain to act as arbitrator in delimitating the lines. Some time before he relinquished the presidency, President Cleveland, who was appointed arbitrator in a claim made by the Italian government against Colombia, in Mr. Cleveland's first term, rendered a decision against Colombia in favor of Signor Cerruti, the Italian claimant, under which Colombia must pay Italy \$300,000. The decision of Mr. Cleveland was severely criticised by the newspapers of Colombia. Colombia having failed to make the settlement, the Italian government in January, 1898, notified the former that Italy felt it her duty to make the award respected.

Newfoundland.—What is known as "the French shore question" again assumed a critical phase in the summer of 1895. The French government claims the exclusive right of fishing (including lobster-fishing and canning) on the shore of

Newfoundland from Cape Ray, at the southwest corner of the island, to the most northerly point, and thence south to Cape St. John, a distance about 700 miles, and also the right to prevent the islanders from any occupation of the land for any purpose, to the extent of half a mile from shore. The British government, on the other hand, claims that the French rights are concurrent only with those of British fishermen, and that it is bound only to prevent its subjects from interfering with French fishermen. In 1887 a French naval officer closed a large lobster-canning plant, erected on the half-mile strip, and the British naval commander issued a warning against resuming the work. A new controversy arose 1895, when the French naval commander refused to permit the construction of a railroad on the shore strip, to connect the interior with the sea. The strip is constantly guarded by British and French war vessels, and it was hoped that the last prohibition would lead to an early diplomatic settlement of the question, which had been an open one for 180 years.

Nicaragua.—See BLUEFIELDS.

United States.—In 1893 a joint Mexican and United States commission re-established the boundary line between the two countries and began setting up boundary monuments. Subsequently a dispute arose concerning the use of the water of the Rio Grande, and both governments agreed to have the river re-surveyed, and the water boundary determined by a joint commission. The work was in progress 1895, but because of delays a treaty was ratified Dec. 21, by which the time for completing the survey was extended.

Venezuela.—The dispute between Venezuela and Great Britain over the boundary line between British Guiana is one of long standing; but it reached its most acute stage in December, 1895, when President Cleveland applied to it the principles of the Monroe doctrine, after Great Britain had claimed ownership of a large part of Venezuelan territory, containing valuable gold mines. Great Britain claims that the limits of her colony extend south to the source of the Essequibo River, in the Acarai Mountains, trending thence nearly due east to the headwaters of the Corentyn, and that the west boundary from south to north coincides with the Takutu and Cotinga, as far as Roraima; thence proceeds northeast to the Imataca range, and onward to the mouth of the Amacuro. Venezuela claims all the territory west of the Essequibo right up to the source of the river. The United States became a party to the dispute by the act of Congress directing the president to urge Great Britain to submit to arbitration the question whether Venezuela was entitled to the territory between the Essequibo and the Orinoco. In his annual message to Congress, Dec. 3, 1895, President Cleveland called attention to the boundary controversy and the representations made by the United States government to that of Great Britain with a view of securing the submission of the dispute to arbitration. On the 17th he sent a special message to Congress, accompanied by the answer of the British government to the representations mentioned, and a recommendation that Congress authorize the appointment of a commission to determine the divisional line between Venezuela and British Guiana. The message created intense excitement throughout Europe and America. Both houses of Congress passed a commission bill unanimously and indulged in much talk of war. Under the bill the president announced, Jan. 1, 1896, the appointment of the following commissioners: David J. Brewer, Associate Justice of the United States Supreme Court; Richard H. Alvey, Chief Justice of the Court of Appeals of the District of Columbia; Andrew D. White, ex-United States Minister to Russia; Frederick R. Coudert; and Daniel C. Gilman, President of Johns Hopkins University. Subsequently the commission

organized and chose Justice Brewer its president. See ARBITRATION: INTERNATIONAL ARBITRATION.

BOURGEOIS, LEON VICTOR AUGUSTE, prime minister of France, was born in Paris, May 21, 1851. On the fall of the Ribot ministry in October, 1895, M. Bourgeois, a Radical, who had been a member of the Tirard and De Freycinet ministries, and distinguished for his efforts to elevate education and the universities, formed a new ministry, which has been called Conservative-Radical; himself becoming minister of the interior and president of the council. Nov. 4, 1895, he declared that his policy, with various financial measures, including an income tax, would include a thorough investigation of the Southern railway scandals. In December he sanctioned a grant of 20,000 francs from the Paris municipality to the Carmaux strikers.

BOURGET, PAUL, novelist and critic, was born in Amiens, France, Sept. 2, 1852. In 1894, *A Saoul*, translated by Katherine P. Wormley, and *Steeple Chase*, were published in the United States; and in 1895 *Outre Mer, Impressions of America*, and *A Tragic Idyl*. May 31, 1895, he was elected a member of the French Academy.

BOWDOIN COLLEGE, Brunswick, Me.; Congregational; incorporated in 1891; has in affiliation the Medical School of Maine. At the close of 1897 it had 31 professors and instructors; 380 students; 61,000 volumes in the library; \$100,000 invested in scientific apparatus, and library; \$500,000 in grounds and buildings; \$552,500 in productive funds; \$15,000 in gifts; \$50,000 in income; president, William De Witt Hyde, D.D.

BOWERS, ELIZABETH CROCKER, actress, was born in Stamford, Conn., March 12, 1830; died in Washington, D. C., Nov. 6, 1895. She was the daughter of a Protestant Episcopal clergyman, and a sister of Mrs. F. B. Conway, the actress, made her first appearance on the stage when 16 years old as Amantis in *A Child of Nature*, in New York City; was married to David P. Bowers, the actor, March 4, 1847; and after his death, 1857, to J. C. McCullom; and remained on the stage till within a few months of her death. After a success in *The Hunchback* in London, 1861, she was pronounced the best American actress who had visited England since Charlotte Cushman.

BOYCOTT, CAP., C. C., land agent, was born in Ireland of English ancestry, about 1842; and died in County Mayo, Ireland, in June, 1897. He became a land agent in County Mayo in 1863, and, according to James Redpath, had not lived there five years before he won the reputation of being the worst land agent in that section of country. For himself he declared that he was prompted by a strict sense of duty in insisting on the payment of all land rents due his principals. In 1880 Charles Stewart Parnell, in a speech at Ennis, showed his Irish followers how they could wield an immense power without violating any law if they would combine and act as one man. Both Parnell and Redpath, as they journeyed through Ireland speaking to the thoroughly aroused peasantry, advised the latter to avoid criminal outbreaks, but to "apply the terrible power of social excommunication" to their oppressors. The instructions given to the tenantry were in substance: "If any man is evicted from his holding, let no man take it. If any man is bold enough to take it, don't shoot him, but treat him as a leper. Encircle him with silence. Let no man or woman talk to him, nor to his wife or children. If the man goes to buy goods in a shop, tell the shopkeeper that if he deals with him you will never trade with him again. If the man or his folks go to church, leave it as they enter. If the landlord takes the ground, let no man

work for him. Let his potatoes remain undug, his grass uncut, his crop wither in the field." Events so shaped themselves that Captain Boycott was the first man the Irish experimented upon in this way, and hence the now familiar word of "boycott." The system was speedily adopted by labor organizations in Great Britain and the United States, and soon led to excesses that brought upon it the condemnation of the law. There are now laws in terms prohibiting boycotting in Colorado, Illinois, and Wisconsin; Florida, Georgia, Illinois, Indiana, Iowa, Missouri, Montana, North Dakota, Virginia, and Wisconsin have laws explicitly prohibiting blacklisting; Alabama, Connecticut, Georgia, Indiana, Maine, Michigan, Minnesota, Missouri, Montana, New Hampshire, New York, North Dakota, Oregon, Rhode Island, South Dakota, Texas, and Vermont have laws which may be fairly construed as prohibiting boycotting; and Maine, Michigan, Minnesota, New Hampshire, New York, Oregon, Rhode Island, South Dakota, Texas, and Vermont have laws which may be fairly construed as prohibiting blacklisting. In California, Colorado, Idaho, Indiana, Massachusetts, Minnesota, Missouri, New Jersey, New York, Ohio, and Pennsylvania it is unlawful for any employer to exact as a condition of employment an agreement, either written or verbal, that the employee shall not be a member of any labor organization.

BOYESEN, HJALMAR HJORTH, author, and professor of Germanic languages and literature in Columbia College, N. Y., was born in Frederiksværn, Norway, Sept. 23, 1848; died in New York City, Oct. 4, 1895. He published in 1894 *A Commentary on the Writings of Henrik Ibsen*; *Literary and Social Silhouettes*; and *Norse-land Tales*.

BOYS' BRIGADE, a society to cultivate Christian manliness among boys, founded in Glasgow, Scotland in 1883. In September, 1895, there were reported in the United Kingdom 744 companies, 2,559 officers, and 32,379 members, of whom 20,460 were reputed regular attendants of the church, or other Christian organization, with which their company was connected. Vice-patron, the Archbishop of Canterbury; honorary president, the Earl of Aberdeen; brigade secretary, William A. Smith, the founder of the society; headquarters, 162 Buchanan Street, Glasgow. It was introduced into the United States and Canada largely through the efforts of Prof. Henry Drummond, and it was said in 1895 that there were there and in Australia, New Zealand, and South Africa, about 700 companies, with 20,000 members.

BRADDON, MARY ELIZABETH (MRS. JOHN MAXWELL), novelist, was born in London, England, in 1837; resides at Litchfield House, Richmond. In 1894 she published *All Along the River* and *The Christmas Hirelings*; and in 1897, *When the World was Younger*.

BRADFORD, city, McKean county, Pa., population (1890) 10,514; (1895) estimated 16,000. It is the metropolis of the oil region of northern Pennsylvania; had an assessed valuation 1897 of \$2,700,000, and a total tax rate of \$36 per \$1,000, and a net bonded debt of \$42,500; 3 national banks, and 3 daily and 4 weekly newspapers.

BRADFORD, city, parliamentary borough, West Riding of Yorkshire, England, population (1891) 216,361; (1894) estimated 223,985. It is the principal seat in England of the manufacture of worsted and woolen goods. It has a large trade with the United States, exporting principally woolens, stuff goods, wool, camel, and other hair, cotton goods, and yarn.

BRADFORD, AMORY HOWE, D.D., was born in Granby, N. Y., April 14, 1846. In 1895 he celebrated the twenty-fifth anniversary of his pastorate, and of the

organization of his church, the First Congregational Church, Montclair, N. J. The same year he supplied in August and September the Westminster Chapel, the largest Congregational Church in London, England, and was unanimously called to the pastorate, but declined. In the same autumn he was sent, with three other prominent Congregational clergymen, by the directors of the American Board of Foreign Missions to inspect and report upon their missions in Japan. In 1894 he became associate editor of *The Outlook*, edited *The Question of Unity*, and published *The Sistine Madonna*; in 1895, *Old Wine; New Bottles*; *The Pilgrim in Old England*; *Heredity and Christian Problems*, and with others, *Christ and the Church*; and in 1897, *The Growing Revolution*.

BRADLEY, WILLIAM O'CONNELL, lawyer, was born near Lancaster, Ky., March 18, 1847; received a limited public school education; was admitted to the bar under a special act of the legislature when 18 years old; entered political life, 1869; elected county attorney, 1870; defeated as Republican candidate for Congress, 1872; and was a delegate-at-large to the National Republican Convention, 1880, '84, '88, and '92. He declined a nomination for Congress, 1882; was defeated for governor of Kentucky, 1887; declined appointment of United States minister to Korea, 1889; and became a member of the National Republican Executive Committee, 1892. In the State election, Nov. 5, 1895, he was elected the first Republican governor of Kentucky, and after his inauguration, Dec. 10, the railway car in which his party friends were returning from the capital was fired into by unknown parties.

BRANDES, GEORG MORRIS COHEN, critic and author, was born in Copenhagen, Denmark, Feb. 4, 1842. He has been several years engaged upon *An Exhaustive Critical Biography of Shakespeare*.

BRASSEY, LORD THOMAS, K. C. B., political economist and writer on naval affairs, was born in Stafford, England, in 1836. In April, 1895, he succeeded the Earl of Hopetoun as governor of Victoria, Australia. In 1894 he published *Papers and Addresses, Naval and Maritime*, 1872-1893, 2 vols.; and *Papers and Addresses; Work and Wages; Imperial Federation; Mercantile Marine*; and *Travels*, 2 vols.

BRAZIL, a republic in South America, comprising a federal district, and 20 States; capital Rio de Janeiro; area, 3,209,878 square miles; population, 16,330,216. The budget for 1897 showed: Estimated revenue 335,894,000 milreis (54.6 cents), expenditures 329,112,753. To meet a deficit in the financial year 1895, caused by expenditures incurred in suppressing the naval revolt of 1893, the Congress authorized an internal loan of 100,000,000 milreis, which increased the total of the foreign and domestic debt to 1,888,475,666 milreis. The government exacts heavy import and export duties, and the trade is principally with Great Britain, the United States, Germany, and France. In the fiscal year ending June 30, 1897, the exports of merchandise to the United States aggregated in value \$69,039,389, and the imports therefrom \$12,450,051. The total commerce of the republic in 1895 was, imports, \$150,000,000; exports, \$180,000,000. The reciprocity treaty between Brazil and the United States was abrogated by the former in September, 1894, to take effect Jan. 1, 1895. The bulk of exports to the United States consists of rubber, coffee, cocoa, raw cotton, and nuts. The last report on the railways (for 1896) showed 8,086 miles open for traffic, 5,463 miles under construction, 4,670 miles under survey, and 8,110 miles selected for survey. The government furnished the capital for nearly all of this work, and it also controls the telegraph system of over 10,000 miles of wire.

The revolt of the fleet in September, 1893, extended into 1894, terminating in

March in the surrender of Admiral da Gama, the leader, to Portuguese authorities. The insurgents were successful in January, and organized a provisional government in the State of Parana, and gained control of the States of Rio Grande and Santa Catharina; but the firmness of Rear-Admiral Benham, of the United States Navy, prevented the insurgents from gaining control of Rio de Janeiro, though they held its harbor for several weeks. In the State of Rio Grande, Admiral de Mello continued the revolt till April 17, when he surrendered to the Argentine authorities. The state of siege was proclaimed at an end Sept. 1, though land forces kept up a semblance of revolution in Rio Grande do Sul till September, 1895, when peace and a general amnesty were proclaimed. Dr. Prudente de Moraes Barros was elected president of the republic March 1, 1894, and was inaugurated Nov. 15 following. An unusually large coffee crop, an improved financial condition, and a cessation of political excitement marked the close of 1894.

Early in February, 1895, the President of the United States, selected as arbitrator in pursuance of a treaty drawn under the Pan-American agreement, decided the long-standing boundary dispute between Brazil and the Argentine Republic in favor of the former, the territory involved being about as large as the State of Maryland. During the summer Great Britain laid claim to the small island of Trinidad, off the coast of Brazil, which Brazil claimed to have received from Portugal. The affair led to local excitement, diplomatic correspondence, and suggestions of arbitration; but remained unsettled. Boundary disputes with France concerning territory adjoining French Guiana and alleged atrocities committed on settlers on the disputed territory, were referred to the King of Norway and Sweden for settlement as arbitrator. In August, Brazil offered its good offices to Chile and the Argentine Republic to arbitrate their cause of friction; and in November, President Moraes sanctioned a decree authorizing a special credit of \$928,200 (United States currency) for the repayment of duties collected on American merchandise that should have been admitted free under the existing commercial arrangement between the governments. In January, 1896, it was announced that a treaty between Brazil and Chile had been signed, containing an agreement to subsidize a line of steamships between the two countries, which it was feared might impair the trade of the United States with these countries. On Nov. 6, 1897, a soldier attempted to shoot the president with a pistol at the Marine Arsenal, Rio de Janeiro, but was frustrated. In attempting to disarm the soldier, General Betancourt, the minister of war, was fatally stabbed. Martial law was proclaimed the following week, on a declaration that the attempt on the president's life was part of a conspiracy in the interests of monarchists.

BRECKINRIDGE, CLIFTON RHODES, legislator, was born in Lexington, Ky., Nov. 25, 1846; received a public school and university education; served in the Confederate army and navy; engaged in mercantile business in Pine Bluff, Ark.; and was elected to Congress as a Democrat in 1882, 1884, 1886, 1889, 1890, 1892, and 1894. On July 19, 1894, he was appointed United States Minister to Russia, where he served till 1897.

BRESLAU UNIVERSITY, Breslau, Germany; founded in 1702. In 1895 there were 150 instructors; and in the department of theology, 324 students, law, 328, medicine, 287, philosophy, 299; total, 1,238, besides the non-matriculated attendants at lectures. The faculty of theology is mixed, Protestant and Roman Catholic; volumes in library, 300,000.

BRETON, JULES ADOLPHE, artist, was born in Courrières, France, May 1, 1827; exhibited at the salon of the Champs Elysées, Paris, in 1894, a landscape with figures entitled *La Fin de la Recolle*.

BREWER, DAVID JOSIAH, jurist, was born in Smyrna, Asia Minor, June 20, 1837; appointed an associate justice of the Supreme Court of the United States, Dec. 4, 1889; and a member of the Venezuela Commission Jan. 1, 1896; and, on the organization of that body, was elected its presiding officer.

BRICE, CALVIN STEWART, capitalist, was born in Denmark, O., Sept. 17, 1845; elected United States Senator as a Democrat, in January, 1890; and was defeated for re-election by ex-Gov. Joseph B. Foraker, Jan. 15, 1896.

BRIDGEPORT, consolidated town and city, Fairfield county, Conn.; population, (1890) 48,866. In 1895 it had an assessed valuation of \$57,094,379, net debt, \$1,416,187, and city property valued at \$1,108,780; and 1897 a traction company operated the entire system of street railways; 5 national banks, 4 private banks; and 6 daily, and 5 weekly newspapers. A long-standing controversy between the city and the New York, New Haven & Hartford Railroad Company was adjusted Dec. 21, 1895, when representatives of both interests signed an agreement by which the railroad company will abandon all its grade crossings and erect four elevated tracks through the city for its main line, at an estimated cost of about \$2,500,000, excluding that of a new depot, of which not over \$400,000 will be assessed against the city.

BRIDGETON, city, capital of Cumberland county, N. J.; population (1890) 11,424; (1895) State census, 13,292. In 1895 it had an assessed valuation of \$5,574,000, and total tax rate, \$17 per \$1,000; and in 1897, a net debt of \$80,000. There are 2 national banks, a trolley road extending to Millville; manufactories of glass, iron, nails, woolen goods, oil cloth, and shoes, and a monthly, 2 daily, and 4 weekly periodicals.

BRIGGS, CHARLES AUGUSTUS, D.D., theologian, was born in New York, Jan. 15, 1841. Although suspended from the ministry by the General Assembly of the Presbyterian Church in 1893, he continued in the work of his professorship of Biblical Theology in the Union Theological Seminary, New York, the seminary refusing to dismiss him. He published in 1891 *The Messiah of the Gospels*; in 1895 *The Messiah of the Apostles and Biblical Study*; and in 1897 a new and enlarged edition of *The Higher Criticism of the Hebrews* (first published in 1893).

BRISTOL, city, seaport, and parliamentary borough, Gloucester and Somerset counties, England; population (1891) 221,665; (1891) estimated 226,578. In the quarter ending June 30, 1895, the exports declared here for the United States aggregated in value \$112,288, an increase of \$59,389 over the total for the corresponding quarter 1894. The principal articles were skins, hides, furs, etc., (\$27,806); woolens (\$22,778); drugs, chemicals, dyes, etc. (18,184); and cocoa and chocolate, machinery, and tin plates, black plate, etc.

BRISTOL, JOHN BENYAN, artist, was born in Hillsdale, Columbia county, N. Y., March 14, 1826. His works in 1895 include *In the Hoosatonc Valley* in the Carnegie Hall exhibition; *On the Saco River, Maine*, in the New York Academy collection; *Lake George Highlands*, in the Chicago exhibition; and *Lake St. Catherine*, near Poultney, Vt.

BRITISH ASSOCIATION, founded at York, England, in 1831. To the sections of mathematics and physics, chemistry, geology, biology, geography, economic science and statistics, mechanics and anthropology, the section of physiology was added in 1893, and botany in 1894. The meeting of 1894 was held at Oxford, Lord Salisbury presiding. His address considered some of the

unsolved scientific enigmas, and the limitations of the Darwinian theory. Sir Douglas Galton, K.C.B., was chosen president. The meeting of 1895 was held in September, at Ipswich. The president's address considered the development of physical science since the organization of the association. Professor Hicks presented a paper on theories of ether; Professor Meldola on chemical science in 1851, when the association last met in Ipswich; W. Whitaker on the geology of Suffolk and the coal measures; Professor Herdman on oceanography; Mr. Mackinder on the history of geography; Prof. Vernon Harcourt on the relation of engineering to science; Prof. Flinders Petrie on races and civilization; and Mr. Thistleton Dyer on the history of botany for the past sixty years. The meeting of 1896 was at Liverpool, under the presidency of Sir Joseph Lister; and that of 1897 at Toronto, Canada, under the presidency of Sir John Evans. See SCIENCE, BRITISH ASSOCIATION, etc.

BRITISH COLUMBIA, a province in the Dominion of Canada; population (1891) 98,173; capital Victoria. The latest reports available at the time of writing covered the fiscal year ending June 30, 1896. The imports were, dutiable goods, \$3,991,703; free goods, \$1,574,535—total, \$5,566,238; entered for home consumption, \$5,496,944; duty collected, \$1,306,739. The revenue, with balances, was \$989,765; expenditures, \$1,614,723; deficit, \$624,958. The government publishes no agricultural statistics beyond those obtained for the census reports. The share of the province in the fishery catch of the Dominion in 1895 was in value \$4,401,354, of which salmon yielded \$3,102,769; and the export of fishery products from the province in 1896 was valued at \$3,288,776, almost wholly salmon. The only collieries in operation were four on Vancouver Island, from which 1,002,268 short tons were taken, and of which 710,345 short tons were exported. The yield of the gold mines, according to provincial reports, aggregated in value \$1,788,206. Large masses of native copper have been found in various parts of the province, and a total of 2,876,894 lbs. was exported in 1896. In general industries, 770 establishments were reported, which employed \$7,246,662 capital and 11,507 hands, paid \$3,586,897 for wages and \$5,119,258 for materials, and had an output valued at \$11,999,928. Public education is free, undenominational, and supported wholly by the provincial government, which appropriated for 1896 \$234,335. There were 190 common, 26 graded, and 4 high schools, 14,460 enrolled pupils, 9,254 pupils in average daily attendance, and 350 teachers. The fishery season of 1895 was satisfactory everywhere excepting on Rivers Inlet, and 16 canneries packed 174,000 cases, against 130,000 cases packed by 12 canneries in the previous year. New and valuable mining fields, in the district of Slocan, in the East Kootenai division, along Trail Creek in West Kootenai, and on Boundary Creek, were undergoing rapid development in 1895, the Slocan ores carrying higher percentages of lead and silver than those of any district in the United States. Early in 1894 the Fraser River overflowed its banks, destroying a large acreage of growing crops. In September following, the Dominion government sent surveyors to survey the river from Yale to its mouth and to devise a system of dikes. The Dominion government has established a quarantine station at William's Head and has contracted for the erection at Victoria of a central building for all Dominion offices, and the provincial government has completed a large courthouse at Vancouver and a group of parliament buildings at Victoria. In 1896-97 the province shared largely in the excitement over the developments in the Klondike and Yukon regions. See ALASKA.

BRITISH EMPIRE, a constitutional monarchy, consisting of the United Kingdom of Great Britain and Ireland, the empire of India, and the colonies,

protectorates, and dependencies; seat of government, London, England; sovereign, Victoria, Queen of Great Britain and Ireland and Empress of India. The United Kingdom of Great Britain and Ireland had, April 5, 1891, an area of 120,979 square miles, and a population of 38,104,975, and India and its dependencies, an area of 1,560,160 square miles, and a population of 287,223,431. Details of the various colonies, provinces, and other possessions will be found under their respective titles. During the fiscal year ending March 31, 1894, the revenue of the United Kingdom from all sources was £91,133,410 (\$142,908,372), and expenditure £91,302,846 (\$443,731,831). The budget estimates for 1894-95, were: Revenue, £94,175,000 (\$457,690,500); expenditure, £93,884,000 (\$456,276,200). Revenue returns for the half-year ending Sept. 30, 1895, showed a net increase of £4,063,000 (\$19,746,180) over those of the previous corresponding period, every department of the service exhibiting improved conditions. The bulk of the increase was from the sale of stamps for stock exchange business and the promotion of new companies. The national debt, March 31, 1894, was £666,154,291, comprising funded and unfunded debts and the estimated capital of terminable annuities; other liabilities aggregated £2,949,730, sundry assets £4,910,883, and exchequer balances at the Banks of England and Ireland £5,977,119; making the gross liabilities £669,104,024 and the net, £658,186,022 (\$3,298,784,066). The whole of the debt was about \$233,280,000 less than the gross annual value of property and profits assessed for income tax. On the funded and unfunded debts and terminable annuities the annual charge was £25,200,000. On March 31, 1895, the gross liabilities were reduced to £660,160,607, and the annual charge against the debt to £24,977,912.

The declared value of the imports and exports of merchandise of the United Kingdom 1891 was: Total imports, £108,505,718 (\$1,985,337,789); exports of British produce, £216,194,239 (\$1,050,701,001); exports of foreign and colonial produce, £57,966,481 (\$281,717,112); total imports and exports, £682,666,441 (\$3,317,758,903). From May 31, 1891-June 1, 1895, the commerce with the United States was as follows: Merchandise, imports from the United States, \$387,960,216, exports, \$153,903,956; gold and silver coin and bullion, imports, \$10,083,800, exports, \$13,022,820—total trade, \$564,970,792. Duty-free articles form about 93 per cent. of the total imports. The principal sources of wheat imports 1891 were the United States (21,658,245 cwt.), Russia (16,775,881), and Argentina (13,272,152), and of 19,134,605 cwt. of flour imported, 15,925,486 was from the United States. The total shipping, steam and sailing, engaged in the home and foreign trade, 1893, was 16,828 vessels of 8,511,388 tons, employing 240,974 men; and the total number of vessels in the world registered as belonging to the United Kingdom was 13,239 sailing vessels of 3,038,260 tons, and 8,088 steam vessels of 5,740,213 tons—in all 21,327 vessels of 8,778,503 tons. During 1893 the number of vessels in the foreign trade that entered the various ports was 59,916, and that cleared 59,918.

Internal communications 1894 comprised 20,646 miles of railway in operation (England and Wales 14,440, Scotland 3,215, Ireland 2,991), which represented a capital of £971,323,353; 975 miles of street and road tramways, capitalized at £14,112,573; 3,813 miles of canals, of which there were no reports since 1888; 20,016 post offices and 25,989 road and pillar letter-boxes; and 35,286 miles of line and 214,804 miles of wire in the telegraph service. For banking interests see BANK OF ENGLAND; BANKING SYSTEMS FOREIGN; for army see ARMIES OF THE WORLD, *British Empire*; for navy see NAVIES OF THE WORLD, *British Empire*.

Agricultural returns 1894 indicated a check in the decreasing of acreage, especially in England, Wales and Scotland, where the holdings were 24,891,539 acres in England, 2,818,547 in Wales, and 4,848,166 in Scotland—total, 32,558,252. The acreage in crops was as follows: Wheat, 1,927,962; barley, 2,095,771; oats, 3,253,401; beans, 244,180; peas, 243,043; potatoes, 504,454; and turnips, 1,956,573; and the principal productions were: Wheat, 59,173,000 bush.; barley and bere, 72,295,000; and oats, 135,463,000. The crop acreages in Ireland were: Wheat, 49,342; barley, 164,780; oats, 1,254,813; potatoes, 717,120; and turnips, 311,294; and the products were: Wheat, 1,666,000 bush.; barley and bere, 6,211,000; oats, 55,701,000; potatoes, 3,064,000 tons; and turnips and swedes, 4,848,000 tons. Live stock returns for the whole kingdom, 1893, were: Horses, 2,079,587; cattle, 11,207,554; sheep, 31,774,824; and swine, 3,278,030.

The sea fisheries employ over 27,000 registered vessels and boats and over 120,000 men. Excluding salmon and shellfish, the weight of fish caught 1894 was 702,294 tons, value on landing £6,807,606, value including shellfish £7,199,890 (\$34,991,465).

Mineral products 1893 had a total value of £70,767,651 (\$343,928,783), of which £66,904,029 was the value of non-metallic minerals. The principal articles were: Coal, 164,325,795 tons, value £55,809,808; iron ore, 11,203,476 tons, value £2,827,947; stone, value £7,773,743; slates and slabs, value £1,107,626; salt, value £735,222; and tin, value £637,053. The total number of persons employed in and about mines was 718,747, of whom 570,978 worked under ground. During 1893 the imports of unmanufactured metals comprised 4,065,864 tons of iron ore, 199,608 of copper ore, 188,249 of lead ore, and 33,553 of tin ore. The textile industry, 1893, showed: Imports of raw cotton, 1,416,780,064 lbs., exports, 224,621,488, retained for home consumption, 1,192,158,576; imports of wool, 677,947,464 lbs, exports, 346,369,110, retained for home consumption, 331,578,354.

At the beginning of 1895 the cabinet comprised the following members: Prime minister, the Earl of Rosebery; lord high chancellor, Lord Herschell; chancellor of the exchequer, Sir W. V. Harcourt; secretary of state for foreign affairs, the Earl of Kimberley; lord privy seal, Lord Tweedmouth; secretary of state for India, H. H. Fowler; secretary of state for the home department, H. H. Asquith; secretary of state for the colonies, the Marquis of Ripon; secretary of state for war, H. Campbell-Bannerman; first lord of the admiralty, Earl Spencer; chief secretary to the lord-lieutenant of Ireland, John Morley; president of the board of trade, James Bryce; president of the local government board, G. J. Shaw-Lefevre; secretary for Scotland, Sir G. O. Trevelyan; postmaster-general, Arnold Morley; and vice-president of the council on education, A. H. Dyke-Acland. On June 21 an adverse vote in the House of Commons was regarded as a vote of want of confidence in the secretary of state for war; on the 24th the entire cabinet resigned; the same day the Marquis of Salisbury was directed by the queen to form a ministry; on July 6 Parliament was prorogued till the 24th; on July 8 a decree of dissolution was made; and in the elections that followed the Liberal party was overwhelmingly defeated, the new government securing 411 members in the new Parliament and the opposition 259. The fourteenth Parliament in Queen Victoria's reign was opened Aug. 12. The following are the members of the new ministry: Prime minister and secretary of state for foreign affairs, the Marquis of Salisbury; lord president of the council, the Duke of Devonshire; lord high chancellor, Lord Halsbury; chancellor of the exchequer, Sir M. Hicks-Beach; lord privy seal, Viscount Cross;

secretary of state for India, Lord George Hamilton; secretary of state for the home department, Sir Matthew W. Ridley; secretary of state for the colonies, Joseph Chamberlain; secretary of state for war, the Marquis of Lansdowne; first lord of the admiralty, George J. Goschen; chief secretary for Ireland, Gerald Balfour; president of the board of trade, Mr. Ritchie; president of the local government board, Mr. Chaplin; secretary for Scotland, Lord Balfour; first lord of the treasury, A. J. Balfour; postmaster-general, the Duke of Norfolk; and vice-president of the council on education, Sir J. E. Gorst. Appointments were made to two new cabinet offices, viz., first commissioner of works, Mr. Akers-Douglas, and president of the board of agriculture, Walter Long.

From the start the Salisbury ministry was involved in international difficulties, and during the last half of 1895, when the nations of Europe were concerned with the Armenian atrocities, the China-Japan treaty and concessions, the failure of Turkey to execute its promised reforms, and various complications in Africa, the most notable and most unusual incident was the complete isolation of Great Britain in the general political movement. Her demands on Venezuela for a rectification of the boundary line, which would throw into British territory an invaluable gold region, were followed by attempts on the part of the United States government to induce her to submit the controversy to arbitration; by a vigorous message to Congress from President Cleveland, asking for authority to appoint a commission to examine and report the Venezuelan situation; and by the prompt acquiescence of that body and the appointment Jan. 1, 1896, of a commission consisting of Justice David J. Brewer, United States Supreme Court, Chief Justice Richard H. Alvey, Court of Appeals of the District of Columbia, Andrew D. White, ex-president of Cornell University, Daniel C. Gilman, president of Johns Hopkins University, and Frederick R. Conant, of New York City. President Cleveland's act and its results led to talk of war between the United States and Great Britain; but by Feb. 1 a better feeling prevailed in both countries, and a conservative treatment of the trouble seemed assured.

BRITISH MUSEUM, London, England, founded in 1753. It received in 1895 an annual appropriation of £157,781; principal librarian and secretary, Edward Maunde, salary £1,200. It included in 1895 the following departments: (1) Manuscripts, containing above 55,000 volumes, besides Greek, Coptic, and Latin papyri, charters, and seals; (2) printed books, 1,600,000 volumes, the law requiring a copy to be sent it of every book printed in the United Kingdom, making the annual increase about 46,000 volumes, besides continuations, newspapers, and music; (3) antiquities, Greek, Roman, Egyptian, Assyrian, British, and Medieval; (4) prints and drawings. Admission free to all visitors and readers properly certified. The visitors during the year were 578,977, an increase of 40,117 over the year preceding; readers 202,973, an increase of 8,871. Space for future extension was provided by the purchase in 1895 of houses and gardens adjoining on three sides, making, with the former ground, an isolated plot of 13 acres.

BROADUS, JOHN ALBERT, D.D., LL.D., Baptist author and educator; professor, until his death, of biblical literature and homiletics in the Baptist Theological Seminary at Greenville, S. C., was born in Calpepper county, Va., Jan. 24, 1827; died at Louisville, Ky., March 16, 1895. One of his most important works was a *Harmony of the Gospels*, published in 1893.

BROCKTON, city, Plymouth county, Mass., population (1890) 27,294; (1895) State census, 33,157, increase in 10 years, 12,371. In 1896 the assessed value-

tions were: Real property, \$21,569,541; personal, \$2,916,860—total, \$24,486,401; total tax rate \$19.70 per \$1,000. In 1897 the city had a total bonded debt of \$1,938,680 (including water debt \$720,000), sinking fund \$207,000; net debt \$1,731,680; 2 national banks, 2 savings banks, and a co-operative bank. In 1896 there were 5,564 pupils enrolled in the public schools, 30 buildings used for school purposes, public school property valued at \$363,000, and expenditures \$97,696. The city has 25 churches, a high school, public library, electric street railroad, extending to Avon, Randolph, Holbrook, and Whitman; and a weekly and 2 daily newspapers.

BROOKE, STOPFORD AUGUSTUS, clergyman, was born in Letterkenny, Ireland, Nov. 14, 1832. He seceded from the Church of England in 1880, and was pastor of Bedford Unitarian Chapel, London, till obliged by ill health to retire in 1895. He published *Tennyson: His Art in Relation to Modern Life* (1894); *The Golden Book of Coleridge* (1895); and *The Old Testament and Modern Life* (1896).

BROOKLINE, town, Norfolk county, Mass., population (1890) 12,103; (1895) State census, 16,159, increase in 10 years, 9,196. In 1896 the assessed valuations were: Real property, \$45,782,700; personal, \$15,129,300—total, \$60,912,000; tax rate \$12.40 per \$1,000; and the town had a total bonded debt of \$2,235,673 (including water debt \$735,653); net debt as defined by law, \$1,345,806; debt allowed by law, \$1,770,078; available balance, \$424,272; a national bank (capital \$100,000); high school, 14 day schools, and over 2,300 children of school age; 25 churches; and a weekly newspaper.

BROOKLYN, a borough in the city of New York since Jan. 1, 1898; co-extensive with Kings county, N. Y.; population (1890) 806,343; (1898) estimated 1,180,000. Within ten years the city more than doubled its area by the annexation of adjoining towns. New Lots was incorporated with it 1886; Flatbush, Gravesend, and New Utrecht, 1894; and Flatlands, 1896. In the latter year the city had acquired a total area of 66.39 square miles, or more than 27 square miles more than New York City, and was the largest city territorially in the State. On the annexation of Flatbush, that famous old Dutch town became the thirty-second ward of the city. In 1897 the assessed valuations were: Real estate, \$570,107,742; personal, \$33,688,721—total, \$603,796,463; average city tax rate, \$2.83 per \$1,000; tax levies, for State purposes, \$1,516,755, for city purposes, \$14,618,805—total, \$17,135,560. The total assessed valuations in 1895 were \$563,987,132, and in 1896, \$582,847,633. The mileage assessments of railroad, telegraph, electric light, and water companies, occupying the streets of the city, was on an assessed valuation of \$14,378,788 in 1896, and \$13,884,237 in 1897, a net decrease of \$541,551. There was in the borough property exempted by law from taxation, having an assessable valuation of \$166,759,427, which included 439 churches, 129 public schools, 75 fire department properties, 28 police department properties, and the grounds and betterments of 42 parks and roadways. The public buildings and United States property were assessable at \$56,247,700; the public parks, \$51,882,500; and cemeteries, \$7,734,500. The report of the city treasurer for the the year ending Dec. 21, 1895, showed: Cash in the depositories selected by the sinking fund commissioners, \$4,578,119; additions from the proceeds of sales of bonds and certificates, \$10,698,249, and from other sources, \$36,277,146; total, \$51,553,514; payments by warrants, \$43,365,609; balance in the depositories Dec. 21, 1895, \$8,187,904, comprising the following funds: Receipts from tax levy of 1895 for municipal purposes 1896, \$8,021,060; special Flatbush and New Utrecht accounts, \$151,913; balance of

amount available for municipal purposes 1895, \$14,930. He also reported that taxation within constitutional limits yielded an insufficient amount for the increased obligations entailed by the annexation of the county towns, and left no adequate means to provide for this deficiency (\$6,000,000). There was a difference of \$2,189,968 between the debt of the city and the amount it could legally borrow, and the annexation of Flatlands was expected to add only \$234,078 to this during 1896. The treasurer recommended the application of a specific amount annually from the revenue fund account to extinguish the deficiency. The report for the period Jan. 1-Dec. 1, 1897, showed: Balance on hand, Jan. 1, \$10,877,067.71; receipts, \$20,641,122.51—total, \$31,518,190.25; disbursements, \$28,720,358.77; balance in banks, \$2,797,831.48. The largest items of receipts were, from bonds and certificates, \$6,205,825; taxes and assessments, \$6,044,370; arrears of taxes and assessments, \$3,359,635; water rates, \$1,799,179; and excise license fees from the State, \$1,553,392. The account of the board of education showed: Balance, \$162,678.72; receipts, \$3,213,762.25—total \$3,376,440.97; disbursements, \$2,933,326.35; balance, \$443,114.62. The debt statement, Jan. 1, 1898, showed: Permanent debt, \$42,869,728; water debt, \$16,800,749; temporary debt, \$2,939,000; tax certificates, \$4,060,000—total, \$66,669,478; sinking funds, \$6,734,055; net debt, \$59,935,422, an increase of \$2,287,325 in a year. The total water debt was \$16,800,749. On Oct. 31, 1897, there were registered in the public schools, 137,453 pupils; number of sittings, 135,713; number of schools, 118; number of teachers, including principals, 3,122.

Under an act of the legislature which authorized the issue of special bonds, the park commissioner began 1895 increasing the number of public parks, and planned four large and six small ones, which will cost over \$2,000,000. He also made contracts with Frederick MacMonnies, the sculptor, for bronze groups to be placed on the pedestals at the Ocean Parkway entrance to Prospect Park, and for a bronze quadriga to be placed on the Memorial Arch. One of the most notable events of 1895 was the laying of the cornerstone of the museum wing of the Brooklyn Institute of Arts and Sciences, on Dec. 14. The entire building will cost about \$3,000,000, and will occupy a delightful site on Prospect Hill facing the Eastern Parkway. Seth Low, ex-mayor of the city and president of Columbia University, by a gift to the college May 6, 1895, established twenty-four scholarships in that institution for the benefit of Brooklyn young men and women. Three scholarships are to be awarded each year beginning with 1896 to young men entering the university, and three to young women entering Barnard College, and each scholarship is to be tenable for four years. In November, 1895, Mrs. Henry D. Polhemus approved plans for the Polhemus Memorial Dispensary, which she proposed to erect and present to the Long Island College Hospital, as a memorial to her husband. The building will cost \$250,000, and Mrs. Polhemus will endow it with a similar amount. The Memorial Hospital for Women and Children, founded by women and having a board of managers and a complete faculty composed entirely of women, was opened Nov. 26, 1895. At the meeting of the Board of Education, in December, 1895, she proffered gift of the Erasmus Hall Academy property in Flatbush, valued at \$150,000, and tendered for a high school building, was formally accepted. The academy was chartered by the State regents 1786, and was the second institution of the kind in the State so organized.

The "Greater New York" bill, introduced in the State Senate, Jan. 2, 1895, failed of passage there May 15, the last day of the session, because of an amendment providing for the submission of the proposed charter to popular vote in the

cities of New York and Brooklyn separately, which was adopted too late to permit the bill in its amended form being acted on. The passage of the bill would not have effected the consolidation of the cities and the other towns and villages mentioned in it; but would have provided for the preparation of a charter, and for bills for enactment into laws for the government of the consolidated municipality. The committee having charge of the preparation of this bill drafted a second one which was submitted to the legislature in January, 1896. See NEW YORK (city). The legislature of 1895 authorized the construction of another bridge across the East River, from Grand Street, New York, to Broadway, Brooklyn, at an estimated cost of \$16,000,000, one-half of which to be paid by each city. In 1897 there were 5 national banks, 8 trust companies 19 State banks, 37 co-operative savings and building-loan associations, with \$6,385,000 assets; and 56 periodicals, of which 5 were daily, 32 weekly, 3 semi-monthly and 17 monthly.

BROOKLYN INSTITUTE OF ARTS AND SCIENCES, Brooklyn, N. Y.; founded in 1824; rechartered in 1890. In 1894 its activity was greatly revived. Since the destruction of its old building by fire it has used rooms hired and loaned; but reported during the year lectures, conferences, and class exercises in 25 different departments, viz.: archaeology, architecture, astronomy, botany, chemistry, domestic science, electricity, engineering, entomology, fine arts, geography, geology, law, mathematics, microscopy, mineralogy, music, painting, pedagogy, philology, photography, physics, political science, psychology, and zoology. The departments of domestic science and law were organized in 1894-95. The library contains 14,000 volumes, besides the library of the late Rev. Frederick A. Farley, D.D., received as a gift in 1894. The biological laboratory is located at Cold Spring Harbor, L. I., for the study of comparative embryology, bacteriology, botany, and zoology; the Shinnecock summer art school, at Shinnecock Hills, L. I. was under the direction of W. M. Chase, late president of the Association of American Artists; the Catskill summer art school was held at Evelyn Cottage, near Princeton, N. J., under Thomas Robinson. There is a third summer school of art at Lynne, Conn., under Joseph H. Boston. A building at Bedford Park was leased as a temporary museum.

The city having granted lands near Prospect Park, the legislature authorized the expenditure of \$50,000 for grading and preparing; and the cornerstone of the first section of a museum building was laid Dec. 14, 1895. This section was completed in January, 1897, furnished as a museum in May, and opened to the public on June 2. When completed the entire structure will cover an area of 560 square feet, with four interior courts to provide light for the central portions of the building. The membership in 1897 was 4,984. President of board of trustees, A. Augustus Healy; general director, Prof. Franklin W. Hooper.

BROOKLYN POLYTECHNIC INSTITUTE, Brooklyn, N. Y.; incorporated as an academy in 1854; enlarged into a college of business and of liberal arts in 1870; and chartered and incorporated under its present name in 1889. In 1895-96 it included the academy, with six years of preparatory study; the institute, with collegiate and technical courses leading to the degrees of B.A. and B.S.; and a post-graduate year of study for the degree of Electrical Engineer. Instructors in 1897, 54; students 800. The library is for reference and study in the institute, and included 8,000 volumes. President, David H. Cochran, A.M., Ph.D., LL.D.

BROOKS, ELBRIDGE STREETER, author, was born in Lowell, Mass., April 14, 1846; published *The Century Book for Young Americans* (1894); *Great Men's*

Sons: Who They Were, What They Did, and How They Turned Out (1895); *The Century Book of Famous Americans* (1896); *The Century Book of the American Revolution* (1897), etc.

BROOKS, NOAM, author, was born in Castine, Me., Oct. 30, 1830. In 1894 he removed from Newark, N. J., where he had edited the *Daily Advertiser* to Castine, Me. He published *Tales of the Maine Coast*, and *Abraham Lincoln and the Downfall of American Slavery* (1891); *How the Republic is Governed, Short Studies in Party Politics*, and *The Mediterranean Trip* (1895); *Washington in Lincoln's Time* (1896), etc.

BROTHERHOOD OF ANDREW AND PHILIP, a society organized to help men in winning other men to a religious life; organized in 1888, in the Reformed Church, Reading, Pa., but extended into churches of different denominations. Conventions of the branches within particular denominations are held biennially; and in the alternate years a general convention of all denominations. The second general convention was held in Philadelphia, Pa., Nov. 15, 1895. The secretary then reported 279 chapters, with about 8,000 members, as follows: In the Reformed Church 91 chapters; Presbyterian, 100; Congregational, 62; Methodist Episcopal, 7; Baptist, 7; United Brethren, 3; Lutheran, 1; Reformed Episcopal, 1; United Presbyterian, 1; Church of Christ, 1. In 1897 there were reported 380 chapters in 31 States, with a membership of 10,000. General Secretary, Rev. C. E. Wyckoff, Irvington, N. J.

BROTHERHOOD OF ST. ANDREW, a society of men in the Protestant Episcopal Church; organized to help win men to a religious life; begun in St. James' Church, Chicago, Ill., in 1883; extending until in 1895 it included 1,120 chapters, with 13,000 members in 49 States and Territories; besides 180 chapters in Canada with 2,000 members, 25 chapters in Australia, and chapters more recently formed in Scotland and England. With these are connected 127 chapters of a boys' department formed to train members for the brotherhood. Since 1886 it has published a monthly periodical named *St. Andrew's Cross*, which had in 1895 an issue of 21,500. In 1897 there were reported 1,220 chapters, and about 13,000 members. General Secretary, John W. Wood, 251 Fourth Avenue, New York.

BROTHERHOOD OF THE KINGDOM, a society organized after the Parliament of Religions in Chicago, Ill., in 1893, to secure a better understanding of the idea of the Kingdom of God, and to assist in its practical realization. Its third annual conference was held at Marlboro, N. Y., Aug. 5-9, 1895, with addresses and papers by many eminent Christian ministers and laymen of different denominations. It publishes a number of leaflets explaining its methods, and the principles for which it works. These, with further information, can be secured from the secretary, Walter Rauschenbusch, 407 West 13d Street, New York.

BROTHERS OF NAZARETH, a monastic order of laymen in the Protestant Episcopal Church; organized in New York City 1886. The members vow every three years to live a life of celibacy and self-denial, devoting all their time to the benevolent work and religious exercises of the order. They observe strictly the discipline and worship of the Episcopal Church, including prayers at the canonical hours, as well as the daily services of the Prayer Book, and the feasts and fasts of the church, and an annual religious retreat. They give the best portion of their time to caring for the sick and helpless. The mother home of the order is near Verbank, Dutchess co., N. Y., and they have also a farm near Ellen-

ville in the Shawangunk Mountains, and a cottage near Farmingdale, L. I. In these they give outings to poor young men and boys from city tenement districts, and at Verbank they care for convalescents and consumptives, and maintain a school for boys. The latter farm and buildings were given them by Gen. J. Watts De Peyster, the school being built by him in 1894.

BROWN, GEORGE, naval officer, was born in Indiana, June 19, 1835. He was appointed a midshipman in the United States navy, Feb. 5, 1849; became the senior rear-admiral, on the retirement of Rear-Admiral James A. Greer, Feb. 28, 1895; and was retired June 19, 1897. At his retirement he had been on sea service for 22 years, 7 months; on shore or other duty 19 years, 5 months; and was unemployed 6 years, 5 months. He achieved a brilliant career.

BROWN, JOSEPH EMERSON, jurist, was born in Pickens county, S. C., April 15, 1821; died in Atlanta, Ga., Nov. 30, 1894. He served four terms as governor of Georgia, and was a United States Senator in 1868-70 and 1880-91.

BROWN UNIVERSITY, Providence R. I., founded by Baptists in 1764; now non-sectarian and co-educational. In 1895-96 the instruction included undergraduate and graduate courses for the degrees of B.A., Ph.B., B.S., C.E., M.B., B.A., Ph.D., and M.A. Examinations for all the degrees were open to women, and also the regular class instruction in the graduate department. For undergraduate women there was established the Women's College in connection with the university. Instructors in 1895-96, 68; students 859, including 117 graduates, and 120 in the Women's College. The university had \$54,671, the interest of which was given to two fellowships for graduates and 100 scholarships for undergraduates of distinguished merit. The library, founded in 1767, contained over 80,000 volumes, and 20,000 pamphlets. President, E. B. Andrews, D.D., LL.D. (*q. v.*).

BRUCE, ALEXANDER BALMAIN, educator, was born near Perth, Scotland, Jan. 30, 1831; has been professor of Apologetics and New Testament Exegesis in the Free Church College, Glasgow, since 1875; received the degree of D.D. from Glasgow University 1876; and published a fourth edition of his Cunningham lecture, *The Humiliation of Christ* (1895); *Providential Order of the World* (1897), etc.

BRUCE, WALLACE, poet, was born in Hillsdale, N. Y., Nov. 10, 1844; published *The Hudson* and *Wayside Poems* (1894).

BRUNETIERE, FERDINAND, author, was born in Toulon, France, in July, 1849. He engaged in critical literature 1870; was appointed professor of French language and literature at the Superior Normal School of Paris, 1886; received the decoration of the Legion of Honor 1887; was elected a member of the French Academy June 8, 1893; and succeeded M. Buloz as director of the *Revue des Deux Mondes* in November following. In 1897 he delivered a course of lectures at Johns Hopkins University, Baltimore, and afterward a course of five on *Contemporary French Literature* in New York City.

BRUSSELS, city, capital of Kingdom of Belgium; population (1891), city 182,305, with suburbs 482,268; (1893) city and suburbs 498,400. The principal articles of export to the United States are cement, plate and window glass, linen goods, skins, corsets, gloves, and hatters' fur. In October, 1895, the king signed a decree declaring the city to be a seaport, and contracts were exchanged for the widening and deepening of the present barge canal, connecting the city with the lower part of the Scheldt River, and the construction of a large harbor and docks between Brussels and Salken, at an estimated cost of \$10,000,000, to be divided between the State, city, and provinces benefited. See also under CANALS.

BRUSSELS, FREE UNIVERSITY OF, Brussels, Belgium; founded in 1834, by liberals who were dissatisfied with the Royal Athenæum. It had in 1895, 1,181 students in the following departments: Law, 255; philosophy, 152; medicine, 544; sciences, 230. Students have free access to the great library of the Palais de l'Industrie, containing about 250,000 volumes.

BRYAN, WILLIAM JENNINGS, candidate in 1896 of the Democratic, Populist, and Silver parties for president of the United States; was born in Salem, Ill., March 19, 1860. He was educated at Illinois College and the Union College of Law at Chicago; removed to Lincoln, Neb., in 1887; was elected to Congress in 1890 and 1892; became editor of *The World-Herald* in 1894; and won the sobriquet of "The Boy Orator of the Platte." For the results of the election, see MCKINLEY, WILLIAM, *Election*.

BRYCE, JAMES, educator, was born in Belfast, Ireland, May 10, 1838; has been Regius Professor of Civil Law at Oxford University since 1870; was appointed president of the Board of Trade of London May 22, 1894; and published a 3d edition, completely revised and with additional chapters, of *The American Commonwealth* (1895); a 4th edition, revised, and with chapter on the Armenian question of *Transcaucasia and Ararat* (1896); *Impressions of South America* (1897), etc.

BRYN MAWR COLLEGE, Bryn Mawr, Pa.; non-sectarian; for women only; organized by Orthodox Friends in 1885. It has a college course of four years, and a graduate course. At the close of 1897 it had 41 professors and instructors; 310 students; over 27,000 volumes in the library; \$70,000 invested in scientific apparatus and library; \$814,905 in grounds and buildings; \$1,500,000 in productive funds; \$24,000 gifts; \$57,000 income; president, M. Carey Thomas, m. d. In 1894 it acquired the classical library of 8,000 volumes and 7,000 dissertations, etc., of the late Professor Sauppe, of Göttingen. Two European fellowships of \$500 each; eleven resident fellowships of \$525 each; two scholarships of \$200 each, four of \$100 each, and two of \$375 each, are awarded to deserving students.

BUCHANAN, ROBERT WILLIAMS, poet, dramatist, and novelist, was born in Warwickshire, England, Aug. 18, 1841. He published *Red and White Heather*, a volume of tales and ballads, and *Rachel Dene; a Tale of the Deepdale Hills* (1894); *Diana's Hunting* and *Effie Hetherington* (1896), etc.

BUCHTEL COLLEGE, Akron, O., Universalist; co-educational; had at close of 1897, 17 professors and instructors; 180 students; 7,000 volumes in the library; \$200,000 in grounds and buildings; \$250,000 in productive funds; \$20,000 in income; president, Rev. Ira A. Priest.

BUCKNELL UNIVERSITY, Lewisburg, Pa., Baptist; co-educational; had at close of 1897, 27 professors and instructors; 425 students; 17,000 volumes in the library; \$250,000 invested in grounds and buildings; \$400,000 in productive funds; \$50,000 income (1895); president, John H. Harris, LL. D.

BUCKNER, SIMON BOLIVAR, candidate of the National Democratic (hard money) party for vice-president of the United States, was born in Kentucky, in 1823. He was graduated at West Point; became a lieutenant-general in the Confederate Army; was a pall-bearer at the funeral of General Grant; and was elected governor of Kentucky in 1887.

BUDAPEST, dual city, capital of the Kingdom of Hungary, comprising Buda on the right bank of the Danube, and Pest on the left; population (1890) 506,384. The royal court was re-established here 1893. The thousandth anniversary

of the founding of the Hungarian State occurred 1896, and for its celebration a national historical and modern exposition was arranged in its capital. The city contains a noted university (see below) and one of the seven government technical high schools, which in 1894 had 59 professors and instructors and 1,021 students.

BUDAPEST, UNIVERSITY OF, Budapest, Hungary, founded in Tyrnau, transferred to Buda in 1780, and to Pest in 1784; having the four departments of theology, law, medicine, and philosophy; professors and instructors in 1894, 257; students 4,006; volumes in library, 100,000, besides 1,600 valuable manuscripts.

BUENOS AYRES, city, metropolis, and capital of the Argentine Republic; population (1893) 567,408. Since 1889 the city has undergone notable changes in the line of local improvement. The most important is the creation of a new system of docks, involving the construction of five long wet docks and great basins. Four of these were in a condition to be used and three of them were entirely completed in January, 1895. The basins have ample area for the largest ocean steamships, and along their walls are hydraulic elevators by which every hatchway of a vessel may be worked at once. Large and convenient warehouses and special docks, yards, and elevators for handling live stock are provided. This improvement is sufficient in extent for the probable necessities of the city for several years to come. Railway and cartage facilities have been greatly extended, the principal streets—80-100 ft. wide in the new part—laid with asphalt, and many iron, brick, and stone buildings erected. Argentina is the most progressive republic in South America, and the making over of its metropolis is in keeping with the general improvement. Between Jan. 1 and Aug. 22, 1895, the exportation of live cattle from Buenos Ayres averaged 7,000 steers and 41,000 head of sheep per month, the new industry showing a notable increase each month. In October, the Argentine Senate received a favorable committee report on a bill granting an annual subsidy of \$100,000 to a steamship company in consideration of its running four 3,500-ton steamers from Buenos Ayres to New York, and making 18 trips yearly; and in November it was officially reported that the government had negotiated in London a loan of \$5,000,000 with which to establish a State bank at the capital.

BUFFALO, city, capital of Erie county, N. Y.; population (1890) 255,664; (1897) estimated 365,000. On Jan. 1, 1897, the city had a total bonded debt of \$12,667,618 (including a water debt of \$3,515,882), sinking funds, \$541,816, net debt, \$12,125,802, and owned real estate, \$10,022,464, and personal property, \$7,525,994—total, \$17,548,458. The assessed valuations 1896 were: Real, \$225,485,795, personal, \$13,486,550—total, \$238,972,345; tax rate, \$15.02 per \$1,000. The tax valuation of the city is about six-sevenths of that of the entire county. In the fiscal year ending June 30, 1897, the imports of merchandise amounted in value to \$4,001,346; exports, \$5,015,247. There are 2 national banks (capital \$700,000), 18 State banks (capital \$4,450,000), 5 savings banks, and 2 loan and trust companies (capital \$700,000); and 11 daily, 29 weekly, 28 monthly, and 2 quarterly periodicals. The churches aggregated in number 155; grain elevators, 45; hospitals, 5; medical colleges, 2; orphan asylums, 2; libraries, 19; building and loan associations 108. In 1896 there was a school population of 75,950; public school enrollment, 52,157; teachers, 944; buildings used for public school purposes, 83; value of public school property, \$2,056,555; expenditures of the year, \$1,304,952. A new reservoir was completed in 1894 at a cost of \$634,000, and a new bridge, on the bascule, or "jackknife" plan was built across the river at Michigan Street,

in 1897 at a cost of \$38,700. The city has a large trade by rail, lake, and canal, in lumber, coal, grain, and live stock. The receipts of grain during 1897 reached a total of nearly 200,000,000 bush., as against 154,000,000 bush. in 1896 and 105,500,000 bush. in 1895. The movement of ores and lumber was heavier than in the previous year, and of the total of 89,137,511 ft. of lumber cleared from the Saginaw River, over 40,000,000 ft. came to Tonawanda and Buffalo.

BUILDING AND LOAN ASSOCIATION, organization designed to enable its members to acquire homes by purchase, building, and removal of mortgages; also acting for non-borrowers as a savings institution. The plan has been popular in the United States for many years, the first association having been organized at Frankford, now a part of Philadelphia, in 1831. Within recent years the number of associations has so increased and their operations have become so important that the majority of the States have legislated for their government and protection, and have brought them more or less under State supervision. The first attempt to collate statistics and to crystallize the different schemes of organization and management was made by the United States Commissioner of Labor, who undertook to secure the essential facts as they existed at the end of fiscal years nearest to Jan. 1, 1893. The results were published by the government 1894. The total number that reported was 5,838, of which 5,598 were organized under local authority and 240 under a national (not official) scheme. Incomplete reports were received from 91 other organizations, but were not considered in the summaries. As some organizations reported for a year earlier or a year later than the one for which all reports were desired, the general results show only approximately the condition of the associations reporting. The following table gives the result of this investigation.

Inquiries.	Local.	National.	Total.
Number of Associations.....	5,598	240	5,838
Male Shareholders.....	710,195	299,458	919,614
Female Shareholders.....	263,388	44,410	307,828
Total Shareholders.....	1,359,396	346,340	1,745,725
Shareholders, Borrowers.....	462,212	53,129	455,411
Percent of Borrowers.....	29.83	15.77	30.35
Number of Shares.....	10,381,031	2,874,841	13,355,872
Dues and Profits.....	\$413,647.228	\$37,020,396	\$150,667,594
Average Shares per Shareholder.....	7.6	7.2	7.5
Average Dues and Profits.....	\$39.11	\$26.73	\$35.25
Average Value of Shares.....	\$39.75	\$12.12	\$34.18
Total Profits.....	\$74,462,969	\$6,261,141	\$80,664,116
Average Size of Loans.....	\$1,135	\$829	\$1,120
Homes acquired.....	290,869	23,052	314,755

While the total of the monthly dues and the profits on operations amounted to \$150,667,594, only 35 of the associations reported a loss at the end of their fiscal years, and the losses only aggregated \$23,332. This fact and the further one, that these associations virtually carry on a banking and a real estate business without the aid of expert financiers, demonstrate the great value of organized self-help and establish the vast power for good of such associations. An analysis of the official tables yields many interesting facts. The rank of the States in number of associations is as follows: Penn., 1,079; Ohio, 721; Ill., 669; Ind.,

445; N. Y., 418; Mo., 366; N. J., 288; Md., 240; Ky., 148; Cal., 133; Mass., 115; all others below 100 each; 48 States and Territories and the District of Columbia reporting. In 38 States and Territories, 916 associations reported paid-up and prepaid stock aggregating \$33,775,366. During the whole existence of 5,440 associations the total number of mortgages foreclosed was 8,409, having a value of \$12,217,126, and the aggregate loss on these foreclosures was \$441,106. The associations are divided into three classes, under names which express the character of their duration, and of the total number, 3,306 (56.6 per cent.) are serial, 1,772 (30.4 per cent.) permanent, and 760 (13 per cent.) terminating. All associations combined have assets of \$528,852,885, including loans on real estate, \$470,142,524, on association stock, \$17,352,193, and on other securities, \$6,001,671. In the management of the associations there are 68 plans under which premiums are charged and collected; 25 plans for the distribution of profits; and 12 plans governing withdrawals. Borrowing shareholders have not only acquired 314,755 homes, but 23,952 other buildings also, making a total of 338,707 buildings obtained for homes and business uses, by the payment of comparatively small monthly instalments.

BULGARIA, an autonomous principality of Europe tributary to Turkey; population (1893) 3,309,816; capital, Sofia. Ferdinand, Duke of Saxony, was elected Prince of Bulgaria by the national assembly in 1887, but the election was not recognized by the Porte till February, 1896, and the attempts of the prince to force recognition, especially by Russia, kept the principality in a state of constant turmoil. During 1894 a son was born to the prince; the sultan acceded to several Bulgarian demands, granting permission for two new bishoprics and the establishments of Bulgarian schools in Macedonia; Premier Stambuloff and his colleagues resigned, the former being succeeded by M. Stoiloff; Archbishop Clement, who was expelled in 1893, was pardoned and warmly welcomed on his return; and a general election resulted in a victory for the ministerial party. In July, 1895, a deputation of influential Bulgarians, headed by Archbishop Clement, went to St. Petersburg, ostensibly under the authority of the Sobranje for the purpose of placing a wreath on the tomb of the late czar, but really with the object of seeking for Ferdinand a recognition as reigning prince by the Russian government. It was openly charged that the archbishop took to St. Petersburg a formal declaration by Ferdinand that he was ready to make any sacrifices, even to changing his religion and having his son brought up in the Greek faith, to secure reconciliation with Russia. While this commission was in St. Petersburg, the world was shocked by a telegram announcing a murderous attack on M. Stambuloff, in Sofia, July 15, from which he died on the 18th. Prince Ferdinand, who had been in Carlsbad for some time, expressed regrets for the assassination and forbade a state funeral for the ex-regent and ex-premier. He was openly charged with direct complicity in the murder, but the court would not receive any evidence in corroboration. In October it was officially announced that the infant prince would be baptized into the Greek faith. The ministerial deputies insisted that Ferdinand should make this pledge in his address at the opening of the Sobranje, but he refused. In January, 1896, a semi-official announcement from St. Petersburg declared that the baptism of the young prince into the Greek faith would not lead to the recognition by Russia of Ferdinand as Prince of Bulgaria, and that because of this decision Ferdinand would withdraw his sanction to the conversion of Prince Boris and would dismiss the Stoiloff ministry. The conversion of Prince Boris to the Greek faith occurred ceremoniously at Sofia, Feb. 14, the day being observed as a holiday throughout the principality.

The Sobranje voted a gift of £20,000 to the infant prince. The same day it was officially announced from Constantinople that all the Powers had assented to the recognition of Prince Ferdinand as the lawful ruler of Bulgaria.

The budget estimates for 1894 were: Revenue, \$20,215,510; expenditure, \$20,441,596. In 1893 the imports of merchandise had an aggregate value of \$17,537,504; exports, \$17,652,485; principal importing countries in their order, Austria-Hungary, Great Britain, Germany, and Turkey; exporting, Turkey, Great Britain, Germany, and France. In 1894 the imports were \$19,315,945; exports, \$13,900,668. The government is giving liberal encouragement to trades and industries, and has recently established a technical high school at Kejajewo, near Sofia. In January, 1895, the Sobranje passed a law granting valuable concessions and facilities for the industrial development of the country by foreign capital, the minimum manufacturing plant to cost \$5,000 and to employ 25 persons. Under a special loan of \$24,125,000, the government is pushing the completion of its railway system and the construction of new harbors at Varna and Burgas. In April, 1895, the authorities determined to begin at once the construction of five railway lines, aggregating 451.53 miles, to cost \$15,244,000, and on their completion to build three other lines, aggregating 215.19 miles, to cost \$4,843,335.

BULOW, HANS GUIDO VON, pianist, musical director and composer, was born in Dresden, Saxony, Jan. 8, 1830; died at Cairo, Egypt, Feb. 12, 1894. His body was cremated, with largely attended funeral services, at Hamburg, Germany, March 29.

BUNCE, FRANCIS M., naval officer, was born in Hartford, Conn., Dec. 25, 1836. He entered the United States Navy as an acting midshipman May 28, 1852; was promoted commodore, March 1, 1895; and was appointed commandant of the North Atlantic Squadron, with the relative rank of rear-admiral, in June following.

BURLINGTON, city, capital of Des Moines county, Ia.; population (1890) 22,565; (1896) estimated 26,000. In 1897 the assessed valuations as equalized were: Real property, \$3,029,239; personal, \$1,022,905—total, \$4,052,144; total tax rate \$68 per \$1,000; and 1897 the city had a bonded debt of \$263,000, floating debt \$54,550, sinking funds \$12,763, net debt \$304,787; 3 national banks, 2 savings banks; an electric street railroad; and 4 daily and 6 weekly newspapers.

BURLINGTON, city, capital of Chittendon county, Vt.; population (1890) 14,590; (1896) estimated 17,000. In 1896 the assessed valuations aggregated 12,762,587; tax rate \$15 per \$1,000; and 1897 the city had a bonded debt of \$592,000 (including water debt \$255,000), floating debt \$40,000, sinking funds \$152,458, net debt \$479,542, besides a special reservoir floating debt (payable \$2,500 annually) of \$5,000. There are 2 national banks, a savings bank, and 2 trust companies; 12 churches, 11 public school buildings, over 3,400 public school pupils, 11 benevolent institutions, 6 hospitals, 33 public buildings and halls, an electric street railroad, and 2 daily and 3 weekly newspapers. The city was the fourth largest lumber market in the United States, having an annual business of \$4,000,000; its manufacturing business had an annual value of over \$5,000,000; and its wholesale trade, \$8,000,000, and retail, \$2,000,000.

BURNE-JONES, SIR EDWARD, D.C.L., painter, president of the Birmingham Royal Society of Artists, was born in Birmingham, England, Aug. 28, 1833. A collective exhibition of his works was made in the New Gallery in 1893, and he was made a baronet in 1894.

BURNETT, MRS. FRANCES HODGSON, novelist, was born in Manchester, England, Nov. 24, 1849. She published *Piccolo and Other Child Stories* (1894); *Two Little Pilgrims' Progress* (1895); *A Lady of Quality*, in an entirely different vein from her previous works (1896); and *His Grace of Osmonde* (1897). Her last play, *The First Gentleman of Europe*, was produced in New York City in 1897.

BURNS, JOHN, labor agitator and member of parliament, was born in London, England, in 1858. In the Trades Union Congress in Norwich in 1894 he successfully advocated socialistic resolutions. In December, 1894, he visited the United States, and addressed assemblies of workmen in New York, Denver, and elsewhere. In 1895, at the Trades Union Congress at Cardiff, he successfully advocated reforming the rules of the congress, so as to exclude all not actually working at a trade, or paid officials of trades unions.

BURROUGHS, JOHN, author, was born in Roxbury, N. Y., April 3, 1837. In 1894 he published *Riverby*. A limited 9-volume edition of *The Writings of John Burroughs* was published 1895, and *Little Nature Studies for Little People*, from his essays, 1896.

BURTON, LEWIS W., clergyman, was born in Cleveland O., in 1852. He was graduated at Kenyon College in 1873, and at the Philadelphia Divinity School in 1877; was ordained priest in the Protestant Episcopal Church in 1878; held charges in Cleveland, Richmond, and Lexington, Ky.; and after the creation of the new Episcopal diocese of Lexington, by the General Convention of 1895, was elected its first bishop.

BURTSSELL, RICHARD LALOR, clergyman, was born in New York City, April 14, 1840. He was ordained to the Roman Catholic priesthood, 1862; became distinguished for his knowledge of ecclesiastical law; was appointed "Defender of the Marriage Tie;" became active in the anti-poverty meeting in New York and the counsel of Dr. Edward McGlynn in his controversy with Archbishop Corrigan; was removed from his parish; and, appealing to Rome for reinstatement, was defeated in January, 1896.

BUSHNELL, ASA S., merchant, was born in Oneida county, N. Y., Sept. 16, 1834; settled in Springfield, O., 1851; engaged in the drug business; served during a part of the civil war in the 152d Ohio Infantry; was quartermaster-general of the State 1886-92; and was the successful Republican candidate for governor of Ohio 1895, over ex-Governor James E. Campbell. He has acquired large means and is a liberal promoter of many charitable and public movements.

BUTLER, MARION, legislator, was born in Sampson county, N. C., May 20, 1863; was graduated at the University of North Carolina, 1885; studied law; joined the Farmers' Alliance and became the county president, 1888; bought the *Clinton Caucasian* and made it the largest weekly newspaper in the State; was elected to the State Senate, 1891; and became president of the State Farmers' Alliance and leader of the Populists, 1892. In January, 1895, he was elected United States Senator from North Carolina, to succeed Matthew Ransom, taking his seat Dec. 2, and becoming a member of the committee on the organization and expenditures of the executive departments.

BUTLER UNIVERSITY, Irvington, near Indianapolis, Ind.; founded by the Christian denomination in 1855; but now non-sectarian and co-educational; had at the close of 1897, 22 professors and instructors; 238 students; 7,500 volumes in the library; \$115,230 in grounds and buildings; \$12,000 in scientific apparatus; \$275,000 in productive funds; \$21,686 income; president, Scott Butler, LL. D.

BUTTE, city, capital of Silverbow county, Mont.; population (1890) 10,723; (1897) estimated 44,000. In 1896 the assessed valuations aggregated \$14,552,060, on an assessment of two-thirds value, and the total tax rate was \$30 per \$1,000. In 1897 the city had a bonded debt \$160,000, floating \$173,504, sinking fund \$11,730, net debt \$321,773. There are 2 national banks, a savings bank, 3 private banks; and 2 daily, 2 semi-weekly, and 5 weekly periodicals. It is the largest mining city in the world, 10,000 miners being constantly employed in the gold, silver, and copper mines, and it has extensive smelting and milling plants.

BUTTERWORTH, HEZERIAH, journalist and author, was born in Warren, R. I., Dec. 22, 1839. He published in 1894 *The Patient Schoolmaster*, *Zig-Zag Journeys in the White City*, and *The Parson's Miracle and My Grandmother's Christmas Candle*; in 1895 *The Knight of Liberty*, and *In Old New England*; in 1897 *Over the Andes, True to His House*; and in 1898 *In the Days of Massachusetts: A Tale of Roger Williams*.

CADIZ, province of Spain, on the Atlantic Ocean; also city, seaport, and capital of the same; population (1887), province 429,872, city 62,531. In the quarter ending Sept. 30, 1895, the exports declared here for the United States aggregated in value \$4,597,84, principally sherry wine.

CAINE, THOMAS HENRY HALL, novelist, was born at Runcorn, Cheshire, England, in 1853. In 1894 he published *The Manxman*, which at once gave him reputation and was dramatized by Wilson Barrett; and in 1897 *The Christian*. In 1895 he visited Canada and the United States in the interests of international copyright, representing the British Society of Authors. He resides in the Isle of Man.

CAIRD, JOHN, D. D., LL. D., author and educator, was born in Greenock, Scotland, on December, 1823. He was principal and vice-chancellor of the University of Glasgow in 1873-95; and in 1895 was chosen master of Balliol College, Oxford.

CAIRO, city, capital of Alexander county, Ill.; population (1890) 10,324. In 1896 it had an assessed valuation of \$1,831,681, and a total tax rate of \$74 per \$1,000; and 1897, a total debt of \$127,472; 2 national banks, 2 savings banks, electric street railroads, and 4 daily and 3 weekly newspapers.

CAIRO, city, capital of modern Egypt; population (1882) 368,108. In 1895 Frederic C. Penfield, United States agent and consul-general, reported that contracts had been signed for the extension of the main line of railway—which within three years has been pushed south in the Nile Valley to Girgeh, 336 miles from Cairo—to Assouan, the frontier town of Egypt, at the first cataract of the Nile, and that this terminus would be reached in time for the Upper Nile tourist traffic of 1897-98. Concessions have been granted to Belgian capitalists for electric street railways in Cairo, and animated bidding was in progress for a concession for an electric railway from the city to the pyramids, a distance of 10 miles, to accommodate the enormous number of winter visitors to the capital. A French engineer applied for permission to build a railway to the top of the Great Pyramid, but the ministry declined to consider the scheme. The consul-general also reported the anomalous fact that shipments of Egyptian long-staple cotton to the United States continued to increase, and for the commercial year 1894-95 would amount to 47,500 bales of 750 pounds each, equivalent to about 71,250 bales of American standard. The cotton area was extended, 1894, to the limit of possibility till irrigation could have a fresh impulse, and was estimated at the consulate-general at 1,075,000 acres, with a possible crop, 1894-95, of 1,050,000 bales, American standard.

CAIRO, MUSEUM OF, Cairo, Egypt. In March, 1894, earnest protests were made by European archeologists against the continued exposure of the priceless antiquities of this museum in a building unsuitably slight, and liable to fire; and in May the Egyptian council of ministers granted \$750,000 to erect a solid building in its place.

CAIRO, UNIVERSITY OF, Cairo, Egypt, founded A.D. 971, and long a famous seat of Oriental learning; formerly teaching chemistry, astronomy, and astrology, and higher mathematics; and having in 1896, 325 instructors, and over 11,000 students. By the latest available statistics there were about 2,000 students, including boys and girls under ten. Many of the students lodge in the Mosque al Azhar, the headquarters of the school, and the connected buildings, sleeping on mats on the floor, and having each a locked cupboard for his belongings. The study is in classes of about 12 students who surround a teacher, who hears them repeat the Koran, and examines them in doctrine, grammar, rhetoric, logic and law. Since 1871 regular formal examinations have been required.

CALAIS, town, department of Pas de Calais, France; the French port of the principal ferry between France and England; population (1891) 56,867. In the quarter ending Sept. 30, 1895, the exports declared here for the United States aggregated in value \$212,961.43, principally lace (\$203,817.41).

CALCUTTA, city, capital of the province of Bengal and of British India; population (1891) with suburbs, 861,764. It is one of the most important commercial centers of Asia. In the fiscal year 1893-94, the imports and exports of merchandise alone aggregated in value 69,927,146 rix (about \$150,832,000), and in the nine months ending Sept. 30, 1895, the exports declared here for the United States, amounted in value to \$12,128,460.65. The principal articles were skins (\$3,459,008), drugs (\$2,379,629), jute butts and rejections (\$1,284,449), cloth (\$1,637,020), and hides (\$887,367). The university matriculated 3,156 students in 1893.

CALCUTTA, UNIVERSITY OF, Calcutta, India, founded in 1857. It is one of the five universities which stand at the head of the national system of education in India. They are merely examining bodies, each having grouped under it a number of affiliated colleges in which a prescribed course of higher education is given. The Calcutta University had in all its colleges 3,156 matriculated students in the beginning of 1894.

CALIFORNIA, one of the United States of North America; admitted to the union Sept. 9, 1850; counties, 57; capital, Sacramento.

State Officers, 1895-99.—Governor (elected for 4 years, salary \$6,000 per annum), James H. Budd; lieutenant-governor, Spencer G. Millard (died 1895, and succeeded by William T. Jeter); secretary of state, Lewis H. Brown; treasurer, Levi Rackliffe; attorney-general, William F. Fitzgerald; superintendent of public instruction, Samuel T. Black; comptroller, E. P. Colgan; surveyor-general, Martin J. Wright; superintendent of state printing, A. J. Johnson; adjutant-general, A. W. Barrett; insurance commissioner, A. J. Clunie; chief justice of supreme court, W. H. Beatty; associate justices, T. B. McFarland, C. H. Garoutte, R. C. Harrison, W. C. Van Fleet, F. W. Henshaw, Jackson Temple; clerk, T. H. Ward—all Republican, excepting Budd, Jeter, Barrett, Clunie, and Temple.

Legislature, 1897.—Republicans, senate, 30, house, 47, joint ballot, 77; Fusionists, senate, 22, house, 23, joint ballot, 45; Democrats, senate, 8, house, 8, joint ballot, 16; Populists, house, 2, joint ballot 2; Republican majority, house, 14, joint ballot, 14.

Elections.—In the State elections, 1894, there was a total of 284,547 votes cast, of which the Democratic candidate for governor received 111,944; Republican candidate 110,738; Populist candidate, 51,304; and Prohibition candidate, 10,561; Democratic plurality, 1,206. All other Republican candidates for State offices were elected by pluralities ranging from 21,678 to 40,098. A Republican legislature was elected, and 6 out of 7 Republican candidates for Congress were chosen. The Populist vote was nearly double that of 1892. In San Francisco, Adolph Sutro was elected mayor as the candidate of a municipal Populist convention, with railroad, political organizations, and the press against him, and property owners and the mercantile community supporting him. The Congressional elections in 1896 resulted in the choice of 1 Fusion, 1 Democratic, 2 Populist, and 3 Republican candidates. In the Presidential election, the Republican candidate received 146,688 votes; the Democratic, 141,766; the National Democratic, 2,006; the Prohibition, 2,573; and the Social Labor, 1,611; giving McKinley a plurality of 2,797. The electoral vote was divided, 8 for McKinley, 1 for Bryan.

Farm Products.—Reported Dec. 31, 1895: Corn, 2,256,852 bush., from 65,416 acres, value \$1,196,132; wheat, 40,097,798 bush., from 3,084,446 acres, value \$24,058,679; oats, 1,690,046 bush., from 60,144 acres, value \$659,118; rye, 425,952 bush., from 36,720 acres, value \$217,052; potatoes, 1,888,425 bush., from 25,179 acres, value \$906,444; and hay, 2,791,710 tons, from 1,681,753 acres, value \$19,709,473.

Farm Animals.—Reported Jan. 1, 1895: Horses, 513,636, value \$16,404,965; mules, 63,033, value \$2,915,041; cows, 339,036, value \$8,062,276; cattle, 916,322, value \$14,003,785; sheep, 3,526,341, value \$5,817,052; and hogs, 487,943, value \$2,702,812.

Finances.—On July 1, 1896, the total bonded debt was \$2,282,500; floating debt, \$367,213—total debt, \$2,649,713. There were also outstanding \$600,000 in depot bonds, a loan to the harbor commissioners, payable from their collections. Of the interest-bearing debt, \$1,526,500 was held in trust for the State school fund, and \$751,000 for the State University fund. The value of real estate in 1895 was \$690,542,325, and of improvements, \$241,994,060; personal property, \$157,726,988; and railroad property, \$43,018,640; and the assessed valuation of all property for taxation was \$1,113,282,013; in 1896, \$1,264,973,043, and tax rate, \$4.29 per \$1,000.

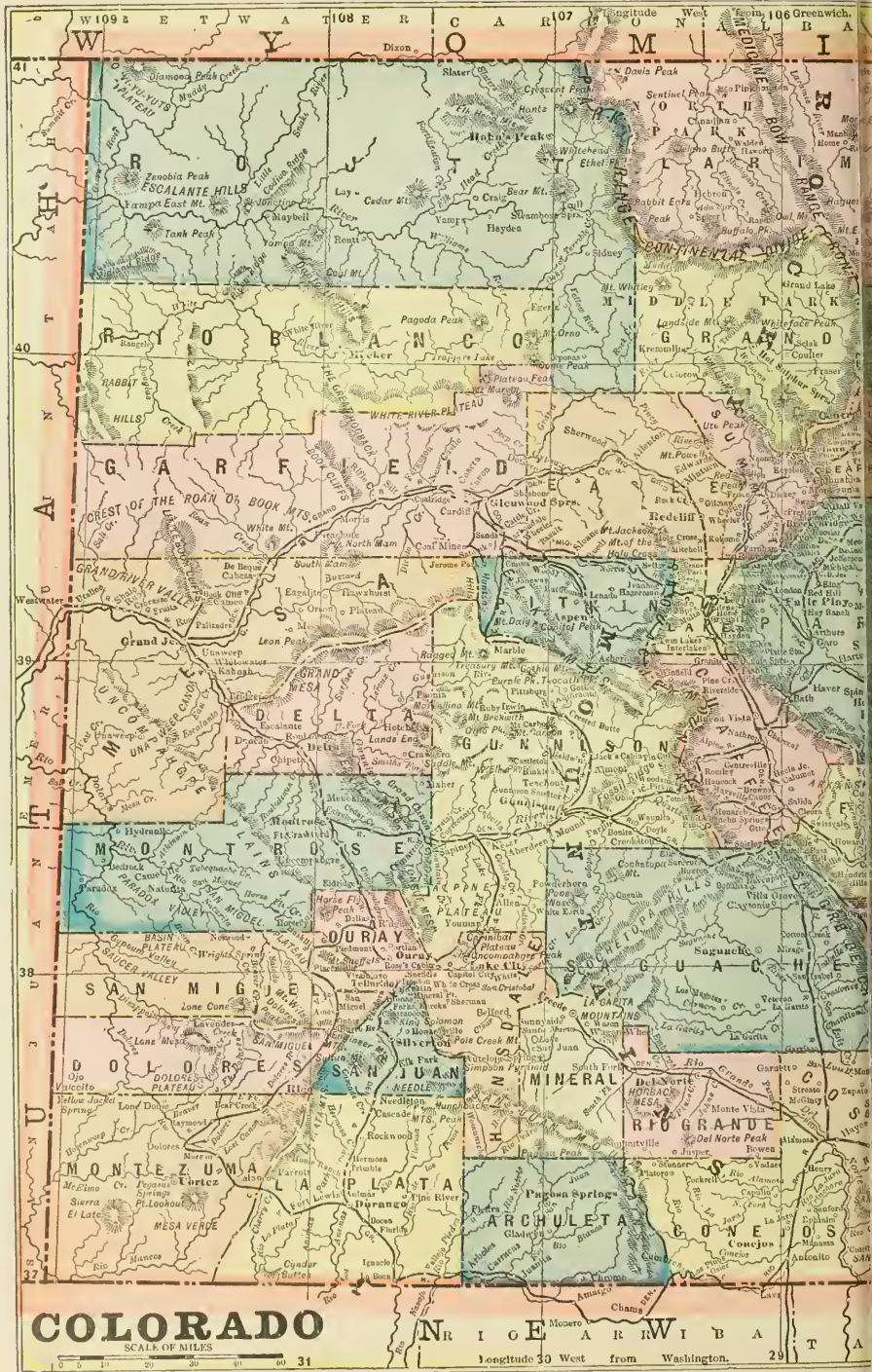
Banks.—On Oct. 31, 1895, there were 31 national banks in operation, with a combined capital of \$7,625,000, which held \$1,665,750 in United States bonds, an excess of \$622,000 over the required amount. These banks had outstanding on loans and discounts an aggregate of \$8,382,059, represented by demand paper with individual or firm names \$7,153,711; the same secured by stocks, bonds, or other personal securities \$3,799,157; time paper with two or more individual or firm names \$3,073,081; time paper with single individual or firm name \$1,145,236; and the same secured by stocks, bonds, or other personal securities \$3,210,874. The banks held an aggregate of \$3,525,728 in coin and coin certificates, of which \$3,180,281 was in gold coin. The circulation account was: Total issue, \$6,623,920; redeemed, \$4,980,002; outstanding, \$1,643,920. There were deposits \$17,742,778; reserve held, \$5,871,725. During the year ending Sept. 30, 1894, the exchanges at the United States clearing-house at San Francisco aggregated \$647,848,503, and in the year ending Sept. 30, 1895, \$671,892,105. The State banks, June 17, 1895, numbered 173, and had capital \$43,547,699, deposits \$56,583,174, resources \$130,514,625, and surplus \$17,626,818. There were 57 mutual

and stock savings banks, with capital \$8,797,850, depositors 168,638, deposits \$126,830,513, resources \$144,990,729, and surplus \$6,478,338; and 18 private banks, with capital \$1,132,767, deposits \$919,386, resources \$2,516,944, and surplus \$352,957. In the year ending Sept. 30, 1895, the national banks had assets of \$31,157,277; commercial banks \$130,514,624; savings banks, resources \$144,990,729; deposits, \$126,830,512.

Internal Revenue.—During the fiscal year ending June 30, 1894, the collections of internal revenue in the two districts (which include Nevada) aggregated \$1,907,928.55, from the following sources: Distilled spirits, \$954,013.50; tobacco, \$245,128.61; fermented liquors, \$691,909.95; oleomargarine, \$7,911.40; and penalties, \$8,956.09. The collections from the same sources in the year ending June 30, 1895, were \$2,090,720.15. During that year there were 602 single-account cigar factories in operation, which used 1,391,118 lbs. of tobacco, and had an output of 66,546,208 cigars and 2,827,000 cigarettes; and 24 other factories, which had an output of 28,620 lbs. of plug and 144,940 lbs. of smoking tobacco. Three grain distilleries produced 752,476 bbls. of fermented liquors, and 268 fruit distilleries produced 1,679,426 gals. of brandy, nearly all from grapes, rectified 2,191,237 gals., and gauged 8,086,014 gals. The production of oleomargarine was 223,389 lbs. Three establishments had an output of 36,651,121 lbs. of sugar from beets, and presented claims for bounty aggregating \$293,208.97. The collections from all sources in the year ending June 30, 1897, aggregated \$3,049,259.55.

Railroads.—The single-track mileage Dec. 31, 1893, was 4,692.39, which was increased during 1894 to 4,724.59, and during 1895 to 4,820.59. Of the total assessment on railroad property 1894 (\$42,730,700), the largest amounts were as follows: Southern Pacific, \$16,000,000; Central Pacific, \$13,000,000; Northern, \$3,100,000; Southern California, \$2,950,000; California Pacific, \$2,000,000; San Francisco & North Pacific, \$1,935,000; South Pacific Coast, \$1,300,000; and North Pacific Coast, \$600,000. The United States government has claims against the Union, the Central, and the Kansas Pacific roads estimated at over \$170,000,000, and has a suit pending against the estate of Leland Stanford, as a stockholder in the Central Pacific, for \$15,000,000, and has suits in preparation against the estates of Mark Hopkins and Charles Crocker for a similar amount each. The net receipts of the Pacific railroads that were aided by United States Government bonds were, 1894, as follows: Union Pacific, \$1,973,646; Central Pacific, \$1,047,335; Kansas Pacific, \$609,289; Central Branch Union Pacific, \$91,750; and Sioux City Pacific, \$157,247.

Commerce.—During the fiscal year ending June 30, 1895, the imports of foreign merchandise at the ports of Humboldt, Los Angeles, San Diego, and San Francisco aggregated in value \$37,280,052, and of gold and silver coin and bullion \$3,923,476; and the exports of domestic merchandise \$25,031,663, and of gold and silver coin and bullion \$14,052,305. The entrances and clearances of vessels in the foreign trade were: Entrances, 644 sailing vessels of 697,442 tons and 413 steam vessels of 607,769 tons; clearances, 556 sailing vessels of 572,229 tons, and 390 steam vessels of 561,521 tons. Among the imports reported in 1895 were: Sugar, 342,998,100 lbs.; coffee, 26,372,756 lbs.; rice, 48,216,400 lbs.; tea, 17,541,230 lbs.; and coal, 1,817,000 tons; and among the exports by sea and rail were: Sugar, 151,462,800 lbs.; lumber, value, \$16,000,000; wheat, \$9,981,394; flour, 913,012 bbls., value, \$2,829,226; canned salmon, 942,360 cases; coffee, 8,971,400 lbs.; rice, 7,428,320 lbs.; tea, 16,238,600 lbs.; wine, 12,927,400 gals.; vegetables, over 80,000,000 lbs.; dried fruits, over 96,000,000 lbs.; and quicksilver, 26,120 flasks.

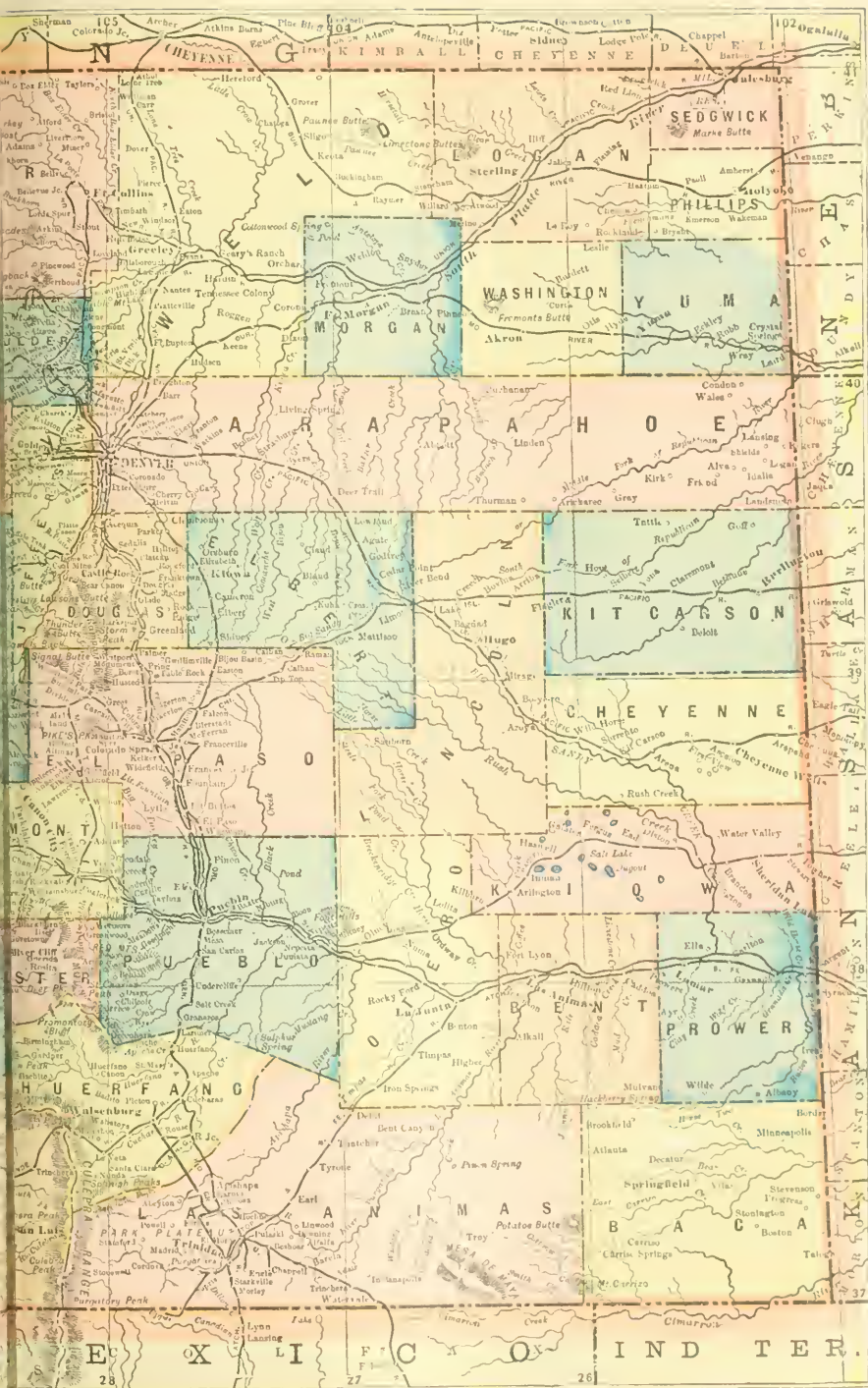


COLORADO

SCALE OF MILES

31

Longitude 30 West from Washington. 29



Ostrich Farming.—This industry was first undertaken experimentally at Los Angeles and Fallbrook in 1883. In 1895 there were successful farms at Anaheim, Fallbrook, Santa Monica, Coronada, and Pomona, containing over 400 ostriches, worth from \$500 to \$1,000 each, representing a capital investment of about \$150,000. Seven farms sold \$90,000 worth of feathers in 1894.

Olives and Oranges.—Between Jan. 1 and Sept. 25, 1895, over 800,000 olive-trees were planted in the State, of which over 500,000 were shipped from the Pomona Valley nurseries to fruit growers in 13 counties. The area of olive orchards having trees in full bearing was estimated at 5,000 acres, and of all olive orchards about 21,000 acres, valued at about \$5,000,000. The total value of the crop in olives and oil, 1894, was over \$200,000. The injury to the groves of Florida, Spain, and the Mediterranean by the severe frosts of 1895-96 made an unusual demand for oranges from the California groves, and in January, 1896, it was estimated that the crop in the southern counties would amount to 3,400,000 boxes, worth at wholesale \$4,500,000 to \$5,000,000. In San Bernardino, Riverside, Los Angeles, San Diego, Orange, Butte, Ventura, and Santa Barbara counties there were nearly 4,000,000 orange trees, of which 1,725,899 were in bearing, and 616,467 lemon trees.

Other Industries.—In 1895 the total output of the mines was valued at \$17,500,000, of which \$15,600,000 was in gold, making the total gold product of the State since 1848, \$1,354,565,997. The salt product was valued at \$136,000; borax, \$875,000; petroleum and bitumen, nearly \$1,500,000; mineral waters, \$350,000; natural gas, \$120,000; and quicksilver, 28,600 flasks. The capital invested in dairies was over \$105,000,000, and the production of butter averages 50,000,000 lbs. per annum, and of cheese, 15,000,000 lbs. During the year the canned fruit pack amounted to 1,280,000 cases; dried fruit product, 162,700,000 lbs.; bean crop, 74,000,000 lbs.; prune crop, 49,000,000 lbs.; raisin crop, 92,500,000 lbs.; and nut crop, value over \$300,000. The wool clip was estimated at 32,000,000 lbs., and the hop crop at over 48,000 bales. The catch of the whale fleet of San Francisco was valued at \$650,000, and of the seal fleet \$600,000. The coinage at the United States branch mint in San Francisco amounted in value to \$25,547,610.

Post Offices.—Reported Jan. 1, 1897: First class, 5; second class, 22; third class 82 (presidential, 109); fourth class, 1,482; money-order offices, 621; money-order stations, 38; limited money-order offices, 37.

Publications.—Reported May, 1895: Daily, 97; semi-weekly, 7; weekly, 447; bi-weekly, 2; semi-monthly, 8; monthly, 78; and semi-quarterly, 1; total, 640; total, September, 1897, 693.

Churches.—The Roman Catholic is the strongest denomination in the State, and is followed by the Methodist Episcopal, the Presbyterian (in the United States of America), the Congregational, the Baptist, and the Protestant Episcopal. The Roman Catholic Church has the archdiocese of San Francisco and the dioceses of Los Angeles, Marysville, and Sacramento; and the Protestant Episcopal Church the diocese of California, Northern California, and Southern California, the last one created 1895. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for California, 1,810 evangelical Sunday schools, 18,448 officers and teachers, and 137,899 scholars, total members, 156,347.

Schools.—According to the report of the United States Commissioners of Education (1897) for the school year 1895-96 there were 259,697 pupils enrolled in the public schools, of whom 184,124 were in average daily attendance; and 1,405

male and 5,480 female teachers. The schools were kept open an average of 174 days; the value of public school property was \$17,100,184; and the total expenditure, excluding payments on debt, was \$5,801,759. There were 15 universities and colleges of liberal arts, with 375 professors and instructors and 4,597 students (male 3,224, female 1,373) in all departments; income, \$628,091; volumes in libraries, 178,025; value of scientific apparatus and libraries, \$730,750; value of grounds and buildings, \$5,575,853, and aggregate of productive funds, \$4,680,764.

Libraries.—In 1897 there were reported 35 public libraries of 1,000 volumes each and upward, with a total of 1,307,659 bound volumes and 116,981 pamphlets.

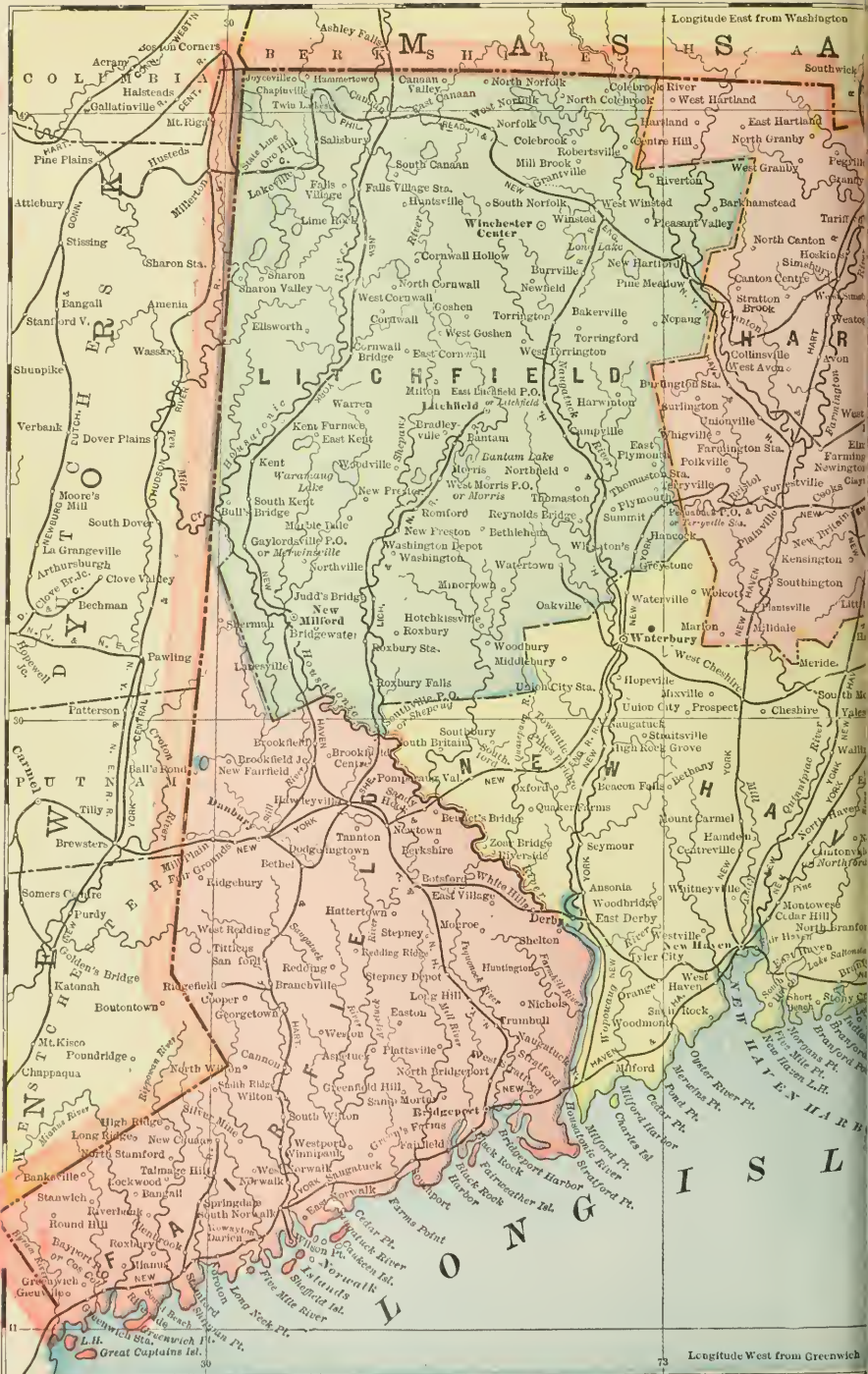
Productions in 1897.—The following is a summary of the natural products, commerce, and coinage of 1897: Wine, 30,000,000 gals.; beet sugar, 65,000,000 lbs.; wheat, 18,000,000 centals; barley, 9,600,000 centals; wool, 32,000,000 lbs.; lumber, \$10,600,000; hops, 50,000 bales; beans, 87,000,000 lbs.; prunes, 82,500,000 lbs.; raisins, 64,000,000 lbs.; honey, 310 cars, 12 tons each. The exports of merchandise from San Francisco amounted to \$46,000,000, the largest in any year, with the exception of 1891, which was \$48,000,000. The imports for the year amounted to \$39,000,000. The report of the local branch mint showed an increase of the coinage for the year 1897 of nearly \$4,000,000, and the largest business, with the exception of two years, since the mint was established in 1854. The deposits for the year were correspondingly heavy, leaving nearly \$4,000,000 uncoined gold deposits in the mint at the close of the year's business. The total of gold coined was \$33,522,500, of which \$29,405,000 were double eagles, \$2,347,500 eagles, and \$1,770,000 in half-eagles. The total silver coinage was \$6,561,791.65.

Golden Jubilee.—The fiftieth anniversary of the discovery of gold was celebrated in San Francisco throughout the week beginning Jan. 24, 1898. The principal feature of the opening of the jubilee was a monster parade, and its culmination was the opening of a mining fair, in which was shown the mining products of every county in the State.

Population.—In 1890, 1,208,130, of whom 700,059 were males; 508,071 females; 841,821 natives; 366,309 foreign born; 1,111,672 whites; and 96,458 colored of all races. On June 1, 1896, the United States government actuary estimated the population at 1,432,000.

CALIFORNIA, UNIVERSITY OF, founded by the legislature in 1868, on the basis of the College of California, organized in 1855; non-sectarian; co-educational; including in 1897: I. at Berkeley, Cal., 6 colleges, viz., of (1) letters; (2) agriculture; (3) mechanics; (4) mining; (5) civil engineering; and (6) chemistry. II. at Mt. Hamilton, Cal., the Lick astronomical department. III. in San Francisco colleges of (1) law; (2) medicine; (3) dentistry; and (4) pharmacy. Four fellowships of \$600 each; one scholarship of \$200; and nine of \$300 are granted annually. Productive funds in 1896, \$2,999,028; total endowment about \$7,000,000. In August, 1895, it was reported that Mayor Sutro, of San Francisco, had given a library and real estate valued at \$1,500,000. Instructors in 1895-96 numbered 235; students, 2,000; graduates since organization, 2,431; volumes in library, 65,000; president, Martin Kellogg, A. M., LL. D.

CALLAO, town, seaport of Lima, the capital of Peru; noted in recent years for its manufacture of cocaine; population about 36,000. In the quarter ending Sept. 30, 1895, the exports declared here for the United States aggregated in value \$80,685.36, principally silver ore (\$24,548) and sulphide of silver (\$21,693.82).



Longitude East from Washington

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Longitude West from Greenwich

CALVE, EMMA (real name DE ROQUER), opera singer, was born in Madrid, Spain, in 1866. She was educated in French convents; studied music in Paris with Laborde, Marchesi, and Puget; made her first appearance at a charity concert in Nice; and began her operatic career as Marguerite in *Faust* in Brussels, 1882. She created the rôle of Anita in Massenet's *La Navarraise* in London, 1894; appeared in it in Paris afterward; and opened her second season in the United States with it in New York City, Dec. 11, 1895, subsequently singing in *Tannhäuser*, *Pearl Fishers*, *Cavalleria Rusticana*, *Romeo and Juliet* and other favorite operas.

CALVINISTIC METHODISTS, the largest Nonconformist denomination in Wales, beginning in a revival among members of the Church of England in the 18th century, and organized into societies like the English Methodists in 1811, but in 1823 adopting a Calvinistic confession of faith. In 1895 they used the Welsh tongue in worship and in the official transactions of the church. They had 2 synods, 24 presbyteries, 1,300 churches, 1,400 chapels and preaching stations, 690 ministers, 320 local preachers and 140,000 members. Annual income \$1,200,000. They had theological colleges at Trevecca and Bala, and maintained missions in Brittany and India.

They were organized in the United States at Remsen, N. Y., in 1826. In 1890 they had 6 synods, 19 presbyteries, 186 churches with average seating capacity for 235, and average value \$3,303, and 14 halls with seating capacity for 1,266; communicants, 12,722. They are chiefly in Wisconsin, Pennsylvania, Ohio, and New York. The value of their church property in 1890 was \$625,875.

CAMBON, JULES MARTIN, diplomatist, was born in Paris, France, April 5, 1845; is a younger brother of Pierre Paul Cambon, French ambassador to Turkey; and was admitted to practice as an advocate in 1866. He served as an officer through the Franco-Prussian war; became a chief of bureau in the Algerian government department after the war; was appointed general secretary to the prefecture of police of the Seine in 1879; succeeded his brother in the prefecture of the department of the Nord in 1882; was transferred to the prefecture of the Rhone in 1889; and was appointed governor-general of Algeria in 1891. In October, 1897, he was promoted to the French ambassadorship to the United States, and on Jan. 15, 1898, was formally received by President McKinley.

CAMBRIDGE, city, Middlesex county, Mass., population (1890) 70,023; (1895) State census, 81,519. On Dec. 1, 1896, the total bonded debt was \$3,313,000; sinking fund, \$1,581,668; net municipal debt, \$2,731,332. The outstanding water debt, in addition to the above was \$2,602,600; its sinking fund held \$369,347; and the net municipal and water debt was \$1,964,585. The water plant to Dec. 1, 1896, had cost \$4,788,721, and it yielded that year \$283,000. The assessed valuations in 1896 were: Real, \$67,770,700; personal, \$16,183,795—total, \$83,954,495; tax rate, \$15.10 per \$1,000. In 1897 there were a national bank (capital \$100,000), a safe deposit and trust company (capital \$100,000), and 4 weekly, 2 bi-weekly, a quarterly and 2 monthly periodicals. See HARVARD UNIVERSITY.

CAMBRIDGE, II. R. H. GEORGE WILLIAM FREDERICK CHARLES, second duke of, grandson of George III. and cousin of Queen Victoria, was born in Hanover, Germany, March 26, 1819. He was appointed to the chief command of the British army 1856, received the patent of commander-in-chief 1887, and was retired and succeeded by Lord Garnet Joseph Wolseley (*q. v.*) in August, 1895.

CAMBRIDGE, UNIVERSITY of, Cambridge, England. It included in 1895, 20 colleges of different ages, from St. Peter's, founded as a hospital in 1257 and converted into a college in 1280, to Ayerst Hall, founded in 1884; instructors 93; undergraduate students, 2,839; volumes in the university library about 400,000. In 1894 an English essay was made a part of the university examinations, it having been charged that candidates for final examinations showed scandalous ignorance of their own language. University College, Nottingham; St. David's Lampeter; Firth, Sheffield; University College, Abeestwith, Wales; and the universities of New Zealand, Adelaide, Calcutta, and Cape of Good Hope are affiliated colleges; and two years' standing in either of them is counted as equivalent to three of the terms required for a Cambridge degree. Women are admitted to the examinations for honor students. They reside mostly in Newnham and Girton College; and on passing the examinations do not receive the degree, but instead formal certificates declaring that they have attained the standing of a first, second, or third class in an honors examination for the B.A. degree. There were granted in 1894 about 25 medals and prizes; receipts for the year £29,639 (\$198,195); expenditures, £42,753 (\$213,765). Professors in 1895, 40; Hulsean lecturer, 1; Lady Mary preacher, 1; University lecturers, 26; total instructors 74; heads of colleges 19, and 1 head of non-collegiate students; matriculated students 935; total students 2,795. The degrees granted by the university are A.B., A.M., B.D., D.D., M.D., M.E., M.Ch., LL.B., LL.M., LL.D., Mus.B., Mus.D. Chancellor, the Duke of Devonshire, K.G., LL.D.; parliamentary representatives, Prof. R. C. Jebb, LL.D., and Sir J. E. Gorst. Registrar, John Willis Clark, A.M.

CAMDEN, city, capital of Camden county, N. J.; population (1890) 5,313; (1895) State census, 63,467. In 1896 it had a bonded debt of \$1,254,800, floating \$30,000; total, \$1,284,800; assessed valuations: Real, \$22,550,702; personal, \$1,761,350; total, \$24,312,052; tax rate, \$22 per \$1,000; and city property valued at \$825,037, including waterworks \$605,037. In 1897 there were 3 national banks (capital \$560,000), 4 deposit and trust companies (capital \$350,000), electric street railway, and 4 daily, 11 weekly, and 5 monthly periodicals. On Dec. 4, 1895, work was begun here on the naval cruiser No. 13, the first war-vessel to be built in the State since 1865.

CAMERON, JAMES DONALD, legislator, was born in Middletown, Pa., May 14, 1833. He succeeded his father, Simon Cameron, as United States Senator in 1877; was re-elected in 1879, 1885, and 1891; became chairman of the committee on naval affairs and member of those on military affairs and foreign relations in December, 1895; and declining another term was succeeded by Boies Penrose in 1897.

CAMERON, VERNEY LOVETT, R.N., D.C.S., African explorer, was born in Radipole, Devonshire, England, July 1, 1844; killed by being thrown from his horse while hunting at Leighton-Buzzard, Bedfordshire, March 26, 1894. His latest work was for the suppression of the slave trade.

CAMPBELL, JAMES EDWIN, lawyer, was born in Middletown, O., July 7, 1843. In 1889 he was the successful Democratic candidate for governor of Ohio, defeating Joseph B. Foraker (renominated); in 1891 was defeated on renomination by William McKinley, Jr.; and in 1895 was defeated by Asa S. Bushnell (*q. v.*).

CAMPOS, ARSENIO MARTINEZ, military officer, was born in Cuba, in 1834. He was graduated at the Military Staff School in Madrid and appointed a lieutenant in the army in 1858; served on the staff of General O'Donnell and became chief of the battalion in the Morocco campaign of 1859; was on duty in Cuba with the

rank of colonel in 1864-70; took part in suppressing the Carlist insurrection and was promoted brigadier-general in 1870; opposed the republic after the abdication of King Amadeus; and was imprisoned as a conspirator. Under a plea for permission to be allowed to serve as a private, he was released and given command of a division in the Third Army Corps in 1874. In the next two years he was constantly fighting the Carlists, distinguishing himself at Las Mueccas and Galdames, and causing the noted siege of Bilbao to be raised. With General Jovellar, he called Alphonso XII. to the throne; was made commander-in-chief of the Catalonia district; and crushed Don Carlos at Pena de la Plata in 1876. For these services he was promoted captain-general. In 1877 he was appointed commander-in-chief in Cuba, and brought the revolution to a close chiefly by means of concessions, which, as minister of war and premier in 1879, he endeavored unavailingly to carry out. He was minister of war in 1881 and 1883, commander of the Army of the North of Spain in 1884-5, president of the Spanish Senate in 1885, and captain-general of New Castile in 1888. In April, 1895, he was appointed governor-general and commander-in-chief in Cuba, and in January, 1896, he was recalled to Spain. He found the present insurrection more formidable than he had anticipated, and though the Spanish government sent him all the reinforcements and supplies he called for, he acknowledged that he had not been fortunate as commander. His failure to pursue a vigorous war policy caused much dissatisfaction in Spain. On his arrival in Madrid on Feb. 4, he repeated his belief that the trouble in Cuba could only be ended by granting reforms. See CUBA.

CANADA, DOMINION OF, a British colony in North America, comprising the provinces of Ontario, Quebec, Nova Scotia, New Brunswick, Manitoba, British Columbia, Prince Edward Island, and the Northwest Territories; area, 3,456,383 square miles; capital, Ottawa.

Government, 1898.—Governor-general, the Earl of Aberdeen (*q. v.*); premier and president of the privy council, Sir Wilfrid Laurier; postmaster-general, W. A. Mulock; minister of marine and fisheries, Sir L. H. Davies; minister of finance, W. S. Fielding; minister of railways and canals, A. G. Blair; minister of public works, Israel Tarte; minister of the interior and superintendent-general of Indian affairs, Clifford Sifton; minister of justice, David Mills; secretary of state, R. W. Scott; minister of agriculture, Sydney Fisher; minister of trade and commerce, Sir R. J. Cartright; controller of customs, William Patterson; controller of inland revenue, Sir Joly de Lotbinière; minister of militia and defense, F. W. Borden; solicitor-general, C. Fitzpatrick; high commissioner for the Dominion of Canada, Lord Strathcona and Mount Royal. The governor-general receives \$50,000 per annum; premier, \$8,000; and ministers, \$7,000.

Parliament, 1898.—The Senate consists of 81 members, appointed for life; and the House of Commons of 213 members, the ratio of representation being one member to 22,688 population. In the Senate, Quebec has 24 members; Ontario, 24; Nova Scotia, 10; New Brunswick, 10; Manitoba, 4; Prince Edward Island, 4; British Columbia, 3; and the Northwest Territories, 2; and in the House, Ontario has 92 members; Quebec, 65; Nova Scotia, 20; New Brunswick, 14; British Columbia, 6; Prince Edward Island, 5; Manitoba, 7; and the Northwest Territories, 4. Members of the House are elected for five years, unless that body is sooner dissolved.

Finances—In the fiscal year ending June 30, 1894, the revenue was \$36,374,693, of which \$19,198,114 was from customs, \$8,381,089 from excise, \$3,702,716 from public works, \$2,809,341 from postal service, \$1,217,809 from interest on

investments, and \$210,000 from Dominion lands. The expenditure was \$37,585,026, of which \$10,212,536 was for interest, \$4,206,655 for guaranteed subsidies to the provinces, \$3,760,556 for railways and canals, \$3,517,261 for postal service, \$2,033,954 for public works, \$1,679,231 for expenses of the civil government, \$1,284,517 for militia and defense, \$968,563 for Indians, and \$745,504 for the judiciary department. The gross debt was \$308,348,024, assets \$62,164,994, net debt \$246,183,030. On Dec. 26, 1895, the minister of finance presented his annual report for the year ending June 30, 1895, which showed, revenue, \$33,978,129; expenditure, \$38,132,000; deficiency, \$4,153,875; addition to the debt, \$6,891,897; and net debt on that date, \$253,074,927. The decrease in revenue in the year was \$2,396,564. It was agreed Feb. 16, 1896, that the finance minister should ask Parliament for an appropriation of \$3,000,000 to purchase 40,000 magazine rifles and heavy field guns, none of the money to be expended on fortifications. The scheme had been approved by the British War Office for the hasty defense of valuable points till aid could be sent from England. The revenue in the year ending June 30, 1897, was \$35,593,279; and the expenditure, \$35,914,573.

Commerce.—The imports of the Dominion in the year ending June 30, 1894, amounted in value to \$123,474,940, of which \$113,093,983 was entered for home consumption; the exports aggregated \$117,524,949, of which \$103,851,764 was Canadian products. Of the imports for home consumption, \$53,034,100 was from the United States and \$41,521,784 from the British Empire; and of the exports, \$68,538,856 went to Great Britain and \$35,809,940 to the United States. In September, 1895, George Johnson, Dominion statistician, made public a commercial statement showing that during the 27 years between the confederation and the close of the fiscal year 1893-94, the imports from Great Britain aggregated \$1,205,349,158, or an annual average of \$44,643,000, and those from the United States aggregated \$1,211,131,392, or an annual average of \$44,857,000. The total imports for home consumption from all countries in this period aggregated \$2,847,953,259, and deducting the value of those from the United Kingdom and the United States, as above, there is left \$431,472,709, or an average of \$16,000,000 per annum as the value of imports for home consumption from all other countries. In other words, out of an average of \$105,000,000 per annum, Canada has taken in this period rather more than \$44,500,000 each from the United Kingdom and the United States per annum, and about \$16,000,000 from the rest of the world. In the fiscal year ending June 30, 1895, the imports from the United States aggregated \$52,854,689, and the exports thereto, \$36,574,327, a decrease in imports and an increase in exports, as compared with the previous year. If the trade of the separate crown colony of Newfoundland and Labrador with the United States is added, the imports of all Canada would aggregate \$53,981,688, and the exports \$37,006,163. The imports in the year ending June 30, 1897, amounted in value to \$107,261,360; and the exports, \$130,358,788.

Shipping.—During 1894 there were built and registered 326 vessels of 21,243 tons, and sold to other countries 43 vessels of 21,960 tons, valued at \$243,429. At the close of that year there were registered as belonging to the Dominion 7,245 vessels of 869,624 gross tons, of which 1,640 were steamers of 240,906 gross tons. For the protection of its own and foreign shipping, the government maintains 770 lighthouses, 629 light-stations, 40 fog horns, 22 fog whistles, 13 light-ships, 11 fog guns, 23 whistling buoys and 23 bell buoys, and 39 automatic fog horns, including those on the Newfoundland coast, and employed 701 light-keepers and a total of 1,503 persons on the outside service. On Jan. 1, 1897, the number registered was 7,279, of 789,299 gross tons.



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Map content including place names: Harrison B., Return Reef, Aurora Bay, Mackenzie, Victoria, Toronto, Detroit, Chicago, St. Louis, St. Paul, Minneapolis, Duluth, Sault Ste. Marie, and many others. Major geographical features include the Great Lakes, St. Lawrence River, and various islands and peninsulas.

Banking.—The government issues legal tender notes, redeemable in specie on demand, in denominations ranging from 25 cents to \$1,000. An act of 1895 provided that the total issue might exceed \$20,000,000, on condition that in addition to any amount required to be held in gold under previous acts, a further amount in gold equal to the excess of issued notes over \$20,000,000 should be held. In 1895 there were 38 chartered banks, having a combined capital of \$62,857,252, reserve fund \$27,158,799, circulation notes \$32,774,442, loans and discounts \$219,729,450, deposits \$188,320,657, liabilities \$234,074,548, and assets \$321,881,711. The panic in the United States in 1893 led the Dominion banks to strengthen their holdings, and between March 31, 1894, and April 1, 1895, there was an increase in specie of \$574,315 and in Dominion notes of \$1,427,089, in all \$2,001,404. The government also increased its holdings of specie and guaranteed sterling debentures to \$11,121,912, or \$4,938,353 beyond the amount required by law. In the half-year ending June 30, 1895, the transactions in the clearing-houses of Montreal, Toronto, Halifax, Hamilton, and Winnipeg aggregated \$487,553,357, an increase of \$29,805,670 over the total of the corresponding period 1894. In 1894 there were 699 postal savings banks with deposits of \$25,257,868; 36 government savings banks in the maritime provinces, Manitoba, and British Columbia, with deposits of \$17,778,144; and 3 special savings banks in Quebec and Montreal, with deposits of \$12,919,578; showing total deposits, exclusive of those in the savings departments of the chartered banks, of \$55,955,590.

Railways and Canals.—On June 30, 1896, there were 16,387 miles of track in the whole Dominion and 16,270 miles of railways in operation, the longest single line, the Canadian Pacific, extending from Montreal to Vancouver, a distance of 2,906 miles. The total railway capital was \$899,817,900; passengers carried, 14,810,407; freight handled, 24,266,825 tons; working expenses, \$35,042,655; and total earnings, \$50,545,569. Rolling stock comprised 2,046 locomotives; 206 parlor and sleeping coaches; 1,042 first-class cars; 648 second-class and emigrant cars; 650 baggage, mail, and express cars; 36,791 cattle, refrigerator, and box cars; 15,593 platform cars; and 4,812 coal and dump cars. The canal system had cost up to 1896, for construction and maintenance, \$80,925,522, of which \$20,692,244 was expended before the confederation, \$4,173,921 by the imperial government, and \$16,518,323 by the provincial governments interested. The total amount spent for construction and enlargement alone was \$69,300,640. The total revenue from the canals since confederation was \$10,917,797, an annual average of \$376,476.

Churches.—The Roman Catholic Church has a cardinal, 7 archbishops, 23 bishops, about 1,500 priests, and 1,992,017 members; the Church of England has 2 metropolitans, 18 bishops, about 1,000 clergy, and 646,059 members; and other denominations in order of strength are Methodist, 847,765; Presbyterian, 755,326; Baptist, 302,565; Lutheran, 63,982; and Congregational, 28,157. There are 10,480 churches, of which the Methodists have nearly 32 per cent., and 7,164 clergymen of all denominations.

Schools.—In 1895 there were 17,282 public schools, including grammar, high, normal, and model schools, and 924 other schools, chiefly denominational; enrollment in public schools, 936,109, other schools, 124,092; average attendance in public schools, 553,099; teachers in public schools, 20,832, other schools, 5,169; revenue from the government, \$2,891,731, other sources, \$6,457,826—total, \$8,609,265. The institutions for higher education comprised 14 universities, with reported endowment of \$3,685,662, property valued at \$1,023,560, income, \$310,-

000, and students, 4,350; 12 colleges, with endowment, \$770,290, property, \$1,280,000, income, \$114,100, and students, 858; 17 classical colleges, with property, \$2,004,411, income, \$201,696, and students, 4,191; 6 colleges for women, with property, \$465,000, income, \$128,500, and students, about 775; and 5 agricultural colleges, with 276 students.

Charitable Institutions.—Incomplete returns from 158 public institutions, 1893, showed receipts from the government \$1,559,529, and other sources \$825,859. Among these institutions were 56 hospitals, 38 houses of refuge, 27 orphan asylums, 14 poorhouses, 10 deaf and dumb and blind asylums, and 10 juvenile reformatories. Many similar institutions are maintained by church organizations, of which no reports are available.

Fisheries.—During 1895 there were 71,334 men in the various fisheries, using vessels, boats, nets, and other gear valued at \$9,253,848, and taking a catch having a commercial value of \$22,646,397, exclusive of about \$2,000,000 worth consumed by the Indians of British Columbia, Manitoba, and the Northwest Territories. For the protection of the seacoast and inland fisheries the government employed eight steamers, two fast-sailing schooners, 400 permanent officers, and during the spawning season, 200 guardians. There is a lobster hatchery at Bay View, Nova Scotia, from which 160,000,000 young lobsters were distributed along the coast in 1894, and 13 fish hatcheries at various points yielding 94,919,000 fry of salmon, trout, whitefish, and salmon-trout for distribution. The yield of all fisheries in 1895 by provinces was as follows: Nova Scotia, \$6,213,131; New Brunswick, \$4,403,158; British Columbia, \$4,401,354; Quebec, \$1,867,920; Ontario, \$1,584,473; Prince Edward Island, \$976,836; and Manitoba and Northwest Territories, \$752,466. The sealing industry in 1896 employed 64 vessels, 263 boats, 442 canoes, 809 white men, and 889 Indians, and had a yield of 55,677 skins.

Mineral Productions.—The following summary of mineral statistics from the reports of the Geological Survey shows the yearly average in production and value of the principal articles in 1896: Metallic products, \$8,039,640; non-metallic, \$15,087,665; sundries, \$500,000—total \$23,627,305. Articles: Copper, 9,385,556 lbs., \$1,021,148; gold, \$2,810,206; iron ore, 88,206 tons, \$184,313; lead, 24,199,977 lbs., \$721,384; nickel, 3,500,000 lbs., \$1,155,000; silver, 3,205,343 oz., \$2,147,579; asbestos, 12,250 tons, \$429,856; coal, 3,743,234 tons, \$8,006,305; coke, 49,817 tons, \$111,560; gypsum, 205,203 tons, \$174,403; petroleum, 726,822 bls., \$1,155,646; salt, 43,956 tons, \$169,677; building stone, \$1,000,000; bricks, \$1,600,000; lime, \$650,000; and miscellaneous clay products, \$428,635. The total value of the mineral productions in 1893 was \$19,350,712; 1894, \$20,900,000; 1895, \$22,000,000; 1896, \$23,627,305.

Population.—In 1891, 4,833,239, of whom 2,460,471 were males; 2,372,768 females; 4,185,877 natives; and 647,362 foreign-born. In 1893 the Department of Indian Affairs estimated the number of Indians at 16,427. See titles of the provinces.

CANALS. Canal engineering to-day concerns itself chiefly with the construction of waterways to connect established navigation routes and of sufficient size to accommodate the ordinary steam and sailing vessels of commerce; to irrigate extensive arid tracts; and to drain low areas. With few exceptions the canals built in the United States twenty-five or more years ago, on which small boats were drawn by horses and mules, have been abandoned; and those still in use have been retained because of their exceptional commercial value, and have been kept in an operative condition only by costly improvements. In 1895 the total

canal mileage was reported at 1,000; but the mileage of the canals in operation was only 2,440, divided between 30 separate canals, and of the total, 238 miles, representing two canals which had cost \$12,663,095, were recommended for abandonment. The longest canals were the Erie, extending from Albany to Buffalo, N. Y., 381 miles; the Ohio, from Cleveland to Portsmouth, O., 317 miles; the Miami and Erie, from Cincinnati to Toledo, O., 274 miles; and the Chesapeake and Ohio, from Cumberland, Md., to Washington, D.C., 184 miles. The United Kingdom had a total canal mileage of 3,813, of which 2,609 belonged to independent systems and 1,204 to railway systems; France, out of a total inland navigation mileage of 7,717, had 3,003 miles of canal proper; and Germany, out of 7,366 miles of navigable inland waterways, had 1,349 miles of canals and canalized rivers. Canada showed a large canal development, its systems comprising the St. Lawrence River group of eight with a total of 71 miles, between tidewater and Lake Superior; the Ottawa and Rideau rivers group, built to connect Montreal with Kingston on Lake Ontario, by means of the waters of the two rivers, and having a canal mileage of 29½; the Richelieu and Lake Champlain group, designed to connect the St. Lawrence River with Lake Champlain and the New York system, with a canal mileage of 85; the Lachine Canal, 8½ miles, common to the first two groups; a canal connecting St. Peter's Bay with the Bras d'Or lakes on the Isle of Cape Breton; and one on its side of St. Mary's River, connecting Lakes Superior and Huron. The last one gives the Dominion an independent outlet from the head of Lake Superior to the ocean, is 3,500 ft. long, cost about \$3,750,000, and was opened Sept. 5, 1895.

Of recently completed ship-canals, the most prominent are the Corinth, across the isthmus of Corinth, Greece, nearly 4 miles long, opened Aug. 6, 1893; the Manchester, England, 3½ miles long, cost over \$70,000,000, opened May 21, 1894; the Harlem, New York, connecting the Hudson and East rivers, and saving over 25 miles of distance between the Hudson and Long Island Sound, opened June 17, 1895; the Baltic and North Sea, Germany, 61 miles long, cost \$40,000,000, officially opened June 20, 1895; and the Canadian "Soo" (above). At the beginning of 1896 an unusually large amount of ship-canal construction was projected, and in noting the most important schemes, only those on which work has been started and such as have received official recognition are here considered. In Belgium, the chamber of representatives voted credits in August, 1895, for a canal to extend from the North Sea at Heyst, 14 miles northeast of Ostend, to Bruges, a distance of about 6 miles. The plan includes the construction of an outer port at Heyst, where there is deep water, and of docks, wharfage, and warehouses at Bruges, and the estimated cost is \$7,800,000. On Oct. 19, 1895, Brussels was officially declared a seaport, in anticipation of the reconstruction of the present canal extending from the city to the Scheldt at Willebroek. A new port is to be laid out between Laeken and Brussels, the improvements will permit vessels of 2,000 tons to discharge at the Brussels wharves, and the total estimated cost is \$7,000,000. In France, the government has appointed a commission to investigate the plans for a ship-canal to connect the Bay of Biscay with the Mediterranean, 220 to 320 miles long, and to cost \$200,000,000 to \$300,000,000, and the president has acknowledged the importance of the project to the southwestern districts. A plan was presented to the Chamber of Deputies 1895, for a similar canal from Marseilles to the Rhone, 34 miles long, and to cost \$16,000,000, and the Chamber also had under consideration proposals for a waterway between Paris and Rouen. In Germany, plans are under examination for a ship-canal to connect Berlin with the sea and for the utilization of Lake Tegel, on the west of

the city, for a harbor, and also for a similar waterway to connect the Black and Baltic seas, with Riga and Cherson as termini, using the Duna, Beresina, and Dnieper rivers, and making canal cutting only between the first two rivers. On May 31, 1895, the foundation stone of the new Elbe-Trave ship-canal works was laid at Lubeck. The new waterway will replace the Stecknitz Canal. The Prussian Diet voted 7,500,000 marks (\$1,725,000) to aid the work, which, by last estimates, will cost about \$4,500,000. In Scotland, there are two propositions before the authorities for a ship canal to connect the Forth and Clyde rivers; the Edinburgh plan involves a cost of about \$40,000,000 and the Glasgow plan about \$35,000,000. In England, several projects are being advanced, the most important of which will give ship-canal facilities to Birmingham and Sheffield. In Mexico, a great sanitary improvement has been effected by the construction of a canal 30 miles long and a tunnel $6\frac{1}{2}$ miles long, connected with the drainage system of the city of Mexico, by which drainage-water passes to the Pamico River at Tampico and thence into the Gulf of Mexico. The work cost about \$13,000,000, and in his message to Congress, Sept. 16, 1895, President Diaz declared that the drainage of the valley of Mexico was almost completed.

In the United States the scheme of the greatest proportions is that indicated in a bill introduced into both houses of Congress, Feb. 1, 1895, providing for the construction of a ship-canal to connect the Great Lakes with the Atlantic Ocean, beginning at the mouth of the Welland Canal, on Lake Erie, utilizing and connecting Lakes Erie and Ontario, the St. Lawrence River, Lake Champlain, and the Hudson. The work involves the construction of a canal, large enough to accommodate ocean steamships, from the Hudson near Albany to Lake Champlain, the deepening of that lake, a canal from its head to Lake St. Francis, on the St. Lawrence, a broadening and deepening of the St. Lawrence canal system, and a new canal across the Welland peninsula from Ontario to Erie. On Feb. 9, 1895, another bill was introduced into both houses of Congress providing for the appointment of a commission to make a survey and submit plans and estimates for a ship-canal to connect the south end of Lake Michigan with the Wabash River. Preliminary surveys for another great work were completed in November, 1894, and sent to the secretary of war to be laid before Congress. This work consists of a 22-ft. ship-canal to extend from Lake Superior through White Birch, Wis., and thence to the Mississippi River near St. Paul, a distance of 162 miles, and to cost by estimates \$90,000,000. Interest in the NICARAGUA CANAL (*q. v.*) was increased in 1895 by the passage of the Senate reorganizing bill (Jan. 24), the appointment by the president of a commission to make a general report on the project (April 3), the reception of the report advising Congress to make the canal a national undertaking (Nov. 2), and the drafting of a bill by a sub-committee of the House committee on interstate and foreign commerce providing for the completion and operation of the canal by the government (Feb. 18, 1896). See Chicago, *Drainage Canal*.

CANISIUS COLLEGE, Buffalo, N. Y., Roman Catholic; founded in 1870; chartered by the University of the State of New York in 1883; had at close of 1897, 23 professors and instructors; 306 students; 20,000 volumes in the library; \$252,500 invested in grounds and buildings; \$28,900 in scientific apparatus; \$44,628 income (1896); president, James A. Rockliff.

CANNON, FRANK J., journalist, was born in Salt Lake City, Utah, Jan. 25, 1859. He is a son of George Q. Cannon, for many years a delegate in Congress; was graduated at the University of Utah in 1859; was a delegate to the Republican

National Convention and unsuccessful candidate for Congress against Joseph L. Rawlins 1892, and defeated Rawlins (renominate) and the Populist candidate by a plurality of 1,263 votes, 1894. On the organization of Congress, in December, 1895, he was appointed a member of the committees on coinage, weights, and measures, on agriculture, and on mines and mining. In January, 1896, he was elected one of the United States Senators from the new State of Utah, and on the 27th drew the long term ending March 3, 1899.

CANNON, JOSEPH G., lawyer, was born in Guilford, N. C., May 7, 1836. With one exception he has been a Republican member from Illinois of every Congress since 1872. On the organization of Congress, in December, 1895, he was appointed chairman of the House committee on appropriations, on which he had previously served.

CANROBERT, FRANÇOIS CERTAIN, senator and last marshal of France, was born in St. Océ, Lot, France, June 7, 1809; died in Paris, Jan. 28, 1895.

CANTON, city, seaport, and capital of the province of Kwangtung (of which it is a corruption), China; population (1893) about 1,800,000. It is the second in importance of the twenty-four treaty ports, and its trade in 1893 was, imports, 13,096,109 Haikwan taels (about \$10,176,487), exports, 15,823,399 Haikwan taels (about \$12,658,719). In the quarter ending Sept. 30, 1895, the exports declared here for the United States aggregated in value \$1,629,144.58, principally raw silk (\$1,031,070), matting (\$412,820), and fire-crackers (\$72,000).

CANTON, city, capital of Stark county, O.; population (1890) 26,189; (1897) estimated, 38,000. In 1897 it had a net debt (including \$190,000 water debt) of \$627,533. The real valuation of taxable property was estimated in 1896 at \$10,000,000; total tax rate, \$29.10 per \$1,000. There are 2 national banks (capital \$400,000), 2 State banks (capital \$230,000), 2 savings banks (capital \$150,000), and a private bank; a trolley line in Canton and Massillon and a branch connecting the cities, and 4 daily and 6 weekly periodicals.

CAPE COLONY, or the COLONY OF THE CAPE OF GOOD HOPE, a British colony in South Africa, comprising Cape Colony proper, Griqualand East, Griqualand West, Tembuland, the Transkeian territories, Walfish Bay, and Pondoland (annexed Sept. 25, 1894); area, 225,311 square miles; population (1891), 1,527,221, with Pondoland, 1,727,221, one-fifth European; capital, Cape Town. The principal towns with their population in 1891 were: Cape Town, 51,251, with suburbs, 83,718; Kimberley, the seat of the diamond trade, 28,718; Port Elizabeth, the chief commercial port, 23,266; Graham's Town, capital of the eastern province, 10,498; Beaconsfield, 10,478; and Paarl, 7,668. The commerce of the colony in 1894 was, imports £11,500,000, exports £13,000,000; in 1895, imports £19,000,000, exports £16,000,000; in 1897, imports £17,935,039, exports £16,951,838. The debt, 1896, was £27,388,406; revenue, 1897, £6,715,000, expenditure £6,711,151. The colony was originally settled by Boers, or Dutch colonists, a part of whom withdrew from the colony on its annexation to the British crown, and established the Transvaal, or South African Republic, the independence of which was recognized in 1852. Much friction has since been exhibited between the original colonists and the Uitlanders, or aliens who have settled there, the latter claiming that they had to bear an undue proportion of the colonial expenses, and were deprived of adequate representation in the administration of affairs. In the latter part of December, 1895, an armed force of the British South Africa Company, numbering 500 to 800 men and provided with Maxim and other guns, under command of Dr. Leander S. Jameson, the

administrator of the company in Mashonaland, made a sudden invasion of the Transvaal territory ostensibly to assist the Uitlanders in enforcing their demands that they be granted equal political rights with the Boers. President Krüger, of the Transvaal, called on the burghers of the republic to defend their country, and a battle occurred between the two forces at Krügersdorp, the Boers mustering, 1,200 to 1,500 men, killing 20 and wounding 27 of the invaders, and capturing Dr. Jameson and his followers. Joseph Chamberlain, British secretary of state for the colonies, as soon as he heard of the expedition, directed Sir Hercules Robinson, governor of Cape Colony, to take steps to preserve order, and promptly repudiated Jameson's act, and Governor Robinson went to Pretoria, the Transvaal capital, induced the Uitlanders to abandon their scheme of revolt, and on Jan. 11, 1896, removed Dr. Jameson from the office of administrator of Mashonaland and appointed F. J. Newton, the receiver-general of British Bechuanaland, in his place. Cecil Rhodes, the premier of Cape Colony, who was charged with being a party to the invasion, resigned his office on Dec. 31, 1895, when Governor Robinson declined to accept it; but on Jan. 6, 1896, he did so, and appointed Sir John Gordon Sprigg, the colonial treasurer, in his place. The latter, on Jan. 10, formed a new cabinet, consisting of Sir Thomas Upington, attorney-general; Sir James Sive-Wright, commissioner of public works; P. H. Faure, secretary for agriculture; and Mr. Tewater, colonial secretary.

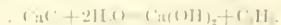
The invasion soon became a subject of international interest. The Emperor of Germany telegraphed congratulations to President Krüger, Jan. 3, 1896, and promised his moral support to the Boers; the Orange Free State, through its Volksraad, tendered its assistance to the Transvaal whenever it might be required; a German authority declared that because of the invasion the Transvaal would repudiate the convention with Great Britain of 1884; President Krüger agreed to surrender the Jameson captives; for which he was thanked by Queen Victoria; and Governor Robinson, of Cape Colony, was thanked by both the British and Transvaal authorities for his influence in preventing further bloodshed and in pacifying the Uitlanders.

In the United States also the incident received diplomatic attention. Among the persons arrested in Johannesburg on charges of sedition were several citizens of the United States, including John Hays Hammond, a mining engineer of San Francisco. Beside sending instructions to the United States consular agent at Johannesburg, Secretary of State Olney asked the British government to secure the good offices of its representatives in South Africa in behalf of American citizens there, and Secretary Chamberlain responded that he had instructed Governor Robinson to extend the same protection to American as to British subjects. The president also decided to appoint a United States consul at Cape Town, and in view of recent developments and the increasing American interests, Secretary Olney, on Feb. 4, 1896, asked the Senate committee on appropriations to raise the office to a consul-generalship, with a salary of \$3,000 per annum, in order to secure a competent incumbent. See **BOERS; CHAMBERLAIN, JOSEPH; JAMESON, LEANDER STAR; KRÜGER, PAUL; SOUTH AFRICAN REPUBLIC.**

CAPE TOWN. town, seaport, and capital of Cape Colony, South Africa; population (1891) with suburbs, 83,718. In the quarter ending Sept. 30, 1895, the exports declared here for the United States aggregated in value \$134,151.74, principally grease (\$78,311), ostrich feathers (\$32,503), and wool (\$22,238). At Port Elizabeth the principal commercial port in the colony, the exports so declared in the half-year ending Sept. 30, 1895, were valued at \$526,220.92, principally wool (\$460,243), and skins (\$60,491).

CARACAS, city and capital of the republic of Venezuela; population (1891) 72,429. In the early part of November, 1895, reports indicated that a revolution against the government of President Crespo had been planned by Dr. Rojas Paul, which involved simultaneous outbreaks in the capital and in several places in the States of Bermudez and Lara; but on Dec. 9 the Venezuelan minister to the United States received an official announcement that the country was perfectly peaceful. On the same day President Crespo appointed the following cabinet: minister of foreign relations, Dr. Pedro E. Rojas; war, Gen. M. Ramon Guerra; treasury, Gen. Henrique Perez; public works, Dr. Claudio B. Verra; interior, Dr. J. Francisco Castillo; agriculture, Gen. Francisco T. Garcia; and public instruction, Dr. Frederico R. Chirinos. On Dec. 9, also, the German minister at Caracas, acting for the British government in the absence of its minister to the country, handed the president a demand for £15,000 indemnity for the arrest of three British Guiana police officers at the Yuruan River station in November, 1894. The Venezuelan government had promptly released the officers, compensated them for losses, took military proceedings against its officers who had made the arrest, and formally disavowed the act. The excitement over the British Guiana boundary contention (see BOUNDARY LINES) was intensified by this incident, and the government began fortifying Caracas, the seaports of La Guayra and Porto Cabello, and other strategic points; made further preparations to resist an attack by Great Britain; and formally asked of all the South and Central American republics their co-operation in case of war. When President Cleveland's message to Congress, touching the Monroe doctrine and its application to the pending dispute, reached Caracas, a great mass-meeting was held to thank the President of the United States for his timely interest. On Christmas day another popular meeting was held to pledge the support of the people to the government, all the church bells were rung, and the city was profusely decorated with national and American flags. After the passage by the United States Senate of the Venezuela Commission bill, the city was again plunged into wild excitement; formal thanks of the government were cabled to Washington; and the United States representatives were saluted by great crowds of students and citizens. See CRESPO, JOAQUIN; VENEZUELA.

CARBIDES, a series of chemical compounds of carbon and metals; calcium carbide, formula CaC_2 , is the principal one. It is made by heating lime and finely divided carbon, usually coke, in an electric arc furnace. It is a hard, stony substance, somewhat red and crystalline on a fresh fracture. Although metallic carbides have long been known, this one has come into much prominence recently, from expectations that it would be made upon the commercial scale and would be used to produce acetylene gas. If calcium carbide is treated with water, acetylene gas is evolved by the following reaction:



100 lbs. of calcium carbide with 56.25 lbs. of water give 40.63 lbs. of acetylene gas. The theoretical yield of gas is 5.75 cubic feet per lb. of carbide. The specific gravity of the commercial carbide is 2.262. The gas thus produced is of very high illuminating power (200 to 250 candles), and gives an exceedingly white light. One pound of calcium carbide gives from 3 to 5 cubic feet of gas. The flame is so brilliant that it cannot be long looked at with comfort. Of the other carbides, aluminum carbide has been produced commercially. It is less quickly decomposed by water than is the calcium carbide. See GAS, ACETYLENE.

CARBONDALE, city, summer resort, and anthracite coal mining center; Lackawanna county, Pa.; population (1890) 10,833. In 1895 the Lackawanna Rapid Transit company leased the franchises and other property of the Carbondale Traction and the Carbondale and Forest City passenger railway companies, had both roads under construction as trolley lines, and expected to have 30 miles of track in operation by March 1, 1896, connecting the city with the towns of Simpson, Mayfield, Jermyn, Pekville, and Archbald. There are one national bank (capital \$110,000), one savings bank (capital \$100,000), and 2 daily, a monthly and 2 weekly periodicals.

CARDENAS, town and seaport of Cuba; population (1892) 23,680. In the half-year ending June 30, 1895, the exports declared here for the United States aggregated in value \$4,420,523.71, principally sugar (\$4,412,810).

CARDIFF, seaport and county town, Glamorganshire, Wales; noted for its tin-plate and ship-building industries; population (1891) 148,890. In 1895 it gained first rank among the seaports of the United Kingdom in shipments to foreign ports, the tonnage clearances in 1894 being 6,319,267, more than 1,000,000 tons in excess of that of London, the second ranking port. An exhibition, showing the most recent progress in science, arts, and manufactures, under the patronage of the queen, and to be opened by the Prince of Wales, was arranged for May 1, 1896, to continue for six months. In the quarter ending June 30, 1895, the exports declared here for the United States aggregated in value \$59,621.59, a decrease of \$137,087.63 from the total for the corresponding quarter 1894, the principal articles being tin plates, black plates, etc. (\$55,556).

CARDINALS, COLLEGE OF, consisted in 1897 of 5 cardinal bishops, 49 cardinal priests, several of whom were bishops of special sees, and 4 cardinal deacons; total, 58. Of these 29 were Italian, 4 French, 4 Spanish, 3 German, 2 Hungarian, 2 Bohemian, 2 Austrian, 2 Portuguese, 3 Sicilian, 2 Irish, and 1 American, 1 Belgian, 1 Polish, 1 Canadian, and 1 English. Two died in December, 1895; Cardinal Persico, Italian, and Melchers, German. The consistory of Nov. 29, 1895, created 9 new cardinals, among whom was the Italian Francis Satolli, the first apostolic delegate to the United States.

CARL, PRINCE, son of Prince Frederick, heir apparent to the throne of Denmark, was born in Charlottenlund, Aug. 3, 1872; became a lieutenant in the Danish navy; and on July 22, 1896, was married to Princess Maud, daughter of the Prince of Wales, born Nov. 26, 1869.

CARLETON COLLEGE, Northfield, Minn., Congregational; co-educational; had at close of 1897, 22 professors and instructors; 296 students; 15,000 volumes in the library; \$200,000 invested in grounds and buildings; \$50,000 in scientific apparatus; \$250,000 in productive funds; \$28,000 in gifts; \$53,750 in income; president James W. Strong, D.D.

CARLISLE, JOHN GRIFFIN, financier, was born near Covington, Ky., Sept. 5, 1835; became secretary of the United States treasury March 6, 1893. On Jan. 17, 1894, owing to the heavy withdrawal of gold coin from the treasury and the large reduction in the \$100,000,000 gold reserve, he issued a public call for the purchase of \$50,000,000 of 5 per cent. bonds, under the Resumption act of 1875, at 117.223. The total amount of subscriptions received and considered was \$52,292,150; the amount received and not considered for various reasons was \$55,705,100; and the proceeds of the bonds sold were \$58,660,917.63 in gold, which was added to the reserve then on hand. This act proved but a temporary relief;

the depressed condition of business and the depletion of the reserve by withdrawals continued; and on Nov. 13, following, the secretary made a second call for the purchase of \$50,000,000 of bonds, when the subscriptions aggregated \$178,341,150. The award of the amount asked for at 117.077, to a syndicate which agreed to supply the gold without withdrawing it from the treasury, yielded \$58,538,500, which was also added to the reserve, and increased it on Dec. 4 to \$111,142,021. Scarcely more than two months after this sale of bonds, the reserve lost by withdrawals more than \$69,000,000 and fell to \$41,340,181. On Jan. 28, 1895, President Cleveland sent a message to Congress, stating the situation, and recommending that authority be given the secretary of the treasury to issue bonds bearing a low rate of interest, to maintain the reserve and to redeem outstanding United States notes and treasury notes issued for the purchase of silver. Congress, however, did not approve the recommendation. On Feb. 8 Secretary Carlisle signed a contract with August Belmont & Co., and J. P. Morgan & Co., both for themselves and others, to supply the United States government with 3,500,000 oz. of standard gold coin of the United States, at the rate of \$17.80441 per oz., for 30-year 4 per cent. bonds, on the condition that one-half of the coin should be obtained and shipped from Europe. The contract also contained a clause providing that if Congress should authorize their issue, bonds payable in gold and bearing 3 per cent. interest might within ten days be substituted at par for the 4 per cent. bonds. The same day the president sent a special message to Congress setting forth that more than \$16,000,000 in interest would be saved if gold bonds bearing 3 per cent. interest were authorized to be substituted for those mentioned in the contract. Congress again withheld its sanction, the contract was carried out, and Secretary Carlisle sold bonds to the amount of \$62,315,000, receiving a little more than \$65,000,000 in gold for them. Subscriptions to this loan were reported at \$590,000,000 in London and at \$200,000,000 in New York. Toward the close of 1895, the financial situation again became alarming, and on Jan. 5, 1896, Secretary Carlisle invited proposals for the purchase of \$100,000,000 of 30-year 4 per cent. bonds, in denominations of \$50 and multiples of that sum, to bear date of Feb. 1, 1895, payment for bonds and accrued interest to be made in gold. On Feb. 5, the time set for opening the bids, it was found that more than 4,600 bids had been received, covering \$568,269,850, at prices ranging from par to more than 120, a single syndicate, that headed by J. P. Morgan & Co., offering to take the entire issue at 110.6877. On Feb. 7 the secretary decided that all bidders of more than 110.6877 should receive the full amount for which they bid; that all below that price should be rejected; and that the Morgan syndicate should be awarded all bonds left after the allotments had been made to higher bidders. An examination of the bids showed that under this plan the individual bidders and bankers would receive \$66,788,650 and the Morgan syndicate \$33,211,350. On Feb. 19, the secretary announced that under its bid the Morgan syndicate was entitled to receive bonds of the face value of about \$1,700,000 in addition to the prior allotment, this increase being understood to represent the value of bonds bid by other parties and defaulted. See CLEVELAND, GROVER; DIET, NATIONAL; MONEY.

CARLOS I., King of Portugal, was born Sept. 28, 1863; succeeded his father, King Louis I., in October, 1889. During the financial difficulties of 1892 the king and royal family renounced 20 per cent. of the endowments regularly paid them by the nation, amounting to a reduction of \$115,000 a year. In November, 1895, he made a visit to England.

CARNEGIE, ANDREW, manufacturer, was born in Dunfermline, Scotland, Nov. 25, 1835. In 1893 he presented an organ to the First Christian Church in Brad-dock, Pa.; pledged himself to duplicate the donations of all Pittsburg to the amount of \$5,000 each working day for a period of two months, for the purpose of providing work for the unemployed; and published a revised edition of his *Triumphant Democracy*. In 1894 he presented the town of Jedburgh, Scotland, a public library, for which he received the freedom of the burgh. His most notable benefaction was consummated at the close of 1895, and consisted of the presentation to the city of Pittsburg, Pa., of a grand public library building with a magnificent art gallery. The building is believed to have cost upward of \$1,000,000, and the art gallery was endowed with \$1,000,000. The building was dedicated Nov. 5, and Dec. 31, after naming the 36 members of the board of trustees of the art gallery fund, he stated that the endowment was to be kept intact perpetually; that during his lifetime he would provide \$50,000 annually for the purchase of works of art; and that after his death the endowment fund should be invested and its proceeds devoted to the same purpose.

CARNOT, MARIE FRANCOIS SADI, President of France 1887-94, was born in Limoges, Aug. 11, 1837; assassinated at Lyons, June 24, 1894. His conservative and incorruptible patriotism would almost certainly have secured his re-election on the expiration of his term in 1894, but in April he formally declared that he would not be a candidate. Great efforts were made by friends of the anarchist Vaillant, convicted in January, 1894, of throwing a murderous bomb on the floor of the Chamber of Deputies, to secure his reprieve by President Carnot, and his assassination was perhaps in consequence of his firm refusal.

CARPENTER, CHARLES C., naval officer, was born in Greenfield, Mass., Feb. 27, 1834. He was promoted commodore May 15, 1893, and rear-admiral Nov. 11, 1894; was commander-in-chief of the United States Asiatic squadron from Aug. 27, 1894, till Nov. 9, 1895; and was retired on reaching the age-limit Feb. 28, 1896. During the summer of 1895 he rendered invaluable service at China in protecting American missionaries and in co-operating with United States Minister Charles Denby and the British and Chinese authorities to preserve peace, particularly after the Kucheng massacre.

CARPENTER, WILLIAM BOYD, D.D. D.C.L., Bishop of Ripon, England, was born in Liverpool, Eng., 1841. He published in 1894 *Twilight Dreams*, and *The Son of Man Among the Sons of Men*; and in 1895, *The Great Charter of Christ, Some thoughts on the Christian Religion*, and *Lectures on Preaching Delivered at Cambridge University*.

CARSON AND NEWMAN COLLEGE, Mossy Creek, Tenn., Baptist; educational; had at the close of 1896, 9 professors and instructors; 290 students; 3,000 volumes in the library; \$75,000 in grounds and buildings; \$30,000 in productive funds; \$12,000 in gifts; \$5,500 in income; president, J. T. Henderson, A.M.

CARTAGENA, city, seaport, capital of the State of Bolivar, Colombia; population (1886) 20,000. In the quarter ending Sept. 30, 1895, the exports declared here for the United States aggregated in value \$210,794.50, principally coffee (\$138,845), hides (\$42,153), and rubber (\$10,937).

CARTER, FRANKLIN, president of Williams College since 1881, was born in Waterbury, Conn., Sept. 30, 1837. He published in 1892 a biographical study of Mark Hopkins, his distinguished predecessor in the presidency of Williams College.

CARTER, JAMES COOLIDGE, lawyer, was born in Lancaster, Mass., Oct. 14, 1827. In 1894 he was elected president of the American Bar Association, and at its 18th annual meeting in 1895 was appointed a member of its executive committee.

CARTER, THOMAS HENRY, lawyer, was born in Scioto county, O., Oct. 30, 1854. In 1892-96 he was chairman of the Republican National Committee. In January, 1895, he was elected a United States senator from Montana, for the term beginning March 4, 1895, and on the organization of Congress in December following he was appointed chairman of the committee on relations with Canada, and a member of those on the improvement of the Mississippi River and its tributaries, interstate commerce, post-offices and post-roads, public lands, and (select) on investigation of trespasses on Indian lands.

CARTHAGE COLLEGE, Carthage, Ill., Lutheran; co-educational; had at close of 1897, 12 professors and instructors; 140 students; 5,000 volumes in the library; \$40,000 invested in grounds and buildings; \$40,000 in productive funds; \$8,000 in gifts; \$13,000 in income; president, J. M. Ruthrauf, D.D.

CASE SCHOOL OF APPLIED SCIENCE, Cleveland, O., founded in 1880; non-sectarian; had at the close of 1897, 21 professors and instructors; 240 students; 2,000 volumes in the library; \$425,000 invested in grounds and buildings; \$75,000 in scientific apparatus; \$2,000,000 in productive funds; \$67,230 income (1896); president, Cady Staley, Ph.D., LL.D.

CASIMIR-PERIER, JEAN PAUL PIERRE, president of France, was born in Paris, Nov. 8, 1837. After 24 years of public life, most of the time a member of the Chamber of Deputies, and for a time its president, he was elected, June 27, 1894, three days after the assassination of President Carnot, to succeed him as president of the republic. Jan. 16, 1895, weary with factional strife, he resigned his office, and was succeeded by Felix Faure (*q. v.*).

CASTELAR, EMILIO, statesman and orator, was born in Cadiz, Spain, Sept. 8, 1832. In April, 1893, he formally retired from political life, declaring himself as always a staunch Republican, but, convinced that at present the monarchy was the only practicable government for Spain, he would submit to it loyally. He has since devoted his time to historical and literary work. For several years he has been engaged in writing a *History of the Nineteenth Century*, to be completed in ten large volumes.

CASTELLAMARE (di STABIA), a fortified city and seaport, province of Naples, Italy; population (1893) 34,064. During the nine months ending Sept. 30, 1895, the exports declared here for the United States aggregated in value \$525,080.02, principally macaroni (\$222,284.82), oranges (\$159,955.98), and cheese (\$76,969.-37).

CATANIA, city, seaport, capital of the province of same name, Sicily, Italy; population (1893) 121,000. During the nine months ending Sept. 30, 1895, the exports declared here for the United States aggregated in value \$428,870.79, principally oranges (\$153,995.36), lemons (\$102,410.78), and brimstone (\$76.-364.47).

CATHODE PHOTOGRAPHY, a name improperly applied to the photography by rays produced in the operation of a Crookes' tube. The cathode is the negative electrode of the tube. See PHOTOGRAPHY, ROESTGEN'S.

CATHOLIC UNIVERSITY OF AMERICA, Washington, D. C., Roman Catholic; founded in 1887; for post-graduate work only. Oct. 1, 1895, the

schools of philosophy and social sciences were publicly inaugurated, and the university now includes these as well as the school of theology. At the close of 1897 it had 30 professors and instructors; 160 students; 30,000 volumes in the library; \$1,000,000 invested in grounds and buildings; \$30,000 in scientific apparatus and library; \$600,000 in productive funds; \$204,750 in gifts; rector, Thomas J. Conaty, D.D.

CAVAIGNAC, EUGENE GODEFROY, engineer, was born in Paris, France, in 1853. He is the grandson of the "Conventionnel" of the same name, and son of the general nicknamed "the butcher," who was the chief of the executive and suppressed the Socialist insurrection in Paris in 1848, and was expelled by Louis Napoleon in 1851. The son is a radical Republican; served as a volunteer in the Franco-German war; has been under-secretary of state; and several times was a member of the budget committee of the Chamber of Deputies. On the organization of the Bourgeois cabinet, Oct. 30, 1895, he was appointed minister of war. He has been mentioned frequently as a promising candidate for the presidency of the republic.

CAWEIN, MADISON J., author, was born in Louisville, Ky., March 23, 1865. He was graduated at the Louisville high school in 1886, and has since achieved distinction as a poet, publishing *Blooms of the Berry* (1887); *The Triumph of Music* (1888); *Accolon of Gaul* (1889); *Lyrics and Idyls* (1890); *Days and Dreams; Woods and Memories; Red Leaves and Roses; Poems of Nature and Love and Imitations of the Beautiful; and The Flying Islands of the Night* (1895).

CAYLEY, ARTHUR, Sadlerian professor of mathematics at Cambridge University, was born in Richmond, England, Aug. 16, 1821; died at Cambridge, Jan. 26, 1895. He had been for many years a member of the council of the senate of the university; and at the time of his death was chairman of the Association for Promoting the Higher Education of Women, which controls Newnham College. The 7th and 8th volumes of his *Collected Mathematical Papers* were published in 1895.

CEDAR RAPIDS, city, Linn county, Ia. population (1890) 18,020; (1895) 22,555. In 1895 the assessed valuation for city tax at actual value was \$14,181,952; valuation of the school district (1896) \$3,928,131; total tax, \$41 per \$1,000; bonded debt of city (1896), \$126,000, floating \$150,900, sinking fund \$19,203; net debt, \$257,697; total debt of school district Jan. 1, 1897, \$161,000; population of school district (1897), estimated 25,000. In 1897 there were 3 national banks (capital \$300,000), 3 savings banks (capital \$185,000); a trolley road connecting with Marion, and 3 daily, 1 semi-weekly, 5 weekly, and 10 monthly periodicals.

CENTRAL COLLEGE, Fayette, Mo., Methodist Episcopal, South; co-educational; had at close of 1896, 14 professors and instructors; 187 students; 5,500 volumes in the library; \$150,000 invested in grounds and buildings; \$15,000 in scientific apparatus; \$130,000 in productive funds; \$13,721 in income; president Tyson S. Dines, A.M.

CENTRAL TENNESSEE COLLEGE, Nashville, Tenn., Methodist Episcopal; co-educational; without restriction as to color; had at close of 1897, 39 professors and instructors; 564 students; 4,000 volumes in the library; \$110,000 invested in grounds and buildings; \$15,000 in productive funds; \$17,689 in income; president, John Braden, D.D.

CENTRAL UNIVERSITY, Pella, Ia., Baptist; co-educational; had at close of

1897, 13 professors and instructors; 156 students; 1,000 volumes in the library; \$27,000 in grounds and buildings; \$23,000 in productive funds; president, A. B. Chaffee, D.D.

CENTRAL UNIVERSITY, Richmond, Ky., Presbyterian; founded in 1874; had at close of 1897, the regular college courses at Richmond, university high schools at Jackson and Elizabethtown, and schools of medicine and dentistry at Louisville; and 35 professors and instructors; 851 students; 8,000 volumes in the library; \$100,000 in grounds and buildings; \$175,000 in productive funds; \$40,000 in income; chancellor, L. H. Blanton, D.D.

CENTRAL WESLEYAN COLLEGE, Warrentown, Mo., Methodist Episcopal; co-educational; had at close of 1897, 14 professors and instructors; 283 students; 6,000 volumes in the library; \$92,000 in grounds and buildings; \$70,000 in productive funds; \$10,000 in income; president, George B. Addicks, A.B., A.M.

CENTRE COLLEGE, Danville Ky., Presbyterian; had at close of 1897, 17 professors and instructors; 241 students; 15,150 volumes in the library; \$75,000 in grounds and buildings; \$10,000 in scientific apparatus; \$250,000 in productive funds; \$20,000 in income (1896).

CEYLON, an island southeast of Hindustan; a British crown colony; population (1891) 3,008,466; European residents about 5,000; capital, Colombo, population about 126,000. Governor in 1897, Col. Sir Joseph West Ridgeway, K.C.B., salary Rs. 80,000. Of the inhabitants about 28 per cent. were engaged in agriculture. In 1894 about one-fifth of the island was under cultivation, the principal acreage being as follows: Rice, 565,844; other grain, 122,329; tea, 331,465; coffee, 20,931; cocoanuts, 851,321; cinchona, 2,062; cinnamon, 39,816. Rice is the chief product for home consumption, and till recently coffee was the leading product for export, but tea has lately taken the lead. There were 525 plumbago mines in operation in 1893. The pearl fishery was valued at Rs. 310,000 in 1890, and 960,000 in 1891, but none was reported in 1892 or 1893. The imports of 1891 were Rs. 75,113,072; exports Rs. 72,027,176. The public revenue in 1894 was Rs. 19,485,319; expenditures, Rs. 20,342,899; debt, Rs. 3,312,923 and £3,563,976. The British troops on garrison duty were 1,656; contributions for military expenditure for 1894-95, £81,750; volunteer force, 1,161, costing for the year Rs. 115,915. The census of 1891 showed 188 post offices, and 1,497 miles of telegraphs; railroads, in 1895, 296 miles. Education is unsectarian, and free in the elementary schools. Scholars enrolled by the superintendent of instruction in 1893, 157,257; but many schools are not counted by the department. A religious census in 1891 reported the Buddhists, 877,043; Hindus, 615,932; Mohammedans, 211,995; Christians, 302,127. In 1895 two official reports were made as to a railroad over the reefs and sandbanks which connect the southern extremity of Ceylon with the mainland, the line being in all 22 miles. One report proposed a single track, of which something over 10 miles should be on iron bridges; the rest over banks and shallows that could be filled, and the cost estimated at Rs. 25,500,000. The other proposed a solid causeway with double track, to cost Rs. 21,900,000.

CHADWICK, JOHN WHITE, clergyman, was born in Marblehead, Mass., Oct. 19, 1810. He celebrated in 1894 the thirtieth anniversary of his ordination and installation as pastor of the Second Unitarian Church in Brooklyn, N. Y., where he succeeded the Rev. Samuel Longfellow; published *Old and New Unitarian Belief* (1894); and contributed many articles to the revised edition of *Johnson's Universal Cyclopaedia* (1893-96).

CHAMBERLAIN, JOSEPH, statesman, was born in London, England, in July, 1836. He has been a member of Parliament since 1876, representing Birmingham till 1885, and since then, Birmingham, West. In the parliamentary session of 1894, he opposed the government on nearly every measure, and in the latter part of the year made a number of notable speeches, in one of which he declared that the gulf between him and the Liberal party could not now be bridged over. On the formation of the coalition ministry under the Marquis of Salisbury in June, 1895, he was appointed secretary of state for the colonies. Since then public affairs have made him probably the busiest member of the cabinet, for beside his colonial duties he has the confidence of the queen and the premier, and his advice has been sought on the complications that have particularly concerned Great Britain since his accession to the ministry. In the matter of Dr. Jameson's raid into the Transvaal he displayed great promptness and executive decision. On Feb. 7, 1896, he sent a long dispatch to Sir Hercules Robinson, governor of Cape Colony and British high commissioner in South Africa, suggesting a scheme of reform to end the grievances of the Uitlanders in the Transvaal, and inviting President Krüger of the Transvaal republic to visit England and discuss with him the questions at issue. On the previous day Secretary Chamberlain had had a long interview with Cecil Rhodes, the ex-premier of Cape Colony, who mysteriously appeared in London the day before and left it the day after. From the ex-premier the secretary received the full details of the Uitlander or alien side of the controversy, after which he sent his invitation to the Transvaal president. On Feb. 8 he published a long summary of recent events in South Africa, in which he maintained that the Transvaal government had no previous knowledge of the raid; that Dr. Jameson had disobeyed strict imperial orders; and that the British South African Company, of which Dr. Jameson was at the time administrator, had made repeated efforts to compromise the home government by securing its assent to a concentration of forces on the borders of the Transvaal. President Krüger announced his willingness to go to England, on condition that the subjects to be discussed by himself and Mr. Chamberlain should be specified beforehand; but the publication of the secretary's dispatch to Governor Robinson led the president to declare (Feb. 13) that his acceptance of the invitation had been thereby rendered impossible, and that his government could not suffer interference with its internal affairs, however well intentioned such interference might be. He was installed as lord rector of Glasgow University, Nov. 3, 1897. See BOERS: CAPE COLONY: JAMESON, LEANDER STAR: KRUGER, PAUL: SOUTH AFRICAN REPUBLIC.

CHAMBER OF COMMERCE, London, England; incorporated in 1881, to consider and act on all questions of public interest which affect the mercantile world. It is divided into 37 sections, representing as many trades. It issues certificates of origin for goods exported to Italy, Spain, and Russia; the number issued up to Sept. 11, 1895, being 36,748. It also issues travelers' certificates for Switzerland and Russia. Since 1886 it has had a system of examination and certificates for commercial education; 64 candidates entering the junior examination in London, in July, 1895, 5 in Ipswich, and 5 in Portsmouth; and 53 receiving certificates; and at the later examination for senior certificates in bookkeeping 21 were examined, and 19 passed. In connection with these examinations the chamber maintains a bureau of employment. At its meetings it listens to addresses on special subjects, which are reported in the *Chamber of Commerce Journal*, issued monthly. President in 1897, Sir Albert K. Rollit, D.C.L., M.P.

CHAMBER OF COMMERCE, New York; organized April 5, 1768; incorporated by King George III, March 13, 1770; reincorporated by the State of New York, April 13, 1784; to promote the enlargement of trade and "to carry into execution, encourage, and promote, by just and lawful ways and means, such measures as will tend to promote and extend just and lawful commerce." It consists of 1,250 regular members. Initiation fee, \$25. Offices and meeting rooms, 34 Nassau Street, New York. It has suggested and urged many public improvements and laws, and in 1894 it acted energetically for municipal reform. President, Alexander E. Orr.

CHAMBERS OF COMMERCE OF THE UNITED KINGDOM, ASSOCIATION OF, formed in 1860; incorporated in 1875, to consider questions of trade, commerce, manufactures, and shipping; and to collect and give information, from time to time, affecting these matters and the commercial interests of the country. Its annual meeting is held in London early in the year, and its autumnal meeting in the provinces. Delegates are sent to it by 92 local chambers. President, 1897, Sir H. Stafford Northcote.

CHAMBER OF DEPUTIES, the popular branch of the French National Assembly; consisting of 584 members, elected for 1 year, by universal suffrage. It alone has the power of initiating financial laws. Its members as well as those of the Senate are paid. It unites with the Senate in the National Assembly to elect the president of the republic; and war can be declared by the president only with the consent of the Senate and Chamber of Deputies. The ministry are responsible to the Chamber, as the British ministry to Parliament, and party divisions have compelled of late very frequent changes of administration. On the election of M. Casimir-Perier to the presidency of the republic, after M. Carnot's assassination, M. Auguste Burdeau was elected president of the Chamber in his place July 5, 1894. M. Burdeau died in December, 1894, and M. Brisson, Radical, was elected in his place. Jan. 28, 1895, a bill was passed granting amnesty for all political convictions pronounced or incurred up to that date. Henri Rochefort and many other exiles took advantage of this to return to France. The annual budget was not passed till April 13, after a long struggle, and included more stringent taxes on ecclesiastical property. July 14, 1895, the Chamber unanimously urged the government to reorganize the Council of the Legion of Honor, because of its refusal to expel M. Eiffel for misappropriation of funds. In October, 1895, there was heated debate on the strike at Carmaux; and the ministry was censured for the Southern Railway scandals, and resigned, M. Bourgeois being called to form a radical ministry.

CHAMPNEY, MRS. ELIZABETH WILLIAMS, author, was born in Ohio, in 1850; gained wide popularity by her series of books on the travels of *Three Tassar Girls*, and subsequently by her *Witch Winnie* series. Her recent publications include *Witch Winnie at Shannock* (1894); *Paddy O'Leary and His Learned Pig* (1895); *Witch Winnie at Versailles* (1896); *Witch Winnie in Venice*, and *Pierre and His Poodle* (1897). Her works are illustrated by her husband, James Wells Champney.

CHAMPNEY, JAMES WELLS, artist, was born in Boston, July 16, 1843. In the winter of 1895-96 he gave exhibitions of pastel "translations" in New York and Boston.

CHANDLER, WILLIAM EATON, lawyer, was born in Concord, N. H., Dec. 28, 1835. On Jan. 16, 1895, he was re-elected United States Senator from New Hampshire for the term ending March 3, 1901; and on the organization of Congress in December, 1895, he was appointed chairman of the committee on census,

and a member of the committees on immigration, interstate commerce, naval affairs, post-offices and post-roads, and privileges and elections. On Dec. 18, 1895, after the passage of the Venezuela Commission bill, he introduced a bill to appropriate \$100,000,000 to procure 1,000,000 infantry rifles, 1,000 field guns, and not exceeding 5,000 guns for fortifications; and on Jan. 17, 1896, he offered a substitute for the Free Coinage bill (see CLEVELAND, GROVER), providing that any person may deposit in any money-order post-office \$100 and receive therefor a receipt acknowledging that there is due to him or his order a postal savings note, drawing interest from date of deposit.

CHANLER, MRS. AMELIE RIVES, authoress, was born in Richmond, Va., in 1863; married to John Armstrong Chanler in June, 1888. She was divorced from him in 1895, and in 1896 was married to Prince Pierre Troubetzkoi, of Russia. She published *A Damsel Errant* (1897).

CHANLER, WILLIAM ASTOR, explorer, was born in New York in 1866, grandson of John Jacob Astor. In June, 1894, he returned to New York from his second expedition into Africa, having been absent on this journey about three years. In January, 1896, he was working on a history of his travels.

CHARITY ORGANIZATION SOCIETY, New York, organized in 1882, to secure associated and concurrent action by the charitable activities of the city. President, Robert W. De Forest; general offices, United Charities Building, 105 East 22d Street. The annual report for 1894 showed an increase of \$43,119.29, and expenses, \$43,103.01. The permanent funds amounted to \$46,878.76, of which \$3,135.72 is invested in the Wayfarers' Lodge and woodyard opened in 1893. Over 14,000 persons applied for assistance to the central bureau, besides applications at the 4 district offices. The society has printed circulars and cards giving information to the charitable how to make their charity most effective; and in 1895 it published the *New York Charities Directory*, a small volume of 500 pages, describing briefly the society's work, and also that of all the public charitable agencies of New York.

CHARLESTON, city, port of entry, capital of Charleston county, S. C.; population (1890) 54,955; (1894) local estimate 65,000. In the commercial year ending Aug. 31, 1895, the total trade of the city was \$67,246,348, a decrease of \$4,073,354 from the total of the previous year, caused by the depression in the phosphate and fertilizer business and the low prices in the cotton market. The foreign trade showed, exports, \$10,783,239, and imports, \$648,321, a decrease of \$2,160,478 in the former, and an increase of \$41,804 in the latter. Among the receipts were upland cotton, 420,169 bales; phosphate rock, crude, 276,778 tons; lumber and cross-ties, 81,908,589 ft.; rice, 67,390 bbls.; rosin, 74,492 bbls.; domestic cotton goods, 88,428 bales; and fertilizers, 160,000 tons. The upland cotton had a value of \$12,605,070; domestic cotton goods, \$4,634,540; fertilizers, \$2,000,000; phosphate rock, crude, \$1,107,112; lumber and cross-ties, \$983,983; rice, \$808,680; and sea-island cotton, \$457,555. The wholesale and retail trade aggregated \$29,159,900. Manufacturing industry was represented by 405 establishments, which had a capital investment of \$12,077,000, employed 6,858 persons, and had an output valued at \$16,882,000. The principal branches, according to value of output, were the manufacture of fertilizers, \$4,265,000; rice mills, \$1,000,000; contractors and builders, \$1,000,000; saw and lumber mills, \$850,000; sash and blind factories, \$850,000; cotton factories, \$700,000; flour and grist mills, \$700,000; and bakeries, \$675,000. Of the total receipts of upland cotton (420,169 bales), 337,396 bales were shipped to

foreign ports and 66,783 bales to coastwise ports; and of the total sea-island cotton receipts, 4,481 bales were shipped to foreign ports and 1,424 to Northern domestic. The total receipts of naval stores were 11,959 casks of spirits, and 74,492 bbls. of rosin, and exports were, spirits, 8,270 casks; rosin, 32,371 bbls. Of lumber, timber, and cross ties, there were shipped, chiefly to domestic ports, 74,908,589 ft., an increase of 13,994,356 ft. in the year. The fruit and vegetable industry is developing rapidly, though the severe frost which extended into Florida caused considerable loss in the year. Records of shipment show, berries, 372,668 qts., value \$175,000; potatoes, 58,153 bbls., value, \$325,000; and vegetables, 283,134 crates, value, \$1,500,000—total, \$2,000,000, a decrease in value of \$200,000, wholly in vegetables.

The financial condition of the city on Jan. 1, 1895, was as follows: Income, \$649,270.04, surplus from previous year, \$18,032.67—total, \$667,302.71; expenditures, \$652,557.33; surplus for 1895, \$14,745.38. The bonded debt was \$3,851,200; assessed valuations, real estate, \$16,685,232, personal property, \$6,636,770—total, \$23,322,002. The personal property included merchandise, money, and credits pertaining to business of merchants, \$1,799,258; returns of banks, \$1,341,580; materials, machinery, etc., of manufacturers, \$922,602; and stocks and bonds of persons and companies and corporations other than banks, \$825,921. At the post-office the receipts from postal business were \$93,190.52; receipts and payments of money-orders aggregated \$917,000; and the total receipts and payments were \$1,010,190.52. There were 2 national banks (capital \$450,000), 2 State banks (capital \$142,500), 7 savings banks (capital \$395,000), 4 banking and trust companies (capital \$430,000), a private bank; 14 local building and loan associations into which a total of \$725,939 had been paid; and 3 daily, a semi-weekly, 3 weekly, and 2 monthly periodicals. The educational institutions included the College of Charleston, the South Carolina Military Academy, the Charleston Medical school, the Medical College of the State of South Carolina (in which the College of Pharmacy has been re-established), and the Porter Military Academy. The high school has been provided with a much needed annex. The charitable and correctional institutions include the Charleston Orphan Asylum, City Almshouse, Ashley River Asylum, City Hospital, St. Xavier Infirmary, Catholic Female Orphan Asylum, Catholic Male Orphan Asylum, William Easton Home, Caroline Wilkinson Home, Church Home, Confederate Home, House of Rest, St. Philip's Church Home, Sailors' Home, Sheltering Arms Day Nursery, and the Riverside Infirmary, the Jacob Washington Franke Lutheran Home, provided for by the will of C. D. Franke, is about to be established. There are three street railways, operating in all about 30 miles of track. The city has purchased 500 acres of land on Cooper River, 5 miles from the center of the city, for a public park, and will construct a connecting boulevard 100 ft. wide. In 1896 the assessed valuations were: Real estate, \$12,887,709; personal, \$5,789,097—total, \$18,676,806; tax rate, \$38 per \$1,000. The total bonded debt Jan. 1, 1897, was \$3,827,700. Under the new constitution of the State the municipal debt is limited to 8 per cent. of the assessed valuation. The commerce of the fiscal year ending June 30, 1897, was imports, \$983,113; exports, \$10,872,026, a gain in a year of \$480,816 in imports, and \$2,374,294 in exports.

CHARLOTTE, city, capital of Mecklenburg county, N. C.; population (1890) 11,557; (1895) estimated 17,000. In 1896 it had a valuation assessed at about one-half actual value of \$5,700,000, and tax rate of \$20.85 per \$1,000; and on Jan. 1, 1896, a total debt of \$175,000. The bonded debt, limited by the charter to \$500,000, was incurred principally for funding and street and sewer purposes.

There are 3 national banks (capital \$675,000), a private bank; an electric street railroad; and 2 daily, 9 weekly, and 3 monthly periodicals.

CHARTERHOUSE SCHOOL, an English public school, founded in London, 1611; but removed in 1872 to Godalming, Surrey. Many of the most eminent of English writers were students at this school. In 1895 it had 60 scholarships tenable in the school, with 10 vacancies annually. There were 21 exhibitions to the universities, each worth \$400 a year for four years. Instructors in 1896, 35; students 500; chairman, the Archbishop of Canterbury; head master, Rev. W. Haig Brown, LL.D.

CHASE, WILLIAM MERRITT, N.A., painter, ex-president of the Society of American Artists, was born in Franklin, Ind., Nov. 1, 1849. He has been for many years instructor in the Brooklyn Art School; but in January, 1896, he obtained leave of absence; closed his studio in New York, selling the many and valuable pictures and other objects of art which he had collected during twenty years; and went with a class of art-students to Madrid, to open there a studio for his students.

CHATHAM, an English town, 25 miles southeast of London. Its royal dockyard, founded by Queen Elizabeth, contains extensive docks, wharves, and mills. During 1895 there were launched here the first-class battleship *Victorious*, and the second-class cruiser *Minerva*; and the barbette ship *Magnificent* was in process of completion. The salaries allowed to the officers in charge in 1896 amounted to £31,547. Superintendent Hilary Gustavus Andoe, C.B. Chatham is also the seat of an important school of military engineering; the allowance for which in 1896 was £16,337. Commandant, Col. Sir John Charles Ardagh, K.C.I.E.

CHATTANOOGA, city, capital of Hamilton county, Tenn.; population (1890) 29,100; (1896) estimated 45,000. In 1896 the assessed valuations were: Real estate, \$10,000,000; personal, \$2,000,000—total, \$12,000,000; city tax rate, \$16.50 per \$1,000; total tax rate, \$28.50. The bonded debt, Feb. 1, 1897, was \$931,000; sinking fund, \$93,000; net debt, \$838,000; chiefly incurred for funding and street and sewer purposes. There are 3 national banks (capital \$650,000), 2 savings banks (capital \$150,000), a trust company (capital \$225,000), a private bank; a street railway connecting all the steam railways entering the city (sold under foreclosure in June, 1895), a steam road to Lookout Mountain, an electric railway, a north side street railway, and an incline and narrow-gauge road; and 2 daily, 1 semi-weekly, 5 weekly, 2 semi-monthly, and 4 monthly periodicals. The Chickamauga and Chattanooga National Military Park, laid out by the Federal government for a memorial of the great battles of the civil war fought in the vicinity of these cities, and ranking next in extent to that of Gettysburg, Pa., was dedicated with ceremonies in both cities on Sept. 1 and 20, 1895. The Federal and State governments have expended \$1,500,000 in acquiring ground, preserving lines, and erecting monuments on the battlefields of Lookout Mountain, Chickamauga, and Missionary Ridge.

CHAUTAUQUA SYSTEM OF EDUCATION, founded in 1878, in connection with a Sunday School assembly at Chautauqua, N. Y. In 1895-96 it included the following departments:

1. The Chautauqua literary and scientific circle, a system of home reading, for which are published a series of 5 books each year and the *Chautauqua Magazine*; the completion of the required reading being recognized by a diploma, and further special reading by "seals" added to the diploma. The enrolled readers in 1895 were over 225,000.

II. A system of 54 summer assemblies in different parts of the country, of which that at Chautauqua is the type. The Chautauqua assembly of 1895 was held continuously from June 29 to Aug. 26; and included 17 courses of lectures, and 143 other lectures, on literature, art, science, sociology, the Bible, history, biography, pedagogy, and other topics; conferences on philosophy, missions, and other themes; and sermons and religious meetings on Sundays.

III. A system of collegiate instruction, mainly by correspondence, under many able and distinguished teachers, under the general superintendence of President W. R. Harper of Chicago University, with courses in Latin, Greek, German, French, Spanish, Italian, English, mathematics, history, political economy, mental and moral science, physics, chemistry, astronomy, geology, biology, and mineralogy. Chancellor, Bishop John H. Vincent; executive secretary, John H. Daniels, Chautauqua offices, Buffalo, N. Y.

CHAUX-DE-FONDS, town, canton of Neuchâtel, Switzerland; noted for its manufactures of watches; population (1893) 27,511. In the quarter ending Sept. 30, 1895, the exports declared here for the United States aggregated in value \$261,915.18, principally watches and watch materials (\$228,650.89), asphaltum, and absinthie.

CHAVANNES, PIERRE CECILE PUVIS DE, decorative painter, was born in Lyons, France, Dec. 24, 1824. In 1894 he painted a series of decorations for the Prefect's Staircase in the Hotel de Ville, Paris, the ceiling representing *Victor Hugo Offering his Lyre to the City of Paris*, while allegories of *Patriotism, Charity*, etc., fill the ten pendentives. In 1895 he painted a great panel which decorates the main staircase of the New Public Library in Boston, Mass.

CHEFOO, city and treaty port; province of Shantung, China; population (1890) 33,500; (1895) estimated, city 40,000, with suburbs 60,000. As a commercial center the city is growing in importance rapidly. Four great banking institutions and 25 steamship companies have connections here, and the annual clearances at the custom-house average 1,000 steam and 1,900 sailing vessels. Over 3,000 native junks have business with the port. The city has a deep harbor, exposed in winter to the gales and monsoons of the Yellow Sea, and protected by two small modern forts armed with Krupps. Most of the foreign population—about 300—are missionaries and their families, of whom the American Presbyterians have 32; American Southern Baptists, 15; and American Swedish Baptists, 3. United States Consul-general Jernigan, reporting from Shanghai on April 10, 1895, on the trade relations of China as affected by the war with Japan, stated that the fluctuations at Chefoo were decidedly marked, especially in importations, and that the export market was in better condition. Ratifications of the treaty of peace between China and Japan were exchanged here May 8, 1895.

CHELSEA, city, Suffolk county, Mass.; population (1890) 27,909; (1895) State census, 31,295; gain in 10 years, 5,586. In 1896 the assessed valuations were: Real, \$20,528,550, personal, \$2,384,544—total, \$22,913,094; tax rate, \$16.80 per \$1,000; and in 1897 the funded debt was \$810,000, water debt, \$300,000, and special loans, \$139,700—total, \$1,249,700; sinking fund, \$201,701, net debt, \$1,047,999. There are 2 national banks (capital \$400,000), a co-operative and 2 savings banks, and a daily and 2 weekly newspapers.

CHELTENHAM COLLEGE, Gloucester, England, founded in 1841; incorporated in 1894. It had in 1897 classical, military and civil, and junior departments. There are numerous scholarships. Instructors, 41; students, 610. Headmaster of the modern school, W. M. Baker, M.A.

CHEROKEES, a tribe of American Indians, formerly living on the Tennessee and Savannah rivers, but mainly removed in 1838 to Indian Territory. Since a portion of their lands was included in 1893 in Oklahoma Territory, they have occupied the northeast corner of Indian Territory; area, 3,844,712 acres; capital Tahlequah; population, by their official census in 1892, 27,215, of whom 14,588 could read and 13,627 write; but in January, 1896, their population was reported 22,000 Indians, 5,000 negroes, and 30,000 whites. In 1893 they were paid in United States obligations for four-fifths of the Oklahoma lands, and in January, 1894, their national council sold these obligations, amounting in value to \$6,640,000, to R. T. Wilson & Co., of New York, the highest bidder for them. The balance, amounting to \$2,300,000, was paid by the United States to the treasurer of the Cherokee nation, and after much dispute its distribution was by agreement in December, 1895, left to the settlement of the Court of Claims. The United States commission, of which ex-Senator Dawes was chairman, visited the Cherokees, and other civilized tribes in 1894 and 1895 with proposals of allotment of their lands in severalty, and dissolution of the tribal relation. These proposals were considered in convention by the Indians in February, 1895, but not accepted by them; the Indians complaining that their territory was illegally invaded by multitudes of white men, who made continual disorder and in any allotment of lands would steal away a large share.

CHESTER, city, Delaware county, Pa.; population (1890) 20,226; (1894) estimated 25,000. In 1894 the assessed valuations were: Real, \$10,314,852, personal \$565,170—total, \$10,880,022; total tax, \$10 per \$1,000; total valuations in 1895, \$11,241,480; the total debt Jan. 1, 1895, was \$471,800. In 1897 there were 3 national banks (capital \$700,000); a traction company controlling all the street railways in the city and operating about 30 miles of track; and 3 daily, a monthly, and 2 weekly periodicals.

CHEYENNE, city, capital of Laramie county, and of the State of Wyoming; population (1890) 11,690; (1897) estimated 11,500. In 1896 the assessed valuation was \$3,000,000, value of city property, \$750,000; State tax \$5.85 per \$1,000, county tax \$11.90, city tax \$7, average school tax \$7.20; and Jan. 20, 1897, the total debt, including a water debt of \$192,500, was \$252,500. There are 2 national banks (capital \$400,000); the workshops of the Union Pacific railroad; valuable lignite and iron mines; and 2 daily and 2 weekly newspapers.

CHICAGO, city, capital of Cook county, and metropolis of Illinois; second city in population of the United States; area 189 square miles; population (1890) 1,099,850; (Jan. 1, 1896) estimated 1,750,000.

Finances.—On Dec. 4, 1895, Mayor Swift made a public statement to the effect that in view of the low condition of the city treasury the city authorities had been compelled to issue warrants in anticipation of taxes already levied. He reported the combined bonded debt of the city of Chicago, the sanitary district of Chicago, and the county of Cook at \$33,359,450, with an annual interest charge of \$1,581,863.50. The net revenues of the city from its municipal property alone, excluding the proceeds of taxes and licenses, exceeded by over \$1,000,000 the interest on the combined bonded debt. The principal items of this revenue are receipts from the waterworks above operating expenses and rentals of real estate owned in fee simple by the city, much of which is in the heart of the business district. Papers were then being prepared for a suit against every street-car company in the city to compel the payment of \$50 for 1895 and all arrears since 1881 from each company and for every car in use. If this suit, brought under an ordinance of 1881, should be successful, the city treasury would receive about

\$2,500,000. The assessed valuations of the city in 1895 were: Real estate, \$192,498,842; personal (including railroad property, \$13,713,112), \$50,977,983—total, \$243,476,825; and the tax rate for city purposes \$47.60 per \$1,000. The debt of the city proper on Jan. 1, 1897, was \$17,078,950, and sinking funds held \$1,205,952, making the net debt \$15,872,998. The sanitary district, which includes practically the entire city and much of the towns of Lyons and Cicero, had a bonded debt in March, 1896, of \$11,950,000. Of the bonds of the city due in 1895 there were \$322,000 Hyde Park water, 7s., Jan. 1; \$120,000 town of Lake water, 5s., April 1; and \$100,000 city, 6s., \$1,263,000 river improvements, 7s., \$13,000 sewerage, 7s., and \$1,485,000 water, 7s., all July 1. Those due in 1896 were \$9,000 Hyde Park water, Jan. 1; and \$86,000 streets, 6s., and \$1,000, tunnel, 7s., all July 1. The city owns the waterworks plant which has cost \$25,336,659, and other property making an aggregate of \$56,849,412. In 1897 there was a floating debt of \$4,525,567, and the water debt was \$4,202,000. During 1896, \$1,072,280 was paid on the floating debt.

Banking.—On Sept. 28, 1895, there were 21 national banks in the city which had a combined capital of \$20,900,000; 9 State banks (capital \$3,497,000); 10 loan and trust companies (capital \$8,300,000); 2 branches of Canadian banks (home capital \$13,500,000); and 14 private banks. The national banks held \$1,650,000 in United States bonds, an excess of \$600,000 beyond legal requirement; loans and discounts, \$93,032,874; coin and coin certificates, \$20,105,993.05, of which \$14,906,492 was in gold coin; deposits, \$97,156,616; and reserve, \$29,206,214, or 5 per cent. more than required, consisting of specie, \$20,105,993; legal tenders, \$7,638,221; United States certificates of deposit, \$1,390,000; and redemption fund in the United States treasury \$72,000. The operations of the United States clearing-house in 1894 aggregated \$4,263,560,459; in 1895, \$4,541,435,624—increase: \$277,875,165.

Commerce.—The foreign trade of the port in the fiscal years ending June 30, 1894, 1895, and 1897, was: 1894, imports \$15,485,838, exports \$3,610,226; 1895, imports \$15,053,146, exports \$1,558,069; 1897, imports \$11,527,552, exports \$2,309,549, the last a decrease in a year in imports of \$4,018,267, and an increase in exports of \$1,016,476. Shipping entrances at the custom-house in 1894 were 50 sailing vessels of 17,389 tons and 41 steam vessels of 27,046, and clearances, 134 sailing vessels of 61,642 and 170 steam vessels of 137,977; and entrances in 1895, 21 sailing vessels of 6,194 and 8 steam vessels of 4,545, and clearances, 49 sailing vessels of 18,340 and 84 steam vessels of 72,144. The winter grain fleet was completed in December, 1895, and numbered 121 steamers and 69 schooners and barges, valued together at over \$20,000,000. The fleet was too large to find room in the Chicago River, hence a large number of boats was taken to South Chicago to await the opening of navigation. The increase in the capacity of the winter grain fleet has been as follows: 1890, 8,478,000 bush.; 1893, 11,289,000; 1894, 12,720,000; and 1895, 13,202,000. Estimates of the value of the probable cargoes of the 1895 fleet reached upward of \$6,000,000, and of insurance premiums about \$50,000.

Elevated Railway.—The formal opening of the Metropolitan West Side Railway in May, 1895, marked an era in street railway transit not only in Chicago but in the country, for it was the first application of electricity to the movement of elevated railway trains. The entire length of the road with its four branches is nearly 18 miles, the main line being four-tracked and each of the branches double-tracked. Up to the time of opening, the road had cost about \$25,000,000, of which over \$6,500,000 was spent in the purchase of land. While capitalized

at \$15,000,000 and having a charter right to increase its bonds to \$30,000,000, only \$12,500,000 of stock has been issued, and that is held by New York and Boston capitalists. The road is operated with trains of from two to five cars, one of which is a combination of motor and smoking car, according to the time of day or night, and the current is taken from a special third rail, and runs back to the power-house by the regular rails.

Sewage Canal.—Work on this great engineering and sanitary scheme is progressing as rapidly as its novel features will permit, and its completion in 1897 was promised. It will be 30 miles long and cost at the rate of about \$1,000,000 per mile. The original purpose was to provide an effective method of draining the sewers of the city. The canal proper will be 28 miles long, or 30 miles with its terminal connections, and of the total length 10 miles are cut through solid rock, in some places to a depth of 36 ft.; 10 miles through bed rock underlying boulder clay; and 10 miles through river muck and glacial drift, to a maximum depth of 38 ft. The rock cut is 160 ft. wide, with vertical sides; the clay cut, 210 ft. wide at the bottom, with sides sloping outward; and the muck stretch, 110 ft. wide on the bottom, with sloping sides. The minimum depth of the entire canal will be 22 ft. Work has been in progress since 1892. In 1895 the river section was finished and the main drainage channel was under contract for its entire length, from its confluence with the Chicago River at Robey Street to Lockport, Ill., 28 miles southwest of Chicago. Over \$10,000,000 had been expended on Jan. 1, 1895. The work is being carried on by the Sanitary District of Chicago, before mentioned, and not by the city government. The projectors believe that in time the Federal government will construct the necessary link from Lockport to La Salle, 65 miles, and from La Salle to the mouth of the Illinois River, 220 miles, and, by improving the part now under construction, make the whole work a ship-canal navigable by at least the largest mercantile vessels.

Intercepting Sewer.—In February, 1898, the city council adopted final plans for a system of intercepting sewers, to cost \$5,000,000. The ordinance as adopted authorizes the commissioner of public works to have plans drawn and solicit bids for the construction on the south side of the city of a twenty-foot conduit or sewer in Thirty-ninth Street, from Lake Michigan to the Halsted-Street slip, and in Lawrence Avenue, on the north side, from the lake to the north branch of the river. It also authorizes him to make a contract with the officials of the Sanitary District of Chicago for the transfer of the sewer-pumping stations, and all other apparatus, as well as the intercepting sewers, when they are completed, to that body, on condition that the sewers be forever maintained by the Sanitary District. The object of the intercepting sewers is to divert all the sewage of the city into the river, whence it is to flow into the drainage canal, and thus prevent the pollution of the lake by the emptying of sewers into it, as now happens in a number of instances.

Public Library.—The new public library building was dedicated on Oct. 9, 1897. The entire structure cost nearly \$2,000,000. Ground was broken for the building in 1892, and the cornerstones were laid May 30 and Nov. 27, 1893. Henceforward the library will receive an annual revenue of about \$240,000 for general purposes. The new library building is bounded by Randolph Street and Michigan Avenue on the north and east, and by Garland Court, or Place, and Washington Street on the west and south. The main entrances are on Randolph and Washington Streets. The building may be said, in general, to be five stories high, including the ground floor, the entresol floor and the mezzanini floor.

Confederate Monument.—A monument erected in Oakwood Cemetery to the memory of the Confederates who died in Chicago prisons during the civil war, with funds chiefly subscribed by Union soldiers, was dedicated on May 30, 1895, a large number of Grand Army men and Confederate veterans taking part in the exercises. The orator of the day was Gen. Wade Hampton, and an interesting feature of the ceremony was the placing and spiking of four cannon which had been captured from the Union Army at Murfreesboro, used by the Confederates in several battles, and recaptured by the Union Army at the battle of Nashville.

Fort Sheridan.—The newly established United States military post on Lake Michigan, though 25 miles north of Chicago, is regarded as one of its prime attractions. The reservation is connected with the city by the picturesque Sheridan Drive, is on the line of the Chicago and Northwestern railway, and comprises a tract $1\frac{1}{2}$ miles long by from $\frac{1}{2}$ to $\frac{3}{4}$ mile wide. In 1895 there had been erected 98 buildings on the reservation, including a barracks building 1,005 ft. long by 60 ft. wide, from the center of which rises a water-tower to a height of 226 ft. The permanent garrison consists of about 800 men; but in the summer of 1894, over 2,000 men were stationed there for several weeks because of the railway strikes.

McCormick Seminary.—On May 2, 1895, the board of directors of the McCormick Theological Seminary rejected the proposition of the General Assembly of the Presbyterian Church for a surrender of the property and control of that institution. This action was a culmination of a prolonged controversy regarding the control of property valued at \$9,000,000.

Political Changes.—The municipal elections on April 2, 1895, resulted in a complete political overturn and the success of almost the entire Republican ticket. George B. Swift, the Republican candidate for mayor, was elected by a plurality of over 41,000 votes over Frank Wenter, the Democratic candidate; Dr. Holmes, the Populist candidate, receiving about 14,000 votes. Adam Wolf was elected city treasurer by 44,288 plurality; J. R. R. Van Cleave, city clerk by 44,643 plurality; and Roy O. West, city attorney by 21,309 plurality. The civil service law was adopted by a majority of 45,570, and of 22 aldermen elected 18 were Republicans, 2 Democrats, 1 Independent Democrat, and 1 Independent Republican. The majorities showed a change of 70,000 votes since the last presidential election. The vote in April, 1897, was as follows: Carter H. Harrison (Dem.), 144,828; J. M. Harlan (Ind.), 67,072; N. C. Sears (Rep.), 57,566; W. Hering (Business Administration), 15,116; John Glenbeck (Soc.-Lab.), 1,226; H. L. Parmlee (Pro.), 852; J. I. Pearce, Jr. (Ind.), 686; P. Howard Collier (Ind.), 88. Total, 287,434. Harrison's plurality, 77,756. Harrison's majority over all, 2,222. Complete returns from all the wards showed the election of 23 Democratic aldermen, 6 Republicans, and 5 Independents. As a result, the Democrats secured a majority of 8 in the council.

CHICAGO, UNIVERSITY OF, Chicago, Ill., non-sectarian; co-education; incorporated in 1890. It included in 1897 collegiate and post-graduate schools, and the Baptist theological seminary at Chicago; and the Yerkes Astronomical Observatory erected in 1891 at Geneva Lake, Wis. At the close of 1897 it had 175 professors and instructors; 2,132 students in all departments; 330,870 volumes in the library; \$2,660, invested in grounds and buildings; \$340,000 in scientific apparatus and library; \$5,000,000 in productive funds; \$2,200,000 in gifts (1896); \$639,918 in income; president, William R. Harper, Ph.D., D.D.

CHICOPEE, city, Hampden county, Mass.; population (1890) 14,050; (1895) State census, 16,427; gain in 10 years, 4,911. In 1896 the assessed valuations

were: Real, \$6,364,910; personal, \$2,428,320—total, \$8,793,230; tax rate, \$17.30 per \$1,000; and March 1, 1897, the net debt, including water debt of \$302,000, was \$619,250. There are a national bank (capital \$150,000), a savings bank, a daily newspaper and manufactories of cotton, worsted, and cloth goods and bicycles.

CHIHUAHUA, a State in Mexico; also capital of the same; population (1893) estimated, State 298,073; town 12,000. In the nine months ending Sept. 30, 1895, the exports declared at the town for the United States aggregated in value \$1,681,367.12, principally silver bullion (\$475,583.90), silver ore (\$413,752.78), gold bullion (\$349,409.28), and silver and lead mixed (\$304,707.96).

CHILE, a republic in South America; capital, Santiago; president (Dec. 26, 1891-Dec. 26, 1896), Jorge Montt; 1896-1901, Señor Errazuriz; population (1885) census, 2,527,320; (1894) official estimate, 2,963,687. After the passage by Congress of the Conversion act of 1892, under which it was proposed to change the currency from paper to gold at the rate of 48 cents on the dollar on July 1, 1896, the government accumulated metal to meet the change, which will affect 46,459,364 pesos (about \$42,370,939). In 1894 the government sold some of its nitrate beds for about \$5,500,000, and estimate the value of those remaining at nearly as much more. The Congress elected that year approved the plan for the resumption of specie payments, and the conversion fund then amounted to \$11,700,300. In April, the commission appointed to adjudicate the claims of citizens of the United States against the Chile government and of citizens of Chile against the United States government completed its work, awarded upward of \$250,000 to citizens of the United States, and left eighteen United States and two Chile claims undecided. An arbitration tribunal met in Santiago in October, to pass on claims of British subjects growing out of the civil war of 1891; and a claim brought by the French government against Chile, in behalf of a French commercial house, was referred to the Swiss Federal Court for arbitration. In 1895 the national capitol was entirely destroyed by fire, together with the library and archives, on May 18. The Liberal ministry was defeated and resigned July 6, whereupon its opponents unavailingly attempted to injure the success of the Conversion act. A Liberal Radical cabinet, organized soon afterward with Señor Recabarren as premier and Señor MacIver as minister of finance, resigned Oct. 17 because three of its members could not agree to the proposals of the minister of finance. A cablegram of Nov. 27 announced the government's choice of the following ministry: Minister of foreign affairs, Adolfo Guerrero; interior, Oswaldo Renjifo; finance, Hermojenes P. Arce; justice, Gaspar Toro; war and naval Affairs, Barros Borgono; and public works, Fernandez Albano. The ministry declared that its policy would be one of firm restraint in respect to the approaching presidential election, and that it would not interfere with candidates of whatever political complexion. On Dec. 13, \$1,300,000 in gold was shipped to Europe for interest payments. The government proposed negotiating a new loan in London of \$32,500,000, but the Liberals agreed to support a measure voting a loan of \$20,000,000 instead. The matter was compromised, and in July, 1896, the government secured a new 5 per cent. loan in London, amounting to \$20,000,000. Financial returns of 1895-96, the latest available, show: Revenue, including a surplus from the previous year, £7,601,276, (\$17,994,499); expenditure, £7,002,000; imports, £11,729,777; exports, £11,773,574. In 1896 the external debt was reported at £17,540,000 and the internal at £6,600,000—together, £24,140,000. At the opening of Congress in May, 1897, the president estimated the revenue of the year at \$76,000,000, and the expenditure at \$82,000,000. A government decree of November, 1895, fixed the strength of the standing army at

9,000 men; the navy at 14 war vessels and 12 torpedo boats; and the naval contingent at 4,000 men. A general election in March, 1897, resulted in the return of a government majority, somewhat reduced from its former strength, viz.: Conservatives, 26; Liberal Errazurists, 20; Democrats, 23; Radicals, 16; and Alliance Liberals, 9. The government majority was composed of the Conservatives, Alliance Liberals, and Liberal Errazurists.

CHILLICOTHE, city, capital of Ross county, O.; population (1890) 11,288; (1895) estimated, 14,000. In 1896 it had an assessed valuation—about one-half actual value—of \$5,264,090, and total tax rate \$27.20 per \$1,000; and Nov. 15, 1896, a total debt in refunding gold bonds of \$100,000, of which 6 bonds may be redeemed each year for 7 years beginning Dec. 1, 1902; 7 each year for 6 years beginning Dec. 1, 1909; and 8 on Dec. 1, 1915. In 1897 there were 3 national banks (capital \$400,000), and 3 daily and 4 weekly newspapers.

CHILTON, HORACE, lawyer, was born in Smith county, Tex., Dec. 29, 1853. He was appointed a United States Senator from Texas to fill a vacancy in April, 1891; failed of election when the legislature met; and was elected Jan. 23, 1895, for the term ending March 3, 1901. On the organization of Congress in December, 1895, he was appointed a member of the committees on civil service and retrenchment, claims, Indian affairs, interstate commerce, and national banks (select).

CHINESE EMPIRE, an empire in Eastern Asia, of which China proper forms the southeastern portion and is about one-third of its whole extent; emperor Kwangsu; capital and metropolis, Peking; population (1895) estimated, China proper, 386,853,000; with dependencies, 403,533,000.

Commerce.—Of its financial condition and interests nothing is known to foreigners, its commercial returns only being made public. Its monetary transactions are expressed in taels, of which there are several kinds, and all fluctuate in value in comparison with foreign money. This leads to much confusion in converting sums of Chinese taels into foreign equivalents. In the present instance the Haikwan or customs tael is considered the unit, and its equivalent in United States money as 80 cents, an average between the extremes of 84.9 and 74.9 of 1894-95. According to the official customs returns for 1894, foreign trade showed a steady increase despite the war with Japan, drought in the south, floods in the north, the plague at Canton which involved quarantine at most coast ports, and the destruction of rice and sugar crops by typhoons. The increase was noted in every branch of trade, with the exception of Indian opium and the importation of wool. The total imports were reported at 162,102,911 Haikwan taels (\$129,682,328); exports, 128,104,522 (\$102,483,617)—total, 290,207,433 (\$232,165,945). The custom receipts were 22,532,600 taels (\$18,018,880), a sum never exceeded excepting in 1891. The imports from the United States aggregated 9,263,082 taels (\$7,410,465), and the exports thereto, 16,442,788 (\$13,154,230)—total value of trade, \$20,564,695; total trade with Great Britain, \$33,154,906; with Russia, \$9,665,529; and with all other Europe, \$19,911,740. The United States, Great Britain, and the coast ports of China also shared in the trade of Hongkong, where the imports amounted in value to 82,424,351 taels; exports, 50,793,504—total, 133,217,855 (\$106,574,284). Of the foreign vessels entering and clearing at the treaty ports, the number carrying the United States flag was 107 of 129,127 tons; British, 20,521 of 20,496,347 tons; French, 293 of 34,829 tons; and German, 2,429 of 1,983,605 tons. There were then eight steamship companies engaged in the passenger traffic with China, three from the United States, two from Great Britain (one from Canada), and one each from France, Ger-

many, and Austria. Under the treaty with Japan, the ports of Chungking, Hangchow, Soochow, and Sha-tze, were opened to the commerce of the world in 1895. In the fiscal year ending June 30, 1897, the United States imported from China merchandise valued at \$20,403,862, and exported thereto merchandise valued at \$11,924,433, an increase in exports and a decrease in imports in a year. The foreign population in 1895 was 9,350, of whom 3,889 were British and 1,294 Americans. China had no foreign debt till 1874, and from that year till the beginning of the war with Japan, six loans were made, aggregating about \$45,000,000. To pay the war indemnity to Japan, \$160,000,000, and the further sum of \$24,000,000 for the return of the Liao-Tang peninsula, loans were negotiated in 1895 with Russian and French capitalists, for how much is not definitely known. No statement has been made of the cost of the war otherwise, though an English authority estimates the total at about \$250,000,000. In 1897-98 China attempted to negotiate a new loan of \$80,000,000. Great Britain, France, Germany, and Russia undertook to supply it, and a great rivalry sprang up between these governments under the belief that whichever supplied the money would gain a controlling advantage in the political and commercial affairs of China. In February, 1898, it was announced that China had arranged the loan with Great Britain.

War with Japan.—In the spring of 1894 an insurrection broke out in Korea; the Chinese government sent a force of 2,000 men into the country to suppress it; the Japanese government protested against this act as a treaty violation, sent a force of 5,000 men there in June, and attempted to reform the local government. Both Korea and China called on the Japanese to withdraw their troops; the requests were refused; China invoked the aid of Russia; and on June 25, the European representatives in Korea demanded the withdrawal of both the Chinese and Japanese forces. In July the Korean government repudiated the reform scheme; on the 21st the Japanese gave the king twenty-four hours in which to sever all relations with China; and no answer being received took possession of the royal palace, made the king a prisoner, and forced him to appoint a regent to carry out the reforms. Russia, Great Britain, and the United States attempted mediation without avail. China demanded that Japan should withdraw her troops and fleet by July 20, otherwise China would begin operations by land and sea. No attention being paid to the demand, China sent war vessels and transports with 12,000 troops to Korea, and on the 25th three Japanese cruisers met part of the Chinese fleet in Prince Jerome Gulf, where an engagement was at once opened, resulting disastrously to the Chinese. The same day there was a four-hours' engagement between other cruisers off Fontao island, with similar results. On Aug. 1 a formal declaration of war was made by the Japanese emperor, to which the Chinese emperor responded. The Japanese government requested the United States representatives to look after the interests of its subjects in China, and the Chinese asked that its people in Japan be similarly protected. During August there were several encounters between the two fleets, in which the Japanese were successful, and the latter made unsuccessful attacks on the squadron at Wei Hai Wei and on Port Arthur. The Japanese negotiated a treaty of alliance with Korea against China. In August and September the campaign in Korea was prosecuted with vigor, success uniformly following Japanese movements. A great naval battle was fought off the mouth of the Yalu River on Sept. 17, between a Chinese fleet of 12 battleships and cruisers and 4 torpedo boats, and a Japanese fleet of 12 ironclads and cruisers and 5 torpedo boats, the fighting lasting from noon till dusk, and resulting in the loss of 4 Chinese vessels and much

injury to the others. The Japanese lost no vessels, but had three badly damaged. While the Japanese continued to push operations in Korea, they also landed on Chinese territory on Oct. 24, making Port Arthur their objective point. Kin-lien-tcheng was evacuated on the 25th; Feng-huang-Tehen was occupied 31st; and the Pei Tang squadron was captured in the harbor of Port Arthur Nov. 7. On Nov. 4 the foreign representatives in China were officially informed that the government was anxious for peace and desired their aid. On Feb. 13, 1895, the remnant of the Chinese fleet that survived the battle of the Yalu was either captured or sunk at Wei Hai Wei, and on March 4 the Japanese took New Chwang. Li Hung Chang, special Chinese commissioner to negotiate peace, reached Shimodoseki on March 19; was murderously assaulted 25th; secured an armistice 29th; and concluded a treaty April 17, ratifications of which were exchanged at Chefoo May 8. Under this treaty China recognized the independence of Korea, ceded to Japan the Liao-Tung peninsula (subsequently restored), Formosa and the Pescadore islands, opened four ports to trade, agreed to pay a war indemnity of 200,000,000 taels, and made other important concessions. China paid the first installment of the indemnity in London Oct. 31, and the special indemnity of 30,000,000 taels for the surrender of the Liao-Tung Nov. 16, and reoccupied Port Arthur Dec. 21.

Internal Troubles.—In June, 1895, riots occurred at Cheng-tu and its vicinity, and in August at Ku-cheng, in both places American and British missionaries being the object of native wrath. A number of persons connected with the missions were murdered. The government ordered a strict inquiry concerning the outrages and the punishment of the guilty, but local authorities paid little attention to the orders till after the United States and British governments had appointed special commissioners of investigation. Then nearly 30 natives, said to have been implicated in the Ku-cheng massacre, were executed. In September, 1895, a rebellion broke out in the northwest province of Kansu. The rebels captured 12 cities, including the capital, defeated several imperial armies sent against them, and by Dec. 1 were masters of half of the province.

Railway Construction.—On Dec. 7, 1895, an imperial edict was issued ordering the construction of a double-track railway between Peking and Tien-Tsin, a distance of 72 miles, to cost about \$2,400,000. The same month it was announced that a syndicate of American capitalists had obtained a concession for building a railway from tide water to Peking, which would tap a valuable coal-mining region, extend about 200 miles, and cost about \$7,000,000. It was also reported in Washington that the Chinese government itself was preparing to build and control a railway for military and industrial purposes from Chin-Kiang, an important commercial city in the south, to Tien-Tsin in the north, a distance of about 700 miles. On Dec. 20 a company to operate railways, and steamship, telegraph, and telephone lines in China was incorporated at Trenton, N. J., with a capital of \$1,000,000.

CHINESE EXCLUSION ACTS, legislation by the United States Congress to restrict Chinese immigration. The first act of this character, known as the Geary Exclusion Act, was passed in 1892; was temporarily suspended in 1893; and subsequently became inoperative by the failure of Congress to appropriate funds with which to deport the Chinese liable to be sent to China under the act. By amendments, the time allowed Chinese residents to register was extended six months by the McCreary bill, passed in October, 1893. In March, 1894, a new treaty was concluded between the United States and China, under which the immigration of Chinese laborers, excepting under specified conditions, was absolutely prohibited for a period of 10 years. The treaty exempted from its opera-

tions any registered Chinese laborer, who has a lawful wife, child, or parent in the United States, or property therein of the value of \$1,000, or debts of like amount due him and pending settlement, and all Chinese subjects, other than laborers, visiting the United States for curiosity or pleasure, or residing therein. The constitutionality of the act based on this treaty was affirmed by the United States Supreme Court, May 27, 1895.

CHITRAL, a small State on the southern slope of the Hindoo Koosh mountains, northeast of Afghanistan; capital Chitral. The Mehtar, or native chief, Aman-ul-Mulk, died in 1892, and was succeeded by his second son, Afzul, who, however was soon killed and succeeded by his uncle, Sher Afzul. But the elder son of Aman, Nizam-ul-Mulk, with British aid drove out Sher Afzul, and reigned till January, 1895. He was then murdered and succeeded by his younger brother, Amir. The British agent, Mr. Robertson, went to the capital to recognize Amir, but was there besieged with him by Sher Afzul, who was aided by the powerful chief Umra Khan; and a small British force marching to his relief was cut off. The Indian government mobilized a force of 14,000, which advanced, warning Sher Afzul to retire, and promising to be withdrawn as soon as the invaders were expelled. Despite a difficult country and spirited opposition, they relieved Robertson, April 20, and captured Sher Afzul, April 27, and Umra Khan, fleeing into Afghanistan, was there arrested by the ameer. The Liberal government then proposed to evacuate Chitral; but the Conservative government, coming into power in July, decided to leave two native regiments in the country, and a brigade of three native regiments was stationed on the Malakand. Shujarel-Mulk was made Mehtar, and given a subsidy by the Indian government, and the British troops were withdrawn, Sept. 26, 1895.

CHOCTAWS, one of the five civilized tribes of American Indians. They formerly lived in what is now Mississippi, Alabama, and Louisiana, but removed to Indian Territory in 1800-30, and now occupy the southeastern part of that Territory. In February, 1894, their delegates met delegates from the civilized tribes in convention at Checotah, I. T., to consider the proposals of the Dawes commission as to the allotment of their lands in severalty. Their governor, Jones, called a convention of the Choctaw nation March 28, and in November, 1895, the Choctaw delegates in conference at Muskogee with the Chickasaws and the Dawes commission absolutely refused to allot their lands or trade away their national existence. The same month their national council passed a bill making it treason for any of their citizens to advocate such allotment, under penalty of 100 lashes and 6 months' imprisonment for the first offense, and for the second offense, death. Ex-Commissioner Thomas J. Morgan in 1895 estimated their total number at 20,000; but this did not include the whites who have illegally intruded among them. Of these all the Indians complain, and in June, 1895, the United States troops expelled a large number, transporting them near the Arkansas line.

CHRISTIAN IX., King of Denmark, was born at Luisenlund, near Schleswig, April 8, 1818; succeeded to the crown, Nov. 15, 1863. He is father of the Princess Alexandra of Wales, and the dowager Empress Dagmar of Russia; and his third son, Prince Valdemar, was in 1886 elected King of Bulgaria, but declined the position.

CHRISTIAN, PRINCE (FREDERICK CHRISTIAN CHARLES AUGUSTUS), of Schleswig-Holstein-Sonderburg, K. G., was born Jan. 22, 1831; married July 5, 1866, Helena Augusta Victoria, Princess of Great Britain and Ireland (known as the Princess Christian). He received the title of Royal Highness by command of Queen Victoria, and was made a Knight of the Garter in July, 1866.

CHRISTIAN ALLIANCE. See ALLIANCE, CHRISTIAN AND MISSIONARY.

CHRISTIAN ENDEAVOR, YOUNG PEOPLE'S SOCIETY OF, organized by Rev. Francis E. Clark, in Portland, Me., in 1881. At the international convention in San Francisco, Cal., in July, 1897, the secretary reported 5,000 new societies formed during the year, making a total of 52,000 societies, with a membership of 3,000,000. The reports from the United States gave 40,195 societies, including 18 senior societies, 33 mothers' societies, 62 intermediate companies; and 169 societies in schools and colleges, public institutions of various kinds, and prisons and schools of reform; 250 societies in the North American Union of German Christian Endeavor; 7 societies in the United States army and navy; societies among policemen, life-saving crews, and Indians; 158 floating societies; and 9,122 junior companies in the United States and Canada. The societies in the British provinces numbered 3,403, and in foreign countries, 8,402. Many societies are active collectors of money for missions, the gifts during 1896 in the United States and Canada aggregating \$425,000. The societies are active in behalf of Christian citizenship, and against lotteries and gambling, Sabbath violation, illegal liquor selling, and intemperance.

CHRISTIANIA, city, seaport, and capital of Norway; population, (1891) 151,239. During the nine months ending Sept. 30, 1895, the exports declared here for the United States aggregated in value \$292,325.73, principally wood pulp (\$160,467.81), fish (\$7,466.70), cod-liver oil, and skins.

CHRISTIANS, or CHRISTIAN CONNECTION, a religious denomination in the United States, formed by the union in 1806 of churches which separated from the Methodists in 1793, the Baptists in 1800, and Presbyterians in 1801. In 1895 they had 1,559 churches, valued at \$1,772,902, and 109,821 communicants.

CHRISTIAN SCIENTISTS, founded by Rev. Mary B. G. Eddy, of Boston, the minister of the mother church in Boston, which has a congregation of 1,000, and in 1894 completed a church building at a cost of \$220,000, Mrs. Eddy having given \$40,000 for the lot on which it stands. In 1897 there were reported 123 organized churches; 131 other places for Sunday services; 65 dispensaries for healing patients; and 1,000,000 hopeless cases healed through Christian science. The organization publishes *The Christian Science Journal*.

CHULALONKORN I., King of Siam, was born Sept. 21, 1853; succeeded his father, King Maha Mongkut, Oct. 1, 1868. In 1893-94 he displayed remarkable intelligence and dignity, though constrained to yield to French aggression, and obtained for his people the best terms of peace possible. In April, 1893, he opened the first railroad in Siam, from Bangkok to Paknan, 25 miles southeast on the Menam. The crown prince died Jan. 4, 1895, and Prince Thao Nkramar Tho was declared successor. Jan. 15, 1895, by special decree a legislative council was instituted, consisting of the ministers and at least 12 nobles, whose duty was stated to be to pass new laws with the royal sanction.

CHUNGKAING, city, second in importance in the province of Szechwen, China; one of the four new treaty ports opened under the treaty of peace with Japan in 1895. It is on the Yangtze River, 360 nautical miles from Ichang, 720 from Hankow, and 1,309 from Shanghai, and, under the treaty of Chefoo in 1877, was to have been opened to the trade of the world immediately after Ichang, but the Chinese government did not keep its promise. The province is said to be the finest and richest in the empire. Brass, copper, pewter, and white metal ware; cotton and grass cloth; glass, iron, leather, and lacquer ware; and matting and matches are the principal productions of the city. According to the

Chinese customs report of 1894, the coast trade of the city was estimated at 4,997,-688 Haikwan taels (about \$3,848,219). During 1894 more than 8,000 upward-bound native junks and more than 10,000 downward-bound ones passed the station below Chungkaing. The population of the province was estimated 1893 at 135,-000,000 and of the city at 250,000.

CHURCH HISTORY, AMERICAN SOCIETY OF, organized in 1887. The 8th annual meeting was held in Hamilton Hall, Columbia College, New York, in December, 1895. Papers were read on various biblical, theological, and ecclesiastical subjects, by Rev. Walter Laidlaw, New York; Rev. B. B. Warfield, D.D., Princeton; Rev. Prof. Thomas C. Johnson, Sidney College, Hampton, Virginia; Rev. Henry Eyster Jacobs, Philadelphia; Rev. John Nicum, D.D., director of Wagner College, Rochester, N. Y.; George H. Ferris, Union Theological Seminary, New York; and Prof. Egbert C. Smyth, D.D., Andover Theological Seminary. The society elected the following officers: President, Rev. Prof. George P. Fisher, D.D., New Haven Theological Seminary; vice-presidents, Rev. Henry M. Baird, D.D., New York University; Rev. Egbert C. Smyth, D.D., Andover; Rev. Henry E. Jacobs, Philadelphia; and Rev. C. C. Tiffany, D.D., Lancaster, Pa.; secretary, Rev. Samuel M. Jackson, D.D., LL.D.; treasurer Barr Ferree; councilors, Rev. T. W. Chambers, D.D., Bishop John Hurst, Rev. A. C. McGiffert, D.D., and Rev. H. M. MacCracken, D.D.

CHURCHES IN THE UNITED STATES. The volume of religious statistics of the United States census of 1890, issued in June, 1895, showed, besides independent churches and miscellaneous congregations, 143 denominations, 165,-177 organizations, 142,521 church buildings valued at \$679,630,139, and 20,612,-806 church members. To this may be added the net increase named in the denominational reports of 1890-94 of 17,331 churches, with 2,356,222 church members, making the number of churches in 1895, 182,508; and of church members, 22,969,028. The ten denominations in the United States having 500,000 members each are as follows, in round numbers: Roman Catholic, 6,250,000; Methodists, 4,600,000; Baptists, 3,725,000; Presbyterians, 1,280,332; Lutherans, 1,230,000; Protestant Episcopalians, 540,000.

CHURCHILL. LORD RANDOLPH HENRY SPENCER, second son of the Duke of Marlborough, was born in Blenheim, England, Feb. 13, 1849; died in London, Jan. 24, 1895.

CHURCH OF ENGLAND, the Protestant Episcopal Church established by law in England. In 1897, there were 2 archbishops, 33 bishops, 25 suffragan bishops, about 14,000 benefices, and about 23,000 clergy; in England and Wales, church accommodations, about 7,000,000 sittings; church population, about 14,000,000. Besides the regular revenues of the establishment there was raised in 1894 by voluntary means for church building and repairs, £1,422,081; for foreign missions, £572,712; for elementary education, £1,215,095; for the assistant clergy, nearly £600,000; church collections and Easter offerings, £118,000; salaries of lay helpers and church expenses, £1,120,000; and for the poor, £549,-000. There were over 12,000 church schools, with an average attendance of 1,850,000 pupils, and the subscriptions for their support aggregated £640,000; 30 training colleges for teachers; and 27 schools for children above elementary grades.

CHURCH OF GOD, a religious denomination in the United States, organized under the lead of John Winebrenner in 1830, and from him called Winebrennerians. In 1895 they had 560 church organizations, and 36,000 church members.

CHURCH OF SCOTLAND, the Presbyterian Church established by law in Scotland. In 1897 its General Assembly elected as moderator Rev. W. Mair, D.D., of

Earlston. There were reported to the General Assembly, in 1897, 16 synods; 84 presbyteries; 1,600 congregations; 1,700 ministers; 9,400 elders; and 633,000 communicants. The income, exclusive of seat-rates, bequests, tithes, and government grants, was £398,000. It had also 17 churches in England, and 4 at popular resorts on the Continent. In 1897 the queen decreed that during his year of office the moderator of the Church of Scotland should take rank with bishops of the Church of England.

CHURCH OF SCOTLAND, FREE, separated from the Church of Scotland in 1843. In 1892 its General Assembly framed a declaration of liberal interpretation of the doctrines of the Confession of Faith, and because of this 4 ministers and about 1,000 members in Skye and Inverness seceded, and formed the Free Presbytery of Scotland. In 1897 its General Assembly elected for moderator Rev. Hugh Macmillan, D.D., LL.D. There were reported to the Assembly, 16 synods; 75 presbyteries; 1,000 congregations; and 350,000 communicants; and income, £674,000. There were 3 theological colleges; and 3 normal schools for teachers. The church maintains 18 charges on the continent of Europe; and missions in India, South and Central Africa, Syria, and Arabia.

CINCINNATI, city, capital of Hamilton county, O.; population (1890) 296,908. In 1896 the assessed valuation was \$198,536,580; tax rate, \$26.40 per \$1,000. The city owns the entire stock of the Cincinnati Southern railway, for the rental of which it receives \$1,090,000 till 1901, and then \$1,250,000 till 1906, when the lease expires. On Jan. 1, 1897, the bonded debt proper (including water debt \$1,409,500) was \$28,526,000; sinking fund, \$2,574,751; net debt, \$25,951,249. There were also outstanding street bonds, not included in the debt statement because payable by special assessment, amounting to \$2,234,312. Besides the above sinking fund, all special assessment street bonds, the fund held \$1,845,796 in other bonds. The imports of foreign merchandise in the fiscal year ending June 30, 1896, were \$1,208,933, and in that of 1897, \$1,220,978. On Sept. 28, 1895, there were 13 national banks, which together had a capital of \$8,400,000; 2 State banks (capital \$300,000); a savings and trust company (capital \$500,000); a private and 2 miscellaneous banks. The national banks held \$3,462,000 in United States bonds, an excess of \$2,812,000 beyond requirement; loans and discounts, \$26,398,385; coin and coin certificates, \$1,801,374.83, of which \$1,082,756 was gold coin; had deposits \$26,791,092; and reserve \$7,468,095, or 2.88 per cent. more than required. The reserve comprised specie, \$1,801,375; legal tenders, \$1,785,113; United States certificates of deposit, \$580,000; due from reserve agents, \$3,145,817; and redemption fund with the United States treasurer, \$155,790. The operations of the United States clearing-house in 1891 aggregated \$630,364,300; in 1895, \$653,228,500— increase, \$22,864,200. In 1897 there were 11 daily, 44 weekly, 4 semi-monthly, and 39 monthly periodicals; 8 public parks; and electric and cable street railway with over 150 miles of track. Thirty-four establishments were engaged in beef and pork packing; 40 in the manufacture of bricks; and 30 in sawing and planing lumber. The city has given 40 acres of ground in the Burnet Woods for a new site for the Cincinnati University and issued bonds for new buildings. Educational reports for the school year 1895-96 showed a school population of 87,212, of whom 42,879 were enrolled in the public schools, and 34,020 were in average daily attendance. There were 63 supervising officers, 886 teachers, 69 buildings used for public school purposes, public school property valued at \$3,000,000, and expenditures, \$925,991, of which \$734,138 was for teaching and supervision.

CIVIL SERVICE REFORM, a system of classified service, with appointment and promotion by competitive examination, adopted by the United States gov-

ernment in 1883. It was reported in 1894 that the effect of the system in ten years had been gradually to increase considerably the proportion of women in the service. In 1890-91 there were appointed to the classified service 147 women and 776 men, or 1 to 5; the examination being open to men and women without distinction; and in 1891-92, 86 women to 247, or 1 to 3. Women were only 12 per cent. of those examined, but 77 per cent. passed the examinations successfully, as compared with 60 per cent. of men. The men's record, however, had improved from year to year. The report of 1895 showed that about 200,000 persons were employed in the United States civil service, of whom about $\frac{1}{4}$ were in the classified service. Jan. 3, 1895, the system was extended over the agricultural department. Nov. 8, 1895, the president signed a rule which, by consolidating as to their appointment and promotions, neighboring post-offices, brought smaller offices under the classified system of the larger. The report of the classified service showed that at the end of President Arthur's administration it covered 15,573 positions; at the end of President Cleveland's first term, 27,330; and at the end of President Harrison's administration, 42,928. March 21, 1894, the State of Illinois adopted a law permitting the adoption of civil service reform in different cities and counties, and by vote in November, the system was adopted in Chicago. The first annual report of the civil service commission of Chicago was made in February, 1896, and showed that of 377 successful candidates for admission to the labor service, 56 were native Americans, 118 Italian, 100 Irish, 48 German, and 5 Poles. The legislature of New York in 1895 enacted a law exempting veterans of the civil war from certain civil service examinations; but in September 1895, the Supreme Court decided that this exemption was unconstitutional. The New York State civil service commission, in annual session in Syracuse, Nov. 13, 1895, recommended to the governor to transfer numerous appointments in the State departments from the non-competitive to the competitive class; and to classify under the provisions of the civil service law all the positions in the offices in New York and Kings counties, and extend such classification when practicable to other counties. The secretary of the Civil Service Reform Association in New York reported that there were on Jan. 1, 1895, 7,897 positions in New York City subject to the civil service rules; and during the year this was increased, mainly by registration of laborers, to about 14,000. About 250 places were left unclassified, including, however, the most important subordinates of each department, and there was earnestly urged a further reduction to 50, which was agreed to by the supervisory board, and only awaited the approval of the mayor. The registration of laborers, introduced July 1, 1895, secured 5,679 applications by Oct. 1; of which 869 failed to appear for examination, 345 failed to pass, and 71 were yet waiting examination; but 4,394 had been enrolled, and 405 appointed, showing a very high grade of fitness. The New York State commission reported Feb. 10, 1896, that the law had been extended in its scope; the examinations increased from 39 in 1894 to 58 in 1895; candidates examined from 824 to 1,460; and appointments from the eligible lists from 183 to 200.

CLAFLIN UNIVERSITY, Orangeburg, S. C., Methodist Episcopal; co-educational; for colored students exclusively; had at the close of 1897, 26 professors and instructors; 550 students; 2,000 volumes in the library; \$150,000 invested in grounds, buildings, and scientific apparatus; \$26,500 in income (1896); president, L. M. Duntou A.M., D.D. It provides, in addition to the usual college courses, instruction in agriculture and the mechanic arts; and is supported chiefly by the American Missionary Association, the United States, the State and the Peabody and Slater funds.

CLARK, FRANCES, E., clergyman and founder of the Young People's Society of Christian Endeavor, was born in Aymler, Quebec, Canada, Sept. 12, 1851. He published *Our Journey Around the World* (1894) and *World-Wide Endeavor* (1895).

CLARK UNIVERSITY, South Atlanta, Ga., Methodist Episcopal; co-educational; includes classical, scientific, and mechanical courses leading to the degrees of A.B., B.S., and B.M.E.; preparatory and normal departments; and schools of industrial and domestic training; had at the close of 1897, 12 professors and instructors; 301 students; 1,500 volumes in the library; \$500,000 in productive funds; \$12,150 in income; president, Charles M. Melden, Ph.D.

CLAY PRODUCTS. The total value of the clay products of the United States in the calendar year 1894, excluding pottery, was \$65,339,784, over 55 per cent. of which was represented by building brick. It is estimated that the common and pressed brick output of the year would make a walk over 10 ft. wide around the entire globe. The following tables give the essential details of this industry:

States, etc.	Firms report'g	Building brick.	Fancy brick.	Fire brick.	Having brick.
Alabama.....	53	\$265,531	\$1,000	\$57,414	\$1,500
Arizona.....	14	16,331	.....	2,350	.....
Arkansas.....	53	162,041	80	1,860	7,250
California.....	70	627,235	11,350	2,575	2,150
Colorado.....	78	228,344	2,680	113,333	21,880
Connecticut.....	44	549,150	5,000	57,500	4,000
Delaware.....	13	45,528	.....	.....	.....
District of Columbia.....	23	317,997	815	.....	250
Florida.....	23	82,287	.....	.....	.....
Georgia.....	61	585,633	14,048	.....	.....
Idaho.....	19	26,768	.....	.....	.....
Illinois.....	677	4,495,613	72,320	116,304	843,217
Indiana.....	663	1,730,017	6,150	25,730	224,473
Iowa.....	437	1,317,473	2,950	36,525	376,951
Kansas.....	67	141,042	4,000	2,350	57,310
Kentucky.....	87	418,846	50,700	87,800	51,380
Louisiana.....	50	442,862	52,500	.....	9,400
Maine.....	169	461,982	200	20,000	11,220
Maryland.....	67	674,669	1,100	161,848	470
Massachusetts.....	114	1,618,067	139,100	93,825	14,530
Michigan.....	196	924,812	54,750	401,880	1,560
Minnesota.....	122	473,901	1,340	3,950	.....
Mississippi.....	31	154,269	1,500	4,500	770
Missouri.....	242	1,541,533	47,933	202,732	190,220
Montana.....	17	80,629	.....	545,700	.....
Nebraska.....	104	411,409	29,375	.....	52,800
New Hampshire.....	55	482,233	1,075	15,000	4,900
New Jersey.....	129	1,601,096	257,300	592,430	6,000
New Mexico.....	5	17,125	.....	1,200	.....
New York.....	392	3,945,022	52,500	298,578	136,697
North Carolina.....	78	226,882	.....	1,100	888
North Dakota.....	8	52,101	.....	.....	.....
Ohio.....	968	2,136,601	92,685	742,304	928,942
Okl. and Indian Territories.....	18	37,328	.....	.....	1,000
Oregon.....	69	95,823	3,320	630	21,000
Pennsylvania.....	508	4,173,274	75,284	598,545	521,359
Rhode Island.....	1	246,000	10,000	3,000	39,600
South Carolina.....	47	229,877	.....	3,300	.....
South Dakota.....	8	24,362	.....	1,600	.....
Tennessee.....	76	417,616	2,971	30,873	39,384
Texas.....	124	865,359	16,389	87,360	1,000
Utah.....	59	134,047	.....	4,440	12,863
Vermont.....	17	92,532	1,500	.....	.....
Virginia.....	104	779,285	76,474	4,794	62,750
Washington.....	59	153,259	15,300	24,400	17,600
West Virginia.....	36	227,432	1,600	500	63,964
Wisconsin.....	140	1,069,162	19,324	6,200	.....
Wyoming.....	4	6,850	.....	.....	.....
Total.....	6,264	35,062,538	1,128,608	5,252,420	3,711,073

States, etc.	Drain tile.	Sewer Pipe.	Ornament. terra cotta.	Tile (not drain.)	Total Value.
Alabama.....	\$600	.....	.....	.....	\$366,045
Arizona.....	.....	.....	.....	.....	18,081
Arkansas.....	2,055	\$10	.....	\$2,000	212,096
California.....	15,850	102,350	\$23,085	.....	841,435
Colorado.....	1,540	50,000	.....	7,500	478,577
Connecticut.....	500	15,000	60,100	5,000	717,000
Delaware.....	2,500	.....	.....	.....	46,028
District of Columbia.....	2,800	61,100	.....	.....	390,672
Florida.....	2,000	47,300	11,000	.....	83,287
Georgia.....	3,500	.....	.....	.....	669,887
Idaho.....	.....	.....	.....	.....	30,268
Illinois.....	1,418,572	308,963	430,000	44,144	8,474,360
Indiana.....	954,264	1,000	50,000	101,855	3,135,569
Iowa.....	537,312	38,000	50	8,545	2,373,506
Kansas.....	8,048	.....	100	375	218,575
Kentucky.....	31,400	15,000	.....	60,000	759,675
Louisiana.....	12,500	.....	.....	.....	517,262
Maine.....	8,400	300,000	.....	.....	142,700
Maryland.....	3,050	50	.....	.....	1,344,865
Massachusetts.....	.....	.....	48,000	46,983	2,330,934
Michigan.....	741,327	99,040	.....	4,300	2,234,329
Minnesota.....	77,300	543,065	.....	.....	1,245,509
Mississippi.....	1,000	.....	.....	.....	12,400
Missouri.....	172,230	150,000	225	24,679	2,615,578
Montana.....	.....	7,300	.....	7,500	644,029
Nebraska.....	14,000	.....	.....	11,300	519,784
New Hampshire.....	.....	.....	.....	.....	503,505
New Jersey.....	8,600	137,377	88,000	701,853	3,076,335
New Mexico.....	.....	.....	.....	.....	18,325
New York.....	62,955	10,000	508,000	64,704	5,164,022
North Carolina.....	1,810	21,000	.....	.....	286,680
North Dakota.....	.....	.....	.....	.....	12,400
Ohio.....	1,465,285	3,311,895	19,000	476,118	10,068,498
Okl. and Indian Territories	.....	.....	.....	.....	38,338
Oregon.....	29,093	.....	1,575	7,800	161,988
Pennsylvania.....	61,952	347,302	61,000	67,300	7,438,048
Rhode Island.....	.....	.....	.....	8,000	294,650
South Carolina.....	3,500	.....	.....	20	236,697
South Dakota.....	.....	.....	.....	500	27,002
Tennessee.....	25,900	73,000	.....	.....	634,344
Texas.....	10,049	2,000	.....	.....	7,026,833
Utah.....	20	2,000	.....	.....	176,900
Vermont.....	4,000	.....	.....	.....	98,652
Virginia.....	10,705	.....	.....	6,696	937,593
Washington.....	2,750	209,000	86,000	6,750	515,669
West Virginia.....	360	350,000	10,000	.....	673,086
Wisconsin.....	85,150	.....	.....	1,300	1,255,376
Wyoming.....	.....	.....	.....	.....	6,850
Total.....	5,863,168	6,314,722	1,396,185	1,688,724	65,389,784

The total value includes, beside the kinds of products here given, terra cotta lumber (\$514,637) and a large variety of miscellaneous articles (\$4,517,709). The average value of the common and pressed brick throughout the United States was \$5.70 per 1,000, and of vitrified paving brick \$8.12 per 1,000. The foregoing tables are compiled from the 16th annual report of the United States Geological Survey on Mineral Resources of the United States (1895).

CLEARING HOUSE, a place for the settling of accounts between banks; established in London, England, in 1810; in New York in 1853; and later in other cities. In 1897 there were clearing houses in 77 cities in the United States, and in the year ending Sept. 30, 1896, the exchanges at them aggregated \$51,977,799,114, a net increase of \$1,105,125,006 over the total of the previous corresponding year. The exchanges at the five largest clearing houses were \$29,350,894,884 at New York; \$4,554,116,109 at Boston; \$4,538,505,883 at Chicago; \$3,383,903,806 at Philadelphia; and \$1,182,015,146 at St. Louis.

CLEMENCEAU, GEORGE BENJAMIN, politician, was born in Monilleron-en-Pareds, in the Vendée, France, Sept. 28, 1841. He has long been proprietor of *La Justice*, an important Paris journal. In 1893 he was accused of treasonable action, but the accusations were not substantiated. At the elections for the Chamber of Deputies in September, 1893, however, he was defeated.

CLEMENS, SAMUEL LANGHORNE, humorist, known as MARK TWAIN, was born in Florida, Mo., Nov. 30, 1835. In 1894 he was involved in the failure of C. L. Webster & Co., publishers. Surrendering his entire property he paid one-half of the obligations; and in 1895 he undertook a lecturing tour in Australia, India, and South Africa, and believed that in four years he could pay the last debt. He published *Following the Equator: a Journey Around the World* (1898).

CLEMENT, ARCHBISHOP OF BULGARIA. In 1893 in a sermon he denounced the change in the constitution which permitted the successor to the throne to be brought up in any other than the orthodox faith. For this he was imprisoned in a monastery, though the object of much popular sympathy. By the intervention of the exarch it was decided that he should be liberated and restored to his diocese on condition of making his peace with the government. He was released by order of Stambuloff, May 25, 1894. He represents the Russophile clergy; and his reconciliation was no doubt connected with the subsequent Russian policy of the government, and possibly with the overthrow and murder of Stambuloff.

CLEVELAND, city, capital of Cuyahoga county, O.; population (1890) 261,353; (1897) estimated 375,000. In 1896 the assessed valuation was \$138,473,385, and tax rate \$29.20 per \$1,000. The bonded debt, Jan. 1, 1897, was \$9,643,126; sinking fund, \$1,817,778; net debt, \$5,933,370. Included in the bonded debt was a water debt of \$1,891,977. The city owns the waterworks and in 1896 had a revenue from it of \$628,523. In 1897 there were 12 national banks (capital \$9,550,000), 6 State banks (capital \$936,900), and 16 savings institutions (capital \$1,847,000). The national banks held United States bonds \$1,550,000, an excess of \$950,000 beyond requirement; loans and discounts, \$28,471,475; coin and coin certificates, \$1,928,561, of which \$1,471,705 was gold coin; had deposits \$24,824,791; and reserve \$8,006,600; ratio of reserve, 32.25 per cent. The reserve comprised specie, \$1,935,286; legal tenders, \$1,076,290; due from reserve agents, \$1,926,641; and redemption fund with the United States treasurer, \$68,380. There were 9 daily, 45 weekly, 24 monthly, 2 quarterly and 3 other periodicals. An official enumeration of the city was made in June, 1895, when the 42 wards showed a registration of 60,699 and an adult male population of 81,453. In October Thomas King, vice-president of the Baltimore & Ohio railroad company, announced that that corporation had decided to expend \$1,000,000 in the city for terminal facilities. A contract was signed for the building of the first dock in the outer harbor, about 100 yards east of the entrance to the river, and extending from the shore a distance outward of 600 ft., where deep water is reached. The dock will be used by a coal company for handling coal by the cargo and supplying the steamboats with fuel. During the navigation season of 1894, Cleveland shipped 1,117,894 tons of coal and received 1,799,817 tons of ore. There were four regular ore-receiving docks. The river frontage extended 16 miles, of which 5 miles was built up in substantial docks. More than 1 mile of this dockage was taken up with passenger-boat landings, warehouses, and grain elevators, and the remainder was used for furnaces, limekilns, and the handling of iron ore, coal, pig iron, and lumber, which are the mainstays of the city's commercial prosperity. Excepting New York, Cleveland claimed to own more floating property than any other city in the country. The net registered

tonnage of steel vessels alone was 73,895, valuation \$6,725,000, and the total vessels belonging to the Cuyahoga customs district, which is practically Cleveland, was 285, of 200,601.40 net tons. Plans have been completed for the improvement and utilization of the harbor, by extending the breakwater and harbor line, widening and dredging the river, and constructing a uniform system of docks.

CLEVELAND, GROVER, 22d president of the United States, was born in Caldwell, N. J., March 18, 1837. His second administration was marked particularly by his efforts to promote tariff and other financial reforms and by the persistent opposition of his own party in both houses of Congress. A new tariff bill, bearing the name of Chairman Wilson of the House Committee on Ways and Means, was introduced Dec. 19, 1893. It provided for free raw sugar, free wool, free coal, free lumber, and free iron ore, and reduced the duties on many articles. On Jan. 24, 1894, a measure providing for an income-tax was presented in the House, and, during the debate on the tariff bill, that measure and others concerning internal revenue were incorporated in it. The House, in Committee of the Whole, adopted the internal-revenue amendment which contained the income-tax provision, by a vote of 182 yeas to 48 nays, 122 members not voting, and the entire bill was adopted by a vote of 204 yeas to 140 nays, 8 members not voting. The bill went to the Senate March 20, was made the special order for April 2, and from that time till its passage more than 500 amendments were proposed and many of them were adopted, especially those providing for a tax on sugar, coal, and iron ore. An amendment to strike out the income-tax provision was defeated by a vote of 24 yeas to 40 nays, 21 senators not voting; one to continue the bounty on sugar (act of Oct. 1, 1890), by a vote of 33 yeas to 37 nays, 15 not voting; and one to make sugar free of duty, by a vote of 33 yeas to 39 nays, 13 not voting. The bill as amended passed the Senate July 3, by a vote of 39 yeas to 34 nays, 12 not voting. On the 7th it was reported in the House with a motion that the House non-concure with the Senate amendments. This motion led to the appointment of conference committees by each house to adjust the differences. No agreement appearing possible, the Democratic leaders in the House, in a caucus, decided to recede from their position of non-concurrence, and on Aug. 13 passed the bill with the Senate amendments, following with the passage of bills for free coal, iron ore, barbed wire, and sugar. The vote on the passage of the amended bill was 182 yeas to 106 nays, 61 not voting and 3 answering "present" when their names were called. The president, who had expressed his views freely on the situation of the bill, the expectations of the country, and the demands of business interests, in a letter to Chairman Wilson, July 2, determined to allow the tariff bill to become a law without his signature, for reasons expressed in a letter to Congressman Catchings, Aug. 27. The United States Supreme Court, April 2, 1895, declared two provisions of the income tax law unconstitutional and upheld the remainder by a tie vote, and on a rehearing declared the whole measure unconstitutional May 20.

A summary of the legislation of 1894-96 concerning national finances and the president's action thereon will be found in the sketch of JOHN GRIFFIN CARLISLE (*q. v.*). On Feb. 7, 1894, the House Committee on Coinage, Weights, and Measures, reported a bill directing the coinage of silver held in the treasury. A substitute by Congressman Bland, providing for the coinage of the seigniorage, was adopted in place of the bill, and was passed in the House March 1 by a vote of 168 yeas to 129 nays, 56 members not voting, and in the Senate by a vote of 44 yeas to 31 nays, 10 not voting. This bill was vetoed by the president March 30, and the House failed to pass it over the veto April 4 by a vote of 144 yeas to 114 nays, the bill not receiving the necessary two-thirds vote. The most decisive

vote on the "silver question" grew out of a bond bill prepared by the Republican members of the House Committee on Ways and Means, and passed by the House Dec. 28, 1895. In the Senate, the Finance Committee reported a free-silver coinage substitute for the House bill Jan. 7, 1896, and the Senate passed it Feb. 1, by a vote of 42 yeas to 35 nays. The House in Committee of the Whole, Feb. 13, refused to concur in the Senate substitute by a vote of 190 yeas to 80 nays, and in regular session on the following day rejected the substitute by a vote of 215 yeas to 90 nays. As a probable sequence to the rejection by the House of the Senate's free-silver substitute, the Senate on Feb. 25, 1896, defeated the Emergency Revenue bill, prepared by the Republican members of the House Committee on Ways and Means and passed by the House on Dec. 26, 1895, by a vote of 205 yeas to 61 nays. Five free-coinage Republican senators united with the Democrats and Populists in refusing relief to the treasury, and the defeating vote was 22 yeas to 33 nays.

On March 17, 1894, the president concluded a treaty with China, which embodied recent acts of Congress restricting Chinese immigration; and on Nov. 22 a commercial and reciprocity treaty with Japan, abandoning the right of extra-territorial jurisdiction and releasing that country from irksome engagements limiting its right to levy import duties. He proclaimed, Sept. 27, 1894, amnesty and pardon to all persons who have been convicted of polygamy under the teachings of the Mormon Church. A dispute between Brazil and the Argentine Republic concerning the Misiones boundary was submitted to him as arbitrator Feb. 10, 1894, and was decided in favor of Brazil, Feb. 6, 1895. He was also agreed upon as arbitrator of the dispute between Colombia and Italy concerning damages sustained by an Italian citizen during the revolution in Colombia in 1885, in February, 1895, and of the dispute between Italy and Brazil arising from claims for damages to Italian subjects during the late revolution in Brazil, in February, 1896. A pleasant feature of international comity was his reception, immediately after the close of the war between China and Japan, of autograph letters from the two emperors thanking him for the services of the United States representatives in these countries, in looking after their subjects and in promoting the negotiation of peace. See BOUNDARY LINES: VENEZUELA: CHINA.

CLIFTON COLLEGE, Bristol, one of the great public schools of England, was founded in 1860; chartered in 1877. In 1895 it included classical, modern, and military courses, prepared pupils for Woolwich, Sandhurst, and Cooper's Hill College. It offers annually 3 exhibitions of £25 to £50 a year, tenable at the universities; and scholarships of £25 or £50 a year, which may be increased to £90, tenable at the college. Instructors in 1895, 49; pupils 600. Head Master, Rev. Michael George Glazebrook, M.A.

CLINTON, city, capital of Clinton county, Ia., population (1890) 13,619. In 1890 it had an assessed valuation of \$1,900,000, and in 1895, 3 national banks (capital \$310,000), 3 savings banks (capital \$365,000), a private bank, and 3 daily and 5 weekly newspapers. The Clinton school district had (1892) an assessed valuation of \$2,059,785, debt (May 1, 1893) \$88,500, and estimated population (1893) 18,000.

CLINTON, town, Worcester county, Mass.; population (1890) 10,424; (1895) State census 11,500; gain in 10 years 2,555. In 1894 it had an assessed valuation of \$6,927,124, tax rate, \$16.60 per \$1,000; and in 1895 a town debt of \$102,350, water debt, \$275,000; a national bank (capital \$200,000), and a daily and 2 weekly newspapers.

COAL. At the close of the calendar year 1894, the approximate coal area of the United States was: Anthracite, 995 square miles; bituminous, including lignite,

brown coal, and scattering lots of anthracite, 221,433 square miles; total, 222,428. The production during the year of all kinds was 152,447,791 long tons, equivalent to 170,741,526 short tons, having an aggregate value at the mines of \$186,141,564. Excluding the colliery consumption, the production showed 146,816,277 long or 164,434,230 short tons for the market. Compared with 1893 the output 1894 was a decrease of 10,367,186 long or 11,611,248 short tons, a little more than 6 per cent., and the decrease in value was \$22,297,132, or more than 10 per cent. The average price per short ton received for all kinds of coal in 1893 was \$1.14; in 1894, \$1.09. In 1893 there was a total of 363,309 men employed in the mines, who worked an average of 201 days; and in 1894 the number was 376,206, who worked 178 days. The following table gives some details of the production of 1894 in short tons:

States.	Product.	Value.	Shipped at Mines.	Persons Employed.
Alabama.....	4,307,178	\$4,085,535	3,269,548	10,859
Arkansas.....	512,625	631,988	488,077	1,493
California.....	67,247	155,620	52,736	125
Colorado.....	2,831,479	3,516,340	2,181,948	6,507
Georgia.....	354,111	290,260	178,610	729
Illinois.....	17,113,576	15,282,111	13,948,910	38,477
Indiana.....	3,423,021	3,295,034	3,085,664	8,603
Indian Territory.....	969,606	1,541,233	923,581	3,101
Iowa.....	3,067,253	4,367,359	3,390,751	9,995
Kansas.....	3,388,251	4,178,998	3,066,398	7,339
Kentucky.....	3,111,192	2,749,932	2,734,847	8,083
Maryland.....	3,501,428	2,687,270	3,435,660	3,974
Michigan.....	70,622	103,049	60,817	223
Missouri.....	2,245,039	2,634,564	1,955,255	7,523
Montana.....	927,395	1,867,390	861,171	1,782
Nevada.....	150	475	.....	2
New Mexico.....	597,196	935,857	561,523	985
North Carolina.....	16,900	29,675	13,590	95
North Dakota.....	42,015	47,049	37,311	77
Ohio.....	11,909,856	9,841,723	10,636,402	27,105
Oregon.....	47,521	183,914	45,068	88
Pennsylvania.....	39,012,463	29,470,839	29,722,803	75,010
Tennessee.....	2,180,879	2,119,481	1,571,406	5,542
Texas.....	420,848	976,458	417,281	1,062
Utah.....	431,550	603,479	364,675	671
Virginia.....	1,229,083	933,576	1,015,713	1,635
Washington.....	1,106,470	2,578,411	1,030,232	2,662
West Virginia.....	11,627,757	8,706,808	9,116,314	17,824
Wyoming.....	2,417,463	3,170,392	2,309,934	3,032
Total.....	118,820,405	107,653,501	96,475,175	244,603
Penn. anthracite.....	51,921,131	73,488,063	45,358,144	131,603
Grand total.....	170,741,526	156,141,564	142,833,319	376,206

In the early part of 1894, with rare exceptions, the entire bituminous coal regions of the country were involved in a miners' strike, which called out about 100,000 men, who lost in wages \$12,500,000; lasted 50 days; was fiercest in Western Pennsylvania, Ohio, and Illinois; necessitated at several points the employment of State militia; and probably cost all concerned in it upward of \$20,000,000.

The importation of coal during the year for domestic consumption was 90,068 long tons of anthracite, valued at \$234,024, and 1,242,714 long tons of bituminous and shale, value \$3,785,513; and the exportation of the domestic production was 1,440,625 long tons of anthracite, value \$6,359,021, and 2,195,716 tons of bituminous and shale, value \$4,970,270. The world's product, in the equivalent of short tons and for years nearest to 1894 for which reports are available, was as

follows: Great Britain (1894), 210,870,828; United States (1894), 170,741,526; Germany (1893) 93,934,409; Austria (1893), 29,266,821; France (1893), 28,276,898; Belgium (1893), 21,398,104; Russia (1892), 7,621,969; Canada (1894), 3,853,235; Japan (1893), 3,400,000; Spain (1893), 1,675,723; New Zealand (1893), 691,548; Sweden (1892), 421,155; and Italy (1893), 349,451—total, 572,501,667; percentage of the United States, 30. See COKE.

COAST DEFENSE. President Cleveland's Venezuela message to Congress led to the introduction in both houses of that body of bills which may result in the strengthening of the most important and exposed parts of the country. On Dec. 18, 1895, Senator Chandler (N. H.) presented in the Senate a measure appropriating \$100,000,000 for the purchase of 1,000,000 infantry rifles, 1,000 field guns, and not exceeding 5,000 guns for fortifications. The same day Representative Grout (Vt.) presented to the House a bill appropriating a similar sum for supplying the seacoasts and the northern frontier with fortifications and arming them with modern guns, the money to be raised by a popular loan. Both measures were referred to the respective committees on appropriations. On Jan. 20, 1896, General Flagler, Chief of Ordnance, testified before the Senate Committee on Coast Defenses that about \$50,000,000 would be required to furnish the guns, mortars, and all that is supplied by the Ordnance Bureau, to complete the defenses of the 28 ports, including Puget Sound, for which projects have been approved. The committees having these several measures in charge maintained unusual secrecy concerning the view of military, naval, and ordnance officers called in consultation. From the annual report of the United States Board on Ordnance and Fortifications, which appeared Jan. 12, 1896, it was learned that the government had a contract with the Bethlehem Iron Company for the manufacture of 25 eight-inch rifles, 50 ten-inch, and 25 twelve-inch, of which 10 eight-inch guns were practically completed, 5 were well advanced, and the parts for the remainder were nearly all forged and some of them machined; 14 ten-inch guns were assembled and the majority of the forgings for 9 more were made and a few machined; and 92 out of 110 forgings for the first 10 of the twelve-inch guns had been accepted. The Board reported in detail on the testing of new guns, the development of gun carriages, the rapidity of work with big guns, the necessity for a satisfactory smokeless powder for field, siege, and seacoast guns, and the manufacture and use of high explosives. The work of providing a proper armament for exposed harbors was progressing steadily, but, because of inadequate appropriations, slowly; and the board believed that it would require 50 years of work, at the pace of the last 10 years, to place the seacoast in proper condition for defense. The principal elements of the problem of defense may be regarded as solved, and only details and elaborations remain. Concerning future advancement, the board believed that it should be along the following lines: The development of smokeless powders; the development of a high explosive that can be safely discharged in a shell at a high velocity, with certainty of detonation; the selection of a disappearing carriage for twelve-inch guns; the investigation of armor plate for sea forts; the development of rapid-fire field and seacoast guns; and the development of an efficient system of fire control for harbor defenses. The board recommended an appropriation of \$2,000,000 for engineer work in the construction of implements, fortifications, and necessary work, and one of \$5,000,000 for the construction of guns, mortars, gun-carriages, seacoast armament, and ammunition. The Senate Committee on Coast Defenses reported a bill Feb. 25, 1896, proposing an appropriation for coast fortifications of \$80,000,000, of which \$10,000,000 would be available for the remainder of the current year and the whole of the next fiscal year, and \$10,000,000 a year thereafter for

seven years, and recommended the following allotment for advance work: New York, \$6,475,000; San Francisco, \$7,300,000; Boston, \$6,050,000; Newport, \$1,875,000; Portland, Me., \$1,500,000; Narragansett Bay, \$2,200,000; and the east entrance to Long Island Sound, \$1,460,000. The committee also favored an appropriation of \$2,500,000 for torpedoes and of \$1,750,000 for forgings, carriages, rapid-fire guns, and projectiles. See MACHINE GUN: ORDNANCE.

COAST AND GEODETIC SURVEY, U. S., a bureau of the Treasury Department, charged with the survey of the coast lines of the United States and of rivers to the head of ship navigation; deep-sea soundings; magnetic observations and gravity research; determination of heights by geodetic leveling and of geographical positions by lines of transcontinental triangulation; and coast and harbor charting. It issues numerous bulletins, charts, and other aids to navigation. The principal officers in 1896 were: Superintendent, W. W. Duffield; hydrographic inspector, Lieut. Commander J. F. Moser, U. S. N. One of the most important of the recent operations of the Survey was the examination of the boundary line of Alaska. See ALASKA: BOUNDARY LINES.

COBBE, FRANCES POWER, author and philanthropist, was born in Dublin, Ireland, Dec. 4, 1822. In recent years she has applied herself chiefly to the protection of animals from vivisection in the interest of biological science. She published a *Life of Frances Power Cobbe* (London and New York, 1894), and was living in retirement in Wales in 1898.

COCKERILL, JOHN A., journalist, was born in Dayton, O., in December, 1845, died in Cairo, Egypt, April 10, 1896. He entered journalism at an early age; became managing editor of the *Cincinnati Enquirer* in 1872; correspondent with the Turkish army in the Russo-Turkish war of 1877; managing editor of the *New York World* in 1883-91; established the *Morning Advertiser* in New York in 1891; and was a special correspondent of the *New York Herald* during the Sino-Japanese war 1894-95, subsequently visiting Formosa and Korea. In January, 1896, on leaving Japan he was personally presented by the emperor with the decoration of the Third Order of the Sacred Treasure, a distinction seldom conferred on foreigners.

COFFEE. The following table shows the quantity (in lbs.) and value of the coffee imported into the United States in 1894 and 1895, and the exporting countries:

Countries.	1894.		1895.	
	Quantity.	Value.	Quantity.	Value.
United Kingdom	8,302,381	\$1,578,423	4,295,826	\$716,161
France	7,086,033	1,284,207	1,870,717	387,365
Germany	7,035,457	1,216,726	2,759,813	469,302
Netherlands	6,708,500	1,334,366	4,033,274	813,504
Other Europe	675,639	115,595	555,590	88,678
Central America	51,532,300	7,946,919	52,320,272	8,056,920
Mexico	32,632,692	5,961,917	36,961,939	6,221,623
West Indies	11,947,175	1,831,162	18,632,745	2,865,531
Brazil	421,234,016	62,109,774	426,559,035	60,767,371
Other South America	37,612,581	6,106,643	73,484,884	12,240,630
East Indies	15,309,257	2,974,365	16,166,062	3,040,733
Other Asia and Oceania	1,033,060	194,097	2,228,255	434,042
Africa	662,722	117,105	34,616	5,892
Other Countries	3,601,248	709,695	2,625,351	564,668
Total	605,152,991	\$93,510,894	642,318,319	\$96,512,370

COFFIN, CHARLES CARLETON, author, was born in Boscowen, N. H., July 26, 1823; died in Brookline, Mass., March 2, 1896. He and his wife celebrated their golden wedding on Feb. 18, 1896. His last publications were *Dau of Millbrook* (Boston, 1894) and *Daughters of the Revolution and Their Services*—(1769-1776) (1895).

COHOES, city, Albany county, N. Y.; population (1890) 22,509. In 1894 the assessed valuations were: Real, \$10,335,925; personal, \$783,000—total, \$11,118,925; city tax rate \$13.20 per \$1,000; State and county tax \$5.70. The total debt, Feb. 1, 1895, was \$329,000, including \$219,000 in water bonds, \$30,000 in city hall bonds, and \$15,000 in city hospital bonds. In 1895 the city had a national bank (capital, \$250,000), a State bank (capital \$100,000), and 3 daily newspapers.

COIMBRA, UNIVERSITY OF, Coimbra, Portugal, founded in 1890. It included in 1892 departments of theology with 49 students, law with 496, medicine with 124, mathematics with 165, and philosophy with 332.

COINAGE. During the fiscal year ending June 30, 1895, the coinage at the United States mints aggregated 59,611,112 pieces, valued at \$53,715,550. There were 4,035,205 gold pieces, value \$43,933,475; 3,965,011 silver dollars; 16,532,594 pieces of subsidiary silver coins, value \$5,113,470 (including \$2,501,052.50 in half-dollars and \$10,005.75 in quarter-dollars, issued as souvenirs of the World's Columbian Exposition); and 35,087,302 minor coins, value \$712,594. The coinage of the world in 1894 was: Gold pieces, \$225,605,551; silver, \$106,945,740; of which the share of the United States was, gold \$79,546,160, silver \$9,200,351; Great Britain, gold \$27,633,807, silver \$4,002,657; France, gold, \$1,897,395, silver \$772,000; Germany, gold \$37,433,154, silver \$1,067,945; Austria-Hungary, gold \$40,395,456, silver \$10,429,887; Japan, gold \$1,576,440, silver \$24,131,363; Sweden, gold \$165,239, silver \$46,443; Switzerland, gold \$465,516, silver \$579,000; Turkey, gold \$84,403, silver, \$450,018; Mexico, gold \$554,107, silver, \$29,481,033; and Bulgaria, gold, \$579,007, silver \$2,316,224. Australasia coined gold only, \$35,203,648; and the Central and South American republics silver only. During the calendar year 1896, the United States mints coined 82,155,655 pieces, valued at \$70,975,677.98. Of these, 2,630,351 pieces, valued at \$47,053,060, were gold; 19,876,762 pieces were silver dollars; 11,748,329 pieces, valued at \$3,213,137.05, were subsidiary silver coin; and 47,900,213 pieces, valued at \$832,718.93, were minor coin. The quantities of gold and silver used were, gold, 2,276,192 fine ounces; silver, 17,858,594 fine ounces. Besides the coinage, there were manufactured at the various United States plants fine, mint, standard, and imported bars of gold to the value of \$65,229,767.64, and fine, mint, and imported bars of silver to the value of \$6,587,719.19. Coinage mints were operated in Philadelphia, San Francisco, Carson, and New Orleans, and assay offices at New York, Denver, Boise, Helena, Charlotte, and St. Louis. A special report on the coinage of standard silver dollars, March 1, 1898, showed, total coinage from Aug. 13, 1890, to Nov. 1, 1892, 36,087,285 pieces, giving a seigniorage of \$6,477,098; and from Nov. 1, 1893, after the repeal of the silver-purchase clause of the act of 1890, to Feb. 1, 1898, 37,735,572 pieces, giving a seigniorage of \$11,812,655. See BI-METALLISM: GOLD: MINERAL PRODUCTIONS: MONEY.

COKE. The production of coke in the United States during the calendar year 1894 was 9,196,244 short tons, a decrease of 281,336 from the output of 1893. The following table gives the material details of the industry:

States, etc.	Plants.	Ovens built.	Ovens building.	Coal used.	Coke product.	Value of product.
Alabama.....	22	5,551	50	1,574,345	923,817	\$1,871,348
Colorado.....	8	1,154	530	542,429	317,817	908,970
Georgia.....	1	338	.....	165,523	93,029	116,386
Illinois.....	1	24	.....	3,800	2,200	4,400
Indiana.....	2	94	.....	13,480	6,551	13,102
Indian Territory.....	1	80	.....	7,574	3,051	10,695
Kansas.....	6	61	.....	13,388	8,439	15,660
Kentucky.....	6	293	.....	66,418	29,748	51,556
Missouri.....	3	10	.....	3,442	2,250	3,563
Montana.....	2	123	.....	22,500	10,000	110,000
New Mexico.....	1	50	.....	13,044	6,529	28,213
Ohio.....	8	393	.....	55,324	32,640	90,875
Pennsylvania.....	101	25,834	118	9,059,116	6,063,777	6,585,489
Tennessee.....	11	1,860	.....	516,802	292,646	480,124
Utah.....	1	83	.....	.....	16,056	.....
Virginia.....	2	736	100	280,524	180,091	268,747
Washington.....	3	84	.....	5,563	5,245	19,349
West Virginia.....	78	7,858	60	1,976,128	1,103,933	1,630,687
Wisconsin.....	1	120	.....	6,343	4,250	19,465
Wyoming.....	1	34	.....	8,685	4,352	15,232
Total.....	259	44,760	578	14,337,937	9,179,744	\$12,273,669
New York.....	1	12	13	.....	16,500	.....
	260	44,772	591	.....	9,196,244	.....

In the above table the quantities of coal and coke are given in short tons; the amount of coal used and production and value of coke in Utah are included in the statement for Colorado; and the number of ovens built in Colorado includes 36 gas retorts. The value of the coal used was \$9,430,661. During the year the equivalent of 32,566 short tons of coke, valued at \$70,359, was imported into the United States.

COLBY UNIVERSITY, Waterville, Me., founded in 1820; Baptist, co-educational. Productive funds reported in 1895, \$495,521; volumes in library, 31,000. Instructors 15; students 260; graduates since organization 1,087; president, Rev. Nathaniel Butler, D.D.

COLERIDGE, JOHN DUKE, 1ST BARON COLERIDGE, lord chief-justice of England, was born in Ottery St. Mary, England, in 1821; died in London, England, June 14, 1894.

COLGATE UNIVERSITY, Hamilton, N. Y., organized in 1820; Baptist; having in 1895-96 college courses leading to the degrees of A. B., PH. B., and B. S.; volumes in library, 23,000; productive funds, \$1,693,405; 64 scholarships, of from \$30 to \$90 a year are granted to deserving students. Instructors in 1895-96, 34; students, 310; graduates living, 1,260; president, George William Smith, A. B., LL. B.

COLLEGE OF THE CITY OF NEW YORK, founded as the Free Academy in 1848; received the present name by act of legislature in 1866; non-sectarian. In 1896 it included college courses for the degrees of B. A. and B. S., and classical, scientific, and mechanical subfreshman classes. The instruction is free; and since 1857 there has been a fund maintained by contributions of the alumni from which loans without interest are made for the help of deserving students. Productive funds, \$42,550; volumes in library, 29,342. The legislature having provided for the removal of the college to a better site, the special committee in charge chose in July, 1895, a site covering two city blocks bounded by Amster-

dam and Convent Avenues, and 138th and 140th Streets. The cost of the lots was limited by the legislature to \$600,000, and an appropriation of \$500,000 for buildings was expected. The ordinary legislative appropriation for the expenses of the college is \$150,000. Instructors in 1895-96, 50; students, 1,695; graduates since organization, 1,760; president, Alexander Stewart Webb, LL.D.

COLLYER, ROBERT, clergyman, was born in Keighley, England, Dec. 8, 1823; became pastor of the Church of the Messiah in New York in 1880. He resigned his pastorate in 1895; but consented to stay if he might have a colleague; and Dec. 18, 1895, Rev. Minot J. Savage, D.D., of Boston, was called, and in January, 1896, became associate pastor.

COLOGNE, fortified city, capital of the province of Rhenish Prussia, Germany; especially noted for its magnificent cathedral; population (1890) 281,681. In the half-year ending Sept. 30, 1895, the exports declared here for the United States aggregated in value \$1,231,254.12, principally mineral waters (\$288,502); drugs, dyes, chemicals, etc. (\$185,178); wine, brandy, beer, and liquor (\$130,204); silk goods (\$110,145); leather and leather goods (\$108,005); and china, glass, porcelain, stone, and earthenware (\$79,506).

COLOMBIA, a republic of South America; comprising 9 departments under governors, formerly States with presidents; capital, Bogota; president 1895-96, M. A. Caro; resigned September, 1896, and was succeeded by the vice-president, Antonio Roldan.

Government.—The chief executive is a president elected for 6 years. Congress comprises a senate of 27 members and a house of representatives of 66 members, elected for 4 years. Dr. Rafael Nunez, elected president for the fourth time in 1892, died Sept. 18, 1894, and was succeeded by the vice-president, Caro. On Dec. 13, 1895, the president named the following to be governors of the States for the ensuing term: Antioquia, Gen. Jose M. Dominguez; Bolivar, Eduardo B. Genebin; Boyaca, Gen. Juan N. Valderrama; Cauca, Gen. Jose A. Pinto; Cundinamarca, Gen. Prospero Pinzon; Magdalena, Dr. Francisco Eseobar; Panama, Don Ricardo Arango; Santander, Dr. Antonio Roldan; and Tolima, Gen. Manuel Casabana.

Finances.—The estimated revenue in 1895-96 was \$21,384,000; expenditure \$27,381,240; and foreign debt \$15,940,800. The domestic debt is large and cannot be definitely stated. There is an accumulation of several years' interest on the foreign debt, and official returns placed the cost of the rebellion in 1895 at \$15,000,000.

Commerce.—In 1895 the value of the imports was reported at \$11,178,000; exports, \$11,580,000; during the fiscal year ending June 30, 1896, the imports from the United States were valued at \$3,382,588, and the exports thereto \$4,970,092, and in the year ending June 30, 1897, these amounts were \$3,807,012 and \$4,730,537 respectively. The principal imports were food articles and textiles; exports, coffee, cocoa, cocoa-nuts, bananas, hides, and skins, and silver ore.

Natural Resources.—Gold is found in all the departments; silver in many, especially in Tolima and Cauca; iron near Bogota; salt at Zipaguira, where it is worked as a government monopoly; emeralds along the Minero River; and copper, lead, platinum, cinnabar, manganese, coal, and petroleum in scattered sections. In 1891 duties were paid on 4,961 mines, nearly all gold, of which 3,398 (all gold) were in Antioquia, 794 in Tolima, and 571 in Cauca. In December, 1895, it was reported that John B. Dorrity, of Philadelphia, had discovered a

new placer gold region in the district of San Martin de Loba, a short distance east of the Magdalena River, and about 300 miles from the city of Barranquilla. The region is a neglected plain which has received the washing of disintegrated quartz from the neighboring hills for many years, and was said to bear on its surface fabulous wealth in virgin gold.

Education.—Primary education is gratuitous, but not compulsory. In 1894 there were 15 normal schools with 600 students; 1,817 primary schools with 89,000 pupils; a national university with 4 colleges and technical schools and about 1,600 students; 4 department universities with 1,083 students; and 34 public institutions for secondary instruction. There is also a national library and museum.

Rebellion of 1895.—A rebellion, which assumed definite shape immediately after the death of President Nunez, broke out in the departments of Santander, Cauca, and Cundinamarca, in January, and became so threatening that the entire country was placed under martial law and the national troops ordered to the disaffected departments on the 26th. The departments of Tolima and Boyaca subsequently joined the revolt, but those of Bolivar, Antioquia, Magdalena, and Panama remained faithful to the government. In Cauca the rebels were defeated by the national troops at Pradera. The government officially announced the defeat of the rebellion April 10, but in July a new one was reported in the departments of Boyaca and Santander and in the federal district of Bogota. A large force of national troops was mobilized on the Isthmus of Panama, ostensibly to preserve neutrality on the Ecuador boundary. On Sept. 24 some troops from Cauca sent to Panama to replace others mutinied, and fired on other troops sent to force them into submission; but were speedily subdued. The government raised the state of siege, excepting in Bogota and the province of Cucuta, and granted amnesty to all engaged in the last revolution on Nov. 10. It also decreed that the tax on coffee, levied to pay war expenses, should remain in force. In November the government declared that it possessed data relating to a general revolt to occur in all the departments on Dec. 20; in January, 1896, troops were sent from Bogota to the coast to prevent the landing of arms and ammunition, said to have been sent from New York to the revolutionists; and on January 19, martial law was proclaimed in the province of Barranquilla.

Minister Jenner.—Toward the close of 1895, it was thought that the government would be compelled by popular demand to ask of Great Britain the recall of George Jenner, British minister at Bogota, because of his connection with an English firm which had filed a claim against the Colombian government that was held to be unjust.

Arbitration.—In November, 1895, the government made an agreement with the governments of Ecuador and Peru that the delimitation of the boundaries of the three republics should be submitted to the queen regent of Spain for arbitration.

Population.—In 1881, by official estimate, 3,878,000; 1892, 4,200,000; commercial towns with population (1886), Barranquilla, 20,000; Cartagena, 20,000; Medellin, 40,000; Bucaramanga, 20,000; and Cucuta, 10,000.

COLORADO, one of the United States of North America; admitted to the Union Aug. 1, 1876; counties, 56; capital, Denver.

State Officers, 1897-99.—Governor (elected for 2 years, salary \$5,000 per annum), Alva Adams; lieutenant-governor, Jared L. Brush; secretary of state, Charles H. S. Whipple; treasurer, George W. Kephart; auditor, John W. Lowell; superintendent of public instruction, Grace E. Patton; attorney-general, Byron L. Carr; adjutant-general, C. L. Moses; chief justice of the Supreme Court, John Campbell;

associate justices, Luther M. Goddard and William H. Gabbert, Democrat; clerk, James A. Miller—all Republicans excepting Adams, Whipple, Patton, Goddard, and Gabbert.

Legislature, 1897.—Republicans, senate 16, house 11; joint ballot 27; Populists, senate 14, house 33, joint ballot 47; Democrats, senate 4, house 20, joint ballot 24; Silver, senate 1, house 1, joint ballot 2.

Elections.—In the elections 1894, in which women freely exercised the franchise, the Republican State ticket was elected by a majority of about 20,000. Two districts voted for representatives in Congress, and of a total vote of 177,931, the Republican candidates received a combined vote of 89,479; the Populist candidates, 82,111; the Prohibitionist candidates, 4,494; and the Democratic candidates, 1,817. For judge of the Supreme Court, the Republican candidate (John Campbell) received 90,845 votes; the Populist candidate, 76,487; and the Democratic candidate, 9,634. Two proposed amendments to the constitution were defeated. It was estimated that more than half of the votes cast in Denver were by women. In the State elections in 1896 there were 183,250 votes cast for governor, of which the Democratic and Silver Republican candidate (Adams) received 87,456; the Republican (Allen), 24,111; and the Populist (Bailey), 71,683; Adams' plurality, 15,773. The elections for Congress resulted in the choice of the Democratic and Free Silver Fusion candidates in both districts. In the presidential election the Democratic-Populist candidate received 161,269 votes, and the Republican, 26,279. An election for judge of the Supreme Court in 1897 resulted in the success of the Democratic-Populist Fusion ticket (Gabbert) by a plurality of 4,941 over the Republican ticket.

Farm Products.—Reported Dec. 31, 1895: Corn, 3,690,976 bush., from 178,308 acres, value \$1,513,300; wheat, 2,808,250 bush., from 119,500 acres, value \$1,572,620; oats, 3,389,252 bush., from 98,812 acres, value \$948,991; rye, 49,141 bush., from 3,389 acres, value \$23,588; potatoes, 3,491,820 bush., from 39,756 acres, value \$1,152,301; and hay, 1,961,187 tons from 810,408 acres, value \$11,512,168.

Farm Animals.—Reported Jan. 1, 1897: Horses, 159,706, value \$3,204,212; mules, 8,888, value \$380,454; cows, 82,374, value \$2,150,785; cattle, 926,560, value \$18,644,569; sheep, 1,411,382, value \$2,486,290; and hogs, 22,716, value \$103,131.

Mineral Products.—Since the repeal of the silver-purchase clause of the Sherman act, Colorado, while retaining first rank as a producer of silver, has developed remarkable resources in gold. In 1894 the State gained second rank as a producer of gold, and in 1895, with an output larger than that of California, gained first place. The production of the most precious metals in 1894 was: Gold, 459,152 fine oz., valued at \$9,491,514; silver, 23,281,400 fine oz. of a coin-ing value of \$30,101,293. The increased output of gold in 1895 was due to developments at Creede and Cripple Creek, and an increased activity in Leadville. The Cripple Creek district alone had an output of \$3,080,000 in 1894 and of \$8,750,000 in 1895. For the first time in the history of the State, the gold output in 1895 exceeded in value that of silver. The total mineral output of the year was reported at Denver at, gold, \$17,340,495; silver, \$14,259,019; lead, \$2,955,114; copper, \$877,192—total, \$35,432,150, an increase of \$5,438,860 over that of 1894. During 1894, the output of iron ore was 111,000 long tons of red hematite, 92,249 of brown hematite, 46,250 of magnetite and 700 of carbonate—total, 250,199 long tons. The State ranked 9th in the production of ores, 6th in brown hematite and red hematite, 5th in carbonate, and 4th in magnetite; and

had a pig iron production of 73,669 long tons. Coal showed a decrease from 1893 of 1,270,980 tons and in value \$1,588,262, the output being 2,831,409 short tons, value \$3,516,340. Of the whole product 2,181,148 tons were loaded at the mines for shipment, and 48,125 tons were made into coke. Lead, in which the State ranked first, yielded the silver-lead smelters and refiners 50,613 short tons, and manganese iron ores, used chiefly at Pueblo for the manufacture of spiegeleisen, aggregated in product 7,022 long tons, value \$26,822. Petroleum, with an output of 515,746 bbls., value \$303,652, showed a decrease in the year of 78,644 bbls., and in value \$193,929. Quarry products were: Granite, \$49,302; sandstone, \$69,105, a decrease from \$1,224,098 in 1890; and limestone, \$132,170, of which \$72,680 was used for fluxing. The total value of clay products, including common, pressed, fire, and paving brick, ornamental brick and tile, and sewer pipe, was \$478,077, and there were 15,000 bbls. of Portland cement manufactured, valued at \$37,500.

Finances.—In 1896 the assessed valuations aggregated \$206,598,561, and the tax rate was \$4 per \$1,000. The total debt, including capitol building bonds, \$600,000, casual deficiency bonds, \$100,000, and Cripple Creek insurrection bonds, \$70,500, was \$3,157,509; assets, \$865,197; net debt, \$2,293,312.

Banks.—On Oct. 5, 1897, there were 41 national banks in operation, with a combined capital of \$5,232,000, which held \$1,274,000 in United States bonds, an excess of \$316,000 over the amount required. These banks had outstanding on loans and discounts an aggregate of \$18,494,476, represented by demand paper with individual or firm names, \$1,070,698; the same secured by stocks, bonds, and other personal securities, \$1,057,470; time paper with two or more individual or firm names, \$4,539,817; time paper with single individual or firm name, \$4,337,477; and the same secured by stocks, bonds and other personal securities, \$7,489,014. The outstanding circulation was \$1,353,603; coin and coin certificates held, \$4,476,384; deposits, \$30,551,264; reserve held, \$13,879,002; required, \$4,582,689; ratio of reserve, 45.43; and the exchanges at the United States clearing house at Denver aggregated \$121,850,632, a decrease of \$6,983,872 from those of the preceding year. The State banks, July 1, 1897, numbered 32, and had capital \$2,000,000; deposits, \$4,854,955; resources, \$7,230,774; and surplus and profits, \$311,208.

Internal Revenue.—During the fiscal year ending June 30, 1897, the collections of internal revenue aggregated \$391,995.84, from the following sources: Distilled spirits, \$150,332.96; tobacco, \$38,005.89; fermented liquors, \$201,278.65; oleomargarine, \$2,304; and miscellaneous, \$74.34. There were 232 single-account cigar factories, which had an output of 12,438,602 cigars, and 18 other tobacco factories, which manufactured 31,375 lbs. of smoking tobacco. Two grain distilleries were in operation; 58,851 gals. of spirits were rectified and 185,338 gals. ganged; and 208,858 bbls. of fermented liquors were produced.

Railroads.—The single-track mileage Dec. 31, 1893, was 4,488.22, which was increased during 1894 to 4,553.57. The capital account of the railroads, 1893, was: Stock, \$116,272,093, funded debt, \$91,315,500, total investment, \$211,355,006; cost of roads and equipment, \$196,722,180; net earnings, \$4,301,259; State assessment for taxation, \$33,043,749.

Post-Officers.—Reported Jan. 1, 1897: First-class 3; second-class 10; third-class 34 (presidential 47); fourth-class 711; money-order offices 218; limited money-order offices 22.

Publications.—Reported May, 1895: Daily 35; semi-weekly 4; weekly 209; semi-monthly 2; monthly 25; and quarterly 1; total of all kinds in 1897, 295.

Churches.—The Roman Catholic Church is the strongest denomination in the State, and is followed by the Methodist, Presbyterian, Baptist, Protestant Episcopal, Congregational, and Disciples of Christ. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Colorado, 485 evangelical Sunday schools, 4,699 officers and teachers, and 37,220 scholars, total members, 41,919.

Schools.—In the school year 1895-96 there were 119,750 children of school age in the State, of whom 91,686 were enrolled in the public schools and 62,410 were in average daily attendance; 2,921 teachers; and 1,654 public school buildings. Public school property was valued at \$5,859,477, receipts were \$1,993,384; expenditures, \$2,384,183, of which \$1,319,921 was for teachers' salaries. There were 5 universities and colleges of liberal arts, with 204 professors and instructors and 1,442 students (male 905, female 537) in all departments; volumes in libraries, 45,968; value of scientific apparatus and libraries, \$138,803; value of grounds and buildings, \$1,260,080; productive funds, \$467,000; and income, 1895-96, \$92,027.

Libraries.—In 1896 there were reported 34 public libraries of 1,000 volumes each and upward, with a total of 300,990 bound volumes and 20,318 pamphlets.

Population.—In 1890, 412,198, of whom 245,247 were males; 166,951 females; 328,208 natives; 83,990 foreign-born; 404,468 whites; and 7,730 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 517,000.

COLORADO COLLEGE, Colorado Springs, Col., incorporated and opened in 1874; non-sectarian; co-educational; had at close of 1897, 33 professors and instructors; 329 students; 27,000 volumes in the library; \$499,950 invested in grounds and buildings; \$47,000 in scientific apparatus and library; \$328,000 in productive funds; \$135,000 in gifts; \$143,500 in income; president, W. F. Slocum, LL.D.

COLORADO SPRINGS, city, health resort, and capital of El Paso county, Col.; population (1890) 11,110. In 1896 it had an assessed valuation, about one-third actual value, of \$6,505,635; and in 1897 a total debt of \$961,072 (including \$760,000 in water bonds), net debt \$829,455; 2 national banks (capital \$200,000), a State bank; a rapid transit company operating about 30 miles of track, including that of an electric railway extending to Manitou and Cheyenne Cañon; and 2 daily, a semi-monthly, and 8 weekly periodicals. The Colorado Springs School District had an assessed valuation, 1894, of \$6,144,370 and a total debt, 1895 of \$138,000.

COLUMBIA, city, Lancaster county, Pa., population (1890) 10,559. In 1896 it had an assessed valuation of \$3,058,076 and a total debt of \$158,900 in funding and improvement bonds; and in 1897, 3 national banks (capital \$600,000), and 2 daily and 4 weekly newspapers.

COLUMBIA, city, capital of Richland county and of the State of South Carolina, population (1890) 15,353; (1894) estimated 20,000. In 1892 the assessed valuations were: Real \$3,254,105, personal \$1,703,196—total, \$4,957,301. There was outstanding of the city debt funded in 1880 and payable in 1910, \$852,186, and of water bonds, secured by mortgage on plant that cost \$100,000, payable in 1921, \$75,000. In 1897 there were 2 national banks (capital \$200,000), 2 State banks (capital \$176,800), a savings bank (capital \$30,000), a trolley street railway operating 10 miles of track, and 3 daily and 6 weekly periodicals.

COLUMBIA UNIVERSITY, New York City, founded as King's College in 1754; re-organized after national independence as Columbia College, and adopting the title of University by action of the trustees Feb. 3, 1896. It is non-sectarian; and in 1897-98 included under the university council 8 departments, viz.: (1) School of Arts, known as Columbia College, granting the degrees of B.A., B.S., and B.L., and of M.A., for continued post-graduate study. (2) School of Mines, with 4 years' courses in mining and engineering, civil engineering, electrical engineering, metallurgy, geology and palæontology, analytical and applied chemistry, and architecture; giving degrees in these departments, and having post-graduate 2 years' course in sanitary engineering; university courses of an additional year for the degrees of M.A. and Ph.D.; and special electives not limited in time. (3) College of Physicians and Surgeons, with 4 years' course for the degree of M.D. (4) School of Law, with 3 years' course for the degree of LL.B., and M.L. for a fourth year. (5) School of Political Science. (6) School of Philosophy. (7) Teachers' College, brought into alliance in 1893. (8) Barnard College. The library received in the year 1894-95 accessions of 24,839 volumes, and contained in 1896, 223,000 volumes, and 65,000 pamphlets. The corner stone of the new library building was laid Dec. 7, 1895. It is being erected by President Low, at a cost of \$1,000,000, as a memorial to his father, and will be one of the most important buildings on the new site. The new site is on Morningside Heights, between Amsterdam Avenue and the Boulevard, extending from 116th to 120th Street, and a part of the group of buildings was occupied in 1897. In December, 1895, President Low said that the site and new buildings would cost \$5,500,000 of which \$4,000,000 had been secured. Free or reduced tuition is granted to not more than one-tenth of the students in any department except medicine, and there are 34 fellowships, 215 scholarships, and a number of prizes awarded to deserving students. At the close of 1897 there were 289 professors and instructors; 1,921 students; 240,000 volumes in the library; \$735,000 in scientific apparatus and library; \$9,400,000 in productive funds; \$275,052 in gifts; \$726,786 in income; president, Seth Low, LL.D.

COLUMBIAN UNIVERSITY, Washington, D. C., Baptist, co-educational; founded 1821; had at close of 1897, 225 professors and instructors; 1,013 students; 12,000 volumes in the library; \$900,000 invested in grounds and buildings; \$50,000 in scientific apparatus; \$256,000 in productive funds; income, \$78,145; president, B. L. Whitman, D.D.

COLUMBUS, city, capital of Franklin county and of the State of Ohio; population (1890) 88,150. In 1896 it had a total assessed valuation, about one-half actual value, of \$62,130,350; a tax rate of \$27 per \$1,000; and in 1897 a total bonded debt (including balance of water debt \$1,112,000) of \$7,524,200, sinking funds \$1,716,246, net debt \$5,807,954. The bonded debt also included street improvement bonds amounting to \$2,696,700, payable by special assessment. In 1897 there were 7 national banks (capital \$2,050,000), 6 savings banks (capital \$384,500), a State bank (capital \$60,000), and 4 private banks; electric street railroads; and 6 daily, 20 weekly, 2 semi-monthly, 11 monthly, and 3 quarterly periodicals.

COLUMBUS, city, capital of Muscogee county, Ga.; population (1890), 17,303; (1897) estimated 19,300. In 1896 the tax valuations, about 80 per cent. actual value, were: Real, \$7,047,755, personal, \$5,000,000—total, \$12,047,755; and city and school tax rate was \$12.50 per \$1,000, State tax \$3.74, county tax

\$4.56. The city owned real estate and improvements valued at \$335,700. On Jan. 1, 1897, the total debt was \$488,500, all incurred for redemption purposes. There are 5 cotton mills in the city, having a combined capital of \$1,723,500 and operating 61,100 spindles, 2,274 looms and 374 sets of cards; 3 national banks (capital \$350,000) 1 State bank (capital \$150,000) and 1 savings bank (capital \$100,000); a combined steam and trolley railroad operating the street-car system, and a belt passenger and freight line connecting all passenger and freight depots; and 2 daily and 5 weekly periodicals.

COMMERCE OF THE UNITED STATES. The following table shows a summary of the imports and exports of merchandise during the calendar years 1895, 1896, and 1897:

Groups.	1895.	1896.	1897.
IMPORTS.			
FARE OF DUTY:			
Articles of food and live animals.....	\$132,992,389	\$119,308,165	\$118,144,740
Articles, crude, for domestic industry....	191,888,463	146,939,598	206,246,201
Articles manufactured—			
For mechanic arts.....	29,199,586	28,352,299	95,993,522
For consumption.....	19,106,475	20,055,657	29,542,277
Articles of voluntary use, luxuries.....	8,023,450	8,334,828	6,702,370
Total.....	\$284,810,163	\$322,952,457	\$377,329,110
DUTIABLE:			
Articles of food and live animals.....	\$98,556,398	\$114,978,999	\$102,349,373
Articles, crude, for domestic industry....	24,632,560	15,233,228	32,555,794
Articles manufactured—			
For mechanic arts.....	73,283,690	57,886,599	55,878,363
For consumption.....	131,732,371	101,381,308	97,803,195
Articles of voluntary use, luxuries.....	88,628,191	79,147,061	76,625,105
Total.....	\$416,833,327	\$358,627,099	\$365,392,240
FREE AND DUTIABLE:			
Articles of food and live animals.....	\$23,538,775	\$24,187,158	\$220,194,113
Articles, crude, for domestic industry....	219,531,032	162,172,736	238,891,995
Articles manufactured—			
For mechanic arts.....	162,182,586	89,298,818	81,171,885
For consumption.....	150,838,840	124,438,965	118,835,882
Articles of voluntary use, luxuries.....	97,251,851	78,541,889	83,327,175
Total.....	\$801,663,190	\$681,579,556	\$742,631,350
EXPORTS.			
DOMESTIC:			
Products of Agriculture.....	\$545,711,375	\$664,955,372	\$739,323,514
Manufactures.....	201,152,771	253,681,541	279,616,898
Mining.....	19,820,595	21,465,771	19,792,796
Forest.....	39,662,993	36,281,994	40,834,861
Fisheries.....	6,232,224	6,594,163	5,649,945
Miscellaneous.....	4,158,948	3,911,426	3,645,015
Total.....	\$807,749,016	\$986,830,686	1,079,833,018
FOREIGN:			
Free of duty.....	\$8,474,579	\$9,941,153	\$8,840,180
Dutiable.....	8,647,880	9,066,088	11,040,356
Total.....	\$17,122,459	\$19,007,241	\$19,880,536

The imports and exports of gold and silver coin and bullion in the same periods were as follows:

Gold and Silver.	1895.	1896.	1897.
Gold—Imports.....	\$32,538,736	\$104,731,259	\$34,020,592
Exports.....	104,665,023	58,256,800	34,276,401
Silver—Imports.....	11,286,067	30,379,740	33,082,302
Exports.....	53,833,153	64,056,741	58,661,292

The tonnage movement was as follows:

Vessels.	1895	1896.	1897.
Entered—Sailing..... (tons)	4,677,213	4,622,178	4,810,290
Steam.....	15,484,923	17,756,032	19,596,336
Cleared—Sailing.....	4,690,116	4,686,162	4,813,116
Steam.....	15,487,783	18,028,772	19,702,738

An analysis of the official reports yields the following information concerning the commercial relations of the United States with foreign countries, individually and by geographical groups, taking the trade in merchandise only for the calendar year 1897: Europe, imports from, \$407,970,332; exports to, \$858,049,510; North America, imports, \$101,762,584; exports, \$129,468,932; South America, imports, \$103,442,125; exports, \$33,506,140; Asia, imports, \$93,896,750; exports, \$40,663,159; Oceania, imports, \$25,987,853; exports, \$21,341,877; and Africa, imports, \$9,571,706; exports, \$16,713,936. The largest trade was with the United Kingdom, imports, \$159,002,286; exports, \$482,695,024. Next in order of values were Germany, imports, \$98,062,278; exports, \$136,277,886; Canada, imports, \$39,348,106; exports, \$73,728,616; France, imports, \$66,730,631; exports, \$73,665,199; Netherlands, imports, \$13,782,795; exports, \$59,672,319; and Belgium, imports, \$13,910,545; exports, \$41,769,322; Italy, imports, \$20,165,602; exports, \$21,336,735; and Mexico, imports, \$19,650,099; exports, \$21,061,152.

COMMERCE OF THE WORLD. The following table shows the commerce of the world, in most cases in merchandise only, in the years nearest to date for which reports or conservative estimates were obtainable:

Countries, etc.	Year.	Value.	Imports.	Exports.
Africa, British E.....	1893..	Rupee.	1,807,306	1,287,399
Africa, British W.....	1893..	£	2,051,355	2,161,787
Argentine Republic.....	1894..	\$	92,788,725	101,687,986
Australia: New South Wales.....	1894..	£	15,801,941	20,577,573
New Zealand.....	1894..	"	6,788,020	9,351,047
Queensland.....	1894..	"	4,337,400	8,735,529
S. Australia.....	1894..	"	6,226,690	7,301,774
Tasmania.....	1894..	"	980,000	1,490,000
Victoria.....	1894..	"	12,470,599	14,026,546
W. Australia.....	1893..	"	1,494,438	913,117

Countries, etc.	Year.	Value.	Imports.	Exports.
Austria-Hungary.....	1892..	Fl.	683,300,000	739,330,000
Belgium.....	1893..	£	117,000,000	108,000,000
Bermudas.....	1893..	"	327,581	129,069
Bolivia, averf. annual est.....	"	"	2,500,000	3,250,000
Brazil.....	1895..	"	12,600,000	11,000,000
Budgaria.....	1894..	"	3,969,166	2,918,025
Canada.....	1894..	\$	123,474,950	17,534,949
Cape Colony.....	1894..	£	11,684,000	1,812,000
Chile.....	1893..	Pesos.	68,235,874	72,245,114
China.....	1894..	H. taels.	162,102,911	124,104,522
Colombia.....	1893..	Pesos.	13,401,299	14,630,332
Congo Free State.....	1894..	£	550,000	500,000
Corea.....	1893..	Mex. \$	3,880,155	1,098,119
Costa Rica.....	1893..	Pesos.	5,833,427	9,919,074
Denmark.....	1893..	Kron.	320,264,997	235,115,937
Colonies.....	1893..	"	3,531,139	3,410,818
Ecuador.....	1893..	£	1,675,369	2,342,000
Egypt.....	1893..	"	9,051,484	13,109,412
Fiji.....	1893..	"	278,308	355,657
France, Special trade.....	1893..	Fr.	3,854,000,000	3,236,000,000
Colonies.....	1891..	"	211,691,000	188,843,000
Germany, Special trade.....	1893..	Marks.	4,134,070,000	3,244,562,000
Colonies.....	1894..	"	17,176,074	18,536,898
Greece.....	1894..	"	4,308,358	2,971,626
Guatemala.....	1894..	"	1,068,000	3,128,000
Guiana, British.....	1893-4	"	1,620,710	2,358,018
Haiti.....	1893..	"	2,030,000	2,453,000
Hawaii.....	1892..	"	865,660	1,600,000
Honduras.....	1892..	"	353,200	312,000
Honduras, British.....	1893..	"	1,460,941	2,135,117
India and dependencies.....	1894..	Rx.	95,482,687	110,603,561
Italy.....	1893..	£	51,360,000	41,324,000
Japan.....	1894..	"	19,600,000	19,000,000
Siberia.....	1894..	"	144,000	151,000
Mauritius.....	1893..	"	1,945,396	1,614,066
Mexico.....	1894..	U. S. \$	16,355,351	48,845,371
Morocco.....	1893..	£	1,263,183	1,449,051
Natal.....	1893..	"	2,336,738	1,242,107
Netherlands.....	1893..	"	117,301,666	93,055,000
Colonies.....	1892..	Guild.	170,562,112	219,153,953
Newfoundland-Labrador.....	1893..	\$	7,572,569	6,280,912
Nicaragua.....	1891..	£	538,700	462,929
Niger Coast Protectorate.....	1893..	"	880,389	998,485
Orange Free State.....	1893..	"	717,603	800,000
Paraguay.....	1893..	"	952,000	1,505,000
Persia.....	1893..	"	7,500,000	.....
Peru.....	1894..	"	1,304,000	2,040,000
Portugal.....	1893..	"	8,514,375	5,190,811
Colonies.....	1894..	Mil.	3,039,000	5,121,000
Romania.....	1893..	£	17,937,000	15,444,000
Russia.....	1893..	"	47,000,000	62,000,000
Salvador.....	1893..	"	270,000	1,080,000
Samoa.....	1893..	"	69,250	34,326
San Domingo.....	1893..	"	483,000	728,000
Serbia.....	1894..	"	1,368,245	1,840,928
Siam.....	1894..	"	2,200,000	4,460,000
South African Republic.....	1893..	"	5,371,701	.....
Spain.....	1893..	Pesetas	684,824,976	626,691,032
Colonies.....	1891-3	\$	92,370,973	122,075,428
Straits Settlements.....	1893..	Mex. \$	160,148,960	144,757,394
Sweden-Norway.....	1893-4	£	29,370,000	25,575,000
Switzerland.....	1894..	"	34,480,000	26,035,500
Turkey.....	1893..	"	18,000,000	11,000,000
United Kingdom.....	1894..	"	408,503,718	274,197,229
United States.....	1897..	\$	712,031,350	1,099,713,554
Uruguay.....	1893..	£	4,185,455	5,761,903
Venezuela.....	1894..	"	3,000,000	4,268,592
West Indies, British.....	1893..	"	6,930,444	6,984,405
Zanzibar.....	1893..	"	1,146,759	1,062,035

The equivalents of foreign values in United States gold may be obtained by the following valuations as promulgated by the secretary of the United States treasury Jan. 1, 1896: £=14.86; rupee, 23.1 cents; florin, 39 cents; peso, 91.2 cents; H. tacl, 80 cents; Mexican dollar, 52.8 cents; kronor, 26.8 cents; franc, 19.3

cents; mark, 23.8 cents; Rx, \$2.31; guilder, 40.2 cents; milreis, \$1.08; and peseta, 19.3 cents.

CONCORD, city, capital of Merrimac county and of the State of New Hampshire; population (1890) 17,004. In 1896 it had an assessed valuation of \$11,228,515; tax rate \$23.20 per \$1,000; and tax receipts \$260,589; and Jan. 1, 1897, the total indebtedness over available assets was \$930,590; the city owned property valued at \$223,165; and the water precinct owned the waterworks, valued at \$848,304, and paying in rates more than sufficient for the interest on outstanding bonds. In 1897 there were 3 national banks (capital \$500,000); a trolley road extending to Penacook and operating 12½ miles of track; and 2 daily, 4 weekly, and 5 monthly periodicals.

CONGO FREE STATE. See KONGO FREE STATE.

CONGREGATIONALISTS, a religious denomination in America, and in England and the colonies. The year book for the United States for 1895, giving the "fifth-year" statistics, reported churches in 49 States and Territories, 5,342; of which 4,417 reported church buildings valued at \$43,436,243, an average value of \$9,836; parsonages, 2,032, valued at \$4,580,239; invested funds, \$3,881,750; debts, \$3,300,796. The ministers numbered 5,287, of whom 3,592 reported salaries aggregating \$4,041,727, an average of \$1,125. Church members were 583,593; members added in 1894, 62,946; losses by death, dismission to other churches, and discipline, 37,047; net gain in the year, 25,899; Sunday school members, 677,935; members of young people's societies of Christian Endeavor, 204,085; families, 405,821. Home expenses of 4,579 churches were \$7,035,307; benevolences \$2,190,111; legacies to benevolent causes, \$749,517; Sunday school benevolences reported, \$132,341. The same authority for 1897 reported a total of 5,546 churches; 5,405 ministers; 615,195 members; 687,575 Sunday school members; 3,892 societies of Christian Endeavor, with 242,346 members; \$2,129,456 aggregate contributions; and \$6,871,128 home expenditures, by 4,758 churches.

The triennial National Council was held at Syracuse, N. Y., in October, 1895; to which it was reported that in three years 651 new churches had been organized and 295 dropped from the roll, leaving a net gain of 356, or 119 churches per year. Of this gain 155 were in the interior, 128 in the West, and 73 in the East. During 30 years the denomination had increased in membership 122 per cent., against 94 per cent. increase of population in the whole country. The Congregationalists of Great Britain and Ireland (there more often called Independents) are united in the Congregational Union of England and Wales, organized in 1831, and meeting annually in May in London. The semi-annual meeting in September-October, 1895, was held at Brighton, Chairman for 1896, Rev. J. Morlais Jones, Lewisham. According to reports then presented there were 51 county and other local associations; 4,542 churches and branches, affording 1,613,722 sittings. There were about 100 churches and preaching stations in Scotland, 30 in Ireland, and 10 in the Channel Islands. There were also about 200 churches and stations in Canada, 300 in Australia, and 25 in New Zealand. The ministers connected with the Union numbered 2,804, of whom 240 were retired because of age or infirmity, and 393 others were without pastoral charge. The contributions reported for all purposes amounted to £1,000,000 during the year, the largest church benevolence being that of the London Missionary Society, which expended for missions in Asia, Africa, the West Indies, Polynesia, and New Guinea, £139,822, besides which the converts at the different mission stations raised for the work £30,966. The British Congregationalists maintained in 1895,

12 colleges for the training of ministers, including Mansfield College, established at Oxford in 1889, besides 4 in the colonies, with about 500 theological students and 10 in heathen lands, with 300 native students for the ministry.

An International Council of British and American Congregationalists met in London in 1890; and the National Council in Syracuse in 1895 appointed a committee to arrange for an International Council in Boston, Mass. This committee in January, 1896, instructed the secretary of the National Council to invite attendants from England and Australia in 1898.

CONGRESS OF THE UNITED STATES, the supreme legislative authority of the nation. The fifty-fifth Congress began legally March 4, 1897, and actually, in a special session, March 15, and will close March 4, 1899. The following was the membership of both branches at the opening of the special session:

SENATE.
 Republicans, 44; Democrats, 34; Populists, 5; Silver Republicans, 2; Silver Democrat, 1; doubtful, 1—total, 90. President, Garret A. Hobart, Rep., N. J.

ALABAMA. John T. Morgan, d. '01 Edmund W. Pettus, d. '03	IOWA. John H. Gear, r. '01 William B. Allison, r. '03	MONTANA. Lee Mantle, r. '99 Thomas H. Carter, r. '01	RHODE ISLAND. Nelson W. Aldrich, r. '99 G. P. Wetmore, r. '01
ARIZONA. James H. Berry, d. '01 James K. Jones, d. '03	KENTUCKY. William Lindsay, d. '01 W. O. Harris, p. '03	NEBRASKA. William Y. Allen, p. '99 John M. Thurston, r. '01	SOUTH CAROLINA. Benj. R. Tillman, d. '01 James H. Earle, d. '03
CALIFORNIA. Stephen M. White, d. '99 George C. Perkins, r. '03	LOUISIANA. Donelson Caffery, d. '01 Sam. D. McEnery, d. '03	NEVADA. Wm. M. Stewart, p. '99 John P. Jones, p. '03	SOUTH DAKOTA. R. F. Pettigrew, r. '01 James H. Kyle, p. '03
COLORADO. Edward O. Wolcott, r. '01 Henry M. Teller, s. r. '03	MAINE. Engene Hale, r. '99 William P. Frye, r. '01	NEW HAMPSHIRE. Wm. E. Chandler, r. '01 Jacob H. Gallinger, r. '03	TENNESSEE. Isaham G. Harris, d. '01 Roger Q. Mills, d. '99
CONNECTICUT. Joseph R. Hawley, r. '99 Orville H. Platt, r. '03	MARYLAND. Geo. P. Gorman, d. '99 Arthur L. Wellington, r. '03	NEW JERSEY. James Smith, Jr., d. '99 William J. Sewell, r. '01	TEXAS. Rogor Q. Mills, d. '99 Horace Chilton, d. '01
DELAWARE. George Gray, d. '99 Richard R. Kenney, s. d. '01	MASSACHUSETTS. Henry C. Lodge, r. '99 George F. Hoar, r. '01	NEW YORK. Edw. Murphy, Jr., d. '99 Thomas C. Platt, r. '03	UTAH. Frank J. Cannon, s. r. '99 Joseph L. Rawlings, d. '03
FLORIDA. Samuel Pasco, d. '99 *J. H. Henderson, d. '03	MICHIGAN. Julius C. Burrows, r. '99 James McMillan, r. '01	NORTH CAROLINA. Marion Butler, p. '01 Jeter C. Pritchard, r. '03	VERMONT. Reinfield Proctor, r. '99 Justin S. Morrill, r. '03
GEORGIA. Augustus O. Bacon, d. '01 Alex. Stephens Clay, d. '03	MINNESOTA. Cushman K. Davis, r. '99 Knute Nelson, r. '01	NORTH DAKOTA. William N. Koach, r. '99 H. C. Hansbrough, r. '03	VIRGINIA. John W. Daniel, d. '99 Thomas S. Martin, d. '01
IDAHO. George L. Shoup, r. '01 Henry Helffeldt, p. '03	MISSISSIPPI. James Z. George, d. '99 Edw. C. Walthall, d. '01	OHIO. *Mark A. Hanna, r. '99 Joseph B. Foraker, r. '03	WASHINGTON. John L. Wilson, r. '99 George Turner, r. '03
ILLINOIS. Shelby M. Cullom, r. '01 William E. Mason, r. '03	CONNECTICUT. Edw. C. Walthall, d. '01	OREGON. George W. McBride, r. '01 *Henry W. Corbett, r. '03	WEST VIRGINIA. Chas. J. Faulkner, d. '99 Stephen B. Elkins, r. '01
INDIANA. David Turpie, d. '99 Chas. W. Fairbank, r. '03	MISSOURI. Francis M. Cockrell, d. '99 George J. Vest, d. '03	PENNSYLVANIA. Matthew S. Quay, r. '99 Boles Perdue, r. '03	WISCONSIN. John L. Mitchell, d. '99 John C. Spooner, r. '03

* Appointed pending election by legislature.

HOUSE
 Republicans, 204; Democrats, 122; Fusion, 15; Populists, 12; Silver Party, 3; vacancy, 1—total, 357.

ALABAMA. 1 George W. Taylor, d. 2 Jesse F. Stallings, d. 3 Henry D. Clayton, d. 4 T. S. Pownall, d. 5 Willis Brown, d. 6 John H. Bankhead, d. 7 Milford W. Howard, p. 8 Joseph Wheeler, d. 9 O. W. Underwood, d.	ARIZONA. 1 Philip D. McCulloch, d. 2 John N. Little, d. 3 Thomas C. McRae, d. 4 William L. Terry, d. 5 Hugh A. Dismore, d. 6 H. S. Brandridge, d.	CALIFORNIA. 1 John A. Barham, r. 2 Marion De Vries, d. 3 Samuel G. Hibborn, r. 4 James G. Maguire, p. 5 Eugene F. Loud, r.	COLORADO. 1 John F. Shafroth, s. 2 John C. Bell, p. 3 Charles A. Russell, r. 4 Ebenezer J. Hill, r.	DELAWARE. L. Irving Handy, d.	FLORIDA. 1 S. M. Sparkman, d. 2 R. W. Davis, d. 3 Rufus E. Lester, d. 2 James M. Griggs, d. 3 E. B. Lewis, d. 4 W. C. Adkinson, d. 5 L. F. Livingston, d. 6 Charles L. Bartlett, d. 7 John W. Maddox, d.	GEORGIA. 1 Rufus E. Lester, d. 2 James M. Griggs, d. 3 E. B. Lewis, d. 4 W. C. Adkinson, d. 5 L. F. Livingston, d. 6 Charles L. Bartlett, d. 7 John W. Maddox, d.	ILLINOIS. 1 James R. Mann, n. 2 William Lorimer, n. 3 Hugh R. Belknap, r. 1 Daniel W. Mills, r. 5 George E. White, n. 6 Edward D. Cooke, n. 7 George E. Foss, r. 8 Albert J. Hopkins, r. 9 Robert R. Hill, r. 10 George W. Prince, n. 11 Walter Reeves, s. 12 Joseph G. Cannon, r. 13 Vespasian Warner, r. 14 Joseph Y. Graff, r. 15 Benjamin F. Marsh, n. 16 W. H. Hinrichsen, d.	INDIANA. 1 Jas. A. Hemenway, r. 2 Robert W. Mierns, d. 3 W. T. Zenor, d. 4 Wm. S. Hollman, d. 5 George W. Faris, r. 6 Henry U. Johnson, r. 7 Jesse Overstreet, r. 8 Charles L. Henry, r. 9 Charles B. Landis, r. 10 E. D. Crumpacker, n. 11 George W. Steele, r. 12 James M. Robinson, f. 13 Lemuel W. Royse, r.	IOWA. 1 Samuel M. Clark, r. 2 George M. Curtis, r.
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Speaker, Thomas B. Reed, Rep., Maine.

- 3 David B. Henderson, R.
4 Thomas Updegraff, R.
5 Robert G. Cousins, R.
6 John F. Lacy, R.
7 John A. T. Tamm, R.
8 Wm. F. Heplburn, R.
9 Alva L. Hager, R.
10 Jon. P. Dolliver, R.
11 George D. Perkins, R.
- KANSAS.
At Large.
Jeremiah D. Botkin, F.
1 Case Broderick, R.
2 M. S. Peters, D.
3 E. R. Ridgely, F.
4 Charles Cuttis, R.
5 W. D. Vincent, P.
6 N. B. McCormick, P.
7 Jerry Simpson, P.
- KENTUCKY.
1 Chas. K. Wheeler, D.
2 John D. Clardy, D.
3 John S. Rhea, D.
4 David H. Smith, D.
5 Walter Evans, R.
6 Albert S. Berry, D.
7 Evan E. Settle, D.
8 George M. Davison, R.
9 Samuel J. Pugh, R.
10 T. Y. Fitzpatrick, D.
11 David G. Colson, R.
- LOUISIANA.
1 Adolph Meyer, D.
2 Robert C. Davy, D.
3 Robert Brossard, D.
4 Henry W. Ogden, D.
5 S. T. Baird, D.
6 S. M. Robertson, D.
- MAINE.
1 Thomas B. Reed, R.
2 Nelson Dingley, Jr., R.
3 Seth L. Milliken, R.
4 Charles A. Holtzcler, R.
- MARYLAND.
1 Isaac A. Barber, R.
2 William B. Baker, R.
3 William S. Rogers, R.
4 Wm. W. McIntyre, R.
5 Sydney E. Mudd, R.
6 John McDonald, R.
- MASSACHUSETTS.
1 Ashley B. Wright, R.
2 Frederick H. Gillett, R.
3 J. Henry Walker, R.
4 G. W. Weymouth, R.
5 William S. Knox, R.
6 William H. Moody, R.
7 William E. Barrett, R.
8 Samuel W. McCall, R.
9 John F. Fitzgerald, D.
10 S. J. Bartows, R.
11 Chas. F. Sprague, R.
12 Wm. C. Lovering, R.
13 John Simpkins, R.
- MICHIGAN.
1 John B. Corlies, R.
2 George Spalding, R.
3 Albert M. Todd, P.
4 E. L. Hamilton, R.
5 Wm. Allen Smith, R.
6 Samuel W. Smith, R.
7 Horace G. Snover, R.
8 F. D. Becker, D.
9 Rossell P. Bishop, R.
10 Rousseau O. Crump, R.
11 William S. Mesick, R.
12 Carlos D. Sheldon, R.
- MINNESOTA.
1 James A. Tawney, R.
2 Jas. T. McCreary, R.
3 Joel P. Heatwole, R.
- 4 F. C. Stevens, R.
5 Loren Fletcher, R.
6 Page Morris, R.
7 Frank M. Eddy, R.
8 J. W. Cassiday, R.
- MISSISSIPPI.
1 John W. Allen, D.
2 W. V. Sullivan, D.
3 T. C. Catchings, D.
4 A. F. Fox, D.
5 John S. Williams, D.
6 C. W. F. Love, D.
7 Patrick Henry, D.
- MISSOURI.
1 Vaucadey, R.
2 Robert N. Bodine, D.
3 Alex. M. Dockery, R.
4 Charles F. Cochran, D.
5 Wm. S. Cowherd, D.
6 D. A. De Armond, D.
7 James A. Cooney, D.
8 Richard P. Bland, D.
9 Champ Clark, D.
10 Richard Bartholdt, R.
11 Charles F. Joy, R.
12 Charles E. Pearce, R.
13 Edward A. Robb, D.
14 Wm. D. Vandiver, D.
15 M. E. Benton, D.
- MONTANA.
1 Chas. S. Hartman, S.
- NEBRASKA.
1 Jesse B. Strode, R.
2 David H. Mercer, R.
3 Samuel Maxwell, F.
4 William L. Stark, F.
5 J. D. Sutherland, F.
6 William L. Green, F.
- NEVADA.
F. G. Newlands, S.
- NEW HAMPSHIRE.
1 Cyrus A. Sulloway, R.
2 Frank G. Clark, R.
- NEW JERSEY.
1 H. C. Loudenslager, R.
2 John J. Gardner, R.
3 Benj. F. Howell, R.
4 Mahon E. Finney, R.
5 James F. Stewart, R.
6 Richard W. Parker, R.
7 Thos. McEwan, Jr., R.
8 Chas. N. Fowler, R.
- NEW YORK.
1 Joseph M. Belford, R.
2 Dennis M. Harley, R.
3 Francis H. Wilson, R.
4 Frank F. Fischer, R.
5 Charles G. Bennett, R.
6 James R. Howe, R.
7 J. H. G. Vesilodge, D.
8 John M. Mitchell, R.
9 Thomas J. Bradley, D.
10 Amos J. Cummings, D.
11 William Sulzer, D.
12 Geo. B. McClellan, D.
13 R. C. Shannon, R.
14 Lemuel E. Quigg, R.
15 Phillip B. Low, R.
16 William L. Ward, R.
17 Benj. B. Odell, Jr., R.
18 John F. Ketcham, R.
19 A. V. B. Cochran, R.
20 Geo. N. Southwick, R.
21 David F. Wilbur, R.
22 Lucien L. Lattaer, R.
23 W. T. Foster, Jr., R.
24 C. A. Chickering, R.
25 John S. Sherman, R.
26 George W. Ray, R.
27 James J. Belden, R.
28 Stephen F. Payne, R.
29 Charles W. Gillet, R.
- 30 J. W. Wadsworth, R.
31 Henry C. Brewster, R.
32 R. B. Mahany, R.
33 D. S. Alexander, R.
34 Warren B. Hooker, R.
- NORTH CAROLINA.
1 Harry Skinner, P.
2 George H. White, R.
3 Frank Thompson, D.
4 William F. Crowl, P.
5 W. W. Kitchin, D.
6 Charles H. Martin, P.
7 Sam. J. Pemberton, D.
8 Romulus Z. Limny, R.
9 Richmond Pearson, R.
- NORTH DAKOTA.
1 Martiu N. Johnson, R.
- OHIO.
1 William E. Shattoe, R.
2 Jacob H. Bromwell, R.
3 John L. Breuder, F.
4 Geo. A. Marshall, F.
5 David McKevick, F.
6 Seth W. Brown, R.
7 Walter L. Weaver, R.
8 Archibald Lybrand, R.
9 James H. Southard, R.
10 Lucien J. Fountain, R.
11 C. H. Grosvenor, R.
12 John J. Lentz, D.
13 James A. Norton, D.
14 Winfield S. Kerr, R.
15 H. C. Van Voorhis, R.
16 Loreuzzo Danford, R.
17 John A. McDowell, F.
18 Robert W. Taylor, R.
19 S. A. Northway, R.
20 Chifton B. Beach, R.
21 Theo. E. Burton, R.
- OREGON.
1 Thomas H. Tongue, R.
2 William R. Ellis, R.
- PENNSYLVANIA.
At Large.
G. A. Grow, R.
S. A. Davenport, R.
J. Henry H. Bigsbaum, R.
2 Robert Adams, Jr., R.
3 William McAleer, R.
4 James R. Young, R.
5 Alfred C. Harner, R.
6 Thomas S. Butler, R.
7 Irving P. Wanger, R.
8 Wm S. Kirkpatrick, R.
9 Daniel Emmentrout, D.
10 Marrott Brosius, R.
11 William Conell, R.
12 M. B. Williams, R.
13 Charles N. Brumm, R.
14 M. E. Olmstead, R.
15 James H. Colding, R.
16 Horace B. Fackert, R.
17 Monroe H. Kulp, R.
18 T. M. Mahon, R.
19 George J. Benner, D.
20 Josiah D. Hicks, R.
21 E. E. Robbins, R.
22 John Dalzell, R.
23 William A. Stone, R.
24 Ernest F. Adesoor, R.
25 James J. Davidson, R.
26 J. C. Startevant, R.
27 Charles W. Stone, R.
28 William C. Arnold, R.
- RHODE ISLAND.
1 Melville Bull, R.
2 Adm B. Capron, R.
- SOUTH CAROLINA.
1 William Elliott, D.
2 Wm. S. Foster, D.
3 Asbury C. Latimer, D.
- 4 Stanyean Wilson, D.
5 Thomas J. Strait, D.
6 John L. McLaurin, D.
7 J. William Stokes, D.
- SOUTH DAKOTA.
At Large.
F. E. Kelly, P.
J. Knowles, P.
- TENNESSEE.
1 W. P. Brownlow, R.
2 Henry R. Gibson, R.
3 John A. Moon, D.
4 Benton McMillin, D.
5 J. D. Richardson, D.
6 John W. Gaines, D.
7 Nicholas N. Cox, D.
8 T. W. Sibus, D.
9 Rice A. Pierce, D.
10 E. W. Carmack, D.
- TEXAS.
1 Thomas H. Ball, D.
2 S. Bronson Cooper, D.
3 R. C. DeGraffenreth, D.
4 John W. Crawford, D.
5 Joseph W. Bailey, D.
6 R. E. Burke, D.
7 R. L. Henry, D.
8 S. W. T. Layland, D.
9 Joseph D. Sayers, D.
10 R. B. Hawley, R.
11 Rudolph Kleberg, D.
12 J. L. Staley, D.
13 John H. Stevens, D.
- UTAH.
William H. King, D.
- VERMONT.
1 H. Henry Powers, R.
2 William W. Groat, R.
- VIRGINIA.
1 William A. Jones, D.
2 William A. Young, D.
3 John E. Lamb, D.
4 Sydney P. Ewes, D.
5 Claude A. Spanson, D.
6 Peter I. Gray, D.
7 James Hays, D.
8 J. F. Rixey, D.
9 James A. Walker, R.
10 Jacob Yost, R.
- WASHINGTON.
At Large.
J. H. Lewis, F.
W. C. Jones, F.
- WEST VIRGINIA.
1 B. B. Jovener, R.
2 Alston G. Dayton, R.
3 Charles P. Dorr, R.
4 Warren Miller, R.
- WISCONSIN.
1 Henry A. Cooper, R.
2 Edw. Sauerbiering, R.
3 Jos. W. Babcock, R.
4 Theobald Ogden, R.
5 Samuel S. Barney, R.
6 J. H. Davidson, R.
7 Michael Griffin, R.
8 Edward L. Shoor, R.
9 Alexander Stewart, R.
10 John J. Jenkins, R.
- WYOMING.
John E. Osborne, D.
- ARIZONA.
Marcus A. Smith, D.
- NEW MEXICO.
H. B. Ferrisburg, D.
T. Y. Callahan, F.

CONGRESS, Acts of. The fifty-third Congress began legally on March 4, 1893, and actually at the call of the president on Aug. 7 following; had three sessions; and ended on March 4, 1895. Among the important bills that were

adopted were: An act to repeal the silver-purchase clause of the Sherman act of 1890; an act amending the act of 1892 restricting Chinese immigration in the United States by extending the time for registration six months; an act to repeal the Federal election laws; an act to give effect to the award of the Tribunal of Arbitration at Paris to which were referred questions relating to the preservation of fur seals, and an act supplementary thereto; an act making Labor Day a legal holiday; an act to define and establish the units of electrical measure; an act providing for the admission of Utah into the Union; an act to reduce taxation, to provide revenue, etc. (Wilson tariff bill; see CLEVELAND, GROVER); acts providing for the dedication of the Chickamauga and Chattanooga National Park and the establishment of national military parks at the battlefields of Gettysburg and Shiloh; an act to suppress lottery traffic; and joint resolutions relating to the boundary dispute between Great Britain and Venezuela (see BOUNDARY LINES, *Venezuela*), and to the Mora claim against Spain. Among the measures that failed to become laws were: The Bland bill for the coinage of the seigniorage, which was passed and vetoed; bills for the admission into the Union of Arizona and New Mexico; a bill for the election of United States senators by direct popular vote; and a resolution declaring that the secretary of the treasury had no legal authority to issue and sell bonds. The aggregate appropriations of this Congress were:

Agricultural.....	\$6,527,373.06
ARMY.....	46,845,492.77
Diplomats and consular.....	3,438,377.59
District of Columbia.....	11,291,121.82
Fortifications.....	4,331,561.50
Indians.....	19,422,316.40
Legislative, executive, and judicial.....	43,157,301.37
Military Academy.....	870,701.74
Navy.....	54,743,372.03
Pensions.....	292,063,110.00
Post office.....	176,782,567.41
Ports and harbors.....	23,116,295.10
Sundry civil.....	69,373,829.35
Deficiencies.....	22,636,380.88
Miscellaneous.....	875,623.92
Total general bills, etc.....	775,060,569.37
Permanent annual appropriations.....	214,148,636.32
Grand total.....	\$989,209,205.69

The fifty-fourth Congress began legally on March 4, 1895, and actually on Dec. 2 following, and ended on March 4, 1897. The secretary of the treasury presented to it (Dec. 2) the following estimates of appropriations needed for the fiscal year ending June 30, 1897:

Legislative establishment.....	\$3,880,581
Executive.....	20,103,212
Judicial.....	923,920
Foreign intercourse.....	1,649,658
Military establishment.....	21,526,968
Naval.....	27,383,975
Indian affairs.....	8,750,458
Pensions.....	141,384,579
Public works.....	28,574,028
Postal service.....	5,021,779
Miscellaneous.....	30,035,031
Permanent annual appropriations.....	119,054,160
Total.....	\$418,091,073

The estimates for the fiscal year ending June 30, 1896, aggregated \$410,435,-079 and the appropriations amounted to \$497,008,520.66 (included in total of the fifty-third Congress). Among the important measures adopted were: A House bill appropriating \$100,000 for expenses of the Venezuela Boundary Commission (Dec. 18); an act for the appointment of a commission to investigate and report upon the true divisional line between the republic of Venezuela and British Guiana (Dec. 20); an act to remove the disabilities of the ex-Confederate officers who had formerly been in the service of the government (Dec. 24); a joint resolution calling on the Great Powers to interfere in behalf of the Armenians and protesting against the outrages (Jan. 27, 1896); an act to extend the mineral land laws to lands embraced in the north half of the Colville Indian Reservation in the State of Washington; an act to open reservations in Colorado for the location of mining claims; and a joint resolution making an appropriation for the expense of locating the boundary line between Alaska and British North America. Several important measures were adopted in one or the other of the houses, but had not become laws by March 10. The most notable of these was a concurrent resolution recognizing Cuban belligerency, which passed the House on March 2, by a vote of 263 yeas to 17 nays.

The fifty-fifth Congress met in extraordinary session at the call of the president on March 15, 1897. In the House Speaker Reed and the other officers of the previous House were re-elected; the committees on Rules, Ways and Means, and Mileage were appointed; and a number of bills that failed in the previous Congress were reintroduced. The most important legislation was on the arbitration treaty with Great Britain and the tariff. The Senate Committee on Foreign Relations ordered a favorable report on the treaty on March 17, and on May 5 the treaty was rejected by a vote of 43 to 26. The House passed the tariff bill on May 31 by a vote of 205 to 121; and the Senate passed it on July 7, by a vote of 38 to 28. The conference report on the bill was passed in the House on July 19, by a vote of 185 to 118, and in the Senate on July 24, by a vote of 40 to 30. Other measures were the appropriations on special resolutions of \$200,000 for the relief of sufferers by the Mississippi River floods (April 7) and \$50,000 for the relief of distressed American citizens in Cuba (May 17); the passage of a bankruptcy bill in the House (April 22); and the adoption in the Senate (May 20) of the Morgan resolution recognizing the Cuban insurgents as belligerents, by a vote of 41 to 14, after a long and exciting debate. The extraordinary session closed on July 24. See also NATIONAL APPROPRIATIONS.

CONNECTICUT, one of the United States of North America; the fifth of the original thirteen States to ratify the Federal constitution (Jan. 9, 1788); counties, 8; capital, Hartford.

State Officers, 1897 99.—Governor (elected for 2 years, salary \$4,000 per annum), Lorrin A. Cooke; lieutenant-governor, James D. Dewell; secretary of state, Charles Phelps; treasurer, Charles W. Grosvenor; comptroller, Benjamin P. Mead; secretary of State Board of Education, Charles D. Hine; insurance commissioner, F. A. Betts; adjutant-general, George Haven; chief-justice of the Supreme Court of Errors, Charles B. Andrews; associate justices, David Torrance, Frederick B. Hall, Simeon E. Baldwin, and William Hamersley; clerk, C. W. Johnson—all Republicans, excepting Judges Baldwin and Hamersley.

Legislature, 1897.—Republicans, senate, 24, house, 218, joint ballot, 242; Democrats, house, 29, joint ballot, 29; National Democrats, house, 1 joint ballot, 1; Republican majority, senate, 24, house, 188, joint ballot, 212.

Elections.—In the State elections 1894, there was a total of 154,118 votes cast,

of which the Republican candidate for governor received 83,975; the Democratic candidate, 66,287; the Prohibition candidate, 2,310; and the Peoplist candidate, 1,546; Republican plurality, 17,688. In 1896 the entire Republican State ticket, 4 Republican representatives in Congress and 24 Republican State senators were elected. In the presidential election, the Republican candidate received 110,295 votes; the Democratic, 56,734; the National Democratic, 4,332; the Prohibition, 1,804; and the Social Labor, 1,223.

Farm Products.—Reported Dec. 31, 1895: Corn, 1,768,338 bush., from 46,658 acres, value \$901,852; oats, 742,247 bush., from 23,267 acres, value \$230,087; rye, 263,894 bush., from 15,615 acres, value \$166,253; potatoes 3,462,656 bush., from 27,952 acres, value \$1,419,689; and hay, 400,440 tons, from 171,106 acres, value \$6,447,084. The tobacco crop of 1894 was 10,176,908 lbs., from 6,713 acres, value \$1,628,305.

Farm Animals.—Reported Jan. 1, 1897: Horses, 43,035, value \$2,638,558; cows, 136,206, value \$3,776,992; cattle, 66,614, value \$1,686,322; sheep, 32,104, value \$99,041; and swine, 53,737, value \$498,999.

Finances.—The report of the treasurer for the biennial term Sept. 30, 1892-Oct. 1, 1894, showed: Balance on civil list account, \$924,417.44; receipts, \$4,263,090.78—total, \$5,127,508.22; expenditures, \$4,389,090.15; balance, \$738,418.07. The funded debt Oct. 1, 1896, comprised \$1,500,000 in 3½ per cent. bonds, due in 1903; \$1,740,000 in 3s., due 1910; and \$200, long overdue and unclaimed—total, \$3,240,000; civil list funds, \$290,734; net debt, \$2,949,466. The grand list, Oct. 1, 1893, amounted to \$416,323,352, an increase of \$43,448,805 in two years; divided between the counties as follows: Hartford, \$96,716,312; New Haven, \$106,429,421; New London, \$37,965,234; Fairfield, \$101,715,966; Windham, \$17,993,764; Litchfield, \$28,081,896; Middlesex, \$18,901,751; and Tolland, \$8,518,875. In 1895 it aggregated \$452,863,714.

Banks.—On Oct. 31, 1897, there were 81 national banks in operation, with a combined capital of \$21,611,070, which held \$9,021,000 in United States bonds. These banks had outstanding on loans and discounts \$44,615,901, represented by demand paper with individual or firm names, \$2,251,928; the same secured by stocks, bonds, and other personal securities, \$3,580,931; time paper with two or more individual or firm names, \$23,249,819; time paper with single individual or firm name, \$8,812,442; and the same secured by stocks, bonds, and other personal securities, \$6,450,781. The banks held an aggregate of \$2,995,544.14 in coin and coin certificates, of which \$1,961,412.20 was in gold coin. The circulation account was: Total issue, \$105,490,890; redeemed, \$96,952,561; outstanding, \$8,538,329. There were deposits, \$35,606,965; reserve required, \$5,341,044; reserve held, \$10,580,269; ratio of reserve, 29.71 per cent. During the year ending Sept. 30, 1895, the exchanges at the United States clearing houses in Hartford and New Haven aggregated \$187,879,168, and in that ending Sept. 30, 1897, \$196,887,691; increase in a year, \$6,350,144. The State banks, Oct. 1, 1896, numbered 8 and had capital \$2,240,000; deposits, \$4,809,066; resources, \$8,356,515; and surplus and undivided profits, \$845,039. There were 89 mutual savings banks, with depositors, 356,445; deposits, \$149,496,556; resources, \$159,426,134; and surplus and undivided profits, \$9,867,838. The loan and trust companies numbered 12, with capital \$1,245,000; deposits, \$5,481,292; loans, \$4,557,910; resources, \$7,522,380; and surplus and undivided profits, \$726,181.

Insurance.—On Dec. 31, 1894, there were 8 stock fire, marine, and inland insurance companies chartered by the State, with capital \$10,000,000, surplus as regards policy holders, \$17,448,618, and surplus over all liabilities, \$7,448,618; 17

mutual companies, with cash assets \$1,662,951, and surplus of cash assets over liabilities \$1,283,007; 58 stock companies of other States, with capital \$30,347,-925, surplus as regards policy holders \$56,888,883, and surplus over all liabilities \$22,400,866; 5 mutual companies of other States, with surplus as regards policy holders \$1,145,200, and surplus over all liabilities \$1,045,200; and 22 companies of other countries, with deposits in the United States \$4,866,000, assets there \$57,543,314, surplus as regards United States policyholders \$17,682,029, and surplus over all United States liabilities \$13,282,029. Of 58 other insurance companies, 29 were carrying on a life business on the old-line plan; 16, including one which insured live-stock, on the assessment plan; and 13 were doing an accident business exclusively; 24 were joint-stock companies and 34 mutual; 12 belonged to Connecticut, 44 to other States, and 2 to London, England. Three companies belonging to other States carried on an industrial business. Of the life companies operating on the fixed-premium plan, 6 belonging to the State had assets \$132,502,456, liabilities excepting capital \$115,337,565, policies in force in the State 13,672, and amount insured \$24,584,461; and 23 belonging to other States had assets \$921,213,538, liabilities excepting capital \$799,167,660, policies in force 170,088, and amount insured \$69,086,318. Six State companies operating on the assessment plan had assets \$7,960,752, liabilities \$7,653,453, policies in force in the State 17,539, amount insured \$23,128,040; and 9 of other States had assets \$10,852,082, liabilities \$3,691,340, policies in force 3,820, amount insured \$9,277,650. The gross assets of 12 State life and accident companies were \$137,083,732; 44 companies of other States, \$930,205,224; and 2 foreign companies, \$1,642,271—total, \$1,068,931,227.

Internal Revenue.—During the fiscal year ending June 30, 1897, the collections of internal revenue aggregated \$1,066,470.96 (Connecticut and Rhode Island included in one district), from the following sources: Distilled spirits, \$281,-794.13; tobacco, \$122,544.10; fermented liquors, \$542,181.61; oleomargarine, \$119,432.78; penalties, \$510.42; and miscellaneous, \$7.92. During that year there were 472 single-account cigar factories in operation, which used 926,470 lbs. of tobacco, and had an output of 40,601,651 cigars and 149,930 cigarettes; and 55 other tobacco factories, which had an output of 26,674 lbs. of smoking tobacco. Two grain and 34 fruit distilleries were in operation; 433,464 gals. of spirits were rectified and 1,118,998 gals. gauged; and 571,306 bbls. of fermented liquors were produced.

Railroads.—The single track mileage, June 30, 1895, was 3,059.77. The companies reported, capital stock, \$90,008,363; total debt, \$57,349,239, of which \$44,261,372 was funded and \$13,087,867 current liabilities; gross earnings, \$35,206,110; operating expenses, \$24,091,893; net earnings, \$11,114,217; dividends \$4,743,256; taxes paid to the State, \$731,070; and total taxes paid, \$1,807,710.

Commerce.—During the fiscal year ending June 30, 1897, the imports of merchandise at the ports of Fairfield, Hartford, New Haven, New London, and Stonington amounted in value to \$1,159,386. In February, 1896, a bill was introduced into Congress to create Stamford a port of entry.

Oyster Culture.—There are 70,000 acres of submarine oyster farms along the Connecticut coast from Greenwich to Branford, and the number of steamers and other vessels engaged in the industry and the acreage are constantly increasing. In 1893-94 the State received \$13,544 in taxes on these farms.

Post-Offices.—Reported Jan. 1, 1897: First-class, 5; second-class, 20; third-class, 53 (presidential 78); fourth-class, 233; money-order offices, 289; money-order stations, 4; limited money-order offices, 3.

Publications.—Reported May, 1895: Daily, 43; semi-weekly, 1; weekly, 113; bi-weekly, 2; semi-monthly, 2; monthly, 44; bi-monthly, 2; and quarterly, 6. In 1897 there was a total of all kinds of 211.

Churches.—The Roman Catholic is the strongest denomination in the State, and is followed by the Congregational, Methodist, Protestant Episcopal, Baptist, Lutheran, and Presbyterian. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Connecticut 1,082 evangelical Sunday schools, 15,429 officers and teachers, and 122,948 scholars, total members, 138,377.

Schools.—At the close of the school year 1896 there were 192,500 children of school age in the State, of whom 141,485 were enrolled in the public schools and 96,925 were in average daily attendance. The private school enrollment was 26,577, making the total school enrollment 168,062. There were 1,633 public school buildings; 3,962 teachers; public school property valued at \$8,829,116; and expenditures, \$2,796,831, of which \$1,748,475 was for teachers' salaries. For higher instruction there were 66 high schools; 59 private secondary schools; and 3 universities and colleges of liberal arts, with 280 professors and instructors, and 2,850 students (male 2,732, female 118) in all departments; income, \$852,116; volumes in libraries, 313,500; value of scientific apparatus and libraries, \$641,755; value of grounds and buildings, \$6,991,780; and aggregate of productive funds, \$5,808,060. See TRINITY COLLEGE: WESLEYAN UNIVERSITY: YALE UNIVERSITY.

Libraries.—In 1896 there were reported 154 public libraries of 1,000 volumes each and upward, with a total of 1,102,082 bound volumes and 211,405 pamphlets.

State Charities.—There are 167 penal, reformatory, and charitable institutions receiving State aid, of which 11 are for criminals, 17 for the sick and injured, 8 for the insane, 8 for dependent children, one each for boys and girls, 2 for the deaf and dumb, 15 for the aged, 13 for orphans, 88 for paupers, and one each for the feeble-minded, the blind, and old soldiers and sailors.

Population.—In 1890, 746,258, of whom 369,538 were males; 376,720 females; 562,657 natives; 183,601 foreign born; 733,438 whites; and 12,820 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 851,000.

CONSTANTINOPLE, city; capital of the Ottoman Empire; population (1885) census, 873,565; (1893) estimated, 925,000. In July, 1894, the city was visited by several earthquakes, which caused a loss of about 200 lives, much damage to property, and great alarm. On Sept. 30 and Oct. 1, 1895, the city was the scene of fatal riots, precipitated by an attack by the police on a small body of Armenians who were seeking to present the grand vizier with a petition against the government at the gate of the sultan's palace, where justice is usually administered. About 150 Armenians and Turks were killed. The government claimed that the affair was organized by leaders of the Hunchakist revolutionists. Protests were sent to the foreign minister by the foreign diplomats against the excesses of the police and against the barbarity of the Mussulman mob by whom many arrested and wounded Armenians were mutilated or beaten to death. The constant pressure of the Great Powers on the government to force the execution of promised reforms in Armenia and other provinces kept the native population in a state of excitement difficult to control. Toward the end of October eight Albanian guards at the sultan's palace were executed for an alleged conspiracy against the sultan. Early in December the foreign diplomats demanded permission of the sultan for the admission of an additional guardship into the

Bosphorus. The sultan refused, whereon the Powers notified him that if permission were not granted they would order war vessels to Constantinople on Dec. 7. In response the Powers were notified that if they forced a passage of the Dardanelles with their second guardships, the government would break off all diplomatic relations with them and absolve itself from responsibility for the protection of foreign interests. On Dec. 10, however, the sultan acceded to the demand, and within a few days Great Britain, Russia, France, Italy, and Austria sent a second ship to the city. A request for an additional United States war vessel was declined, as was also a formal visit which Rear-Admiral Selfridge, U. S. N., proposed to make the sultan, going to Constantinople on his flagship. A new ministry was announced on Nov. 7, in which Said Pacha was given the post of president of the council, and before the close of the month he created much excitement by fleeing from the palace and taking refuge in the British embassy. Extraordinary precautions were taken to protect the sultan on the occasion of his annual visit to the mosque to kiss the mantle of the prophet, March 1, 1896. The streets through which he was driven with great speed had been dug up in search for hidden mines and bombs, the bridge across the Golden Horn from Constantinople to Galata was guarded for many days to prevent its being tampered with, and the route of his drive was lined with nearly 15,000 troops. It was a significant fact that, though firmly pressing many protests and demands and acting in accord with the representations of other nations, the United States minister was the only one whose name was published in the official gazette as being an invited guest at the Sultan's palace and table. In the quarters ending March 31 and Sept. 30, 1895, the exports declared at Constantinople for the United States, aggregated in value \$1,552,822, principally carpets and rugs (\$401,338), wool (\$309,494), mohair (\$295,680), skins (\$161,012), opium (\$134,685), and attar of roses (\$90,005). See **TURKEY**.

CONSULAR AND DIPLOMATIC SERVICE, agency by which national governments carry on political and commercial relations with each other. In the United States it is under the immediate direction of the president and through him of the secretary of state. For its support Congress appropriated \$1,557,445 for 1894; \$1,569,787 for 1895; and \$1,574,459 for 1896. The following comprises the principal officers of the United States embassies and legations in foreign countries and of the foreign ones in the United States, with the rank and salary of the former, on April 1, 1898:

U. S. EMBASSIES AND LEGATIONS.

- Argentina*.—William I. Buchanan, Envoy Extraordinary and Minister Plenipotentiary, Buenos Ayres, \$10,000; Francis S. Jones, Secretary of Legation, \$1,500.
- Austria-Hungary*.—Charlemagne Tower, E. E. and M. P., Vienna, \$10,000; Charles V. Herdliska, secretary, \$1,800; Lieut. J. L. Chamberlain, military attaché; Lieut. A. P. Niblack, naval attaché.
- Belgium*.—Bellamy Storer, E. E. and M. P., Brussels, \$7,500; Lieut. G. T. Langhorne, military attaché.
- Bolivia*.—George H. Bridgman, E. E. and M. P., La Paz, \$5,000.
- Brazil*.—Charles P. Bryan, E. E. and M. P., Rio de Janeiro, \$12,000; Thomas C. Dawson, secretary, \$1,800.
- Chile*.—Henry L. Wilson, E. E. and M. P., Santiago, \$10,000; Charles R. Simpkins, secretary.
- China*.—Edward H. Conger, E. E. and M. P., Peking, \$12,000; H. G. Squires, secretary, \$2,625; Fleming D. Cheshire, interpreter.
- Colombia*.—Charles H. Hart, E. E. and M. P., Bogota, \$10,000; J. C. McNally, secretary.
- Costa Rica*.—William L. Merry, E. E. and M. P., also accredited to *Nicaragua* and *Salvador*, Managua, \$10,000; John F. Baker, secretary.
- Denmark*.—Lauritz S. Swenson, E. E. and M. P., Copenhagen, \$7,500; Major W. R. Livermore, military attaché.
- Ecuador*.—Archibald J. Sampson, E. E. and M. P., Quito, \$5,000.
- France*.—Horace Porter, Ambassador E. and P., Paris, \$17,500; Henry Vignaud, secretary, \$2,625; Capt. Alex. Rodgers, military attaché; Lieut. W. S. Sims, naval attaché.
- German Empire*.—Andrew D. White, A. E. and P., Berlin, \$17,500; John H. Jackson, secretary, \$2,625; Lieut. Henry T. Allen, military attaché; Lieut. A. P. Niblack, naval attaché.
- Great Britain*.—John Hay, A. E. and P., London, \$17,500; Henry White, secretary, \$2,625; Lieut.-Col. Alfred E. Bates, military attaché; Lieut. John C. Colwell, naval attaché.
- Greece*.—William W. Rockhill, E. E., M. P. and Consul-General, also accredited to *Roumania* and *Serbia*, Athens, \$6,000.

- Guatemala*.—W. Godfrey Hunter, E.E. and M.P., also accredited to *Honduras*, Guatemala City, \$10,000; Arthur M. Beupre, secretary and consul-general, \$2,000.
- Haiti*.—William F. Powell, Minister Resident and Consul-General, also Chargé d'Affaires to *Santo Domingo*, Port au Prince, \$5,000.
- Hawaiian Islands*.—Harold M. Sewall, E.E. and M.P., Honolulu, \$7,500; William Haywood, secretary.
- Italy*.—William F. Dwyer, A.E. and P., Rome, \$12,000; Lewis M. Idlings, secretary, \$1,800; Capt. George F. Scriven, military attaché; Lieut. A. P. Niblack, naval attaché.
- Japan*.—Alfred E. Buck, E.E. and M.P., Tokyo, \$12,000; Joseph R. Herod, secretary; Ransford S. Miller, Jr., interpreter.
- Korea*.—Horace H. Allen, M.R. and C.O., Seoul, \$7,500; William F. Sands, secretary, \$1,500; Pang Kyeng III and Ye Ho Yung, interpreters.
- Liberia*.—William H. Heard, M.R. and C.G., Monrovia, \$4,000; C. M. Manning, secretary.
- Mexico*.—Powell Clayton, E.E. and M.P., Mexico City, \$17,500; Fenton R. McCreery, secretary, \$1,800; Lieut. Powell Clayton, military attaché.
- Netherlands*.—Stanford Newell, E.E. and M.P., The Hague, \$7,500; Major James N. Wheelan, military attaché.
- Paraguay*.—William R. Finch, E.E. and M.P., also accredited to *Uruguay*, Montevideo, \$7,500.
- Persia*.—Arthur S. Hardy, M.R. and C.G., Teheran, \$5,000.
- Peru*.—Irving B. Dudley, E.E. and M.P., Lima, \$10,000; Richard R. Neill, secretary, \$1,500.
- Portugal*.—Lawrence Townsend, E.E. and M.P., Lisbon, \$5,000.
- Russia*.—Ethan A. Hefschock, A.E. and P., St. Petersburg, \$17,500; E. O. Achorn, secretary, \$2,025; Lieut. George L. Anderson, military attaché; Lieut. W. S. Sims, naval attaché.
- Siam*.—Hamilton King, M.R. and C.G., Bangkok, \$5,000.
- Spain*.—Stewart L. Woodford, E.E. and M.P., Madrid, \$12,000; Stanton Sickles, secretary, \$1,800; Capt. T. H. Ebb, military attaché; Lieut. George L. Dyer, naval attaché.
- Sweden and Norway*.—W. W. Thomas, E.E. and M.P., Stockholm, \$7,500; Major W. R. Livermore, military attaché.
- Switzerland*.—John G. A. Leisiman, E.E. and M.P., Berne, \$5,000; Lieut. J. R. Williams, military attaché.
- Turkey*.—James B. Angell, E.E. and M.P., Constantinople, \$10,000; John W. Riddle, secretary, \$1,800; A. A. Gargiulo, interpreter.
- Venezuela*.—Francis Loumas, E.E. and M.P., Caracas, \$7,500; William W. Russell, secretary, \$1,500.
- Egypt*.—Thomas S. Harrison, agent and consul-general, Cairo, \$5,000.

FOREIGN EMBASSIES AND LEGATIONS.

- Argentina*.—Dr. Martín García Merou, E.E. and M.P.; Antonio del Viso, secretary.
- Austria-Hungary*.—Laudislaus Hengelmüller von Hengery, E.E. and M.P.; Baron Franz R. von Reidenau, secretary.
- Belgium*.—Count G. de Lichterwelle, E.E. and M.P.; Maurice Joostens, counselor.
- Brazil*.—Salvador de Mendonça, E.E. and M.P.; Manoel de Oliveira Lima, 1st secretary.
- Chile*.—Domingo Gana, E.E. and M.P.; Eudoro Infante, 1st secretary.
- China*.—Wu Ting-fang, E.E. and M.P.; Shen Tung, 1st secretary; Ching Mun Yew, secretary interpreter.
- Colombia*.—José M. Hurtado, E.E. and M.P.; Julio Rengifo, secretary, and c.d.a. ad interim.
- Costa Rica*.—Joaquín B. Calvo, sec. and c.d.a. ad interim.
- Denmark*.—Constantin Bruun, E.E. and M.P.
- Dominican Republic*.—Alejandro Woz y Gil, chargé d'affaires.
- Ecuador*.—Luis F. Carbo, E.E. and M.P.
- France*.—Jules Cambon, A.E. and P.; Eugene Hillkant, 1st secretary; Maurice Trubert, 2d secretary; Clement de Grandprey, military attaché; Jules Bouffre, chancellor.
- German Empire*.—Herr von Holleben, A.E. and P.; A. von Brenning, 2d secretary; Graf von Götzen, military attaché.
- Great Britain*.—Sir Julian Pauncefote, A.E. and P.; C. F. Frederick Adam, 1st secretary; Capt. Henry B. Jackson, naval attaché.
- Greater Republic of Central America (Honduras, Nicaragua, Salvador)*.—J. D. Rodriguez, E.E. and M.P.; Luis F. Coroa, secretary.
- Guatemala*.—Antonio L. Arfaga, E.E. and M.P., also representing *Honduras*.
- Haiti*.—J. N. Leger, E.E. and M.P.; J. Nicolas, secretary.
- Holland*.—Francis M. Hatch, E.E. and M.P.; James B. Castle, secretary.
- Italy*.—Baron de Fava, A.E. and P.; Count Vmel, 1st secretary.
- Japan*.—Toro Hoshi, E.E. and M.P.; Keisheiro Matsui, secretary; Durhan W. Stevens, counselor; Com. Katsuro Nisita, naval attaché.
- Korea*.—Chin Pom Ye, E.E. and M.P.; Bong Sun Pak, secretary.
- Mexico*.—Matias Romero, E.E. and M.P.; José F. Godoy, 1st secretary.
- Netherlands*.—G. de Weckherlin, E.E. and M.P.
- Persia*.—Victor Eguigure, E.E. and M.P.; Manuel Elguera, secretary.
- Portugal*.—Viscount de Santo Freixo, E.E. and M.P.; Izacio da Costa Duarte, secretary.
- Russia*.—M. de Kotzebue, E.E. and M.P.; M. de Wollant, 1st secretary; Gen. Mertwago, naval and military agent.
- Spain*.—Louis Polo de Bernabé, E.E. and M.P.; Juan du Bose, 1st secretary; Capt. Carlos de la Casa, military attaché.
- Sweden and Norway*.—J. A. W. Grip, E.E. and M.P.; N. J. Knagenhjelm, secretary.
- Switzerland*.—J. B. Pöschl, E.E. and M.P.; Dr. L. Vogel, secretary.
- Turkey*.—Ali Ferouk Bey, E.E. and M.P.; Edhem Bey, 1st secretary.
- Venezuela*.—José Andrade, E.E. and M.P.; Dr. Manuel M. Ponte, Jr., secretary.

CONSUMPTION (OR PULMONARY TUBERCULOSIS), a disease common to mankind and animals, in which the lungs are most frequently affected. It is now recognized as an infectious and communicable disease, not necessarily the result of a cold, and transmitted in the vast majority of cases by means of the sputum or expectoration of its victims. Modern treatment has eliminated from the disease much of the fatality that formerly accompanied it, and boards of health are tak-

ing special precautions to prevent its spread by simple directions for its management. Science has proven that a living germ, called the tubercle bacillus, is the cause and the only cause of the disease, and on this demonstration Koch, Bertin, Picq, and other investigators in Europe, and Drs. Hubbard, W. Mitchell, and Cyrus Edson, notably, in the United States, have experimented with encouraging results to establish methods for killing the germs after they have become located. Applications of Koch's lymph have developed valuable facts, and Dr. C. A. Bruce, in New York, and Dr. Kitasato, in Japan, have achieved remarkable success with advanced cases by a further development of Koch's discovery. In Paris, Dr. Roux, who was Pasteur's first assistant, has produced a serum for which much is expected by French specialists; in Japan, Dr. Kitasato, who has been granted \$75,000 by the government to continue his investigations, injects a preparation of tubercaline under the skin, which is taken into the blood and is found to give immunity to healthy lung tissues and to enable diseased portions to recover their normal condition; and in Nantes, Drs. Bertin and Picq have discovered that goats are not subject to consumption and are treating the disease with injections of goat's blood. The last discovery is that of Dr. Cyrus Edson, formerly a commissioner of the New York Board of Health, who prepared a fluid, to which the name of aseptolin was given, which he declared in February, 1896, was a specific for malaria and septicæmia, and though not one for consumption, had been used with gratifying results in that disease. The composition is: Water, 97.2411 per cent.; phenol (the active principle of carbolic acid), 2.7401 per cent.; and pilocarpine-phenyl-hydroxide, 0.0188 per cent., the latter comprising pilocarpine, 53.92 per cent., and phenol, 46.08 per cent. The preparation, which must be administered only by a physician, is intended when absorbed by the blood after injection, to add to the disinfecting qualities of the blood and to increase its power to throw off disease germs. Dr. Edson will send a 2 oz. bottle of aseptolin to any physician in the United States, but will not place it in non-professional hands.

COOK, CLARENCE CHATHAM, journalist and writer on art, was born in Dorchester, Mass., Sept. 8, 1828. In 1894 he issued a new edition, in 3 volumes, 4to, of his *Art and Artists of our Time*, first published in 1888; and in 1895, a new edition of *The House Beautiful*.

COOK, JOSEPH, lecturer was born in Ticonderoga, N. Y., Jan. 26, 1838. He became associate editor of *Our Day*, a monthly review, in 1888. In 1895 he made a lecturing tour to Australia, where in August he broke down in health, and was compelled to cancel all his engagements. He returned home slowly, resting by the way, arriving in the United States toward the end of 1895. Early in 1896 he went to the sanitarium at Clifton Springs, N. Y., greatly prostrated nervously. His condition was there pronounced serious, but with good hope of complete recovery.

COOLEY, THOMAS McINTYRE, jurist, was born in Attica, N. Y., Jan. 6, 1824. For many years from 1859 he was professor of law, of constitutional and administrative law, and of American history, and lecturer on constitutional law in the University of Michigan. He was a supreme court judge from 1864 till 1885, and chairman of the United States interstate commerce commission from its creation in 1887 till Sept. 4, 1891. Besides being author of a number of legal works, he wrote in 1894 important review articles on *The Lawyer as Teacher and Leader* and *Lessons of Recent Strikes*. He was elected president of the Michigan Bar Association in 1893.

CO-OPERATION. An interesting example of co-operation in the United

States is the American Co-operative Millwrighting Company, organized in Chicago, in 1892. It offers stock at \$1 a share, non-assessable, and gives holders of a single share a full vote in choice of officers or directors of the business. The workmen in a shop elect their foreman, and may vote him out of office at any time. Ten per cent. of their earnings are set aside each half-year for the purchase of stock to be used in the establishment. They have successfully carried on very diverse industries, and in November, 1895, proposed to open a co-operative store. They are said to have secured a contract for a section of the new water-tunnel.

The British co-operative societies are united in the Co-operative Union, established in 1869; general secretary J. C. Gray, Long Millgate, Manchester. The union is controlled by the Central Co-operative Board, consisting of 64 ordinary and 7 honorary members of London and provincial societies, having 7 sections: Irish, Midland, Northern, Northwestern, Scottish, Southern, and Western. In the union 940 societies are enrolled; and 1,674 are registered in Great Britain, with 1,343,518 members, and share capital of £15,006,663. They sold in 1894 goods valued at £49,985,065; profits, £4,911,299; investment, £7,780,452. During 1894 113 new co-operative societies were registered, viz.: 7 dairying, 9 clubs, 14 coal, 1 banking, 2 bakers, 14 loan and investment, 2 land and building, 2 boot and shoe, 1 printing, 48 for general purposes, besides others for miscellaneous objects. The Scottish Co-operative Farming Association owns 3 farms. Co-operative farming reported in 1895 farms amounting to 4,305 acres; capital, £90,706; rent paid in 1894, £6,814; profits, £2,482. Co-operative manufacture was reported in England in 1883 as having only 15 organized societies; but in 1895 there were 120, and their capital had increased from £100,000 to £800,000 and the profits in 1894, in spite of financial depression, were £68,000, of which over £8,000 were paid to workmen as their share, besides the interest many of them received for capital invested. The 28th Annual Co-operative Congress was called to meet at Woolwich in June, 1896.

In France it was reported in 1895 that 306 co-operative societies made sales amounting to over \$15,000,000 during the year. They had an aggregate membership of about 300,000, besides about 900,000 concerned in farmers' syndicates, which buy fertilizers for vine-culture, maintain laboratories for soil-analysis, and publish monthly price lists.

The first International Co-operative Congress was held in London in September, 1895. George Jacob Holyoake took part in the meeting. Reports were given of most of the facts given above; and the congress resolved to establish an international co-operative alliance for the promotion of co-operation and profit-sharing in all their forms.

COOPER UNION, an institution in New York City, for instruction of the working classes, founded by Peter Cooper in 1859. In 1895 it included free night schools for instruction in advanced physics and chemical analysis, and to fit students for the civil service examinations; a woman's art school; free classes for women in stenography, typewriting, and telegraphy; free classes in elocution, oratory, debate, and civics; a free library of 35,459 volumes; a free reading-room with 114 periodicals; and free evening courses of lectures in connection with Columbia University and the Board of Education of New York. Instructors in 1895-96 in the different schools and classes, 40; students in the art school 1,260; in scientific classes, 490; average daily readers in reading-room, 2,182. The ordinary receipts from rents, interest, etc., for 1895, were \$49,062; extraordinary receipts added to the endowment fund, \$131,500; expenditures for the year, \$55,035.78.

COPENHAGEN, city, capital of the kingdom of Denmark; population (1890) 312,859; (1894) estimated 350,000, both exclusive of suburbs. On Sept. 1, 1894, the city became a free port, and steps were taken to provide it with facilities necessary to its new condition. The Sound is seldom blocked with ice, and as it has no tides it affords an easy and convenient access at any time, by day and night, winter and summer. The depth of water will be 25 to 30 ft.; there will be a 12,000 ft. quay; and the piers will be furnished with the most approved mechanisms for loading and discharging cargoes and with large warehouses and sheds. Vessels entering the port will pay only a pierage due of $3\frac{3}{4}$ cents per ton and a small warehousing due. As the royal Danish railways have their tracks on the piers and the port is in steam ferry connection with Malmoe, across the Sound in Sweden, goods may be sent by rail direct to any station in Denmark and Sweden. In the nine months ending Sept. 30, 1895, the exports declared here for the United States aggregated in value \$294,741, principally hides and skins (\$149,293), cement (\$66,677), rennets (\$37,933), and cabbage (\$21,468).

COPPER. The following table shows the production of copper in the United States during the calendar years 1893 and 1894:

Sources.	1893.	1894.
Lake Superior	112,605,078 lbs.	114,308,870 lbs.
Arizona.....	43,962,834 "	44,514,894 "
Montana.....	155,209,133 "	183,072,756 "
New Mexico.....	281,742 "	31,884 "
California.....	239,082 "	130,000 "
Utah.....	1,135,330 "	1,147,570 "
Colorado.....	7,695,826 "	6,481,413 "
Nevada.....	20,000 "	.....
Idaho.....	36,367 "	.....
Washington.....	39,785 "	.....
Maine, New Hampshire, Vermont, Southern States, Middle States.....	732,703 "	2,374,514 "
Lead desilverizers, etc.....	7,456,838 "	2,136,473 "
Total domestic copper.....	322,354,394 "	354,188,374 "
From imported pyrites and ores.....	7,723,387 "	6,655,844 "
Total.....	337,077,785 "	360,844,218 "

The product of Colorado includes copper purchased by smelters in the open market, sources and quantity not reported. In 1894 the available supply for domestic markets was computed as follows: Production of domestic copper, 354,188,374 lbs.; imported ores and pyrites, 6,655,844 lbs.; imports of pigs, bars, ingots, and old copper, 3,446,724 lbs.—total, 364,290,942 lbs.; exports, ingots and bars, 162,393,000 lbs.; estimated contents of matte, 5,750,000 lbs.; re-exports in foreign ore, pig bars, and old copper, 1,186,676 lbs.—total, 169,329,676 lbs.; available supply, 194,961,266 lbs. The exports of fine copper from the United States during 1894 aggregated 77,527 long tons. Of the total output of the Lake Superior mines in 1890—101,410,277 lbs.—the Calumet and Hecla mines yielded 59,868,106 lbs. Since 1891 the Calumet and Hecla Company has withheld information concerning the output. The reported production of the other leading mines during 1894 was: Tamarack, 15,375,281 lbs.; Quincy, 15,484,014; Osceola, 6,918,502; Franklin, 3,556,487; Atlantic, 4,437,609; Kearsarge, 1,998,710; Tamarack, Jr.; 2,349,329; Central, 584,590; and Wolverine, 1,665,255—in general, a considerable increase over the output of the pre-

vious year. The output of Montana in 1894 was 51.6 per cent. of the total of the United States, and of the Lake Superior mines, 32.3 per cent. An estimate of the world's production in 1894 by geographical divisions shows: Europe, 81,741 long tons; North America, 175,290; South America, 26,810; Africa, 6,500; Asia, 20,050; Australia, 9,000—total, 319,391. The United States, among countries, has been the largest producer for many years.

COPYRIGHT. The adoption by the United States Congress of the international copyright law of 1891 has not proved the panacea for the evils complained of that was expected. In the subsequent agitation the champions of copyright reform were reinforced by French literary and artistic societies. In 1895 the British Colonial Office and the Authors' Society of London combined in an attempt to secure a revision of the Canadian copyright law of 1889, and the French Foreign Office entered a protest against a proposed compromise, based on the manufacturing clause, which is regarded in France as irreconcilable with the vital principle of the Berne Convention. Hall Caine, the author, visited Canada in the summer, as the representative of the Authors' Society, and attempted to influence legislation, presenting the following objections to the Canadian law as it then stood: That it was opposed to the principle of copyright, by allowing the publication of a book beyond the author's control; that it required a multiplication of places of manufacture; that it fostered a scheme of license which seemed to be little better than legalized piracy and paved the way for the ruin of the trade of book-selling; and that it offered temptations to dishonest traders from all parts of the world to make Canada the ground for invading the copyright territories of other countries. A new copyright law was drafted by the deputy minister of justice, designed to overcome these objections, but owing to cabinet and other political complications no action was then taken on it.

In the United States nearly identical bills were introduced in each house of the fifty-fourth Congress, providing for the appointment of a register and other officers, who should have full charge of all copyright matters, thus separating this function from the duties of the librarian of Congress. A bill by Representative Treloar (Mo.), introduced Feb. 27, 1896, and referred to the Committee on Patents, provided both for the appointment of a commissioner of copyrights and for a revision of copyright laws. The American Publishers' Copyright League disapproved of both provisions of this bill. On March 3, Robert U. Johnson, secretary of the league, argued against the bill before the Committee on Patents, claiming that the bill would restrict to citizens of the United States the privilege of securing copyright under the statute; that it would constitute a serious injury to the rights of producers of copyright property and to the interest of the community; and that its adoption would constitute a breach of international good faith with several nations of Europe which have extended copyright privileges to American citizens. The same day the representatives of the Photographers' Copyright League favored the measure, and representatives of the Musical Publishers' Association and of other interests opposed certain features but approved the general principles of the bill. The Committee on Patents also had under consideration a bill introduced by Representative Cummings (N. Y.), giving the owners of plays greater protection, a measure emanating from the American Dramatists' Club.

COREA. See **KOREA.**

CORELLI, MARIE, author, was born in Italy. In infancy she was adopted by Dr. Charles Mackay, the author, and at his death was left in the guardianship of his son, W. S. Eric Mackay, also an author and poet. She was educated in London, and on beginning her literary career adopted the pen name as here given,

which subsequently became her legal name. Her writings are greatly admired by Queen Victoria and Mr. Gladstone, and to the former she sends by request an advance copy of each of her books. She has published *A Romance of Two Worlds*; *Vendetta*; *Thebua*; *Ardath, the Story of a Dead Self*; *Wormwood*; *The Soul of Lilith*; *Barabbas* (1893); *The Silence of the Maharajah*; and *The Sorrows of Satan* (both 1895); *Cameos, The Mighty Atom*, and *The Sorrows of Delicia* (all 1896).

CORK, city, seaport, and capital of county Cork, Ireland; population (1891) city, 75,345, parliamentary borough, 97,281. In the nine months ending Sept. 30, 1895, the exports declared here for the United States aggregated in value \$70,952.57, principally skins, hides, and furs (\$144,066), and fish, (\$17,343). The city returns two members of Parliament, and in the general elections of 1895 re-elected J. F. O'Brien and M. Healy, both Nationalists, the former having represented it one month, and the latter, continuously since 1885.

CORN. The following table contains the final estimates of the United States Department of Agriculture on the corn crop for the calendar year 1896:

States, etc.	Acres.	Bushels.	Value.
Maine.....	14,780	546,800	\$257,024
New Hampshire.....	27,460	1,161,740	522,774
Vermont.....	48,642	1,994,222	737,842
Massachusetts.....	42,920	1,845,500	848,058
Rhode Island.....	8,848	300,832	147,408
Connecticut.....	46,658	1,773,004	744,022
New York.....	530,257	17,802,738	6,902,240
New Jersey.....	282,286	9,325,368	3,357,422
Pennsylvania.....	1,311,875	52,477,000	17,316,750
Delaware.....	224,558	4,933,676	1,233,419
Maryland.....	623,004	10,930,128	6,373,501
Virginia.....	1,770,604	38,007,386	12,181,756
North Carolina.....	2,458,670	20,504,148	10,916,535
South Carolina.....	1,753,486	15,781,374	7,250,432
Georgia.....	2,984,514	32,839,654	14,116,755
Florida.....	486,004	4,860,040	2,570,208
Alabama.....	2,505,000	32,445,075	14,600,284
Mississippi.....	2,072,103	27,973,300	12,308,202
Louisiana.....	1,197,310	15,565,030	7,004,204
Texas.....	3,392,486	32,228,617	13,213,733
Arkansas.....	2,301,707	23,723,854	10,957,820
Tennessee.....	3,125,802	71,853,446	29,139,145
West Virginia.....	722,972	21,689,100	7,374,314
Kentucky.....	2,800,441	40,032,348	20,233,017
Ohio.....	3,016,877	123,601,057	35,975,311
Michigan.....	1,053,725	40,041,030	9,610,003
Indiana.....	3,813,370	134,468,205	25,358,970
Illinois.....	7,026,488	284,572,704	51,223,098
Wisconsin.....	1,051,083	38,800,071	8,555,816
Minnesota.....	1,129,469	31,446,974	6,544,925
Iowa.....	8,249,319	321,719,541	43,042,739
Missouri.....	6,546,987	176,708,409	35,353,730
Kansas.....	8,847,643	247,734,004	44,592,121
Nebraska.....	7,962,657	208,590,628	38,817,353
South Dakota.....	1,107,575	31,136,504	5,604,851
North Dakota.....	27,444	974,540	243,035
Montana.....	1,131	34,696	20,764
Wyoming.....	2,843	62,075	48,418
Colorado.....	178,308	2,822,928	1,027,454
New Mexico.....	21,250	388,160	213,388
Arizona.....	.....	.....	.....
Utah.....	8,650	216,250	110,288
Nevada.....	.....	.....	.....
Idaho.....	.....	.....	.....
Washington.....	6,819	95,452	54,408
Oregon.....	13,520	297,638	166,677
California.....	59,520	2,202,573	1,167,364
Oklahoma.....	.....	.....	.....
Total.....	81,027,156	2,283,875,165	\$491,000,967

CORNELL COLLEGE, Mt. Vernon, Ia., Methodist Episcopal; co-educational; had at close of 1897, 30 professors and instructors; 537 students; 15,000 volumes in the library; \$280,000 invested in grounds and buildings; \$18,000 in scientific apparatus; \$100,000 in productive funds; \$25,360 in income; president, William F. King, D.D., LL.D.

CORNELL UNIVERSITY, Ithaca, N. Y., incorporated in 1865, and opened in 1868; non-sectarian; co-educational; included in 1895-96 college courses leading to the degrees of A.B., PH.B., B.C., and B.S.; courses in civil, mechanical, electrical, and marine engineering; a course in agriculture; a two years' course preparatory to the study of medicine; a school of law; advanced courses in archeology and the history of art; comparative philology, German and Romance languages; and summer courses with field work and laboratory practice. Military science and drill are a part of the regular work. Graduate study leads to degrees in many departments. At the end of 1897 there were 175 professors and instructors; 1,808 students; 197,460 volumes in the library; 22 fellowships; 658 scholarships \$1,723,135 invested in grounds and buildings; \$1,021,460 in scientific apparatus and library; \$6,300,580 in productive funds; \$97,000 in gifts; \$576,150 in income; president, J. G. Schurman, D.Sc., LL.D.

CORSON, HIRAM, physician, was born in Plymouth township, Pa., Oct. 8, 1804; died there, March 4, 1896. He was graduated at the University of Pennsylvania in 1828, and practiced continuously till within a few months of his death. Besides notable contributions to medical literature on scarlet fever and diphtheria, he was widely known as the originator of the ice treatment for those maladies and as the pioneer in blood-letting for pneumonia.

COSTA RICA, a republic in Central America, extending from sea to sea between Nicaragua and Colombia; comprising 5 provinces and 2 territories; area, about 23,000 square miles; population (1892) 243,205; capital, San Jose; chief ports, Punta Arenas and Limon; other towns, Cartago, Alajuela, and Heredia. The general election held in April, 1894, followed an unsuccessful and short-lived revolution, and resulted in the election of Rafael Iglesias, the official candidate for the presidency, over Jose G. Trejos, the Catholic Union candidate. The new president appointed the following cabinet: Minister of foreign affairs, justice, and public instruction, Ricardo Pacheco; interior, police, and public works, Dr. Juan J. Ulloa; finance and customs, Ricardo Montelegre; and war and marine, Dr. Juan B. Quiros. Early in his administration President Iglesias incurred the ill-feeling of the Nicaraguan government by refusing to surrender fugitive revolutionists, and in September following his inauguration he was the victim of an attempted assassination. In September, 1895, there was a three days' jubilee in San Jose, held to celebrate Central American independence and to mark the unveiling by the president of an allegorical monument in commemoration of the victory obtained over Walker's filibusters in 1856-57. The relations between Costa Rica and Nicaragua became further strained by disputes concerning the international boundary. In February, 1896, the Nicaraguan government requested that of Costa Rica to appoint a new boundary commission, because the former could not continue to treat with the members of the existing one. Negotiations between the republics had reached a point where Nicaragua proposed to cede to Costa Rica a strip of land along the boundary a mile wide, and to submit all further boundary differences to the arbitration of the United States. Subsequently, the president of Salvador tendered the good offices of his government to the republics with the view of settling this dispute. The revenue,

1896-7 was \$7,226,820 expenditure, \$6,501,170; imports, 1896, \$4,615,542; exports, \$5,441,013. In February, 1895, President Iglesias informed United States Minister Baker that he had recently paid over \$1,000,000 of the internal debt, and had made provision for the early extinction of this debt, and that the government had ceased to pay interest on the foreign debt (\$496,332 annually), because it could not stand the drain. The foreign debt, 1896-97, was \$9,720,000, and the internal, \$1,093,640. There were 147 miles of railroad; 630 miles of telegraph; 267 primary schools; 5 institutions for higher education; and a standing army of 600 men and 12,000 militia.

COTES, SARA JEANNETTE (DUNCAN), author, was born in Brantford, Ontario, Canada, about 1860. She entered journalism as a correspondent for several Canadian and American newspapers at the Cotton Centennial in New Orleans in 1884-85; served on the staff of the *Washington Post*, the *Toronto Globe*, and the *Montreal Star*; married Everard C. Cotes, of the Indian Museum; and has lived for several years in India. Her books include *A Social Departure; An American Girl in London; A Daughter of To-Day* (1894); *Vernon's Aunt, an Oriental Story* (1895); and *A Voyage of Consolation* (1898).

COTTON. The crop year 1894-95 was a phenomenal one in the history of the cotton industry of the United States. The acreage was greatly increased, the season was excellent, and the crop was the largest ever gathered, that of Texas alone equaling the crop of the entire country in 1853. Secretary Hester, of the New Orleans Cotton Exchange, reported, Sept. 1, 1895, that the receipts at all United States ports amounted to 8,006,177 bales, against 5,940,092 in the previous year; overland receipts, 1,087,101 bales, against 931,706; and the Southern consumption taken direct from the cotton belt, 807,973 bales, against 678,019—making the crop amount to 9,901,251 bales, against 7,549,817 in the previous year, and showing an excess over the largest crop ever marketed before, that of 1891-92 (9,035,379), of 865,872 bales. The production by States, in round numbers was: Texas, 3,276,000 (including Indian Territory, 120,982); Georgia, 1,300,000; Mississippi, 1,200,000; Alabama, 1,000,000; Arkansas, 850,000; South Carolina, 800,000; Louisiana, 600,000; North Carolina, 465,000; Tennessee, 350,000 (including Oklahoma, 14,584); and Florida, 60,000. The average weight of the crop was $9\frac{1}{2}$ lbs. per bale more than that of the previous year, which would make the 1894-95 crop equal 10,089,000 bales or the 1893-94 crop. Cotton mills in the South and woolen mills using cotton consumed a total of 862,838 bales, of which 54,865 were taken from outports.

At the annual conventions of cotton-growers, held in Jackson, Miss., Jan. 11, 1895, and in Memphis, Tenn., Jan. 21, 1896, resolutions were adopted to restrict the cotton acreage, on the ground that "the annual surplus is the effective instrument used by the cotton 'bear' to depress values, and that overproduction fosters manipulation." The last convention also adopted a resolution urging all cotton producers to join in making the South self-supporting by still further decreasing the cotton acreage and producing more corn, hay, meat, and other commodities for home consumption. As a result of these efforts, Secretary Hester reported that from Sept. 1, 1895, to Jan. 17, 1896, the port receipts were 3,787,651 bales against 5,871,583 in the previous corresponding period; overland shipments to mills and Canada, 576,635 against 774,440; interior stocks in excess of Sept. 1, 498,026 against 456,684; Southern mill takings, net, 441,111, against 424,135; and brought into sight during 139 days to Jan. 17, 5,304,311, against 7,526,842. The United States Department of Agriculture, Feb. 1, 1896, estimated the crop of 1895-96, at 6,788,507 commercial bales.

During the calendar year 1895, the United States imported raw cotton to the extent of 49,692,431 lbs., valued at \$5,171,099, of which 32,435,286 lbs. came from Egypt, 15,481,371 from the United Kingdom, and 1,235,202 from South American countries; and exported 2,770,832,486 lbs. (5,519,121 bales), valued at \$189,890,645, of which 18,156,874 lbs. were sea island and 2,752,675,612 other cotton. The principal shipments were 1,387,808,052 lbs. to the United Kingdom, 610,673,694 to Germany, 303,623,159 to France, and 385,720,124 to other European countries. The trade in manufactured cotton was: Imports, cotton cloths, 50,307,478 square yards, value, \$5,985,941, other manufactures, value \$29,115,891—total value, \$35,101,832; exports, cloths, 179,619,882 square yards, value, \$10,100,881; other manufactures, value, \$3,914,133—total value, \$14,015,014; imports, both classes, chiefly from the United Kingdom, and exports chiefly to China, South America, and British North America.

The consumption of the staple by cotton and woolen mills in the Southern States has become an interesting feature of the industry. In 1890 there were reported 254 mills completed, under construction, or projected; in 1895, 408. During this period the number of looms increased from 38,865 to 70,874, spindles 1,699,082 to 3,001,340, and cards nearly 100 per cent., or to 7,251. The distribution of mills by States, 1895, was: North Carolina, 145, with 747,270 spindles and 16,185 looms; Georgia, 75, spindles, 576,538, looms, 14,195; South Carolina, 73, spindles, 838,036, looms, 21,273; Alabama, 26, spindles, 163,602, looms, 3,020; Tennessee, 26, spindles, 124,092, looms, 2,574; Maryland, 18, spindles, 175,290, looms, 3,142; Texas, 10, spindles, 76,500 looms, 2,051; Virginia, 9, spindles, 127,108, looms, 4,155; Mississippi, 9, spindles, 55,788, looms, 1,840; Kentucky, 7, spindles 52,900, looms 692; Louisiana, 6, spindles, 56,708, looms, 1,512; Arkansas, 2, spindles, 6,108, looms, 210; Florida, 1, spindles, 1,400; and West Virginia, 1, looms, 25. The annual report of Secretary Hester for the crop year 1896-97 showed receipts at all United States ports of 6,829,100 bales, against 5,420,246 in the previous year; overland 940,482, against 873,465; Southern consumption, taken direct, 988,382 against 863,635, making the crop amount to 8,757,964 bales against 7,157,346 in the previous year and 9,901,251 the year before. Altogether the Southern mills took 1,042,671 bales, an increase of 138,000. Mr. Hester made the actual crop of Texas, including Indian Territory, 2,247,554. His report on the crop of the different States was given as follows in thousands of bales: North Carolina, 500,000; South Carolina, 800,000; Georgia, 1,300,000; Alabama, 1,010,000; Florida, 60,000; Mississippi, 1,226,000; Louisiana, 575,000; Arkansas, 700,000; Tennessee, 330,000; Texas, 2,248,000. Total crop, bales, 8,758,000. North Carolina above includes Kentucky and Virginia; Tennessee includes Oklahoma, Missouri, Kansas and Utah; Texas includes Indian Territory. Another estimate, by Statistician Hyde, of the United States Agricultural Department, showed a total crop of 8,532,705 commercial bales, made up by the following States: Alabama, 833,789, Arkansas, 605,643, Florida, 48,730, Georgia, 1,299,340, Indian Territory, 87,705, Kansas, 61, Kentucky, 414, Louisiana, 567,251, Mississippi, 1,201,000, Missouri, 24,119, North Carolina, 521,795, Oklahoma, 35,251, South Carolina, 936,463, Tennessee 236,781, Texas, 2,122,701, Utah, 123, Virginia, 11,539. He also reported that an investigation of the production of sea island cotton showed that the crop of 1896-97 was the largest on record, the States of Georgia, Florida, South Carolina and Texas having produced 104,368 bales. The next largest crop was that of the preceding year, estimated at about 93,000 bales. The production of Georgia was about 64,668 bales, that of Florida, 26,431 bales, South Carolina, 10,769 and Texas, 2,500. The total value of the uplands

crop was \$285,810,606, which gave an average of 6.65 cents per pound for that sold, and the total value of the sea island crop was \$6,000,958, an average price of 16.58 cents per pound. The total acreage during 1896-97 was 23,273,209. Ten years ago only about 6 per cent. of a crop of 6,500,000 bales was used by those States, while during the year 1896-97 they used over 11 per cent. of a crop of over 8,500,000 bales. The number of mills in operation during the year was 402, the number of spindles, 3,344,327, and the number of bales bought 981,991.

COTTON OIL, an oil made from cotton seed and used as a substitute for linseed oil, lard, and tallow; for packing fish, especially American sardines; as an illuminant; and for other adulterant and substitute purposes. A trust corporation whose securities are listed by the New York Stock Exchange reported in November, 1895, that it owned the following manufacturing properties: Crude oil mills, 70; refineries, 16; cotton ginneries, 14; cotton compressors, 3; lard and cottolene plants, 4; soap factories, 9; fertilizer mixing plants, 2; and seedhouses, 1,112. It also owned an equipment for transportation by rail, river, and ocean. The capital stock consisted of \$20,237,000 of common and \$10,198,600 of preferred, and there were \$3,068,000 of debenture bonds, and \$1,789,762 of current liabilities, making total liabilities of \$35,293,362, against which was charged a cash valuation of property and assets aggregating \$17,883,332, leaving a balance of \$17,410,130, representing good-will, contracts, patents, etc. The sales of various articles manufactured aggregated \$21,069,821; the gross profits of the year were \$1,565,862; net divisible profits \$831,671; and surplus, after paying a 6 per cent. dividend on the preferred stock, \$201,780. Besides establishing new plants in the United States and Canada within the year, the company erected an extensive one in Rotterdam, Holland. The foregoing details virtually comprehend the entire industry in the United States. In the calendar year 1895, the exports of cotton oil aggregated 21,763,649 gals., value \$6,429,828, and of oil cake and oil cake meal, 504,022,561 lbs., value \$4,352,348.

COUCH, A. T. QULLER. See QULLER-COUCH, A. T.

COUDERT, FREDERIC R., expert in international law. In 1892 he was appointed one of the counsel on the part of the United States before the Bering Sea Tribunal of Arbitration in Paris, and was especially complimented by Baron de Courcel, president of the tribunal, for his argument on the necessity of putting a stop to pelagic sealing. On Jan. 1, 1896, President Cleveland appointed him a member of the Venezuela Boundary Commission. He has a world-wide reputation as an advocate and an authority on international law, and because of his large practice has several times declined the offer of appointment to the bench of the United States Supreme Court. For several years he was president of the Manhattan Club of New York City.

COULTER, JOHN MERLE, botanist, was born in Ningpo, China, Nov. 20, 1851; was elected president of the Indiana State University in 1891 and of the Lake Forest University in 1893; and resigned the last charge to become professor of botany in the University of Chicago, which had been endowed with \$1,000,000 for its botanical department, in February, 1896.

COUNCIL BLUFFS, city, capital of Pottawattamie county, Ia.; population (1890) 21,474; (1895) estimated 30,000. On March 1, 1897, the city had a bonded debt under the 5 per cent. limit of \$101,400; special bonds, \$262,000; and special assessment bonds, \$101,500—total, \$464,900. The sinking funds held \$22,000 on account of the regular city bonds and \$30,000 on intersection im-

provement (special) bonds. The total assessed valuation 1896 was \$5,000,000, and tax rate \$56 per \$1,000. In 1897 the city had a national bank (capital \$100,000), a State bank (capital \$150,000), a savings bank (capital \$150,000), and a private bank; a trolley line extending to Omaha, Neb., and operating 20 miles of track; and 3 monthly, 5 weekly, and 2 daily periodicals. The Council Bluffs School District, co-extensive with the city, had, 1895, an estimated real valuation of \$22,000,000, and a total debt \$152,500.

COVINGTON, city, capital of Kenton county, Ky.; population (1890) 37,371; (1897) estimated 45,000. In 1897 the assessed valuations aggregated \$22,756,075, and tax rate \$26.25 per \$1,000; and the total bonded debt (including \$1,229,400 water debt) was \$2,364,700, sinking funds, \$70,778; net debt, \$2,293,922. In 1897 the city had 4 national banks (capital \$1,150,000) and a State bank (capital \$1,813,000); a trolley line connecting with Cincinnati, Newport, Dayton, Bellevue, Ludlow, Bronley, and Fort Thomas, operating over 56 miles of track; and 4 daily and 3 weekly newspapers.

COWEN, JOHN KIRK, lawyer, was born in Millersburg, O., Oct. 28, 1844. He graduated at Princeton College in 1866; studied law at the Michigan University; was admitted to the bar of Ohio in 1868; removed to Baltimore in 1872; and became general counsel of the Baltimore and Ohio Railroad Company. In 1894 he was elected to Congress as a Democrat from the 4th Maryland district, and on the organization of Congress was appointed a member of the committees on banking and currency and immigration and naturalization. On Jan. 24, 1896, he was elected president of the Baltimore and Ohio Railroad Company, and on Feb. 29, he and the first vice-president, Oscar G. Murray, were appointed receivers of the property.

COX, KENYON, painter, was born in Warren, O., Oct. 27, 1856. In 1894-96 he contributed to periodical literature a great many illustrations, and in 1894 able reviews of J. A. Symond's *Art Essays*, and Michael's *Life of Rembrandt*. In 1895 he was elected secretary of the Society of American Artists.

COX, PALMER, artist and author, was born in Granby, Quebec, Canada, April 28, 1840. He settled in New York City in 1875, and has since endeared himself to children everywhere by his series of *Brownie* books, the latest of which are *The Brownies at Home* (1893); *The Brownies Around the World* (1894); and *The Brownies Through the Union* (1895).

COXE, ARTHUR CLEVELAND, D.D., Protestant Episcopal bishop of Western New York since 1865, was born in Meadham, N. J., May 10, 1818; died in Clifton Springs, N. Y., July 20, 1896. Since 1888 he had held the office of bishop in charge of the "Gallicans" of France, having frequently preached and officiated in the Gallican Chapel in Paris. During 1893-94 he published a series of letters to Archbishop (now Cardinal) Satolli on the *Relations of the Roman Catholic Church to American Institutions*.

COXEY, JACOB S., agitator, was born in Snyder county, Pa., April 16, 1854. In March and April, 1894, he led a band of about 100 unemployed men from Massillon, O., his home, to Washington, D. C., to petition Congress for legislation which would favor workingmen. He reached Washington with a band of 300 or 400 men, while Congress was in session and with two followers, Browne and Jones, he tried to carry a banner up the steps of the capitol, and to harangue the people. He was arrested, thrown into jail, and May 8 was convicted of violation of municipal ordinances. On May 15 a motion for a new trial was denied, and Coxey, Browne, and Jones were sentenced to 20 days' imprisonment, and

Coxey and Browne to \$5 fine, or 10 days' more imprisonment. While imprisoned he was nominated by the Populists in the Massillon district of Ohio for representative in Congress. June 27, 1894, the attorney-general asked of Congress a deficiency appropriation of \$125,000 for the expenses incurred in prosecuting Coxeyite tramps in 14 States and 2 Territories. In October, 1895, Coxey started a newspaper in Massillon, and in November he was the Populist candidate for governor of Ohio, and received 52,675 votes.

CRADDOCK, CHARLES EGBERT (pen name of MARY NOAILLES MURFREE), author, was born in Grantland, near Murfreesboro, Tenn., about 1850. She began writing for the *Atlantic Monthly* when 16 years old; published her first book, *In the Tennessee Mountains* (1884); and concealed her identity till she became famous. Her latest publications include *The Phantoms of the Footbridge and Other Stories* (1895); and *The Juggler and The Young Mountaineers* (1897).

CRAIGHILL, WILLIAM P., engineer, was born in Virginia, July 1, 1833. He was graduated at the United States Military Academy and commissioned a brevet 2d lieutenant of engineers in 1853; was promoted 2d lieutenant 1855, 1st lieutenant 1859, captain 1863, major 1865, lieutenant-colonel 1881, and colonel 1887; became chief of United States Engineers with the rank of brigadier-general, May 10, 1895; and was retired Feb. 1, 1897. Since the civil war his principal engineering work was in connection with the improvement of the Great Kanawha and the harbor of Baltimore.

CRAIGIE, PEARL RICHARDS (pen name, JOHN OLIVER HOBBS), author, was born in Boston, Mass., in 1867; resident of London, England, since 1870. In June, 1895, she was divorced from her husband, R. Craigie. In December and January following she received public and private receptions from a number of the most distinguished literary, artistic, and fashionable people in New York; and entertained a number of eminent guests in return. She published, beside contributions to periodicals, *A Bundle of Life* (1894); *The Gods, Some Mortals* and *Lord Wickenhams* (1895); and *School for Saints* (1897).

CRANE, STEPHEN, author, was born in Newark, N. J., in 1870. He began writing for the press when 16 years old; tried poetry and the novel soon afterward; published *Maggie: A Girl of the Streets*, under the pen name of Johnson Smith, about 1890; and created a decided literary sensation in New York and London with *The Red Badge of Courage* and *The Black Riders and Other Lines* (poems), both in 1895. He has since published *George's Mother* and *The Little Regiment* (1896), and *The Third Violet* (1897).

CRANE, WALTER, painter, decorative designer, and illustrator, was born in Liverpool, England, Aug. 15, 1845. In 1892 he published *The Claims of Decorative Art*, and in 1893 he was appointed Art Director to the city of Manchester, with a salary of £600. In 1894 he issued a volume of 8 illustrations to Shakespeare's *Tempest*, engraved by Duncan C. Dallas; and in 1895 he was engaged in illustrating an edition of Spenser's *Faerie Queene*.

CRAWFORD, FRANCIS MARION, American novelist, was born in Bagni di Lucca, Italy, Aug. 2, 1854. In 1894 he published *Katherine Lauderdale; The Ralstons; Morn'zelle Beauty; Love in Idleness, a Tale of Bar Harbor*, illustrated with reproductions of drawings and photographs; *The Upper Berth*; and *By the Waters of Paradise*; in 1895, *Casa Braccio*, and *Constantinople*, illustrated by Edwin Lord Weeks; in 1896, *The Novel: What It Is*; and in 1897 *A Rose of Yesterday and Corleone*. A dramatization of his *Dr. Claudius* was produced at the Fifth

Avenue Theater, New York City, in February, 1897. He visited the United States in 1895, as he does yearly, but resides in Italy.

CREEDE, town, Mineral county, Col.; founded in 1890 and named after N. C. Creede, a pioneer prospector and mine owner; population (1895) estimated 8,000. On June 5, 1892, it was almost entirely destroyed by fire, causing an estimated loss of about \$1,000,000. It had a weekly newspaper; a public school system; and the usual accessories of a thrifty mining town. The principal mines are the Holy Moses (the first opened), Amethyst, Last Chance, New York, United (group) and the Antler's Park (group), all of which have yielded well and some to a remarkable extent. See COLORADO.

CREFELD, town, Rhenish Prussia, Germany; noted for its manufactures; population (1890) 105,376. In the nine months ending Sept. 30, 1895, the exports declared here for the United States aggregated in value \$2,855,290.42, principally silk goods, velvets, plushes, and ribbons (\$2,596,907).

CREMATION. In 1895 there were 27 companies in the United States, operating 26 crematories, one having been destroyed by fire. The total number of cremations since 1876, the date of the oldest company, was 3,670, and the membership of societies favoring incineration was about 8,000. The *Uru*, an organ of cremation, reports the total number of cremations in Europe in 1876-93 as 19,700. According to statistics published by the Paris prefect of police in the summer of 1895, there were cremated at the cemetery of Père-Lachaise in 1889, 49; 1890, 121; 1891, 134; 1892, 159; 1893, 189; 1894, 216; and in four months of 1895, 75. The crematory there is also used for the consumption of remains from the hospitals, amounting to from 2,000 to 2,500 bodies a year.

CRESTO, JOAQUIN, military officer, was born in Venezuela, about 1840. He received a liberal education; joined the Federal party on attaining his majority; distinguished himself as an officer in the revolutions of 1871 and 1879; became governor of the State of Guarico in 1880; and was president of the republic in 1884-86. In 1892 he headed a revolution against Dr. Andreza Palacio, who had proclaimed himself dictator of Venezuela, and after a brilliant campaign entered Caracas at the head of his army in October and established a provisional government with himself as president. In January, 1894, he was elected to the office without noticeable opposition; and he served till Feb. 20, 1898, when in accordance with the constitution he resigned his office to the first president of the government council. He is a man of simple habits and large wealth acquired in cattle raising, and has given Venezuela many reforms and a beneficial administration.

CRETE (also KRITI and CANDIA), an island of Turkey in the Mediterranean Sea, south of the Ægean Sea and Archipelago; known as the Key to the Golden East; area 2,949 square miles; population (1894) about 295,000. It is a place of much strategic importance. In 1895 the sultan, prior to the elections for the General Assembly, reduced the number of deputies from 80 to 57. Turkhan Bey was recalled as governor and replaced by Karatheodory Pacha. An assembly of delegates from all parts of the island was held at Canea on July 5, and petitioned the sultan to restore the old system of taxation, to convoke the General Assembly, and to nominate a permanent Christian governor. In October another petition was drawn up, demanding the restoration of the charter and the reorganization of the system of taxation and of the gendarmerie. Troops were at once sent to break up the meeting at which this petition was drawn up, and a state of anarchy ensued. The new governor sent his resignation to Constantinople, and

the Cretans presented a statement of their grievances to the representatives of the Great Powers, after the Greek government had informed them that it was unable to interfere. With the opening of February, 1897, the situation began to assume a more critical phase. Fighting occurred between the Mussulmans and the Christians; marines were landed from the foreign warships in the harbor of Canea; both Greece and the Great Powers increased their naval forces in Cretan waters; the Greek government announced its intention to intervene forcibly in Crete; and Turkey appealed to the Powers for aid, threatening to attack Greece in Thessaly unless the Powers restrained hostile action by Greece in Crete. Subsequently parts of the island were occupied by foreign marines; the camp of the Cretan insurgents was bombarded by the foreign warships (Feb. 21); the Powers ordered Greece to evacuate the island within six days under threats of coercion (March 3) and King George declared that Greece would listen to no admonition from the Powers. War between Greece and Turkey followed, in which Greece was sorely defeated, and lost the province of Thessaly pending the payment of a large indemnity. During the winter of 1897-98 several of the Powers urged the appointment of Prince George of Greece as governor of Crete, but Turkey refused to sanction such a course. See GREECE: TURKEY.

CRIPPLE CREEK, town, El Paso county, Col.; 25 miles west by southwest of Colorado Springs; founded in 1890; population (1895) estimated 10,000. The main development of the town and district has taken place since 1893; prior to that year the region was chiefly a cattle ranch, though gold was known to exist there. In 1897 it had a national bank with capital of \$50,000, resources, \$252,-396, and deposits, \$172,231, and 1 daily and 3 weekly newspapers. The district is a complete network of gold-bearing veins, on which have sprung up in the vicinity of Cripple Creek town a number of mining towns, of which Victor, Altman, Independence, Gillet, Lawrence, and Anaconda are the best known, giving the district a total population fluctuating at about 40,000. The production of the district in 1894 was valued at \$3,080,000, and in 1895 at \$8,750,000. A stock exchange has been established in Cripple Creek town, where sales of shares aggregated during 1895 about \$2,000,000 daily. Such mining experts as ex-Gov. James B. Grant, United States Senator Teller, and ex-United States Senator Tabor, all of Colorado, believe that the output of the Cripple Creek district will soon exceed that of the famous South African region. See COLORADO.

CRISP, CHARLES FREDERICK, jurist, was born in Sheffield, England, Jan. 24, 1846; died in Atlanta, Ga., Oct. 23, 1896. He was a Democratic representative in Congress from the 3d district of Georgia since 1882; was elected Speaker of the House in 1891 and 1893, succeeding Thomas B. Reed, who succeeded him in 1895; was offered and declined an appointment to the United States Senate in 1894; and on the organization of Congress in December, 1895, was appointed a member of the committees on ways and means and on rules.

CRISPI, FRANCESCO, statesman, was born in Ribera, Sicily, Italy, Oct. 4, 1819. After the fall of the Giolitti ministry, Nov. 24, 1893, and the vain attempt to form a ministry under Zanardelli, Crispi, who had been prime minister before, though blamed in connection with the Banca Romana scandals, was again made prime minister Dec. 8. The treasury debt was about \$100,000,000, and the estimated deficit for 1894-95 \$38,000,000. He proposed retrenchment to the amount of \$9,000,000, and fresh taxes of \$20,000,000; and sternly but ably repressed the disorders in Sicily. In June, 1894, his financial scheme being approved by only 225 deputies against 214, he resigned; but was persuaded to withdraw this, and

partly reconstruct his ministry. June 10 an unsuccessful attempt was made to assassinate him. In September, 1894, his private secretary had an interview at the Vatican with Cardinal Rampolla which resulted in improved relations with the papacy. In October, 1894, the deficit was estimated at \$12,000,000, and he proposed \$8,000,000 new taxation, and \$4,000,000 fresh economies of administration. In November he made a subscription of \$3,400 for the earthquake sufferers in Sicily. During the year he sustained the campaign of General Baratieri in Sicily, which was at first successful. He was believed to hold the Triple Alliance as a temporary necessity, and those opposed to it respected him as perhaps the only man strong enough to carry Italy through her financial crisis. In February, 1895, he was sustained in the popular vote against the radicals and socialists, and in July, 1895, a radical motion of want of confidence failed, 151 to 383. In August, 1895, he urged the making of Sept. 20 a national holiday; and in November he declared against any modification of the law of Papal Guarantees. On the overwhelming defeat of the Italians in Abyssinia March 1, 1896, he was obliged to resign, and was succeeded by the Marquis Antonio di Rudini.

CROCKETT, SAMUEL RUTHERFORD, clergyman and author, was born in Duchrae, New Galloway, Scotland, in 1859. His first important publication, *The Stuckel Minister*, appeared in 1893, and was received with great favor, reaching an 11th edition in England in 1895, besides many reprints in the colonies and the United States. In 1894 he published *The Lads Saubonniet, Ma! Sir Uehred of the Hills, The Play Actress, and The Raiders* (9th edition in 1895); in 1895 *The Men of the Moss Hags, Sweetheart Travelers, Rutherford, Boy Myrtle and Peat, Galloway Hero!*; in 1896 *Cleg Kelly, Arab of the City, and The Grey Man of Auchendrygair*; and in 1897 *Lad's Love and The Surprising Adventures of Ser Toddy Lion*; and in 1898, *Lochmear*.

CROKER, RICHARD, politician, was born in Black Rock, Ireland, Nov. 24, 1843. On May 10, 1894, he resigned the leadership of Tammany Hall, with the chairmanship of its finance committee and membership of the executive committee, retaining only his place on the general committee, after being the acknowledged head of the organization since 1885. In the following month, and while the Lexow legislative committee was in session in New York, he made a sudden trip to Europe, and gave himself up to the pleasures and excitements of the turf, in which he had been financially interested since 1893. On Feb. 8, 1896, during a brief visit to New York, he was banqueted by his political admirers and presented with a costly loving cup; and in 1897, was popularly believed to have directed the Democratic campaign for the first municipal government of the Greater New York.

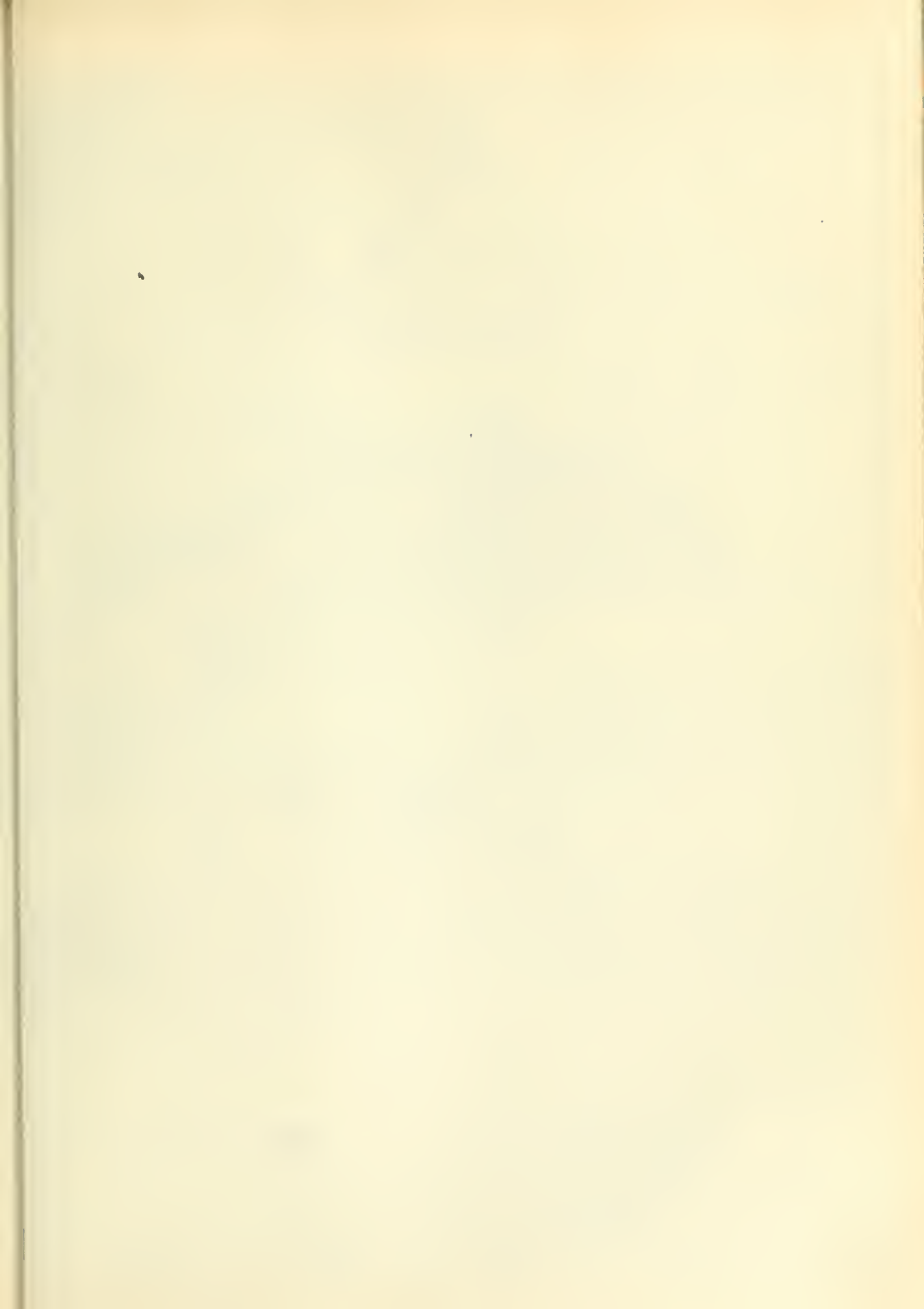
CROMER, EVELYN BARING, 1ST LORD, diplomatist, was born in England, Feb. 26, 1841. Since 1883 he has been British minister at Cairo, Egypt, where he had previously served as British commissioner of the Egyptian debt and as controller-general of Egyptian finance. He was created a peer in May, 1892, and received the honorary degree of D.C.L. from Oxford in 1893. Lord Cromer is said to possess a more complete knowledge of Egypt than any living English official; is styled the maker of modern Egypt; and had additional responsibility placed on him in March, 1896, by the decision of the British cabinet to send an Anglo-Egyptian expedition against the Dervishes threatening Kassala, Abyssinia, a movement believed to be in aid of the Italian government, whose troops had suffered severe reverses in that country. See ABYSSINIA: EGYPT.

CROOKES, WILLIAM, physicist, was born in London, England, in 1832. Since 1883 he has been engaged almost exclusively with researches on the nature and

constitution of the rare earths, as interpreted by the radiant matter test, a method of spectroscopic examination emanating from his early discoveries in radiant matter. His name is now familiar everywhere, because of the use of the glass tubes bearing it by Dr. Roentgen in the experiments resulting in his discovery of the remarkable effects of what he termed the X rays in photography. At the time of Dr. Roentgen's discovery, Professor Crookes was in Johannesburg, South Africa.

CRUGER, JULIA VAN RENSSELAER, (per name JULIEN GORDON), author, was born in Paris, France. She is a daughter of the late Thomas W. Storrow and wife of Steven V. R. Cruger, of New York City. In 1889 she organized a successful opposition to the Ward McAllister social régime. Her publications include *A Diplomat's Diary* (1890); *A Successful Man*; *Vampire*; *Mlle. Reseda*; *Marionettes*; *His Letters* (1893); *Poppea* (1894); and *Eat Not Thy Heart* (1897).

CUBA, largest of the West Indian islands and most important of the Spanish colonial possessions; between Florida and the Caribbean Sea; area, 41,655 square miles; population (1890) 1,631,687; capital, Havana. The estimated revenue for 1896-97 was \$30,375,000; expenditure, \$123,541,200; debt 1896, about \$315,900,000; imports, 1895-96, \$69,459,647; exports, \$99,084,727. The principal products are sugar and tobacco; chief imports, provisions; chief exports, sugar, molasses, rum, cigars and cigarettes, and leaf tobacco. In the fiscal year ending June 30, 1896, the United States imported from Cuba merchandise to the value of \$40,017,730, and exported merchandise thereto valued at \$7,530,880; and in the year ending June 30, 1897, the imports fell to \$18,467,211, and the exports rose to \$8,250,776. Since the beginning of 1895 all interests connected with the island have been dwarfed by the revolution there. In December, 1894, a bill introduced in the Spanish Cortes, designed to give Cuba a larger measure of control of its own government, encountered serious opposition in Spain. The government undertook to effect a compromise by proposing to appoint a council of 12 members, including the governor-general, the president of the high court, and the highest church officials, and allowing the Cubans to choose 15 other members by popular vote. This council was to sit in Havana, frame the local budget, administer local and financial affairs, and exercise a general supervision over the local government. While the compromise was pending, local dissatisfaction became so pronounced that in February, 1895, the Spanish government proclaimed martial law over the island. This led at once to an organized revolution in the eastern and western provinces, and the forming of a provisional government with Jose Marti at its head and Maximo Gomez as commander-in-chief of the revolutionists. In April, General Campos was appointed governor-general and commander-in-chief of the Spanish forces on the island, and in January, 1896, he was recalled and succeeded by Gen. Valeriano Weyler y Nicolau. President Cleveland issued a neutrality proclamation June 12, 1895, and Attorney-General Harmon special instructions to United States district attorneys to enforce the neutrality laws, on the following day. During the progress of the revolution, a number of expeditions were organized in the United States to convey munitions of war to the revolutionists, most of which were successful. A few seizures of men and materials were made by United States officials, but up to April 1, 1896, all were released by the courts with the exception of one case, in which convictions were had and sentences imposed. On Aug. 7, 1895, the provisional government of the revolutionists was reconstructed, with Gen. Bartolome Maso for president; and on Sept. 23, the revolutionists proclaimed the independence





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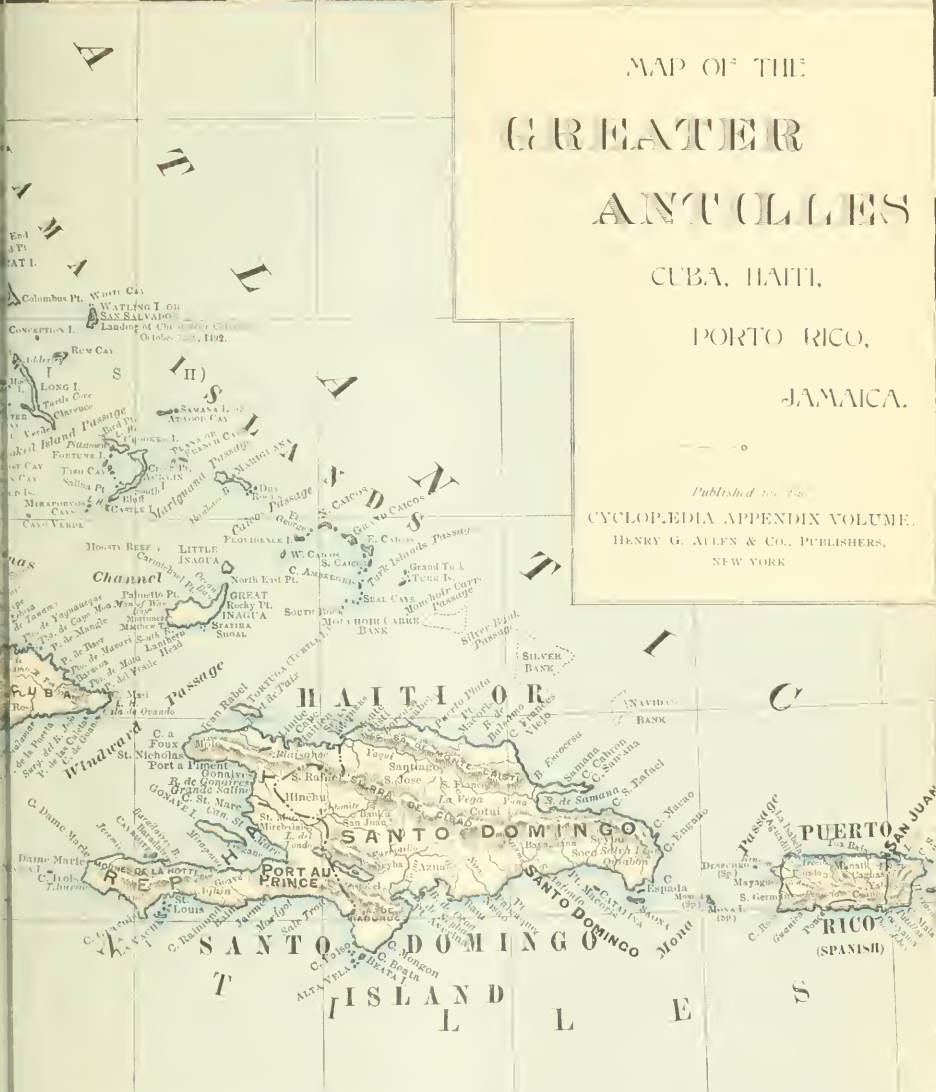
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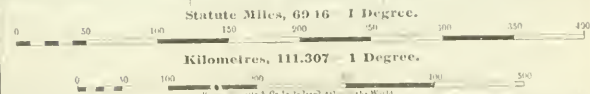
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MAP OF THE
GREATER
ANTILLES
CUBA, HAITI,
PORTO RICO,
JAMAICA.

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SCALE.



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of Cuba, organized a permanent government, republican in form, with Salvador Cisneros for president, and adopted a constitution.

In the United States Congress, a resolution recommending the recognition of the Cuban revolutionists as belligerents was introduced in the Senate, Feb. 5, 1896, and a similar one was presented in the House, Feb. 27. The Senate resolution was passed, Feb. 28, by a vote of 64 yeas to 6 nays, and aroused a storm of indignation, leading to riotous demonstrations throughout Spain, and in the House the resolution as reported from the Committee on Foreign Affairs was adopted March 2, by a vote of 263 yeas to 17 nays. Two days afterward the Senate refused to concur in the House resolution and sent it to a conference committee, whence it was reported and became the subject of a spirited debate till March 23, when it was sent back to conference by a unanimous vote. On March 26 the conference committee of the House decided to adopt the Senate resolutions.

From the beginning of active operations the revolutionists carried on a kind of guerrilla warfare, making sudden dashes into territory occupied by the government, and on various pretexts burning many small towns, and destroying much plantation property. A dispatch from Havana, March 14, 1896, named 35 towns in the western provinces that had been destroyed, and stated that more than 25 others had been half burned. On the same date the strength of the revolutionary army was estimated in Havana at about 43,000, distributed among the provinces as follows: Havana, 16,800; Matanzas, 8,600; Santa Clara, 6,500; Santiago, 5,500; Pinar del Rio, 3,900; and Camaguey, 1,500. The revolutionists claimed a force of 60,000 men, two-thirds of whom were well mounted and about half well-armed. *La Epoca* newspaper of Madrid, in March, 1896, in a summary of the operations of the Spanish government since the beginning of the revolution, said that Spain had sent nine expeditions to Cuba, comprising a total of 117,795 officers and men, and that after March 31, she would have 130,000 soldiers on the island. The cost of fighting the revolution from Feb. 21, 1895, to Feb. 24, 1896, was \$50,000,000, of which \$10,000,000 was on account of the army, and \$40,000,000 on account of the navy and war supplies. The estimated expenditures for 1896 were \$75,000,000. General Weyler was said to believe that the war would last two years longer, in which case the cost to the Spanish government would be \$200,000,000. In February, 1898, the cost of the war from February, 1895, to the end of 1897, was officially estimated at Madrid at \$240,000,000, beside the arrears due from the Cuban treasury, amounting to \$40,000,000.

In February, 1897, a scheme of reforms for the island was agreed upon by the Spanish cabinet, and its general features were made public; but the plan was not favorably received. The Cubans suffered the loss by death of their principal leader, Gen. Antonio Maceo, and by capture of his successor, General Rivera; and the headquarters of their government, Esperanza, was captured by the Spaniards under General Castellano. General Weyler was recalled and was succeeded by Marshal Blanco y Arenas, in October, and the new governor at once inaugurated a more humane régime, started measures of relief for the thousands who were starving in the interior, and granted many pardons. During the year the distress became so great and so widespread that the President of the United States appointed an influential committee to raise funds and ship to the island the articles most urgently needed. Subsequently Clara Barton, president of the American Red Cross Association, responded to an appeal for aid, and went to the island with the sanction of the Spanish government to direct the practical distribution of relief stores. With the advent of a new Spanish ministry under

Señor Sagasta, a new official policy of dealing with the revolution was attempted. He announced that political rather than military means would be used to effect the pacification of the island, and that autonomy, under the suzerainty of Spain, would be granted. In accord with this policy, Marshal Blanco, on his arrival, issued a proclamation declaring that he had been charged by the home government to grant reforms and give the island self-government.

The full text of the decree granting autonomy to both Cuba and Puerto Rico was published in the *Official Gazette* of Madrid, on Nov. 27, of which the following is a synopsis:

Article I. explains the principles of the future government of the two islands.

Article II. decrees that the government of each island shall be composed of an Insular Parliament, divided into two chambers, while a governor-general, representing the home government, will exercise in its name the supreme authority.

Article III. declares that the faculty of making laws on colonial affairs rests with the Insular Chambers and the governor-general.

Article VI. directs that the insular representation shall be composed of two corporations, with equal powers—a Chamber of Representatives and a Council of Administration.

Article V. provides that the Council of Administration shall consist of thirty-five members, of whom eighteen shall be elected and seventeen nominated by the home government.

Article VI. provides that the members of the Council of Administration must be Spaniards, thirty-five years of age, who were born in the island or who have resided there continuously for four years. It specifies numerous officials, such as senators, presidents of courts and of Chambers of Commerce and other bodies as eligible to election to the Council.

Articles VII. to XIV., inclusive, deal with nominations and the conditions of election to Councils.

Article XV. empowers the throne or the governor-general to convoke, suspend, or dissolve the Chambers, with an obligation to reassemble them within three months.

Article XVI. and the following articles deal with the procedure of the Chambers, and grant immunity to members.

Article XXIX. empowers the Insular Parliament to receive the governor's oath and make effective the responsibility of the secretaries forming the governor's Council. When the secretaries are impeached by the Chambers they are to be judged by the Council of Administration. Negotiations for treaties of commerce are to be made by the home government, with the assistance of the secretaries of the island.

Article XXXIX. confers upon Parliament the imposing of customs duties.

Article XL. deals with the commercial relations of the islands with the peninsula, and provides that no import or export tax may differentiate to the prejudice of the productions of either island or the peninsula. A list will be formed of articles coming from Spain direct, which will be granted favorable treatment in regard to similar articles coming from abroad, and the same will be done for productions of the islands entering Spain, the differential duty in no case to exceed 35 per cent.

The remainder of the decree explains the governor-general's powers. He will exercise supreme command, be responsible for the preservation of order, have free power to nominate officials and his secretariat; he will publish and execute the laws and decrees, international treaties, and conventions, etc., and will have

the power of pardoning, suspending constitutional guarantees, and ordering a state of siege, should circumstances require it.

On Dec. 29 Captain-General Blanco issued a decree announcing the lines on which the home rule government was to be established. The first section defined the powers which Governor-General Blanco and his secretary-general, Dr. Congosto, would continue to exercise, as follows: The conduct of general affairs between Spain and Cuba; intercourse with diplomatic and consular officers of foreign governments; census of foreigners; public peace and order; honors and decorations; relations with the Church. With these powers excepted, the entire administration of the affairs of the island is turned over to the members of the Cabinet. Each member was authorized to select an assistant secretary and to employ his own staff of assistants. The authority of each Cabinet officer was then specified as follows:

The premier, Señor Galvez, directs the general policy of the island, confers with the other ministers, and is the executive head of the organization, the detailed work being left to the other ministers.

The minister of justice and interior, Señor Govin, has charge of affairs relating to the courts and judicature, appointment of marshals and other court officers, jails and penitentiaries, municipalities, provincial deputations, local police, public charity, charitable institutions, public health, asylums, the press and theaters, etc.

The minister of finance, Señor Montoro, has control of all affairs relating to the customs of the island, appointment of customs officers, conduct of the treasury, disbursement of public money, etc.

The minister of public instruction, Señor Zayas, has charge of the University of Havana, all colleges, professional schools, and other institutions of which the control is not reserved to the province or municipality.

The minister of public works and telegraph, Señor Dolz, has control of the post offices and telegraph system, railroads, ports and lightships, public buildings and grounds.

The minister of commerce, Señor Rodriguez, has charge of agriculture, patents and copyrights, banks and chambers of commerce, public forests and mining.

This division of duties was to continue till the Cuban Legislature met and established by law the exact duties of the Cabinet officers. It was desired to have the Cabinet begin work at once, so that without waiting for the Legislature the decree established the system until the law was made. The new officials took the oath of office on Jan. 1, 1898, and immediately assumed charge of their offices.

In February, 1898, the Radical wing of the Autonomist party, with others, met in secret session to discuss the situation, which was considered serious, owing to the continuance of the insurrection notwithstanding the granting of autonomy. Under the belief that the insurrection could not be suppressed by force of arms, it was resolved to open negotiations with the insurgents, under the name of the new colonial government, and the following propositions were formulated, with the approval of the colonial secretary of the interior, to be formally tendered to the insurgents:

First.—The volunteers will be dissolved and a Cuban militia formed.

Second.—The insurgent colonels and generals will be recognized.

Third.—Cuba will be called upon to pay only \$100,000,000 out of the \$600,000,000 indebtedness due for both wars.

Fourth.—Cuba will pay \$2,000,000 a year for the Crown list.

Fifth.—Cuba will make her own treaties without interference by the Madrid government.

Sixth.—Spanish products will have only a 10 per cent. margin of protection over similar products from other countries.

Seventh.—No exiles or deportations will be made, even in war time, to Spain, Africa, or to penal settlements elsewhere.

Eighth.—Death sentences for rebellion shall be abolished.

Ninth.—Martial law cannot be ordered by the captain-general without the assent of both the House and the Senate if those bodies are in session, or without the assent of a majority of the Cabinet if they are not in session.

Tenth.—The Archbishop of Santiago de Cuba shall always be a native Cuban.

Eleventh.—The actual insurgent party shall have three seats in the first Cabinet.

Twelfth.—An armistice of fifteen days will be granted for the discussion of the terms of peace.

At the time of writing all efforts to open negotiations with the insurgents had failed, and it was feared that the scheme of autonomy would prove unsuccessful. On the night of Feb. 15, the United States battleship *Maine*, which had been at anchor in the harbor of Havana for some days, was suddenly blown up, causing the death of over 250 officers and crew and the almost complete destruction of the vessel. This catastrophe appalled the world, and for a time overshadowed every interest connected with Cuba. For details of the disaster and events growing out of it, see HAVANA.

CULLOM, SHELBY MOORE, lawyer, was born in Wayne county, Ky., Nov. 22, 1829. Since 1883 he has been a Republican United States senator from Illinois, and by re-election, Jan. 23, 1895, will hold his seat till March 3, 1901. On the organization of Congress in December, 1895, he was appointed chairman of the committee on interstate commerce and a member of the committees on census, foreign relations, and on additional accommodations for the library of Congress (select).

CUMBERLAND, city, capital of Allegany county, Md.; population (1890) 12,729; (1897) estimated 18,000. In 1897 the total assessed valuation (about 85 per cent. of actual value) was \$7,377,000; and the total bonded debt was \$523,000; sinking funds, \$42,000; net debt, \$481,000. There are 3 national banks (capital \$300,000); and 2 daily, 5 weekly, and 2 monthly periodicals.

CUMMINGS, Amos J., journalist, was born in Conkling, N. Y., May 15, 1841. He received a common school education; learned the printer's trade; served with Walker in Nicaragua; received a Congressional medal of honor for conspicuous bravery in the civil war; engaged in editorial work in New York City; and was elected to Congress as a Democrat in 1886, 1889, 1892, 1895 and 1897 (second and fourth times to fill vacancies). In the present Congress he is a member of the committees on naval affairs and on the library.

CURACAO, most important of the Dutch West India Islands; capital Willemstad; area, 210 square miles; population (1893) 27,254. During the nine months ending Sept. 30, 1895, the exports declared here for the United States aggregated in value \$63,892.30, principally hides and skins (\$29,694) and wood (\$13,089).

CURRENCY. On Jan. 1, 1898, the population of the United States was estimated by government officials at 73,725,000, and the amount of money in circulation at \$23.34 per capita. The following table shows the amounts of gold and silver coin and certificates, United States notes, and national bank notes in circulation on that date:

Classification.	Amt. Coined or Issued.	In U. S. Treasury.	In circulation.
Gold Coin.....	\$699,478,536	\$151,940,476	\$547,538,060
Silver, Standard Dollars.....	455,818,122	394,327,049	61,491,073
Subsidiary Coin.....	76,490,207	10,679,809	65,720,398
Notes, United States.....	346,681,016	84,200,089	262,480,927
Treasury act, 1890.....	106,348,280	2,904,344	103,443,936
National Bank.....	229,014,644	5,186,886	223,827,758
Certificates, Gold.....	38,128,449	1,570,469	36,557,980
Silver.....	387,925,504	11,229,912	376,695,592
Currency.....	4,555,000	1,240,000	43,815,000
Total.....	\$2,385,349,255	\$668,248,815	\$1,721,100,640

Excluding \$1,055,000 in \$5,000 certificates and \$43,555,000 in fractional parts, both representing United States notes deposited in the treasury, the denominations and amounts of each of paper currency outstanding on the above date are as follows:

Denominations.	United States Notes.	Treasury Notes of 1890.	National Bank Notes.	Gold Certificates.	Silver Certificates.	Total.
\$1.....	\$1,754,768	\$15,346,890	\$450,536		\$31,598,550	\$48,150,744
50c.....	2,447,878	10,201,776	169,092		49,271,678	61,991,374
25c.....	62,582,267	32,207,755	72,827,610		106,211,195	273,888,827
\$10.....	82,835,561	31,650,930	70,747,130		119,233,396	304,466,917
500.....	67,971,932	10,255,181	52,395,400	\$4,795,494	71,162,410	206,570,816
\$50.....	11,208,373	28,525,000	10,679,450	2,722,655	14,361,425	67,206,903
\$100.....	24,654,200	2,382,100	21,501,100	3,712,000	25,821,370	75,410,770
\$500.....	15,650,000		112,000	3,448,500	157,500	19,408,000
\$1,000.....	75,115,000	3,055,000	28,000	5,631,500	168,000	84,909,500
\$5,000.....	13,000			5,475,000		5,490,000
\$10,000.....	10,000			12,340,000		12,350,000
Fractional.....			30,382			30,382
Total.....	\$347,681,016	\$106,348,280	\$229,014,640	\$8,128,140	\$87,925,504	\$1,109,397,580
Unknown, destroyed.....	1,000,000					1,000,000
Net.....	\$346,681,016	\$106,348,280	\$229,014,640	\$8,128,140	\$87,925,504	\$1,108,397,580

The monetary stock of the principal countries of the world estimated (necessarily) in 1894 was approximately as follows: Gold, \$3,965,900,000; silver, full tender, \$3,435,800,000, partial tender, \$619,900,000, total, \$4,105,700,000; uncovered paper, \$2,570,900,000—total, \$10,592,500,000. Muhlman in 1895, using Mulhall's estimates of 1889 and supplying notable omissions and a conservative increase, gave the aggregate banking power of the world as follows: Europe £2,200,000,000; Asia, £150,000,000; Africa, £50,000,000; Oceania, £175,000,000; North America, £1,200,000,000; South America, £140,000,000—total, £3,915,000,000 (\$18,996,900,000). Europe, with a population of 364,300,000 in round numbers, was credited with using \$3,048,000,000 in gold; \$1,160,000,000 in full tender silver; \$501,500,000 in subsidiary silver; \$100,000,000 in minor coin; and \$1,314,800,000 in uncovered paper. The note issues aggregated \$3,484,600,000, and the metallic reserves \$2,178,300,000. France, Germany, Great Britain, and Russia, in their order, possessed the largest stocks of gold in Europe; and Russia, Italy, Austria-Hungary, Spain, France, and Belgium, in their order, the largest amounts of uncovered paper. Combining all kinds of money, Muhlman gives France the largest circulation per capita, about \$42.84;

then Belgium, \$27.58; the Netherlands, \$25.89; and Greece, mostly in depreciated paper, \$25.50. No other countries of Europe have as much as \$20 per capita; only 8 of the remainder have over \$15; and all but one of the others have under \$10. See GOLD: MONEY: SILVER.

CURRIE, SIR PHILIP HENRY WODEHOUSE, diplomatist, was born in 1834; entered the British diplomatic service in 1854; special secretary to Lord Salisbury in Constantinople in 1876; and joint secretary at the Congress of Berlin in 1878. After continuous important service he became ambassador to Constantinople in 1893, in which office he displayed great ability during the difficult negotiations of 1894-96. In February, 1896, it was announced that he would succeed the Marquis of Dufferin as ambassador at Paris on the impending retirement of the latter.

CURZON, GEORGE NATHANIEL, author of important works on Oriental political questions, and M.P., was born in Lancashire, England, in 1859. He was under-secretary of state for India in 1891-92, and became under-secretary of state for foreign affairs, parliamentary secretary for the foreign office, and representative of that department of the government in the House of Commons in 1895. In 1894 he published *Problems of the Far East—Japan, Korea, China*. He was married to Miss Mary Leiter, of Chicago, Ill., in 1895.

CUSHING, FRANK HAMILTON, ethnologist, was born in Northeast, Pa., July 22, 1857. He has been connected with the United States Bureau of Ethnology since 1879, and has particularly distinguished himself by his work concerning the Zuni Indians. In December, 1895, he started on an expedition under the joint auspices of the United States Ethnological Bureau and the archeological department of the University of Pennsylvania, to Pine Island, below the Southern Florida Keys, where he had previously uncovered remains of the shell-age of prehistoric man, and found evidences of hitherto unknown phases of aboriginal life.

CYPRUS, third largest island in the Mediterranean Sea, administered by Great Britain under a convention with the sultan since 1878; area, 3,580 square miles; population (1891), exclusive of the military, 209,286; capital, Nicosia. In April, 1895, there was a general movement among the people, looking to the abolition of the Turkish tribute and to a union with Greece.

DABOLL, DAVID AUSTIN, publisher of the *New England Almanac and Farmers' Friend*, was born in Groton, Conn., in 1813; died there, July 8, 1895. He was a son of Nathan D., whom he assisted in preparing Daboll's *Arithmetic*, and grandson of Nathan 1st—all noted mathematicians. As State representative he was in office continuously 1846-71, and was State senator one term.

DAHLGREN, MADELINE VINTON, author, was born in Gallipolis, O., about 1835. She was a daughter of Samuel F. Vinton and the second wife of Rear-Admiral John A. Dahlgren, U.S.N., and began writing poems and sketches in 1859, under the pen name of CORINNE. For many years she has been a leader in the social, literary, and philanthropic circles of the national capital. Her last notable publication was the 6th edition of *The Social Official Etiquette of the United States* (1894).

DAHOMY, a former kingdom, now a French protectorate, in Upper Guinea, Africa; area, about 4,000 square miles; population (1894) estimated 250,000. Disputes with France broke out in 1890, were renewed in 1892, and culminated in the dethronement of King Benhazin and the appointment by France of King Gouthili, Jan. 15, 1894. Subsequently, in the settlement of the boundary line between the British and French West African possessions, Dahomey became the

"hinterland" of the French possession of Porto Novo. In 1896 Benhazin was confined in old Fort Tartacon, on the island of Martinique.

DAIRY EXPORTS. During the fiscal year ending June 30, 1897, the exports from the United States of butter aggregated 31,345,224 lbs., value \$4,493,364; cheese, \$50,944,607 lbs., value \$4,636,063; and milk, value \$524,968—total value, \$9,651,395; increase in a year, \$3,354,825. The principal customer was the United Kingdom, which took a total in 1896 of butter and cheese, \$4,259,541, and in 1897, \$6,696,572.

DALLAS, city, capital of Dallas county, Tex., population (1890) 38,067; (1895) estimated 65,000. In 1895 the assessed valuations were: Real, \$16,904,125; personal, \$4,723,800—total, \$21,627,925; and the total tax rate was \$15 per \$1,000. The bonded debt, limited to \$2,500,000, was Feb. 14, 1895, \$2,005,500 (including a water debt of \$661,000), floating debt, \$18,000, sinking fund, \$52,500—net debt, \$1,971,000; value of city property, \$1,500,000. The total debt, 1896, was \$2,051,071. In 1897 there were 5 national banks with combined capital of \$1,150,000, and resources \$5,898,986, and the exchanges at the United States clearing house were \$66,471,619, an increase of \$1,907,211 over the total of the previous year. The city had electric and horse railroads operating over 50 miles of track, and a quarterly, 6 monthly, 2 semi-monthly, 15 weekly, 2 semi-weekly, and 2 daily periodicals.

DALY, CHARLES PATRICK, jurist, was born in New York City, Oct. 31, 1816. He has been president of the American Geographical Society for many years, done much to promote exploration and polar search, and been a voluminous writer on legal, historical and geographical topics. On July 26, 1895, he responded to the addresses of welcome at the opening of the World's Geographical Congress, at London, England. His last publications of note are *The Settlement of the Jews in North America* (1893), and *The Common Law: Its Origin, Sources, Nature, and Development, and What the State of New York has done to Improve Upon It* (1894).

DAMASCUS, town, capital of Syria, Asiatic Turkey; population (1894) estimated 200,000. It has large manufacturing and trade interests, and latest reports (1894) gave the imports of the previous year as \$3,292,650, and exports, \$2,219,950. The Great Mosque, built at the beginning of the 8th century, was destroyed by fire in October, 1893, and it was only through private letters that the fact became known, the Turkish authorities apparently suppressing all mention of it. During the latter part of 1895 the town was the scene of much military activity, on account of the mobilizing in it of Turkish troops. Travel between the town and Beirut, Aleppo, and Lebanon was exceedingly dangerous because of the conflicts between the Druses and Mutualis, the latter claiming that it was impossible to obtain justice from the Turkish officials, and the former summoning their co-religionists at Hauran to their aid. The vali of Damascus succeeded in preventing the Hauranites from leaving, and the vali of Beirut posted a force of cavalry to prevent armed men from entering the villages. In 1895 work was being pushed on the Damascus-Beirut railway; the Damascus-Mezarib line, 65 miles long, was opened; the Damascus-Homs-Biredjik line, a part of the Ottoman strategical system, had been granted state aid; and work on the Damascus-Acre-Haifa project had ceased.

DAMES OF AMERICA, COLONIAL, an organization with national and state societies; open to women who are descended in their own right from colonial ancestry; the ancestor must have become a resident of an American colony prior

to 1750 and rendered conspicuous service during the colonial period. In 1895 the society was represented in all of the original colonies and in the District of Columbia. Secretary, Mrs. William B. Reed, 825 St. Paul Street, Baltimore, Md.

DAMES OF THE REVOLUTION, a patriotic society organized in 1896, and composed of women above the age of 18 years who are descended in their own right from an ancestor, either a military, naval, marine, or civil official, who aided in establishing American independence during the war of the Revolution. Secretary and historian, Miss Mary A. Phillips; headquarters, 64 Madison Avenue, New York City.

DAMROSCH, WALTER JOHANNES, musical director, was born in Breslau, Germany, Jan. 30, 1862. Since 1885, when he succeeded to several musical appointments that had been held by his father in New York City, he has made himself one of the foremost conductors and directors of the day. In December, 1894, he produced the original opera, *The Scarlet Letter*, in New York City, with the aid of the Symphony Society, and on March 2, 1896, began a season of grand opera in German there, with a combination of notable singers, many of whom had never been heard in the United States.

DANA, CHARLES ANDERSON, editor of *The Sun*, New York City, was born in Hinsdale, N. H., Aug. 8, 1819; died on Dosoris Island, N. Y., Oct. 17, 1897. In the United States District Court at New York, June 24, 1895, Judge Addison Brown decided that Mr. Dana could not be removed to stand trial in the District of Columbia for libel on F. B. Noyes of the *Star*, Washington, the suit based on sale of copies of *The Sun* in the District, where the old libel law is severe. Citizens are entitled to trial where the alleged offense is committed, and the District of Columbia was not properly the place in this instance, nor is it exceptional in privileges as to jurisdiction. Mr. Dana published in volume form three lectures, entitled *The Art of Newspaper Making* (1895); and at the time of his death was publishing his *Reminiscences of the War in McClure's Magazine*.

DANA, JAMES DWIGHT, LL.D., geologist, mineralogist, and biologist, was born in Utica, N. Y., Feb. 12, 1813; died in New Haven, Conn., April 14, 1895; long a professor in Yale. His *Manual of Geology* was again revised and issued in February, 1895; and his *System of Mineralogy* in 1892.

DANBURY, city, capital of Fairfield county, Conn.; population (1890) 16,552; (1896) estimated 23,000. The city is in the town of the same name and both are separate corporations. The bonded debt Oct. 1, 1896, was \$484,000 (including a water debt of \$229,000), floating debt, \$269,900, sinking funds, \$4,000, and net debt, \$749,900; assessed valuations: Real, \$5,809,413, personal, \$885,037—total, \$6,694,450; tax rate, \$10 per \$1,000; value of city property, \$600,000. In 1897 there were 2 national banks with combined capital of \$577,000, and resources \$1,513,223; a trolley line completed extending to the town of Bethel, the Danbury fair grounds, and the pleasure resort of Lake Kenosha; and a daily, a weekly, and 2 monthly periodicals.

D'ANNUNZIO, GABRIELE, novelist and dramatist, was born in Italy, in 1865. His last drama, *La Ville Morte*, was written for Sarah Bernhardt, and was produced by her in Paris, in January, 1898. He was elected to the Chamber of Deputies in 1897, and in 1898 was working on his plans for the erection of a theater, after the style of the ancient classical theaters, on the shore of Lake Albano, near Rome.

DANUBE IMPROVEMENT, engineering work for removing the great impediment to the navigation of the Danube River at the stretch known as the Iron Gates. The work was begun on Sept. 16, 1890, substantially on the plans prepared at the request of the Austrian government by William J. McAlpine, a distinguished civil engineer of the United States (died Feb. 16, 1890). Initial operations were at Greben, where there were reefs to be removed; at the cataracts near Jucz; and at the Iron Gate proper, below Orsova. The total length of the river to be improved was about 250 miles, and, considering the natural obstacles to be overcome, the enterprise ranks as one of the greatest engineering feats ever attempted. It was expected that the work would be completed in 5 years, at a cost somewhat within \$4,000,000, but unavoidable delays occurred. A government report in 1894 showed that six cuttings had been made, overcoming 13 difficult bends in the river and shortening the course by 6 nautical miles; that another cutting would make a further shortening of $1\frac{1}{2}$ nautical miles; and that parallel dams at the Sulina mouth would be finished in 1895, and afford a depth of $23\frac{1}{2}$ ft. The work was so far completed that a navigable channel was inaugurated with much ceremony on Sept. 27, 1896.

DANVILLE, town, capital of Vermilion county, Ill.; population (1890) 11,491; (1896) estimated 15,000. The assessed valuations in 1896 were: Real estate, \$1,808,359; personal, \$447,271—total, \$2,255,630; total tax rate, \$17.72 per \$1,000; and the total debt, Jan. 1, 1897, was \$67,000. There are 3 national banks with combined capital of \$350,000 and resources \$1,812,275; a corporation owning the gas works, an electric light plant, and the entire street railway system; and a monthly, 5 weekly, and 3 daily periodicals.

DANVILLE, city, Pittsylvania county, Va.; population (1890) 10,305. In 1894 the assessed valuations were: Real, \$5,476,552; personal, \$1,883,483—total, \$7,360,035; and in 1895 the city debt comprised municipal bonds \$672,500, and railroad bonds \$320,000—total, \$992,500; debt limit by charter, \$1,160,000. In 1897 it had a national bank with capital of \$100,000 and resources \$556,168; flour and cotton mills; large tobacco interests; and a daily, 3 weekly, and 3 monthly periodicals.

DARDANELLES, a channel connecting the Sea of Marmora with the Archipelago and separating Europe from Asia, from 1 to 4 miles wide. From time immemorial Turkey has claimed the right to prevent foreign ships of war from entering the Dardanelles, and this right was recognized in treaties by Great Britain in 1809; the five Great Powers in 1841; the Paris signatories in 1856; the London conference in 1871; and the Berlin conference in 1878. Within recent years Turkey has permitted the Great Powers to maintain a single dispatch boat in the Bosphorus. In December, 1895, the Powers demanded permission to send a second vessel or guardship through the Dardanelles to be maintained near Constantinople, and the sultan refused for several days, but finally yielded. The strait is considered the key to Constantinople, and is fortified on each side with works of large extent, but, excepting for torpedoes, it would not be difficult for a modern battleship to force a passage. At present treaty obligations give Turkey the greatest strength at this point. See **CONSTANTINOPLE**.

DARIEN SHIP CANAL. Many attempts have been made in the last 50 years to locate feasible routes for a canal across the Isthmus of Panama, and the United States government has expended considerable money in surveys; but the great cost of the undertaking has prevented active operations excepting by the notorious De Lesseps combination. In 1895 Gustavus Karweise, an engineer

who had spent nearly 30 years in investigating ship-canal routes in Central and South America, made known his plans for a new and short route, based on eight instrumental surveys. His projected line lies through the State of Colombia, between the Gulf of Darien, on the Atlantic side, and the Bay of San Miguel, on the Pacific side, and the greater part of it is south and outside of the territory included in the existing Panama canal concessions. On the Pacific side there are about 11 miles of free navigation up the Bay of San Miguel and the Tuyra River, which would need dredging out, and the remaining part of the river to a point 60 miles from the Pacific would be straightened and dredged. The canal proper would begin at this point with the first tidal lock, then follow the Javiera River and valley to the main ridge of the Cordilleras, which would be tunneled a distance of 11,880 ft. and terminate in a naturally protected harbor between Capes Acanti and Tolo, on the Gulf of Darien. The total estimated cost is placed at \$48,000,000, of which the tunnel would call for \$11,000,000.

DARTMOUTH COLLEGE, Hanover, N. H., founded in 1769; non-sectarian; affiliated institutions, New Hampshire Medical College, Chandler Scientific School, Thayer Engineering School, New Hampshire Agricultural and Mechanical College; had at close of 1896, 46 professors and instructors; 601 students; 75,000 volumes in the libraries; \$500,000 invested in grounds and buildings; \$100,000 in scientific apparatus and libraries; \$1,695,000 in productive funds; \$84,800 in gifts; \$70,000 in income; president, William J. Tucker, D.D., LL.D. Plans were completed in 1895 for the erection of the first two of a group of new buildings in the quadrangle north of the campus—the Butterfield Museum and the Alumni Memorial Hall.

DAUDET, ALPHONSE, author, was born in Nimes, France, May 13, 1840; died in Paris, France, Dec. 16, 1897. He was one of the most indefatigable of French writers both in the line of the novel and the drama, and had charge of the dramatic criticism of *Le Journal Official*, the organ of the French government. In 1895 he published *La Petite Tarisse* and *Tartarin of Tarascon*; shortly before his death he completed a novel, *Le Soutien de Famille*, which was published in Paris, London, and New York in 1898.

DAUGHTERS OF THE AMERICAN REVOLUTION, organization founded in Washington, D. C., Oct. 11, 1890; open to women not less than 18 years of age and descendants of those who rendered material aid to the cause of independence as recognized patriots, soldiers, sailors, or civil officers in the colonies or States. In 1897 there were State chapters in 44 States and Territories, with a combined membership of about 20,000. Corresponding secretary-general, Mrs. Anderson D. Johnston, 1332 V Street N. W., Washington, D. C.

DAUGHTERS OF THE CONFEDERACY, NATIONAL, a society organized in Nashville, Tenn., Sept. 10, 1894; open to the widows, wives, mothers, sisters, and lineal descendants of men who served in the Confederate army and navy, in the civil service of the Confederacy, or who otherwise rendered personal service to the cause. The constitution declares that the objects are without any political signification whatever. Corresponding secretary, Mrs. J. B. Lindsley, Nashville, Tenn.

DAUGHTERS OF THE KING, a religious order in the Protestant Episcopal Church; organized in New York City, Easter Evening, 1885; often confused with the society of the King's Daughters, from which it materially differs. The chief objects are to spread Christ's kingdom among young women and to aid rectors in their parish work. Secretary, Miss Elizabeth L. Ryerson, 520 E. 87th Street, New York City.

DAUGHTERS OF THE REVOLUTION, society organized in New York City, Sept. 9, 1891; open to women who are lineal descendants of a military, naval, or marine officer, soldier, sailor, or marine in actual service under the authority of any colony or State or of the Continental Congress who remained loyal to such authority; of a signer of the Declaration of Independence, a member of the Continental Congress, or of any colonial or State Congress; and of any other recognized official who aided in establishing American independence. In 1895 the society was represented in 32 States. Secretary-general, Mrs. D. Phoenix Ingraham, office, 64 Madison Avenue, New York City.

DAUGHTERS, UNITED STATES, patriotic society, incorporated in 1892; open to women who are lineal descendants of persons who assisted in the wars of 1776 and 1812 as military or naval officers, soldiers or sailors, or who otherwise materially aided the cause. Secretary-general, Mrs. George A. Ludin, 100 W. 74th Street, New York City.

DAVENPORT, city, capital of Scott county, Ia.; population (1890) 26,872; (1895) 36,126. In 1895 it had an assessed valuation, about two-thirds actual, of \$10,000,000, and city tax rate, \$16.75 per \$1,000; and 1897 a total debt of \$275,000; improvement bonds (additional), \$271,000; assets, \$82,438. There were 4 national banks with combined capital of \$775,000 and resources \$3,753,872; a trolley line comprising all the street railways in Davenport and Rock Island and Moline, Ill., and 5 daily, 3 semi-weekly, 11 weekly, and 2 monthly periodicals. In 1897 the city completed the largest and costliest plant in the world for purifying its water supply. It has ten double filter shells, with a capacity of 7,500,000 gals., which contain the immediate water supply, each shell being constructed of steel and being 32 ft. long and 9½ ft. in diameter. The original source of supply is the Mississippi River, the distribution is through 37 miles of mains, and the filter plant cost \$1,200,000.

DAVIDSON, GEORGE, astronomer, was born in Nottingham, England, May 9, 1825. After a service of nearly 50 years on the United States Coast and Geodetic Survey, of the Pacific division, during which he had mapped that entire coast of the United States, traced the Mexican boundary line, determined the geographical position of 50 of the most prominent headlands of California, and performed scientific labors, which elicited the praise of the most learned societies of the world, he was suddenly removed from his office early in 1895. Strong protests were made against the act by influential institutions and people of the Pacific coast, and representatives of a number of foreign scientific societies, of which he was a member, deplored the removal as a great loss to geodetic science.

DAVIDSON COLLEGE, Davidson, N. C., founded in 1837; Presbyterian; had at close of 1897, 10 professors and instructors; 180 students; 11,000 volumes in the library; \$150,000 invested in grounds and buildings; \$110,000 in productive funds; \$17,500 in income; president, J. B. Shearer, D.D., LL.D.

DAVIS, CUSHMAN KELLOGG, lawyer, was born in Henderson, N. Y., June 16, 1838. He has been a Republican United States senator from Minnesota since 1887, and his present term will expire March 3, 1899. On the organization of Congress in December, 1897, he was appointed chairman of the committee on Foreign Relations and a member of those on Judiciary, Pacific Railroads, and the Five Civilized Tribes of Indians (select). He had been considered an aspirant for the Republican presidential nomination in 1896, but at the Minnesota State convention, March 24, he withdrew from the contest, and the convention pronounced William McKinley, Jr., its first choice.

DAVIS, REBECCA HARDING, author, was born in Washington, Pa., June 24, 1831. She published *Doctor Warrick's Daughters'* (1896), and *Frances Waldeau* (1897).

DAVIS, RICHARD HARDING, author, editor, and son of the preceding; since 1891 editorially connected with *Harper's Weekly*. He published *Our English Cousins, The Exiles and Other Stories, and the Rulers of the Mediterranean* (1894); *About Paris, The Princess Aline* (1895); *Cinderella and Other Stories* (1896); *Cuba in War Time, Dr. Jameson's Raiders vs. The Johannesburg Reformers, and Soldiers of Fortune* (1897); and *A Year from a Reporter's Notebook* (1898).

DAVITT, MICHAEL, journalist and Irish leader, was born in Straide, Mayo, Ireland, in 1846. In May, 1893, he was obliged to vacate his seat in Parliament in consequence of bankruptcy proceedings connected with the costs of the North Meath petition against him; but in the general elections of 1895 he was returned from Kerry, East.

DAVOUT, LEOPOLD CLAUDE, DUC D' AUBESTADT, military officer, was born in Escolives, France, Aug. 9, 1829. He is a grand-nephew of Napoleon's great marshal; was graduated at Saint-Cyr; served in Algeria, the Crimea, Mexico, Italy, and the Franco-German war; was rewarded by the Corps Legislative with the privilege of reviving the title borne by his distinguished ancestor; and received the grand military medal in 1891. He was retired in 1894, and after the disgraceful disclosures concerning the Legion of Honor, was appointed its grand chancellor, Dec. 5, 1895.

DAWES, HENRY LAURENS, statesman, was born in Cummington, Mass., Oct. 30, 1816. He voluntarily retired from the United States Senate, after a service of eighteen years in each house of Congress, March 4, 1893, and was elected to the newly endowed chair of United States History Since the Civil War in Dartmouth College, June 28 following. He spent considerable time in the Indian Territory in 1895, as the head of a commission appointed under an act of Congress to endeavor to secure from the five civilized tribes there their voluntary assent to the abandonment of tribal relations. He reported, December, 1895, that the commission had failed in its object chiefly because the men who profit by the continuance of the present status are the ones in power and the ones with whom negotiations must be carried on, and believed that the mass of the Indians themselves would vote for allotment if they dared. On March 21, 1896, the Senate committee on Indian affairs reported favorably on an amendment to the Indian bill, which directed the Dawes commission to make a census of the five civilized tribes, ascertain who are and who are not citizens, and suggest to Congress a plan for the division of the lands of the Indians among those who are found to be citizens.

DAWSON, SIR JOHN WILLIAM, geologist, was born in Pictou, Nova Scotia, Oct. 13, 1820. He published *Some Salient Points in the Science of the Earth and The Meeting Place of Geology and History* (1894); *Eden Lost and Won and Relics of Primeval Life* (1897), etc.

DAYTON, city, capital of Montgomery county, O.; population (1890) 61,220; (1896) 79,331. In 1897 the actual valuation of property was reported at \$100,000,000, and the assessed valuation, \$41,873,440; tax rate \$26.40 per \$1,000. The total debt was \$2,339,000, including a water debt of \$749,000; and there were also outstanding special assessment bonds aggregating \$1,212,950 and payable by assessments on benefited property. The treasury had a sinking fund of \$386,000, and the city owned public school property valued at \$1,223,525.

There were 7 national banks with combined capital of \$2,400,000 and resources \$8,628,022; trolley, steam, and horse railway lines, operating over 50 miles of track and connecting with Middletown, Hamilton, Riverdale, the National Soldiers' Home, and Cincinnati; and 6 daily, 15 weekly, 1 semi-monthly, and 9 monthly periodicals.

DEAF MUTES. The United States Commissioner of Education reported in 1897 that there were in the United States 51 State public institutions for the deaf, with 772 instructors, 9,037 pupils (4,948 males, 4,089 females); 91,271 volumes in the libraries; \$12,604 in scientific apparatus; \$10,704,700 invested in grounds and buildings; \$1,630,050 in receipts; and \$2,090,778 expenditures. Public day schools for the deaf, chiefly under the direction of municipal boards of education, numbered 20, and had 77 instructors; 615 pupils; \$202,900 in grounds and buildings; \$99,224 receipts; and \$103,161 expenditures. There were also 16 private schools for the deaf, with 88 instructors and 594 pupils. An interesting exhibition of deaf-mute instruction occurred in New York City, Feb. 25, 1895, when a five-act drama was performed wholly by deaf mutes in the theater of St. Francis Xavier's College.

DE AMICIS, EDMONDO, author, was born in Oneglia, Italy, Oct. 21, 1846. He served in the army; became director of the Italia Militare in Florence; and since 1868 has been a prolific writer of books, chiefly in the line of history and military life. In 1896 he was engaged on a work on socialism and studying educational questions in Turin.

DEBS, EUGENE V., labor leader, was born in Terre Haute, Ind., Nov. 5, 1855. In 1895 he served out his six months' term of imprisonment for contempt of the injunction of July 2, 1894, against interference with trains carrying United States mails or engaged in interstate commerce at the time of the Chicago strike and riots, beginning with the Pullman boycott, June 26, 1894. He was sentenced Dec. 14, 1894. The case was appealed from the United States Circuit Court to the United States Supreme Court, and the appeal was denied in May, 1895, thus affirming the right of the lower courts to enjoin from interference with traffic. In March, 1896, he began lecturing on *The Relations of the Church to Labor*.

DEBT, NATIONAL. The following shows the public debt and the cash in the treasury of the United States on Dec. 31, 1897:

INTEREST BEARING DEBT.					
Title of Loan.	Rate.	Amount Issued.	Amount Outstanding.		
			Registered.	Coupon.	Total.
Funded loan of 1891	2 per ct.	\$250,000,000	\$25,364,500	.....	\$25,364,500
Funded loan of 1897	4 per ct.	740,002,850	390,584,600	\$69,405,900	359,641,500
Refunding certificates	1 per ct.	40,012,750	.....	.....	44,228
Loan of 1901	5 per ct.	100,000,000	\$83,422,850	36,577,150	100,000,000
Loan of 1925	4 per ct.*	162,315,400	105,699,950	56,615,950	162,315,400
Total, excluding Pacific R. R. bonds.	.....	\$1,598,760,000	\$985,071,900	\$162,249,500	\$847,365,620

The funded loan of 1891 was originally issued at $4\frac{1}{2}$ per cent., and the bonds were continued at 2 per cent.

DEBT ON WHICH INTEREST HAS CEASED SINCE MATURITY.

Funded loan of 1891, matured Sept. 2, 1891.....	\$149,450.00
Old debt matured prior to Jan. 1, 1861, and other items of debt since	1,180,820.26
Aggregate.....	\$1,330,270.26

DEBT BEARING NO INTEREST.

U. S. Notes, Feb. 25, 1862; July 11, 1862; March 3, 1863.....	\$346,681,016.00
Old demand notes, July 17, 1861; Feb. 12, 1862.....	54,347.50
National bank notes, redemption account, July 14, 1860.....	32,308,146.00
Fractional currency, less \$8,375,934 est. as lost or destroyed.....	6,880,937.14
Aggregate.....	\$385,890,446.64

CERTIFICATES AND NOTES ISSUED ON DEPOSITS OF COIN AND LEGAL TENDER NOTES AND PURCHASES OF SILVER BULLION

Classification.	In Treasury.	In Circulation.	Amount Issued.
Gold Certificates.....	\$1,570,460.00	\$36,557,689.00	\$38,128,149.00
Silver Certificates.....	11,229,912.00	370,035,562.00	387,925,504.00
Certificates of Deposit.....	1,240,000.00	43,315,000.00	44,555,000.00
Treasury Notes of 1890.....	2,904,344.00	103,143,936.00	106,348,280.00
Aggregate.....	\$16,944,716.00	\$560,012,217.00	\$576,956,933.00

RECAPITULATION.

Classification.	Amount.
Interest-bearing debt.....	\$847,365,620.00
Debt on which interest has ceased.....	1,330,270.26
Debt bearing no interest.....	385,890,446.64
Aggregate.....	\$1,234,586,336.90
Certificates and treasury notes offset by cash in treasury.....	576,956,933.00
Aggregate of debt.....	\$1,811,543,269.90

CASH IN THE TREASURY.

Gold—Coin.....	\$151,910,176.27	
Bars.....	45,559,059.61	\$197,469,235.88
Silver—Dollars.....	\$394,327,049.00	
Subsidiary Coin.....	10,679,899.23	507,201,684.17
Paper—U. S. Notes.....	84,300,089.00	
Treasury Notes of 1890.....	2,904,344.00	
Gold Certificates.....	1,570,460.00	
Silver Certificates.....	11,229,912.00	
Certificates of Deposit.....	1,240,000.00	
National Bank Notes.....	5,186,886.49	106,331,691.49
Other—Bonds, Interest, and Coupons paid, awaiting reimbursement.....	20,287.91	
Minor Coin and Fractional Currency.....	1,086,754.29	
Deposits in National Bank Depositories—general account.....	44,979,694.10	
Disbursing Officers' Balances.....	4,203,022.74	50,208,759.04
Aggregate.....		\$861,391,370.58

DEMAND LIABILITIES.

Gold Certificates.....	\$38,128,149.00
Silver Certificates.....	387,925,504.00
Certificates of Deposit.....	44,555,000.00
Treasury Notes of 1890.....	106,348,280.00
Fund for Redemption of Uncurrent National Bank Notes.....	8,236,089.94
Outstanding Checks and Drafts.....	6,338,785.38
Disbursing Officers' Balances.....	27,676,540.28
Agency Accounts, etc.....	48,950,668.57
Gold Reserve.....	100,000,000.00
Net Cash Balance.....	135,474,769.01
Aggregate.....	\$861,391,370.58

See CURRENCY.

DEBTS, FOREIGN. The following table shows the national debts of the principal countries of the world, compiled with few exceptions from the official reports of 1895 and reduced to equivalents in United States gold dollars. It is believed to be the most complete national debt statement extant.

Argentine Republic.....	\$513,746,099	Russ, Elder Br.....	\$27,631
Austria-Hungary, general, 1,341,311,400		Russ, Younger Br.....	247,650
Austria, special.....	596,217,996	Saxe-Altenburg.....	211,213
Hungary, special.....	1,092,562,910	Saxe-Cob-Gotha.....	739,536
Belgium.....	443,075,829	Saxe-Mein.....	2,691,612
Bolivia.....	4,556,958	Saxe-Weimar.....	1,185,822
Brazil.....	432,982,233	Saxony.....	159,346,080
British Empire.....		Schaume-Lippe.....	85,680
United Kingdom.....	3,268,280,549	Schw-Rhd.....	930,580
Ceylon.....	16,923,519	Schw-Soult.....	644,245
India.....	522,915,115	Waldeck.....	499,871
Straits Settlements.....	1,551,425	Wurtemberg.....	110,364,000
Cape Colony.....	134,591,365	Greece.....	134,577,384
Mauritius.....	6,642,896	Guatemala.....	12,999,951
Natal.....	39,173,320	Haiti.....	17,797,320
Bermudas.....	228,996	Hawaii.....	3,583,161
Canada.....	308,348,024	Honduras.....	78,627,081
Australia, New S. Wales, 282,872,069		Italy.....	2,401,571,520
New Zealand.....	194,373,023	Japan.....	329,327,800
Queensland.....	148,508,135	Liberia.....	1,291,429
South Australia.....	108,449,590	Mexico.....	143,967,851
Tasmania.....	37,896,614	Montenegro.....	388,800
Victoria.....	232,985,134	Netherlands.....	449,414,862
West Australia.....	16,698,297	Nicaragua.....	8,385,109
West Indies.....	16,088,616	Norway.....	46,625,885
Chile.....	88,938,000	Orange Free State.....	367,300
China.....	257,580,000	Paraguay.....	20,412,000
Colombia.....	38,433,338	Persia.....	3,430,000
Costa Rica.....	56,387,023	Peru.....	282,055,660
Denmark.....	55,999,710	Portugal.....	744,915,920
Ecuador.....	6,594,560	Roumania.....	217,610,200
France.....	6,297,056,594	Russia.....	2,430,000,000
German Empire.....	481,519,651	Sardinia.....	12,234,440
Alsace-Lorraine.....	8,723,343	San Domingo.....	9,890,000
Anhalt.....	246,884	Serbia.....	72,102,320
Baden.....	103,329,508	South African Rep.....	13,143,145
Bavaria.....	254,270,443	Spain.....	764,938,660
Bremen.....	27,229,212	Sweden.....	75,219,960
Brunswick.....	6,728,316	Switzerland.....	17,049,717
Hamburg.....	77,497,792	Turkey.....	874,869,000
Hesse.....	9,563,279	Bulgaria.....	3,736,416
Lippe.....	192,874	Egypt.....	508,536,334
Lubek.....	4,661,273	United States, 1897.....	1,811,513,263
Meck-Schw.....	26,396,842	Uruguay.....	68,392,158
Meck-Stred.....	1,488,000	Venezuela.....	16,038,813
Oldenburg.....	11,152,701		
Prussia.....	1,512,229,183	Total.....	\$31,730,022,268

DECATUR, city, capital of Macon county, Ill.; population (1890), 16,841. In 1896 the assessed valuations were: Real estate, \$2,423,024; personal, \$913,957; railroads, \$100,090—total, \$3,437,072; total tax rate, \$61.50 per \$1,000. The bonded debt, Feb. 1, 1897, was \$100,000; floating debt, \$22,000; total debt, \$122,000; sinking fund, \$14,000; net debt, \$108,000. There were 3 national banks with combined capital of \$500,000, deposits \$1,266,608, and resources \$2,255,590; a trolley line operating 14 miles of track; and 4 daily, 5 weekly, and 2 monthly periodicals.

DE FOREST, JONAS WILLIAM, author, was born in Humphreysville (now Seymour), Conn., March 31, 1826. Ill health has greatly restricted his literary activity for several years; but in 1896 he was engaged on two historical novels, one of the Revolutionary period, the other of the civil war, and was also gathering materials for a New England history.

DE HAAS, MAURICE FREDERICK HENDRICK, marine painter, was born in Rotterdam, Holland, Dec. 12, 1832; died in New York, Nov. 23, 1895. He was an acknowledged master. His last work, *Boone Island Light*, was one of his best. His funeral took place at the Academy of Design, and was largely attended by artists. An auction in February, 1896, of 150 of his paintings brought \$28,000.

DE KAY, CHARLES, journalist and author, was born in Washington, D. C., in 1848. He was graduated at Yale College in 1868; served on the editorial staff of the *New York Times* from 1876 till June, 1894; and then became United States consul-general at Berlin. On the death of Ambassador Runyon, Jan. 27, 1896, he became acting chargé d'affaires, and was mentioned in connection with the succession, but the appointment was given to Edwin F. Uhl.

DELAGOA BAY, a large bay, estuary of several rivers, on the southeast coast of Africa, and of much commercial and strategic importance, lying between 25° 40' and 26° 20' s. lat.; length north and south 60 miles, breadth 20 miles. Discovered by the Portuguese 1498, it was in contention between Portugal and England till 1835, when the Boers also became claimants in part. It is the only available seaport for the Transvaal, but not in its territory. The dispute between the Portuguese and the English was referred to President Thiers, and decided by his successor, MacMahon, in favor of Portugal in 1875. By an agreement Great Britain has a right of pre-emption. Movements on the part of Germany have been interpreted as covetous of the bay and adjacent territory, or as opposed to English influence in the Transvaal. In the British Parliament March 27, 1896, the government was questioned as to a report that it had purchased from Portugal the bay and coast from Amatonga on the south to the Limpopo River on the north for \$25,000,000, and the same day the purchase was officially denied. A railway extends from the bay 57 miles to the western boundary of the Portuguese territory, and from there has been continued 290 miles by the Netherlands Company to Pretoria, the capital of the Transvaal Republic. On April 2, 1897, it was reported from London that Delagoa Bay had been leased to Great Britain for thirty years at an annual rental of £500,000, and that the Transvaal government was not aware of the arrangement till it was completed. In November following it was understood that the award of the Berne tribunal of arbitration in the Delagoa Bay railroad case was in favor of the McMurdo claim for a sum under £2,000,000; and that Portugal had completed arrangements for a settlement.

DELAND, MARGARATTA WADE (CAMPBELL) author, was born in Allegheny, Pa., Feb. 23, 1857; achieved wide fame by her novel *John Ward, Preacher*, in 1888. She has since published *Philp and His Wife* (1894); *The Wisdom of Fools* (1897), etc.

DELAWARE, one of the United States of North America; the first of the original thirteen States to ratify the Federal constitution (Dec. 7, 1787); counties, 3; capital, Dover.

State officers, 1897-1901.—Governor (elected for 4 years, salary \$2,000 per annum), Ebe W. Tunnell; secretary of state, James H. Hughes; treasurer, W. M. Ross; auditor, B. L. Lewis; attorney-general, Robert C. White; adjutant-general, Garrett J. Heart; chancellor of court of errors and appeals, John R. Nicholson; chief-justice, Charles B. Lore; associate justices, Ignatius C. Gaubb, W. C. Spruance, James Pennewiel, and William H. Boyce; clerk, W. S. Hutson—all Democrats excepting Judges Spruance and Pennewiel.

Legislature, 1897.—Democrats, senate 5, house 20, joint ballot 25; Republi-

cans, senate 4, house 1, joint ballot 5; Republican majority, senate 1, house 19, joint ballot 20.

Elections.—In the State elections 1894, there was a total of 38,728 votes cast, of which the Republican candidate for governor received 19,880; the Democratic candidate 18,659; and the Populist candidate, 189; Republican plurality, 1,221. This was the first time in 30 years that the State had elected a Republican governor. The new chief executive, Joshua H. Marvil, died April 8, 1895, and under the constitution was succeeded by the president of the senate, a Democrat. This change also tied the two parties in the senate, and made a Republican majority of 9 on joint ballot. In the State election in 1896, omitting irregular returns from Kent county, there were 29,596 votes cast for governor, of which the Democratic candidate (Tunnell) received 13,496; the Republican (Hoffecker), 9,255; and the Independent Republican (Higgins), 6,845. The Congressional election resulted in the choice of the regular Democratic candidate (Handy), by a plurality of 4,103. In the presidential election, the governor's certificates for Newcastle and Sussex counties showed that the Republican candidate had received 16,804 votes; the Democratic, 13,424; the National Democratic, 877; and the Prohibition, 355.

Farm Products.—Reported Dec. 31, 1895: Corn, 4,281,291 bush., from 203,871 acres, value \$1,455,639; wheat, 1,069,300 bush., from 92,181 acres, value \$684,352; oats, 468,790 bush., from 24,544 acres, value \$135,949; potatoes, 327,758 bush., from 5,651 acres, value \$124,548; and hay, 68,108 tons, from 55,372 acres, value \$828,193.

Other Products.—The State is a large producer of vegetables and orchard fruits, chiefly peaches, for the northern markets. Other products are granite, which in 1894 had an output valued at \$173,805, all in Newcastle county, and clay, which was worked by 13 establishments, and yielded common and pressed brick and drain tile valued at \$46,028.

Farm Animals.—Reported Jan. 1, 1897: Horses, 30,274, value \$1,294,516; mules, 5,269, value \$314,838; cows, 31,857, value \$958,568; cattle, 25,482, value \$538,434; sheep, 12,358, value \$38,779; and swine, 19,559, value \$287,413.

Finances.—This State has been remarkably successful in the management of its financial affairs, due, doubtless, to the fact that the legislature is the sole debt-creating authority. Whenever the State or any of its municipalities requires a loan, authority to issue it is granted by a special act of the legislature. As a result of this conservative management, the total funded debt of the State, Jan. 1, 1896, was \$684,750; the total assets were \$1,051,396; and the excess of assets over all liabilities was \$366,646.

Banks.—On Oct. 31, 1897, there were 18 national banks, with a combined capital of \$2,083,985, which held \$795,000 in United States bonds. These banks had outstanding on loans and discounts \$5,634,106, represented by demand paper with individual or firm names, \$226,077; the same secured by stocks, bonds, and other personal securities, \$113,773; time paper with two or more individual or firm names, \$3,814,619; time paper with single individual or firm name, \$424,442; and the same secured by stocks, bonds, and other personal securities, \$755,195. The banks held an aggregate of \$346,728.37 in coin and coin certificates, of which \$154,975.95 was in gold coin. The circulation account was: Total issue, \$8,806,985; redeemed, \$8,146,494; outstanding, \$690,491. There were deposits, \$5,265,828; reserve required, \$789,874; reserve held, \$1,558,401; ratio of reserve, 29.59 per cent. During the year ending Sept. 30, 1896, the exchanges at the United States clearing house at Wilmington aggregated \$36,631,187, and

in that ending Sept. 30, 1897, \$34,557,570, a decrease of \$2,073,617. On June 29, 1897, there was one State bank, with three branches, which had capital \$680,000; deposits, \$1,129,054; resources, \$2,406,970; and surplus and undivided profits, \$512,442. There were 2 mutual savings banks, which had 19,326 depositors, \$4,030,153 deposits, \$4,719,414 resources, and \$688,945 surplus and individual profits. The loan and trust companies numbered 2, and had capital \$1,000,000; deposits, \$2,225,183, resources, \$3,666,751; and surplus and undivided profits, \$307,974. In 1893 there were reported 21 building and loan associations, all local, and all but two serial. The associations combined had 2,969 shareholders, who held 18,957 shares, of which 10,411 were free and 8,546 borrowed on. The total dues and profits were \$1,573,566, and the assets and liabilities, \$1,741,047. In all associations, 15 reported 82 mortgages foreclosed during their existence; amount, \$112,472; loss, \$300.

Railroads.—The single-track mileage, Jan. 1, 1897, was 317.77. At the close of the fiscal year 1895, reports of railroads and operations showed: Capital stock, \$8,214,090, funded debt, \$6,375,000, total investment, \$15,183,410; cost of roads and equipments, \$14,944,839; gross earnings, \$3,423,479; net earnings, \$1,054,562; interest paid on bonds, \$284,550; dividends paid on stock, \$157,471.

Canal Interests.—In June, 1894, the report of the Chesapeake and Delaware Canal Company showed: Gross receipts, \$157,208; ordinary interest and cost of maintenance, \$45,878; interest on mortgage loan, \$104,118; surplus, \$7,212. Although there was a decline in receipts during a part of the year, caused by the coal miners' strike, the total for the year showed an increase over the preceding one. In October, 1894, an expert board of commissioners were appointed to select a line for the projected ship canal between Chesapeake and Delaware bays, designed to provide an important connection in an internal water route from Florida to Long Island Sound.

Post-Offices.—Reported Jan. 1, 1897: First-class, 1; third-class, 10 (presidential, 11); fourth-class, 158; money-order offices, 48.

Publications.—Reported May, 1895: Daily 5; weekly, 26; semi-monthly, 1; and monthly, 5—total 37; total in 1897, 41.

Churches.—The Roman Catholic is the strongest denomination in the State, and is followed by the Methodist Episcopal, Presbyterian, African Methodist, Protestant Episcopal, Baptist, and Methodist Protestant. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Delaware, 422 evangelical Sunday schools, 5,888 officers and teachers, and 43,634 scholars—total members, 49,522.

Schools.—Returns for the school year 1891-92, published in 1896, estimated the number of children of school age at 48,830, of whom 33,174 (28,316 whites, and 4,858 colored) were enrolled in the public schools, and 22,693 (19,746 whites and 2,947 colored) were in average daily attendance. There was a total of 840 teachers, 218 males, 622 females, 734 whites, and 106 colored. Ten public high schools had 29 teachers, and 1,239 pupils below secondary grades and 595 in such grades. The value of all public school property was \$904,426. Four private secondary schools had 13 teachers, 523 pupils, grounds and buildings valued at \$135,000, and income from all sources \$34,150. Delaware College, at Newark, in 1893-94, had 13 professors and instructors, 80 students in all departments, 6,267 volumes in the library, scientific apparatus and library valued at \$36,334, grounds and buildings valued at \$80,000, productive funds \$83,000, and income during the year \$24,451. The agricultural and mechanical college for white students is a department of Delaware College, founded on a grant of

90,000 acres of land, and in 1894-95 had farm land valued at \$3,000 and buildings and equipment valued at \$33,000; received from the State \$3,000, from the United States government, under act of 1862, \$4,980, under act of 1890, \$16,000, and for support of experiment station, \$15,000, and from fees and other sources, \$1,742; and expended for the department, \$16,103, the experiment station, \$15,000, and all other purposes, \$7,143. There is an agricultural and mechanical college for colored students at Dover, which had farm land valued at \$5,000 and buildings and equipments valued at \$15,700; receipts from all sources, \$1,853; and expenditures, \$4,825.

Libraries.—In 1896 there were reported 14 public libraries of 1,000 volumes each and upward, with a total of 83,763 bound volumes and 15,264 pamphlets.

Population.—In 1890, 168,493, of whom 85,573 were males; 82,920 females; 155,332 natives, 13,161 foreign born; 140,066 whites; and 28,427 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 185,000.

DELAWARE COLLEGE, Newark, Del., non-sectarian; had at close of 1897, 15 professors and instructors; 77 students; 10,000 volumes in the library; \$82,200 invested in grounds and buildings; \$44,056 in scientific apparatus and library; \$83,000 in productive funds; \$39,200 in income; president, George A. Harter, A. M., PH. D.

DEL MAR, ALEXANDER, political economist, was born in New York City, Aug. 9, 1836. He has been known widely for many years as a statistician, mining expert, and writer on economic subjects, and published *History of Monetary Systems* (1896).

DEMOREST, WILLIAM JENNINGS, prohibitionist and publisher, was born in New York, June 10, 1822; died there April 9, 1895. He founded the National Prohibition Bureau; also, the Constitutional League to test the constitutionality of the liquor laws, and the Demorest Medal Contest in temperance recitations. In 1885 he was the unsuccessful Prohibition candidate for lieutenant-governor of New York.

DENBY, CHARLES, diplomatist, appointed United States envoy extraordinary and minister plenipotentiary to China in 1885. Prior to his appointment, made by President Cleveland and continued by President Harrison, he had made himself one of the foremost lawyers in Indiana. During the war between China and Japan, his services were so conspicuously meritorious that after peace the Emperor of Japan made known his wish to confer on him the decoration of the Order of the Rising Sun, the highest given to any person not of royal birth. See *China, War with Japan*.

DENISON, city, Grayson county, Tex.; population (1890) 10,958; (1896) estimated 15,000. In 1896 the tax valuation, assessed at about one-half actual value, was \$4,500,000; net debt, \$187,350; and value of city property, \$450,000. In 1897 it had 2 national banks with combined capital of \$350,000, deposits, \$1,100,619, and resources, \$1,716,271; extensive cotton, iron, and machine plants; large cattle-shipping interests; and a daily and 3 weekly newspapers.

DENISON UNIVERSITY, Granville, O., founded in 1831; Baptist; had at close of 1897, 25 professors and instructors; 353 students; 18,000 volumes in the library; \$190,000 invested in grounds and buildings; \$10,000 in scientific apparatus and library; \$410,000 in productive funds; \$5,000 in gifts; \$35,000 in income; president, D. B. Purinton, PH. D., LL. D.

DENMARK, a kingdom in Europe; smallest of the three comprising the Scandinavian group; capital, Copenhagen; population (1890) 2,185,335; king, Christian IX.

Finances.—In the year ending March 31, 1895, the actual revenue was 67,342,-857 kr. (\$17,509,142) and expenditure, 61,395,337 kr. (\$15,962,787). The estimated revenue for 1895-96 was 62,743,929 kr. (\$16,313,421), and expenditure, 61,767,435 kr. (\$16,059,533); and the budget for 1896-97 showed, estimated revenue, 67,423,955 kr. (\$17,530,228), and expenditure, 67,419,059 kr. (\$17,528,-955). The reserve in the royal treasury that is maintained to provide for sudden emergencies, on the above date, was 17,850,992 kr. (\$4,641,257). State investments, including the reserve fund, but excluding the State railways (190,080,-660 kr.) and the domains aggregated 50,553,395 kr. (\$13,143,882). The capital of the debt was 208,428,026 kr. (\$55,860,710), of which a little over one-third was foreign.

Commerce.—For several years the foreign trade has shown a healthful increase. In 1894 the imports, chiefly from Germany, the United Kingdom, Sweden and Norway, Russia, and the United States, in their order, amounted in value to 348,969,131 kr. (\$90,731,974), and the exports, chiefly to the United Kingdom, Germany, Sweden and Norway, Danish colonies, and Russia, to 263,664,535 kr. (\$68,552,779). The commercial marine of the kingdom and its colonies, on Jan. 1, 1895, comprised 3,591 vessels of 4 tons and upward each, of 334,899 aggregate registered tons; and 389 vessels of 141,994 tons were steamers. During the previous year 27,738 vessels of 2,334,640 tons entered the various ports, and 27,657 vessels of 590,040 tons cleared therefrom, and of coasting vessels, 34,283 entered and 34,426 cleared. In the fiscal year ending June 30, 1897, the United States imported from Denmark merchandise valued at \$356,355, and exported thereto merchandise valued at \$10,194,857.

Productions.—In 1894, 80 per cent. of the total area of Denmark proper was reported as productive, and the total value of the produce was 262,858,982 kr. (\$68,343,335). The principal crops were: Oats, 28,900,000 bush.; barley, 21,760,000 bush.; rye, 15,670,000 bush.; wheat, 4,035,000 bush.; potatoes, 15,-900,000 bush.; and other roots, 85,960,000 bush.; besides hay, clover, and vegetables. The live stock comprised 13,290 horses; 108,221 cattle; 118,306 swine; and 8,036 sheep and lambs. Among the manufactured articles of the year were 3,473,905 gals. of brandy; 16,890,600 gals. of taxable beer, and 27,-230,000 gals. not taxable; and 37,410 tons of beet sugar.

Army and Navy.—In 1895 the army consisted of 31 battalions of infantry, with 11 of reserve; 5 regiments of cavalry, each with three active squadrons; 2 regiments of field artillery, in 12 batteries, and 4 of reserve; 3 battalions of fortress artillery, with 12 active and 6 reserve companies; and a regiment of engineers. The peace strength was 778 officers and 13,152 men; regular war strength, 1,214 officers and 42,919 men; total war strength, 60,000 men, with emergency reserve of 16,500 officers and men. The navy, maintained chiefly for coast defense, consisted of 1 second-class battleship; 4 port defense ships; 3 first-class armored cruisers; 1 second-class cruiser; 4 third-class cruisers; 11 cruisers with less than 12 knots' speed; and 7 first-class, 3 second-class, 2 third-class, and several smaller torpedo boats.

Railways, etc.—In 1895 there were 1,332 miles of railway in operation, of which 1,067 miles belonged to the state and had cost up to March 31, 1895, \$49,420,-971; 793 post-offices, which handled about 65,000,000 letters and cards and 61,750,000 parcels during the previous year; 3,013 miles of state telegraph lines,

with 8,515 miles of wire and 171 offices; and 237 railway and private telegraph offices.

Churches and Schools.—The established religion is the Lutheran, to which all excepting 1.5 per cent. of the population belong. Elementary education is compulsory. Free public schools are maintained by the communes. There are about 2,940 elementary schools, with 231,940 pupils; 67 popular high schools, all private but aided by the State; 31 Latin schools, part state and part private; 99 technical and commercial schools, 72 of which receive state aid; a university with 5 departments, 40 professors, and 1,300 students, in Copenhagen; a veterinary and agricultural college, with 22 teachers, in the same city; and 21 agricultural or horticultural schools.

Banking.—The national bank on July 31, 1895, had a capital equal to \$7,020,000; assets and liabilities, \$33,906,127; and reserve, \$780,000. There were 40 commercial, agricultural and industrial banks and (1893) 539 savings banks, with 943,594 depositors, and \$140,410,770 deposits.

Political Situation.—The long-standing dispute between the Conservatives, or Right, and the Parliamentarians, or Left (subdivided into Moderate Left and Radical Left), was settled by a compromise on Aug. 7, 1894. The Conservatives had contended that under the Constitution the Folkething, or House of Commons, did not possess supremacy in matters relating to national finances, and that the king and Landsting, or Upper House, together could overrule the Folkething. After the elections of 1892, it was agreed that the Parliament then elected should confirm the provisional laws previously enacted, and that the ministry would resign. The consummation of this agreement retired the Estrup ministry after a tenure of 19 years. Baron de Reedtz-Thott was then called on to form a new ministry, and, taking the office of premier himself, chose moderate men of the Right for his associates. The elections in 1895 resulted in the return of 61 Radicals, 28 Moderates, and 24 Conservatives. In the early part of 1897 both houses of the Rigsdag became involved in a conflict with the ministry. A tentative settlement was effected, but in May the ministry resigned, and was succeeded by one formed by M. Hørring, formerly minister of the interior department, and containing several other members of the previous ministry. Princess Ingeborg of Denmark was married to Prince Charles of Sweden and Norway, Aug. 27.

DENVER, city, capital of Arapahoe county, and of the State of Colorado; population (1890) 106,713; (1896) estimated 158,000. In 1895 it had a tax valuation, about one-third actual value, of \$67,851,815, and a tax rate of \$28.20 per \$1,000. The total debt, April 1, 1896, was \$2,012,300, sinking fund \$130,000, and net debt \$1,882,300. There was also outstanding \$540,000 in sewer and paving bonds, payable by special assessment and not included in the city debt. In 1897 there were 5 national banks, with combined capital of \$2,200,000, individual deposits, \$16,319,033 and resources, \$26,494,236. During the year ending Sept. 30, 1897, the exchanges at the United States clearing house here aggregated \$121,850,632, a decrease of \$6,983,872 from the total of the previous year. The city had about 190 miles of street railway, operated by trolley, cable, steam, gravity, and horse-power; and 8 daily, 42 weekly, 2 semi-monthly, and 22 monthly periodicals. The large increase in population was caused by the annexation to the city of the town of South Denver, whose indebtedness was assumed by the city, on Feb. 7, 1894.

DE PAUW UNIVERSITY, Greencastle, Ind., founded in 1837; Methodist Episcopal; co-educational; had at the close of 1897, 36 professors and instruc-

tors; 710 students; 7,900 volumes in the library; \$204,692 invested in grounds and buildings; \$226,553 in productive funds; \$32,000 in income; president, H. A. Gobin, D.D.

DEPEW, town, Erie county, N. Y.; 10 miles east of Buffalo; named after Chauncey M. Depew. It was laid out in 1895 for a great railway transfer point, and ultimately, an industrial town like Pullman, Ill.; is backed by the Vanderbilt railway interest; and has four of the largest New York Central railroad shops, several other railroad and private manufacturing concerns, industries sufficient to support a large population, and a weekly newspaper.

DEPEW, CHAUNCEY MITCHELL, railroad president, was born in Peekskill, N. Y., April 23, 1834. In 1895 he edited *One Hundred Years of American Commerce*. He is in great demand as an orator for all manner of social, political, and commercial gatherings, and has the chief direction of the Vanderbilt railway system.

DE PEYSTER, JOHN WATTS, military writer, was born in New York City, March 9, 1821. In 1894 he provided for the erection of St. Paul's Training School for Boys, at Priory Farm, Verbank, N. Y.; and transferred to the Woman's Home Missionary Society of the Methodist Episcopal Church a tract of land with buildings, for the founding of the Watts De Peyster Industrial Home and School for Girls, in Madalin, N. Y.; in 1895 undertook the erection of a home for consumptives at Priory Farm and a building for a College of Languages, to be a part of the American University (Methodist Episcopal) in Washington, D. C.; and in 1897 began the erection of a library building of 75,000-volume capacity, for Franklin and Marshall College, Lancaster, Pa.

DERBY, city, New Haven county, Conn.; population (1895) estimated 13,000. On Jan. 1, 1894, the town of Derby, its school districts, and the borough of Birmingham were consolidated under a new city charter, the city assuming the debts of the town, school districts, and borough. The tax valuation in 1895, on an assessment of about actual value, was \$4,771,350; city tax, \$9 per \$1,000. In 1897 the city had a bonded debt of \$172,000, floating debt, \$11,956—total debt, \$183,956; sinking fund, \$14,072; net debt, \$169,884; a national bank with capital of \$300,000, deposits \$349,045, and resources \$1,064,528; a trolley line connecting with Ansonia and Park and operating about 8 miles of track; and a daily and a weekly newspaper.

DERBY, FREDERICK ARTHUR STANLEY, 16th EARL OF, was born at Knowlsley, England, in 1841. He succeeded his brother, the 15th earl, in April, 1893; retired from the office of governor-general of Canada, which he had held since 1888 under the title of Lord Stanley of Preston, in July following; and became lord mayor of Liverpool in November, 1895.

DERENBOURG, JOSEPH, Orientalist, was born in Mayence, Germany, Aug. 21, 1811; died in Paris, France, Aug. 5, 1895. He was director of the department of philology in the school of high studies, and published annotated translations of the Hebrew version of the book of *Kalilah and Dimnah*, and the Arabic opuscles and treatises of Aboul-Walid.

DES MOINES, city, capital of Polk county and of the State of Iowa; population (1890) 50,093; (1897) estimated 65,000. In 1896 it had an assessed valuation of \$16,595,508, and in 1897 a bonded debt of \$741,000; 4 national banks with combined capital of \$800,000, deposits \$1,525,711, and resources \$5,037,479; exchanges at the United States clearing house \$49,145,060, a decrease in a year of \$2,121,376; a trolley line operating 35 miles of track; and 4 daily, 21 weekly, 3 semi-monthly, 18 monthly, and 2 quarterly periodicals.

DES MOINES COLLEGE, Des Moines, Ia., founded in 1865; Baptist; co-educational; had at the close of 1897, 14 professors and instructors; 137 students; 5,000 volumes in the library; \$50,000 in grounds and buildings; \$55,000 in productive funds; \$7,122 in income; president, H. L. Stetson, A.M., D.D.

DETAILLE, EDWARD JEAN BAPTISTE, painter, was born in Paris, France, Oct. 5, 1848. In 1894 he exhibited at the Salon of the Champs Elysées a large canvas entitled *Les Victimes du Devoir*, depicting a night street scene in Paris, with firemen bearing away the bodies of some of their comrades killed at the post of duty. Among the works of this painter in the United States are: *Skirmishing near Paris*, in the Vanderbilt collection, and *French Cuirassiers Bringing in Bavarian Prisoners*, in the Corcoran Gallery.

DETROIT, city, capital of Wayne county, Mich.; population (1890) 205,876; (1894) 237,835. In 1896 the assessed valuations were: Real estate, \$164,961,160; personal, \$44,680,940—total, \$209,642,100; tax rate, \$15.59 per \$1,000. The general bonded debt, Jan. 1, 1897, was \$4,815,000; sinking funds, \$1,264,632; net general debt, \$3,550,368; net special debt, \$327,415; total net debt, \$3,877,783. There were outstanding water bonds \$1,133,000, not included in the debt statement, because their payment is differently provided for, and the city owned property free from all incumbrance valued at \$19,957,764. In 1897 there were 6 national banks, with combined capital of \$2,300,000, deposits \$10,907,065, and resources \$25,898,678; and in the year ending Sept. 30, the exchanges at the United States clearing house here aggregated \$292,865,813, a decrease of \$17,643,074 from the total of the previous year. About one-half of the population was dependent on the manufacturing industries, the principal products being stoves, tobacco, drugs, ships, railroad cars, bridges, and engines. In the fiscal year ending June 30, 1897, the foreign trade in merchandise was: Imports, \$3,226,463; exports, \$11,080,772—a decrease of \$210,717 in imports and an increase of \$377,824 in exports as compared with the previous year. The system of vacant lot farming by people out of work was originated here by Mayor Pingree in 1893, and attained a success in 1895 that led many of the large cities throughout the country to adopt it. Among new buildings of note are the Union Depot, cost \$1,000,000, and the Chamber of Commerce, 12 stories high, cost \$450,000. In 1897 there were over 200 miles of trolley railroad in operation. The periodicals numbered 80, and comprised a quarterly, 2 bi-monthly, 28 monthly, 3 semi-monthly, 38 weekly, 2 semi-weekly, and 6 daily issues.

DEVONSHIRE, SPENCER COMPTON CAVENDISH, 8th DUKE OF, better known by his former title of MARQUIS OF HARRINGTON, was born July 23, 1833. He succeeded to his present title in 1891, and ended a romance of many years standing by marrying the Dowager Duchess of Manchester, Aug. 16, 1892. In 1895 he was appointed lord president of the council in the coalition cabinet, and was selected to preside over a committee of the council of national and imperial defense.

DEWAR, JAMES, physician and chemist, was born in Kincaidine-on-Forth, Scotland in 1842. Among his many original papers, mostly in the *Proceedings of the Royal Society*, are those on *Spectroscopic Researches*, the *Liquefaction of Oxygen and Hydrogen*, the *Physiological Action of Light*, etc., besides special chemical researches. He was co-author of the report, Jan. 10, 1896, on the quality of the water supply of London.

DIAMOND MINING. Much interest has developed of late in the occurrences of diamonds in the United States. In 1893 a diamond crystal of 3.83 carats was

found at Oregon, Dane co., Wis. It was a rhombic dodecahedron, white in color, and identical in shape with a yellow one of $15\frac{1}{2}$ carats, previously found at Eagle, Waukesha co., and a wine-yellow one of $24\frac{1}{4}$ carats, found at Kohlsville, Washington co., both in the same State. All three were found in what is known as the Kettle moraine of the Green Bay Lobe of the Ice sheet. Another discovery was a hexoctahedron crystal of $10\frac{7}{8}$ carats, found at Dowagiac, Mich., in Glacial Drift. In California, W. P. Carpenter, of Placerville, who has taken about 50 small diamonds from auriferous gravel, has lately found two, each nearly a quarter inch in diameter and faintly tinted, one weighing over 7 gr. troy, and the other 6. A brilliant white diamond, weighing $3\frac{7}{8}$ carats, was found at Deer Lodge, Mont., in 1894. The reported discovery in 1895 of brilliant diamonds at Mount Edgecombe, near Sitka, Alaska, was without foundation, though it is believed that diamonds will be found there as the geological formation is quite similar to that of the South African diamond fields. Recent finds are authoritatively reported in the gold fields of British Guiana and in South Australia, and the director-general of the geological survey of India has been instructed by the government to examine the diamond mines in the native State of Panna, in Bundelkund, and report the best method of operating them. In the Carbon district of Brazil, a black diamond that weighed 3.073 carats, more than three times the weight of the famous Koh-i-noor, was found in 1895. A blue-white diamond, with a slight spot in the center, weighing 971 carats, and valued at \$2,000,000, was found in the Jagersfontein mine, in June, 1893. The Emperor of Germany was anxious to buy it, but in February, 1895, it was said that the President of the Orange Free State had presented it to Pope Leo. Between June, 1893, and June, 1894, the De Beers diamond mine in South Africa produced \$14,000,000 from 2,500,000 loads of clay washed, averaging 0.89 carat per load, value \$6.10 per carat; profit, \$5,645,000; dividend, \$4,935,000. In 1894-95 the profit was \$11,222,840; dividends, 25 per cent.; clay on hand for sifting 3,360,258 loads. A syndicate of Antwerp and Amsterdam dealers attempted in January, 1895, to break the English control of the diamond market, but the English syndicate bought the output of the year for over \$17,500,000, and that of 1896 for about \$18,000,000. On April 9, 1896, it was reported that the Transvaal government had seized the De Beers mine, because the manager had secreted arms and ammunition for the Uitlanders. During the calendar year 1894 the importation into the United States of glaziers' diamonds amounted in value to \$82,081; diamond dust, \$53,691; and rough or uncut diamonds, \$764,554.

DIAZ, PORFIRIO, military officer and statesman, was born in Oaxaca, Mexico, Sept. 15, 1830. He was elected president of the republic of Mexico for the fifth time in 1896. In his message at the opening of Congress, on April 1, 1896, he upheld the principle of the Monroe doctrine, and declared that it was not sufficient for the objects to which Mexico aspired that only the United States should bear the obligation to aid the other republics of this hemisphere against the attacks of Europe. It was incumbent on each of these republics, by means of a declaration similar to that of President Monroe, to declare that any attempt of a foreign power to reduce the territory or the independence or to change the institutions of a single one of the American republics should be considered as an individual affront, if the republic sustaining an attack or threat of this nature should appeal for aid. In this way, he declared, the doctrine to-day called the Monroe doctrine would be the American doctrine in the most ample sense, and although it originated in the United States, it should be among the international rights of all Americans. See Mexico.

DICKINSON, ANNA ELIZABETH, lecturer, was born in Philadelphia, Pa., Oct. 28, 1842. In 1892 she lost a suit brought against the members of the National Republican Committee for a balance of \$1,250, alleged to be due on a contract for \$5,000 for political services in the presidential campaign of 1888; and in 1893 began suits against eight persons for aggregate damages of \$125,000, for having caused her confinement in the State Insane Asylum at Danville, Pa., in 1891. These suits have since dragged slowly, and on March 24, 1896, were again continued on account of an accident to Anna's sister Susan, the most important witness for the defense.

DICKINSON, MARY LOWE, educator, dean of the woman's branch of the University of Denver, and general-secretary of the International Order of the King's Daughters and Sons since its organization. In February, 1895, she was elected president of the National Council of Women. She is a fluent speaker and a skillful parliamentarian.

DICKINSON COLLEGE, Carlisle, Pa., founded in 1783; Methodist Episcopal; co-educational; had at the close of 1897, 22 professors and instructors; 425 students; 45,000 volumes in the library; \$324,428 invested in grounds and buildings; \$30,000 in scientific apparatus and library; \$286,643 in productive funds; \$43,000 in income; president, George E. Reed, D.D., LL.D.

DILKE, SIR CHARLES WENTWORTH, author, was born in Chelsea, England, Sept. 4, 1843. After an absence of six years from the British House of Commons, he was returned from Gloucester, Forest of Dean, in the general elections of 1892, and was re-elected unopposed in 1895. He published in 1892 *Imperial Defense*, a sequel to his *Greater Britain* and his *Problems of Greater Britain*, and is still the proprietor of the *Athenaeum* and of *Notes and Queries*.

DILLON, JOHN, Irish leader, was born in Dublin, Ireland, in 1851. He has represented Mayo, East, in the British Parliament continuously since 1885, being last returned in the general elections of 1895, and was elected chairman of the Anti-Parnellite section of the Irish Nationalist party, to succeed Justin McCarthy, Feb. 18, 1896. He is an eloquent and powerful speaker, and has won the sobriquet of Honest John. On March 5 the pope sent him and his party special blessings through Monsignor Kelly, rector of the Irish College in Rome.

DINGLEY, NELSON, JR., legislator, was born in Durham, Me., Feb. 15, 1832. He was graduated at Dartmouth College in 1855; was admitted to the bar; and has been editor and proprietor of the *Lewiston (Me.) Journal* since 1856. During 1862-73 he served six terms in the State House of Representatives and two as speaker; in 1874-75 was governor of the State; and since Sept. 12, 1881, when he succeeded William Pitt Frye, he has represented the 2d Maine district in Congress, as a Republican. He received the degree of LL.D. from Bates College in 1874 and from Dartmouth in 1894. On the organization of Congress, in December, 1895, he was appointed chairman of the House Committee on Ways and Means, and had charge of the tariff bill bearing his name, which became law on July 24, 1897.

DIPHTHERIA, a preventable, communicable disease, the virus of which is remarkably long lived and has the property of adhering tenaciously to objects on which it happens to light; contracted by inhalation of air containing the disease germs coming directly from the sick or from articles infected by them, and of air from sewers, cesspools, cellars, or any damp and ill-ventilated place in which the germs have lodged. The foregoing, condensed from an official circular of warning and instruction issued by the New York State Board of Health, indi-

icates the latest medical and sanitary view of the disease and of the conditions under which it thrives. The modern treatment, the anti-toxine, is the result of discoveries attributed both to Prof. Robert Koch, of Berlin, and Prof. Emil Behring, of the University of Halle, and made public in 1894. The highest medical authorities in the world soon conceded its efficacy, and it was speedily adopted in the principal hospitals in Europe. Frank H. Mason, United States consul-general at Frankfort, Germany, was instructed by the State Department to make a detailed report on the discovery and the process of making the anti-toxine, and the reader is referred to his report for the details which cannot be given here. At the same time Dr. J. J. Kinyoun, of the United States Marine Hospital Service, investigated the new treatment with Professor Roux, in Paris, Professor Baginsky, in Berlin, and others elsewhere; spent considerable time with Koch, Behring, Ehrlich, and Wasserman; and reported fully on his investigations. Dr. Hermann M. Biggs, chief inspector of the bureau of bacteriology of the Board of Health of New York City, was sent to Europe to study the treatment, and on his report, Dr. Cyrus Edson, then health commissioner of the board, said that anti-toxine was "the most important discovery made in medicine since the time when Jenner discovered the science of vaccination." In Baltimore, Dr. William H. Welch, pathologist to the Johns Hopkins Hospital, gave early attention to the discovery and presented an elaborate paper on it at the meeting of the Association of American Physicians in Washington, D. C., in 1895. This paper, revised to date and containing valuable statistics, forms the principal contribution to the Johns Hopkins Hospital *Bulletin* for October, 1895. In his conclusions, Dr. Welch declared that "anti-diphtheric serum is a specific curative agent for diphtheria, surpassing in its efficiency all other known methods of treatment." Anti-toxine is obtained by subjecting the bacilli of diphtheria to the usual culture; the product is injected repeatedly into a large animal, as the horse; and serum from the blood of the animal inoculates the human patient.

DISCIPLES OF CHRIST, also known as CHRISTIANS, a religious organization founded in the United States in 1827. At the close of the church year 1894 the organization had in the United States 8,768 church buildings, 4,940 clergymen, and 871,017 members, and in foreign countries 546 church buildings, 134 clergymen, and 35,998 members, making the total strength 9,314 church buildings, 5,074 clergymen, and 907,015 members. The home field employed 50 missionaries, who organized during the year 14 new churches, aided efforts to gather congregations in 57 new places, baptized 1,777 persons, and received 2,854 persons into church fellowship. Evangelists were employed in 19 States, 4 Territories, and in the provinces of New Brunswick, Nova Scotia, and Ontario, Canada. In the foreign field, 16 missionaries, 14 native helpers, and 6 stations, beside an asylum for lepers at Hurda, were maintained in India; 9 missionaries, 16 native helpers, and 4 stations in Japan; and 23 missionaries, 25 native helpers, and 8 stations in China. At these stations were 1,291 Sunday school pupils, 660 day school pupils, and 28 boarding school pupils. Norway had 5 church buildings, 941 members, and 320 Sunday school pupils. Stations in England, at London, Liverpool, Southampton, Birkenhead, and Harney, had 1,531 members and 1,265 Sunday school pupils. Bible and training schools for missionaries and teachers were also maintained in China, Japan, and India. At the close of 1896 the church reported 5,390 ministers, 9,607 churches, and 1,003,672 communicants.

ISRAELI, CONINGSBY, nephew and heir of the late Earl of Beaconsfield, was born in 1867. He was educated at Charterhouse and New College, Oxford; was

elected to Parliament for the Altrincham district of Cheshire as a Conservative in 1892; and was returned in the general elections of 1895.

DISTRICT OF COLUMBIA, federal district of the United States of America; under the direct control of Congress; co-extensive with the city of Washington; population (1890) 230,392; (1897) estimated 292,000.

Government.—In 1898 the commissioners, who have authority to make and enforce all regulations of a municipal character, Congress enacting the general laws, were John W. Ross (Dem.) president; John B. Wight (Rep.); and Capt. W. M. Black (non-partisan), United States Engineer Corps.

Finances.—One-half of the expenditures on account of the District is paid out of the United States treasury, and the remainder out of funds derived from local taxation, fines, penalties, and other sources, and in recent years there has been a tendency in Congress to place the total expenditure on local taxpayers. In 1896 the assessed valuations were: Real estate, \$180,376,908; personal property, \$9,532,851—total; \$189,909,759; and the tax rate was \$15 per \$1,000. The total funded debt, Jan. 1 1897, was \$16,933,000, comprising bonds of the District proper and of the former corporation of Washington. Since July 1, 1878, Congress has appropriated annually a sufficient sum to pay the interest on the District bonds and also to maintain a sinking fund, which, it is believed, will extinguish the debt on the maturity of the bonds in 1924.

Commerce.—A United States custom house is maintained in the part of the District known till 1878 as the city of Georgetown, but commercial activity has greatly declined. In the fiscal year ending June 30, 1897, the imports of foreign merchandise had a value of \$195,794; exports none. As this part of the District is at the head of navigation on the Potomac it has a considerable coasting trade, and its position at the terminus of the Chesapeake and Ohio canal gives it the benefit of large coal shipments. The District with two counties in Virginia belongs to the internal revenue collection district of Maryland, and in the fiscal year ending June 30, 1897, the collections in the District of Columbia alone aggregated \$197,859.35.

Banking.—On Oct. 31, 1897, there were 13 national banks in operation, with a combined capital of \$3,127,000, deposits \$14,550,904, and resources \$21,179,490; and in the year ending Sept. 30 the exchanges at the United States clearing house aggregated \$95,031,020, a decrease of \$1,027,436 from the total of the previous year. There were 3 loan and trust companies, with capital \$3,250,000, deposits \$6,406,616, resources \$11,284,409, and surplus and undivided profits \$561,603; and a stock savings bank, with capital \$32,500, deposits \$38,328, and resources \$105,057.

Churches.—Of 217 churches in the District, the Baptists have 63; Methodists, 62; Episcopalians, 18; Roman Catholics, 17; Presbyterians, 16; Lutherans, 11; Congregationalists, 6; Independents, 5; and 13 other organizations from three to one each. The District constitutes a diocese of the Roman Catholic Church and one of the Protestant Episcopal Church, the latter created Dec. 4, 1895, and its first bishop, Henry Yates Satterlee, D.D., of New York City, consecrated March 25, 1896. In January, 1896, plans were accepted for the projected Protestant Episcopal Cathedral of St. Peter and St. Paul, to occupy, with seminary, chapels, and other buildings, an area of 20 acres, and to cost nearly \$4,000,000. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for the District of Columbia, 207 evangelical Sunday schools, 4,485 officers and teachers, and 42,643 scholars; total members, 47,128.

Schools.—At the close of the school year 1896 there were 69,440 children of school age in the District, of whom 42,464 were enrolled in the public schools, and 32,153 were in average daily attendance. The teachers numbered 1,031. There were 114 public school houses, and public school property valued at \$3,260,000. The total expenditure, excluding payments on debt, was \$1,050,369. Of the total enrollment, 27,289 were white pupils and 15,175 colored, and of the total teachers, 688 were white and 343 colored. There are 7 universities and colleges of liberal arts: American University (Meth. Epis.), organized 1891; Catholic University of America (Rom. Cath.), 1887; Columbian University (Bapt.) 1821; Georgetown University (Rom. Cath.), 1789; Howard University, (non-sect.), 1867; Gonzaga College (Rom. Cath.), 1820; and Galaudet College (non-sect.) 1864. In April, 1896, a bill was pending in Congress to incorporate the National University of the United States, give it the ground designated by President Washington for a national university, and appropriate \$15,000 for the year ending June 30, 1897, and \$25,000 for the following year. There are 11 private secondary schools; 2 public normal schools; and 2 commercial and business colleges.

Libraries.—In 1896 there were reported 55 public libraries of 1,000 volumes each and upward, with a total of 1,793,910 bound volumes and 735,231 pamphlets. Of the total, 35, including the Library of Congress, belonged to various departments of the Federal government.

Publications.—Reported September, 1897: Daily, 4; weekly, 32; semi-monthly, 4; monthly, 23; semi-quarterly, 1; bi-monthly, 2; and quarterly, 5—total, 71. The government publishes an enormous quantity of reports, the greater part of which may be obtained by the public free of charge through senators and representatives in Congress. For the more valuable reports, some of which are sumptuous specimens of the printer's art and difficult to obtain, a price is charged about equal to the cost of production. For other details concerning the District, see WASHINGTON, CITY OF.

DOANE COLLEGE, Crete, Neb., founded in 1872; Congregational; co-educational; had in 1897, 10 professors and instructors; 140 students; 7,300 volumes in the library; \$132,000 in grounds and buildings; \$10,000 in scientific apparatus and library; \$66,778 in productive funds; \$9,255 in gifts; \$17,340 in income; president, David B. Perry, A.M.

DOBSON, GEORGE EDWARD, biologist, was born in Edgeworthstown, Ireland, Sept. 4, 1844; died in London, Nov. 26, 1895. He was an important contributor to the *Encyclopedia Britannica* and author of monographs on mammalian orders, and, later, of anatomical papers.

DOBSON, HENRY AUSTIN, author, was born in Plymouth, England, Jan. 18, 1840. His latest publications are *Eighteenth Century Vignettes* (1892); *Horace Walpole: a Memoir*, and *Proverbs in Porcelain* (1893); *The Story of Rosina, and Other Verses* (1895); a third series of *Eighteenth Century Vignettes* (1896); a revised edition of *Handbook of English Literature* (1897), etc.

DODDS, ALFRED AMEÉE, military officer, was born in St. Louis, Senegal, Feb. 6, 1842. He was educated at the lyceum of Carcassonne at the military school of Saint-Cyr; entered the French army as sub-lieutenant in 1864; was promoted lieutenant, 1867, captain, 1869, lieutenant-colonel, 1887, and brigadier-general, 1892; and was made an officer of the Legion of Honor, 1883, a commander, 1891, and grand officer, 1892. His military career has been unusually full of important actions, and his last service was as commander of the expedition which

resulted in the virtual conquest of Dahomey and the dethronement of King Benhazin in January, 1894. For this the Chamber of Deputies voted him the thanks of the nation. In January, 1896, he was appointed commander-in-chief in French Indo-China.

DODGE, MARY ABIGAIL (pen name, GAIL HAMILTON), author, was born in Hamilton, Mass., in 1833; died there Aug. 17, 1896. She was stricken with paralysis at her home in Washington, D. C., in May, 1895, and was left in a critical condition. One of her last works of public interest was an open letter to the British secretary of state for the home department, in October, 1892, in which she reviewed the trial of Mrs. Maybrick, an American woman convicted in London of having killed her husband with poison and now undergoing life imprisonment, and made a powerful plea for the release of the prisoner. Her last publication was *X Rays* (1896). At the time of her death she had nearly completed a life of her cousin, James G. Blaine.

DODGE, MARY MAPES, author and editor, was born in New York City, in 1838; editor of *St. Nicholas* magazine since 1873. She published *When Life is Young*, a collection of verses for boys and girls (1894); *New Baby World* (1897), etc.

DODGE, THEODORE AYRAULT, military officer and author, was born in Pittsfield, Mass., May 28, 1842. Since the close of the civil war he has been engaged in lecturing and writing on military subjects. His last publications include *Gustavus Adolphus*, in the *Great Captain Series* (1895); a new and revised edition of *Bird's-eye View of Our Civil War* (1897), etc.

DODGSON, CHARLES LUTWIDGE (pen name, LEWIS CARROLL), educator and author, was born in England, in 1832; died there Jan. 14, 1898. His latest publications are *Through the Looking-glass and What Alice Found There* (1893); *Sylvie and Bruno Concluded* (1894); and a fourth edition, revised and altered, of Part I. of his *Symbolic Logic* (1897).

DOE, JOSEPH B., lawyer, was born in Janesville, Wis., in 1856. He was graduated second in his class at Racine College in 1874; was admitted to the bar in Janesville in 1876; and was appointed assistant secretary of the war department in 1894.

DOLE, NATHAN HASKELL, author, was born in Chelsea, Mass., in 1857; graduated at Harvard in 1874. His latest publication are *Not Angels Quite* (1893); a biography of Sir Walter Scott in a new edition of his poetical works (1894); *The Hawthorn Tree and Other Poems* (1895); and an edition of the *Rubaiyat of Omar Khayyam*, with notes, biographies, bibliography, etc. (2 vols., 1896).

DOLE, SANFORD BALLARD, jurist, was born in Honolulu, Hawaii, in 1844; son of an American missionary. He was educated in Honolulu and in the United States; was admitted to the bar in Boston, Mass.; and was judge of the Supreme Court of Hawaii from 1887 till the overthrow of the kingdom and establishment of the provisional government in January, 1893, when he was chosen provisional president. On July 4, 1894, Hawaii was proclaimed a federal republic, and he became its first chief executive. He visited the United States in January, 1898, and was received with becoming honors. It was believed in political circles that his visit was for the purpose of promoting the annexation of Hawaii to the United States; but early in March it became evident that the scheme could not be carried through the U. S. Congress, and the treaty then pending in the Senate was abandoned till a more opportune moment.

DOMAIN, PUBLIC. The location and extent of the public lands vacant and subject to entry on June 30, 1897, are shown in acres in the following table,

which excludes Alaska and various military and other reservations. During the year ending June 30, 1897, the area of public lands disposed of aggregated 7,839-116.66 acres, a decrease of 5,370,406 acres from the total of the previous fiscal year. The cash receipts of the Land Office were \$2,087,932.28 a decrease in a year of \$18,430.39.

States and Territories.	Surveyed Land.	Unsurveyed Land.	Total Area.
Alabama.....	532,330		532,330
Arizona.....	11,932,225	42,467,886	54,400,211
Arkansas.....	3,922,042		3,922,042
California.....	35,217,527	8,623,517	43,841,044
Colorado.....	35,480,832	4,556,369	40,037,201
Florida.....	1,633,280	164,382	1,797,662
Idaho.....	10,041,336	35,921,519	45,762,855
Kansas.....	1,046,589		1,046,589
Louisiana.....	780,002	65,017	845,020
Michigan.....	522,431		522,431
Minnesota.....	3,402,481	2,837,828	6,240,309
Mississippi.....	441,220		441,220
Missouri.....	497,764		497,764
Montana.....	17,688,116	53,744,801	71,432,917
Nebraska.....	10,660,353		10,660,353
Nevada.....	23,359,457	32,170,129	61,578,586
New Mexico.....	42,958,203	14,024,755	56,982,957
North Dakota.....	11,960,433	9,424,860	21,385,293
Oklahoma.....	8,100,778	3,460	8,105,238
Oregon.....	23,682,023	12,210,215	33,892,238
South Dakota.....	11,153,430	2,097,288	13,250,718
Utah.....	9,837,581	34,366,489	44,204,070
Washington.....	5,529,856	12,437,080	17,966,936
Wisconsin.....	454,107		454,107
Wyoming.....	42,173,830	7,167,744	49,341,586
Grand total.....	319,049,833	272,294,120	591,343,953

During the fiscal year ending June 30, 1895, the area of public lands in the United States disposed of through the General Land Office was 8,406,849.04 acres, and the cash receipts of the office were \$2,033,454.03, a decrease of 1,999,251.73 acres and \$734,370.29 in receipts from the aggregates of the previous fiscal year. The area of original homestead entries was 5,009,491.21 acres, and the area patented for the benefit of railroad companies under Congressional grants, 8,184,336.31 acres, the largest being by the Northern Pacific Railroad Company in the State of Washington, 3,343,473.57 acres, and the next largest by the same company in North Dakota, 1,969,034.67 acres. Twelve States and one Territory selected 1,237,070.30 acres under land grants for educational and other public purposes, an increase in area so disposed of 417,076.94 acres. The total patents issued during the year were: Agricultural, 8,098,880 acres; mineral, 9,329.30; swamp, 244,774.61; railroad, 8,184,336.31; Indian and miscellaneous, 414,116.38; and educational selections, 1,237,070.30—aggregate, 18,188,536.90; increase, 10,409,105.89.

DOMINICAN REPUBLIC. See SANTO DOMINGO.

DONGOLA, a province in the Egyptian Soudan, Central Africa; also the capital of the same, on the Nile River between the 3d and 4th cataracts. After the revolt of El Mahdi (1882-85), Sua kim, Zeilah, and Berbera were occupied by the English; Massowah by the Italians; and the northern part of Dongola by the Egyptians. The defeat of the Italian army at Adowa, Abyssinia, on March 1, 1896, led to the temporary evacuation of Kassala, a town of much strategic and

international importance, which was occupied by the Dervishes in 1885 and captured by the Italians in 1894. The plight of the Italians aroused the Dervishes under the Khalifa, the successor of El Mahdi, and with their old commander, Osman Digna, they undertook the recapture of the town. This movement spurred the Italians to reoccupy Kassala, and an Anglo-Egyptian expedition was organized to aid the Italians in defending the place, under General Kitchener, Sirdar of the Egyptian army. About the middle of March it was ascertained that the Khalifa had a large force of Dervishes at Dongola, as well as in the vicinity of Kassala, and it was believed that the object of the Anglo-Egyptian expedition was to strike a decisive blow at Dongola and then make that place the base of operations against Berber. Simultaneously with this expedition, a Belgian-Kongo Free State force was organized to attack the Dervishes on the Upper Nile. On March 18 the first detachment of Egyptian troops left Cairo for Dongola; on the 20th the Khalifa proclaimed a holy war against Egypt, and ordered all Dervishes capable of bearing arms to enroll themselves under the green banner; and about the same time Osman Digna left the Dervishes threatening Kassala to take command at Dongola. The Italians twice repulsed Dervish attacks near Kassala on April 2, when it was estimated that there were 15,000 Dervishes in the vicinity. On the 6th it was reported that the Khalifa had ordered an attack all along the line of the Nile to Kassala, and that 20,000 Dervishes were at Suakin in readiness to oppose the Anglo-Egyptian expedition to Dongola. The situation took an acute international phase early in March, when Great Britain proposed to use a portion (£500,000) of the reserve Egyptian fund for the Dongola expedition. After a show of opposition, the Powers comprising the Dreihund gave their assent. This action gave rise to a belief that the Powers had assented only on the condition that Great Britain should aid Italy in Africa, and that Great Britain had accepted the condition as a means of allaying the growing discontent of the Powers over her continued occupation of Egypt. At the end of April railway and telegraph lines were being constructed rapidly, the channels of the second cataract of the Nile were being marked clearly, and a number of shallow draft stern-wheeled steamers, to be armed with machine guns, were being built in England for use in the expedition.

DONNELLY, IGNATIUS, author, was born in Philadelphia, Pa., Nov. 3, 1831. Since his *Ragnarok* and his *Shakespeare-Bacon Cryptogram*, he has published *Cæsar's Column* (1890); *The Golden Bottle* (1892); and *The American People's Money* (1895). On Dec. 1, 1894, he resigned the presidency of the State Farmers' Alliance of Minnesota, to apply himself wholly to literary work.

DORSEY, JAMES OWEN, anthropologist, was born in Baltimore, Md., Oct. 31, 1848; died there Washington, D. C., Feb. 4, 1895. He had been connected with the United States Bureau of Ethnology since 1878, and had published numerous works on the languages and traditions of American Indians.

DOUCET, CHARLES CAMILLE, dramatist and poet, was born in Paris, May 16, 1812; died there April 1, 1895. As perpetual secretary of the French Academy he reported and published analyses of noteworthy works on all subjects, under the title *Les Concours Littéraires*.

DOUGLAS, AMANDA MINNIE, author, was born in New York City, July 14, 1838. Her latest publications are *Sherburne House* (1892); *Lynell Sherburne, Bertha Wray's New Name*, and *Larry*, a \$2,000 prize story (1893); *In the King's Country* (1894); *In Wild Rose Time* and *A Sherburne Romance* (1895); *A Little Girl in Old New York* (1896); *Children at Sherburne House, Hannah Ann*, and *Her place in the World* (1897).

DOUGLASS, FREDERICK, African-American orator, journalist and reformer, was born a slave in Tuckahoe, Md., Feb. 17, 1817; died in Washington, D. C., Feb. 20, 1895. Of the public offices held by him the last was minister to Hayti, 1889-91; and of his autobiographies 1844-81, he published a continuation in 1893.

DOVER, city, capital of Strafford county, N. H.; population (1890) 12,790; (1896) estimated 13,000. In 1896 the assessed valuations were: Real estate, \$5,724,898; personal, \$2,875,576—total, \$8,600,474; tax rate, \$20 per \$1,000. The total debt (including a water debt of \$317,922), Jan. 1, 1897, was \$694,222, chiefly city hall, bridge and refunding bonds; and the total value of city property was \$416,384. There are 2 national banks, with combined capital \$350,000, deposits, \$525,615, and resources, \$1,081,783; and electric street railroad connecting with Somersworth; large woolen mills; and 2 daily and 2 weekly newspapers.

DOVER, city, parliamentary borough, and seaport, in Kent, England; nearest point of the English coast to France; population (1891) 33,418. The harbor is undergoing costly and extensive improvement, authorized in 1891, and involving the creation of an outer harbor, by extending the admiralty pier 580 ft., to form the west arm, and constructing an east pier to provide shelter from the east and southeast. On July 20, 1893, the Prince of Wales laid the memorial stone which will form part of the approach to the new east pier. An iron viaduct, 1,260 ft. long, will be constructed from a point directly seaward of the memorial stone, and the remainder of the pier will be of solid masonry and 1,500 ft. long. When the improvement is completed the new harbor will have a sheltered area of 36 acres, and on the land reclaimed will be two railway jetties, besides which four steamships may be berthed. The first submarine block of the new pier was laid in the bed of the sea in September, 1894, and surveyors began a survey of the harbor in 1895, with the understanding that their plans should be completed in March, 1896.

DOW, NEAL, reformer, was born in Portland, Me., March 20, 1804; died there Oct. 2, 1897. His 90th birthday was celebrated by the American Temperance Union with an impressive demonstration in New York City on March 18, 1894, and by branches of the Women's Christian Temperance Union all over the world on the 20th.

DOYLE, ARTHUR CONAN, author, was born in Edinburgh, Scotland, in 1859; a grandson of John Doyle, a famous political caricaturist. He was educated at Stonyhurst and in Germany; graduated in medicine at the University of Edinburgh in 1880; practiced till 1890; and then applied himself wholly to literary work, in which he had already become widely known. His publications include *A Study in Scarlet*; *Micah Clarke*; *The Sign of Four*; *The White Company*; *The Adventures of Sherlock Holmes*; *Memoirs of Sherlock Holmes*; *The Refugees*; *The Parasite* and *Around the Red Lamp* (both 1894); *The Mystery of Cloombur* and *Strange Secrets* (both 1895); *The Exploits of Brigadier Gerard* (1896); *Uncle Bernac* (1897), etc. He made a lecturing tour of the United States in 1894, and became the correspondent of the New York *Herald* with the Anglo-Egyptian expedition (see DONGOLA) in March, 1896.

DRAKE, FRANCIS MARION, financier, was born in Rushville, Ill., Dec. 30, 1830. In 1837 he accompanied his parents to Iowa where he received a business education, and subsequently studied law. He served through the civil war, in which he was wounded and brevetted brigadier-general; after its close practiced law for six years; and has since been engaged in the railroad and banking business. In 1881 he founded Drake University (*q. v.*) in Des Moines, Ia., of whose board

of trustees he has since been president. He was elected governor of Iowa in 1895 as a Republican, receiving 208,689 votes, to 149,433 for Washington I. Babb (*q. v.*), Democratic, 32,118 for the Populist candidate, and 11,052 for the Prohibition candidate, a plurality of 59,256. On March 28, 1896, he took part with his official staff in the launching of the new battleship *Iowa*, at Philadelphia, his daughter, Mary L. Drake, christening the vessel.

DRAKE, SAMUEL ADAMS, author, was born in Boston, Mass., Dec. 20, 1833. His latest works include *The Making of the Ohio Valley States, 1650-1837* and *Our Colonial Homes* (both 1894), and *The Watch Fires of '76* (1895); *Nooks and Corners of the New England Coast* and *The Border Wars of New England* (1897).

DRAKE UNIVERSITY, Des Moines, Ia., founded in 1881 and named after Francis M. Drake (*q. v.*); Christian; co-educational; had at the close of 1897, 55 professors and instructors; 596 students; 5,500 volumes in the library; \$145,000 invested in grounds and buildings; \$20,000 in scientific apparatus and library; \$159,800 in productive funds; \$38,945 in income (1896); chancellor, William B. Craig.

DREW THEOLOGICAL SEMINARY, Madison, N. J., founded in 1866; Methodist Episcopal; had at close of 1897, 7 professors and instructors; 165 students; 43,000 volumes in the library; \$460,000 invested in grounds and buildings; \$395,000 in productive funds; \$10,000 in gifts; \$27,436 in income; president, Henry A. Buttz, D. D., LL. D.

DREYFUS, ALBERT, military officer, was born in Mulhouse, Alsace, Oct. 8, 1859. He belonged to a wealthy Jewish family, and after the close of the Franco-Prussian war and the annexation of Alsace and Lorraine to Germany he chose to retain his French nationality, while his brothers accepted that of Germany. He was educated at the Polytechnic School, entered the French artillery corps, and was rapidly promoted till he attained the rank of captain in the 14th artillery regiment, and was assigned to the general military staff at Paris. While stationed in Paris he married the daughter of a wealthy diamond merchant. He had been connected with the general staff but a short time when his remarkable series of troubles began. According to the views held by the French military authorities, he had access to important military plans and documents, and delivered copies of them to an officer of the German embassy in Paris. He was charged with treason, found guilty, publicly degraded in Paris, Jan. 5, 1895, and, despite his protestations of innocence, was taken to a fortress in French Guiana for life imprisonment. His friends, however, at once began an agitation in his favor. Rumors that he was the victim of a plot because of his Jewish birth soon became rife. It was declared that the papers he was charged with having communicated to the German government had been prepared for the purpose of entrapping him; that they were absolutely of no value; and that the writings said to have been his work were forgeries committed by another officer in the plot. In keeping with this contention was the assertion of the German minister for foreign affairs, Baron von Bulow, that there had never been any communication between the German government or its agents and Captain Dreyfus, and that the story of the finding of documents at the German embassy in Paris affecting Captain Dreyfus was "sheer invention." Conspicuous among the efforts to secure a reopening of the case against Captain Dreyfus was that of M. Scheurer-Kestner, one of the vice-presidents of the French Senate, who, on Oct. 30, 1896, presented to General Billot, the French minister for war, documents which he regarded as proving the prisoner innocent.

In November, 1897, the *Figaro* published a number of letters reflecting in

strong terms on France and the French army. Subsequently, Major Count Ferdinand Esterhazy, a retired French army officer, admitted that he was the author of all the letters excepting one. This confession added to the complication, as Count Esterhazy had been freely charged by the friends of Captain Dreyfus with the authorship of a particular paper on which Captain Dreyfus had been condemned. Count Esterhazy was placed on trial by court martial on Jan. 10, 1898, and on the following day was acquitted of treason. The next step in this extraordinary case was that taken by Emile Zola, the distinguished author, who, on Jan. 13, published in the *Aurore* an open letter to President Faure, pointing out irregularities and illegalities in the court-martial of Count Esterhazy; formally accusing General Billot, the minister for war, Major Ravary, the investigating officer, and Major Paty du Clam, one of the witnesses, of perjury; and challenging the government to prosecute him. For this the minister of war lodged a complaint against M. Zola and M. Perreux, the manager of the *Aurore*. They were brought to trial on Feb. 7, and on the 23d both were found guilty on all counts, without any extenuating circumstances. M. Zola was sentenced to one year's imprisonment and to pay a fine of 3,000 francs, and M. Perreux to four months' imprisonment and a similar fine. During the trial the accused by their counsel undertook to go into the Dreyfus matter, but were prevented by the presiding judge; yet they scored a number of important points, the strongest, perhaps, being an admission that between the closing of testimony and the rendition of sentence in the trial of Dreyfus, the court that tried him gave consideration to a secret document that was not produced in the trial. After the verdict, M. Zola carried his case to the Court of Appeal, which, on April 2, quashed the verdict of guilty, on the ground that, according to the law of 1881, the prosecution for defamation of a constituted body, such as the court-martial, could only be instituted on the complaint of that body; therefore the original prosecution should have been instituted by the court-martial, and not by the minister of war.

DRISLER, HENRY, educator, was born on Staten Island, N. Y., Dec. 27, 1818; died in New York City, Nov. 30, 1897. After a continuous service of 50 years in Columbia College, in which he became professor of Greek and Latin and dean of the School of Arts, he retired by resignation on July 1, 1894. On May 4, the alumni association gave him a reception and a handsome gold medal, and subsequently President Low gave the college \$10,000 for the endowment of a Henry Drisler Scholarship in Comparative Philology. Professor Drisler was for many years editor-in-chief of the Harper's *Classical Series*.

DROWN, THOMAS MESSINGER, LL.D., educator, was born in Philadelphia, Pa., March 19, 1842. He was graduated from the Philadelphia High School 1859, and from the University of Pennsylvania, 1862; was instructor at Harvard, 1869-70; professor of chemistry, Lafayette College, 1874-81; the same, Institute of Technology, Boston, 1885-95; and was elected president of Lehigh University in 1895. From 1873 to 1883 he was secretary of the American Institute of Mining Engineers, and from 1887 to 1895 chemist to the Massachusetts State Board of Health. Besides numerous scientific papers, he has published an address on the *Educational Value of Engineering Studies* (1895).

DROZ, ANTOINE GUSTAVE, artist and author, was born in Paris, France, June 9, 1832; died there, Oct. 23, 1895. He had been one of the editors of the *Revue des Deux Mondes* since 1868.

DRUMMOND, HENRY, scientist and theologian, was born in Stirling, Scotland, in 1851; died in Tunbridge Wells, England, March 11, 1897. In 1893 he de-

livered a series of lectures at the Lowell Institute and the Chautauqua Assembly, which were published under the title of *The Ascent of Man* (New York, 1894). The lectures attracted much attention, not only in the United States but in England and Scotland, and led 12 presbyteries in the north of Scotland to petition the Free Church Assembly to deal with the author as a heretic. Professor Drummond demanded a speedy hearing, and under the advice of the Rev. Drs. Rainy and Stalker, the Assembly in 1895 decided by a vote of 271 to 151 not to interfere with the professor as teacher in the church college at Glasgow. An early and almost wholly forgotten novel for children, *Wee Willie Winkie*, was re-published under the title of *The Monkey that Would Not Kill* (New York, 1898).

DRURY COLLEGE, Springfield, Mo., founded in 1873; Congregational; co-educational; had at the close of 1897, 17 professors and instructors; 300 students; 23,000 volumes in the library; \$200,000 invested in grounds and buildings; \$15,000 in scientific apparatus and library; \$225,000 in productive funds; \$5,000 in gifts; \$21,000 in income; president, Homer T. Fuller, r.n.d.

DUBLIN, city, seaport, metropolis, and capital of Ireland; population (1891) 245,001. In the nine months ending Sept. 30, 1895, the exports declared here for the United States aggregated in value \$703,243.61, principally beer, ale, and stout (\$524,671); skins, hides, and furs (\$80,992); and woolen goods (\$32,880).

DUBLIN UNIVERSITY, better known as TRINITY COLLEGE, Dublin, Ireland, founded by Queen Elizabeth in 1591. At the end of the last semester of 1895, the university had 64 professors and instructors, 1,123 students, and over 800 undergraduates. Two new degrees have been established, conferred only for original research and discoveries, D.SC. and D.LITT., making 16 in all. The chancellor 1896 was the Earl of Rosse; vice-chancellor, Rt. Hon. J. T. Bail, LL.D.; parliamentary representatives, Rt. Hon. D. Plunket and Edward Carson, q.c.; provost, Rev. George Sahnou, D.D.; registrar, John K. Ingram, LL.D.; and librarian, Rev. Thomas K. Abbott, D.D.

DUBOIS, FREDERICK T., politician, was born in Crawford county, Ill., May 29, 1851. He was graduated at Yale in 1872; was secretary of the Illinois board of railway and warehouse commissioners in 1875-76; removed to Idaho in 1880; became leader of the anti-Mormon party; was United States marshal in 1882-86; Republican delegate in Congress in 1886-90; and was elected United States senator from the new State, Dec. 18, 1890.

DUBUQUE, city, capital of Dubuque county, Ia.; population (1890) 30,311; (1897) 40,654. In 1896 the total assessed valuation, about four-fifths actual value, was \$20,413,000; tax rate \$11 per \$1,000; and total debt, \$914,261. In 1897 there were 3 national banks with combined capital of \$700,000, deposits \$1,303,158, and resources \$3,182,276; electric street railway lines extending to West Dubuque and Stewart Park; and 4 daily, 7 weekly, a bi-weekly, and 5 monthly periodicals.

DU CHAILLU, PAUL BELLOXI, explorer and author, was born in Paris, France, July 31, 1835. He is a naturalized citizen of the United States; was presented by the Council of the American Geographical Society with a handsome silver loving-cup, in commemoration of the twenty-fifth anniversary of his return from Africa after discovering the gorillas, pygmies, and the great equatorial forest, on Jan. 30, 1893; and published the same year *Year the Vékouy*.

DUCHESNE, JACQUES CHARLES RENE ACHILLE, military officer, was born in Sens, France, March 3, 1837. He was graduated at the military school of Saint-Cyr and entered the army as sub-lieutenant of infantry in 1857; became captain 1864, lieutenant-colonel 1881, colonel 1884, general of brigade 1888, and general of

division 1893; and was decorated with the cross of the legion of honor 1859, and promoted to officer 1882, and commander 1885. He won distinction in the Italian campaign, the Franco-Prussian war, the Tonkin expedition, and the Formosa campaign; was appointed commander of the expedition to Madagascar in 1894; and entered the capital on Sept. 30, 1895. The result of the campaign, for which he was congratulated by the government, was the establishment of a French protectorate over the island.

DUCLAUX, EMILE, chemist, associate of the late Prof. Louis Pasteur; appointed director of the Pasteur Institute in Paris in 1895. During the siege of Paris, Pasteur took refuge with Duclaux, who was then professor of chemistry in the faculty of sciences at Clermont-Ferrand, and carried on his masterly researches in his protector's laboratory. In 1888 Duclaux was appointed professor of chemistry at the Sarbonne, but at the request of Pasteur he was allowed to conduct his work at the Pasteur Institute. He there brought out and has since edited the *Annales de l'Institut Pasteur*, a notable bacteriological journal, and applied himself particularly to the chemical applications of bacteriology. As the official successor of his distinguished friend, he now proposes to take up the special researches which Pasteur laid aside in the interest of humanity, for the study of disease germs.

DUDLEY, LEWIS JOEL, educator, was born in Guilford, Conn., Nov. 11, 1815; died in Northampton, Mass., Feb. 27, 1896. He was graduated at Yale in 1838; taught there for several years; admitted to the bar in 1848; conducted a boys' classical school in Northampton for fourteen years; and from its organization in 1867 till his death was president of the Clark Institute for Deaf Mutes in Northampton.

DUFF, SIR ROBERT WILLIAM, governor of New South Wales, was born in Scotland, 1835; died in Sidney, March 15, 1895. He was seventeen years in the British navy, becoming commander; thirty-two years in Parliament; was a lord of the treasury and afterward of the admiralty; and was appointed governor of New South Wales 1893.

DUFFERIN AND AVA, FREDERICK TEMPLE HAMILTON BLACKWOOD, 1st MARQUIS OF, diplomatist, was born in Florence, Italy, June 24, 1826. In 1891-96 he was British ambassador to France. In 1895 he resigned the office of lord warden of the Cinque Ports, to which the queen had appointed him in November, 1891.

DUFFIELD, WILLIAM WARD, civil engineer, was born in Carlisle, Pa., Nov. 19, 1823. He was graduated at Columbia College in 1842; served through the Mexican war; became a civil engineer after the war and was engaged for many years in railroad work; attained the rank of brigadier-general in the early part of the civil war and resigned because of wounds in 1862; resumed railroad work; and was appointed by the president superintendent of the United States Coast and Geodetic Survey on Sept. 25, 1894.

DULUTH, city, capital of St. Louis county, Minn.; population (1890) 33,115; (1895) 59,396. On Jan. 1, 1894, the manufacturing suburb of West Duluth was annexed to the city, and with it and the east side residence suburb of Lake Side, previously annexed, the city has an area of 66 square miles and a frontage of 15 miles on Lake Superior and St. Louis River and Bay. In 1896 the assessed valuations were: Real, \$26,037,311; personal, \$4,438,844—total, \$30,476,155; the tax rate was \$31.40 per \$1,000; and the total bonded debt, Feb. 15, 1897, was \$1,942,250. The Duluth School District had a net debt, Feb. 1, 1897, of

\$899,700. The foreign and domestic trade of the city has been increasing rapidly for several years. During the fiscal year ending June 30, 1897, the foreign trade in merchandise showed: Imports, \$1,273,907; exports, \$3,818,624, a decrease of \$325,916 in imports and an increase of \$131,394 in exports, as compared with the previous year. The city has become one of the greatest wheat and flour markets of the world, and has 8 large docks exclusively for handling lumber and 6 for coal. Its harbor, protected by Minnesota Point, is one of the safest on the globe. The United States government expended up to 1894 for improvements \$767,981, and a commission of engineers appointed that year under an act of Congress reported that the completion of improvements that would give a uniform depth of 20 ft. of water would cost \$1,806,000. In 1897 it had a national bank with capital of \$500,000, deposits \$1,757,282, and resources \$3,042,104; electric street railroads; and 4 daily and 11 weekly newspapers.

DUMAS, ALEXANDRE, or Dumas the Younger, novelist and play-writer, was born in Paris July 28, 1824; died at Marly-le-Roi, near Paris, Nov. 27, 1895; elected to the French Academy 1875. He was dramatic exponent of the demi-monde, and best known by his novel *La Dame aux Camélias*, dramatized, and also reproduced in Verdi's opera *La Traviata*.

DU MAURIER, GEORGE LOUIS PALMELLA BUSSON, artist and author, was born in Paris, France, March 6, 1831; died in London, England, Oct. 8, 1896. He was a member of the staff of *Punch* for thirty years, and beside his work on that periodical he illustrated Fox's *Book of Martyrs*, Thackeray's *Ballads*, *Henry Esmond*, *The Story of a Feather*, and other books, and published the novels *Peter Ibbetson* (1891), *Trilby* (1894), and *The Martian* (posthumous, 1897).

DUN, EDWIN, diplomatist, was born in London, O., about 1848. During his first administration, President Cleveland appointed him secretary of the United States legation in Japan, an office he held also through the Harrison administration, and from which President Cleveland promoted him to the post of United States minister to Japan in 1893. In co-operation with the United States minister to China, Charles Denby, he rendered signally valuable services to both China and Japan during the war of 1894-95.

DUNDEE, city, parliamentary borough, seaport, Forfarshire, Scotland; noted for its manufactures of linen and jute goods; population (1891) 155,675; (1893) 158,719. In the nine months ending Sept. 30, 1895, the exports declared here for the United States aggregated in value \$6,077,009.73, principally burlaps (\$3,292,381), linens (\$1,796,569), and marble and granite (\$155,050).

DUNFERMLINE, city, royal burgh, Fifeshire, Scotland; noted for its manufacture of linen, nearly one-half of which is exported to the United States; population (1891) 22,365. In the nine months ending Sept. 30, 1895, the exports declared here for the United States aggregated in value \$1,461,865.84, principally linens (\$1,262,411), linoleum (\$105,947), and cotton goods (\$70,597).

DUNKARDS (also known as TUNKERS), a religious organization in the United States, brought from Germany and Holland in 1719; strongest in the northern, border, and western States; follow the Scriptures without a creed; divided into four branches 1882-83, known as Conservative, Progressive, Old Order, and Seventh-day Brethren. Collectively, they reported 1896, 1,026 churches, 2,137 ministers, and 83,475 communicants. The Conservative branch was the strongest in members, 69,250. They have a college and publishing house at Ashland, O. and organizations of King's Children, Sisters' Society of Christian Endeavor, and a Woman's Christian Temperance Union.

DUNKIRK, city and port of entry, Chautauqua county, N. Y.; population (1890) 9,416; (1894) 10,022. In 1893 it had an assessed valuation, about actual value, of \$1,717,845, and in 1896 a bonded debt (including water debt \$147,600) of \$321,959, floating debt \$13,892, sinking fund \$24,851, and net debt \$311,000. In 1897 there were 2 national banks with combined capital \$205,000, deposits \$782,393, and resources \$1,186,175; imports of foreign merchandise valued at \$6,393; no exports; and 2 daily, a semi-weekly, 2 weekly, and 2 monthly periodicals.

DUNRAVEN, WYNDHAM THOMAS WYNDHAM-QUIN, 4th EARL OF, owner of the yacht *Valkyrie III*, was born in Adare Abbey, Limerick county, Ireland, Feb. 12, 1841. War correspondent, sportsman, author, under-secretary in the British cabinet, he became widely known later by the defeat of his yacht in races for the *America's* cup with the *Vigilant*, 1893; and in races off Sandy Hook, Sept. 7 and 10, 1895, his *Valkyrie III* was defeated by the *Defender*. The New York Yacht Club struck his name from its list of honorary members, Feb. 27, 1896, and the same month he was appointed lord-lieutenant of Limerick. See BOATING.

DUPUY, CHARLES, politician, was born in Puy, France, Nov. 5, 1851. He was brought up in the family of Comte Benedetti; received a lyceum and normal school education; was elected to the Chamber of Deputies as a Progressive Republican in 1885; became premier of France in April, 1893, and resigned in November following; again formed a cabinet and took the offices of premier, minister of the interior, and minister of worship, May 29, 1894; and again resigned, Jan. 14, 1895.

DUPUY DE LOME, ENRIQUE, diplomatist, was born in Valencia, Spain, in August, 1851. He was graduated in law at the University of Madrid; became an attaché of the minister of state in 1869; won the appointment of third secretary to the Spanish legation in Japan by a competitive examination in 1893; and after serving at Brussels, Buenos Ayres, Montevideo, and Paris, was appointed first secretary of the Spanish legation in Washington in 1882. He was minister to the United States in 1892-93, and in April, 1895, was again appointed to the post, in succession to Señor Don E. de Muruaga. This post was a trying one because of the revolution in Cuba and the action of the United States Congress thereon, but he won the esteem of the officials in Washington, and bore himself with dignity till Feb. 9, 1898, when in consequence of the publication of a letter he had written, in which he made reflections on President McKinley, he asked his government to recall him, which was done.

DURUY, JEAN VICTOR, historian, was born in Paris, France, in 1811; died there Nov. 25, 1894. He was for many years a professor in the Ecole Polytechnique; was minister of public instruction and reorganized the elementary educational system on a secular basis in 1863-69; subsequently became a senator; was elected to the French Academy in 1884; and was widely known by his histories of Greece and Rome.

DUSE, ELEONORA, actress, was born in Vigevano, Italy, Feb. 22, 1862. She comes from a theatrical family, her father, mother, grandfather, and grandmother having distinguished themselves on the Italian stage. Her training was severe, but made her the Bernhardt of Italy, and her repertoire is quite similar to that of the famous French actress. She made a tour of the United States, shortened by illness, in 1893, and in February, 1896, began a second season at the Fifth Avenue Theater, New York City.

DUSSELDORF, town in district of same name, Rhenish Prussia, Germany;

population (1890) 144,642. It is noted for its manufacture of iron and cotton goods, and in the six months ending Sept. 30, 1895, the exports declared here for the United States aggregated in value \$377,679.84, principally machinery (\$141,307), cotton, linen, and woolen goods (\$60,000), and drugs and chemicals (\$44,125).

DURANGO, a State in Mexico; also a city and capital of the same; population (1893) State, 265,931; city, 24,800. During the nine months ending Sept. 30, 1895, the exports declared at the city for the United States aggregated in value \$389,111, principally base bullion (\$200,350), silver ore (\$116,656), goat skins (\$38,156), and block tin (\$20,159).

DURHAM, city, capital of Durham county, N. C.; population (1890) 5,485; (1895) 11,699. In 1896 the assessed valuations were: Real estate, \$1,538,097; personal, \$3,640,551—total, \$5,178,648; total tax, \$17 per \$1,000; and in 1897 the bonded debt was \$174,000, floating debt \$19,049, total debt \$193,049, sinking fund \$19,397—net debt, \$173,652. The city had several of the largest tobacco factories in the world; a national bank, with capital \$150,000, deposits \$137,857, and resources \$362,431; and 2 daily, a monthly, and 3 weekly periodicals.

DURHAM UNIVERSITY, Durham, England, founded in 1832; comprises the University College and Bishop Hatfield's Hall at Durham and the colleges of Medicine and Science at Newcastle; had in 1895 about 500 students at Durham and 1,700 at Newcastle; warden and president of the College of Science, G. W. Kitchen, D.D., F.S.A., dean of Durham; president of the College of Medicine, G. H. Philipson, M.D.; confers 13 degrees.

DUTCH EAST INDIES, colonial possessions of the Netherlands in Asia; area, 736,400 square miles; population (1893) approximate, 32,800,000. In 1893 the value of the imports of merchandise and specie was equal to \$70,942,988, and exports, principally of merchandise, \$76,972,660; and in 1894 the revenue was equal to \$50,883,170, and the expenditure, \$55,648,179. Trade with the United States is large and growing. In the quarter ending Sept. 30, 1895, the exports declared at Batavia, Macassar, Padang, Samarang, and Soerabaya for the United States aggregated in value \$7,139,144, principally sugar (\$5,796,415), coffee (\$759,204) and sugar, coffee, and skins aggregated (\$815,147). The latest reports (end of 1893) showed 962 miles of railway in operation; 4,277 miles of telegraph, with 104 offices and 28 telephone offices; 300 post-offices; 3 Dutch banks and several British branch banks, besides savings banks with nearly 11,000 depositors; 170 elementary schools for Europeans, with 629 teachers and 16,280 pupils; 1,125 elementary schools for natives, with 116,114 pupils; 18,030 Mohammedan schools, with 272,427 pupils; 7 public middle-class schools for Europeans, 5 public normal schools, 4 schools for sons of native chiefs, and 368 schools for foreign Orientals; 281,618 Christians, 103 Christian missionaries, 66 Reformed Church ministers and assistants, and 47 Roman Catholic curates and priests, not paid from public funds.

DUTY, F. JENNIE, originator of the praying crusade against liquor saloons, was born in 1815; died in Cleveland, O., March 30, 1896. The crusade began 1874, extended widely, and led to the organization of the non-partisan Women's Christian Temperance Union. For the last twenty years Miss Duty was engaged in the charitable Central Friendly Inn of Cleveland.

DVORAK, ANTONIN, composer, was born in Nelahozeves, Bohemia, Sept. 8, 1841. In 1892 he came to the United States under a three years' engagement as

director of the National Conservatory of Music in New York City; made his first appearance and produced a *Te Deum* written for the occasion, on Oct. 21; produced what has been considered his greatest symphony, entitled *From the New World*, with the aid of the New York Philharmonic Society, on Dec. 15, 1893; and has composed music for the piano, and songs, and a cello concerto in B minor.

DWIGHT, TIMOTHY, educator, was born in Norwich, Conn., Nov. 16, 1828; grandson of Timothy Dwight, president of Yale College in 1795-1817. He has been connected with Yale since 1858 and its president since 1886.

DYNAMITE GUNS, ordnance for discharging projectiles in which dynamite is the explosive agent. The United States government built the first and only vessel designed exclusively for a dynamite cruiser, the *Vesuvius*. She was fitted with three great pneumatic tubes for projecting dynamite shells, and after several years of experimenting with her, the naval authorities declared her a failure for the purpose for which she was designed, and ordered her conversion into a torpedo chaser in 1894. In March, 1898, owing to the threatened war between the United States and Spain she was completely overhauled, placed in commission, and assigned to coast defense duty. The latest application of this kind of ordnance for use on shipboard was by the Japanese government, which, after its war with China, in planning a new navy, ordered an armament of pneumatic dynamite guns as well as the ordinary Whitehead torpedoes. The gun invented by Captain Zalinski, U.S.A., and bearing his name, has found much favor among ordnance experts in the United States as an effective means of coast defense. Further developments of the idea resulted in the organization of a pneumatic dynamite gun company, which manufactured a number of guns for the British government at the West Point (N. Y.) foundry, under the Rapiéff patents. Under the Grayson, Justin, and Snyder patents ordinary guns are used, but those which the United States government has built or is building are either the Zalinski tube or modifications of it, and are properly machines, not guns. Two 15-in. guns have been constructed for Fort Warren, Boston; three for Fort Schuyler, N. Y.; two 15-in. and one 8-in. for Sandy Hook, N. J.; and three, similar in style but more powerful, because of improvements, than the large ones at Sandy Hook, for San Francisco. The last three were accepted early in January, 1896, after tests in which each threw 500 lbs. of explosive upward of 5,000 yards with precision, 500 lbs. of gelatine 2,100 yards, and 100-lb. charges of the same explosive a distance of 3 miles. On a test, the guns at Sandy Hook have thrown 200-lb. charges of gelatine a distance of over 2 miles seaward, and one of them, 50 ft. in length, threw a 350-lb. projectile, with an explosive charge of 50 lbs., a distance of over $3\frac{1}{2}$ miles. Experiments are still in progress, both in connection with the guns and the explosives, and in the tests dynamite, nitrogelatine, and gun cotton have been used. See MACHINE GUNS: ORDNANCE.

EARLHAM COLLEGE, Richmond, Ind., Orthodox Friends; co-educational; had at the close of 1897, 17 professors and instructors; 344 students; 6,500 volumes in the library; \$125,000 invested in grounds and buildings; \$10,000 in scientific apparatus and library; \$125,000 in productive funds; \$16,000 in income; president, Joseph J. Mills, A.M., LL.D.

EAST AFRICA, politically, that part of the east coast of the continent lying between Arabia and the lower portion of the Red Sea on the north, and the South African Republic on the south, and extending west in its broadest part to the Kongo Free State. The following shows in brief the apportionment of the region among the European Powers according to the latest delimitations of their respective spheres of influence:

Italy.—The northern portion is under the protection of Italy. On the coast of the Red Sea the possession extends from Cape Kasar to the southern limit of the sultanate of Raheita on the strait of Bab-el-Mandeb, and has a coast line of about 670 miles. This region was constituted the colony of Erythrea, with autonomous administration and the management of its own finances, and with the seat of government at Massowah. The province of Tigre was annexed to the new colony in 1895, as a result of the war against the King of Abyssinia. The best-known portion of this region is the territory of the ancient empire of Abyssinia, or Ethiopia, which includes the kingdoms of Tigre, Amhara, and Shoa. The area of this section is about 48,700 square miles, and the population, largely nomadic, comprised by census of 1893, 191,127 natives and 3,452 Europeans. To the east of this section Italy has acquired a protective influence over the sultanate of Obbia, on the Somali coast, and by treaty with the Sultan of the Mijertain Somalis, of the country between lat. $5^{\circ} 33'$ north and $8^{\circ} 3'$ north. A treaty with the Sultan of Zanzibar also ceded to Italy the Somali coast from Obbia to the mouth of the Juba River, where British East Africa begins. The delimitation of this boundary was settled in 1894, and the line ascends the channel of the Juba from its mouth to lat. 6° north, thence follows the parallel of 6° north as far as longitude 35° east, whence it extends north to the Blue Nile. The area of the region in the Italian sphere of influence is estimated at 646,936 square miles. For details, see *ABYSSINIA: ERYTHREA*.

Great Britain.—The British East Africa sphere lies between the Italian and the German, and was acquired through the Imperial British East Africa Company, a chartered corporation, which first obtained from the Sultan of Zanzibar a 50-year cession of the strip of the coast extending from the northern limit of German influence on the right bank of the Umbe River to the Ozi River, including the towns of Kau and Kipini. By subsequent treaties the company gained the sultan's towns and possessions north of Kipini, all the islands on the coast, and the ports of Kismayu, Brava, Merka, Magadisho, Warsheik, and Maroti, and finally a grant in perpetuity for all the sultan's territory from the Juba to the Umbe, the company thus securing a coast line of about 400 miles. By a treaty between Great Britain and Italy, the ports north of Kismayu were retroceded by the company to the sultan. To the west the company had occupied the territory as far as Uganda, Lake Albert Edward, and the Semliki River. In 1893 the company surrendered Uganda to the British government, which declared a protectorate over it in 1894. On June 15, 1895, a British protectorate was proclaimed over the whole of the territory, from the coast to the boundaries of Uganda, and soon afterward the company evacuated the territory leased from the sultan. The principal ports of this section are Wanga, Mombasa, Malindi, Mambui, Lamu, and Kismayu. The entire sphere of influence in 1896 embraced over 1,000,000 square miles, and, besides the ports mentioned, included the former kingdom of Uganda, Emin Pasha's Equatorial Province, a large part of Somaliland, parts of Ruanda, Kordofan, and Darfur, Usoga, Unyoro, Ankori, Witu, Mpororo, Koki, and the islands of Patta and Manda. To the west the boundary line crosses Lake Victoria, and extends to the Kongo Free State; to the north, it is coterminous with the Italian sphere in Gallalaud and Abyssinia as far as the boundary of Egypt. The western line north of the Kongo Free State has not been delimited. In 1895 a railroad, which the British government is constructing from the coast at Mombasa to Victoria Nyanza, a distance of 657 miles, was completed to Dunantaba, and an excellent non-metal road was open for traffic between Mombasa and Kibwezi, nearly 200 miles inland.

Germany.—The German sphere of influence is immediately south of the British. Its northern line extends from the Umbe River northwest to the eastern shore of Victoria Nyanza, and west of the lake to the Kongo Free State; its western line along Lake Tanganyika; and its southern line from the southern extremity of that lake to the northern extremity of Lake Nyassa, and thence to the coast, for a considerable distance along the Rovuma River. The coast strip, originally leased from the Sultan of Zanzibar for 50 years, now belongs to Germany outright by virtue of direct purchase. The portion of the former empire of Kitwara that afterward became the Central African State of Karagwe, is mostly within this sphere. The German possessions here have an estimated area of 380,000 square miles, and an estimated population of 2,800,000. In 1894 the boundary between this sphere and that of Portugal (see below) was more clearly defined. Major von Wissmann was appointed governor of the territory in 1895, and negotiations for a narrow-gauge railroad from the coast to Lakes Victoria, Nyassa, and Tanganyika were progressing favorably on an estimated line of over 620 miles and a cost of about \$7,000,000. In 1896 judicial proceedings were begun against Dr. Karl Peters, the explorer and former commissioner of German East Africa, on charges of having murdered a number of natives and engaged in looting their villages, and he was found guilty. In November, 1897, a court-martial confirmed the sentence of the lower court, on which he was dismissed from the German service.

Portugal.—The southern extremity of political East Africa as above defined is under the jurisdiction of Portugal. The territory comprises the former province of Mozambique, which has been divided on the line of the Zambezi River into the present provinces of Mozambique, north of the river, and Lourenço Marques, south of it, both together now constituting the State of East Africa. The coast line extends south from Cape Delgado to Kosi Bay, just below Delagoa Bay (*q. v.*); the northern boundary is the Rovuma River from Cape Delgado to Lake Nyassa; and under an agreement between Portugal and Germany in 1894, the mouth of the river and Kionga were given to Germany and Cape Delgado to Portugal. On the west of the territory are British South Africa, including Mashonaland and Matabeleland (the last, in revolt in 1896), and the Transvaal, or South African Republic. The remainder of the eastern coast to the south belongs politically to South Africa. See also CAPE COLONY.

EASTON, city, capital of Northampton county, Pa.; population (1890) 14,481; (1894) estimated 15,400. It is the seat of Lafayette College (*q. v.*), and in 1896 had a tax valuation, with assessment about three-quarters actual value of \$11,900,000, and a State tax rate of \$4 per \$1,000, county, \$1.80, city \$6.50, and school, \$6. The total municipal debt Jan. 1, 1897, was \$294,400, sinking fund \$15,400, net debt \$289,000. The electric light plant was owned by the city, and the water works belonged to a private corporation. In 1897 there were 3 national banks with combined capital of \$1,034,000, deposits \$1,567,470, and resources \$3,436,514; a trolley corporation operating its own and several leased lines, with an aggregate of over 20 miles of track; and 3 daily, 2 semi-weekly, 7 weekly, and 5 monthly periodicals.

EAST ORANGE, township, Essex county, N. J.; population (1890) 13,282; (1895) State census, 17,927. In 1896 the assessed valuations aggregated \$13,782,650; total tax rate, \$25 per \$1,000; total debt, \$1,039,007; sinking fund, \$113,472; net debt, \$925,535. In 1897 there were a national bank, with capital of \$100,000, deposits \$335,948, and resources \$510,788; trolley line connection with Newark and Orange; and a weekly newspaper.

EAST ST. LOUIS, city, St. Clair county, Ill.; population (1890) 15,169; (1897) estimated 31,500. In 1896 the assessed valuations were: Real estate, \$3,738,373; personal, \$803,219—total, \$4,541,592; total tax, \$72 per \$1,000; and Jan. 1, 1897, the total bonded debt was \$650,000 in refunding bonds. The school district had an estimated real valuation of \$15,000,000, and debt \$107,000. In 1897 the city had 2 bridge and 2 ferry connections with St. Louis, Mo.; extensive stock, meat-packing, and flour, grain, and iron interests; 2 national banks, with combined capital of \$200,000, deposits \$605,593, and resources \$952,336; and a daily and 2 weekly newspapers.

EAU CLAIRE, city, capital of Eau Claire county, Wis.; population (1890) 17,415; (1895) State census, 18,637. In 1896 the assessed valuations were: Real, \$4,507,830; personal, \$1,567,601—total, \$6,075,441; total tax rate, \$25.27 per \$1,000; and Feb. 1, 1897, the bonded debt was \$240,000, floating debt \$2,500, net debt \$242,500. There was a national bank with capital of \$100,000, deposits \$555,868, and resources \$756,682; an electric street railway, light, and power company; large lumbering and manufacturing interests; and 3 daily and 5 weekly newspapers.

EBERS, GEORG MORITZ, Egyptologist, was born in Berlin, Germany, March 1, 1837. His latest publications include *The Story of My Life* (1893); *Cleopatra* (1891); *In the Fire of the Forge* (1895); *In the Blue Pike* (1896); *Barbara Blomberg* (1897), etc.

ECUADOR, a republic of South America; divided into a federal territory and 16 provinces, and including the Galapagos or Tortoise Islands; area, about 120,000 square miles; population (1895) 1,271,861; capital, Quito; president, 1898, Gen. Eloy Alfaro. The republic is rich in gold, silver, copper, iron, lead, and coal; has an abundance of petroleum on the coast near Guayaquil; and is principally engaged in the cultivation of cocoa, rice, sugar, and coffee. The foreign trade in the last year reported (1893) was: Imports, chiefly cotton and woolen goods and provisions, \$8,042,229; exports, chiefly cocoa, coffee, ivory nuts, rubber, hides, and straw hats, \$11,382,120. The revenue was \$3,504,060; expenditure, \$3,596,400; debt, foreign, compromised in 1892 and 1894, \$3,441,657, internal, \$1,079,721. Primary education is gratuitous and compulsory. There are 9 schools for higher education, including a university in Quito with 32 instructors and 216 students; 35 secondary and 1,088 primary schools; and, excluding the university, 1,198 instructors and 68,630 students and pupils. The army in peace numbers 3,311 officers and men; the national guard comprises a force of 30,000 men; and the navy consists of a cruiser, a torpedo launch, 2 river gunboats, and a transport. There are 3 banks of circulation, in which the government is not interested but from which it requires monthly statements of balances of silver in deposit and notes in circulation, an agricultural bank, 2 savings banks, and no private banks. Internal communication is chiefly by side-wheel and screw steamers, canoes, and other small craft on the rivers; a railway completed only between Duran and Chimbo, 58 miles; and wagon roads. There are about 1,242 miles of telegraph, 60 telegraph stations, telephone system in Guayaquil, and cable connection between Quito and the rest of the world.

In April, 1895, an insurrection broke out in the province of Carchi, caused by dissatisfaction with the election of President Cordero, the candidate of the Church party, who was charged with failing to recognize officially the claims of his party. The revolt spread to the provinces of Canar and Rios; the insurgents captured the towns of Esmeraldas and Quaranta in May, and Guayaquil, the principal city, in June; and the government was steadily defeated in its military

operations. The insurgents established a provisional government in Guayaquil, with General Ignacio as civil and military chief, and General Alfaro, then in Nicaragua, as provisional president. Alfaro took command June 10, published a programme guaranteeing liberty, tolerance, and justice, and began operations for the capture of Quito, the capital. The government forces were under the command of General Sarasti, the secretary of war, who was defeated by a division of the revolutionary army under General Vergaza, at San Miguel de Chimbo, on Aug. 7, and by Alfaro in person at Rio Bamba, on the 16th, and who then sought refuge in the United States legation. Alfaro entered the capital on Sept. 4, and, after a severe battle, Cuenca, on the 28th. Imbabura, the last place to hold out, soon afterward accepted the situation. The frustration of an attempt to assassinate General Alfaro, the suppression of a conspiracy to overthrow the provisional government, and a proclamation of general amnesty followed these successes. In February, 1896, President Alfaro appointed the following cabinet: Minister of war and marine, Gen. Juan F. Morales; interior, Jose Maria Carbo; finance, Serafin Wither; and public instruction, Carlos Freile. A tribunal of arbitration, appointed to decide the claim of Julio R. Santos, a naturalized American citizen, for property destroyed and confiscated during the Ecuador revolution of 1884, agreed to begin receiving evidence in Lima, Peru, in April, 1896. The United States government named the British minister to Ecuador as its arbitrator, and the Ecuador government, the Spanish minister to it. In March, 1896, a conspiracy against the government, led by the ex-governor of Guayaquil, was discovered and all the leaders arrested, and Veintemilla, an exc-dictator, was reported as threatening a revolt on the southern border of Peru.

EDINBURGH, city, capital of Midlothian county, and of Scotland; population (1891) 264,796; (1895) 273,535. A proposition to extend the limits of the city so as to embrace Leith, Portobello, and portions of adjoining territory, after being discussed for several years, was put into definite form in the draft of the Edinburgh Amalgamation and Extension Bill, for introduction into Parliament, in December, 1895. At present the city has an area of about 10 square miles, which the proposed bill would increase to about 21 square miles. The principal opposition to the scheme has developed in Leith, where it is insisted no advantages will be gained by consolidation. Edinburgh now contains a statue of Abraham Lincoln, erected as a memorial to the Scottish-American soldiers of the American civil war, and unveiled Aug. 21, 1893.

EDINBURGH, UNIVERSITY OF, Edinburgh, Scotland, founded in 1582; co-educational since 1892; had in 1895, 98 professors and instructors and 2,836 students, of whom 162 were women; value of fellowships, bursaries, and prizes, over \$60,000 per annum; chancellor, Rt. Hon. A. J. Balfour; principal and vice-chancellor, Sir William Muir; lord rector, Lord President Robertson; representative in Parliament, also for St. Andrews University, Sir Charles Pearson, confers 15 degrees.

EDISON, THOMAS ALVA, electrician, was born in Milan, O., Feb. 11, 1847. On Nov. 11, 1895, the Supreme Court of the United States sustained his incandescent light patent of 1880 against the claim of the Consolidated Electric Light Company, using the Sawyer-Mann system, of which it was asserted that the Edison system was an infringement. The case came from the United States District Court for the Western District of Pa., which gave judgment in favor of the Edison company. In January, 1896, he completed his plans and started in operation a plant near Ogden, N. J., for the magnetic separation of iron from the

rock with which it is sometimes associated in the earth. The process is purely automatic, allowing powdered ore to fall in a fine stream across a field of large electro-magnets, which diverts the iron from the direct line of fall and drops it into one receptacle, while the refuse and rock fall into another. In April, following, he gave a private exhibition of an invention just perfected, while he calls the vitascope. It is an improvement of his kintescope, by which moving life-size figures of men, women, and animals are thrown upon a screen by means of bright lights and powerful lenses. As soon as announcement was made of Professor Roentgen's theory concerning what he temporarily named the X rays, Edison began a series of experiments with the hope of being able to photograph the brain, bones, diseased organs, and location of foreign substances in the human body. He used the glass bulb of his ordinary incandescent lamp in preference to the Crookes' tubes, and his first conclusion was that while he could distinctly see the bones of the hand through eight inches of solid wood, the penetrative power of the ray was unavailable against steel. In his investigations he had been thwarted by the limitations of the photographic plate, and after experimenting with more than 1,800 chemicals and chemical compounds he tried one that had been compounded for him several years ago and found that the new substance was six times as sensitive both as to distance and intensity as the barium-platina cyanide, which had been used previously. It was by means of this fluorescent compound that he gained the penetration already noted. The compound is the tungstate of calcium crystals, and with it he perfected an apparatus, which he named the fluoroscope, by which he claimed to be able to see the bones of the hand and other hidden objects without the aid of photograph, radiograph, or shadowgraph. At the time of writing he was endeavoring to construct thin glass tubes strong enough to stand nine amperes in the primary coil, which, if accomplished, would provide an invaluable aid to the physician and surgeon. He said he did not intend to patent any part of the fluoroscope, and that when he reached a satisfactory point he would give his invention and discovery to the world for the benefit of suffering humanity.

EDSON, Cyrus, bacteriologist, was born in Albany, N. Y., in 1857. He was graduated at the New York College of Physicians and Surgeons in 1881; was appointed a temporary inspector on the Summer Corps of the Board of Health of New York, in 1882, a sanitary inspector in 1884, chief inspector of adulterated foods and offensive trades in 1886, chief inspector of contagious diseases in 1887, sanitary superintendent in 1894, and health commissioner in 1893; and resigned the last post to take effect July 1, 1895. He has greatly distinguished himself in the line of original research. See CONSUMPTION; DIPHTHERIA.

EDUCATION. The following outlines are compiled from the report of the United States Commissioner of Education issued in 1895, in most cases covering the school year 1893-94. In the District of Columbia and the 16 Southern States, the public school enrollment in 1893-94 was 3,835,593 white pupils and 1,424,995 colored, who had 88,086 white teachers and 26,570 colored. The total number of public school buildings in the United States was 235,426. Including 1,336,600 pupils in private schools, there was a total of 15,296,888 children of school age receiving primary and secondary instruction. The revenue of the public schools was: Income from permanent funds, \$8,674,945; State taxes, \$33,694,813; local taxes, \$108,425,054; other sources, \$14,228,070—total, \$165,022,882. The average monthly expenditure for all purposes per pupil was \$2.70. There were 2,812 public high schools, with 9,489 instructors; 436,855 students below secondary grades, and 232,951 in those grades; 1,211,147 volumes in their

libraries; \$51,811,044 invested in grounds, buildings, and scientific apparatus; \$5,923,800 revenue from State or municipal appropriations; \$616,350 income from tuition fees; and \$8,374,104 in total income. For normal instruction there were 121 public schools, with 27,926 students, and the total in public and private normal, high and normal departments of universities and colleges was 52,008.

The following table presents the public schools:

State or Territory.	Est. pop. 1893.	School pop.	Enroll- ment.	Teach- ers.	Value School Property.	Expendi- ture in the Year.
United States.	66,087,000	19,552,491	13,960,388	388,531	\$308,435,039	\$170,384,173
N. Atlantic Div.	18,205,500	4,648,992	3,293,714	95,464	153,332,672	50,081,591
S. Atlantic Div.	9,293,293	3,159,041	1,981,336	43,338	18,093,761	10,590,070
S. Central Div.	11,620,617	4,084,816	2,652,795	55,624	19,693,955	12,965,805
N. Central Div.	33,477,700	6,856,190	5,382,263	172,401	173,155,739	74,861,983
Western Div.	3,511,390	853,452	650,189	19,704	34,198,912	12,854,724
N. Atlantic Div.:						
Me.	650,100	159,900	135,815	7,421	3,768,998	1,557,862
N. H.	385,300	85,930	62,437	3,187	3,081,406	920,803
Vt.	332,500	81,360	65,548	3,728	1,500,000	753,805
Mass.	2,359,400	539,600	400,669	11,714	30,913,840	9,968,227
R. I.	382,300	93,170	55,671	1,554	3,592,565	1,478,841
Conn.	786,400	185,100	136,049	3,822	7,598,536	2,642,628
N. Y.	6,179,000	1,518,400	1,134,998	32,929	49,913,005	19,308,571
N. J.	1,928,000	423,872	349,588	8,868	10,374,218	3,834,103
Pa.	5,592,000	1,561,000	1,032,090	26,241	42,673,504	18,886,751
S. Atlantic Div.:						
Del.	468,493	47,491	53,174	840	904,426	275,000
Md.	1,077,000	315,300	96,186	4,318	3,810,000	2,301,111
D. C.	292,200	66,550	40,678	942	2,705,000	930,524
Va.	1,723,000	588,500	352,710	8,213	2,768,585	1,825,433
W. Va.	800,800	269,300	218,815	6,115	3,547,815	1,611,642
N. C.	1,688,000	506,300	370,890	8,300	892,364	783,405
Tex.	1,392,000	446,500	226,706	4,304	617,571	532,767
Ga.	1,924,000	582,100	436,682	9,033	2,133,000	1,683,006
Fla.	437,800	145,500	96,775	2,923	650,000	647,175
S. Central Div.:						
Ky.	1,946,000	637,300	467,451	9,808	4,822,700	3,315,024
Tenn.	1,866,000	618,100	463,461	8,812	2,950,004	1,947,740
Ala.	1,513,017	540,226	306,014	6,608	1,130,000	663,359
Miss.	1,352,000	496,000	345,581	7,577	1,511,069	1,235,146
La.	1,178,000	401,300	155,470	3,444	832,000	992,000
Ark.	2,491,000	874,200	508,608	12,462	6,128,882	3,675,501
Okla.	1,183,000	422,200	285,159	6,286	1,875,000	1,244,818
Okla.	151,000	45,500	31,048	827	425,000	292,158
N. Central Div.:						
O.	3,723,000	1,056,000	899,780	24,904	26,505,281	12,824,444
Ind.	2,253,000	695,000	541,570	14,071	16,777,504	5,693,655
Ill.	4,041,000	1,142,000	855,998	22,857	32,366,846	15,807,450
Mich.	2,168,000	602,000	468,979	16,190	15,757,921	5,978,366
Wis.	1,875,000	542,300	395,630	12,581	10,224,926	4,801,300
Minn.	1,639,000	416,300	337,861	10,322	10,158,057	5,020,882
Ia.	1,989,000	600,100	522,731	28,026	15,571,588	7,840,008
Mo.	2,850,000	889,500	657,505	14,521	11,570,415	5,816,634
N. D.	245,800	67,110	47,361	2,700	2,423,486	1,081,600
S. D.	308,000	90,480	88,626	4,816	2,396,779	1,087,918
Nebr.	1,122,000	338,000	273,652	9,473	8,212,356	4,165,087
Kan.	1,414,000	446,800	393,840	11,903	11,000,000	4,488,450
Western Div.:						
Mont.	159,800	28,800	25,730	880	1,547,632	643,749
Wyo.	85,500	13,200	10,310	337	380,474	233,181
Col.	503,100	110,700	84,448	2,895	5,861,018	1,981,635
N. M.	164,000	46,030	21,471	546	215,000	137,065
Ariz.	76,120	19,350	11,320	283	419,700	216,779
Ut.	244,600	79,300	57,008	1,115	1,973,103	963,151
Neuv.	43,170	9,442	6,827	379	292,214	203,140
Ida.	107,000	28,970	24,266	712	614,210	346,332
Wash.	446,800	101,400	86,720	3,168	4,872,711	1,525,448
Or.	380,300	102,500	77,841	3,162	2,649,080	1,238,111
Cal.	4,301,000	308,600	243,249	6,257	15,573,770	5,434,793

In the foregoing the expenditures are for school maintenance proper, and do not include payments on debts or loans. See also PUBLIC EDUCATION.

The universities and colleges of liberal arts numbered (1894) 476, and had 10,897 professors and instructors; 143,632 students in all departments (108,505 males and 31,527 females); 5,496,957 bound volumes and about 1,150,000 pamphlets in their libraries; \$101,064,023 invested in grounds and buildings; \$98,527,052 in productive funds; \$13,532,419 in libraries and scientific apparatus; \$9,025,240 in gifts during the year; and \$15,365,612 in total income. At the end of the school year 1892-93, these institutions numbered 451, of which 141, with 20,130 students, were for males only, and 310, with 27,317 male students, 15,583 female, and 88 unclassified, were co-educational. There was a net gain of 25 such institutions in 1893-94. In addition to these colleges there were 143 colleges for women only, with 2,114 instructors; 22,949 students; 313,339 volumes in their libraries; \$13,069,581 invested in grounds and buildings; \$725,120 in scientific apparatus; \$3,594,947 in productive funds; and \$3,070,516 in total income. Of these, 16 represented a class of institutions similar to the colleges for men and the co-educational colleges, and their itemized statistics formed the greater part of the totals of the whole number.

Colleges of agriculture and the mechanic arts in the various States are endowed by the acts of Congress of July 2, 1862, which granted 10,400,000 acres of the public domain for the purpose, and of Aug. 30, 1890, which gave to each of such institutions \$15,000 for that year, the amount to increase by \$1,000 per annum till it reached \$25,000, which sum was thereafter to be the annual appropriation. At the end of the school year 1894-95 there were 51 such institutions for white students, with a staff of 367 at the experiment stations; faculty, 1,196; students in all departments, 12,404; farm land under cultivation, 8,289 acres; farm lands valued at \$1,557,812; and buildings and equipments of the agricultural and mechanical departments valued at \$7,650,150. For colored students there were 14 such colleges, with 151 instructors, 2,902 students in all departments, 1,352 acres under cultivation, farm lands valued at \$127,155, and buildings and equipments valued at \$452,658.

Scientific and technological schools included the United States Military and Naval Academies and in all numbered 21, with 654 professors and instructors and 4,458 students in all departments.

For the study of theology there were 117 schools, in large measure departments of universities and colleges of liberal arts. They had combined 963 regular and special or assistant professors and instructors and 7,658 students, of whom over 1,500 were in graduating classes. There were 67 law schools, with 621 instructors and 7,311 students; 109 regular medical schools, with 3,077 instructors and 17,601 students; 19 homo-opathic schools, with 178 instructors and 1,666 students; and 9 eclectic schools, with 161 instructors and 803 students; 35 dental schools, with 794 instructors and 4,152 students; 35 schools of pharmacy, with 283 instructors and 3,658 students; 66 training schools for nurses, with 2,710 students; 8 veterinary schools, with 118 instructors and 554 students; and 335 business and commercial colleges, with 1,990 instructors and 99,654 students.

The care and education of the defective classes has always been a proud concern of the people of the United States, to which they have given generous support. For deaf-mutes there are 49 public boarding schools, 12 public day schools, and 19 private schools, with an aggregate of 757 instructors, 9,304 inmates, 76,000 volumes in the libraries, \$16,199 invested in scientific apparatus, and \$10,568,837 in grounds and buildings. For the blind there are 35 public

institutions, with 348 instructors, 3,489 inmates, 77,044 volumes in the libraries, \$21,810 invested in scientific apparatus, and \$6,189,436 in grounds and buildings. For the feeble-minded there are 17 public and 10 private institutions, having together 207 instructors, 1,023 inmates, and \$4,232,520 invested in grounds and buildings. There are also 85 State and municipal institutions for the reformation of juvenile delinquents, which in 1893 had a governing and teaching staff of 1,521; inmates, 23,011; pupils in school, 16,330; inmates learning trades, 6,232; grounds and buildings valued at \$14,497,484; and expenditures for maintenance, \$3,013,412.

Illiteracy, under the steady development of public and private educational systems, is steadily decreasing. According to the census of 1880 there were in that census year a population of 36,761,607 ten years old and upward, of whom 6,239,958, or 17 per cent., were enumerated as illiterates. Similar reports for the census year 1890, published in 1894, showed a corresponding population of 47,413,559, of whom 6,324,702, or 13.3 per cent., were classified as illiterate. Other percentages of decrease are: In white illiterates, 1.7; native whites, 2.5; and colored, 13.2. The foreign whites increased in illiteracy 1.1 per cent.

For the principal educational institutions in the United States, see their respective titles, and for later general statistics, PUBLIC EDUCATION; also BLIND, EDUCATION OF THE; DEAF-MUTES; FEEBLE-MINDED, THE; ILLITERACY; JUVENILE DELINQUENTS.

EGAN, MAURICE FRANCIS, author and educator, was born in Philadelphia, Pa., May 24, 1852. His recent publications include *The Success of Patrick Desmond* and *The Flower of the Flock and The Badgers of Belmont* (1894); *Jack Chambleigh* (1896); *The Boys in the Block*, *Chatelaine of the Roses* and *Jasper Thorpe* (1897), etc.

EGGLESTON, EDWARD, clergyman and author, was born in Vevay, Ind., Dec. 10, 1837. His latest publications include, *Stories of Great Americans for Little Americans* (1895); *The Beginners of a Nation*, the first volume in a series on *A History of Life in the United States* (1896), etc. He is the editor of the *Delights of History Series*.

EGGLESTON, GEORGE CARY, journalist, brother of the preceding, was born in Vevay, Ind., Nov. 26, 1839. He published *American War Ballads and Lyrics* (1895).

EGYPT, a State in the northeastern part of Africa; tributary to Turkey; extending (1896) from Wady Halfa, latitude 21° 40' north, to the Mediterranean; total area, 400,000 square miles; settled and cultivated area, 12,976 square miles; population (census 1882), 6,817,265; capital, Cairo; reigning khedive or viceroy, Abbas Hilmi.

Finances.—The public debt on Jan. 1, 1896, comprised a guaranteed loan, £8,699,300; privileged debt, £29,393,580; unified debt, £55,974,820; Daira Sanieh loan, £6,644,360; and Domains loan, £3,924,840—total, £104,636,900 (\$508,535,334). During 1894 the revenue was £E10,321,523; expenditure, £E9,601,258; surplus, £E720,265 (£E1=\$4.94; \$3,558,109). The surplus was applied to the reserve fund of the Caisse de la Dette, the government reserve fund, and the fund of savings from the conversion of the debt, and these reserve funds, Jan. 1, 1895, held an aggregate of £E3,887,087 (\$19,202,209). The budget estimates for 1896 were: Reveque, £E10,260,000 (\$50,684,400); expenditure, £E9,630,000 (\$47,572,200).

Commerce.—In 1894 the imports of merchandise were valued at £E9,266,116; exports, £E11,892,875—total, £E21,158,991; and imports of specie, £E1,995,676; exports, £E1,816,256—total, £E3,811,932; grand total, £E24,970,923 (\$123,356,559). The entrances of commercial vessels at the port of Alexandria during 1894 aggregated 2,375, of 2,221,145 tons; and the clearances, 2,397 vessels, of

2,201,885 tons. The principle imports were cotton, silk, woolen and other woven goods; coal; hoisery and clothing; timber; coffee; wine, beer, and spirits; tobacco and cigars; iron and steel goods and machinery. And the chief exports were cotton; cotton seed; sugar; beans; wheat; rice; maize; and onions. The total value of the imports in 1896 was \$48,533,266; exports, \$66,349,694—total trade, \$114,882,960, a large increase over that of the previous year. In the fiscal year ending June 30, 1897, the United States imported from Egypt merchandise to the value of \$7,027,005, and exported thereto merchandise valued at \$323,761.

Communications.—On Jan. 1, 1897, there was a total of 1,215 miles of railway in operation and 290 miles under construction; of the former, 1,143 miles belonged to the government. There were 2,269 miles of telegraph with 8,450 miles of wire, all belonging to the government; a private telephone company; and a private telegraph company, with lines from Alexandria to Suez and from Port Said to Suez, connecting with cables to England and India. The postal service had 261 town offices, 39 traveling offices, and 111 rural stations.

Suez Canal.—During 1894, 3,352 vessels, of 11,283,855 gross tons, passed through the canal, and the gross receipts of the company were equal to \$15,390,230, against \$14,764,906 for 1893; and if revenues from the tramway, lands, and water company are deducted, the actual receipts of the canal would show an increase of \$650,800 over those of the previous year. By means of the canal it was estimated that British trade with the far East improved to the extent of more than \$15,000,000 in 1894. The receipts in 1895 were \$15,631,748, and in 1896, the most prosperous year in the history of the canal, \$15,930,435, with a net tonnage of 8,594,307. See SUEZ CANAL.

Education.—Official returns corrected to Jan. 1, 1895, showed 22 government schools for primary, secondary, and higher instruction, with a teaching staff of 158 and a student enrollment of 3,820; 33 national primary schools, with 255 teachers and 5,162 pupils; 134 mission schools of the three grades, with 432 teachers and 10,906 pupils; 8,628 other schools, with 10,940 teachers and 163,267 pupils; and 96 schools for girls, with 567 teachers and 13,455 pupils—a total of 8,913 schools, 12,505 teachers, and 196,610 pupils and students. All Mussulman schools are attached to the mosques; the Copts maintain 1,000 schools for elementary education, 22 primary schools, and a college; Protestant and Catholic missions have 108 schools; and there are 43 private European schools.

Army and Navy.—The new army has a total strength of 17,000 officers and men; of the former, the sirdar, or commander, and about 100 others belong to the British army. There is also a British army of occupation of over 3,000 men. Depending on Turkey for seaboard protection, Egypt has now no warships worthy of the name.

Agriculture.—About 61 per cent. of the population are engaged in cultivating the soil, and in Upper and Lower Egypt, with a total of 3,779 villages, 4,961,462 feddans (1.03 acres each) are worked. The principal crops are wheat, maize, clover, cotton, beans, barley, and dates. Horses, camels, and cattle, employed or raised on farms, number about 1,670,000. More attention is being paid to cotton-growing than formerly, and although cotton is a great staple of the United States, Egypt exported thither in 1895 nearly 32,500,000 lbs. of the raw material. The production in the cotton-year 1896-97 was 584,390,000 lbs., double that of ten years before, and worth \$5,000,000 more than that of the previous year.

Recent Events.—In December, 1894, the government made an agreement with the Powers by which it would apply £40,000 annually of the revenue from light dues to the quarantine service and the erection of new lighthouses on the Red Sea for the period Jan. 1, 1894 to Jan. 1, 1897. On Feb. 6, 1895, the khedive

signed a contract of marriage with a slave girl in the harem who had just borne him a son. The khedive approved of a proposed reform in the public works department, and made a state visit to the sultan at Constantinople on July 18. After 53 years of service Nubar Pasha resigned the office of premier on Nov. 11, and was succeeded by Mustapha Fehmy Pasha, formerly minister of war. Col. G. E. Raum, an engineer of San Francisco, discovered in February, 1896, the cap of the Sphinx, which has been missing from time immemorial, in the Temple of the Sphinx, between the forepaws. It measures 4 ft. 3 in. in extreme breadth, is painted red, and is marked with three lotus columns above a serpent. In 1897, much to general surprise, the Court of Appeal decided that the Egyptian government should refund with interest the sum of £500,000 taken from the reserve fund for the Dongola campaign. The decision gave Great Britain an opportunity to further strengthen herself by promptly providing the necessary amount. Late in the year, Egypt assumed the responsibility of governing Kassala, which Italy had relinquished. For the Anglo-Egyptian expedition to the Soudan see DONGOLA.

ELECTRICITY. In the electric world the chief recent developments have been in its practical applications, especially in the engineering field. The generation of current by storage batteries has greatly increased, not so much from any revolutionary improvement in the battery as from a better appreciation of its powers and limitations. Some very large installations have been erected. Philadelphia and New York and other cities have storage battery plants operated in connection with their electric lighting plants, the battery acting as a reserve to be used when the demand is greatest, the current from the generators at the hours of smallest consumption being employed to charge the battery. The storage battery is also used in Paris in the propulsion of street cars. In the United States various efforts have been made to do the same, the principal trouble being the great weight of the battery.

The electric railroad service has been enormously extended, so that already the car-horse is almost a thing of the past. The overhead trolley, made possible by the invention of the familiar pole and roller, pressing the trolley wire upward instead of dragging it downward, is generally constructed with a return circuit through the rails. To prevent high joint resistance, electric welding of the joints and the running of melted iron around them so as to make the entire length of rails a single unbroken line of metal have both been tried. Both operations were executed *in situ*. Copper cable connections have also been extensively used to connect across the joints of iron rails. It was found that when the rails were used for a return circuit the current branched off into the earth and set up electrolysis and corrosion of water and gas-pipes. One of the objects of perfecting the joint contacts was to overcome this trouble.

The underground trolley has obtained a considerable foothold in the United States. Various ingenious plans have been invented for avoiding leakage in case of wet weather. In New York, however, a simple conduit of the cable road type has been put in with two lines of steel contact bars, positive and negative, running through it. The car-motor makes contact by a "plow" or piece descending into the conduit and carrying two contact shoes, one for each bar. In Chicago (*q. v.*), electric traction by a contact rail, carried by the structure, has been applied on a new elevated railroad.

A special case of electric car traction has arisen in the city of Baltimore. The Baltimore & Ohio Railroad have built tunnels through a portion of the city and have used electric locomotives to draw the trains through the city. The locomo-

tive weighs 96 tons, has eight driving wheels, and can exert from 42,000 to 60,000 lbs., drawbar pull. It traverses 15,000 feet of track, including two tunnels. The motors are gearless; each is rated at 360 H. P., and can pass 900 amperes of current. The electric energy is taken from an overhead wire by means of a sliding brass shoe pressed against it by a jointed system of levers. Active work is in progress on the introduction of the electric locomotive on other steam railroads. So far, the work outside of Baltimore may be considered as experimental.

A curiosity in electric traction is the electric plow described in a United States consular report from Leipsic, Germany. The motor is carried by the plow, and traction is effected by a chain extending across the field. A speed of over 200 ft. per minute is attained. Further developments of the same principle to digging ground-crops, and the like, are anticipated. The electric energy is generated by a portable dynamo placed on one side of the field. Another phase of development is in the line of electric house elevators. These are now most extensively introduced, and are produced by various manufacturers. In foundries and machine shops electric cranes are employed for handling heavy pieces, and electro-magnets have been substituted in some cases for hooks and slings for lifting pieces of iron and steel.

Notwithstanding its low efficiency, electric heating has been applied to various cases. Numerous technical applications as to sadirons, cooking vessels, and the like have been made, but in car-heating it has found its principal field. Here its simplicity, safety, cleanliness, and freedom from any large repair expense or labor charge for removing ashes, supplying coal, etc., have given it a real basis of utility. The apparatus takes the shape of resistance coils, and has given very satisfactory results. The air temperature near the coils has been found to be 180° F. Iron coils are found to act advantageously, because as their temperature rises their resistance increases, thus exercising a throttling action upon the current. It is claimed that, owing to cost of repairs and of attention where stoves are used, the electric heating is the cheaper.

Electric traction has been to a certain extent successfully applied to horseless carriages, particularly in France. In the United States a storage-battery carriage won the great gold medal in the *Chicago Times-Herald* race on Thanksgiving Day, 1895. It has also been proposed to use an electric motor to drive a ship's screws. Slow-acting engines would generate the power, and the advantage of the system is supposed to inhere in the use of the perfectly balanced electric motor for effecting directly the comparatively rapid rotation of the shafts, thus disposing of vibration. The modern steamship presents the most varied examples of the modern uses of electricity, from its electric lighting plant to the electric dish-washer. Capstans and cranes may be operated by the current.

Mining machinery is now operated by electricity. The operations include the driving of ventilating fans, hoisting and hauling apparatus, pumps, lighting, under-cutting, and drilling. General types of machines for under-cutting masses of coal have been invented which can cut a gap or channel some 6 ft. deep and nearly 1 ft. wide close to the floor of the working chamber, enabling a great mass of coal to be brought down by wedging or blasting. For hauling ore or coal through the galleries of mines, electric locomotives worked by trolley wires have had quite an extensive application. In machine-shops and shipyards the electric drill has been much used. Its connection with the source of power by a flexible conductor only has made it so convenient and adaptable that it has met with a permanent field there. Sometimes the flexible shaft is used to connect the drill to the

motor. Among minor applications the electric incubator may be mentioned. Here the current is caused to maintain a proper temperature in a closed case to hatch eggs placed therein.

In electric lighting some interesting work is in progress. The arc lamp has been introduced on incandescent circuits with the advantage of economy of conductors but with waste of energy because a constant potential lamp works necessarily at a disadvantage, the resistance of the arc decreasing as the temperature rises, and hence tending to take more and more current. This has to be compensated for by special resistance. The incandescent arc lamp is an arc light whose carbon points are inclosed in an approximately tight globe so as to exclude oxygen and hence save the consumption of the carbons. It is claimed that the carbon's life is increased in this lamp twenty-fold. Vacuum tube illumination has been experimented with by Tesla, D. MacFarlane, Moore, and others. By passing discharges of highly disruptive character through tubes containing air or other gases at very high exhaustion, comparatively brilliant lighting effects have been produced. It is a development or intensification of the old Geissler tube light.

In telegraphy some interesting work in signaling without wires has been done and some success has been attained. W. H. Preece, of London, and Charles A. Stephenson, of Edinburgh, have tried transmission through air and water by electro-magnetic and static induction with such success as to make it probable that the system would be extensively used for lightships and similar cases. It has been claimed that in subaqueous work true conduction has come into play. A telephone is used instead of sounder in order to obtain the requisite sensitiveness. The transmission of pictures over an ordinary telegraph wire was practically and successfully tested in January, 1898, by the *New York Herald*, under strict supervision, using an instrument invented by Ernest A. Hummel, of St. Paul, Minn. A portrait of Mayor Van Wyck was transmitted over a circuit of six miles with gratifying results, and the copy received was published in the paper.

Electric balloon signaling has shown much progress in the facility and certainty of its methods. Eric S. Bruce has invented a system which is independent of the configuration of the country, and which uses a specially improved key worked by carbon contacts instead of the Morse key that would not withstand the heavy currents necessary for lighting. Mr. Bruce believes that electric balloon signaling soon will be extensively applied to scientific exploration in Arctic and Antarctic expeditions. For that purpose he recommends a balloon seven feet in diameter, which would lift 500 ft. of cable, with a cubic capacity of 150 ft. The filling of this would necessitate the taking out of a steel tube of compressed hydrogen about eight feet long. He finds it good practice to put the lamps inside the balloon. This causes a loss of illuminating power, but makes the signaling clearer. When incandescent lamps are flashed the filament remains hot for a moment. In the open this is visible and connects the flashes, whereas with the lamps inside the balloon, the afterglow is not seen. In foggy weather, the lamps, of course, have to be outside, but then the fog acts as would the goldbeater skin envelope and obviates the confusion caused by the afterglow.

The electric furnace, devised by Henri Moissan, a noted French chemist, and with which he has obtained some remarkable results in working on minerals at very high temperatures, has been explained at length before the Congress of Learned Societies in Paris. The furnace consists of two bricks of quicklime or ordinary limestone, with a hollow space that contains the crucible and two

horizontal grooves in the lower brick to hold the electrodes. The apparatus is a true reverberatory furnace—an electric reverberatory furnace, with movable electrodes. By means of this apparatus and the use of high temperatures, M. Moissan was able to reproduce diamonds, to crystallize metallic oxides, to reduce oxides until now thought impossible of reduction, to fuse refractory metals, to distill lime, silica, zircon, and carbon, to volatilize in quantities metals like platinum, copper, gold, iron, manganese, and uranium. Some of these bodies which could not be even liquefied, such as magnesium, uranium, tungsten, and molybdenum, can be turned into gases by the electric furnace; he has handled in his investigations the gas vaporized from lime and that from silica.

Early in 1898 plans were made public for an electrical power plant more extensive than any yet projected in the United States. The enterprise involves the bringing of power to Los Angeles, Cal., from the Kern River, the largest stream in the southern end of the San Joaquin Valley. Its flow exceeds the combined flow of all rivers between it and the Colorado, and it drains an area of 2,300 square miles. The project includes the construction of a dam by which nearly 15,000,000,000 gals. of water will be impounded. Part of the site of the proposed works is within the Sierra Forest Reservation, and it has been necessary to obtain legislation by Congress permitting occupation of the reservation under regulations imposed by the Interior Department, and to apply with elaborate maps and description to that department for right of way.

What is believed to be the largest and most powerful electric generator ever constructed was built in 1897 for Brooklyn, N. Y. The wheel weighs 59,000 lbs., and the entire generator more than 80 tons, and the capacity is equal to the light for 36,000 incandescence lamps of 16-candle power each. The largest storage battery plant in the United States, if not in the world, is that erected in Chicago in 1898. It weighs about 500 tons, has 166 cells, equal to a current of 11,400 ampères, and, when fully charged, will produce a light equal to that given by 25,000 sixteen-candle power lamps in an hour.

It was officially announced in January, 1898, that the management of the elevated railroad system in New York City had decided to introduce electricity as soon as a general installation could be made. The installation of a plant or plants sufficient to supply the great power that will be needed will be the biggest enterprise of the kind that has ever been undertaken. Whether the whole amount of the power will be produced at one station or whether a number of stations will be built at convenient points along the lines has yet to be determined, for this will depend upon a comparison of the cost of the enormous copper conductors which would be required to distribute the great currents to be employed and the cost of separate power plants. It is probable that several plants will be built at points convenient for receiving the great quantities of coal needed.

The most striking among the recent curiosities of electrical science is the plan for illuminating the historic catacombs of Rome by incandescence lights. A manufacturing company in the United States received a contract in January, 1898, for lighting the catacombs of St. Callistus, St. Agnes, St. Cyraea, St. Demetilla, St. Priscilla, and St. Bentianus. Some months before the subterranean burial ground of St. Callistus was lighted, and the effect was so satisfactory that the persons in charge decided to have electricity put in the principal catacombs of the city. Six motors capable of supplying current for not less than 450 lamps are required for the six catacombs.

ELGIN, city, Kane county, Ill.; population (1890) 17,823; (1893) estimated 21,500. In 1895 the total assessed valuation, about one-fifth actual value, was \$3,575,375; and the total debt of the Elgin School District was \$181,000. In 1897 the city had 3 national banks with combined capital of \$450,000, deposits \$980,619, and resources \$1,873,442; a trolley line operating 13 miles of track; and a monthly, 8 weekly, and 3 daily periodicals.

ELIOT, CHARLES WILLIAM, LL.D., educator, was born in Boston, Mass., March 20, 1834; president of Harvard University since 1869. The 25th anniversary of his presidency was commemorated June 27, 1894, by the alumni, who presented him with a medal that cost \$2,000. His annual report that year created much surprise in collegiate athletic circles, because of his lengthy treatment of college athletics and his recommendations that intercollegiate freshmen contests be prohibited; that no student should be a member of a university team or crew in more than one sport within the same year; and that intercollegiate contests in any one sport should not take place oftener than every other year. He published *American Contributions to Civilization* (1898). See HARVARD UNIVERSITY.

ELLIOT, DANIEL GIRAUD, naturalist, was born in New York City. Ill health preventing him from attempting a collegiate education, he applied himself to the study of zoology, especially of mammalogy and ornithology, and has since traveled and hunted over the greater part of the world. He has published 11 large volumes and over 100 papers on zoological subjects; is a member of the principal zoological societies of the world; has been decorated by numerous European sovereigns for his contributions to scientific knowledge; and presented to the American Museum of Natural History, New York, a valuable library and a unique collection of humming birds. In 1894 he was appointed curator of zoology in the Field Columbian Museum, Chicago, and in March, 1896, started with several professional companions on an expedition to Central Africa for the collection of specimens for the museum.

ELIZABETH, city, capital of Union county, N. J.; population (1890) 37,764; (1895) State census, 43,834. In 1896 the assessed valuations were: Real, \$14,796,650; personal, \$1,780,300—total, \$16,576,950; total tax rate, \$28.80 per \$1,000; and in 1897 the total bonded debt, including unadjusted bonds, was \$3,383,000. There were 2 national banks, with combined capital of \$550,000, deposits \$1,432,590, and resources \$2,747,723; a trolley line connecting with Newark; and 2 daily and 2 weekly newspapers.

ELKHART, city, Elkhart county, Ind.; population (1890) 11,360; (1897) estimated 16,000. In 1896 the assessed valuations, about five-eighths actual value, were: Real, \$3,579,400; personal, \$1,339,870—total, \$4,919,270; total tax rate, \$25.60 per \$1,000; and in 1897 the total debt, all bonded, was \$85,000. There were 3 national banks, with combined capital of \$250,000, deposits, \$431,694, and resources, \$824,394; and 2 monthly, 2 semi-monthly, 3 weekly, and 2 daily periodicals.

ELKINS, STEPHEN BENTON, capitalist, was born in Perry county, O., Sept. 26, 1841. He was secretary of war in the latter part of President Harrison's administration; elected United States senator from West Virginia, as a Republican, in February, 1894; and in 1898 he was chairman of the select Committee on Geological Survey, and a member of the Committees on Civil Service and Retrenchment, Commerce, Railroads, and Interstate Commerce.

ELMIRA, city, capital of Chemung county, N. Y.; population (1890) 30,893; (1896) estimated 42,000. In 1897 the assessed valuations, about two-thirds actual value, were: Real, \$15,275,945; personal, \$1,684,470—total, \$16,960,415; city tax rate, \$17 per \$1,000; total debt, all bonded, \$971,000. There was a national bank, with capital of \$300,000, deposits, \$702,117, and resources, \$1,327,342; an electric street railroad extending to Horsesheds; and a quarterly, 2 bi-monthly, a monthly, 6 weekly, and 4 daily periodicals.

EL PASO, city, port of entry, and capital of El Paso county, Tex.; population (1890) 10,338. In 1893 it had an assessed valuation of \$5,359,190, and city tax rate \$18.50 per \$1,000. The bonded debt at last report was \$95,000, and further bonds to the amount of \$175,000 had been authorized for the construction of improved waterworks. During the fiscal year ending June 30, 1897, the imports of merchandise from Mexico at the custom house here were valued at \$1,670,970, against \$1,330,996 in 1896; and similar exports to Mexico were valued at \$6,074,407, against \$3,835,545 in 1896. The movement in gold, silver, and bullion in 1897 was: Imports, of gold, \$629,916; silver, \$4,605,377—total, \$5,235,293. In 1897 the city had 2 national banks, with combined capital of \$155,000, deposits \$984,598, and resources \$1,399,246; and 4 daily and 5 weekly newspapers.

EMMENS, STEPHEN H., inventor and engineer, was born in Kent, England, Dec. 27, 1843. He was educated at King's College, London; subsequently studied chemistry and engineering; and since about 1885 has been engaged as a mining and electrical engineer in the United States, principally in California and New York. He is the inventor of the giant explosive known as Emmensite, which has been adopted by the United States government, and of a method of converting the old Rodney guns into effective ordnance. In March, 1896, he announced, as a result of his experiments in cathode photography, that he was able to obtain the X rays with the aid only of the sunlight, discarding the Crookes tubes and induction coils. He has constructed an instrument, which he calls the photoscope, by which he declares it is possible to examine the interior of the human body with the aid of sunlight only, using no photographic materials whatever.

EMORY COLLEGE, Oxford, Ga., founded in 1837; Methodist Episcopal, South; had at the close of 1897, 16 professors and instructors; 302 students; 20,000 volumes in the library; \$100,000 invested in grounds and buildings; \$206,000 in productive funds; \$10,000 in scientific apparatus and library; \$5,000 in gifts; \$28,500 in income; president, W. A. Chandler, D. D., LL. D.

ENGELS, GEORG, actor, was born in Altona, near Hamburg, Germany, Jan. 12, 1846. He made his first professional appearance on the stage in Berlin in 1870, and has since achieved the reputation of being Germany's greatest comedian. On April 5, 1896, he arrived in New York City, under an American engagement, and was given an enthusiastic reception at the Irving Place theater.

ENGINEERING—*Canals*.—This branch of engineering work has taken largely the shape of the building of new ship canals. Of these some of the more prominent will be found treated under separate titles in the present work.

In Canada a short but very important work has been executed in the building of the Sault Ste. Marie, or "Soo" canal. This canal crosses St. Mary's island on the side of St. Mary's Rapids, connecting Lake Superior and Lake Michigan. The rapids have here a fall of 18 ft. The canal proper is 3,500 ft. long, with dredged approaches 1,800 ft. long, and is 21 ft. deep. A masonry lock, 900 ft. long and 60 ft. wide, with 20½ ft. of water on the sills at low water, pro-

vides for the difference of level; $9\frac{1}{2}$ minutes will lock a vessel upward, $7\frac{1}{2}$ minutes downward. The valves and gates are operated by electric power. The work is one of the most important in Canada. In England the Manchester ship canal is the most conspicuous work of the kind. It was undertaken to make Manchester a seaport with a chance of competing with Liverpool. Work was begun on Nov. 11, 1887, under contract for £5,750,000. A fall of 60 ft. from Manchester to the sea is provided for by 5 sets of locks. Other locks connect the canal with previously existing canals at various points. The expenses far exceeded the estimates, nearly double the amount originally called for having been put into the work. The canal starts on the Mersey, about six miles above Liverpool, at Eastham; it is $35\frac{1}{2}$ miles long. The design called for a minimum depth of 26 ft. with a bottom width of 120 ft. The docks at the Manchester end have 105 acres of water area, 152 acres of quay area, and a water frontage of over 5 miles. The canal was opened for traffic Jan. 1, 1894. The North Sea canal, opened with much eclat June 20, 1895, is designed to cut off the long sea-passage from the North Sea to the Baltic around the Danish peninsula. It was begun in 1887, cost about \$40,000,000, is 61 miles long, 200 ft. wide on the surface, and 80 ft. wide on the bottom. It will accommodate vessels of 10,000 tons register. Its terminal points are Kiel on the Baltic and Brunsbüttel on the Elbe. The present is the sixteenth canal projected to cross the peninsula. The Chicago drainage canal is primarily designed to take the sewage of Chicago out into Lake Michigan. The canal in rock is to have a uniform width of 162 ft.; in earth its bottom width is 202 ft. The depth is to be 22 ft. Its length is about 29 miles. Work began on Sept. 2, 1892, and was practically completed at the end of 1897, at a cost of about \$27,000,000. The canal starts at Chicago, cuts through the divide, and connects the lake with the Des Plaines River and thereby with the Mississippi River. It represents two-thirds of the work necessary to give Chicago a waterway for large vessels clear to the gulf of Mexico. The Harlem ship-canal, at present a minor work, establishes communication for reasonably large vessels across the space between the Hudson and the Harlem rivers north of New York on Manhattan Island. It gives 18 ft. depth of water and a width of 350 to 400 ft. The Harlem canal will be eventually of greater use, it is to be anticipated, if the Harlem River itself is dredged out.

The success of the Manchester canal has stimulated Belgium to think of a similar enterprise for the benefit of Brussels. The Belgian monarchy, with relation to area, possesses double the mileage of internal navigation that Holland can boast, and six times the European average. There are twenty-nine canals, summing up 535 miles of navigable rivers. The chief canal is from Brussels to Charleroi, 46 miles, the toll amounting to \$6,000,000 yearly and working expenses \$2,500,000. The tonnage carried on all the canals is 9,000,000. The population of Brussels and suburbs is now in excess of 500,000, and is nearly twice as large as that of Antwerp. The project of making Brussels a maritime port includes that of a basin of 29,652 acres, with a depth of 18 ft., and two large quays. Freight accommodations would be provided, and the port would be equipped with the latest improvements in the way of machinery. Branch lines would lead from the quays to the railway stations. The estimated cost of the Brussels canal is \$35,000,000.

Harbor and River Work.—In Europe the famous Iron Gates of the Danube have marked the scene of extensive operations where the Hungarian government has undertaken the work of straightening the course of the river by dikes and canals, to provide a channel over 1,000 ft. wide in the river proper. The works

are too extensive to be here described, but they have made a vast improvement over some hundred miles of the river. The Zuyder Zee is the possible scene of extensive work, where it is proposed, at an expense of over \$150,000,000, to build a dam some 15 miles long across its mouth and pump out the water, thus adding a vast area of land—469,490 acres—to Holland. There will be a depth of 12 ft. of water to be pumped out. The work will take 33 years to complete. The harbor of Galveston, Tex., has, by a system of concentration of currents brought about by extensive breakwater construction, been deepened so as to give a good deep-water harbor, something hitherto wanting in the Gulf of Mexico. By dredging, the harbor of New York has been greatly improved as regards its approaches, its entrance now being practicable at all tides for vessels of the largest size.

Tunnels.—Many important tunnels have been commenced, completed, or proposed. In London the Blackwall tunnel, crossing the Thames near Blackwall Stairs, has been nearly finished. It is a circular tunnel, 27 ft. external diameter, 24 ft. 3 inches internal diameter, and 6,200 ft. long. It is the largest tunnel of its type in sectional area of any in the world. In New York a tunnel 2,516 ft. long has been built beneath the East River, connecting Ravenswood with New York between 70th and 71st streets. The tunnel was designed to accommodate two 3-ft. and one 4-ft. gas main, besides other conduits for electric conductors, the height being 8 ft. 6 inches and diameter 10 ft. 6 inches. Work began on June 28, 1892, and gas was delivered through a 3-ft. main on Oct. 15, 1894. This tunnel is, in a sense, unique, and may modify greatly the system of supplying New York with gas and electric light and power. A great drainage tunnel for the city of Mexico is nearly completed. The city lies in a valley without outlet. A canal 22 miles long and from 17 to 65 ft. deep leads to the tunnel. This pierces the northern boundary of the valley. It is $6\frac{1}{4}$ miles long. The chord of the arch of the tunnel and its height are each 14 ft. (nearly); the gradient is 1 in 1,388.88. It is to dispose of the sewage and drainage of the city of Mexico. The greatest tunnel proposed is the Simplon tunnel, 12 miles and 460 yds. long, across the line of the famous Simplon pass, between Switzerland and Italy. Very extensive and elaborate projects have been drawn up, and if the work is carried out it will be the largest tunnel in the world. Among other tunneling operations the Boston subway and the Baltimore tunnel may be mentioned. The first crosses the Common in the city of Boston, Mass., and branching, carries the trolley cars through the busiest and most crowded portion of the city underground. The Baltimore, Md., tunnel is remarkable principally in being the scene of the operations of the electric locomotive spoken of under ELECTRICITY. Underground railroads are not increasing very rapidly in number, their expense and darkness militating against them. The Rapid Transit road in New York, involving a tunnel beneath Broadway with connections, the whole many miles long, is the greatest project of the kind now in embryo. The Niagara tunnel, erected to provide a sluiceway or tailrace for the hydraulic and electric power plant at Niagara Falls, is now complete and in operation. In June, 1897, gangs of workmen began digging in Colorado the longest tunnel which man ever attempted to construct. The main bore will be 20 miles long, and connecting with this are subsidiary tunnels, with a total length of 30 miles. So, in reality, the task that has been put under way is that of digging 50 miles of tunnels, and every foot of this vast system will be under Pike's Peak and the mountains on each side. Two gangs of men, as stated, are working on this tunnel, one at each end. It is believed that the mammoth task will be completed in seven years. The average depth of the tunnel from surface will be 2,800 ft., and it is designed to test the mineral

deposits of the territory at these great depths. It is estimated by the contractors that the average cost per foot of excavation will be \$80. This makes the total probable expense of digging the tunnel and its subsidiary branches \$20,520,000.

Bridges.—No very great bridge has been constructed since the days of the Forth bridge. In the city of London the Tower bridge over the Thames, near the Tower of London, was opened on June 30, 1894. This is a bascule bridge, its roadway swinging upward in two halves to leave the channel free. Two towers rise, one on each side of the draw, and a bridge crosses from top to top of the towers 141 ft. above the water. Elevators are provided in the towers. The upper level bridge is only used when the bascules are raised to permit the passage of vessels. The clear span is 200 ft. wide. The bridge cost \$5,500,000. In Chicago a somewhat similar structure, crossing the Chicago River at Halsted Street, has been completed. Here, however, the bridge is lifted bodily to permit vessels to pass. There is no upper roadway. The lift can be raised in less than one minute. In New York work on a new bridge over the East River is in progress; another is being projected; and a gigantic suspension bridge of more than 3,000 ft. clear span over the North River is already designed and its construction is authorized by Congress. The Park Avenue improvement in New York City is nearly complete, and consists of a steel 4-track viaduct for carrying the trains of the New York Central and the New Haven railroads to the Grand Central depot. It is a structure of the most solid kind, carried on steel columns, and at its northern end the Harlem River is crossed by a 4-track steel bridge with drawspan, the latter the largest of its kind in the world. The drawspan is 400 ft. long, 58 ft. 6 in. wide, and 64 ft. high in the center, and weighs 2,500 tons.

Miscellaneous.—Tall office buildings in cities embody some of the triumphs of engineering. New York and Chicago have numerous examples. The system of construction involves the erection of a steel frame whose spaces are filled in with brick and stone. The result is a building from 15 to 25 stories high, whose entire weight, except some small portions of the lower stories, is carried by the steel uprights, perhaps not more than 15 or 20 in number. Refrigerating machinery, utilizing the latent heat of vaporization of ammonia, has attained great development, so much so that artificial ice is used most extensively and artificial skating rinks are maintained successfully. The general principle includes the chilling of brine and its circulation through pipes. The latter are the sources of cold, and become covered with a thick coating of ice from the moisture of the air. In the same order Dewar's and Linder's work on the liquefaction of gases make it possible that liquid air may yet be produced on the engineering scale. Steel castings are rapidly coming into use for important members of structures, and open-hearth and Bessemer steel are almost universally used in truss and bridge work. Nickel steel has attained much development and extensive use. Mountain railroads, worked by cable or by rack rails, are constantly being built, especially in Switzerland. Advantage is taken of neighboring waterfalls for the generation of power to operate them by. It is even proposed to build a road to the top of the Jungfrau in Switzerland, which project includes a tunnel and a vertical shaft with elevator.

ENGINEERS, AMERICAN INSTITUTE OF ELECTRICAL, organized Feb. 15, 1884; incorporated at Albany, N. Y., March 16, 1896; headquarters, 26 Cortlandt Street, New York City; membership, April 1, 1897, 1,100; officers 1897-98: President, Dr. Francis B. Crocker, New York City; vice-presidents, Charles P. Steinmetz, Prof. Harris J. Ryan, Prof. Wilbur M. Stine, Dr. A. E. Kennelly, Charles S. Bradley, Prof. Dugald C. Jackson; treasurer, George A. Hamilton;

and secretary, Ralph W. Pope. The institute has published a large list of valuable technical papers.

ENGINEERS, AMERICAN INSTITUTE OF MINING, organized in 1871; officers 1897-98: President, Dr. Thomas M. Drown, South Bethlehem, Pa.; vice-presidents, H. S. Chamberlain, Anton Eilers, Charles Kirehoff, D. W. Brunton, W. E. C. Eustis, James Douglas; treasurer, Theodore D. Rand, Philadelphia; secretary, Rossiter W. Raymond, 13 Burling Slip, New York City. The Institute publishes *Proceedings* of each meeting, annual *Transactions* with *Papers*, and authors' editions of pamphlets. Membership, 2,488.

ENGINEERS, AMERICAN SOCIETY OF CIVIL, organized in 1852; headquarters, 220 West 57th Street, New York City; membership, 2,079; officers 1897-98: President, Benjamin M. Harrod; vice-presidents, William R. Hutton, P. Alexander Peterson, George H. Mendell, John F. Wallace; directors, Augustus Mordecai, Charles SooySmith, George H. Benzenberg, George H. Browne, Robert Cartwright, George A. Just, William Barclay Parsons, Horace See, John R. Freeman, Daniel Bontecou, Thomas W. Symons, James Owen, Rudolph Hering, Henry G. Morse, Benjamin L. Crosby, Henry S. Haines, Lorenzo M. Johnson; treasurer, John Thomson; secretary, Charles Warren Hunt.

ENGINEERS, AMERICAN SOCIETY OF MECHANICAL, organized April 7, 1880; incorporated Dec. 27, 1881; membership, 1,868; officers 1897-98: President, Charles Wallace Hunt, New York City; vice-presidents, E. S. Cramp, Philadelphia, Pa., S. T. Wellman, Cleveland, O., W. F. Durfee, New York City, John C. Kafer, New York City, David R. Fraser, Chicago, Ill., Walter S. Russell, Detroit, Mich.; treasurer, William H. Wiley, 12 West 31st Street, New York City; secretary, Prof. F. R. Hutton, 12 West 31st Street, New York City. The Society publishes *Transactions*, and has quarters at 12 West 31st Street, containing a library, drawing-room, auditorium, social room, and dormitory for non-resident members.

ENGINEER CORPS, U. S. A., the most popular branch of the regular military force of the United States. Since the establishment of the United States Military Academy in 1802 this corps has enjoyed exceptional privileges by law and by usage. Very few persons not graduates of the academy have ever been members of it; it is recruited in general from the honor men, or the five cadets with the highest standing in each graduating class; by law it furnishes one of the three commissioners of the District of Columbia (act of July 11, 1878), and by usage, the superintendent of the United States Military Academy (Col. Oswald H. Ernst in 1898), and the superintendent of the public buildings and grounds at the national capital (Col. John M. Wilson in 1898); and to it is intrusted the expenditure of the large annual appropriations for the improvement of rivers and harbors. In 1898 the corps comprised a chief of engineers with the rank of brigadier-general, 6 colonels, 12 lieutenant-colonels, 24 majors, 30 captains, 26 first lieutenants, 10 second lieutenants, 6 additional second lieutenants, and 500 enlisted men.

ENGLAND, principal portion of the island of Great Britain and of the United Kingdom of Great Britain and Ireland. The principality of Wales is administratively a part of England, and both are here treated as one.

Population.—By census of 1891 England had an area of 50,867 square miles, and a population of 27,483,490, and Wales an area of 7,412 square miles, and a population of 1,519,035—together 58,309 square miles, and 29,002,525 population; and on June 1, 1895, the combined population was estimated at 30,394,078.

Nearly one-sixth of the combined population are concentrated in the metropolis of London, which, June 1, 1895, had a population in the inner or registration district of 4,392,346, and in the "outer ring," 1,656,209, giving the "Greater London" a total of 6,048,555.

Education.—In 1895 there were 3 universities, Oxford, Cambridge and Durham, which together had 43 colleges, 211 professors and instructors, and 1,901 students. London University, an examining body only, had 81 examiners, who examined 6,219 candidates for its degrees. The Victoria University is an association of Owens College, Manchester, University College, Liverpool and Yorkshire College, Leeds. There are 15 other colleges, with 757 professors and instructors, and 11,778 students; 5 university colleges for women—Newnham and Girton in Cambridge, Lady Margaret and Somerville Halls, Oxford, and Bedford College, London, which together had 569 students, and, excluding the Halls, 74 instructors; medical schools in several of the universities and colleges and attached to the hospitals of most of the large towns in England; and a Technical Institute in London with Central and Intermediate Colleges, having together at the beginning of 1896, 58 instructors and 1,920 students; a School of Technical Art, London, with 7 instructors and 136 students; and a Leather Trades School, London, with 11 instructors and 300 students. During the four years ending March 31, 1894, there was expended on technical and intermediate education in England and Wales the sum of £1,508,958 (\$7,333,535). In that year there were 5,151 elementary day schools under the supervision of public school boards; 11,897 National Society schools; 985 Roman Catholic; 503 Wesleyan; and 1,229 British, undenominational, and others; a school population (5 to 15 years) of 6,838,130; an average daily attendance of 4,225,834 pupils; 50,689 certificated teachers; 26,067 assistant teachers; 28,379 pupil teachers; and 44 residential and 14 day training schools, with 4,281 students. The amount expended from parliamentary grants for primary schools in 1895 was £6,227,696 (\$30,266,602). Adding to regular grants the receipts from endowments and other sources, the total income of the elementary schools inspected in 1894 was £8,780,368 (\$42,672,588).

Taxation.—Of the gross value of property and profits assessed for income tax in the United Kingdom for the year ending April 5, 1894, £706,130,875, the share of England and Wales was £602,388,699, the assessment of land being £40,065,831, houses, £131,860,499, mines, £10,809,842, railways, £29,956,168, and ironworks, £1,355,718. The payments to local taxation accounts from the collections by imperial officers for local authorities in the year ending March 31, 1895, were, from additional beer and spirit duty, £1,052,473, licenses, £3,203,362, and the share of probate and estate duties £1,720,447—total, £5,976,282. The amount raised for local expenditure in the fiscal year 1892-93 (the last for which returns were available in May, 1896) was £67,512,942 (\$328,112,898), and amount expended £66,761,039 (\$324,458,649). The estimated expenditure of the London County Council for the year ending March 31, 1896, was, maintenance account, £3,695,761; capital account, £7,365,820; and the consolidated stock in 1895 was returned at £33,511,638.

Customs.—The customs revenue received at the principal ports of England and Wales during 1894 was as follows: London, £9,183,976; Liverpool, £2,999,751; Bristol, £1,386,208; other ports, £2,741,744—total, £16,311,679 (\$79,274,759).

Army.—Of the total effectives of the army, 78,563 officers and men and 9,795 horses and mules were on duty in England and Wales. The establishments for military education are the Royal Military Academy at Woolwich, estimated cost

of maintenance in 1895-96, £34,100; the Royal Military and Staff College at Sandhurst, estimated cost in 1895-96, £43,600; the Royal Military Asylum and Normal School at Chelsea; and special artillery, medical, and garrison schools.

Live Stock.—Returns for 1895 showed in England, 1,184,747 horses, 4,472,565 cattle, 15,557,571 sheep, and 2,471,020 swine; in Wales, 153,158 horses, 703,824 cattle, 3,000,841 sheep, and 260,091 swine—total, 1,337,905 horses, 5,176,389 cattle, 18,558,412 sheep, and 2,731,111 swine. For agricultural products, see BRITISH EMPIRE: UNITED KINGDOM.

Fisheries.—Excluding shellfish and salmon, the catch of the fisheries in 1895 was 363,154 tons, valued on landing at £5,128,204, and the value of all fish excepting salmon was £5,435,202 (\$26,315,081).

Coal.—The total product of the United Kingdom in 1894 was 188,277,525 tons, of which the districts of Durham, N. and S., yielded 32,556,924; Glamorgan, 23,993,594; Yorkshire, 23,416,184; Lancashire, 23,125,983; Staffordshire, 13,230,238; Derbyshire, 11,472,579; Northumberland, 9,511,199; Monmouthshire, 8,213,156; and Nottinghamshire, 6,821,830—in all, 152,401,687. The exports of coal, coke, and fuel during the year amounted to 11,537,585 tons, valued at £6,589,643, from Cardiff, and a total of 26,315,081 tons, valued at £6,269,050, from seven other ports—in all 37,852,666 tons, value, £12,858,693 (\$62,493,247).

Commerce.—During 1894 the imports of foreign merchandise at the ports of England and Wales amounted in value to £366,441,000 (\$1,780,903,260); and the exports of British and foreign and colonial merchandise to £251,526,000 (\$1,222,416,360); total trade equal to \$3,003,319,620.

Communications.—On Jan. 1, 1895, there were 11,536 miles of railway in operation in England and Wales; the capital of these railways aggregated £811,814,465 (\$3,945,418,299); and their share of the total receipts was £71,934,167. There were 2,026 miles of canals not belonging to railway systems and 1,024 miles so owned, a total of 2,050 miles, and the capital of all canal companies not parts of railway systems exceeded £21,000,000. During the year ending March 31, 1895, the numbers of letters delivered at post-offices was 1,502,000,000, postal cards, 271,600,000, book-packets, 522,500,000, newspapers, 117,500,000, parcels, 47,200,000, and inland money orders, 7,658,756, value £21,040,022. Messages forwarded from postal telegraph stations numbered 60,216,708.

Banking.—In October, 1895, there were 100 joint stock banks, making returns in England and Wales, with 2,677 branches, which combined had deposits £485,277,000, cash in hand and at call £144,163,000, and reserve notes in the Bank of England £25,983,000. London had 30 offices of colonial joint stock banks and 24 of foreign banks. There were 39 private banks in England and Wales, with partners capital and reserve £11,901,131 and deposits £69,170,171. The post-office savings banks had capital £81,960,372, received £29,602,953, and paid £21,919,841; and trustees' savings banks at the end of 1894 had capital £728,586,913, received £6,439,860, paid £9,652,399, and credited interest £743,891.

ENGLISH, THOMAS DENN, M.D., LL.D., journalist, was born in Philadelphia, Pa., June 29, 1819. He retired from a double-term service as a Democratic representative in Congress from New Jersey on March 4, 1895; composed a patriotic march song, entitled *Old Glory*, the same year; and was defeated for commissioner of the board of public works of Newark, N. J., April 14, 1896. He is most widely known as the author of the song *Ben Bolt*.

ENGLISH, WILLIAM HAYDEN, capitalist and politician, was born in Lexington, Ind., Aug. 7, 1822; died in Indianapolis, Ind., Feb. 7, 1896. At the time of his

death he was president of the Indiana Historical Society, having retired from politics after his defeat as Democratic candidate for vice-president of the United States in 1880. He left an estate valued at \$2,000,000, and bequeathed \$2,500 to the historical society unconditionally and \$1,000 to complete and publish his *History of Indiana*.

EOPHONE, an instrument designed to enable vessels to navigate safely in a fog; invented by Frank de la Torre, of Baltimore, Md., and perfected in 1896. It consists of two bell-mouthed sound receivers, separated by a central diaphragm, and in use the receivers are connected by short flexible tubes with the ears of the lookout or observer. When the instrument is pointed directly at a source of sound, the noise is heard equally clear in each ear; when pointed otherwise, the noise is heard in the ear nearest the source only; and by shifting the instrument the range of any sound may be obtained readily. The eophone, which has been subjected successfully to severe tests at Baltimore and elsewhere, can be placed on any vessel without altering the arrangement of its chart-house.

EPWORTH LEAGUE, society of young members and friends of the Methodist Episcopal Church, organized in May, 1889. On Oct. 1, 1897, it had 23,768 chapters, all but 252 in the United States, and an aggregate membership of 1,650,000. The officers are, President, Bishop William X. Ninde, Detroit, Mich.; vice-presidents, Department of Spiritual Work, Rev. William I. Haven, Brookline, Mass.; Department of Mercy and Help, Rev. E. M. Mills, D.D., Elmira, N. Y.; Department of Literary Work, R. R. Doherty, Ph.D., New York City; and Department of Social Work, John A. Patton, Chattanooga, Tenn.; general secretary, Rev. Edwin A. Schell, 57 Washington Street, Chicago, Ill.; and general treasurer, Charles E. Piper, Stock Exchange Building, Chicago. The central office is in Chicago, and the organ is the *Epworth Herald*, published weekly.

The Methodist Episcopal Church, South, has an Epworth League also; organized in Memphis, Tenn., in 1891; central office in Nashville, Tenn.; organ, the *Epworth Era*; strength 1897, 3,825 chapters, 175,200 members. The officers are: President, Bishop R. K. Hargrove, Nashville; 1st vice-president, Rev. J. E. Harrison, San Antonio, Tex.; 2d vice-president, Rev. J. W. Newman, Birmingham, Ala.; 3d vice-president, Prof. W. R. Webb, Bellbuckle, Tenn.; general secretary, Rev. S. A. Steel, Nashville; and treasurer, J. U. Rust.

ERBEN, HENRY, naval officer, was born in New York City, Sept. 6, 1832. On June 1, 1893, while holding the lineal rank of commodore in the United States navy, he was appointed commander of the European squadron, with the temporary rank of rear-admiral. He made a tour with Capt. Mahan in the cruiser *Chicago*, that was noteworthy because of the honors paid the United States officers by the British authorities and people. Earl Spencer, first lord of the admiralty, gave Admiral Erben and his officers a banquet, Aug. 9, 1893; a public banquet was given them in London in May, 1894; the Prince of Wales received them cordially at a state levee, June 4; and the admiral and his officers returned the courtesies by a grand reception on board the *Chicago* at Gravesend, June 11. On Aug. 2, following, Acting Rear-Admiral Erben was promoted to the full lineal rank, and on Sept. 6 he was retired, having reached the age of 62 years.

ERIE, city, capital of Erie county, Pa.; population (1890) 40,634; (1897) estimated 52,000. On Jan. 1, 1897, it had a total bonded debt (including water debt \$517,012) of \$841,700. The city owned real estate and personal property valued at \$2,311,715, including the water plant \$1,375,000, public school property, \$651,990, and city hall \$170,000; and the total assessed valuations

(1896) aggregated \$17,602,361; tax rate, \$21.50 per \$1,000. In 1897 there were 3 national banks with capital \$600,000, deposits \$3,666,567, and resources \$5,278,-853; an electric motor line, having a perpetual franchise for all the city streets; and 5 daily and 12 weekly newspapers.

ERYTHREA, a colony of Italy in East Africa; bordering on the Red Sea; area, about 48,700 square miles; coast line, 670 miles; population (1893) estimated 191,127 natives, mostly nomads, and 3,452 Europeans; capital, Massowah. For the fiscal year 1895-96 the revenue and expenditure of the colony were estimated at 11,700,000 lira (\$2,258,100), the revenue from the colony being 1,700,000 lira and the contributions of Italy 10,000,000; and the total expenditure of Italy on account of the colony in 1894-95 was 13,727,684 lira (\$2,649,443). In 1895 there were 17 miles of military railway from Massowah to Saate, and of telegraph 319 miles from Massowah to Assab and 62 miles from Assab to Perim. During the commercial year 1894 Massowah had imports by land and sea valued at 11,609,-944 lira (\$2,240,719), and 1,859 vessels of 147,071 tons entered the port and 1,882 vessels of 147,660 tons cleared there. In 1897 the Italian government decided to gradually transform Erythrea from a military to a civil and commercial colony, and to reduce the military occupation to a force stationed at Massowah. A commissioner was appointed to delimit the Italo-Abyssinian frontier, and in November Italy surrendered possession of Kassala to Egypt. See ABYSSINIA; DONGOLA; ITALY.

ETHNOLOGICAL SOCIETY, AMERICAN, founded in 1842; headquarters and library, American Museum of Natural History, Central Park, New York City; officers, 1897-98: President, Charles E. West, M.D., LL.D.; vice-presidents, Charles P. Daly, LL.D., and Henry Drisler, LL.D. (died 1897); corresponding secretary, Albert S. Bickmore, LL.D.; recording secretary, T. Stafford Drown, D.D.; treasurer, Henry T. Drown; librarian, Anthony Woodward, M.D.

EUGENIE MARIE DE GUZMAN, COUNTESS OF TEBA, now calling herself the COUNTESS DE PIERREFOND, ex-empress of the French, was born in Grenada, Spain, May 5, 1826. She still spends the greater part of her time at Camden House, Chislehurst, England, where the remains of her husband and son are entombed, though she owns an estate in Hampshire. In 1894 Emperor William of Germany created a profound sensation throughout his empire by paying the ex-empress a visit, attired in a British uniform. The same year the publication in Paris by Comte Maurice d'Herisson of a book entitled *The Prince Imperial, Napoleon II.*, recalled more sharply the personality of the former imperial family, by the author's assertion that the prince was driven by his mother's treatment to self-banishment and death—if he is really dead—and the belief that the prince was either murdered in Africa during the Zulu war or that he is alive and kept from returning for political purposes. Comte d'Herisson was quite positive that it is not the prince's body that rests in the tomb with Napoleon III.

EUREKA COLLEGE, Eureka, Ill., founded in 1857; Disciples of Christ; co-educational; had at the close of 1897, 15 professors and instructors; 210 students; 5,000 volumes in the library; over \$100,000 invested in grounds and buildings; \$45,000 in productive funds; \$38,000 income; president, J. H. Hardin, A.M., LL.D.

EUSTIS, JAMES BIDDLE, diplomatist, was born in New Orleans, La., Aug. 27, 1834; became the first United States ambassador to France in 1893. His most important service at this post was in connection with John L. Waller, ex-United States consul to Madagascar, who was court-martialed and sentenced to 20 years' imprisonment under conviction of having illegally communicated with the Hovas

during the French campaign. After a prolonged correspondence, the ambassador secured his pardon and release from prison, as an act of comity on the part of the French government toward that of the United States in February, 1896. In the diplomatic world of Paris the grant of the pardon was regarded as a high personal compliment to the United States ambassador.

EVANGELICAL ASSOCIATION, a religious organization founded in the United States by Jacob Albright in 1800; had in 1890, 22 conferences in the United States and 4 in foreign countries; 2,310 organizations in all; 1,899 church edifices; 133,313 members of the United States, and church property valued at \$4,785,680; and was strongest in Pennsylvania. Owing to a division, it had lost about 40,000 members at the time of the General Conference in 1895, and then had about 790 ministers and 1,945 church edifices in the United States, and a grand total of 938 ministers, 2,112 church edifices, and 112,353 members. The missionary receipts of 1895 were \$135,538, and of the four years ending with that year, \$543,774; and the expenditures in the last period were \$600,209. The home missionary field had 497 stations with a missionary at each, and 39,609 members, and during the year 16 missions were made regular stations, 42 new missions were established, and 6,662 members received. The foreign field had 84 stations, 119 missionaries, and 11,829 members, of whom 1,226 were received during the year. The denomination had a publishing house in Cleveland, O., with a branch in Stuttgart, Germany; 17 pastoral charges, 19 missionaries, and 727 members in Japan; a Deaconesses' Home in connection with the European mission; and a Young People's Alliance, with 19 conference branches, 768 local alliances, and 28,743 members.

The UNITED EVANGELICAL CHURCH, organized from the Evangelical Association in 1894, had in 1896, 408 ministers, 521 church edifices, and 55,118 members.

EVANS, ROBLEY D., naval officer, was born in Virginia, in 1846. After a brilliant service during the civil war, he was promoted to the rank of captain in the navy, June 27, 1893, and appointed commander of the cruiser *New York*, then considered the most important command afloat, July 19, 1894, and of the battleship *Indiana*, Aug. 23 following. He superintended the completion of the last vessel, the pioneer of the 10,200-ton class of new war vessels, which, on her speed trial Oct. 18, 1895, made an average of nearly 16 knots an hour and on a spurt 17 knots. In March, 1898, at his own request, he was detached from lighthouse duty and placed in command of the battleship *Iowa*.

EVANSVILLE, city, capital of Vanderburg county, Ind.; population (1890) 50,756; (1895) estimated 65,000. In 1895 the assessed valuations were: Real, \$18,559,020; personal, \$7,193,030—total, \$25,752,050; and total tax rate, \$27.80 per \$1,000; in 1896 the valuations aggregated \$26,700,000; and in 1897 the total bonded debt (including water debt \$400,000) was \$2,118,000, besides balance of an old bonded debt, \$37,000 and railroad-aid bonds, \$15,000. In 1897 there were 3 national banks with a combined capital of \$1,200,000, deposits \$2,895,971, and resources \$5,968,548; a trolley line operating 27½ miles of track; and 5 daily, 7 weekly, and 4 monthly periodicals.

EWING, THOMAS, military officer and lawyer, was born in Lancaster, O., Aug. 7, 1829; died in New York City, Jan. 21, 1896.

EXPLOSIVES. Gunpowder is a mechanical mixture of carbon, sulphur, and potassium nitrate, and may be termed the first explosive. It has been greatly improved during the last decades. The first improvements were in the direction of increasing the intimacy of the mixture, and of regulating the size of the grain

by first agglomerating the mass by pressure and then crushing it into granular condition. The varying conditions of modern ordnance practice and of blasting require powder of varying rapidity of combustion. This variation is secured by different sizes of the grains of powder, by varying its density, and by varying the coating of the grains. Larger size of grain gives a slower combustion. A slower combustion and sustained pressure are obtained also by increasing the carbon and potassium nitrate and reducing the sulphur. Sometimes partially carbonized wood is used instead of carbon, giving a brown instead of black powder (cocoa powder). Common powder is now formed into regular geometrical shapes and gives extraordinarily accurate results. It produces from 14 to 18 tons pressure per square inch and gives a muzzle velocity of from 1,900 to 2,000 ft. per second.

Gun cotton is a chemical compound $C_6H_7O_2(NO_2)_3$. It is made from the best white cotton by treatment with nitric acid, three hydroxyl groups being replaced by three NO_2 groups. After a number of hours' treatment with acid the wet mass is passed through a centrifugal machine to expel acid, is washed, neutralized, cut up by machinery into a mass of fibers, and finally it is compressed, eventually to five tons to the square inch. The utmost care and attention to detail is required. Gun cotton can be exploded by a detonating fuse of fulminate. Simple ignition is not reliable, only effecting its detonation under special conditions. The pressure produced by gun cotton in its explosion has been put as high as 160 tons to the square inch. The detonation varies in violence with the strength of the detonator. Nitroglycerine is a chemical compound $C_3H_5(NO_2)_3$, made by mixing glycerine with nitric and sulphuric acids. Just as in the case of gun cotton, three hydroxyl groups are replaced by NO_2 groups. The nitroglycerine rises to the surface of the mixed acids, and is removed and purified. Six cubic inches on explosion gives a cubic yard of gas, and it can produce 13 times the pressure which gunpowder can develop. Dynamite is a mixture of nitroglycerine with infusorial silica or other inert porous material. When partly carbonized wood is used as the absorbent the substance is called carbo-dynamite. By mixing gun cotton and nitroglycerine, a union takes place and a jelly-like substance called explosive gelatine is produced, which has been used extensively. In this the violent properties of both constituents are modified.

The smoke of ordinary powder is due largely to the presence of potassium nitrate. It was early attempted to dispose of the smoke by substituting ammonium nitrate for the potassium salt. These powders were found unreliable and apt to vary in action, however tightly sealed in the cartridges. Many attempts were made to use gun cotton, pure or mixed with plain cotton, as a smokeless powder for guns without success. Granulated wood, treated with nitric and sulphuric acids in a way analogous to that followed in making gun cotton, and after purification mixed with some nitrates, attained considerable popularity, under the name of Schultze powder, as a sporting powder. Another powder was made from gun cotton mixed with barium and potassium nitrates, and gelatinized by a mixture of benzole, alcohol, and ether (E.C. powder). An E.C. powder No. 2 used lower nitrated cellulose (soluble gun cotton) and camphor. These powders left a somewhat troublesome residue, and were not absolutely smokeless. By dissolving gun cotton and by proper additions, bringing about a gelatinous condition, a glue-like consistency is obtained, which insures slow combustion. Some of the most successful smokeless powders are made on these lines. Some very successful ones have been based on explosive gelatine. The present smokeless powders fall under two general heads: (a) Gelatinized gun cotton powders;

(b) gelatinized nitroglycerine powders. The explosive properties are modified by addition of oil, vaseline or a similar compound, and also by the shape given to the finished compound. Sometimes it is formed into long cylinders like thread or cord. Thus the British service powder, "cordite," named from the shape given the finished product, is a compound of 58 parts nitroglycerine, 37 parts gun cotton, and 5 parts vaseline. Thin cords give quicker explosion. It is brought into a gelatinous condition by solution in acetone. Picric acid, $C_6H_2(NO_2)_3OH$, representing phenol in which three hydrogen atoms are replaced by three NO_2 groups, has received much attention as a base for explosives. The famous French Melinite had this as its basis. Picric acid can be exploded by heat or other means, and can be used in combination with bases also.

From what has been said it appears that a mechanical mixture, gunpowder, was the first explosive in point of time, and may be made the starting point of a division of the family. Next we come to explosive nitrated chemical compounds—gun cotton, nitroglycerine, picric acid, and others. Ammonium nitrate powders come under the first division. Then gelatinized gun cotton and gelatinized nitroglycerine and gelatinized mixtures of gun cotton and nitroglycerine, made by solution, and sometimes with their properties modified by the addition of camphor, glycerine, or other substances, come in as the representatives of many modern smokeless powders. The picric-acid compounds form another class. Finally what may be termed the miscellaneous class of modern explosives must be considered. These form a very numerous family, of which only a few can be cited as examples. Rack-a-rock is a mixture of potassium chlorate and petroleum oil or nitrobenzole, which is made on the spot immediately before use. Hellhoffite is a mixture of nitrated tar oils with the strongest nitric acid. Oxonite contains picric acid and nitric acid, which are mixed before use as with rack-a-rock. Sprengel explosives are mixtures of nitrated hydrocarbons and ammonium or potassium nitrate. A typical example is roborite, a mixture of ammonium nitrate with chlorinated meta-di-nitrobenzole. Others are bellite and securite, both mixtures of ammonium nitrate and nitrobenzole.

FAIRBAIRN, ROBERT BRINCKERHOFF, clergyman, educator, and author, was born in New York City, May 27, 1818. His last publications are *The Oblation and the Invocation* (1894) and *The Unity of the Faith* (1895).

FAITHFULL, EMILY, reformer and author, was born in Headley, Surrey, England, in 1835; died in Manchester, England, May 31, 1895.

FALL RIVER, city, Bristol county, Mass.: population (1890) 74,398; (1895) State census, 89,203. In 1896 the assessed valuations were: Real estate, \$41,935,800; personal, \$27,350,696—total, \$69,286,496; tax rate, \$17 per \$1,000. The municipal bonded debt Jan. 1, 1897, was \$2,260,500, permanent loan, \$73,905; less special loans, \$520,000, total debt, \$1,814,405. sinking fund, \$440,227, net debt, \$1,374,178, water debt additional, \$1,900,000, water sinking fund, \$456,586, and total net debt, \$2,817,592. There were 7 national banks with combined capital \$2,150,000, deposits \$3,242,637, and resources \$8,022,354, and during the year the exchanges at the United States clearing house aggregated \$44,827,640, an increase of \$2,049,329 in a year. The city has a manufacturing capital of over \$25,000,000; 81 mills with 2,833,691 spindles and 67,352 looms; a trolley line operating about 30 miles of track; and 4 daily and 6 weekly newspapers.

FRARGO, city, capital of Cass county, N. D., population (1890) 5,664; (1896) estimated 12,000. In 1896 the assessed valuations were: Real estate, \$1,927,887; personal, \$615,688—total, \$2,543,575; total tax rate, \$58 per \$1,000; and Jan. 20, 1897, the bonded debt was \$194,000, floating debt \$20,000, sinking funds

\$38,000, and net debt \$176,000. There is also an outstanding water debt of \$40,000, payable from water rents. There are 3 national banks with combined capital of \$275,000, deposits \$1,160,212, and resources \$1,835,034; and 2 daily, 2 weekly, and 3 monthly periodicals.

FARLEY, JAMES M., clergyman, was born in Newtown Hamilton, Ireland, about 1845. He was graduated at St. John's College, Fordham, N. Y., in 1860; completed his studies for the Roman Catholic priesthood and was ordained in Rome, Italy, in 1870; was secretary to Archbishop McCloskey, of New York, in 1872-84; and became papal private chamberlain in 1883, vicar-general of the archdiocese of New York in 1891, domestic prelate in 1892, and protonotary apostolic and auxiliary bishop of New York in 1895.

FARMER, LYDIA HOYT, author, was born in Cleveland, O. Her publication, *The Doom of the Holy City* (1895), was dedicated by permission to William E. Gladstone, and the manuscript formed the basis of several popular readings in 1894.

FARRAR, FREDERICK WILLIAM, D.D., LL.D., clergyman and author, was born in Bombay, India, Aug. 7, 1831. In 1895 he was appointed dean of Canterbury and chaplain to the Speaker of the British House of Commons. His last publications include *The Second Book of Kings* and *The Life of Christ as Represented in Art* (1894); *The Book of Daniel* (1895); *Gathering Clouds* (1896); *The Bible: Its Meaning and Supremacy, Lectures on Ecclesiastical History, Sin and Its Conquerors* (1897), etc.

FAURE, FRANCOIS FELIX, President of the Republic of France, was born in Paris, Jan. 30, 1841. He entered political life as a member of the Chamber of Deputies from Havre in 1881; became under-secretary of state for commerce and the colonies in 1881, 1883, and 1888, and minister of marine in 1894; and was elected president of the republic Jan. 17, 1895, by 430 votes against 361 for Henri Brisson, to succeed Jean Paul Pierre Casimir-Périer (*q. v.*), resigned. In December, following, hated by underhand attacks on his social standing, he caused it to be made public that his father-in-law had been found guilty of malversation in 1841, that the wife and daughter were completely ruined by the act, and that he had married the daughter with a full knowledge of her father's history. He had apprised the foreign ambassadors of these facts at the time of his election to the presidency and no foreign power had protested. His act of thus replying to the attacks was widely approved. In 1897 he consented to arbitrate the frontier dispute between Costa Rica and Colombia.

FAWCETT, EDGAR, author, was born in New York City, May 26, 1847. His late publications include *Her Fair Fame and Outrageous Fortune* (1894); *The Ghost of Guy Thyrle* (1896); *Romance of Old New York* (1897), etc.

FAWCETT, MILLCENT GARRETT, author and reformer, was born in Aldeburgh, Suffolk, England, June 11, 1847. Her last publication is *Life of Her Majesty Queen Victoria* (London and Boston, 1895).

FEEBLE-MINDED. THE, a defective class of children for whom educational advantages are provided by special State institutions. The last report of the United States Commissioner of Education shows that in the school year 1895-96 there were in the United States 18 such institutions with 37 male and 168 female teachers; 416 assistants for caring for the inmates; 3,974 male and 3,678 female inmates; 500 inmates in kindergartens, and 1,007 in music; grounds and buildings valued at \$4,258,436; receipts of the year, \$1,289,267, and expenditures \$1,380,513. Several State institutions are for the feeble-minded, irrespective of

age or sex; some are for women or for children only; and one, Washington, is for defective youth generally.

FENN, GEORGE MANVILLE, author, was born in London, England, in 1830. His last publications include *First in the Field*, *The Vast Abyss*, and *A Life's Eclipse* (1894), and *Diamond Dyke*, *Cormorant Crag*, and *The Young Castellan* (1895); *Cursed by a Fortune and Vice*, *the Rebel* (1897,) etc.

FERDINAND MAXIMILIAN, DUKE OF SAXONY, Prince of Bulgaria, was born in Vienna, Austria, Feb. 26, 1861. In his eagerness to secure the friendship of Russia, and the recognition of the Great Powers as the ruler of Bulgaria, he brought about the conversion of his son, Prince Boris (born Jan. 30, 1894), from the Roman Catholic to the Orthodox Greek faith on Feb. 14, 1896. The same month Turkey recognized his election as ruler and urged the other interested Powers to do so, and in April following, the acts of reconciliation and recognition were completed by his being received and dined by the czar and received by the diplomatic corps at St. Petersburg. For events leading to his recognition, see BULGARIA.

FIELD, EUGENE, author, was born in St. Louis, Mo., Sept. 2, 1850; died in Chicago, Ill., Nov. 4, 1895. Soon after his death a collected edition of his writings was begun, and it was proposed to ask the children of the United States to contribute a cent each toward a monument fund for the creator of *Wyandott*, *Blythen*, and *Nod*.

FIELD, HENRY MARTYN, clergyman, editor of *The Evangelist*, and author, was born in Stockbridge, Mass., April 3, 1822. His last publication of travels is *Our Western Archipelago* (1895).

FIJI, a British colony in the South Pacific ocean, comprising over 200 islands, of which about 80 are inhabited; gross area, 8,045 square miles; population (1891) census, 121,180; (Jan. 1, 1895) estimated 121,867; capital, Suva, on Viti Levu island. In 1894 the revenue was equivalent to \$389,162 and expenditure \$350,911, and the estimated revenue for 1895 was \$366,113 and expenditure \$358,770. The public debt comprised a loan of \$615,276 and advances from the imperial government of \$489,290—total, \$1,104,566. During 1894 the imports, chiefly hardware, breadstuffs, coal, timber, and machinery, aggregated in value \$1,389,867, and the exports, chiefly sugar, copra, bananas, desiccated cocoanuts, peanuts, and cotton, \$2,826,828—total trade, \$4,216,695. The industries comprise (1) agriculture, under which reports for 1894 showed area in bananas 1,401 acres, cocoanuts 18,603, sugar cane 19,382, tea 410, yams 306, maize 299, sisal hemp 160, and peanuts 153, and animals, 1,538 horses and mules, 9,386 cattle, 4,130 sheep and 2,680 Angora goats; and (2) manufacturing, under which there were 9 sugar mills, 2 tea factories, 2 desiccated cocoanut factories, a tobacco factory, and 14 boat-building yards. The principal religious and educational work is done by the Wesleyan Mission, which in 1894 had 10 European missionaries, 65 native ministers, 58 catechists, 1,110 teachers, 2,018 local preachers, 4,636 class leaders, 941 churches, 379 other preaching places, and an attendance at worship of 98,297. The mission had 1,942 schools for the education of native Fijians, which were attended by 36,158 children. The Roman Catholic Mission had 26 European priests, 187 native teachers, 83 churches and chapels, 4 training schools, a church attendance of 9,700, 143 day schools for natives with 2,010 pupils, and 3 schools for Europeans with 112 pupils. The government maintains 2 public schools and an industrial and technical school, in which special attention is paid to boat-building, house-building, and cattle-rais-

ing. Communication is facilitated by 10 registered sailing vessels, 196 local sea-going vessels, and an inter-island steam vessel, and by ocean steamers connecting monthly with New Zealand, monthly with Samoa, semi-monthly with New South Wales, and monthly with Sydney and Vancouver, B. C.

FINANCES, NATIONAL. The receipts of the United States government during the calendar year 1897 aggregated \$397,858,377.15 and the expenditures \$378,566,482.88; surplus, \$19,291,894.27. During the calendar year 1896 the receipts were \$315,328,310.08 and the expenditures \$361,785,083.26; excess of expenditures, \$49,456,773.18. In 1897 the receipts were from the following sources: Customs, \$171,744,494.56; internal revenue, \$154,871,758.34; miscellaneous, \$71,242,124.25, and the expenditures were for the following purposes: Civil and miscellaneous appropriations, \$92,411,350.80; war, \$56,443,092.17; navy, \$34,250,426.94; Indians, \$11,767,787.49; pensions, \$145,590,378.38; and interest, \$38,103,447.10. For other details, see **COMMERCE OF THE UNITED STATES: CURRENCY: DEBT, NATIONAL: INTERNAL REVENUE.**

FINDLAY, city, capital of Hancock county, O.; population (1890) 18,553; (1895) estimated 21,500. In 1896 it had a total assessed valuation of \$6,355,140, and total tax rate \$30 per \$1,000; and on Nov. 15, 1896, a total debt (including water debt \$338,500) of \$754,080, cash on hand \$34,512, and net debt \$719,168. In 1897 the city had 3 national banks, with combined capital of \$365,000, deposits, \$913,707, and resources, \$1,432,892; a trolley and horse railway operating 13 miles of track; and 3 daily and 5 weekly newspapers.

FINDLAY COLLEGE, Findlay, O., founded in 1882; Church of God; co-educational; had at the close of 1897, 10 professors and instructors; 216 students; 1,500 volumes in the library; \$65,000 invested in grounds and buildings; \$39,000 in productive funds; \$2,000 in gifts; \$7,100 in income; president, Rev. C. Manchester, A.M.

FINLEY, MARTHA (pen name MARTHA FARQUHARSON), author, was born in Chillicothe, O., April 26, 1828. Her last publications include *Elsie at the World's Fair* and *Mildred's New Daughter* (1894); *Elsie's Journey on Inland Waters* (1895); *Elsie at Home* (1897), etc.

FISKE, BRADLEY A., naval officer, was born in Lyons, N. Y., June 13, 1851. He was appointed a cadet midshipman in the United States navy Sept. 24, 1870; became a lieutenant Jan. 26, 1887; invented a boat-detaching and attaching apparatus for warships in 1877, the first electric ammunition used in the navy in 1888, electric gun-training apparatus and electric steering-gear the same year, range and position finders in 1889, improvements of the range finder and electric steering-gear in 1895, and an electrical apparatus for transmitting the orders of a ship's commander from the deck bridge to the engine room in 1896; and has been attached to the naval Bureau of Ordnance since April 20, 1895. His *Electricity and Electrical Engineering* has passed through several editions.

FISKE, JOHN, LL.D., LL.D., historian, was born in Hartford, Conn., March 30, 1842. His last publications include *Edward L. Youmans, Interpreter of Science for the People* (1894); *A History of the United States for Schools* (1895); *The American Revolution* (2 vols., 1896); *The Critical Period of American History and Old Virginia and Her Neighbors* (1897), etc.

FISS UNIVERSITY, Nashville, Tenn., founded in 1867; Congregational; co-educational; irrespective of color; had in 1897, 29 professors and instructors; 465 students; 6,388 volumes in the library; preparatory school, common English

department, college of liberal arts, theological school, industrial school, and school of music; grounds and buildings valued at \$350,000; productive funds, \$50,000; gifts, \$36,365; income, \$37,000; president, Erastus Milo Cravath, D. D.

FITCHBURG, city, capital of Worcester county, Mass.; population (1890) 22,037; (1895) State census, 26,394. In 1896 the assessed valuations were: Real estate, \$16,113,647; personal, \$4,660,212—total, \$20,773,859; tax rate, \$19.20 per \$1,000; and total debt (including water debt \$736,000) \$1,798,500, sinking funds, chiefly in city bonds, \$292,225; net debt, \$1,506,275. There are 4 national banks, with a combined capital of \$950,000, deposits \$2,379,034, and resources \$4,660,783; a trolley line operating over 13 miles of track; and a weekly, a monthly, and 2 daily periodicals.

FLOQUET, CHARLES THOMAS, ex-premier of France, was born in Saint-Jean-de-Luz, Oct. 5, 1828; died in Paris, Jan. 18, 1896. He had not been active in politics since 1893.

FLORENCE, city, capital of Tuscany, Italy; population (Dec. 31, 1893) 200,300. During the 9 months ending Sept. 30, 1895, the exports declared here for the United States aggregated in value \$1,186,146.72, principally straw goods (\$813,847), hemp (\$143,316), marble statuary (\$61,577), paintings (\$38,869), alabaster statuary (\$25,923), and unclassified works of art (\$15,929).

FLORIDA, one of the United States of North America; admitted to the Union March 3, 1845; seceded Jan. 10, 1861; readmitted July 4, 1868; counties, 45; capital, Tallahassee.

State Officers, 1897-1901—Governor (elected for 4 years, salary \$3,500 per annum), William D. Bloxham; secretary of state, John L. Crawford; treasurer, James B. Whitfield; comptroller, W. H. Reynolds; superintendent of public instruction, W. N. Sheats; commissioner of agriculture, L. B. Wombwell; attorney-general, W. B. Lamar; adjutant-general, Patrick Houstoun; chief justice of the supreme court, R. Fenwick Taylor; associate justices, Milton H. Mabry and F. B. Carter; clerk of court, B. B. Wilson—all Democrats.

Legislature, 1897.—All Democrats, excepting 1 Populist in senate and 2 in house, and 3 Republicans in house.

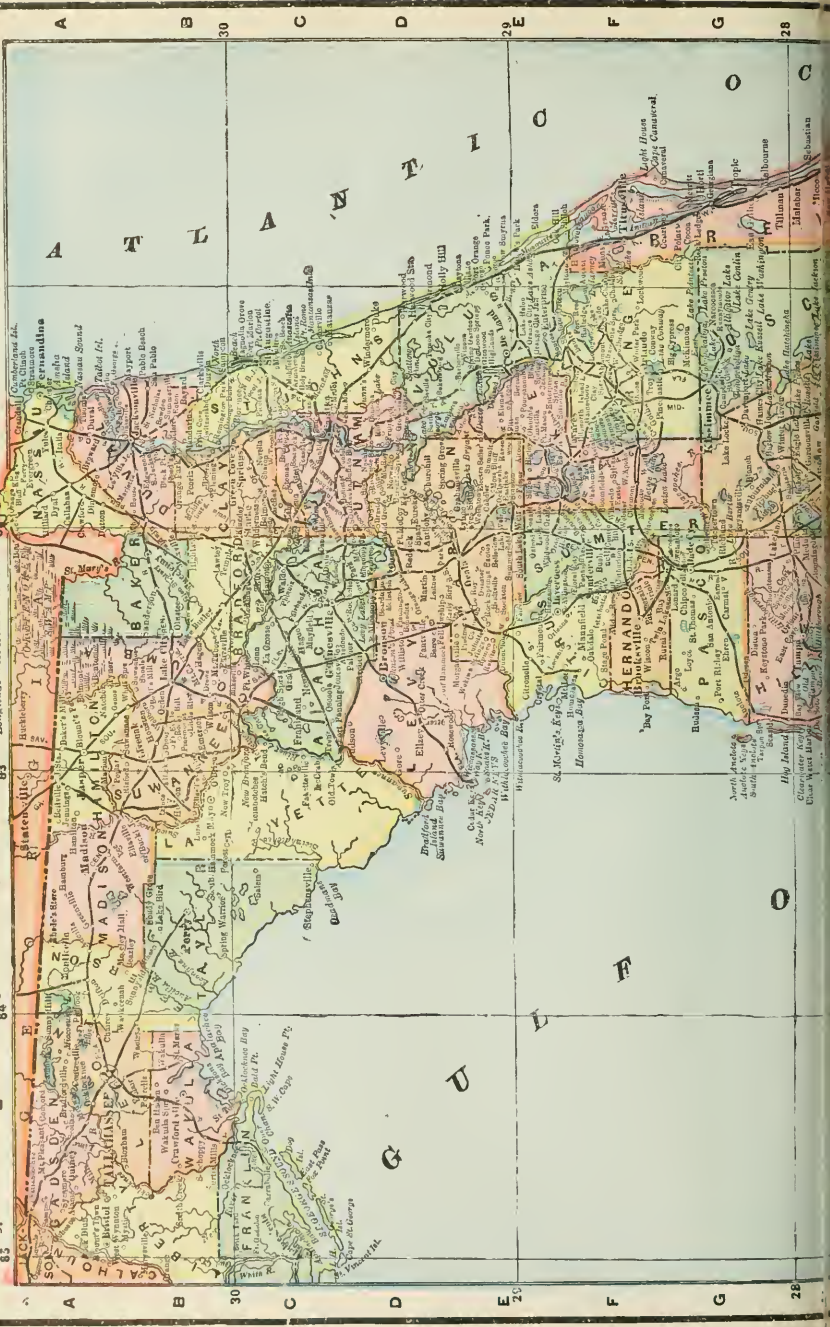
Elections.—In 1896 there were 40,732 votes cast for governor, of which the Democratic candidate (Bloxham) received 27,172; both of the regular Democratic candidates for Congress were elected; and for President the Democratic-Populist candidate received 32,736 votes, the Republican 11,288, the National Democratic 1,778, and the Prohibition 654.

Farm Products.—Reported Dec. 31, 1895: Corn, 6,186,645 bush., from 552,379 acres, value \$2,907,723; oats, 406,327 bush., from 39,836 acres, value \$264,113; potatoes, 89,925 bush., from 1,635 acres, value \$89,925; and hay, 10,280 tons, from 6,719 acres, value \$136,004. In 1894 the cotton crop was 45,637 bales and that of 1895 was estimated at 60,000.

Farm Animals.—Reported Jan. 1, 1897: Horses, 35,865, value \$1,531,331; mules, 8,273, value \$492,084; cows, 116,619, value \$1,921,881; cattle, 353,833, value \$2,408,150; sheep, 97,706, value \$154,610; and swine, 415,017, value \$837,504.

Finances.—The total assessed valuations in 1896, about 35 per cent. of actual value, aggregated \$95,389,966, comprising real estate and railroad and telegraph property, \$79,323,644, and personal property, \$16,066,322. The total valuation in 1894 was \$104,144,605. The total bonded debt, Jan. 1, 1895, was \$1,232,500, of which various State funds held \$724,800 and individuals \$507,700.

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Longitude west from Greenwich

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Banks.—On Oct. 31, 1897, there were 15 national banks in operation and 10 in liquidation, the active ones having a combined capital of \$1,485,000, which held \$122,500 in United States bonds. These banks had outstanding on loans and discounts \$3,242,705, represented by demand paper with individual or firm names, \$153,320; the same secured by stocks, bonds, and other personal securities, \$133,411; time paper with two or more individual or firm names, \$1,245,997; time paper with single individual or firm name, \$809,770; and the same secured by stocks, bonds, and other personal securities, \$900,207. The banks held an aggregate of \$269,478.30 in coin and coin certificates, of which \$90,293.65 was in gold coin. The circulation account was: Total issue, \$1,475,580; redeemed, \$1,136,727; outstanding, \$334,853. There were deposits, \$3,901,839; reserve required, \$585,275; reserve held, \$1,209,187; ratio of reserve, 31 per cent. During the year ending Sept. 30, 1897, the exchanges at the United States clearing house at Jacksonville aggregated \$8,188,515, a decrease of 2,735,527. The State banks, June 30, 1897, numbered 21, and had capital \$800,150; deposits, \$1,730,510; resources, \$2,865,460; and surplus and undivided profits, \$172,902. Private banks numbered 3, and had \$21,800 capital, \$55,800 deposits, \$82,830 in resources, and \$21,603 surplus and profits. The last report on building and loan associations (1893) showed 23 such organizations, of which all but 2 were local, 14 serial, 6 permanent, and 3 terminating. A total of 53,318 shares had been issued, of which 5,325 had matured, 20,813 were free, and 11,421 had been borrowed on, and there were 3,868 holders of the shares in force. The total assets and liabilities were \$1,705,665 and the dues and profits \$1,567,404. During the life of 22 of the associations 29 mortgages were foreclosed, involving \$63,362, on which the loss was \$1,000.

Insurance.—In March, 1895, there were reported 33 fire, 13 life, and 11 miscellaneous insurance companies doing business in the State, which during 1891 received in premiums \$1,239,058.43, paid losses aggregating \$249,795.34, and had a net balance of \$989,263.09. With the exception of one fire company in Tampa, all these concerns were branches of corporations belonging to other States.

Internal Revenue.—During the fiscal year ending June 30, 1897, the collections of internal revenue aggregated \$162,397.29, from the following sources: Distilled spirits, \$8,711.92; tobacco, \$445,176.88; fermented liquors, \$3,198.59; oleomargarine, \$5,012; and penalties, \$292.92. During that year there were 571 single-account cigar factories in operation, which used 2,878,208 lbs. of tobacco, and had an output of 146,862,496 cigars and 2,369,940 cigarettes, and 13 other tobacco factories, which had an output of 30,560 lbs. of smoking tobacco.

Roads.—The single-track mileage, Jan. 1, 1895, was 2,926.21. The companies reported the cost of roads and equipments, over \$66,000,000; capital stock, \$41,500,000; funded debt, nearly \$32,500,000; aggregate investment, nearly \$80,000,000; gross earnings, about \$4,000,000; and net earnings, about \$1,000,000.

Commerce.—During the calendar year 1897, the imports of foreign merchandise at the ports of Apalachicola, Fernandina, Key West, Pensacola, St. Augustine, St. Johns, St. Marks, and Tampa aggregated in value \$1,920,519, and the exports of domestic merchandise \$12,339,643.

Special Industries.—Official reports in 1895 estimated the total shipments of phosphate during the previous year at 500,000 tons. The orange industry had 3,000,000 bearing trees and a like number of non-bearing ones, and in last year covered had a yield of 5,000,000 boxes, valued at \$5,000,000; lemon, 45,000

bearing trees, and 100,000 non-bearing, yield 57,000 boxes, value \$75,000; pear, 200,000 trees, yield 46,000 boxes, value \$60,000; peach, 300,000 trees, yield 120,000 bush., value \$90,000; cocoanut, 27,000 trees, yield 300,000 nuts, value \$5,000; strawberry, 1,000 acres, yield 900,000 quarts, value \$100,000; guava, yield 31,000 crates, value \$25,000; grape fruit, 63,000 trees, yield 26,000 crates, value \$85,000; and grape, yield 4,000,000 lbs., value \$300,000. Through the gratuitous distribution by railroad companies of seed, about 8,000 acres were under cultivation for watermelons, and the crop of 1895 was expected to reach 3,000,000 melons, valued in the market at \$300,000. The total field crops were valued at \$7,418,424; vegetable and garden products, \$1,070,405; fruit crops, \$5,306,125; live stock, \$8,809,851; poultry, \$632,851; dairy products, \$1,011,355; and miscellaneous products, \$402,018—in all, \$24,651,028. The manufacturing industries had an output value estimated at \$10,382,197. Forest productions included lumber, 300,000,000 ft., value \$4,000,000; hewn timber, 420,000 cubic ft., value \$65,000; sawed timber, 130,000,000 superficial ft., value \$1,225,000; cypress lumber, 7,000,000 superficial ft., value, \$215,000; resin and spirits, 15,000 bbls., value \$75,000; and railroad crossties, 500,000, value \$150,000.

Canal Projects.—Up to March, 1896, nearly \$1,000,000, of a total estimated cost of \$1,300,000, had been expended on the construction of a navigable inland waterway for light-draught steamers and yachts, from Mayport, on the St. John's River, to Key West. A memorial was presented in the United States Senate, Dec. 20, 1894, and referred to the committee on transportation routes to the seaboard, urging the construction of a large ship-canal to connect the Mississippi River at one of two suggested points near New Orleans, one above, the other below, the city, with the Atlantic Ocean near the mouth of St. Mary's River in Cumberland Sound, passing through the broadest part of Florida. Of the total cost, \$7,000,000 would be required for work within this State.

Publications.—Reported May, 1895: Daily, 15; tri-weekly, 1; semi-weekly, 2; weekly, 114; bi-weekly, 1; semi-monthly, 1; and monthly, 12. In 1897 the total of all kinds was 157.

Post-Offices.—Reported Jan. 1, 1897: First-class, 1; second-class, 7; third-class, 20 (presidential, 28); fourth-class, 988; money-order offices, 246; money-order stations, 2; and limited money-order offices, 20.

Churches.—The African Methodist Episcopal is the strongest denomination in the State, and is followed by the Methodist Episcopal, South; Regular Baptist, Colored; Regular Baptist, South; Roman Catholic; Methodist Episcopal; Protestant Episcopal; Presbyterian; Disciples; and Congregational. At the Eighth International Sunday School Convention held in Boston, Mass., June 23-26, 1896, there were reported for Florida 2,400 evangelical Sunday Schools, 12,119 officers and teachers, and 94,870 scholars—total members, 106,989.

Schools.—Official reports for the school year 1895-96 showed an estimated school population of 159,800, of whom 100,373 were enrolled in the public schools, and 66,135 were in average daily attendance. The State had public school property valued at \$628,340, and the expenditure of the year was \$598,927. There were 2,508 teachers of all grades. Of the total enrollment 63,586 were white pupils and 36,787 colored; of the daily attendance 41,992 were white and 24,143 colored; and of the teachers 1,929 were white and 579 colored. There were 6 universities and colleges of liberal arts, with a total of 75 professors and instructors and 760 students in all departments; grounds and buildings valued at \$354,885; scientific apparatus and libraries, \$27,804; productive funds, \$324,800; and

income from all sources, \$77,928. There were also 24 public high schools, 10 endowed private schools for secondary instruction; 2 public State and 4 private normal schools; a business and commercial college; and a State Institution for the Blind and Deaf and Dumb at St. Augustine.

Libraries.—In 1896 there were reported 13 public libraries of 1,000 volumes each and upward, with a total of 43,506 bound volumes and 4,920 pamphlets.

Population.—In 1890, 391,422, of whom 201,947 were males; 189,475 females; 368,490 natives; 22,932 foreign-born; 224,949 whites; and 206,771 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 496,000.

FLOWER, ROSWELL PETTIBONE, banker, was born in Theresa, N. Y., Aug. 7, 1835. On Jan. 1, 1895, he was succeeded as governor of New York State by Levi P. Morton (*q. v.*), and resumed the management of his financial concerns.

FLUSHING, town, borough of Queens, N. Y.; population (1890) 19,803; (1892) State census, 20,810. In 1896 it had an equalized tax valuation of \$7,269,365; tax rate, \$16 per \$1,000; and outstanding refunding and drainage bonds, \$11,500. The village of the same name had a tax valuation (1893) of \$2,784,185, and (1895) total debt, \$354,000; an electric railway extending to College Point and operating about 4 miles of track; and a daily and 3 weekly newspapers.

FOLTZ, CLARA (SHORTRIDGE), lawyer, was born in Henry county, Ind., July 16, 1849. In January, 1896, she opened an office in New York City, and on Feb. 20, following, General Tracy presented papers showing her standing before the courts of California and the United States, and moved her admission to the bar of the State of New York, in the Appellate Division of the Supreme Court. The court admitted her to practice.

FOND DU LAC, city, capital of Fond du Lac county, Wis; population (1890) 12,024; (1895) State census, 13,051. In 1896 it had an assessed valuation of \$3,576,997; and in 1897 a bonded debt of \$114,000; 2 national banks with combined capital \$225,000, deposits \$970,359, and resources \$1,379,357; and 2 daily and 3 weekly newspapers.

FOOTE, MARY (HALLOCK), author and artist, was born in Milton, N. Y., Nov. 19, 1817. Her last publications include *In Exile* and *Cœur d'Alene* (1894) and *The Cup of Trembling and Other Stories* (1895).

FORAKER, JOSEPH BENSON, lawyer, and orator, was born near Rainsboro, O., July 5, 1846. On Jan. 14, 1896, he was elected United States senator from Ohio as a Republican to succeed Calvin S. Brice (*q. v.*), for the term beginning March 4, 1897. On the organization of Congress in December, 1897, he was appointed a member of the Committees on Foreign Relations, Pacific Railroads, Transportation Routes to the Seaboard and the University of the United States, and chairman of the Committee to Examine the Several Branches of the Civil Service. On March 28, 1898, he introduced in the Senate the following resolution, which was referred to the Committee on Foreign Relations: "Be it resolved by the Senate and the House of Representatives of the United States of America: 1. That the people of the Island of Cuba are, and of right ought to be, free and independent. 2. That the Government of the United States hereby recognizes the Republic of Cuba as the true and lawful Government of that island. 3. That the war Spain is waging against Cuba is so destructive of the commercial and property interests of the United States, and so cruel, barbarous, and inhuman in its character as to make it the duty of the United States to demand, and the

Government of the United States does hereby demand, that she at once withdraw her land and naval forces from Cuba. 4. That the President of the United States be and he is hereby authorized, empowered, and directed to use, if necessary, the entire land and naval forces of the United States to carry these resolutions into effect."

FORBES, ARCHIBALD, war correspondent, was born in Morayshire, Scotland, in 1838. In 1895 he published *Colin Campbell in the Englishmen of Action Series*, and *Memories and Studies of War and Peace*.

FORBES, EDWIN, war art correspondent, was born in New York City in 1839; died in Brooklyn, N. Y., March 6, 1895. The last part of his life was applied to animal and landscape painting.

FOREST, JOHN ANTHONY, clergyman, was born in Loire, France, Dec. 25, 1838. He came to the United States as a Roman Catholic deacon in 1863; was assigned to duty at St. Mary's and Hallettsville, Tex.; and was consecrated bishop of the diocese of San Antonio, Oct. 28, 1895.

FORMOSA, an island off the coast of China; area, 13,300 square miles; population about 3,000,000. By the treaty of Shimonoseki, May 8, 1895, China ceded to Japan this and the Pescadore Islands, which together had constituted a Chinese province since 1886. The transfer was formally made on June 2 following, and Japan undertook the establishment of civil government. In this she was thwarted constantly, chiefly by local half-breed Chinese, instigated by a faction of officials in China, and doubtless to a considerable extent by Russian intrigues. Rebellion after rebellion sprang up in various parts of the island after the new occupation, and the Japanese government refrained from adopting drastic measures through fear of adverse criticism by Western Powers, who might not recognize the fact that it had savages to contend with, till near the close of 1895, by General Liu, the notorious Black Flag chieftain, who after fleeing in defeat and disgrace from Formosa, was warmly received by the Chinese authorities in Amoy. On Feb. 1, 1896, the Japanese minister to the United States communicated to the secretary of state an official cable dispatch just received from the imperial government at Tokio, which was intended as the formal declaration on the part of Japan to the treaty Powers of the accession of the island. The dispatch announced the establishment of order and tranquillity in Formosa and the granting, among other privileges, of the following: That subjects and citizens of Powers having commercial relations with Japan may reside and trade in Formosa, at Tamsui, Kelung, Anping, Taiwan, and Takao, and the vessels of such Powers may visit and carry cargo to and from the ports and harbors of Tamsui, Kelung, Anping, and Takao. A few days afterward the rebels made another formidable demonstration, attacked several towns, including one of the new open ports, destroyed railroad and telegraph property, and defeated several detached bodies of Japanese troops.

The last report on the commerce of Formosa is that by H. B. Morse, the acting commissioner of customs at Tamsui, the principal port, for 1894, from which it appears that the net foreign imports had a market value of 2,722,843 Haikwan taels and net native imports 698,644—total, 3,421,487; deduct duties and likin paid at Tamsui, 248,068, and 7 per cent. for importers' profit, 222,139, and the value of imports at the moment of landing was 2,951,280 H. taels (\$2,301,998). The market value of original exports was 4,884,461 H. taels; add duty paid at Tamsui, 409,692, and 8 per cent. for exporters' profit, 390,757, and the value of exports at the moment of shipment was 5,684,910 H. taels (\$4,434,229.) These totals

show an increase over those of the previous year of 34 per cent.; if the value of opium for 1893 and 1894 be deducted, the advance during the year was over 50 per cent.; and if war material also be deducted, the advance was 35 per cent. The trade of the United States in kerosene oil nearly doubled in 1894, and most of the tea of Formosa was exported to the United States.

FORSYTH, JAMES WILLIAM, military officer, was born in Mannce, O., Aug. 26, 1834. He was promoted to the rank of brigadier-general, U. S. A., Nov. 9, 1894; retiring year, 1898.

FORT SCOTT, city, capital of Bourbon county, Kan.; population (1890) 11,946; (1895) assessors' returns, 11,108. In 1896 the total assessed valuation was \$1,930,353; and in 1897 the total bonded debt was \$243,800, sinking fund, \$40,779, net debt, \$203,020. There are 2 national banks with combined capital of \$250,000, deposits \$349,890, and resources \$702,349; and 2 daily, 3 weekly, and 2 monthly periodicals. The city council granted a franchise to a syndicate in 1895 for the construction of gas works, with the right to lay necessary pipes in streets and alleys. It was the intention of the syndicate to supply the city with natural gas from wells in Allen and Neosho counties.

FORT SMITH, city, capital of Sebastian county, Ark.; population (1890) 11,311. In 1897 it had 3 national banks with combined capital \$400,000, deposits \$640,461, and resources \$1,324,950; a street railway operating 9 miles of track; 3 daily and 5 weekly newspapers; and large trade interests in corn, fruit, cotton, live stock, lumber, and hides.

FORT WAYNE, city, capital of Allen county, Ind.; population (1890) 35,393; (1897) estimated 44,000. In 1896 the assessed valuations, about two-thirds of actual value, were: Real, \$17,482,250; personal, \$5,229,920—total, \$22,712,220; tax rate, \$18.70 per \$1,000. On Jan. 1, 1897, the total bonded debt (including water debt \$285,800) was \$677,800, sinking fund, \$14,254, net debt, \$663,546. The sinking fund was receiving about 5 per cent. of collected taxes, and the city had no floating debt. In 1897 there were 4 national banks with combined capital of \$1,050,000, deposits \$2,528,172, and resources \$4,834,738; electric street railway operating about 20 miles of track; and 6 daily, 8 weekly, and 3 monthly periodicals.

FORT WORTH, city, capital of Tarrant county, Tex.; population ((1890) 23,076; (1895) estimated 31,000. In 1897 the assessed valuations, about 80 per cent. of actual value, aggregated \$15,790,000; tax rate, \$17.50 per \$1,000; and the bonded debt was \$1,319,000; sinking funds and other assets \$191,000; net debt, \$1,128,000; and separate water debt, \$800,000. There were 6 national banks with combined capital \$1,475,000, deposits \$2,060,586, and resources \$4,727,494; and in the year ending Sept. 30, the exchanges at the United States clearing house here aggregated \$33,625,807, a decrease of \$41,390 from the total of the previous corresponding period. There were 4 electric street railway lines with about 30 miles of track; and 3 daily, a monthly, and 3 weekly periodicals.

FORT WORTH UNIVERSITY, Fort Worth, Tex., founded in 1881; Methodist Episcopal; co-educational; had at the close of 1897, 47 professors and instructors; 860 students; 3,000 volumes in the library; \$125,000 invested in grounds and buildings; \$7,500 in scientific apparatus; \$23,800 in income; president, O. L. Fisher, A.M., D.D.

FOSDICK, J. WILLIAM, fire etcher, was born in Boston, Mass. He studied drawing and painting in Paris with Boulanger, Lefebvre, and Collin; returned to the United States in 1884; and has since applied himself wholly to the develop-

ment of burnt wood as a means of decoration. At the exhibition of pictures by the Glasgow School of Artists at the Philadelphia Academy of Fine Arts, in March, 1896, he exhibited among other specimens a large panel entitled *The Adoration of Jeanne d'Arc*, and gave an illustrated lecture on *Etching with Fire as a Means of Artistic Expression*.

FOSTER, JOHN WATSON, diplomatist, was born in Pike county, Ind., March 2, 1836. In December, 1894, he was requested by the Chinese government to go to Japan, meet the Chinese plenipotentiaries, and aid them in their negotiations for peace. The Japanese government expressed its satisfaction with the appointment. He returned in July, 1895, and much of the prompt negotiation and ratification of the treaty of Shimonoseki is credited to him.

FOSTER, MURPHY JAMES, lawyer, was born in Franklin, La., Dec. 12, 1849. In 1896 he was renominated by the Democratic party for governor of Louisiana, and the election on April 21 showed such close results that a recount and a contest in the courts seemed inevitable. Friends of John N. Pharr, the Fusion candidate, claimed his election by at least 30,000 majority. In May the tellers of the General Assembly submitted two reports on the election, and the legislature adopted the majority report, which gave Foster 116,216 votes and Pharr, 90,188. The Democratic party carried the State generally.

FOUNDERS AND PATRIOTS OF AMERICA, ORDER OF, a patriotic society organized in New York City, and incorporated March 18, 1896; open to male citizens of the United States of 21 years of age and over, who are lineally descended in the male line of either parent from an ancestor who settled in any of the original Colonies now included in the United States of America, from the settlement of Jamestown, May 13, 1607, to May 13, 1657, inclusive, and whose intermediate ancestors, at the call of the colonists, adhered as patriots to the cause of the Revolutionary war. The first annual meeting was held in New York City, April 24, 1896, when the following principal officers were elected: Governor, Frederick D. Grant; deputy governor, Ralph E. Prime; treasurer, William W. Goodrich; secretary, Henry L. Morris; attorney, Morris P. Ferris; historian, Rev. George R. Howell; chaplain, Rev. Joseph F. Folsom; 3 councilors for 3 years, 3 for 2 years and 3 for 1 year; and several committees.

FRALEY, FREDERICK, merchant, was born in Philadelphia, Pa., May 28, 1804. On Jan. 28, 1896, he was unanimously elected president of the National Board of Trade for the 28th successive term, and presided over its annual session in Philadelphia.

FRANCE, a republic in Europe; area, 204,092 square miles; population (1891) 38,343,192; (1896) 38,517,975; capital, Paris; president, 1898, François Felix Faure (*q. v.*).

Finances.—The budget estimates of revenue adopted for 1895 comprised: Direct taxes, 505,215,107 fr.; indirect taxes, 2,020,498,595; monopolies, domains, etc., 681,279,290; total ordinary revenue, 3,206,992,992; other revenues, 168,825,398; total budget for France, 3,375,818,390; for Algeria, 48,355,866; grand total, 3,424,174,256 fr. (\$684,834,851); and estimates of expenditure adopted, including payment on public debt, 1,235,347,273 fr., aggregated for France 3,350,041,920, for Algeria 73,851,842; grand total, 3,423,893,762 fr. (\$684,778,752). The budget estimates for 1896 showed a total for revenue of 3,448,317,093 fr. (\$689,663,418), and for expenditure of 3,447,918,198 fr. (\$689,583,639). The revenue of the communes in 1894 was 719,090,046 fr. (\$143,818,009) and expenditure 681,850,724 fr. (\$136,370,144). The national debt, Jan. 1, 1894, was 31,-

-035,252,522 fr. (\$6,207,050,504), and the aggregate communal debt, 3,296,916,-125 fr. (\$659,383,225). The best estimate of the value of private property is that by M. de Foville, which gives: Land, \$15,000,000,000, buildings, \$10,000,000,000; specie, \$1,000,000,000; convertible securities; \$14,000,000,000; agricultural implements and live stock, \$2,000,000,000; other personal property, \$3,400,000,000—total, \$45,400,000,000.

Commerce.—During 1894 the general commerce, which includes all goods entering or leaving the country, showed imports equivalent to \$959,000,000 and exports \$825,000,000; and the special commerce, which comprises imports for domestic use and exports of French origin, showed imports, \$770,000,000 and exports, \$615,600,000. The special commerce consisted of imports, food products 1,198,000,000 fr., raw products, 2,104,000,000, and manufactured goods, 548,000,000; and exports, food products, 666,000,000, raw products, 755,000,000, and manufactured goods, 1,657,000,000. During the fiscal year ending June 30, 1895, the United States imported from France merchandise valued at \$61,580,509, and coin and bullion, \$7,850,709, and exported thereto merchandise, \$45,149,137, and coin and bullion, \$26,753,100—value of total trade, \$141,333,755.

Agriculture.—In 1894, of the total area, 20,740,913 acres were under forest and 91,333,432 acres under all kinds of crops, fallow, and grasses. The cereal productions were: Wheat, 336,790,319 bush.; oats, 252,666,518; rye, 72,618,975; barley, 46,954,622; buckwheat, 26,854,025; maize, 26,571,619; and mixed corn, 12,219,985. Other crops were: Potatoes, 128,200,939 quint.; beet root, sugar, 76,401,820, other beet root, 108,017,708; tobacco, 239,721; clover, 37,752,263 tons; and grass and hay, 188,215,605. In the first 10 months of 1895 there were 4,315,094 acres under vines, from which 5,871,360 gals. of wine were obtained. Silk culture was carried on in 28 departments by 154,733 persons, and yielded 23,285,880 lbs. of cocoons, of which 555,530 lbs., valued at \$656,536, were exported, besides 6,024,365 lbs. of raw silk, valued at \$21,632,949. On Jan. 1, 1895, the farm animals comprised 2,807,042 horses, 218,762 mules, 359,879 asses, 12,879,240 cattle, 20,721,850 sheep, 6,038,372 pigs, and 1,484,921 goats.

Mining.—Out of about 1,400 registered mines, 502 were in operation during 1893, with 157,724 men. The output was estimated at 30,920,659 tons, valued at \$67,579,200. The products included 25,172,792 tons of coal and lignite, 3,517,138 of iron ore, 2,003,096 of pig iron, 808,171 of finished iron, and 664,932 of steel.

Manufactures.—The various textile industries had 4,879 manufacturing establishments in 1893-94, and the sugar industry had 370 works, which employed 19,971 persons and had an output of 1,132,535,800 lbs.

Fisheries.—In 1894 the cod fishery employed 11,818 men and 632 boats, and had a catch of 98,045,860 lbs., and the herring fishery had 6,887 men, 599 vessels, and a catch of 85,730,040 lbs.

Army.—In the budget for 1896 provision was made for a peace army of 28,963 officers and 569,300 men, with 142,661 horses. The general staff has 3,716 officers and 821 men; the military schools, 380 officers and 2,875 men; the infantry, 12,956 officers and 348,405 men; cavalry, 3,934 officers and 73,267 men; artillery, 7,323 officers and 74,576 men; engineers, 175 officers and 12,667 men; 20 squadrons of train, 412 officers and 11,833 men; gendarmerie, 657 officers and 22,154 men; and the Garde Republicaine, 83 officers and 2,967 men. The force liable to military service is estimated as follows: Active army and its reserve, 2,350,000; territorial army, 900,000; territorial reserve, 1,100,000; total, 4,350,-

000, of whom about 2,500,000 are regarded as available. The budget estimate of expenditure on the war account for 1896 was, ordinary, \$121,829,096, extraordinary, \$8,405,868—total, \$130,234,954.

Navy.—The personnel of the navy in 1894 comprised 16 vice-admirals, 30 rear-admirals, 115 captains *de vaisseau*, 217 captains *de frigate*, 247 principal engineers, 1,212 other executive officers, and 41,536 rank and file, including 31,686 seamen and petty officers. There is a reserve of 114,000 men, of whom about 25,500 are serving in the various fleets. The French navy is next in importance to that of Great Britain, and in 1895 comprised 58 armored ships with 1,433 guns; 72 unarmored, 4,416 guns; 8 armored gunboats, 72 guns; 28 unarmored, 144 guns; 10 dispatch vessels, 37 guns; 16 training ships, transports, tugs, etc., 128 guns; and 188 torpedo boats over 100 ft. long, and 91 under 100 ft. The total armament, including secondary batteries, was 6,230 guns, of which 79 were between 40 and 80 tons; 220 between 20 and 40; 378 between 4 and 20; and 5,593 under 4. The largest vessels under construction were being fitted with 3 screws each, the propelling machinery being divided into 3 parts. The budget estimate of expenditure on the marine account for 1896 was \$54,522,979.

Communications.—In 1894 there were 23,643,978 miles of national roads; 22,462 miles of railway in operation; 5,512 miles of navigable rivers, of which 4,671 miles were being navigated; 2,983 miles of canals; 59,693 miles of telegraph line, with 197,622 miles of wire, and 10,589 telegraph offices; and 8,188 post-offices and about 60,000 letter boxes.

Banking.—The Bank of France, on Sept. 30, 1895, had in gold, 2,023,500,000 fr.; silver, 1,250,800,000; circulation notes, 3,363,500,000; current accounts and deposits, 552,500,000; French paper, 478,200,000; mortgage loans, 306,300,000; and treasury account—current and deposits, 288,000,000—total, 8,262,800,000 fr. (\$1,652,560,000). During 1894 the government coinage was: Gold, 9,831,060 fr.; silver, 4,000,000; bronze, 200,000—total, 14,031,060 fr. (\$2,806,212). There were 544 private savings banks, which, Jan. 1, 1895, had 6,314,345 depositors and 3,244,494,413 fr. deposits, and the postal savings banks, including Algeria and Tunis, on the same date had 2,293,930 accounts and 674,318,599 fr. deposits; showing a private savings bank per capita of \$102.80, and a postal of \$58.80.

Churches.—Under existing laws any sect which has 100,000 adherents is entitled to a grant from the national treasury, but only 3 bodies enjoy that privilege, and the budget grants for 1896 were for administration, 260,000 fr.: Roman Catholic worship and places of worship, 42,156,523; Protestant worship, 1,541,900; and Jewish, 167,530—total, 44,125,952 (\$8,825,190). The Roman Catholic Church has 17 archbishops, 67 bishops, and over 55,000 secular clergy and teachers; the Protestant churches, 638 Reformed pastors and 62 Lutheran; and the Jewish, 57 rabbis and assistants.

Schools.—In 1895 there were 15 universities, 2 Protestant theological schools, 13 schools of law, 26 of medicine and pharmacy, and in January, 1896, the law schools had 8,782 students, medical schools, 8,685, and pharmaceutical 3,076. Secondary instruction was provided in 1895 by 109 *lycees*, with 533,031 pupils; 228 communal colleges, with 32,161 students; and 63 *lycees* and colleges for girls, with 10,413 pupils; besides a large number of technical, industrial, and other special schools, either public or private. In 1893-94 France and Algeria together had 2,608 public and 2,953 private infant schools with an aggregate of 713,887 pupils, and 67,429 public and 15,642 private elementary schools with 5,548,180 pupils. The budget estimate for public instruction in 1896 was 195,018,342 fr. (\$39,003,668).

Recent Events.—In 1894 a new department, the Ministry of the Colonies, was created, of which Senator Boulanger was appointed the first incumbent, March 21. The Casimir-Perier cabinet resigned May 22, because of an adverse vote on an interpellation as to leave of absence being given to railway men to attend a congress of the Railway Workmen's Federation, and M. Dupuy formed a new cabinet, his place as president of the Chamber being taken by M. Casimir-Perier. On June 24 President Carnot was assassinated immediately after opening an exhibition in Lyons, by Caserio Santo, an Italian anarchist, in revenge for the execution of several of his fellow-anarchists. On the 27th the National Assembly was convened to elect a successor, and Jean Paul Pierre Casimir-Perier (*q. v.*) was chosen, receiving 451 votes to 195 for Henri Brisson, out of a total of 851, his place as president of the Chamber being taken by M. Bardeau. The government was granted extended powers against anarchists and the press was restricted from publishing full reports of anarchist trials. The Chamber was prorogued July 29, and the new session opened Oct. 23. The Dupuy cabinet, at the request of the new president, retained office. On Sept. 12, the Duc d'Orleans declared himself the representative of the national and traditional monarchy. The prohibition of a series of bull fights and the prosecution of the managers led to much excitement in Nîmes in October. Cornelius Herz was sentenced in default to 5 years' imprisonment and a fine of 5,000 fr. for complicity in the Panama Canal scandal. On Dec. 18 M. Brisson succeeded M. Bardeau as president of the Chamber.

In 1895 a conflict arose between the Chamber and the government, which led to the defeat of the latter, Jan. 14, because of resistance to a motion inferring the right of the Chamber to override the judgment of the Council State. On the following day President Casimir-Perier resigned his office, declaring that he would not bear the weight of the moral responsibility resting on him in the condition of powerlessness to which he was condemned. He was succeeded by François Felix Faure (*q. v.*), who received 430 votes to 361 for M. Brisson. A new cabinet was formed by M. Ribot, Jan. 27, and the Chamber adopted an amnesty bill for all convictions pronounced or incurred up to Jan. 18. France joined Russia and Germany to prevent Japan from retaining the Liao-Tung peninsula, and a Chinese loan of \$75,000,000 was floated in France on the guarantee of Russia. The elections for department councils, July 28, resulted in the return of 894 Republicans, 263 Reactionaries, 181 Radicals, 74 Rallied, and 26 Socialists. In October the Ribot ministry resigned and was succeeded by one formed by Leon V. A. Bourgeois (*q. v.*).

In 1896 the government notified the Powers that in view of the difficulties of maintaining a protectorate over Madagascar it had annexed the island. It also informed the United States government that hereafter French universities and high schools would be open to American students. On April 23, the Bourgeois cabinet resigned, because of a deadlock between the Senate and Chamber, and on the 28th a new one was formed by Felix Jules Méline, as follows: Prime minister and minister of agriculture, F. J. Méline; commerce, M. Bouche; justice, M. Darlan; public works, M. Turrel; foreign affairs, M. Hanotaux; interior, M. Barthou; war, General Billot; marine, Admiral Besnard; finance, M. Cochéry; public instruction and worship, M. Rambaud; and colonies, M. Le Bon. The new premier appealed for conciliation and co-operation. See DREYFUS, ALBERT.

FRANCE, JACQUES ANATOLE THIBAUT, poet, was born in Paris, France, April 16, 1844. On Jan. 23, 1896, he was elected a member of the French Academy to fill the vacancy caused by the death of Ferdinand de Lesseps.

FRANCIS JOSEPH CHARLES I., Emperor of Austria and King of Hungary and Bohemia, was born Aug. 18, 1830. The 40th anniversary of his marriage with the Empress Elizabeth has celebrated throughout the dual empire with much enthusiasm on April 24, 1894. During 1895 he was much troubled by the action of the municipal council of Vienna in electing Dr. Lueger, the Anti-Semite leader, burgomaster of the city. Owing to the smallness of his majority Dr. Lueger declined the office, and his followers, despite the known opposition of the emperor, re-elected him by a much larger one. This led the emperor to annul the election and dissolve the council. In April, 1896, Dr. Lueger was a third time elected, but on the 27th, in an audience with the emperor, he agreed to accede to the emperor's wish, and promised to decline the office and any future candidacy for it. On May 2, 1896, the emperor opened in person the Hungarian millennial *fêtes* in Budapest, where he was received with extreme cordiality. The heir apparent to the throne in 1898 was the Archduke Carl Ludwig, brother of the emperor, and the heir presumptive, the Archduke Francis Ferdinand. Impelled by strong dynastic reasons, the emperor in 1898 was active in efforts to prevent war between Spain and the United States, and in April joined other European powers in a friendly representation to President McKinley for peace.

FRANCIS FERDINAND D'ESTE, heir presumptive to the throne of Austria-Hungary, was born in Gratz, Styria, Dec. 18, 1863. The death of the Crown Prince Rudolph made the emperor's brother, Archduke Carl Ludwig, the heir apparent, and as he is now (1896) 63 years of age and in poor health, it is understood that should he become emperor he will abdicate in favor of his son, Francis. The sovereigns of Europe have recognized Francis Ferdinand as the future emperor by conferring on him innumerable orders, and the emperor himself sent him on a voyage around the world in 1893-94, during which he visited the United States.

FRANKFORT, city, Hesse-Nassau, Prussia; financial center of Germany; population (1890) 179,985. During the 9 months ending Sept. 30, 1895, the exports declared here for the United States aggregated in value \$3,270,705.14, principally dyes, drugs, and chemicals (\$1,267,656); leather, hides, and skins (\$829,432); platina wire and platinum (\$193,292); and hair, raw and prepared (\$142,750).

FRANKLIN, BENJAMIN J., lawyer, was born in Mason county, Ky. He received a private school education; took a partial course in Bethany College, West Virginia; was admitted to the bar in Leavenworth, Kan.; removed to Kansas City, Mo., in 1860; served in the Confederate Army through the civil war; elected to Congress as a Democrat in 1874 and 1876; was United States consul at Hankow, China, in 1884-88; and was appointed governor of Arizona, succeeding Louis C. Hughes, removed, March 30, 1896.

FRANKLIN AND MARSHALL COLLEGE, Lancaster, Pa., founded in 1836; Reformed Church in the United States; had at the close of 1897, 24 professors and instructors; 347 students; 33,500 volumes in the library; \$122,000 invested in grounds and buildings; \$25,000 in scientific apparatus and library; \$180,000 in productive funds; and \$25,000 in income; president, Rev. J. S. Stahr, M.D., D.D.

FRANKLIN COLLEGE, Franklin, Ind., founded in 1834; Baptist; co-educational; had at the close of 1897, 11 professors and instructors; 265 students; 11,500 volumes in the library; \$67,000 invested in grounds and buildings; \$191,248 in productive funds; \$11,000 in gifts; and \$15,375 in income; president, Rev. W. T. Stott, D.D.

FREE (OR FREEWILL) BAPTIST CHURCH. The *Register and Yearbook* for 1896 showed 197 quarterly meetings; 1,540 church edifices; 1,362 ordained ministers; 212 licensed preachers; 85,504 communicants; \$2,661,409 invested in church property; and \$17,239 contributed for foreign missions, \$12,594 for home missions, \$32,017 for the education society, and \$22,232 for the woman's missionary society. The foreign missionary department had receipts and expenditures of \$31,464 and \$52,621 in invested funds; home missionary department, receipts \$14,446 and \$13,118 in invested funds; education department, receipts \$21,135 and \$8,607 in invested funds. The mission in India had 559 resident and 170 non-resident members, 2,793 Sunday school pupils, and 1,519 persons in its native Christian community. The education department was maintaining 13 universities, colleges, classical and high schools. At the General Conference in Winnebago City, Minn., in October, 1895, the Committee on Our Country reported a resolution urging the Federal government to devise effectual means of restraining vicious foreign immigration, and an expression of belief that the interests of justice, temperance, reform, and the possible purification of political methods would be conserved by both municipal and national enfranchisement of women.

FREEPORT, city, capital of Stephenson county, Ill.; population (1890) 10,189; (1895) estimated 16,000. In 1896 the assessed valuations, about one-fifth actual value, were: Real, \$1,300,213; personal, \$495,293—total, \$1,795,536; total tax rate, \$68.96 per \$1,000; and in 1897 a total debt of \$62,000. There were 2 national banks with combined capital \$250,000, deposits \$300,043, and resources \$906,582; and 3 daily, 5 weekly, and 2 monthly periodicals.

FREIBURG, town, Baden, Germany; population (1890) 48,909. During the 9 months ending Sept. 30, 1895, the exports declared here for the United States aggregated in value \$943,127, principally linen, woolen, and cotton goods (\$625,-626) and dyes, drugs, and chemicals (\$120,907).

FRESNO, city, capital of Fresno county, Cal.; population (1890) 10,818. In 1896 the assessed valuations, about one-half actual value, were: Real, \$5,637,147; personal, \$672,043—total, \$6,309,190; total tax rate, \$23.50 per \$1,000; and Jan. 1, 1897, the bonded debt was \$139,000, sinking fund, \$8,767, net debt, \$130,233. There were 2 national banks with combined capital of \$300,000, deposits \$1,032,-740, and resources \$1,588,987; and (1898) 2 daily, 3 weekly and 2 monthly periodicals.

FREYTAG, GUSTAVE, novelist, was born in Kreuzberg, Silesia, Germany, in 1816; died in Weisbaden, Germany, April 30, 1895.

FRIENDS, SOCIETY OF. The reports from the yearly meetings in the United States for 1895 showed: Orthodox branch, 1,150 ministers, 824 meeting-houses, 88,158 members; Hicksite branch, 115 ministers, 201 meeting-houses, 21,992 members; Wilburite branch, 38 ministers, 53 meeting-houses, 4,329 members; and Primitive branch, 11 ministers, 9 meeting-houses, 232 members—total, 1,314 ministers, 1,087 meeting-houses, and 114,711 members. Statistics of the Society in the United Kingdom in 1895 showed: Members in Great Britain, 16,244, in Ireland, 2,611; attenders of meetings in Great Britain and Ireland, not members, 6,774; adult First Day scholars, 23,459, junior scholars, 15,132; total connected with the Society, 64,220. There is but one body in the United Kingdom. In the United States, the most numerous branch, the Orthodox, had 12 yearly meetings or independent bodies, the largest being the Indiana (18,182), the Western (15,195), the Iowa (10,642), and the Kansas (10,583). Mexico had one yearly

meeting, with 500 members, and Canada one, with 1,064. During 1895 there were three important occurrences: the bi-centennial of the establishment of the New Yearly meeting, at Flushing, L. I.; the bi-centennial of the founding of Merion meeting-house in Pennsylvania, each of which was attended by members of the Orthodox and Hicksite branches, which had not united since the separation in 1827; and the decision of the London Yearly Meeting to correspond with the smaller branches in the United States. The third Quinquennial Conference met at Indianapolis, Ind., in October, 1897. Among the important transactions were the reaffirming of the original Quaker position upon the doctrines of the Christian faith, the high priesthood of Christ and priesthood of all believers, the absence of sacerdotalism, and the rights of individual members in the exercise of their gifts in the proper spheres under the leadings of the Holy Ghost. Rufus M. Jones, of Philadelphia, read a paper on *Shall Future Conferences be Legislative*, and Edmund Stanley, of Kansas, one on *A Uniform Discipline*. A committee of 26 was appointed to prepare a plan of union and a draft of a discipline to be submitted to the yearly meetings. Cyrus R. Dixon, of Kansas, read a paper advocating the preparation of a *Hymnal*, and a committee of one from each yearly meeting was appointed to consider the subject with power to act. The mission among Indians was reported to be in a prosperous condition, 10 ministers, besides some other interested Friends, now doing Gospel work among various tribes, and the Indian membership being 491. *Foreign Missions, Young People's Work, The Need of a Fuller History of Friends in America, Christian Sociology, Qualification for the Christian Ministry, The Regulation of the Ministry, Position and Authority of the Pastor, Pastoral Work, and The Authority of Evangelistic Committees*, were presented in papers and discussions.

FROTHINGHAM, OCTAVIUS BROOKS, clergyman and author, was born in Boston, Mass., Nov. 26, 1822; died there Nov. 27, 1895. Since 1881 he had applied himself wholly to literary work.

FROUDE, JAMES ANTHONY, historian and educator, was born in Darlington, Devonshire, England, April 23, 1818; died in London, England, Oct. 20, 1894. At the time of his death he was professor of history at Oxford University and had just published *Life and Letters of Erasmus*, his last course of university lectures.

FRYE, WILLIAM PIERCE, lawyer, was born in Lewiston, Me., Sept. 2, 1832. In 1895 he was elected a United States senator from Maine, as a Republican, for the fourth time; and on the organization of Congress in December, 1895, he was appointed chairman of the Committee on Commerce and a member of those on Fisheries, Foreign Relations, Pacific Railroads, and (select) to Investigate the Condition of the Potomac River Front at Washington, and to Establish the University of the United States. On March 29, 1898, he introduced the following resolution, which was referred to the Committee on Foreign Relations: *Whereas*, The war which was being waged in the Island of Cuba for the past three years has been conducted by the Spanish Government in violation of the rules of civilized warfare, and said Government has driven the unarmed and peaceable inhabitants from their homes and forced them within the armed camps, where it has permitted hundreds of thousands of men, women, and children to die of starvation; and as a result of this system of inhuman warfare tens of thousands of the helpless people are now dying for want of food; and, *Whereas*, The war has paralyzed and almost destroyed the large commercial relations which have heretofore existed between the United States and Cuba, and has rendered useless and brought to ruin the many millions of dollars of property of American citizens invested in the island; and, *Whereas*, The existence and prolongation of the hostilities have

imposed heavy financial expenditures and burdensome official labors upon the Government of the United States in the enforcement of its neutrality laws; and, *Whereas*, The Consuls of the United States and other impartial and competent observers have reported that the Spanish Government has lost control of much of the greater portion of the island; that it is powerless to restore its authority and bring about peace, and that a continuance of the contest will have no other effect than to increase the horrors, misery, and starvation which now exist, to utterly extinguish the commerce with and destroy the property of American citizens and add to the expense and burdens of the Government of the United States; therefore, *Resolved*, by the Senate and House of Representatives of the United States of America in Congress assembled, That the President of the United States be and he is hereby directed and empowered to take such effective steps as, in his discretion, may be necessary, to secure a speedy termination of the hostilities between the Government of Spain and the people of Cuba, the withdrawal of the military and naval forces of Spain from said island, and the complete independence of said people.

FURMAN UNIVERSITY, Greenville, S. C., founded in 1852; Baptist; educational; had at the close of 1897, 8 professors and instructors; 154 students; 5,000 volumes in the library; \$60,000 invested in grounds and buildings; \$80,000 in productive funds; \$11,000 in income; president, A. P. Montague, PH. D., LL. D.

FURNESS, HORACE HOWARD, Shakespearean scholar, was born in Philadelphia, Pa., Nov. 2, 1833. For several years he has been engaged in editing a new variorum edition of Shakespeare, and in 1895-96 was building a handsome fire-proof structure at his home in Wallingford, Pa., for his rare and valuable library, then numbering over 16,000 volumes.

FURNESS, WILLIAM HENRY, clergyman and author, was born in Boston, Mass., April 20, 1802; died in Philadelphia, Pa., Jan. 30, 1896. At the time of his death he was the oldest graduate of Harvard University.

FURNISS, HENRY, caricaturist, was born in Wexford, Ireland, in May, 1854. After several years' service on *Punch* he left that periodical in 1894 and started *Lika Joke*, a humorous and satirical weekly, and on the abandonment of the *Pall Mall Budget*, in March, 1895, he bought its machinery, engaged nearly all its staff, and brought out a fac-simile of it, under the name of *The New Budget*, without a break in issue. He dropped *Lika Joke* at the end of its first volume, and applied himself wholly to *The New Budget*.

FUR SEAL TREATY, a treaty between the United States and Great Britain, providing for a commission to assess the damages sustained by Canadian sealers in Bering Sea, was ratified by the United States Senate on April 15, 1896. Under it, each government was to appoint a commissioner, and if the two could not reach a satisfactory conclusion, a third commissioner was to be named by the president of the Swiss republic, and the conclusions of the majority were to be binding on the two governments. See BERING SEA QUESTION: SEAL CLAIMS COMMISSION.

FURTH, town, Bavaria, Germany; population (1890) 43,206. In the 9 months ending Sept. 30, 1895, the exports declared here for the United States aggregated in value \$1,458,467.35, principally glass—plate, mirror, and window—(\$898,094); fancy goods and toys (\$255,940); and bronze powder, aluminum, and leaf metal (\$188,095).

FYFFE, JOSEPH, naval officer, was born in Ohio, July 26, 1832; died in Pierce, Neb., Feb. 25, 1896. On July 10, 1894, he was promoted to the rank of rear-admiral in the United States Navy, and on the 20th was placed on the retired list on completing 40 years of service. At the time of his promotion he was commandant of the Boston Navy Yard.

GAGE, LYMAN J., financier, was born in De Ruyter, N. Y., June 28, 1836; received an academical education, and became a bank clerk; removed to Chicago, Ill., in 1855; was connected with the Merchants' Savings, Loan and Trust Company in 1858-68; vice-president of the First National Bank in 1868-91, and president in 1891-97; and was appointed secretary of the U. S. Treasury Department in 1897.

GALESBURG, city, capital of Knox county, Ill.; population (1890) 15,264; (1896) estimated 20,000. In 1896 it had an assessed valuation, about one-fifth actual value, of \$2,858,452; total tax rate, \$68.70 per \$1,000; and in January, 1897, a bonded debt of \$136,000, floating debt, \$7,000, sinking fund, \$22,200, and net debt, \$120,800. There were 3 national banks with combined capital \$375,000, deposits 678,176, and resources \$1,366,375; a trolley line extending to East Galesburg; and 2 daily, 6 weekly and 2 monthly periodicals.

GALIMBERTI, LUIGI, cardinal and prefect of the pontifical archives, was born in Rome, Italy, in 1838; died in Suchtein, near Dusseldorf, Germany, May 7, 1896.

GALVESTON, city, capital of Galveston county, Tex.; population (1890) 29,084; (1895) estimated 54,400. On Dec. 1, 1896, it had a total bonded debt of \$3,426,000, floating and other indebtedness, \$336,729, sinking fund, \$833,554, net debt, \$2,929,175, and public property, including waterworks, \$1,500,000, aggregating in value \$3,068,959. The assessed valuations in 1895, nearly one-half of actual value, were: Real estate, \$19,848,056; personal, \$5,543,496—total, \$25,391,552; city tax rate, \$15 per \$1,000. During the calendar year 1896 the imports of merchandise aggregated in value \$795,018, and exports \$56,027,431, and in 1897 the imports were \$644,367, exports \$60,958,589. The expenditures under congressional appropriations for the construction of a deep-water harbor by the jetty system had reached in 1895, \$5,300,000, and it was estimated that two years' more time would be required to complete the work, which was being pushed night and day on both the north and south jetties. The harbor proper then had an area of 460 acres with a depth of 30 ft., and 1,500 acres with a depth of 20 ft. Among new buildings are the Young Men's Christian Association Hall, Grace Church, an orphans' home, and an old ladies' home, all built on bequests of Henry Rosenberg; a new Ursuline convent; a grand opera house block; and the Harmony Club House. In 1897 there were 2 national banks with combined capital \$550,000, deposits \$506,993, and resources \$1,755,304, and during the year ending Sept. 30 the exchanges at the United States clearing house here aggregated \$135,819,850, an increase of \$4,424,412 over the total of the previous corresponding period. In 1897 the United States government purchased a block of 16 city blocks on the outskirts for a site for fortifications. There were about 40 miles of trolley line track; and 2 daily and 7 weekly newspapers.

GANNETT, ABBIE M., poet and essayist, was born in North Brookfield, Mass., July 18, 1845; died in Malden, Mass., March 20, 1895.

GANNETT, HENRY, chief geographer of the United States Geological Survey and of the 10th and 11th censuses, was born in Bath, Me., Aug. 24, 1846. In 1895 he published *The Building of a Nation: The Growth, Present Condition, and Resources of the United States, with a Forecast of the Future.*

GARCIA, CALIXTO, military officer, was born in Holquin, Santiago, Cuba, in 1840. He served in the Cuban revolution of 1868, becoming a major-general; was captured in that of 1873, and confined in a dungeon for 5 years; led the expedition of 1880 and was captured, but regained freedom at the request of General Campos; and in March, 1896, was indicted on a charge of connection with an attempted filibustering expedition on the steamship *Bermuda*, was admitted to bail, which he forfeited by non-appearance for trial, and soon afterward successfully landed an important expedition on Cuban soil.

GARY, JAMES ALBERT, manufacturer, was born in Uncasville, Conn., Oct. 22, 1833; removed to Baltimore, Md., in boyhood, and was there educated; was admitted to partnership in the firm of James S. Gary & Son, manufacturers of cotton duck, twills, etc., in 1860; became the head of the firm on the death of his father in 1870; and was appointed postmaster-general of the United States in 1897.

GAS, ACETYLENE, a hydrocarbon C_2H_2 . Sp. gr. 0.92. It is moderately soluble in water. It may be produced by direct synthesis, by passing hydrogen gas through a tube in which a voltaic arc is maintained between carbon electrodes. It has acquired much prominence within a recent period from the proposal to produce it on the commercial scale from calcium carbide. It gives the brightest flame of any gas known. To burn it successfully, a very small gas burner (a $\frac{1}{2}$ -ft. burner) must be employed. Owing partly to its high specific gravity it burns well under a wide range of pressure; its illuminating power is estimated at 240 candles, or 10 to 15 times that of ordinary illuminating gas. Various products can be formed from acetylene, among others benzole and alcohol, so that it may be made a starting point for a quantity of organic compounds. It is endothermic; to combine its carbon and hydrogen, heat is required, and, consequently, heat is evolved in its decomposition. It can be caused to explode by a fulminate. It forms an explosive compound with copper oxide, on which account brass and copper pipes and fittings should be avoided as far as possible where it is employed. It liquefies at a moderate pressure below $100^\circ F.$, its critical temperature being not far from that point. It has been proposed to introduce the gas into everyday use, either distributing it through pipes or supplying it in liquid form.

GATLING, RICHARD JORDAN, inventor of the machine-gun bearing his name, was born in Hartford county, N. C., Sept. 12, 1818. His last improvements are a 6-barrel gun, adapted to police, boat, mounted service, and use behind breast-works, weighing, with tripod, 155 lbs., and having a range, with a Springfield rifle cartridge, of over a mile and a capacity of 800 shots per minute; an electric motor to take the place of the crank when the machine has a fixed position; and a new feed drum, with which 1,500 shots have been discharged in a minute.

GAYARRE, CHARLES ETIENNE ARTHUR, historian, was born in New Orleans, La., Jan. 9, 1805; died there Feb. 11, 1895.

GEFFCKEN, FREDERICK HENRY, juriconsult and publicist, was born in Hamburg, Germany, Dec. 9, 1830; died in Munich, April 30, 1896.

GEIKIE, SIR ARCHBALD, geologist, was born in Edinburgh, Scotland, in 1835; became a member of the Geological Survey of the United Kingdom in 1855; general director of the Survey and the Geological Museum in London in 1881; and president of the British Association for the advancement of Science in 1892. He was knighted in 1891. In 1897 he delivered a course of lectures in Johns Hopkins University. His latest publications include *The Founders of Geology* and *Ancient Volcanoes of Great Britain* (both 1897).

GEIKIE, JAMES, scientist and educator, was born in Edinburgh, Scotland, in 1839. His last publication is a 3d edition of *The Great Ice Age, and Its Relation to the Antiquity of Man* (1895), nearly three-fourths of which was entirely rewritten and the remainder revised and rearranged, making it really a new work.

GEIKIE, JOHN CUNNINGHAM, clergyman and author, was born in Edinburgh, Scotland, Oct. 26, 1824. His last publications are *New Testament Hours, Vol. I.: The Gospels and Landmarks of Old Testament History; Samuel to Malachi* (1894); and *New Testament Hours, Vol. II.: The Apostles, their Lives and Letters* (1895).

GENERAL THEOLOGICAL SEMINARY, New York City, founded in 1817; Protestant Episcopal; had at the close of 1897, 15 professors and instructors; 154 students; 27,540 volumes in the library; \$1,353,000 invested in grounds and buildings; \$1,010,848 in endowments; \$72,878 in gifts; \$81,758 in income; president, Rev. Eugene A. Hoffman, D.D., D.C.L.

GENEVA, canton in Switzerland; also city and capital of the same; population (1894) canton, 109,557; (1893) city, 78,777. During the 9 months ending Sept. 30, 1895, the exports declared at the city for the United States aggregated in value \$183,454, principally watches and watch movements (\$78,057), musical boxes (\$30,764), and milk products (\$28,051).

GENEVA COLLEGE, Beaver Falls, Pa., founded in 1848; Reformed Presbyterian; co-educational; had at the close of 1897, 14 professors and instructors; 240 students; 4,500 volumes in the library; \$80,000 in grounds and buildings; \$150,000 in productive funds; 5,000 in gifts; and \$17,000 in income; president, W. P. Johnston, D.D.

GENOA, province in Italy; also city and capital of the same, and most important seaport in the kingdom; population (1895) province, estimated 826,625; (1894) city, 215,300. During the 9 months ending Sept. 30, 1895, the exports declared at the city for the United States aggregated in value \$537,376, principally cotton waste (\$132,871), olive oil (\$124,074), silk (\$55,000), glycerine (\$48,961), hides (\$48,529), and cheese (\$39,753).

GEOGRAPHICAL SOCIETY, AMERICAN, organization founded in 1852 to encourage geographical exploration and discovery; affiliated with 200 similar domestic and foreign bodies; headquarters, No. 11 West 29th Street, New York City, where there is a library of 25,000 volumes and a large collection of maps, charts, and atlases. The officers are: President, Charles P. Daly, LL.D., vice-presidents, W. H. H. Moore, C. C. Tiffany, D.D., Gen. E. L. Viele; foreign corresponding secretary, Prof. William Libby, Jr.; domestic corresponding secretary, Chandler Robbins; recording secretary, Anton A. Raven; treasurer, W. R. T. Jones; councilors, Francis M. Bacon, Austen G. Fox, Bancroft Gherardi, John A. Hadden, William G. Hamilton, Levi Holbrook, Henry Holt, Morris K. Jesup, Alexis A. Julien, S. Nicholson Kane, Clarence King, Gustav E. Kissel, D. O. Wills, Henry Parish, and Charles A. Peabody. The Society publishes an annual journal and occasional bulletins. Membership, 1897, 1,100.

GEOGRAPHIC SOCIETY, NATIONAL, organization with headquarters in Washington, D. C.; founded for the increase and diffusion of geographical knowledge; publishes a magazine; and had 1,513 members in 1897. Officers: President, vacant; vice-presidents, Herbert G. Ogden, Gen. A. W. Greely, C. Hart Merriam, Marcus Baker, William H. Dall, Grove K. Gilbert; corresponding secretary, Eliza R. Seidmore, 1517 H Street N. W., Washington, D. C.; recording secretary, Everett Hayden; treasurer, Henry Gannett; managers, H. F. Blount, John Hyde, W. J. McGee, F. H. Newell, W. B. Powell, Charles J. Bell, David T. Day, and F. V. Coville.

GEOLOGICAL SOCIETY OF AMERICA, founded 1888; publishes *Bulletin of the Geological Society of America*; fellows, 1897, 234. Officers: President, Edward Orten, State University of Ohio; vice-presidents, J. J. Stevenson, New York University, B. K. Emerson, Amherst College; secretary, H. L. Fairchild, University of Rochester (N. Y.); treasurer, I. C. White, Morgantown, W. Va.; editor, J. Stanley Brown, Washington, D. C.; councilors, J. S. Diller, United States Geological Survey, R. W. Ells, Geological Survey of Canada, W. B. Scott, Princeton University, C. R. Van Hise, University of Wisconsin, and J. M. Safford, Vanderbilt University.

GEOLOGICAL SURVEY, U. S., a branch of the executive Department of the Interior, the director of which has charge of the classification of the public lands and examination of the geological structure, mineral resources, and publication of the statistics collected; director, 1897, Chas. D. Walcott; chief of division of mineral resources, David T. Day. The Survey publishes, under acts of Congress, a large number of important reports annually. See **MINERAL PRODUCTIONS, UNITED STATES**.

GEORGE CHRISTIAN WILLIAM FERDINAND ADOLPHUS, KING OF THE HELLENES was born in Copenhagen, Denmark, Dec. 24, 1845; elected king in 1863. He presided at the opening of the athletic games of the 776th Olympiad at Athens on April 6, 1896, and at the closing contests and ceremonies on the 15th, and at a banquet to the contestants at the royal palace made a felicitous speech congratulatory to the victors. The total number of athletes who received crowns of victory was 44, of whom 11 were from the United States, 10 from Greece, 7 from Germany, 5 from France, 3 from Great Britain, 2 from Hungary, 2 from Australia, 2 from Austria, and 1 each from Denmark and Switzerland. In February, 1898, he narrowly escaped assassination.

GEORGE FREDERICK ERNEST ALBERT, DUKE OF YORK, heir presumptive to the British throne by the death of his brother, the Duke of Clarence and Avondale, was born in Marlborough House, June 3, 1865. The birth of a son to the duke and duchess on June 23, 1894, bringing a third life into direct succession to the throne, was the occasion of much rejoicing throughout the empire. On the 27th following, the duke was invested with the honorary degree of LL.D. by the University of Cambridge.

GEORGE, HEXIV, political economist, was born in Philadelphia, Pa., Sept. 2, 1839; died in New York City, Oct. 29, 1897. In 1894 it was reported that the papal authorities had issued a decree condemning his books; but subsequently it was ascertained that although Archbishop Corrigan, of New York, had appealed to the Holy Office for such a decree, on the ground that his teachings were not such as the Roman Catholic Church should countenance, no action was taken. In 1897 he was the first candidate nominated for the office of mayor of the Greater New York. Subsequently, he was indorsed by several political organizations. On Oct. 2 all his supporters united in forming an organization named the Democracy of Thomas Jefferson, and his nomination was renewed and accepted. He entered the campaign with all the heartiness that had characterized every important movement in his life, and, despite the exhaustive work of public speaking, kept up a most active canvass till within about three hours of his death. On his last night he made four addresses; returned to his hotel after midnight; complained of being tired; was stricken with apoplexy; and died soon afterward. His followers immediately substituted the name of his son at the head of their ticket. The funeral was one of the most notable events in the history of

the city. Over 30,000 persons viewed the remains, and the most eminent clergymen of several denominations, including his tried friend, Dr. McGlynn, spoke over his bier. At the time of his death he had nearly completed *The Science of Political Economy*, in five parts, and the work was published in 1898.

GEORGE, JAMES ZACHARIAH, military officer and jurist, was born in Monroe county, Ga., Oct. 20, 1826; died in Mississippi City, Miss., Aug. 14, 1897. From 1881 till his death he was a Democratic United States senator from Mississippi. On the organization of Congress in December, 1895, he was appointed chairman of the select Committee to Investigate the Condition of the Potomac River Front at Washington, and a member of the Committees on Agriculture and Forestry, Education and Labor, Judiciary, Transportation Routes to the Seaboard, and Woman Suffrage (select).

GEORGETOWN COLLEGE, Georgetown, Ky., founded in 1829; Baptist; co-educational; had at the close of 1897, 21 professors and instructors; 365 students; 12,000 volumes in the library; \$225,000 in productive funds; and \$20,197 in total income; president, A. C. Davidson, D.D.

GEORGETOWN UNIVERSITY, Washington D. C., founded in 1789; Roman Catholic; had at the close of 1897, 118 professors and instructors; 690 students; 76,500 volumes in the library; \$30,000 in productive funds; \$14,842 in gifts; \$120,045 in income; college of liberal arts, preparatory department; school of arts and sciences; school of medicine; and school of law; president, Rev. J. H. Richards, S.J.

GEORGIA, one of the United States of North America; the fourth of the original thirteen States to ratify the Federal constitution (Jan. 2, 1788); seceded Jan. 19, 1861; readmitted July 30, 1868; counties, 137; capital, Atlanta.

State Officers, 1896-98.—Governor (elected for 2 years, salary \$3,000 per annum), William Y. Atkinson; secretary of state, Allen D. Chandler; treasurer, W. J. Speer; comptroller, William A. Wright; attorney-general, Joseph M. Terrell; adjutant-general, J. McIntosh Kell; commissioner of agriculture, Robert T. Nesbitt; school commissioner, G. A. Glenn; chief justice of the supreme court, Thomas J. Simmons; associate justices, Samuel Lumpkin, Henry T. Lewis, Andrew J. Cobb, William A. Little, and William H. Fish; clerk, Z. D. Harrison—all Democrats.

Legislature, 1897.—Democrats, senate 37, house 142, joint ballot 179; Populists, senate 6, house 30, joint ballot 36; Republicans, senate 1, house 3, joint ballot 4; Democratic majority, senate 30, house 109, joint ballot 139.

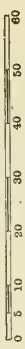
Elections.—In the State elections 1896, there was a total of 206,659 votes cast for governor, of which the Democratic candidate (Atkinson) received 120,827 and the Populist candidate (Wright) 85,832. All Democratic candidates for Congress were elected. In the presidential election, the Democratic candidate received 94,232 votes; the Republican, 60,091; the Prohibition, 5,592; and the National Democratic, 2,788.

Farm Products.—Reported Dec. 31, 1895: Corn, 42,172,481 bush., from 3,244,037 acres, value \$17,290,717; wheat, 1,330,706 bush., from 214,630 acres, value \$1,091,179; oats, 6,679,048 bush., from 460,624 acres, value \$3,072,362; rye, 138,809 bush., from 19,279 acres, value \$117,988; potatoes, 364,066 bush., from 6,277 acres, value \$258,487; and hay, 236,541 tons, from 147,838 acres, value \$2,578,297. The cotton crop of 1894-95 was approximately 1,300,000 bales; and of 1896-97, 1,299,340 bales.

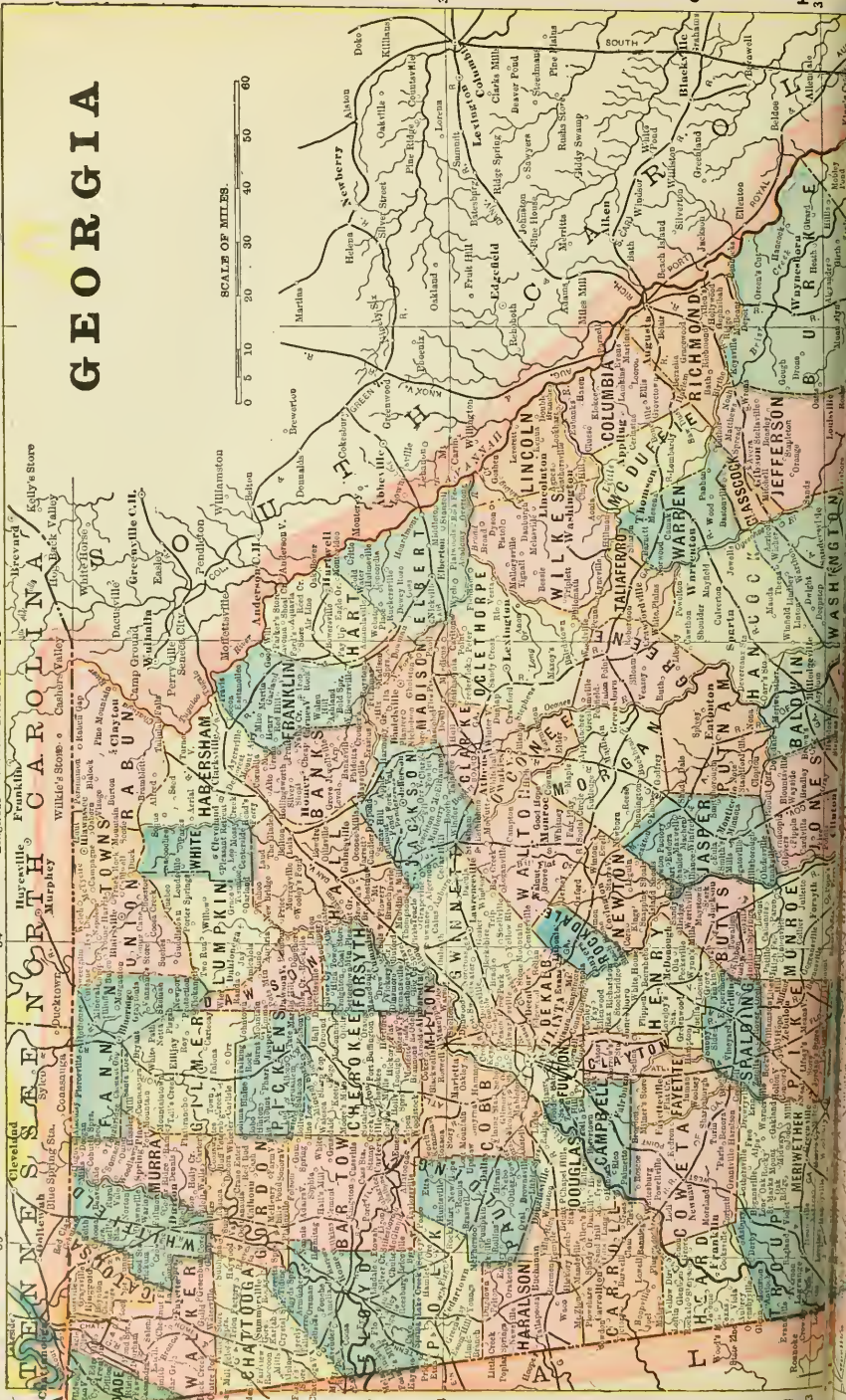
Farm Animals.—Reported Jan. 1, 1897: Horses, 110,277, value \$5,331,018;

GEORGIA

SCALE OF MILES.



1 85.2 3 4 5 6 7 83 9 10 11 12 13



mules, 164,380, value \$10,343,698; cows, 306,457, value \$5,212,834; cattle, 513,-870, value \$4,317,650; sheep, 344,680, value \$503,646; and swine, 2,012,868, value \$6,373,544.

Mineral Resources.—The following is summary of the mineral productions of the calendar year 1894: Iron ore, a small part credited to North Carolina, 174,-694 long tons; pig iron, 40,268 long tons; gold and silver, estimated at \$99,095; manganese 1,277 long tons, value \$8,620; coal, 354,111 short tons, value \$299,-290, all in Dade and Walker counties; coke, 93,029 short tons, valued at \$116,286 from 166,523 tons of coal; quarries, granite, \$511,804 (\$476,387 in 1893); sandstone, \$11,300; slate, \$22,500; marble, \$724,385 (\$261,666 in 1893) all from Pickens county; and limestone, \$32,000—total, \$1,301,989; and clay products, common and pressed brick, \$585,693, fancy brick, \$14,098, firebrick, \$17,650, sewer pipe, \$47,300, drain tile, \$2,000, terra-cotta work, \$11,000, and miscellaneous, \$22,196—total, \$699,887.

Finances.—The assessed valuations in 1895 were: Real estate and railroad property, \$237,183,710; personal, \$133,555,811—total, \$370,739,521; tax rate, \$4.30 per \$1,000. Assessed valuations have steadily decreased since 1892, when they aggregated \$463,753,534, with a \$4.85 tax rate. The recognized bonded debt, Oct. 1, 1895, was \$8,436,500 bearing interest, and \$2,500 past due and non-interest bearing; total, \$8,439,000; floating debt bearing interest, \$90,202; sinking fund, \$200,000; net debt, \$8,329,202; contingent liabilities, \$164,000; property owned by the State, the Western & Atlantic R. R., rented for 29 years at \$420,012 per annum. The State is paying off its bonded debt at the rate of \$100,000 per annum.

Banks.—On Oct. 31, 1897, there were 30 national banks in operation and 14 in liquidation, the active ones having a combined capital of \$4,016,000, and holding \$1,211,000 in United States bonds. These banks had outstanding on loans and discounts \$9,788,454; represented by demand paper with individual or firm name, \$385,034; the same secured by stocks, bonds, and other personal securities, \$800,-766; time paper with two or more individual or firm names, \$3,714,006; time paper with single individual or firm name, \$1,304,492; and the same secured by stocks, bonds, and other personal securities, \$3,641,755. The banks held an aggregate of \$687,653 in coin and coin certificates, of which \$295,598 was in gold coin. The circulation account was: Total issue, \$10,902,960; redeemed, \$9,674,440; outstanding, \$1,228,520. There were deposits, \$6,940,688; reserve required, \$1,099,698; reserve held, \$2,023,439; ratio of reserve, 2 banks in Savannah 55.61 per cent., 28 banks in State 26.71 per cent. During the year ending Sept. 30, 1897, the exchanges at the United States clearing house in Savannah aggregated \$124,497,490 a decrease of \$15,928,255 from the total of the previous corresponding period. The State banks, reporting June 30, 1897, numbered 41, and had capital \$3,926,900; deposits, \$6,167,507; resources, \$13,180,-939; and surplus and undivided profits, \$1,223,712. There were 6 stock savings banks, which had capital \$655,000; depositors, 5,384; check deposits, \$1,081,-794; and savings deposits, \$288,010; resources, \$2,483,897; and surplus and profits, \$432,096. Private banks numbered 6, and had capital, \$331,500; deposits, \$214,430; resources, \$584,338; and surplus and profits, \$25,117. The last report on building and loan associations (1893) showed 43 such organizations, of which 31 were national and 12 local, 25 serial, 6 permanent, and 12 terminating. There were 31,294 shareholders, who held 224,090 shares, of which 152,168 were free and 62,161 borrowed on. The total assets and liabilities were \$7,313,741, loans on real estate, \$6,229,826, and dues and profits, \$5,938,077. During the life

of the associations, 38 reported 4,409 houses and 176 other buildings acquired by shareholders, and 41 reported 70 foreclosures of mortgage, involving \$91,218, on which the net loss was \$1,575.

Internal Revenue.—During the fiscal year ending June 30, 1897, the collections of internal revenue aggregated \$447,698.85 from the following sources: Distilled spirits, \$315,760.86; tobacco, \$20,960.39; fermented liquors, \$105,259.20; oleo-margarine, \$2,936; penalties, \$4,676.07; and miscellaneous, \$6.96. During the year there were 93 single-account cigar factories in operation, which used 98,866 lbs. of tobacco, and had an output of 4,426,406 cigars and 3,225,800 cigarettes, and 18 other tobacco factories, which had an output of 52,348 lbs. of smoking tobacco. There were 59 grain and 93 fruit distilleries in operation; 123,136 gals. of spirits rectified and 713,489 ganged; and 109,300 bbls. of fermented liquors produced.

Railroads.—The single-track mileage, Jan. 1, 1895, was 5,113.02. The roads had a combined capital of over \$68,000,000; funded debt, over \$87,000,000; total investment, exceeding \$172,000,000; and had expended for roadbeds and equipment about \$157,000,000. The State owned the Western & Atlantic R. R., extending from Atlanta to Chattanooga, Tenn., and during 1895 the Northeastern R. R. was bought at auction by the State, the Georgia Central was bought by the Southern Railway Co., which also secured control of the Georgia Southern & Florida road, and the Marietta & North Georgia road was bought by the Philadelphia Car Trust Co.

Commerce.—During the calendar year 1897 the imports of foreign merchandise at the ports of Brunswick, St. Marys, and Savannah aggregated in value \$482,091, and the exports of domestic merchandise, \$35,134,695; an increase of \$120,782 in imports and \$6,226.53 in exports over the totals of the previous year.

Manufactures.—In 1895 there were in the State 75 cotton and woolen mills, with 668,578 spindles, 15,237 looms, and 1,809 cards. Till recently the State had the largest cotton mill in the South, with \$1,250,000 capital, 46,600 spindles, 1,650 looms, and 266 cards; but there is now one in Pelzer, S. C., with a capital of \$1,000,000, which has 107,000 spindles and 3,100 looms. The principal mills were the Eagle and Phoenix, Columbus, capital \$1,250,000; John P. King and Sibley, both in Augusta, capital of each, \$1,000,000; Massachusetts, Rome, capital \$700,000; Augusta, in Augusta, capital \$600,000; Exposition, Atlanta, capital \$500,000; and Lauett, West Point, capital \$500,000. The leading manufacturers of the State formed an association, May 7, 1895, for the purposes of promoting manufacturing possibilities, securing a more equitable adjustment of freight and insurance rates, protective legislation for private and corporate capital, and encouraging a more liberal patronage of home industries.

Publications.—Reported March, 1898: Daily, 28; semi-weekly, 2; weekly, 273; bi-weekly, 2; semi-monthly, 8; monthly 43; and quarterly, 1.

Churches.—The Regular Baptist Colored Church is the strongest denomination in the State, and is followed by the Regular Baptist South; Methodist Episcopal, South; African Methodist; Methodist Episcopal; Primitive Baptist; Presbyterian, South; and Roman Catholic. At the Eighth International Sunday School Convention held in Boston, Mass., June 23-26, 1896, there were reported for Georgia, 6,889 evangelical Sunday schools, 59,885 officers and teachers, and 310,612 scholars; total members, 370,497.

Schools.—Reports for the school year 1895-96 showed: Estimated number of children of school age in the State, 715,300; pupils enrolled in the public schools, 423,786; pupils in average daily attendance, 254,142; public school property

valued at \$2,476,188; and total expenditure, excluding debt payments, \$1,686,909. There were 8,921 teachers, nearly equally divided between the sexes. Of the total enrollment, 253,516 pupils were white and 170,270 colored; of the average daily attendance, 154,896 were white and 99,246 colored; and of the teachers, 5,868 were white and 3,053 colored. For higher instruction there were 10 universities and colleges of liberal arts, with 126 professors and instructors; 2,252 students (1,622 males, 630 females) in all departments; 61,204 bound volumes in the libraries; scientific apparatus and libraries valued at \$114,750; grounds and buildings, \$1,666,000; amount of benefactions during the year, \$33,922; total income, \$129,649; and aggregate productive funds, \$940,217. The State College of Agriculture and Mechanic Arts, a branch of the State University, had a faculty of 21; students in the collegiate department, 103; volumes in library, 27,377; area under cultivation, 50 acres; value of farm lands, \$10,000; and value of buildings and equipments, \$250,000. The State Industrial College for colored youth had 143 students in the preparatory department and 63 in the collegiate; receipts, \$15,232; and expenditures, \$7,883. The State Normal School, near Athens, which had a session of only eight weeks in 1894, was opened as a permanent normal school in April, 1895, under an appropriation by the legislature of \$20,000 for maintenance for two years. There were also 58 endowed academies, seminaries, and other secondary schools, and 10 colleges for women exclusively, the latter having 131 instructors and 2,023 students.

Libraries.—In 1896 there were reported 41 public libraries of 1,000 volumes each and upward, with a total of 270,041 bound volumes and 19,262 pamphlets.

Population.—In 1890, 1,837,353, of whom 919,925 were males, 917,428 females; 1,825,216 natives, 12,137 foreign-born; 966,465 whites; and 858,996 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 2,146,000.

GEORGIA, UNIVERSITY OF, Athens, Ga., non-sectarian; had at the close of 1897, 19 professors and instructors; 267 students; 20,000 volumes in the libraries; \$500,000 invested in grounds and buildings; \$35,000 in scientific apparatus and libraries; \$380,200 in productive funds; \$169,000 in income; president, William E. Boggs, D.D., LL.D.

GERMAN EMPIRE, a confederation of all the States of Germany under the constitution of 1871; area, 208,670 square miles; population (June 14, 1895), 51,758,364; capital, Berlin; emperor, William II.

Finances.—The budget estimates for the common support of the empire for 1895-96 showed: Revenue, ordinary, 1,178,395,000 marks; extraordinary, including loans, 46,379,000—total, 1,224,774,000 (\$281,698,020); expenditure, ordinary, 1,192,872,000; extraordinary, including the army, 46,379,000—total, 1,239,251,000 (\$285,027,730). Deficits are made up by assessments on the individual States. Of the estimated revenue 627,003,000 marks (\$144,210,690) were charged against customs and excise and 51,629,000 (\$12,564,670) against stamps. The debt in 1894 was funded, 1,915,714,500 marks (\$440,614,335); unfunded, 120,000,000 (\$27,600,000)—total, \$468,214,335. The empire proper has large assets in invested funds and keeps at Spandan a war treasure fund, equivalent to over \$27,000,000, in gold coin. The contribution of the principal States to the common revenue in 1894-95 was: Prussia, 233,180,000 marks; Bavaria, 50,088,000; Wurtemberg, 18,294,000; Saxony, 27,258,000; Baden, 14,055,000; Alsace-Lorraine, 13,617,000; Hesse, 7,729,000; Mecklenburg-Schwerin, 4,501,000; Saxe-Weimar, 2,538,000; Oldenburg, 2,763,000; Brunswick, 3,142,000; and Hamburg, 4,846,000.

Commerce.—During 1894 the special commerce aggregated 4,285,533,000 marks in imports (\$985,625,900) and 3,051,480,000 in exports (\$701,840,400); the imports of gold and silver included in the foregoing were equivalent to \$74,123,980 and the exports to \$20,429,980. The principal imports were: Wool, 222,520,000 marks; coffee, 202,793,000; raw cotton, 199,605,000; wheat, 117,916,000; barley, 104,380,000; woolen yarn, 100,633,000; raw hides, 97,293,000; swine, 80,754,000; raw silk, 77,407,000; horses, 61,624,000; rye, 54,544,000; and petroleum, 45,536,000; and the principal exports were: Sugar, 209,174,000 marks; coal and coke, 136,715,000; woolen fabrics, 117,714,000; haberdashery, 85,532,000; hosiery, 81,973,000; mixed silk and cotton cloth, 79,061,000; leather goods, 72,317,000; cotton cloth, 54,431,000; and aniline dyes, 53,183,000. During the fiscal year ending June 30, 1895, the United States imported from Germany merchandise valued at \$81,014,065 and gold and silver \$1,389,090, and exported thereto merchandise \$92,053,753 and gold and silver \$15,239,751.

Agriculture.—According to the last official returns (1892) 91 per cent. of the whole area of Germany is productive and 9 per cent. unproductive. In 1894-95 the areas under the principal crops, in hectares (1 hectare=2.47 acres) were as follows: Rye, 6,044,568; hay, 5,912,626; oats, 3,916,726; potatoes, 3,025,103; wheat, 1,980,496; barley, 1,628,058; beet root for sugar, 439,386; and vines, 116,548; and the products, in metric tons (1 m. t.=2,200 lbs.), were: Rye, 7,075,020; hay, 18,970,259; oats, 5,250,152; potatoes, 29,049,238; wheat, 3,012,271; barley, 3,432,913; beet root for sugar, 12,537,429; and wine, 62,137,284 (gals). The farm animals at last report comprised 3,836,256 horses; 17,555,694 cattle; 13,589,612 sheep; 12,174,288 swine; and 3,091,287 goats.

Mining.—The total value of the mineral productions of Germany and Luxemburg in 1894 was 675,000,000 marks (\$155,250,000), the principal mining operations being in Prussia. The output of the principal minerals was: Coal, 76,772,700 tons; lignite, 22,103,400; iron ore, 12,403,800; potassic salt, 1,643,600; rock salt, 735,500; zinc ore, 728,600; copper ore, 588,200; and lead ore, 162,700.

Fisheries.—The North Sea cod and herring fisheries employed 456 boats and 2,104 men in 1894; the Baltic fisheries were the most important, and besides local wants yielded fresh fish for export to the value of 7,666,000 marks (\$1,763,180). The imports of fresh and preserved fish, oysters, lobsters, and all other shellfish aggregated in value 55,073,000 marks (\$12,666,790).

Manufactures.—In 1893-94 there were 405 beet-root sugar factories in operation, which used 10,644,352 metric tons of beet root and produced 1,319,006 tons of raw sugar and 279,299 of molasses. The output of refined sugar was 819,629 tons. For the manufacture of sugar from starch there were 30 factories, which had an output of 7,916 tons of dry sugar, 26,457 of syrup, and 3,699 of color. Within the beer-excite district there were 8,243 breweries and 71,503 distilleries in operation, which had an output of 1,221,110,000 gals. of beer and 71,786,000 of alcohol.

Army.—To defend its frontier of 4,570 miles, there are 17 fortified places of the first-class and 19 other fortresses, all connected with each other by underground telegraphs, and strategical railway lines connect the principal military centers with the frontier. The peace strength of the imperial army in 1896 was: Officers 22,618, rank and file 562,116, horses 97,280; the infantry comprising 12,918 officers and 383,586 rank and file. The government publishes no details of its war strength, but it is believed that in an emergency over 3,000,000 trained men could be put into the field under the present organization. There are 494 field batteries, of which 47 are mounted. The budget estimate of expenditure for the army in the year ending March 31, 1896, was 472,212,200 marks (\$108,608,806).

Navy.—The personnel of the navy in 1896 comprised 969 officers, 4,439 petty officers, 116 surgeons, 15,202 seamen, and others making a total of 22,277 men. On Jan. 1, 1896, there were afloat 4 first-class battleships; 5 second-class; 4 third-class; 12 port defense ships; 9 first-class cruisers; 11 second-class; 23 third-class; and 132 torpedo craft of all dimensions; and a first-class battleship, 5 cruisers, and 8 torpedo craft were under construction. In March, 1896, the budget commission granted the demand of the government for the construction of 3 additional cruisers. The total armament was 1,009 guns, including secondary batteries, of which 22 were between 40 and 80 tons; 78 between 20 and 40; 168 between 4 and 20; and 741 under 4. The government has also subsidized, as auxiliary merchant cruisers, 7 vessels with a nominal speed of about 20 knots. The budget estimate of expenditure for the navy in the year ending March 31, 1896, was 55,261,500 marks (\$12,710,145).

Communications.—At the end of 1894 there were 27,851 miles of railway in operation, of which all but 3,170 miles belonged to the government. The total capital was equal to \$2,554,316,060; receipts, \$325,110,290; expenditures, \$198,561,070. There was a total of 8,457 miles of canals and other navigable waterways in use. See BALTIC AND NORTH SEA CANAL. Excepting in Bavaria and Wurtemberg, the postal and telegraph services are united in an imperial postal district, and including those States there was a total of 30,372 post-offices, 97,990 postal boxes, and 19,906 telegraph offices in the empire.

Banking.—In 1891 there were 8 note-issuing banks, which had a combined capital of 219,672,000 marks, total liabilities, 2,018,120,000, and total assets, 2,022,193,000. During that year the government coinage was, gold, 157,282,100; silver, 4,487,200; nickel, 813,900; and copper, 373,400—total, 162,986,600 marks (\$374,869,180). See BANKING SYSTEMS, FOREIGN.

Churches.—Protestants form 62.8 per cent. of the population; Roman Catholics, 35.8; other Christians, 0.29; and Jews, 1.1. The order of the Jesuits is prohibited in all parts of the empire; the Roman Catholics have 5 archbishops and 20 bishops; and the Old Catholics have one bishop, at Bonn.

Schools.—In 1895 there were 21 universities with 2,526 professors and teachers and 27,797 students in all departments, besides 3,721 non-matriculated students in the University of Berlin. There were 856 secondary schools of various grades; 9 technical high schools; 31 middle schools of agriculture; 15 schools of mining; 15 schools of architecture and building; 9 academies of forestry; 23 schools of art and art industry; and 7 public music schools. The number of elementary schools exceeds 56,000, with over 120,000 teachers, and over 8,000,000 pupils. Of all recruits for the army in the levy of 1893-94 only 0.24 per cent. could neither read nor write.

Recent Events.—In 1895 the Reichstag refused to authorize its president to convey the congratulations of parliament to Prince Bismarck on his 80th birthday, which aroused the indignation of the emperor and led the president to resign. In March, the emperor, crown prince, heads of the civil, military, and naval departments, and a representative detachment of troops visited Prince Bismarck, and the emperor gave a grand banquet in his honor. The unfavorable condition of agriculture was a source of grave concern to the emperor and the Reichstag. The 25th anniversary of the French surrender at Sedan (Sept. 2) was observed with much enthusiasm throughout the empire, and on the anniversary of the battle of Gravelotte (Aug. 18) the emperor laid the foundation stone of the national memorial to Emperor William I. Trade generally showed a marked improvement during the year, despite the depression in cereals.

At the beginning of January, 1896, the emperor created a European sensation by formal congratulations to President Krüger, of the South African Republic, over the failure of the Jameson raid (see CAPE COLONY), and assured Austria and Italy that the Dreibrund would not be affected by the occurrence. Subsequently he pledged himself to stand by the Boers. On April 5, a new treaty of commerce and navigation between Germany and Japan was signed in Berlin, much more liberal to Germany and more progressive on the part of Japan than the preceding one. On May 3, surrounded by a glittering assemblage of court officials and foreign ambassadors, the emperor opened the International Art Exhibition in Berlin.

GIRARD COLLEGE, Philadelphia, Pa., opened in 1848; non-sectarian; had at the close of 1897, 66 professors and instructors; 1,705 students; 27,200 volumes in the library; grounds, buildings, and scientific apparatus valued at \$3,250,000; and productive funds aggregating \$15,210,400; president, Adam H. Fetterolf, PH. D., LL. D.

GLOUCESTER, city and port of entry, Essex county, Mass.; population (1890) 24,651; (1895) State census, 28,211. In 1896 the assessed valuations were: Real estate, \$12,021,300; personal, \$3,501,084—total, \$15,522,384; tax rate, \$17.70 per \$1,000; and the total funded debt was \$497,450; sinking funds, \$213,118; net debt, \$284,332. There are 4 national banks, with combined capital \$800,000, deposits \$1,229,235, and resources \$3,242,711; a weekly and 2 daily newspapers; electric street railroad connecting with Beverley and Essex; and large granite and cod and mackerel fisheries interests.

GOLD. The estimate by the director of the United States mint of the world's production of gold in 1894 was 8,780,518 fine ounces, valued at \$181,510,100, the principal producers being Australasia, \$41,760,800; Africa, \$40,346,000; the United States, \$39,500,000; Russia, \$27,646,000; China, \$6,014,000; Mexico, \$4,500,000; British India, \$3,986,900; Colombia, \$2,892,000; British Guiana, \$2,310,100; Germany, \$2,293,100; and Brazil, \$2,219,500. The quantity of the production in the United States was 1,910,813 fine ounces, which gave the country third place as a producer. During 1895 the world's output rose to \$200,000,000 approximately, the share of the United States being 2,265,612 fine ounces, valued at \$46,830,000, and giving the country second place. Much of the increase in the United States was due to enlarged mining operations in California, Colorado, Idaho, Montana, Washington, and Alaska since the repeal of the silver-purchase clause of the Sherman law. The commercial movement of gold in the United States in the calendar year 1895 was, imports \$32,538,736, and exports, \$104,605,023. At the close of the year the national banks held an aggregate of \$162,925,290 in gold, and the general stock, coined or issued, amounted to \$568,106,939, of which the treasury held \$83,378,392, and the Russian government \$30,769,115. The treasury estimate of the total stock of gold in the United States, Jan. 1, 1896, was \$618,205,000. The bidding for the bond issue of February, 1895, showed a stock of gold available for investment of \$568,269,850, on a tender of \$100,000,000. On April 1, 1895, the general stock, coined or issued, was \$567,592,416, of which \$88,098,517 was in the treasury and \$479,493,899 in circulation; and on April 1, 1896, the general stock was \$588,743,303, of which \$142,831,047 was in the treasury and \$445,912,256 in circulation. On the last date the gold certificates issued aggregated \$43,822,469, of which \$583,220 was in the treasury and \$43,239,249 in circulation. The foregoing relates wholly to gold as a medium of commercial exchange, no trustworthy information concerning the use of the metal in the mechanic arts being obtainable.

GOLD COAST COLONY, one of four British colonies in West Africa, extending 350 miles along the Gulf of Guinea; area, colony proper, 15,000 square miles; including protected territory, 46,600 square miles; population (1895) estimated 1,473,800. The native State of Ashantee (*q. v.*) is now within the protected sphere. The colony produces and exports palm oil, palm kernels, india-rubber, and valuable native woods, and is beginning to show important operations in gold mining. Education is promoted mainly by Wesleyan, Roman Catholic, and German missions, the government providing elementary schools at Accra and Cape Coast Castle and contributing to the support of others. The chief towns are Accra (population 16,267); Elmina (10,530); Cape Coast Castle (11,614); and Kwitta, Saltpond and Winneba. Since the forced submission of the King of Ashantee, a British Resident has been appointed to Kumassi, his capital. In 1894 there were 391 miles of telegraph in the colony, including 3 miles of cable.

GRAHAM, WILLIAM MONTROSE, military officer, was born in the District of Columbia, Sept. 28, 1834. He was commissioned a 2d lieutenant in the 1st U. S. Artillery in 1855; was promoted 1st lieutenant and captain in 1861, major of the 4th Artillery in 1879, lieutenant-colonel of the 1st Artillery in 1887, colonel of the 5th Artillery in 1891, and brigadier-general, U. S. A., in 1897; and under his last commission was placed in command of the Department of Texas. In March, 1898, in anticipation of war with Spain, the new department of the Gulf was created, with headquarters at Atlanta, Ga., and General Graham was assigned to its command.

GRAND RAPIDS, city, capital of Kent county, Mich.; population (1890) 60,278; (1897) estimated 90,000. It is noted particularly for its manufactures of household and school furniture. In 1896 the assessed valuations were: Real estate, \$21,864,915; personal, \$5,868,620—total, \$27,733,535; total tax rate, \$31 per \$1,000; and Feb. 1, 1897, the total bonded debt was \$1,710,000 (including a water debt of \$855,000); sinking fund, \$90,000; net debt, \$1,620,000. There were 5 national banks, with combined capital \$2,200,000, deposits \$4,675,154, and resources \$8,840,776; electric street railroad operating over 50 miles of track; and 3 daily, 2 semi-weekly, 13 weekly, and 1 monthly periodicals.

GREECE (known officially as the Kingdom of the Hellenes), a constitutional monarchy of Europe on the Mediterranean Sea; area, 25,041 square miles; population (1889) 2,187,208; (1896) 2,418,000; capital, Athens; sovereign, King George I.

Finances.—The budget estimate in 1894 for revenue was 88,749,669 drachmai, for expenditure, 89,312,400; and in 1895, revenue, 91,331,118 (\$17,352,912), expenditure, 90,150,380 (\$17,128,572). The principal sources of revenue, in their order, were: Customs and excise, direct taxes, stamps and dues, monopolies, state property, elementary instruction, arrears, municipal police, and repayments; and the items of expenditure: Public debt, army, ministry of the interior, collection of revenue, public instruction, navy, ministry of justice, and pensions. The outstanding public debt on Jan. 1, 1895, comprised 656,028,897 drachmai in gold and 168,580,255 in paper—total, 824,609,152 (\$156,675,738). The total indebtedness per head of population was about \$80. Municipal revenues aggregated about \$3,264,352 and debts \$3,641,210.

Commerce.—During 1894 the special commerce comprised imports, principally cereals, yarns and tissues, timber, minerals and hardware, coal, fish, sugar, crude metals, coffee, and live stock, equivalent to \$20,892,176; and exports, princi-

pally currants, ores, olive oil, wines, fruit, tobacco, valonea, sponges, silk and cocoons, \$14,115,271. During the fiscal year ending June 30, 1895, the United States imported from Greece merchandise valued at \$327,201, a decrease from \$797,281 in 1894 and \$1,283,557 in 1893; and exported thereto products valued at \$152,544, an increase from \$124,449 in 1894 and \$130,461 in 1893. The merchant marine in 1894 consisted of 125 steam vessels of 134,687 tons and 762 sailing vessels of 343,442 tons, and during that year 4,900 vessels of 2,612,253 tons entered Greek ports and 4,428 of 2,469,791 tons cleared therefrom.

Agriculture.—An official report in 1893 credited the kingdom with 5,000,000 acres of pasture, 2,025,400 in forest, 1,200,000 fallow, 1,111,500 in cereals, 432,000 in olives, 336,000 in vineyards, 168,000 in currants, and with 3,000,000 in waste land. About one-third of the area of Lake Copais (61,750 acres) had been reclaimed by drainage. The average production of cereals is: Wheat 7,000,000 bush.; barley, 3,000,000; rye, 825,000; maize, 2,700,000; and mezzlin, 1,380,000. The crop most cultivated is the currant, which in 1893 yielded 350,000,000 lbs. The farm animals included 100,000 horses, 360,000 cattle, and 2,900,000 sheep.

Mining.—The mineral productions in 1894 included iron ore, 214,265 tons; pig lead, 16,126; zinc ore, 23,120; blend of zinc lead, 1,030; galena, 11,620; lead carrying arsenic, 1,680; copper, nickel, and iron speiss, 300; and emery, 3,950. Other minerals of unreported output were silicate of magnesia, barytes, sulphur, and magnesite ore.

Army.—Under existing laws the army on a peace footing consists of 24,076 men, comprising 16,136 infantry, 4,877 cavalry, and 3,063 artillerymen and engineers, and in 1895 this total was exceeded with nominally 1,880 officers and 22,997 men, in all 24,877. On a war footing the regular army would consist of 100,000 men, with reserves of 104,500 and the territorial army of 146,000. The budget estimate of expenditure for the army for 1895 was \$2,918,250.

Navy.—The personnel of the navy in 1894 comprised about 185 officers and cadets, 587 petty officers, 1,643 sailors, 503 stokers, and 247 employees—total 3,165 men. There were 5 armor-clad vessels carrying 10 heavy guns besides secondary batteries and machine guns; 17 torpedo boats over 86 ft. in length; 2 Nordenfeldt submarine torpedo boats; and of unprotected vessels, 2 corvettes, 2 cruisers, 12 gunboats, 3 revenue vessels, a steel yacht, and an iron transport. The budget estimate of expenditure for the navy for 1895 was \$1,043,650.

Communications.—In 1894 there were 2,043 miles of non-metalled roads open for traffic; 555 miles of railway with 304 miles under construction; and a canal across the isthmus of Corinth 4 miles. The telegraph lines had a total length of 4,781 miles with 5,836 miles of wire and 200 offices; and the postal system 317 offices.

Banking.—The National Bank of Greece on Aug. 31, 1895, had approximately \$380,000 in gold and silver; \$21,640,000 in circulating notes; \$19,060,000 in private accounts and deposits; \$7,440,000 in mortgages on real estate; \$640,000 in advances on personal property; and \$1,480,000 in funds abroad. The National, Ionian, and Epiro-Thessalian Banks are authorized to issue notes for forced currency to the amount of \$17,600,000.

Churches.—The Orthodox Greek Church has 9 archbishops and 8 bishops in Northern Greece, 6 archbishops and 6 bishops in the Peloponnesus, an archbishop and 5 bishops in the islands of the Greek Archipelago, and 5 archbishops and 10 bishops in the Ionian Islands. There are 161 monasteries and nunneries, with 2,620 monks and 485 nuns. The last census reported 1,902,800 adherents of the established church; 14,677 other Christians, chiefly Roman Catholics; 5,792

Jews; and 24,165 Mohammedans. All sects have equal toleration and liberty of worship.

Schools.—Education is compulsory by law for children from 5 to 10 years of age, but is not generally enforced. The latest returns (for 1892) show 2,745 primary schools, 295 secondary, and a university; 3,680 teachers of all grades; and 139,385 pupils and students in all departments. About 440 students pass the university examination annually. Fully 30 per cent. of the army recruits can neither read nor write, and 15 per cent. can read only.

Recent Events.—In the latter part of 1893 and the early part of 1894 the Tricoupis ministry had much difficulty with the holders of the national bonds. The budget act of March 19, 1894, provided for the payment of only 30 per cent. of the interest due on gold loans, and amortization of these loans, where it had been in progress, was suspended. In July the bondholders' committee notified the premier that they would accept conditionally a minimum rate of interest of 35 per cent. in gold as the integral interest of the various loans, and abandon certain demands they had made on the government; but the premier refused his consent, and, after making counter propositions which were accepted by the Greek and French committees and rejected by the English and German, broke off the negotiations. Several towns suffered greatly from earthquake shocks in April.

On Jan. 22, 1895, the Tricoupis ministry resigned because of a rupture between the king and the premier over a popular demonstration against a proposed higher house tax and a tax on all trades and professions. Two days afterward a new cabinet was formed by Nikolas Delyanni, the Chamber was dissolved, and a general election ordered for April 30, which resulted in an overwhelming majority for the Delyanni party. The government at once authorized a reopening of negotiations with the foreign bondholders and announced its policy to be to meet all needs out of the regular revenue and to exercise rigid economy. The new president of the Chamber also announced that the service of the public debt would be transferred from the ministry of finance to a special body consisting of the minister of finance, the president of the supreme court of the Areopagus, the president of the board of audit, and the directors of the three banks of issue. See CRETE: TURKEY.

GRIGGS, JOHN W., lawyer, was born near Newton, N. J., July 10, 1849; graduated at Lafayette College in 1868; was admitted to the bar in Paterson, N. J., in 1871; elected to the State Assembly in 1875 and re-elected in 1876; served four years as city counsel of Paterson; elected to the State Senate in 1882 and 1885; and was its president in 1886; elected governor of New Jersey in 1895; and was appointed attorney-general of the United States in 1898.

GUATEMALA, a republic of Central America; divided into 22 departments for administrative purposes; area, 63,400 square miles; population (1890) 1,460,017; (1895) estimated 1,800,000; capital, Guatemala la Nueva; president, 1892-98, J. M. Reyna Barrios (assassinated Feb. 9, 1898).

Finances.—In 1894 the revenue, nearly one-half from customs, and over one-third from taxes on spirits, tobacco, and other articles, was \$11,831,815, and the expenditure, principally on account of the public debt, education, and war, was \$13,577,034; and for 1895-96 the estimated revenue was \$12,182,000, expenditure \$10,705,442. The outstanding foreign debt in May, 1895, was \$4,314,222, and the consolidated domestic debt, \$6,025,900—total, \$10,340,122. The government defaulted on its foreign bonds in February, 1894, but in May, 1895, arranged with the holders for the unification of its debts into a new consolidated 4 per cent.

debt of \$7,776,000, the bonds to be secured by a special tax on coffee exports. Other loans and a floating debt increase the foregoing debt by about \$1,000,000.

Commerce.—In 1894 the imports of merchandise, bullion, and specie aggregated in value \$6,937,000, and the exports, principally coffee, \$20,324,000. During the fiscal year ending **June 30, 1895**, the United States imported from Guatemala merchandise to the value of \$2,699,384 and exported thereto productions valued at \$2,665,408.

Agriculture.—The latest reports (for 1892) showed coffee area 115,681 acres, product 74,652,985 lbs.; sugar cane, 25,560 acres, product 6,064,080 lbs. of refined sugar, 37,991,770 lbs. of coarse sugar, and 4,802,800 lbs. of molasses; tobacco 72,520 acres, product 979,682 lbs.; cocoa 5,161 acres, product 637,582 lbs.; maize 173,640 acres, product 180,662,295 lbs.; and wheat 16,081 acres, product 10,047,125 lbs. Other important productions are rice, cotton, rubber, bananas, and coconuts. The municipalities own 1,098,930 acres of forest, containing mahogany and logwood. There are in the republic over 200,000 horses and mules, 500,000 cattle, and 500,000 sheep.

Mining.—Guatemala contains valuable deposits of gold, silver, lead, tin, copper, sulphur, salt, and other minerals, but scarcely anything has been done toward developing them.

Manufactures.—The mechanical industries are principally confined to the manufacture of cotton and woolen goods, cement, brick, furniture, cigars, and fermented and distilled liquors.

Army.—The regular army in 1894 consisted of 3,718 officers and men, with a reserve militia of 60,970 officers and men. There is no navy.

Communications.—Railways in operation have a total length of about 150 miles, and lines under construction a total of over 250 miles. A considerable additional mileage is under contract, with a guaranteed government subsidy of about \$8,000 per mile. There are 2,475 miles of telegraphs, with 135 offices; and 176 post-offices.

Banking.—The currency in circulation is principally paper. There are three large banking institutions, one of which paid a dividend of 14 per cent. on its paid-up capital in 1894. See **BANKING SYSTEMS, FOREIGN**.

Churches.—The prevailing religion is the Roman Catholic, but all other creeds are permitted liberty of worship, and the government makes no distinction between any of them.

Schools.—Education is free and compulsory. Excluding the polytechnic school, which is a charge on the war department, the government expended in 1895 for education \$1,541,645. There are over 1,300 government primary schools, attended by about 45,000 pupils out of a school population of 145,000; 13 secondary, normal, and professional schools, with 2,000 students; and 59 private schools and colleges for both sexes.

Recent Events.—In 1895 another attempt was made to establish a Federal union of the Central American republics, but the presidents of Guatemala and Costa Rica refused to attend the conference of presidents because of irritating boundary disputes. The long-standing controversy between Guatemala and Mexico, which nearly provoked war in 1894, was settled by a treaty in 1895, in which Guatemala renounced all claim to the territory in dispute, and both governments agreed to refer the question of damages for the expulsion of Mexican citizens from the disputed territory to the United States Minister to Mexico for arbitration.

GUIANA, BRITISH, a colony in South America, adjoining Venezuela, and including the settlements of Demerara, Essequibo, and Berbice; area, including

the territory claimed by Venezuela, 109,000 square miles; population (1894) 280,869; capital, Georgetown. The revenue for 1894-95 was \$2,858,870; expenditure, \$2,850,202; imports, \$8,110,125; exports, \$9,913,918; and public debt, \$4,162,973. The colony is very rich in gold, especially the part claimed by Venezuela, and mining operations yielded \$2,432,167 in 1894-95. The principal exports are sugar, rum, molasses, and gold; and imports, flour, rice, pork, butter, lumber, oils, and dried fish. During the fiscal year ending June 30, 1895, the United States imported from British Guiana merchandise to the value of \$2,521,704 (a decrease from \$4,223,970 in 1894 and \$5,029,178 in 1893), and exported thereto products valued at \$1,705,631 (a decrease from \$2,414,720 in 1894 and \$2,000,675 in 1893). There are 23 miles of railway; 450 miles of navigable waterways; 360 miles of post-office telegraph; 62 post-offices, 38 of which are also telegraph offices; 24 miles of telephone line; and 16 savings banks. Sir Augustus Hemming, the newly-appointed governor of the colony, reached Georgetown on April 4, 1896. Toward the end of that month the colonists sent a petition to the colonial secretary, urging a speedy settlement of the boundary dispute and detailing their property interests involved in the result. A treaty between Great Britain and Venezuela, providing for the submission to a tribunal of arbitration of the claims of both countries to the territory in dispute on the British Guiana border, was signed in Washington, D. C., Feb. 2, 1897.

GUIANA, FRENCH (OR CAYENNE), a colony in South America, between Dutch Guiana and Brazil; capital, Cayenne; population of capital about 14,000; of the interior, 12,640; convicts, 4,400. The colony has a large present interest because of its valuable deposits of gold and because of a dispute with Brazil similar to that between British Guiana and Venezuela. Cabral, a native Brazilian chief, has been occupying a tract of mineral land which the French claim as a part of the colonial possession, and so far efforts to dislodge him have failed. Brazil claims that Cabral is not an official of the government. In 1894 Cabral killed a French naval officer and several men who had been sent on a gunboat to rescue another officer whom Cabral held prisoner, and soon afterward the Brazilian and French governments began negotiations for a settlement of the boundary dispute by arbitration. In February, 1896, the Paris press demanded a speedy settlement of the trouble, and declared that the attitude of Cabral was becoming unbearable. It was shown that the region held by Cabral yielded 1,519,892 grammes of gold for export in 1891, and that between June 24 and Dec. 21, 1894, the export of native gold was valued at \$2,600,000. The territory in dispute is in the Brazilian State of Para, and the scene of the attack by Cabral's forces on the French colonists and the naval detachment sent to their aid is Amapa.

GUINEA, FRENCH, a colony on the west coast of Africa, comprising (1896) French Guinea proper, capital, Conakry; the Ivory Coast settlements, capital, Grand Bassam; and the Benin settlements, capital, Porto Novo; area and population both undetermined; area of Ivory Coast and Benin settlements, reported as 25,000 square miles; population of French Guinea proper, estimated as 47,500. The expenditure for the colony proper by the French government was fixed in the budget for 1896 at \$6,735, and the local budget for 1895 estimated the expenditure for the colony proper at \$109,500 and for the Ivory Coast settlements at \$220,000. A convention between France and Liberia settled the boundaries of the French possessions in August, 1894, each surrendering to the other certain parcels of territory; and by an agreement between France and Great Britain in January, 1895, respecting the Sierra Leone frontier, the former secured direct connection between French Guinea and the French Sudan, and a joint commis-

sion to delimit the frontiers of French Guinea and Sierra Leone was appointed in September following. During 1895 Captain Marchand discovered a new and important trade route from the Ivory Coast to the Niger by way of the Bandamma River. See also DAHOMEY.

GUINEA, PORTUGUESE, a colony on the west coast of Africa, between the British colonies of Gambia and Sierra Leone; area, 14,000 square miles; population estimated 800,000. The colonial budget for 1894-95 showed estimated revenue, \$73,429, and expenditure, \$188,684; and the last commercial returns (for 1891) showed imports \$102,600, and exports \$46,440.

GUSTAVUS ADOLPHUS COLLEGE, St. Peter, Minn., Lutheran; co-educational; had at the close of 1897, 15 professors and instructors; 227 students; 7,100 volumes in the library; \$65,000 invested in grounds and buildings; \$20,000 in scientific apparatus and library; \$14,250 in income; president, M. Wahlstrom, A. M., PH. D.

HAGEN, JOHN G., S. J., clergyman, was born in Austria, in 1847; entered in youth the German Province of the Society of Jesus; educated at the universities of Munster and Bonn; came to the United States in 1881; and since 1889 has been director of the observatory of Georgetown University, D. C. In 1896 he took part in the scientific congresses at Bamberg, Bavaria, and Fankfort-on-the-Main, and was highly honored for his work in the fields of astronomy and mathematics. He has published two volumes of a projected series of four on the *Higher Mathematics*, beside numerous treatises on astronomical and mathematical subjects.

HAGGARD, HENRY RIDER, author, was born in Norfolk, England, June 22, 1856. His last publications include *Montezuma's Daughter*; *The People of the Mist*; *Juan Haste*; and *The Wizard* (1896). In 1895 he was an unsuccessful candidate for Parliament.

HAITI, a republic occupying the western portion of the island of San Domingo, West Indies; area, 10,204 square miles; population, variously estimated at from 572,000 to 1,210,000; capital, Port-au-Prince; president, 1897, Gen. Tiresias Simon Sam, elected 1896.

Finances.—The revenue, derived almost exclusively from customs, aggregated \$7,644,780 in 1896, and the expenditures, \$7,654,986. The public debt was, external, \$4,255,369; internal, \$4,262,100; others, \$10,050,386; and paper currency, \$4,040,795—total, \$22,608,650.

Commerce.—In 1896 the exports, principally coffee, cocoa, logwood, cotton, gum, honey, and mahogany, amounted to about \$14,000,000; the imports, largely cotton, woolen, and linen manufactures, and iron in various forms, \$9,865,800.

Army.—The reorganized army comprises nominally 6,828 officers and men, chiefly of infantry, and there is a special government guard of 10 generals, who act as aids to the president, and 650 men.

Navy.—The navy consists of six vessels, which under comparison with vessels of other navies would be classed as third-rate cruisers. The latest built are the *Capois-la-Mort*, 1893, and the *Crete-a-Pierrot*, 1895.

Banking.—All notes of circulation are issued by the government and placed under control of the national bank of Haiti, which acts as its fiscal agent. In 1895 the government increased the amount of silver and copper coin in circulation by 1,600,000 gourdes (1 gourde= $96\frac{1}{2}$ cents, United States gold).

Churches and Schools.—The nominal predominating religion is Roman Catholicism. The republic is divided into 14 educational districts, each under an

inspector, and nearly \$1,000,000 is expended annually for public education. The public system comprises about 400 national schools and 5 public high schools, and there are many private schools.

Recent Events.—In 1896 the national assembly elected Gen. Tiresias Simon Sam, the former minister of war and marine, president of the republic, in succession to the late General Hippolyte. One of his first acts was to revoke the decree of banishment against Gen. François Legitime, ex-president, and to invite him to return to his native land. In January, 1897, the cabinet in office on President Sam's accession resigned, and a new one was formed as follows: Minister of finance, commerce, and foreign relations, A. Firman; public works and agriculture, Mr. Arteaud; public instruction, J. J. Cheney; justice and religion, Solon Menos; and army and navy, J. S. Marius. In October the government was endeavoring to negotiate a loan of \$6,000,000 to enable it to establish a gold currency, based on the United States gold dollar as the unit of value.

HALE, EDWARD EVERETT, D.D., philanthropist, was born in Boston, Mass., April 3, 1822. On the occasion of his 75th birthday, in 1897, his admirers undertook to raise \$30,000 with which to endow the Ten Times One corporation, which with the Lend-a-Hand clubs, owes its origin to his story, *Ten Times One is Ten*. He published *Susan's Escort and Others* (1897).

HALE, CHARLES CUTHBERT, D.D., educator, was born in New York City, Sept. 3, 1852. He was graduated at Williams College in 1872; was licensed to preach in 1874; held Presbyterian pastorates in Newburg and Brooklyn, N. Y.; and was elected president of the Union Theological Seminary, New York, in 1897. He published *Qualifications for Ministerial Power* (1894), *The Children, The Church, and the Communion* (1895), and *The Christ-filled Life* (1897); compiled an *Evangelical Hymnal*; and became editor of the American edition of *The Expositor* in 1897.

HALLIDAY, SAMUEL BYRAM, D.D., clergyman, was born in Morristown, N. J., June 5, 1812; died in Orange, N. J., July 8, 1897. He was widely known as the assistant for many years of the Rev. Henry Ward Beecher; subsequently as pastor of the Beecher Memorial Church, Brooklyn.

HAMILTON COLLEGE, Clinton, N. Y., opened in 1812; non-sectarian; had at close of 1897, 18 professors and instructors; 160 students; 36,000 volumes in the library; \$300,000 in grounds and buildings; \$100,000 in scientific apparatus and library; \$350,000 in productive funds; \$51,000 in gifts; \$35,000 in income; president, M. W. Stryker, D.D., LL.D.

HAMLIN UNIVERSITY, St. Paul, Minn., Methodist Episcopal; co-educational; had at the close of 1897, 60 professors and instructors; 393 students; 6,000 volumes in the library; \$198,000 invested in grounds and buildings; \$109,110 in productive funds; president, G. H. Bridgman, D.D.

HAMPTON NORMAL AND INDUSTRIAL INSTITUTE, Hampton, Va., opened in 1868; non-sectarian; co-educational; for Indians and negroes only; had at the close of 1897, 80 professors and instructors; 950 students; 8,556 volumes in the library; \$572,000 invested in grounds, buildings, and scientific apparatus; \$125,949 in gifts; \$152,037 in income; president, H. B. Frissell, D.D.

HANGCHOW, city and capital of the province of Chekiang, China; 150 miles from Ningpo, the principal treaty port of the province; opened to foreign commerce under the Chinese-Japanese treaty of 1895; population, estimated, 800,000. It is the richest city in the empire, being the center of the most extensive silk and tea districts in the world.

HANNA, MARCUS ALONZO, politician, was born in Lisbon, O., Sept. 24, 1837. In 1852 he removed to Cleveland, where he was educated and engaged in the iron, coal, and lake shipping business. He was a delegate to the national Republican conventions of 1884, 1888, and 1896; elected chairman of the National Republican Committee in 1896, and managed the Republican presidential campaign of that year; was appointed United States senator, March 5, 1897, to succeed John Sherman, made secretary of state in President McKinley's cabinet; and was elected for both the short and long terms, Jan. 12, 1898.

HANOTAUX, ALBERT AUGUSTE GABRIEL, statesman, was born in Beaurevoir, France, Nov. 19, 1853. He is a savant, an archivist, a distinguished author, and a man of much experience in the French foreign office. He has been premier several times, serving, with a brief exception, since 1894, and is credited with arranging the visits of the czar to Paris and of President Faure to St. Petersburg in 1897, for the purpose of creating a Franco-Russian alliance.

HANOVER COLLEGE, Hanover, Ind., Presbyterian; co-educational; had at close of 1897, 14 professors and instructors; 175 students; 14,000 volumes in the library; president, D. W. Fisher, D.D., LL.D.

HARCOURT, SIR WILLIAM VERNON, statesman, was born in London, England, in 1827. He was chancellor of the exchequer in 1886 and 1892-95, was defeated for re-election in Derby, but elected for Monmouthshire, West, in 1895; and was the leader of his party in the parliamentary session of 1896.

HARDY, THOMAS, author, was born in Dorsetshire, England, June 2, 1840. His latest publications include *Life's Little Ironies*; *Jude the Obscure* (1895); *The Hand of Ethelbert*, a comedy (1896); *The Well-Beloved* (1897).

HARE, AUGUSTUS JOHN CUTHBERT, author, was born in Rome, Italy, March 13, 1834. He published *The Gurneys of Earham* and *The Life and Letters of Maria Edgeworth* (both 1895), and *The Story of My Life* (1896).

HARLAND, HENRY (pen name SIDNEY LUSKA), author, was born in New York City, March 1, 1861. He has lived abroad since 1889; is the literary editor of *The Yellow Book*; and published *Gray Roses* (1895).

HARPOOT, town and seat of government of a Turkish district in Armenia, and the principal center of the atrocities of 1895-96. In 1896 an unnamed Turkish official made a detailed statement of the number of persons killed and wounded at Harpoot and in its vicinity; also of houses burned and persons reduced to destitution. In consequence of an alleged intervention of the European Powers in favor of the Armenians and a rumored issuance of a firman ordering reforms in Armenia, the Turkish population of that country, believing that an Armenian principality was about to be established, began to show great hostility to the Christian Armenians. Before any of the intended reforms were undertaken the whole Turkish population was aroused; they would obliterate the Armenian name; allying themselves with the neighboring Kurdish tribes, the Turks, armed with weapons allowed only to the army, and led by Turkish officials, openly and in daylight attacked the houses, shops, stores, monasteries, churches, schools, etc., of the Christian Armenians, committing fearful atrocities. They killed bishops, priests, teachers, and the common people; of the dead bodies of the ecclesiastics, some they burned, some they gave as food to dogs and wild beasts. They plundered the churches and monasteries and carried off all the property of the people—flocks and herds, house furnishings, food, clothing, etc, leaving the people absolutely destitute. Priests, laymen, women and children were forced

to become Moslems. Men were circumcised with every circumstance of cruelty. Married women and virgins were defiled; women and girls were taken to the military barracks and dishonored. Many women, to escape defilement, threw themselves into the Euphrates, and some committed suicide in other ways. The total deaths in Harpoot and vicinity, due to these Moslem outrages, are given as 39,334; wounded, 8,000; houses burned, 28,334; number of persons left in destitution, 94,870.

HARRADEN, BEATRICE, author, was born in London, England, in 1864; studied in several English colleges; took the degree of B.A. both in classics and mathematics at London University in 1883; and made her first literary success with *Ships That Pass in the Night*. Her later works include *At the Green Dragon*; *In Varying Moods*; *Things Will Take a Turn*; *Hilda Stratford* and *A New Book of the Fairies* (both 1897).

HARRINGTON, MARK WALROD, LL.D., meteorologist, was born in Sycamore, Ill., Aug. 18, 1848. He was made chief of the United States Weather Bureau in 1891; was summarily removed by President Cleveland in 1895; and became president of the State University of Washington the same year.

HARRIS, ISHAM GREEN, legislator, was born near Tullahoma, Tenn., Feb. 10, 1818; died in Washington, D. C., July 8, 1897. He had served continuously as a United States senator from Tennessee since 1877, having been re-elected last in 1895.

HARRIS, JOEL CHANDLER, author, was born in Eatonton, Ga., Dec. 9, 1848. He published *Mr. Rabbit at Home* (1895); *Daddy Jake the Runaway*, and *The Story of Aaron* (both 1896); the same year, *Georgia, from the Invasion of De Soto to Recent Times* (in *Stories from American History Series*); *Aaron in the Wild Woods* (1897), etc.

HARRIS, WILLIAM TORREY, LL.D., author, since 1889 United States Commissioner of Education, was born in Killingly, Conn., Sept. 10, 1835. He published *The Spiritual Sense of Dante's Divina Commedia* (1897).

HARRISBURG, city, capital of Dauphin county and of the State of Pennsylvania; population (1890) 39,385. In 1896 the city had a total assessed valuation of \$23,500,000, and a tax rate of \$22.50 per \$1,000; and on April 6, 1897, the bonded debt was \$957,800; floating debt, \$20,000; total debt, \$977,800; sinking funds, \$86,785; net debt, \$891,015. The city had assets, including the waterworks, valued at \$1,610,000. In 1897 there were 3 national banks, with combined capital \$500,000; deposits, \$1,680,472; and resources, \$3,188,503; and in 1898, 4 daily, 2 semi-weekly, 10 weekly, 1 bi-weekly, and 5 monthly periodicals. The State capitol, a brick structure erected in 1822 at an original cost with grounds of \$291,588, was destroyed by fire on Feb. 2, 1897, involving an estimated loss of nearly \$1,000,000 and many valuable records.

HARRISON, BENJAMIN, 23d president of the United States, was born in North Bend, O., Aug. 20, 1833. At the close of his administration he resumed the practice of law and became lecturer on Constitutional Law at Leland Stanford Junior University. On Feb. 3, 1896, he wrote a letter for publication, declining to permit his name to be used in connection with the presidential nomination at the St. Louis convention. He published *This Country of Ours* (1897).

HARRISON, CONSTANCE CARY (MRS. BERTON HARRISON), author, was born in Vaucluse, Va., about 1835. Her latest publications include *An Errant Womany* (1895); *A Virginia Cousin* and *Bar Harbor Tales* (1896); *Externals of Modern New York*, Vol. III. of *Martha J. Lamb's History of the City of New York* (1896); and *A Son of the Old Dominion* (1897).

HARTE, FRANCIS BRET, author, was born in Albany, N. Y., Aug. 25, 1839. His last publications include *In the Hollow of the Hills* (1895); *Bulger's Reputation, Clarence, Barker's Luck* (1896); and *The Three Partners* (1897).

HARTFORD, city and port of entry, capital of Hartford county and of the State of Connecticut; population (1890) 53,230. In 1895 the assessed valuations were: Real estate, \$36,808,488; personal property, \$16,403,193—total, \$53,211,681; tax rate, \$17 per \$1,000. The total bonded debt, Jan. 26, 1897, was \$3,480,000; floating debt, \$194,181—total, \$3,674,181; sinking fund, \$307,405. Of the total debt, \$970,000 was a balance of the water debt. The town and city were consolidated in 1896. In the fiscal year 1895-96 the imports of merchandise were valued at \$527,549, and in 1896-97 at \$662,455; exports, none. In 1897 there were 8 national banks, with combined capital, \$5,475,000; deposits, \$11,083,605; and resources, \$20,437,224; and in 1898, 4 daily, 12 weekly, 4 monthly, and 3 other periodicals. On Oct. 19, 1897, the figurehead of Admiral Farragut's old flagship *Hartford* was presented to the city by the United States Navy Department, and its presentation, acceptance, and deposition in the State capitol were the occasion of impressive patriotic exercises.

HARTFORD THEOLOGICAL SEMINARY, Hartford, Conn., Congregational; co-educational; had at close of 1897, 24 professors and instructors; 58 students; 70,000 volumes in library; president, C. D. Hartranft, D.D.

HARTZELL, JOSEPH, clergyman, was born in Moline, Ill., in 1841; educated at Northwestern University and the Garrett Biblical Institute; entered the ministry of the Methodist Episcopal Church; became a secretary of the Freedman's Aid and Educational Society in 1882, and subsequently labored chiefly among the colored people; and was elected missionary bishop of Africa, to succeed the venerable Bishop Taylor, in 1896.

HARVARD UNIVERSITY, Cambridge, Mass., began its 262d year Oct. 1, 1898. Among the innovations in the curriculum are the establishment of two courses in Celtic languages and the founding of a professorship of the Russian language. The college year 1895 saw the largest number of undergraduates ever entered at Harvard. The increase was most notable in the department of chemistry, in which 510 men were enrolled; an increase of 140 over any previous year. The Directory for the academic year 1897-98, issued in October, 1897, showed that there were then 3,739 students in all departments, a gain of 149 over the previous year; the number of professors and instructors was 394, an increase of 28. There was a notable increase in the number of students attending the Lawrence Scientific school; the college proper had an enrollment of 2,531; the law school, 501; the medical school, 531; and the other departments, 176. The university has 473,000 volumes in the library; \$8,526,813 in productive funds; and about \$1,094,000 income; president, Charles William Eliot, LL.D.

HASTINGS, THOMAS SAMUEL, D.D., educator, was born in Utica, N. Y., Aug. 28, 1827. In 1897 he resigned the presidency of the Union Theological Seminary, New York City, which he had held since 1888, and was succeeded by Charles Cuthbert Hall, D.D. (*q. v.*)

HAUPT, PAUL, PH.D., educator, was born in Görlitz, Silesia, in 1858. He received a university education; became deeply interested in Assyriology; studied the Assyrian language signs, Arabic, Etheopic, and Rabbinical Hebrew; and became professor of Oriental Languages in Johns Hopkins University in 1883. In 1897 he published *The Polychrome Bible*, designed to be a new Hebrew Bible that could be understood without dictionary or glossary and to include all of the

results of the modern higher criticism. The work is his own conception, and in its preparation he had the co-operation of many of the ablest specialists in the United States and Europe.

HAVANA, city, capital of the island of Cuba; population (1893), estimated 250,000. As the seat of administration and foreign commerce the city has suffered severely since the beginning of the present revolution. Several times the insurgents have raided the province and almost penetrated the city. The hospitals have been overcrowded with Spanish soldiers prostrated with fever contracted in the field, and with other ailments incident to military service. In September, 1897, Sanitary Inspector Brunner of the United States Marine Hospital Service, reported that no city could show a more inviting presence to epidemic disease than Havana. In the week ending Sept. 9 there were 326 deaths from yellow, enteric and pernicious fevers, dysentery, and enteritis. It was believed that the yellow fever which broke out in Ocean Springs, Miss., early in September, 1897, and a few days later in New Orleans, originated in Havana. A floating dock, of sufficient size to admit the largest war vessel, built for the city of Havana at Newcastle, England, was successfully towed to its destination in October, 1897. The first distribution of supplies from the United States for the starving Cubans took place here on Jan. 9, 1898. The same week there were riotous demonstrations that necessitated the use of the regular troops. On the 25th the United States battleship *Maine* entered the port, on a strictly friendly visit. Her officers made the usual formal calls on the Spanish authorities, received them with prescribed honors aboard ship, and were banqueted by Consul-General Lee. On Feb. 11, Captain Sigbee, of the *Maine*, and Consul-General Lee made an official call on Captain-General Blanco, who was absent from Havana when the *Maine* arrived, and on the following day a visit of courtesy was made to President Galvez, of the new Cuban cabinet, who afterward returned it. In all these ceremonies there were no indications of aught but friendly feelings; certainly, extreme cordiality was manifested by both parties. On the night of Feb. 15, after her crew and most of her officers had retired, and while the *Maine* was lying quietly at the anchorage designated for her, the battleship was suddenly blown up. First reports indicated a loss of 258 men and the saving of 96. The most intense excitement ensued, and prompt efforts were made to rescue the survivors. In this relief work the Spanish authorities were indefatigable. The boats, crew, and officers of the cruiser *Alfonso XII.*, and of the New York and Cuba mail steamship *City of Washington*, both lying near by; the military firemen, and other organizations in the city; the officials at the palace; and citizens generally were all at once employed in the work of succor. On the 18th the remains of all the victims that had been recovered were laid in state in the city hall and afterward buried with manifestations of the deepest feeling, at the expense of the Spanish authorities. The local and home Spanish governments and governments and naval authorities throughout the world telegraphed their condolence to the United States government, all viewing the appalling disaster as due to an accident. A naval court of inquiry was at once appointed. The first session was held in Havana, and subsequent ones there and at Key West. To aid the court in ascertaining the cause of the disaster, the U. S. Congress voted an appropriation of \$200,000 for an examination of the wreck, and professional wreckers were at once put to work on the ship. As fast as possible the wounded who had been attended in hospitals in Havana, and the remains of other victims that were being recovered daily, were removed to Key West, for further treatment or burial.

Within a few days after the disaster, rumors became plentiful that the destruction of the *Maine* was due to design and not to an accident, and many ingenious hypotheses were given by all sorts of people in support of this theory. On the other hand, it was declared that the *Maine* was a friendly visitor in a harbor of a government with which the United States was at peace; that she represented the United States government; that it was the duty of her host to protect her while a guest from any injury or slight; and that any dereliction in this respect on the part of the host would bring on the latter the condemnation of the civilized world. The incident, however, quickened the acute feelings of both peoples, and pending a decision by the court of inquiry, both governments began making preparations for the worst outcome. From the great mass of rumors a few facts were suggestive. The Spanish cruiser *Vizcaya* arrived at the port of New York on Feb. 20, to make a brief visit of international courtesy. Her commander first learned of the *Maine* disaster on his arrival, and at once lowered his flags and gave formal expression of sympathy. During her brief stay in the harbor the vessel was under an organized protection, planned by the Federal and city governments, such as had never before been deemed necessary for a war vessel of a friendly nation. The customary exchange of official visits was made, and when the vessel sailed for Havana Captain Eulate expressed gratification with his treatment. In view of the extent of the suffering on the island and the large amount of relief stores that had been contributed by citizens of the United States, President McKinley determined to send two naval vessels to Cuba with these stores, as a merchant vessel for the purpose could not be chartered without an act of Congress. The Spanish government intimated that the employment of merchant vessels for this errand was more desirable, and that the recall of Consul-General Lee would be appreciated; but the President refused to take either step suggested. A bill appropriating \$50,000,000 for national defense was passed in the House March 8, and in the Senate on the following day, without an opposing vote in either house; and a bill creating two new regiments of artillery was passed in the House on the 7th, with but three dissenting votes.

The Court of Inquiry completed its investigation on March 21, and on the 28th President McKinley transmitted the findings and evidence to Congress, accompanying them with a special message. The following is the text of the report:

UNITED STATES SHIP "IOWA"—FIRST RATE, }
KEY WEST, Fla., Monday, March 21, 1898. }

After full and mature consideration of all the testimony before it, the court finds as follows:

1.—That the United States battleship *Maine* arrived in the harbor of Havana, Cuba, on the 25th of January, 1898, and was taken to Buoy No. 4, in from five and a half to six fathoms of water, by the regular government pilot.

The United States consul-general at Havana had notified the authorities at that place, the previous evening, of the intended arrival of the *Maine*.

2.—The state of discipline on board the *Maine* was excellent, and all orders and regulations in regard to the care and safety of the ship were strictly carried out.

All ammunition was stowed in accordance with prescribed instructions, and proper care was taken whenever ammunition was handled.

Nothing was stowed in any of the magazines or shell-rooms which was not permitted to be stowed there.

The magazines and shell-rooms were always locked after having been opened,

and after the destruction of the *Maine* the keys were found in their proper place, in the captain's cabin, everything having been reported secure that evening at 8 p.m.

The temperature of the magazines and shell-rooms was taken daily and reported. The only magazine which had an undue amount of heat was the after ten-inch magazine, and that did not explode at the time the *Maine* was destroyed.

The torpedo warheads were all stowed in the after part of the ship under the ward-room, and neither caused nor participated in the destruction of the *Maine*.

The dry gun-cotton primers and detonators were stowed in the cabin aft, and remote from the scene of the explosion. Waste was carefully looked after on the *Maine* to obviate danger. Special orders in regard to this had been given by the commanding officer.

Varnishes, driers, alcohol, and other combustibles of this nature were stowed on or above the main deck and could not have had anything to do with the destruction of the *Maine*.

The medical stores were stored aft under the ward-room and remote from the scene of the explosion.

No dangerous stores of any kind were stowed below in any of the other store-rooms.

The coal bunkers were inspected daily. Of these bunkers adjacent to the forward magazine and shell-rooms, four were empty, namely: B 3, B 4, B 5, B 6. A 15 had been in use that day, and A 16 was full of New River coal. This coal had been carefully inspected before receiving it on board. The bunker in which it was stowed was accessible on three sides at all times, and the fourth side at this time, on account of bunkers B 4 and B 6 being empty. This bunker, A 16, had been inspected that day by the engineer officer on duty.

The fire alarms in the bunkers were in working order, and there had never been a case of spontaneous combustion of coal on board the *Maine*.

The two after boilers of the ship were in use at the time of the disaster, but for auxiliary purposes only, with a comparatively low pressure of steam, and being tended by a reliable watch. These boilers could not have caused the explosion of the ship. The four forward boilers have since been found by the divers and are in a fair condition.

On the night of the destruction of the *Maine* everything had been reported secure for the night at 8 p.m. by reliable persons through the proper authorities to the commanding officer. At the time the *Maine* was destroyed the ship was quiet and therefore least liable to accident, caused by movements from those on board.

3.—The destruction of the *Maine* occurred at 9:40 p.m., on the 15th day of February, 1898, in the harbor of Havana, Cuba, she being at the time moored to the same buoy to which she had been taken upon her arrival.

There were two explosions of a distinctly different character, with a very short but distinct interval between them, and the forward part of the ship was lifted to a marked degree at the time of the first explosion. The first explosion was more in the nature of a report, like that of a gun, while the second explosion was more open, prolonged, and of greater volume. This second explosion was, in the opinion of the court, caused by a partial explosion of two or more of the forward magazines of the *Maine*. The evidence bearing upon this, being principally obtained from divers, did not enable the court to form a definite conclusion as to the condition of the wreck, although it was established that the after part of the ship was practically intact and sank in that condition a very few minutes after the destruction of the forward part.

4.—The following facts in regard to the forward part of the ship are, however, established by the testimony: That portion of the port side of the protective deck which extends from about Frame 50 to about Frame 41 was blown up aft and over to port. The main deck from about Frame 30 to about Frame 41 was blown up aft and slightly over to starboard, folding the forward part of the middle structure over and on top of the after part.

This was, in the opinion of the court, caused by the partial explosion of two or more of the forward magazines of the *Maine*.

5.—At Frame 17 the outer shell of the warship from a point $11\frac{1}{2}$ ft. from the middle line of the ship and 6 ft. above the keel when in its normal position has been braced up so as to be now about 4 ft. above the surface of the water; therefore about 34 ft. above where it would be had the ship sunk uninjured. The outside bottom plating is bent into a reversed V-shape, the after wing of which, about 15 feet broad and 30 feet in length (from Frame 17 to Frame 25), is doubled back upon itself against the continuation of the same plating extending forward.

At Frame 18 the vertical keel is broken in two, and the flat keel bent into an angle similar to the angle formed by the outside bottom plating. This break is now about 6 ft. below the surface of the water and about 30 ft. above its normal position.

In the opinion of the court, this effect could have been produced only by the explosion of a mine situated under the bottom of the ship at about Frame 18 and somewhere on the port side of the ship.

6.—The court finds that the loss of the *Maine* on the occasion named was not in any respect due to fault or negligence on the part of any of the officers or members of the crew of said vessel.

7.—In the opinion of the court, the *Maine* was destroyed by the explosion of a submarine mine, which caused the partial explosion of two or more of her forward magazines.

8.—The court has been unable to obtain evidence fixing the responsibility for the destruction of the *Maine* upon any person or persons.

W. T. SAMPSON, Captain, United States Navy, President.

A. MARIX, Lieutenant-Commander, United States Navy, Judge Advocate.

The court having finished the inquiry it was ordered to make, adjourned at 11 A. M., to await the action of the convening authority.

W. T. SAMPSON, Captain, United States Navy, President.

A. MARIX, Lieutenant-Commander, United States Navy, Judge Advocate.

UNITED STATES FLAGSHIP "NEW YORK," }
March 22, 1898. Off Key West, Fla. }

The proceedings and findings of the court of inquiry in the above case are approved.

M. SICARD, Rear Admiral, Commander-in-Chief of the United States naval force on the North Atlantic station.

In his message of transmittal President McKinley said:

"For some time prior to the visit of the *Maine* to Havana harbor our consular representatives pointed out the advantages to flow from the visit of national ships to the Cuban waters, in accustoming the people to the presence of our flag as the symbol of good-will and of our ships in the fulfillment of the mission of protection to American interests, even though no immediate need therefor might exist.

"Accordingly, on the 24th of January last, after conference with the Spanish minister in which the renewal of visits of our war vessels to Spanish waters was discussed and accepted, the peninsular authorities at Madrid and Havana were advised of the purpose of this government to resume friendly naval visits at Cuban ports, and that in that view the *Maine* would forthwith call at the port of Havana. This announcement was received by the Spanish government with appreciation of the friendly character of the visit of the *Maine* and with notification of intention to return the courtesy by sending Spanish ships to the principal ports of the United States. Meanwhile the *Maine* entered the port of Havana on Jan. 25, her arrival being marked with no special incident besides the exchange of customary salutes and ceremonial visits.

"The *Maine* continued in the harbor of Havana during the three weeks following her arrival. No appreciable excitement attended her stay; on the contrary, a feeling of relief and confidence followed the resumption of the long-interrupted friendly intercourse. So noticeable was this immediate effect of her visit that the consul-general strongly urged that the presence of our ships in Cuban waters should be kept up by retaining the *Maine* at Havana, or, in the event of her recall, by sending another vessel there to take her place.

"At 9:40 in the evening of Feb. 15, the *Maine* was destroyed by an explosion, by which the entire forward part of the ship was utterly wrecked. In this catastrophe 2 officers and 264 of her crew perished, those who were not killed outright by her explosion being pinned between decks by the tangle of wreckage and drowned by the immediate sinking of the hull. Prompt assistance was rendered by the neighboring vessels anchored in the harbor, aid being especially given by the boats of the Spanish cruiser *Alphonso XII*, and the Ward Line steamer *City of Washington*, which lay not far distant. The wounded were generously cared for by the authorities of Havana, the hospitals being freely opened to them, while the earliest recovered bodies of the dead were interred by the municipality in a public cemetery in the city. Tributes of grief and sympathy were offered from all official quarters of the island.

"The appalling calamity fell upon the people of our country with crushing force, and for a brief time an intense excitement prevailed which in a community less just and self-controlled than ours might have led to hasty acts of blind resentment. This spirit, however, soon gave way to the calmer processes of reason and to the resolve to investigate the facts and await material proof before forming a judgment as to the cause, the responsibility, and if the facts warranted, the remedy due. This course necessarily recommended itself from the outset to the Executive, for only in the light of a dispassionately ascertained certainty could he determine the nature and measure of his full duty in the matter.

"The usual procedure was followed, as in all cases of casualty or a disaster to national vessels of any maritime State. A naval court of inquiry was at once organized, composed of officers well qualified by rank and practical experience to discharge the onerous duty imposed upon them. Aided by a strong force of wreckers and divers, the court proceeded to make a thorough investigation on the spot, employing every available means for the impartial and exact determination of the causes of the explosion. Its operations have been conducted with the utmost deliberation and judgment, and, while independently pursued, no source of information was neglected, and the fullest opportunity was allowed for a simultaneous investigation by the Spanish authorities."

The President then gave a summary of the findings of the Court of Inquiry, and concluded his message as follows:

"I have directed that the finding of the Court of Inquiry and the views of this government thereon be communicated to the government of her majesty the queen regent, and I do not permit myself to doubt that the sense of justice of the Spanish nation will dictate a course of action suggested by honor and the friendly relations of the two governments.

"It will be the duty of the Executive to advise the Congress of the result, and in the meantime deliberate consideration is invoked."

While the United States Naval Court of Inquiry was investigating the disaster, a Spanish Naval Commission was appointed for the same purpose. A synopsis of its report was received in Washington the same day that President McKinley sent the report of the United States Court of Inquiry to Congress. The synopsis was as follows:

"The report contains declarations made by ocular witnesses and experts. From these statements it clearly deduces and proves the absence of all those attendant circumstances which are invariably present on the occasion of the explosion of a torpedo.

"The evidence of witnesses comparatively close to the *Maine* at the moment is to the effect that only one explosion occurred; that no column of water was thrown in the air; that no shock to the side of the nearest vessel was felt, nor on land was any vibration noticed, and that no dead fish were found.

"The evidence of the senior pilot of the harbor states that there is abundance of fish in the harbor, and this is corroborated by other witnesses. The assistant engineer of works states that after explosions made during the execution of works in the harbor he has always found dead fish.

"The divers were unable to examine the bottom of the *Maine*, which was buried in the mud, but a careful examination of the sides of the vessel, the rents and breaks in which all point outward, shows without a doubt that the explosion was from the inside.

"A minute examination of the bottom of the harbor around the vessel shows absolutely no sign of the action of a torpedo, and the Fiscal (judge advocate) of the commission can find no precedent for the explosion of the storage magazine of a vessel by a torpedo.

"The report makes clear that, owing to the special nature of the proceedings following and the absolute respect shown for the extra-territorial rights of the *Maine*, the commission has been prevented from making such an examination of the inside of the vessel as would determine even the hypothesis of the internal origin of the accident. This is to be attributed to the regrettable refusal to permit of the necessary co-operation of the Spanish commission both with the commander and crew of the *Maine* and the different American officers commissioned to investigate the causes of the accident, and later on with those employed in salvage work.

"The report finishes by stating that an examination of the inside and outside of the *Maine* as soon as such examination may be possible, as also of the bottom where the vessel rests will prove that, supposing the remains (of the wreck) be not totally or partially altered in the process of extraction, the explosion was undoubtedly due to some interior cause."

President McKinley had intended sending another message to Congress on April 6, concerning the state of affairs between the United States and Spain, which, it was feared, might lead to speedy hostilities; but a dispatch from Consul-General Lee, at Havana, stating that he would not be able to secure the removal of American citizens from Cuba before the night of the 9th, caused the president to withhold the message till the 11th. On the 9th the last of the

Americans in Cuba who wished to leave, and all the United States consular officers there, left Havana, all consular property being placed previously in charge of the consuls of Great Britain. See also UNITED STATES.

HAWAII, a republic comprising 8 inhabited and 4 uninhabited islands in the North Pacific Ocean; area, 6,640 square miles; capital Honolulu, on the island of Oahu; president, 1894-1900, Sanford B. Dole (*q. v.*). The population of the Hawaiian Islands by the census of Feb. 8, 1897, was 109,020; of these 31,019 were of the native Hawaiian race; 24,407 Japanese; 21,616 Chinese; 15,100 Portuguese; 8,485 half-breed Hawaiians; 3,086 Americans; 2,250 British; and 2,338 miscellaneous. Of the total population, 72,517 are males and 36,503 females. At the time of the census Japanese immigrants were landing at the rate of 1,000 a month. The year 1896 was the most prosperous in the history of the islands. The exports for the year ending September, 1896, amounted to about \$14,500,000; for the previous year, \$7,600,000.

The proposed annexation of Hawaii to the United States created widespread political interest. That possession of the islands is a military necessity for the United States is the opinion of Captain Mahan, U. S. N. The question of annexing Hawaii is according to him "one of principle; it is a policy fruitful of many future acts, to enter upon which, in the fullness of our national progress, the time has now arrived." In the beginning of 1897 many Japanese immigrants were refused by the Hawaiian government the right to land, and were ordered deported back to their own country. The Japanese government interposed objections and expressed a determination to exact from Hawaii an indemnity of 320 yen for each man denied the right to land. The Hawaiian government stood on its right to reject immigrants that are unable to meet the legal requirements; if any Japanese were excluded though possessing the legal qualifications, the republic would make reparation for such cases of injury. Negotiations between the two governments were continued till in July the offer of Hawaii to submit to arbitration the dispute between the two countries was accepted by Japan. The arbitration was to cover not only the question of the landing of Japanese immigrants, but other disagreements between Japan and Hawaii. There still remained, however, causes of disquietude. In Honolulu people were in hourly apprehension of the landing of an armed force from the Japanese cruiser *Naniwa*, and another Japanese warship was reported to be on the way to Hawaii. Measures were promptly taken by Admiral Beardslee, commanding the two United States warships in the harbor, to reassure the people, and the incident passed over without any overt act on the part of the Japanese.

In January, 1896, a joint resolution was introduced into the lower house of the United States Congress providing for the annexation of Hawaii to the United States and for its admission into the Union as a State. The resolution was referred to the Committee on Foreign Affairs. On June 16, 1897, a treaty of annexation was signed in Washington by representatives of the two governments and was transmitted to the Senate for action by the President. The treaty was referred to the Committee on Foreign Relations, which reported it favorably and without change; but the Senate adjourned without acting on it. In Hawaii, however, both houses of Congress ratified the treaty by a unanimous vote, Sept. 10th. The essential points of the treaty are here given:

In Article I. the Republic of Hawaii cedes absolutely and without reserve to the United States of America all rights of sovereignty of whatsoever kind in and over the Hawaiian Islands and their dependencies; and it is agreed that all the territory of and appertaining to the Republic of Hawaii is hereby annexed to the United States of America under the name of the Territory of Hawaii.

In Article II. the Republic of Hawaii also cedes and hereby transfers to the United States the absolute fee and ownership of all public, government or crown lands, public buildings or edifices, ports, harbors, military equipments and all other public property of every kind and description belonging to the government of the Hawaiian Islands, together with every right and appurtenance thereunto appertaining. The existing laws of the United States relative to public lands shall not apply to such lands in the Hawaiian Islands, but the Congress of the United States shall enact special laws for their management and disposition. Provided that all revenue from or proceeds of the same, except as regards such part thereof as may be used or occupied for the civil, military or naval purposes of the United States, or may be assigned for the use of the local government, shall be used solely for the benefit of the inhabitants of the Hawaiian Islands for educational and other public purposes.

Article III. declares that until the United States Congress shall provide for the government of such islands, all the civil, judicial and military powers exercised by the officers of the existing government in said islands shall be vested in such person or persons, and shall be exercised in such manner as the President of the United States shall direct, and the President shall have power to remove said officers and fill the vacancies so occasioned. The existing treaties of the Hawaiian Islands with foreign nations shall forthwith cease and determine, being replaced by such treaties as may exist, or as may be hereafter concluded between the United States and such foreign nations.

Article IV. treats of financial matters, and provides that the public debt of the Republic of Hawaii lawfully existing at the date of the exchange of the ratifications of this treaty, including the amounts due to depositors in the Hawaiian postal savings bank, is hereby assumed by the government of the United States, but the liability of the United States in this regard shall in no case exceed \$4,000,000. So long, however, as the existing government and the present commercial relations of the Hawaiian Islands are continued, as hereinbefore provided, said government shall continue to pay the interest on said debt.

Article V. touches the Chinese exclusion laws of the United States, and declares that there shall be no further immigration of Chinese into the Hawaiian Islands, except upon such conditions as are now or may hereafter be allowed by the laws of the United States, and no Chinese by reason of anything herein contained shall be allowed to enter the United States from the Hawaiian Islands.

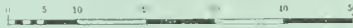
The government of Japan, through its minister at Washington, entered a protest against the conclusion of the treaty, unless provision be made in it to safeguard the rights of Japanese residents in the islands. In January, 1897, a rumor gained currency that the British government was taking steps to obtain possession of Necker Island, one of the Hawaiian group. It is a barren rock and uninhabited, but might serve well as a submarine cable station. The rumor arose out of the visit of two Canadians at Honolulu, who represented themselves as agents of wealthy British investors. The government of Hawaii had never distinctly claimed sovereignty over Necker Island; but to preoccupy the ground against any British claim of sovereignty, a party was sent out which raised the Hawaiian flag and claimed the island for the Republic of Hawaii. On Feb. 19, 1897, in the United States Senate Committee on Foreign Relations, a project was considered for the laying of a telegraphic cable to connect the United States with the Hawaiian Islands. President Dole visited the United States in February, 1898, and was officially received with the honors becoming his office. At the time of writing the annexation treaty had not been reported by the committee to whom it was referred.

Longitude West from Greenwich.

MAP OF HAWAII

SCALES.

Statute Miles, 69.16 = 1 Degree.



Kilometres, 111.807 = 1 Degree.



Rand, McNally & Co.'s New Business Atlas Map of Hawaii.
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HAWKINS, ANTHONY HOPE (best known by his Christian names), author, was born in London, England, Feb. 9, 1863. He published *The Chronicles of Count Antonio*, *Mr. Witt's Widow*, *Sport Royal*, and *Half a Hero* (1895); *The Heart of Princess Osra* and *Comedies of Courtship* (both 1896); and made his first visit to the United States to give a series of readings from his writings in 1897.

HAWTHORNE, JULIAN, author, son of Nathaniel Hawthorne, was born in Boston, Mass., June 22, 1846. In 1896 he published *Mr. Danton's Invention*, *The Golden Fleece*, *Miss Peckskill's Sparometer*, and *A Fool of Nature*, winning the New York *Herald* prize of \$10,000 with the last; and in 1897, *Love is a Spirit*.

HAY, JOHN, author, was born in Salem, Ind., Oct. 8, 1838. In 1897 he was appointed United States ambassador to Great Britain.

HEADLEY, JOEL TYLER, historian, was born in Walton, N. Y., Dec. 30, 1813; died in Newburg, N. Y., Jan. 16, 1897.

HEARN, LAFCADIO, journalist and traveler, was born in Santa Maura, Ionian Islands, June 27, 1850; engaged in journalism in the United States. Among his latest publications are *Out of the East: Reveries and Studies in New Japan* (1895); *Kokoro: Hints and Echoes of Japanese Inner Life* (1896); and *Gleanings in Buddha Fields* (1897).

HEDDING COLLEGE, Abingdon, Ill., Methodist Episcopal; co-educational; had at close of 1897, 16 professors and instructors; 240 students; 2,000 volumes in the library; \$40,000 in productive funds; \$6,400 income; president, J. G. Evans, D.D., LL.D.

HEIDELBERG UNIVERSITY, Tiffin, O., Reformed Church in the United States; co-educational; had at close of 1897, 20 professors and instructors; 216 students; 15,000 volumes in the library; \$125,000 in productive funds; \$1,500 gift; \$12,000 income; president, J. A. Peters, D.D.

HEILPRIN, ANGELO, naturalist, was born in Hungary, March 31, 1853; became curator of the museum of the Academy of Natural Sciences and professor of geology at the Wagner Free Institute of Science, both in Philadelphia. He led the Peary relief expedition organized by the Academy of Natural Sciences, and has published *The Arctic Problem*, etc. (1893); *The Earth and Its Story* (1896), etc.

HENTY, GEORGE ALFRED, novelist, was born in Trumpington, England, Dec. 8, 1832. He was for several years traveling correspondent of the London *Standard*, and was in the service of that journal in the Crimean war, in the war of 1866 in Italy, in the Franco-German war, etc. He has written more than 30 stories based on historical events, the latest ones including *On the Iracably*, *At Agincourt*, *With Cochrane the Dauntless*, etc.

HEPWORTH, GEORGE HUGHES, D.D., clergyman and editor, was born in Boston, Mass., Feb. 4, 1833. Since 1885 he has been the religious editor of the New York *Herald*, also contributing to it a weekly sermon. In 1817, under a special arrangement with the Sultan of Turkey as to passes, escort, and exceptional privileges, he was commissioned by the *Herald* to make a thorough investigation of the reported Armenian massacres in 1895-96. His first report was published in the *Herald* of Nov. 8, 1817.

HEREDIA, JOSE MARIA DE, French poet, was born near Santiago de Cuba, Nov. 22, 1842. He was educated chiefly in France. For his translation into French of Bernal Diaz del Castillo's history of the Spanish conquests in America and his learned annotations on the text he was laureated by the French Academy; in 1897 he was elected a member of the Academy. His volume of sonnets, *Trophées* (1896), had an extraordinary success.

HILLSDALE COLLEGE, Hillsdale, Mich., Free Baptist; co-educational; had at close of 1897, 26 professors and instructors; 400 students; 13,300 volumes in library; \$232,962 in productive funds; \$8,767 gifts; \$13,586 income; president, George F. Mosher, LL.D.

HIRAM COLLEGE, Hiram, O., Disciples; co-educational; had at close of 1896, 21 professors and instructors; 422 students; 5,971 volumes in library; \$105,000 productive funds; \$2,443 gifts; \$19,605 income; president, Ely V. Zollars, A.M., LL.D.

HIRSCH DE GEREUTH, MAURICE DE, financier and philanthropist, was born in Munich, Bavaria, Dec. 9, 1831; died near Pressburg, Hungary, April 20, 1896. He acquired a fortune estimated at \$200,000,000; had an income of from \$15,000,000 to \$20,000,000 per annum; gave great sums of money to promote education and the welfare of Jews in all parts of the world; and liberally supported his wife's extensive charitable work. At the time of his death the benefactions of himself and wife were estimated at \$100,000,000, about equally divided. He sent considerable money to the United States to plant Jewish colonies and aid Jewish institutions, and after his death his widow announced her determination to continue his work in this country, and appropriated about \$2,000,000 for immediate use.

HITCHCOCK, ETHAN ALLEN, diplomat, was born in Mobile, Ala., in 1835; son of the chief justice of the Supreme Court of that State; educated at Yale College; engaged in business in St. Louis, Mo., in 1851; was in commercial business in China in 1860-72; returned to St. Louis in 1874; and was appointed United States minister to Russia in 1897. In 1898 the United States and Russian governments raised the rank of their representatives to each other from minister to ambassador.

HITTITE INSCRIPTIONS. The people called in the Hebrew sacred writings Khittim (Hittites), and in Egyptian inscriptions Khita, were in very early times a warlike and powerful nation in the far north of Syria, between the Orontes and the Euphrates, and their dominion extended far into Asia Minor and westward to the Aegean Sea. The Hittite inscriptions so far discovered number about 24, and mostly refer to local princes serving the kings of the first Babylonian dynasty. The language is usually called Akkadian. One of the inscriptions found at Marash, in northern Aleppo (in ancient Cappadocia), has two archaic figures of a king and a prince with the legend, "The king of this region, Zumovebi, has caused me to rule in his possessions, and the speaker is a servant, Kezir by name, of the great king. And he having nominated me it has become mine." This Zumovebi is the Sumuvebi who founded the first Babylonian dynasty about 2232 B.C. At Palanga was found a basalt statue of a seated figure with the inscription, "Lord of glory and conquering lord Zubuvabe, the great king is here represented who is my king and . . . my service. For me also, Nanderi (*i.e.*, worshiper of Nana), is power through conquest for him in this region, as hereby proclaimed, since I have completed it now that the city has become a region of Tintir (Babylon). And, being conquered and subject and obedient, my conquest is his. The memorial establishes that I have been here made a king, doing homage; and for its lord it is become a royal fortress and is my abode. And the conquest being complete in the tenth month, this is completed in the twelfth month." This would seem to refer to the same Sumuvebi, founder of the first Babylonian dynasty. At a place called Bor is an inscription relating to the second king of the same dynasty (about 2217-2182 B.C.). Here on the upper part of the statue

of a king is this text: "He whose king is Zemunulu causes this to be uttered and written. The total conquest is complete and this therefore is engraved and published, since a conquest both lawful and mighty is completed through his commands to me. Moreover, allegiance is proclaimed as by a servant in my lord's presence. Allegiance being established, may long life also be his, conquering both crown and (subjects?) in this region." At Marash is a figure of a lion, on which is a long inscription in relief relating to Zabu, third king of the Babylonian dynasty (about 2180-2168 B.C.). The name of the subordinate ruler Targon and that of his god, Set, suggest that the lieutenant of the great king was a Hittite. A very interesting monument is the inscription found at Bulgar-maden. It is written in the name of Eriaku, once King of Larsa, now lieutenant of the great king. This Eriaku was made a vassal of Babylon by Amurapaltu, who reigned about 2120 to 2075 B.C.; and these two names, slightly transformed, appear in the book of Genesis (xiv. 1). There Amraphel and Arioch are mentioned as invading Palestine in the time of Abraham. This inscription, defaced in parts, apparently for a purpose, reads, "These announcements address both the foe of this region and him who dwells in this region; and this writing is their utterance, spoken to the country. . . . I, Eriaku, therefore, have made proclamations, being sent by the power of Babylon (Tintir), having been king and ruling the city of Larasa; and as prince of this region my lord causing me to protect all therein; and he protects both what here and formerly I have owned. And the memorial speaks concerning me and the protection I give from foes, and to those in the land and to the man among the foes who serves me and is obedient to my government—all who were formerly subject to the rule of the great city ruled by the Babylonian. My lord . . . said. The protecting lord having established me and making me . . . a memorial of his protection, in which by his order my proclamation is uttered, and the announcement thereof has been sanctioned, of tribute and collection of treasure for the king of kings . . . which is made by me. And to him who is here and is made . . . and to him in this region who is subject to the enemy, a clear announcement has been made, in a city facing the country of the foe, in explanation of what must be done; telling the man who comes here, and the city here, and all of, or from it, that I have been named chief; and to say that, for the lord of this region here, I, building both mound and fortress in a ruined city, have made a new city, obedient to me, a servant of the reigning lord, since the city was taken."

HOBART, GARRET AUGUSTUS, vice-president of the United States, was born in Long Branch, N. J., in 1841. He graduated at Rutgers College; was admitted to the bar in Paterson, N. J., in 1868; became speaker of the State Assembly in 1874, and president of the Senate in 1881; was unsuccessful candidate for the United States Senate in 1881; and has been a member of the National Republican Committee since 1884. He is a man of exceptional executive ability, with many large financial trusts and interests. He was elected vice-president on the ticket headed by William McKinley (*q. v.*) in 1896, the Republican candidates receiving 7,121,342 popular and 271 electoral votes. He has presided over the Senate with an urbanity and ability that won the esteem of senators of all parties.

HOBOKEN, city, Hudson county, N. J.; population (1890) 43,648; (1895, State census) 51,083. In 1896 the assessed valuations were: Real estate, \$24,828,600; personal property, 2,884,640—total, \$27,713,240; tax rate, \$22 per \$1,000. The total bonded debt, 1896, was \$1,020,000; sinking funds, \$8,551; net bonded debt, \$1,020,449; floating debt, \$130,101. The city owns property valued at over

\$1,000,000. It has 25 miles of streets, of which 18 miles are paved; 18 miles of sewers; and 19 miles of water mains. The cost of maintaining the city government is over \$355,000; annual expenditure for public schools, \$140,000; and value of public school property, \$258,600.

HOLDEN, SIR ISAAC, BART., inventor of the lucifer match and of a wool-carding machine, was born in Paisley, Scotland, in 1807; died in Yorkshire, England, Aug. 13, 1897.

HOLLEY, MARIETTA (better known as JOSIAH ALLEN'S WIFE), author, was born near Pierrepont Manor, N. Y., in 1844. She published *Josiah's Alarm and Abel Perry's Funeral and Samantha in Europe* (both in 1895). *

HOLMAN, WILLIAM STEELE, popularly known as "The Watchdog of the United States Treasury" and as "The Great Objector," was born in Dearborn county, Ind., Sept. 6, 1822; died in Washington, D. C., April 22, 1897. With the exception of 8 years, Judge Holman had served as a representative in Congress continuously since 1858.

HOLYOKE, GEORGE JACOB, reformer, was born in Birmingham, England, April 13, 1817. A collection of his essays on *English Secularism* was published in Chicago, Ill., in 1897.

HONDURAS, a republic of Central America, member of the Greater Republic of Central America; bounded by the Caribbean Sea, Nicaragua, Fonseca Bay, San Salvador, and Guatemala; area about 40,000 square miles; population estimated at 400,000; capital, Tegucigalpa; president, 1897, Policarpo Bonilla.

Finances.—The revenue from tariffs and internal taxes amounted in 1896 for 10 months to \$1,791,677; expenditure exceeded income by \$136,850, owing to civil war; of the income \$644,131 came from tariffs.

Commerce.—The imports and exports nearly balance; about \$1,500,000 per annum.

Army.—The standing army numbers 1,522 men, but of these only 856 do garrison work; the rest are guards in prisons, or are assistants in the police or otherwise employed in civil capacities. There is a militia of about 20,000 officers and men.

Post-Office.—In the beginning of 1896 the post-office department was non-existent because of the war. During the 10 months of peace the service was revived at an outlay of \$66,000.

Telegraphs.—There are about 2,500 miles of line; expenditure during 10 months (1896), \$127,500, including cost of constructing 226 miles of new line; number of messages 55,454.

Recent Events.—General Bonilla raised in Nicaragua a force of 2,750 men, one-half Hondurans, the rest citizens of neighboring States, for the expulsion of President Vasquez. In the first considerable engagement, at Choluteca, Vasquez at the head of an army of 1,900 men was defeated by an inferior force and retreated to the capital with only 600 men. Another force of his adherents, 800 men under General Villela, was defeated at Comayagua. President Vasquez sought safety in flight and General Bonilla was proclaimed president in his stead. Among the acts of Congress, which adjourned April 10, 1897, were the granting of several concessions to citizens of the United States, the most important of which was the one to a syndicate of New York capitalists, under which the control of extensive governmental functions passed to the hands of Americans. The syndicate will complete the interoceanic railroad from Puerto Cortez to the Pacific coast, which was begun by an English company forty years ago. The Honduras

government agreed to surrender all its governmental functions to the syndicate. The latter was to begin operations by Oct. 1, when \$1,000,000 was to be paid to carry on the expenses of the Honduras government, and the government was to turn over to the syndicate all its revenues. The latter is to control all the custom houses, etc., to reimburse itself. The syndicate also agreed to relieve the Honduras government of all responsibility for the foreign debt of \$35,000,000, owed in England, and will compromise or settle with the foreign creditors. Congress also passed an act to make the cultivation and sale of tobacco (the latter heretofore a government monopoly) free.

HOPE COLLEGE, Holland, Mich., Reformed Church in America; co-educational; had at close of 1897, 14 professors and instructors; 254 students; 10,000 volumes in library; \$230,000 in productive funds; \$3,200 in gifts; \$13,300 income; president, Gerrit J. Kollen, A.M., LL.D.

HOPPIN, AUGUSTUS, illustrator, was born in Providence, R. I., July 13, 1828; died in Flushing, N. Y., April 1, 1896.

HOWARD PAYNE COLLEGE, Brownwood, Tex., Baptist; co-educational; had at close of 1897, 11 professors and instructors; 250 students; 1,200 volumes in library; \$5,000 in productive funds; \$12,000 in gifts; \$18,00 income; president, J. H. Grove, M.S.D., A.M.

HOWARD UNIVERSITY, Washington, D. C., non-sectarian; co-educational; had at close of 1897, 50 professors and instructors; 600 students; 12,000 volumes in the library; \$16,000 in productive funds; \$48,500 income; president, J. E. Rankin, D.D., LL.D.

HOWELLS, WILLIAM DEAN, author, was born in Martin's Ferry, O., March 1, 1837. His recent publications include *Stops of Various Quills* (1895); *The Day of their Wedding* (1896); and *The Landlord at Lion's Head* (1897). In 1897 he was making a critical study of Tolstoi's works for the *Cyclopedia of the World's Best Literature* (New York).

HUDSON BAY. With the marked increase in the commerce of Canada in recent years there has been a strong sentiment in favor of testing the navigability of Hudson Bay and its tributary waters for grain-laden ships. Early in 1897 the Canadian government fitted out an exploring expedition, and the reports therefrom (September) were unfavorable to the project. The expedition made six passages through Hudson Strait, visited Cumberland Sound, explored the coast of Baffin Land and discovered a large lake in the interior, trawled for codfish without success, surveyed both shores of Hudson Strait, visited Fort Churchill, and obtained a lot of information from the factors there, steamed 30 miles up Ungava River, and reached Fort Chimo. The expedition reported unfavorably upon the commercial value of Hudson Bay as a steamship route, owing to fogs, shoals, icebergs, want of lighthouses, and the country being bleak and barren, with no communication with civilized regions.

HUGHES, THOMAS, lawyer, philanthropist, and author, was born in Uffington, England, Oct. 23, 1823; died in Brighton, England, March 22, 1896. He will probably be best remembered for his *Tom Brown's School Days* and *Tom Brown at Oxford*.

HUNGARY, one of the two parts of the Austro-Hungarian empire, including Transylvania, Croatia, and Slavonia; area, 125,039 square miles; population (1896), 18,021,961; capital, Budapesth.

Statistics.—The budget estimates for the Hungarian part of the empire alone

for 1897 were: Revenue, \$204,390,311; expenditures, \$204,352,628. The railroad mileage was 8,217; number of post-offices, 4,462; mileage of telegraph lines, 12,473; mileage of wire, 35,320; value of imports (1895), \$234,911,110; value of exports, \$217,069,160.

Commerce.—In 1897 the national bureau of statistics of Hungary published the quantity of the commercial movement of Hungary during 1896, the values to be announced later. There were 3,931,115 tons of imports, consisting of 384,908 pieces; the exports amounted to 6,790,232 tons of 4,358,098 pieces. It will be noted that there has been an increase of 171,598 tons in imports over the figures given for last year and 1,144,866 tons in exports. It is the first time for many years that such an increase in exports has been registered; it consists principally of cereals, wood, coal, sugar and minerals. Of wheat, 734,536 tons were exported during 1896—over 6 times the quantity imported.

Recent Events.—In 1895 an act was passed in the Hungarian Diet annulling all previously existing statutes which denied to Jews equality before the law. Another step in reform and liberal legislation was the decree of the emperor-king according permission to the women of Hungary to study medicine in the universities. On May 2, 1896, the thousandth anniversary of the founding of the Hungarian kingdom was celebrated. At Budapesth the Millennial Exposition was opened with imposing ceremonies by the King of Hungary, the Emperor Francis Joseph. Most interesting was the historical section, consisting of buildings representing the architectural styles of 10 centuries and containing priceless memorials and relics from ancient times. The inauguration of the navigable channel made through the Iron Gates (see DANUBE IMPROVEMENT) took place on Sept. 27, in the presence of the emperor and of the kings of Roumania and Servia. The river was thus rendered navigable as far up as Passau, on the Austro-Hungarian frontier. The general elections for the Reichstag occurred on Oct. 28, and resulted in the return of 282 Liberals, 48 Kossuthists, 37 Nationalists, 20 of the People's Party, 10 Independents, and 7 Ugronists. On May 12, 1897, in the lower house of parliament, Baron Banffy, the premier, replying to interpellations with respect to the recent visit of the Emperor Francis Joseph to St. Petersburg, said: "Austro-Hungary's position toward her allies is unchanged. The Triple Alliance is not one of those short-lived political combinations which can easily be replaced by other arrangements. The Triple Alliance constitutes the unchangeable basis of Austria's foreign policy. Russia, like Austria-Hungary, has declared that she is not pursuing selfish ends in the East, but that she has as her only aim the maintenance of order, security and the preservation of the *status quo*. In the light of these facts I declare positively that Austria-Hungary and Russia have identical and harmonious aims in their Eastern policies, and the visit of the emperor to St. Petersburg has doubtless helped to foster and to strengthen the good relations existing between the two countries." See also AUSTRIA-HUNGARY.

HUNGERFORD, MARGARET HAMILTON (best known as THE DUCHESS), author, was born in Roscarberry, Ireland, about 1836; died in Bandon, Ireland, Jan. 24, 1897. She was the author of more than 30 novels.

HUTTON, LAWRENCE, author, was born in New York City, Aug. 8, 1843. Among his latest works are *Other Times and Other Seasons* and *Literary Landmarks of Jerusalem* (both 1895); *Literary Landmarks of Venice* (1896); and *Literary Landmarks of Rome* (1897). In 1897 he presented to Princeton University his unique collection of death masks of over sixty distinguished men.

HUTTON, RICHARD HOLT, literary critic and editor of *The Spectator* since 1861, was born in 1827; died in London, England, Sept. 10, 1897.

HUXLEY, THOMAS HENRY, scientist, was born in Ealing, England, May 4, 1825; died in Eastbourne, England, June 29, 1895.

HYDROPHOBIA VIRUS. Dr. Salmon, chief of the United States Bureau of Animal Industry, made, in August, 1897, an experiment with virus extracted from tissues of the embalmed body of a young man who had died with symptoms of hydrophobia, caused by the bite of a dog. Three rabbits were inoculated with the virus. In about 16 days they died in convulsions. Dr. Salmon was in doubt as to whether the convulsions were caused by the virus or the embalming fluid, so he made another experiment with the same virus. Two rabbits were inoculated; but after 19 days they were still in perfect health. The inference is that the subjects of the first experiment died from some disease or from some cause other than hydrophobia. The scientific world is seeking an antidote for hydrophobia, and Dr. Salmon will continue his experiments.

IBSEN, HENRIK, dramatic poet, was born in Skien, Norway, March 20, 1828. His latest play is *John Gabriel Borkman* (1897). The theme is suggested by St. Matthew, xii. 31, and the poet interprets the "unpardonable sin" to be the murder of the life of love in the soul.

IDAHO, one of the United States of North America; admitted to the Union July 3, 1890; counties, 21; capital, Boise City.

State Officers, 1897-99.—Governor (elected for 2 years, salary \$3,000 per annum), Frank Stennessberg; lieutenant-governor, George F. Moore; secretary of state, George J. Lewis; treasurer, George H. Storer; auditor, James H. Anderson; attorney-general, R. E. McFarland; adjutant-general, D. W. Figgins; superintendent of public instruction, L. N. B. Anderson; state engineer, Frank B. Mills; chief justice of the supreme court, I. N. Sullivan; associate justices, J. W. Huston and Ralph P. Quarles; clerk, Solomon Hasbrouck—State government, all Democrat, Populist, Fusion; judiciary, all Republican excepting Judge Quarles.

Legislature, 1897.—Democratic-Populist-Fusion, senate 12, house 29, joint ballot 41; Republican, house 1, joint ballot 1; Silver Republican, senate 9, house 19, joint ballot 28; Democratic-Populist-Fusion majority, senate 3, house 9, joint ballot 12.

Elections.—In the State elections 1896 there were 28,776 votes cast for governor, of which the Democratic-Populist and Silver Republican candidate (Stennessberg) received 22,096; the Republican candidate (Morrison) 6,441; and the Prohibition candidate (Fowler) 239. The Democratic-Populist candidate for Congress was elected by a plurality of 4,503. In the presidential election, the Democrat and Populist candidate received 23,135 votes; the Republican, 6,314; and the Prohibition, 172.

Farm Products.—Reported Dec. 31, 1895: Corn, 50,839 bush., from 1,656 acres, value \$31,520; wheat, 1,221,899 bush., from 68,616 acres, value \$574,293; oats, 1,102,358 bush., from 31,317 acres, value 319,684; potatoes, 408,240 bush., from 3,888 acres, value \$163,296; and hay, 459,598 tons, from 178,832 acres, value \$2,872,488.

Farm Animals.—Reported Jan. 1, 1897: Horses, 132,011, value \$2,259,370; mules, 911, value \$11,673; cows, 28,594, value \$660,544; cattle, 387,935, value \$5,846,179; sheep, 1,376,119, value \$2,346,283; and swine, 77,192, value \$277,721. The wool clip of the year amounted to 9,189,719 lbs.

Mineral Resources.—During the calendar year 1894 the product of the gold mines was 111,687 fine ounces, value \$2,308,775; silver mines, 3,774,349 fine ounces, value \$7,183,630; and there was an output of lead valued at \$2,605,450.

The Wood River region is particularly rich in gold; a single mine yielded \$6,000,000 in gold and silver 1890-96, and another \$1,800,000 in 1893-96. The best-paying mines in 1896 were the Minnie Moore, Queen of the Hills, Queen Victoria, Jessie, Walker, Sunset, Pearl and Morning. The Minnie Moore and Queen Victoria are owned in England. In 1894 the quarries yielded sandstone, \$10,529; marble, \$3,000; and limestone, \$5,315; and the clay products were common and pressed brick \$26,768 and drain tile \$3,500. The State is also rich in opals, the location being from 35 to 60 miles from Boise City, and extending from Squaw Creek, which empties into the Snake River, a distance of 20 miles. The gems are found on the bottom lands of the river, on the higher ground beyond the action of the water, and in very dark sandstone which requires blasting.

Finances.—In 1897 the State had a total bonded debt of \$393,000, consisting of special loans for normal school, wagon road, insane asylum, and refunding purposes. Property is assessed at about one-third of actual value, and the total valuation in 1896 was \$28,962,833. The tax levy cannot exceed 10 mills on the dollar, and for 1896 it was \$8.50 per \$1,000. Under a law of Congress of 1894-95, by which the general government donated to each State in which there are arid lands, 1,000,000 acres of such lands on condition that their reclamation is done by the States, Idaho will soon have a greatly increased agricultural area and a correspondingly increased assessed valuation.

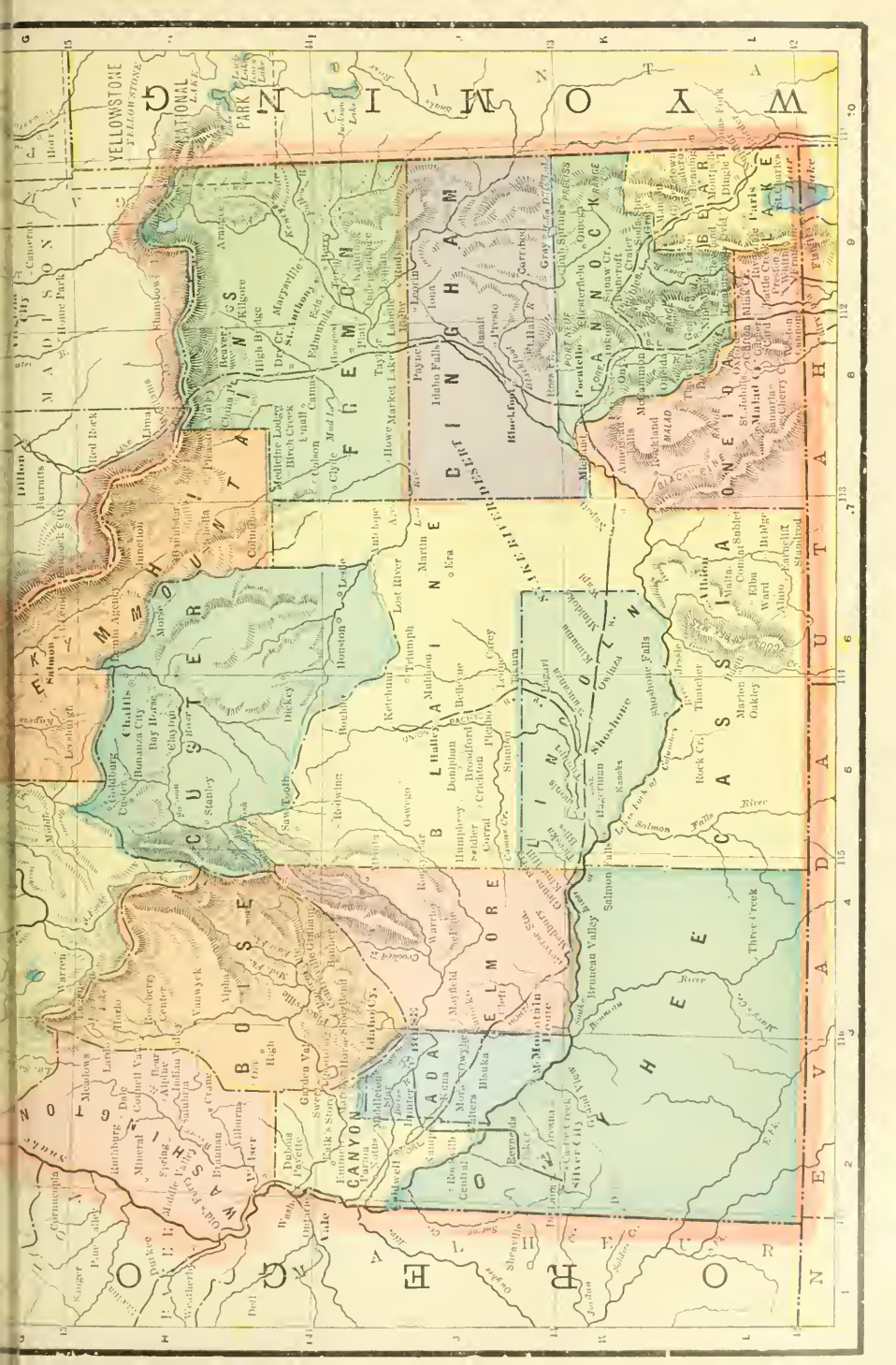
Banks.—On Oct. 31, 1897, there were 10 national banks in operation and 4 in liquidation, the active ones having a combined capital of \$675,000, and holding \$206,250 in United States bonds. These banks had outstanding on loans and discounts \$1,066,699, represented by demand paper with individual or firm names, \$181,045; the same secured by stocks, bonds, and other personal securities, \$77,217; time paper with two or more individual or firm names, \$238,238; time paper with single individual or firm name, \$212,421; and the same secured by stocks, bonds, and other personal securities, \$357,777. The banks held an aggregate of \$214,634 in coin and coin certificates, of which \$185,409 was in gold coin. The circulation account was: Total issue, \$917,090; redeemed, \$743,811; outstanding, \$173,279. There were deposits, \$2,294,319; reserve required, \$344,147; reserve held, \$928,813; ratio of reserve, 40.48 per cent. Reports of June 30, 1897, showed 5 private banks in operation, with a combined capital of \$60,350; deposits, \$275,520; resources, \$440,573; and surplus and profits, \$103,457.

Railroads.—The single-track mileage, Dec. 31, 1894, was 1,089.99, which has not been increased materially since.

Publications.—Reported March, 1898: Daily, 5; semi-weekly, 4; weekly, 60; semi-monthly, 2; and monthly, 3.

Churches.—The Mormon Church is the strongest denomination in the State, and is followed by the Roman Catholic, Methodist Episcopal, Presbyterian, Lutheran, and Protestant Episcopal. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Idaho 100 evangelical Sunday schools, 750 officers and teachers, and 5,250 scholars, total members 6,001.

Schools.—At the end of the school year 1895-96 the number of children of school age in the State was estimated at 38,810, of whom 32,560 were enrolled in the public schools and 24,256 were in average daily attendance. There were 727 teachers; public school property valued at \$712,681; and the expenditures of the



year, excluding payments on debt, aggregated \$296,357. Institutions for higher education include a State University, State normal schools at Albion and Lewiston, a State agricultural college in process of erection at Idaho Falls, 8 public high schools; and Mormon, Presbyterian, and Protestant Episcopal colleges.

Libraries.—In 1896 there were reported 5 public libraries of 1,000 volumes each and upward, with a total of 13,023 bound volumes, and 10,230 pamphlets.

Population.—In 1890, 84,385, of whom 51,290 were males, 33,095 females; 66,929 natives, 17,456 foreign-born; 82,018 whites and 2,367 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 151,000.

IDAHO, UNIVERSITY OF, Moscow, Idaho, opened in 1892, non-sectarian; co-educational; had at close of 1897, 22 professors and instructors; 250 students; 4,000 volumes in library; \$125,000 in grounds and buildings; \$25,000 in scientific apparatus and library; \$6,500 in productive funds; \$45,000 income; president, Franklin B. Gault, M.S.

ILLINOIS, one of the United States of North America; admitted to the Union Dec. 3, 1818; counties, 102; capital, Springfield.

State Officers, 1897-1901.—Governor (elected for 4 years, salary \$6,000 per annum), John R. Tanner; lieutenant-governor, W. A. Northcott; secretary of state, James A. Rose; treasurer, Henry R. Hertz; auditor, J. S. McCullough; superintendent of education, Samuel M. Inglis; attorney-general, E. C. Aiken; adjutant-general, J. N. Reece; commissioner of insurance, J. R. B. Van Cleave; chief justice of the supreme court, Jesse J. Phillips; associate justices, Joseph W. Wilkin, J. H. Cartwright, Alfred M. Craig, Benjamin D. Magruder, Joseph N. Carter, and C. C. Boggs; clerk, A. D. Cadwallader—State government, all Republicans; judiciary, all Republicans excepting Judges Phillips, Craig and Boggs, Democrats.

Legislature, 1897.—Republicans, senate 39, house 87, joint ballot, 126; Democrats, senate 11, house 64, joint ballot 75; Populists, senate 1, house 2, joint ballot 3; Republican majority, senate 27, house 21, joint ballot 18.

Elections.—In the State elections 1896 there were 1,084,539 votes cast for governor, of which the Republican candidate (Tanner) received 587,587; the Democratic-Populist (Altgeld, renominated), 474,270; the Prohibition (Gere), 14,582; and the National Democratic (Forman), 8,100. The Congressional elections resulted in the choice of 17 Republican and 5 Democratic candidates, the last being in the 16th, 18th, 19th, 20th, and 21st districts. In the presidential election the Republican candidate received 607,130 votes; the Democratic, 465,613; the Prohibition, 9,818; the National Democratic, 6,390; and the Social Labor, 1,117.

Farm Products.—Reported Dec. 31, 1895: Corn, 255,136,554 bush., from 6,821,833 acres, value \$56,130,042; wheat, 19,060,712 bush., from 1,732,792 acres, value \$10,102,177; oats, 73,707,130 bush., from 3,020,784 acres, value \$12,530,212; rye, 1,700,287 bush., from 111,861 acres, value \$680,115; potatoes, 13,749,197 bush., from 178,561 acres, value \$4,424,759; hay, 1,319,133 tons, from 1,998,686 acres, value \$13,521,113; and tobacco, 3,076,000 lbs., from 4,591 acres, value \$246,080—total value, \$97,334,498. A Permanent State Fair was opened at Springfield on Sept. 1, 1895, the building for the agricultural exposition consisting in part of the dome from the Horticultural Hall of the World's Columbian Exposition at Chicago.

Farm Animals.—Reported Jan. 1, 1897: Horses, 1,072,956, value \$33,166,042; mules, 90,631, value \$234,290, cows, 1,008,259; value \$28,735,382, cattle, 1,330,808, value \$31,264,395; sheep, 604,189, value \$1,725,564; and swine, 2,249,401, value \$11,651,896—total value, \$109,777,569.

Coal.—At the end of the calendar year 1894 the coal-bearing area of Illinois was about 36,800 square miles, covering 56 counties, and containing 836 mines and openings of all kinds, 156 new mines opened and old ones reopened, and 108 closed or abandoned mines. The output of the year of all grades was 17,113,576 short tons, valued at the mines at \$15,282,111. Of a total of 38,477 employees, 32,046 worked under ground, and 31,595 were miners. The casualties were: Men killed, 72; men injured so as to lose time, 541; wives made widows, 41; children made fatherless, 114; coal mined for each life lost, 237,689 tons; and coal mined for each man injured, 32,847 tons. The total output was 2,835,988 tons less than that of the previous year. According to the output the most productive counties ranked as follows: St. Clair, 1,623,684 tons; Macoupin, 1,575,045; Sangamon, 1,142,299; La Salle, 1,134,097; Grundy, 1,130,420; Christian, 1,005,500; Vermilion, 989,813; Madison, 889,768; Bureau, 878,937; Jackson, 766,514; Peoria, 611,792; Fulton, 557,703; Perry, 530,490; and all others below 500,000. The largest production was lump coal, 13,865,284 short tons, which had an average value at the mines for the five districts of the State of \$1.009 per ton.

Quarries.—During 1894 the limestone output had a value of \$2,555,952, more than half of the product being quarried in Cook and Will counties. Of the total value, \$2,167,979 represented stone used for building and road purposes, and \$387,973 stone burned into lime. The sandstone output was valued at \$10,732, a large decrease from that of the previous year.

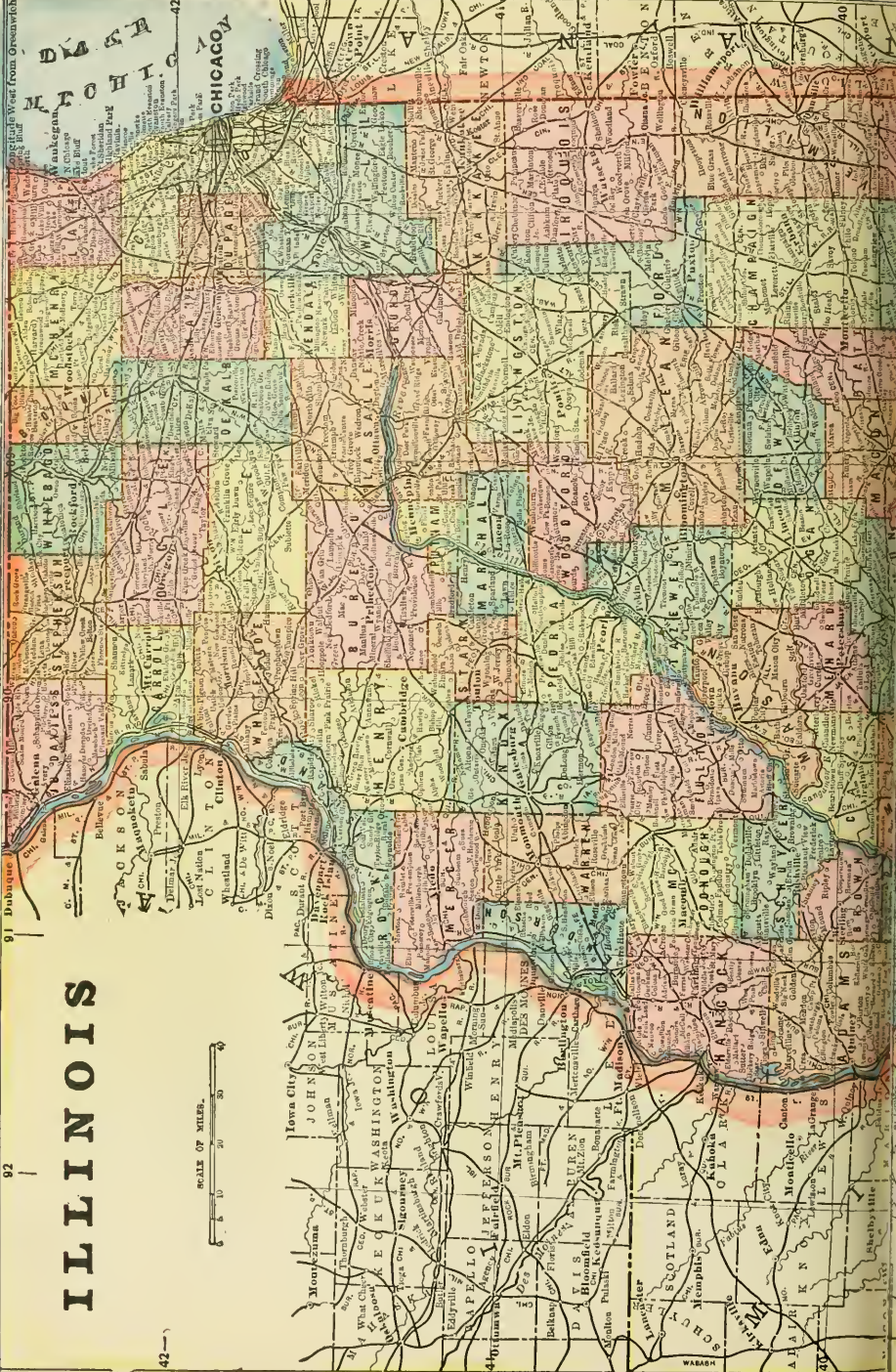
Clay Products.—Clay-working firms, numbering 697, reported on their output for the calendar year 1894 as follows: Common and pressed brick, \$4,495,613; fancy brick, \$72,920; firebrick, \$116,904; vitrified paving brick, \$813,217; drain tile, \$1,418,572; sewer pipe, \$308,963; terra cotta work, \$130,000; terra cotta lumber, \$81,288; tile, not drain, \$44,144; and miscellaneous, \$662,739—total, \$8,474,360.

Fluorspar.—The only locality in the United States producing this mineral is near Rosiclare, Ill., which had an output in 1894 of 7,500 short tons, valued at \$47,500, a decrease in quantity of 4,900 tons and in value of \$36,500.

Finances.—There is no bonded debt excepting \$18,500, which has never been presented for payment and has long ceased drawing interest. The assessed valuations in 1896 aggregated \$731,201,463, a steady decrease since 1873, when the total was \$1,355,401,317. Owing to the low state of the treasury in 1894 assessments were levied against the capital stock of 263 corporations, and in 1895 a similar levy was made in 274 cases, and the treasury was further relieved by an advance railroad payment of \$250,000.

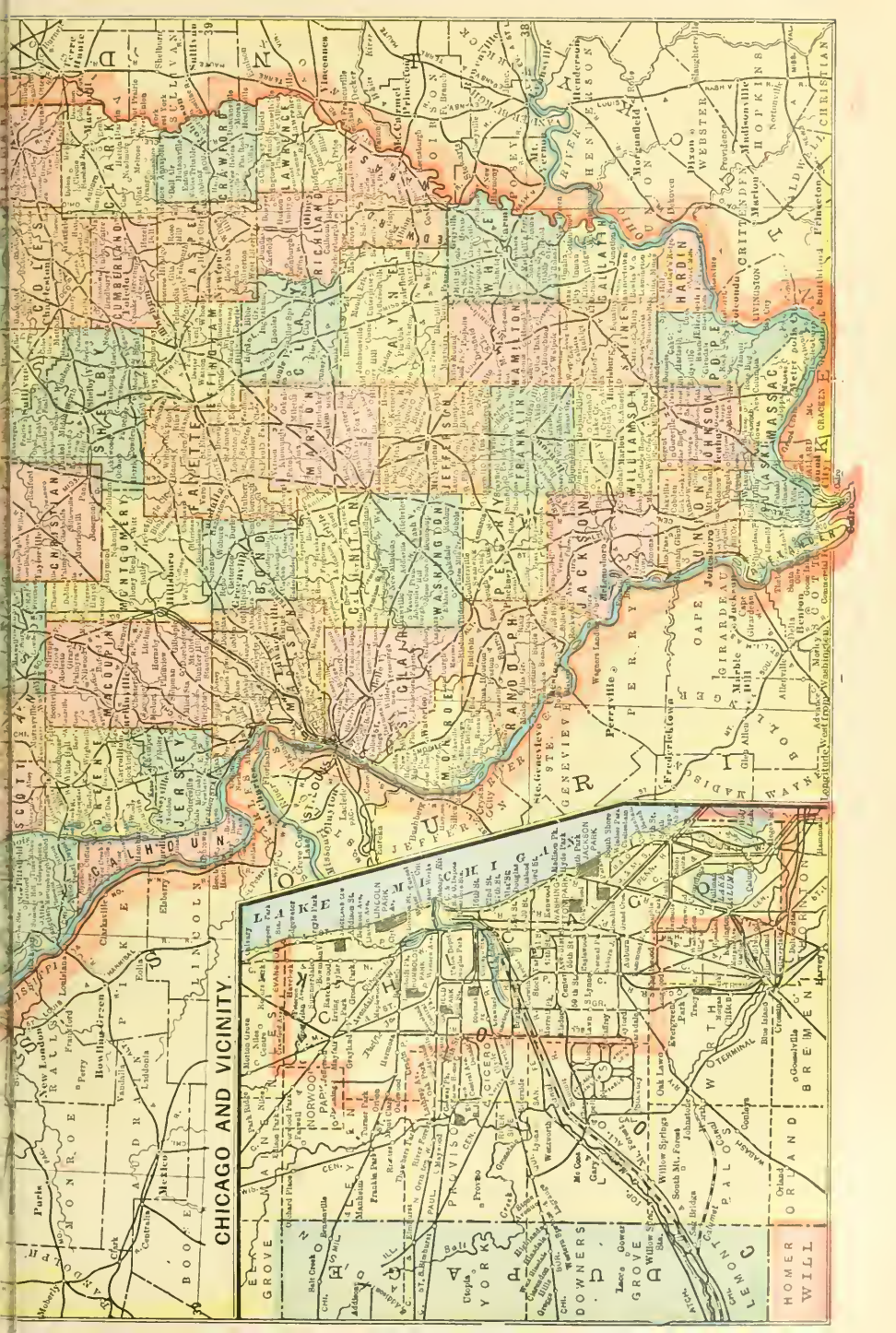
Banks.—On Oct. 31, 1897, there were 220 national banks in operation and 85 in liquidation, the active ones having a combined capital of \$37,326,000, and holding \$7,611,500 in United States bonds. These banks had outstanding on loans and discounts \$133,696,805, represented by demand paper with individual or firm names, \$10,727,421; the same secured by stocks, bonds, and other personal securities, \$18,912,696; time paper with two or more individual or firm names \$51,528,694; time paper with single individual or firm name, \$21,502,048; and the same secured by stocks, bonds, and other personal securities, \$31,025,945. The banks held an aggregate of \$25,674,935 in coin and coin certificates, of which

ILLINOIS



Chicago
 Mendota
 Peoria
 Springfield
 St. Louis
 Urbana
 Vandalia
 Woodstock

Indiana
 Kentucky
 Missouri
 Wisconsin
 Michigan
 Ohio
 Pennsylvania
 Maryland
 Virginia
 North Carolina
 South Carolina
 Georgia
 Florida
 Alabama
 Louisiana
 Arkansas
 Mississippi
 Tennessee
 West Virginia
 Texas
 Oklahoma
 Kansas
 Nebraska
 Colorado
 Wyoming
 Montana
 North Dakota
 South Dakota
 Iowa
 Minnesota
 Wisconsin
 Michigan
 Indiana
 Ohio
 Pennsylvania
 Maryland
 Virginia
 North Carolina
 South Carolina
 Georgia
 Florida
 Alabama
 Louisiana
 Arkansas
 Mississippi
 Tennessee
 West Virginia
 Texas
 Oklahoma
 Kansas
 Nebraska
 Colorado
 Wyoming
 Montana
 North Dakota
 South Dakota
 Iowa
 Minnesota



CHICAGO AND VICINITY.

CHICAGO AND VICINITY.

This detailed inset map shows the city of Chicago and its immediate surroundings. Key locations include:

- CHICAGO:** The city proper, including the Loop, downtown, and the lakefront.
- NEARBY CITIES:** Evanston, Oak Park, Berwyn, Northbrook, Skokie, and Des Plaines.
- WATERWAYS:** The Chicago River, Lake Michigan, and the Calumet River.
- INDUSTRIAL AND COMMERCIAL DISTRICTS:** The Loop, Loop West, Loop East, Loop South, Loop North, Loop West, Loop East, Loop South, Loop North.
- LANDMARKS:** The Willis Tower, the Sears Tower, the Merchants Building, the Tribune Tower, the Wacker Drive, the Michigan Avenue, the State Street, the Dearborn Street, the LaSalle Street, the Madison Street, the Franklin Street, the LaSalle Street, the Madison Street, the Franklin Street.
- TRANSPORTATION:** The Chicago River, the Lake Michigan, the Calumet River, the Chicago River, the Lake Michigan, the Calumet River.

HOMER ORLAND WILL

\$17,189,634 was in gold coin. The circulation account was: Total issue, \$66,-189,385; redeemed, \$58,539,211; outstanding, \$7,650,174. There were deposits, \$155,339,580; reserve required, \$33,872,390; reserve held, \$55,890,267; ratio of reserve, banks in Chicago, 30.06 per cent., other banks in the State, 35.82. During the year ending Sept. 30, 1897, the exchanges at the United States clearing houses at Chicago and Peoria aggregated \$4,397,810,491, a decrease of \$232,-125,242 from the total of the previous corresponding period. The State banks, Aug. 2, 1897, numbered 104, and had capital \$7,265,600; deposits, \$21,278,899; resources, \$33,794,117; and surplus and profits, \$3,461,646. There were 11 loan and trust companies, with capital \$6,358,000; deposits, \$27,641,268; resources, \$43,953,901; and surplus and profits, \$2,680,542. Stock savings banks numbered 26, and had capital, \$5,497,000; check deposits, \$26,015,107; and savings deposits, \$26,589,141; resources, \$63,950,394; and surplus and profits, \$5,064,-926. Of private banking establishments there were 108 with combined capital of \$3,048,703; deposits \$7,158,150; resources, \$12,045,433; and surplus and profits, \$1,352,969. Combining all these institutions, the State had an aggregate banking capital of \$59,495,303.

Insurance.—In January, 1895, there was a total of 369 insurance companies doing business in the State, of which 7 were joint-stock fire and marine, under State charters; 9 mutual fire, State charter; 103 joint-stock fire and marine, other State charters; 15 mutual fire, other States; 35 fire and marine, foreign; 12 State district mutual fire; 40 Illinois county mutual fire; 142 Illinois township mutual fire; 2 Illinois district mutual windstorm; and 4 Illinois county mutual windstorm. The aggregate loss in the State during 1891 was \$7,543,306.

Building and Loan Associations.—The last general report on these associations (1893) showed a total of 669 organizations, of which 631 were local, 38 national 648 serial, 8 permanent and 13 terminating. There were reported by 663 associations, shareholders 226,038; by 631, shares issued 4,773,139; by 654, shares matured 148,403; by 665, shares free 1,893,325; and by 666, shares borrowed on 767,961. The total assets and liabilities were \$75,771,559; loans on real estate, \$69,019,545; and dues and profits, \$67,316,635. During the life of 663 associations, 959 mortgages were foreclosed, involving \$1,651,864, on which there was a loss of \$25,600. Of all associations, 572 reported 57,394 homes, and 567 reported 4,812 other buildings acquired. A special report in 1897 showed, number of associations, 726; shares outstanding, 2,330,436; installment dues paid in, paid up and prepaid stock, and profits, \$75,735,777; and assets, \$82,639,258.

Internal Revenue.—During the fiscal year ending June 30, 1897, the collections of internal revenue aggregated \$32,115,607.07, from the following sources: Distilled spirits, \$27,025,907.80; tobacco, \$1,474,803.81; fermented liquors, \$3,052,-081.62; oleomargarine, \$538,046.42; miscellaneous, \$1,204.08; and penalties, \$5,218.68. During that year there were 3,010 single-account cigar factories, which used 4,751,309 lbs. of tobacco, and had an output of 247,689,712 cigars and 5,163,836 cigarettes; and 392 other tobacco factories, which used 12,489,705 lbs. of material, and had an output of 764,603 lbs. of plug tobacco, 2,102,404 lbs. of fine cut, 8,477,116 lbs. of smoking, and 420,959 lbs. of snuff, the whole requiring stamps aggregating \$704,022. There were 12 grain and 15 fruit distilleries in operation; 5,885,926.30 gals. of spirits rectified and 58,652,278 gals. gauged; and 3,244,896 bbls. of fermented liquors produced. The State ranked first in production of oleomargarine, the output being 25,700,900 lbs., more than half of the total production of the country, and the taxes were \$538,046.

Railroads.—In 1895 there were 10,576 miles of railroad track, making Illinois the banner railroad State of the country, with over 1,000 miles more than Pennsylvania, the second in rank. The assessment of railroad property was \$79,319,385; total capital stock, \$2,112,570,715; gross earnings, \$282,762,993; operating expenses, \$191,140,759; total income from operations \$91,633,234; income from property, \$12,056,936; and net income, \$103,689,170. The employees numbered 61,200, and received \$46,848,608 in wages; and the casualties were 65 passengers killed and 258 injured, and 134 employees killed and 1,057 injured. The total mileage reported in 1896 was 10,649.28.

Commerce.—During the fiscal year ending June 30, 1897, the imports of merchandise at the port of Chicago aggregated in value \$11,527,552, principally from the United Kingdom, Germany, Japan, and France; and the exports, \$2,309,549, all to Canada. This was a decrease of \$4,018,267 in imports and an increase of \$1,016,476 in exports, as compared with the previous year.

Publications.—Reported March, 1897: Daily, 169; semi-weekly, 33; weekly, 1,099; bi-weekly, 9; semi-monthly, 33; monthly, 254; bi-monthly, 6; and quarterly, 15.

Churches.—The Roman Catholic is the strongest denomination in the State, and is followed in their order by the Methodist Episcopal; Baptist; Lutheran, Synodical Conference; Disciples of Christ; Presbyterian; German Evangelical Synod; Congregational; Lutheran, General Council; Protestant Episcopal; United Brethren; Cumberland Presbyterian; and Lutheran, Independent Synods. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Illinois 7,816 evangelical Sunday schools, 91,739 officers and teachers, and 682,366 scholars—total members, 774,105, a gain in membership of 79,503 in three years.

Schools.—At the end of the school year 1895-96, the number of children of school age in the State was estimated at 1,274,000, of whom 898,619 were enrolled in the public schools, and 681,525 were in average daily attendance. There were 25,416 teachers; public school property valued at \$43,765,475; and expenditures, excluding payments on debt, \$16,201,121. There were 31 universities and colleges of liberal arts, co-educational, and for men only, with a total of 1,091 professors and instructors; 15,679 students in all departments (10,866 males and 4,813 females); 81 fellowships; 374 scholarships; 519,647 bound volumes in the libraries; \$1,595,180 in total income; \$8,060,338 invested in grounds and buildings; \$8,993,605 in productive funds; and \$2,578,519 receipts from gifts. The public schools and State educational institutions have together property valued at over \$37,300,000. There are State Normal Universities at Normal and Carbondale, and two more have been authorized by the legislature, for the eastern and northern sections of the State, to be located at Charleston and De Kalb respectively. The endowed academies, seminaries, and other private secondary schools number 41; the colleges exclusively for women, 3; the private normal schools, 4; and the commercial and business colleges, 25.

Libraries.—In 1897 there were reported 214 public libraries of 1,000 volumes each and upward, with a total of 1,822,580 bound volumes and 447,168 pamphlets.

Population.—In 1890, 3,826,351, of whom 1,972,308 were males; 1,854,043 females; 2,984,004 natives; 842,347 foreign-born; 3,768,472 whites; and 57,879 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 4,511,000.

ILLINOIS COLLEGE, Jacksonville, Ill., non-sectarian; had at the close of 1897, 15 professors and instructors; 207 students; 15,000 volumes in library; \$130,000 in productive funds; president, J. E. Bradley, PH.D., LL.D.

ILLINOIS, UNIVERSITY OF, Champaign, Ill., non-sectarian; co-educational; had at close of 1897, 182 professors and instructors; 1,600 students; 30,100 volumes in library; \$620,000 invested in grounds and buildings; \$175,000 in scientific apparatus and library; \$460,000 in productive funds; \$399,429 in income; president, Andrew S. Draper, LL.D.

ILLINOIS WESLEYAN UNIVERSITY, Bloomington, Ill., Methodist Episcopal; co-educational; had at close of 1897, 31 professors and instructors; 1,367 students; 6,000 volumes in library; \$120,000 invested in grounds and buildings; \$75,000 in scientific apparatus and library; \$175,000 in productive funds; \$14,620 income; president (acting), R. D. Graham, A.M.

ILLITERACY. See EDUCATION: JUVENILE DELINQUENTS.

IMMIGRATION. The bill for restricting immigration, which was passed by both houses of the 54th Congress in its final session, was vetoed by President Cleveland. To the classes of immigrants declared to be inadmissible by former legislation this bill added all persons over 16 years of age who cannot read the English language or some other language; but immigrants admissible under the new act might bring with them or send for illiterate parents or grandparents over 50 years old, also wives and minor children. The bill further prohibited from employment on public works aliens who come regularly or habitually into the United States for the purpose of engaging in any mechanical trade or manual labor, and who have not declared their intention to become citizens. The House of Representatives voted to pass the bill over the veto: 193 yeas to 37 nays. The Senate adjourned without action on the veto. But when the 55th Congress met (1897) Mr. Lodge of Massachusetts introduced in the Senate a new bill substantially the same as the one vetoed, but it did not include the clauses prohibiting employment on public works of "aliens who come regularly," etc. *i. e.*, Canadians. In this bill Cubans are exempted from the rule of exclusion pending the present troubles.

Official reports indicate a large falling off in immigration. In the fiscal years ending June 30, 1896 and 1897, the total immigration to the United States was 343,267 and 230,832 respectively. In regard to European immigration in 1897 it may be noted that while the proportion of the total immigration from South-eastern Europe was not diminished, the proportion from Northwestern Europe, which was 52 per cent. in 1895 and 39 per cent. in 1896, was only 38 per cent. in 1897—a steady decline. The proportion debarred and returned is steadily diminishing, having been 1 per cent. in 1895, 0.9 per cent. in 1896, and 0.8 per cent. in 1897. There was some decrease in general illiteracy, and an increase in the average amount of money brought by each immigrant in 1897, as compared with 1896. The number of persons in each hundred immigrants, over fifteen years of age, who could not write or could not read and write their own language, from those nations of Europe which sent upward of 2,000 immigrants to the United States during the fiscal year 1897 was as follows: Denmark, 0.5; Sweden, 0.9; Norway, 1.1; Germany, 1.8; England, 4.1; France, 4.3; Ireland, 6.4; Finland, 8.2; Russia, 27.9; Austria-Hungary, 28.1; Poland, 39.4; and Italy, 50.9.

IMPORTS AND EXPORTS. The following table gives a summary of the imports and exports of merchandise into and from the United States in the fiscal years ending June 30, 1896 and 1897:

IMPORTS AND EXPORTS.

Groups.	1896.	1897.
<i>Imports.</i>		
Free of duty:		
Articles of food and live animals.....	\$123,674,370	\$124,012,968
Articles in a crude condition for domestic industry	186,417,181	194,564,418
Articles manufactured for mechanic arts.....	29,854,940	29,864,421
For consumption.....	20,496,084	24,750,375
Articles of voluntary use, luxuries, etc.....	9,315,045	8,746,339
Total free of duty.....	\$369,757,470	\$381,938,421
Dutiable:		
Articles of food and live animals.....	\$113,350,775	\$121,153,211
Articles in a crude condition for domestic industry	22,951,536	20,339,911
Articles manufactured for mechanic arts.....	64,878,779	57,309,091
For consumption.....	124,778,005	109,024,851
Articles of voluntary use, luxuries, etc.....	84,008,109	74,352,124
Total dutiable.....	\$409,967,204	\$382,779,188
Free and dutiable:		
Articles of food and live animals.....	\$237,025,045	\$245,166,179
Articles in a crude condition for domestic industry	209,368,717	214,904,329
Articles manufactured for mechanic arts.....	94,733,718	87,173,512
For consumption.....	145,274,039	134,375,126
Articles of voluntary use, luxuries, etc.....	93,323,154	83,098,463
Total imports of merchandise.....	\$779,724,674	\$764,717,609
Duties collected.....	\$160,534,351	\$176,316,393
<i>Exports.</i>		
Domestic:		
Products of—Agriculture.....	\$569,879,207	\$683,878,990
Manufactures.....	228,571,178	276,357,861
Mining.....	20,045,054	21,338,129
Forest.....	33,718,204	40,489,321
Fisheries.....	6,850,392	6,134,014
Miscellaneous.....	4,135,762	3,802,985
Total.....	\$863,200,487	\$1,032,001,300
Foreign:		
Free of duty.....	\$9,486,930	\$9,746,495
Dutiable.....	9,919,521	9,339,458
Total.....	\$19,406,451	\$18,985,953

The movement of gold and silver coin and bullion in the same periods were:

Coin and Bullion.	1896.	1897.
Gold—Imports.....	\$33,525,065	\$85,014,760
Gold—Exports.....	112,419,947	40,361,580
Silver—Imports.....	28,777,186	30,333,227
Silver—Exports.....	60,541,670	61,946,638

The following shows the foreign trade of the United States in the same periods by groups of countries:

Countries.	Imports.		Exports.	
	1896.	1897.	1896.	1897.
Europe.....	\$418,639,121	\$430,193,353	\$673,043,753	\$813,380,332
North America.....	126,877,126	105,909,805	116,567,496	124,963,773
South America.....	108,828,462	107,389,009	36,297,671	33,768,493
Asia.....	89,592,318	87,295,280	25,639,059	39,268,755
Oceania.....	24,674,068	24,490,430	12,197,223	22,652,773
Africa.....	11,172,979	9,529,723	13,870,760	16,933,127

The domestic exports in the year ending June 3, 1897, were the largest in the history of the country, the next largest being in 1892. The following table shows the items and values of exports for the two fiscal years in which the largest increases were made:

Articles.	1896.	1897.
Cattle.....	\$31,569,672	\$36,337,451
Brass and manufactures of.....	872,396	1,171,431
Barley.....	3,100,311	7,646,384
Corn.....	37,836,862	54,087,152
Oats.....	3,497,611	8,756,207
Rye.....	445,975	3,667,505
Wheat (in the grain).....	39,709,898	59,020,178
Wheat flour.....	52,625,217	55,914,347
Copper and manufactures of (not ore).....	19,729,104	31,931,125
Cotton in bales.....	199,056,469	299,800,071
Cotton, manufactures of.....	12,958,357	17,281,620
Cycles and parts of.....	1,898,012	7,095,323
Instruments, etc., for scientific purposes.....	2,522,217	3,054,453
Iron and steel and manufactures of.....	5,799,188	6,627,406
Other machinery.....	14,833,221	19,771,856
Railroad bars (steel).....	549,797	2,482,208
Wire.....	1,596,885	2,232,617
Total iron and steel (not ore).....	41,160,877	57,397,305
Oleace meal.....	7,949,547	9,611,044
Cottonseed oil.....	5,176,510	6,807,361
Paper and manufactures of.....	2,713,875	3,333,157
Fresh beef.....	18,074,107	22,653,742
Hams.....	15,669,763	15,970,021
Butter.....	2,397,393	4,463,394
Cheese.....	3,091,914	4,639,063
Total provisions.....	131,593,530	137,138,084
Tobacco, manufactured.....	4,380,361	5,025,817
Vegetables.....	1,655,050	2,337,924

SEE COMMERCE OF THE UNITED STATES: MERCHANT MARINE.

INDIA, BRITISH. Famine and war were the plagues of India in 1896-97. The close of 1896 found the country stricken with famine and pestilence. The distress was most acute in the Punjab, the Northwest Provinces and Oude; while in the Central Provinces, Berar, Madras and Bombay, the suffering was only less. Grain riots were frequent; 1,000,000 persons were employed on government relief works; and the conditions were growing worse. The "famine area" at the end of December had a population of over 80,000,000 people. The bubonic plague

broke out in Bombay in September; at the end of December the mortality in the city from that cause was 1,500 daily; of the normal population, viz., 800,000, one-fourth had fled from the city. The plague was spreading, having reached Kurachee and several smaller places. In January, 1897, the famine assumed still more alarming proportions, extending over an area of 1,300 by 400 miles. In the middle of February the recipients of public relief numbered 2,750,000, and before the end of the month 2,948,000. In one district of 700,000 the number obtaining relief was 200,000. On March 1, relief was offered to 3,141,000, and in the middle of May to 3,608,000. But the plague was steadily subsiding, and timely rains had greatly improved the prospect of the crops. On Oct. 1, 1897, the lord mayor of London reported that the total subscriptions to the famine fund in Great Britain, the United States, the British colonies, and India, aggregated nearly \$7,500,000, and that the total cost of the famine was over \$50,000,000.

The first act in the insurrection, still at this writing local and unconcerted, was an attack, on June 9, upon a British force on the Afghan frontier by some men of the Waziri tribe. The British were compelled to retreat, suffering heavy loss of men and officers. At Poona and at Peshawur about the same time British officers were assassinated. At Calcutta, June 30, there was serious rioting by Mussulmans. The authorities went very much more than halfway to conciliate the rioters. Such occurrences were happening everywhere, but still there was no clear proof of concerted action, though there were strong suspicions that the outrages were directed by hidden foes of British domination. The risings of the hill tribes were charged to the account of the ameer of Afghanistan, Abdurrahman Khan. The ameer had called to Kabul his agents at Simla, Calcutta, and other points. Military movements were promptly ordered to counteract the ameer's schemes for inciting the tribesmen to a holy war. The "Mad Mullah," who was preaching the holy war, was known to have his headquarters in the Mohmand country, within the Afghan border. The Turkish sultan was also believed to be in the conspiracy. The fierce tribes of Afridis and Orakzais had risen by the middle of August and the country between Peshawur and Kabul was in their control. They held the Khyber and other passes. In hot contests with British posts and detachments the insurgents were gaining important advantages daily. In the beginning of September it was decided by the British government to send a strong expedition under General Lockhart, commander-in-chief in the Punjab, against the Afridis and Orakzais, for those two tribes seem alone to have borne the brunt of the war. The native rulers of the protected Indian States with one accord offered the services of their troops against the mountain tribes. The ameer of Afghanistan, too, protested his determination to fulfill all his obligations toward England loyally. Later in the month the Afridis and Orakzais of the Tirah country decided in a council to resist the British advance. In consequence of their failure to accept the terms of the British authorities, the punishment of the Mohmands was resumed. Twelve of their villages were destroyed and their fortified towers were blown up. On Oct. 18 there was stubborn fighting on the Samana Range, and on the 20th the British suffered severely in a struggle to gain control of the Dargai Ridge, which commanded Chagru, on the Samana Range. On the 29th General Lockhart captured the Sempagha Pass, on the Afghan border, where it was believed the tribesmen had massed 20,000 men, thrown up long lines of rifle pits, and strengthened their defenses. The stand here made was evidently for the purpose of delaying the British advance, and the situation of the British was becoming critical through the policy of the tribesmen in attacking the lines of communication and the British convoys. The defenses at this pass were the

strongest the British had encountered in the campaign. The works were shelled by six batteries, then height after height was charged and taken in the face of a heavy fire till the British reached the summit, where they were exposed to the fire of the tribesmen on the surrounding heights for nearly three hours, and then a heavy counter fire by the British cleared the ground and completed the victory. Early in November a large deputation of the Orakzais entered General Lockhart's camp to treat for peace, but the Afridis showed no signs of yielding. Later on, a large British reconnoitering force suffered heavily in a forced retreat from the mountain summit near Saran-Sar. On Nov. 22 General Lockhart issued a proclamation announcing the terms on which he would receive the submission of the Afridis. Considerable speculation was excited by the withdrawal of the 2d Battalion, Royal Irish Regiment, from Samana to Rawalpindi. On Dec. 28, 1897, it was announced that the British columns had returned from Khyber Pass after punishing, with slight opposition, the Zakka-Khels in the Bazar Valley. Military operations on the frontier were considered concluded. Every Afridi and Orakzai valley had been visited. In January, 1898, Maj.-Gen. Sir Arthur Power Palmer was appointed to succeed Gen. Sir William Lockhart as commander of the field force on the Northwest frontier. See AFGHANISTAN: ABDURRAHMAN KHAN.

INDIANA, one of the United States of North America; admitted to the Union Dec. 11, 1816; counties, 92; capital, Indianapolis.

State Officers, 1897-1901.—Governor (elected for 4 years, salary \$5,000 per annum), James A. Mount; lieutenant-governor, W. S. Haggard; secretary of state, W. D. Owen; treasurer, F. J. Scholz; auditor, Americus C. Daily; superintendent of education, David M. Geeting; attorney-general, W. A. Ketcham; state geologist, W. S. Blatchley; state statistician, S. J. Thompson; reporter of the supreme court, Charles F. Remy; chief justice of the supreme court, Timothy E. Howard; associate justices, James H. Jordan, Leonard J. Hackney, James McCabe, L. J. Monks; clerk, Alexander Hess; justices of the court of appeals, Woodfin D. Robinson, William J. Henley, James B. Black, D. W. Comstock, and U. Z. Wiley—all Republicans excepting Judges Howard, Hackney and McCabe, Democrats.

Legislature, 1897.—Republicans, senate 33, house 52, joint ballot 85; Democrats, senate 14, house 39, joint ballot 53; Populists, house 3, senate 9, joint ballot 12; Republican majority, senate 16, house 4, joint ballot 20.

Elections.—In the State elections 1896 there were 630,191 votes cast for governor, of which the Republican candidate (Mount) received 321,032; the Democratic (Shively), 294,855; the Populist (Wadsworth), 8,525; the Prohibition (Christ), 2,996; the National Prohibition (Kingsbury), 2,500; and the Social Labor (Moore), 283. The Congressional elections resulted in the choice of 9 Republican and 4 Democratic candidates. In the presidential election the Republican candidate received 323,754 votes; the Democratic, 305,528; the Prohibition, 3,056; the National Democratic, 2,145; and the Social Labor, 324.

Farm Products.—Reported Dec. 31, 1895: Corn, 121,435,768 bush., from 3,702,310 acres, value \$27,930,227; wheat, 20,291,492 bush., from 2,205,923 acres, value \$11,567,860; oats, 25,895,595 bush., from 1,130,812 acres, value \$5,179,119; rye, 633,949 bush., from 51,963 acres, value \$266,259; potatoes, 6,945,576 bush., from 105,236 acres, value \$2,153,129; hay, 955,725 tons, from 1,566,763 acres, value \$11,497,372; and tobacco, 8,760,000 lbs., from 13,435 acres, value \$770,880—total value, \$59,364,846. The wheat acreage is steadily decreasing.

Farm Animals.—Reported Jan. 1, 1897: Horses, 645,834, value \$20,547,082;

mules, 46,397, value \$1,674,144; cows, 618,282, value \$14,665,649; cattle, 726,557, value \$15,317,115; sheep, 654,758, value \$1,771,579; and swine, 1,340,365, value \$6,762,409—total value \$80,737,978.

Mineral Products.—The following is a summary of the mineral products for the calendar year 1894, the last reported: In *coal* the State ranked 8th in production, with an output of 3,423,921 short tons, valued at the mines at \$3,295,034. The worked coal area was about 6,500 square miles, and covered parts of 19 counties, and the most important grade was the block, which is peculiar to this State and a part of Illinois. Of the total output, 3,085,664 short tons were loaded at the mines for shipment. The most productive counties were: Clay (865,950); Sullivan (496,495); Parke (327,011); Vigo (309,593); Greene (292,606); and Vermilion (289,791). The average number of men employed at the mines was 8,603. In *natural gas* the State contains the most important territory in the country, comprising an estimated area of 2,500 square miles, and the flow is holding out better than that of Ohio and Pennsylvania. There were 399 producing wells, having an aggregate daily flow of 779,525,000 cubic ft., and the value of the gas consumed was \$5,437,000. The largest flow was in Hamilton, Madison, Delaware, Greene, Howard, Marion, and Tipton counties. The production of crude *petroleum* was 3,688,666 bbls., valued at 1,774,260, an increase of more than 50 per cent. over the output of the previous year. The local field is chiefly an extension of the Lima district in Ohio, and covers parts of Blackford, Jay, Wells, and Adams counties. During 1894 there were 1,189 new wells opened, which had an initial daily flow of 40,748 bbls. Reports of the pipe-line runs, the shipments, and the stock on hand cover the operations in Indiana and Ohio, and cannot be given for the States separately. *Quarrying* was limited to sandstone and limestone, and for certain grades of each the State has become widely noted. The sandstone output was valued at \$22,120, and that taken from Orange county is highly prized for abrasive purposes. The limestone output valued at \$1,203,108, was chiefly the Bedford oolitic stone, which is now in great demand for building and ornamental purposes. It was found in 32 counties and quarrying for it was being rapidly and widely developed. In *clay* products, 663 concerns reported, value of output of common and pressed brick, \$1,720,017; fancy brick, \$6,650; firebrick, \$22,720; vitrified paving brick, \$224,473; drain tile, \$954,264; other tile, \$101,855; sewer pipe, \$1,000; terra cotta work, \$50,000; and miscellaneous, \$4,590—total, \$3,135,569. Out of 11 commercial mineral springs, 9 reported an output of 198,960 gals., value \$31,146.

Finances.—On Nov. 1, 1896, what is known as the foreign debt amounted to \$6,436,615, and the domestic or school debt to \$484,000; total debt, \$7,920,615; total annual interest, \$224,225. The assessed valuations for 1895 aggregated \$1,286,050,531; tax rate \$2.96 per \$1,000. During 1895 the State had receipts \$8,525,219, and expenditures \$8,342,004; paid on the State debt, \$1,331,380; to its benevolent institutions, \$959,525; penal institutions, \$190,484; colleges, \$223,922; and reformatories, \$110,000.

Banks.—On Oct. 31, 1897, there were 115 national banks in operation and 71 in liquidation, the active ones having a combined capital of \$14,237,000, and holding \$5,290,050 in United States bonds. These banks had outstanding on loans and discounts \$31,876,860, represented by demand paper with individual or firm names, \$2,655,477; the same secured by stocks, bonds, and other personal securities, \$1,575,439; time paper with two or more individual or firm names, \$19,213,341; time paper with single individual or firm name, \$3,876,607; and the same secured by stocks, bonds, and other personal securities, \$4,555,995. The banks

held \$4,456,391 in coin and coin certificates, of which \$3,616,514 was in gold coin. The circulation account was: Total issue, \$62,356,085; redeemed, \$56,-664,312; outstanding, \$5,691,773. There were deposits, \$32,985,999; reserve required, \$4,947,899; reserve held, \$13,595,849; ratio of reserve, 41.22 per cent. During the year ending Sept. 30, 1897, the exchanges at the United States clearing house at Indianapolis aggregated \$108,477,351, an increase of \$946,973 over the total of the previous corresponding period. The State banks May 13, 1897, numbered 96, and had capital \$4,875,900; deposits, \$9,964,930; resources, \$16,106,236; and surplus and profits, \$1,098,956. There were 4 loan and trust companies with capital \$1,810,900; deposits, \$647,969; resources, \$2,831,660; and surplus and profits, \$161,758. Mutual savings banks numbered 5, and had depositors, 17,437; deposits, \$4,082,359; resources, \$4,635,824; and surplus and profits, \$552,509. Of private banking establishments there were 40, with combined capital of \$1,585,260; deposits, \$3,528,150; resources, \$5,622,058; and surplus and profits, \$430,047. Combining all these the State had an aggregate banking capital of \$22,509,060.

Building and Loan Associations.—The last general report on these associations (1893) showed a total of 445 organizations, of which 429 were local, 16 national, 154 serial, 160 permanent, and 131 terminating. There were reported by 442 associations, shareholders, 112,301; by 344, shares issued, 584,154; by 421, shares matured, 23,188; by 444, shares free, 369,508; and by 440, shares borrowed on, 202,565. The total assets and liabilities were \$26,623,795; loans on real estate, \$23,907,658; and dues and profits, \$20,699,080. During the life of 444 associations, 255 mortgages were foreclosed, involving \$196,380, on which there was a loss of \$1,652. Of all associations, 311 reported 19,673 homes, and 292, 1,228 other buildings acquired. A special report in 1897 showed number of associations, 502; shares outstanding, \$14,811; installment dues paid in, paid up and prepaid stock, and profits, \$32,829,875; and total assets, \$34,347,023.

Internal Revenue.—During the fiscal year ending June 30, 1897, the collections of internal revenue aggregated \$8,564,363.13, from the following sources: Distilled spirits, \$7,702,252.15; tobacco, \$199,272; fermented liquors, \$609,855.64; oleomargarine, \$33,058.70; miscellaneous, \$18,917; and penalties, \$987.64. During that year there were 852 single-account cigar factories, which used 1,237,-232 lbs. of tobacco, and had an output of 62,868,678 cigars; and 98 other tobacco factories, which used 308,368 lbs. of materials and had an output of 122,495 lbs. of plug tobacco and 119,557 lbs. of smoking.

Railroads.—On Jan. 1, 1894, the total railroad mileage was 6,321.07, and during that year three companies laid a total of 58.20 miles of new track, making the aggregate mileage on June 1, 1895, 6,379.27. The companies had a combined capital of \$109,376,430; funded debt, \$138,511,688; total investment, \$253,208,-586; and had expended for construction and equipment, \$247,057,309. In 1891 the legislature passed an act which more than doubled the taxable valuation of railroad property, and after a contest the supreme court affirmed the validity of the act in 1893. Under this act such property was assessed at \$157,125,035 in 1895.

Publications.—Reported March, 1897: Daily, 150; semi-weekly, 23; weekly, 588; semi-monthly, 8; monthly, 78; bi-monthly, 1; and quarterly, 1.

Churches.—The Methodist Episcopal is the strongest denomination in the State, and is followed in their order by the Roman Catholic; Disciples of Christ; Regular Baptist; United Brethren; Presbyterian, North; Friends; Lutheran,

Synodical Conference; and Christians. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Indiana, 5,248 evangelical Sunday-schools, 62,416 officers and teachers, and 428,798 scholars, total members, 491,214, a gain of 68,662 in membership in three years.

Schools.—At the end of the school year 1895-96, the number of children of school age in the State was estimated at 676,100, of whom 543,665 were enrolled in the public schools, and 401,702 were in average daily attendance. There were 14,884 teachers; public school houses, 9,890; public school property valued at \$18,867,494; and expenditures, excluding payments on debt, exceeded \$3,911,440. There were 15 universities and colleges of liberal arts, co-educational and for men only, with a total of 344 professors and instructors; 4,336 students in all departments (3,199 males and 1,137 females); 1 fellowship; 21 scholarships; 187,840 bound volumes in the libraries; \$436,060 in total income; \$4,047,422 invested in grounds and buildings; \$1,977,643 in productive funds; \$344,000 in scientific apparatus and libraries; and \$100,000 receipts from gifts. A popular movement in 1895 resulted in the purchase of the North Manchester College, which had been conducted by the United Brethren Church, and the presentation of the college property with a cash endowment to the Dunkards. A new feature in the curriculum of the State University is the addition of a course in journalism. The endowed academies, seminaries, and other private secondary schools number 22; public normal schools, 3; private normal schools, 10; colleges with normal departments, 5; public high schools, 315; and commercial and business colleges, 20.

Libraries.—In 1896 there were reported 107 public libraries of 1,000 volumes each and upward, with a total of 654,651 bound volumes and 53,357 pamphlets.

Population.—In 1890, 2,192,404, of whom 1,118,347 were males; 1,074,057 females; 2,046,199 natives; 146,205 foreign-born; 2,146,736 whites; and 45,668 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 2,448,000.

INDIANAPOLIS, city, capital of Marion county, and of the State of Indiana; population (1890) 105,436. In 1896 the assessed valuations were: Real estate, \$77,922,520; personal property, \$30,363,395—total, \$108,285,915; tax rate, \$16.50 per \$1,000. The funded debt, Jan. 1, 1897, for refunding and local improvements, was \$1,424,500; and the annual cost of maintaining the city government, exclusive of the public schools, was \$825,950. There were 332 miles of streets, of which 59 were paved; 75 miles of sewers; and 60 miles of water mains. The total cost of the waterworks to date was \$2,500,000. There are 3 national banks, with combined capital, \$1,600,000; deposits, \$5,284,728; and resources, \$10,414,215. In the year ending Sept. 30, 1897, the exchanges at the clearing house aggregated \$108,477,351, an increase of \$946,973 in a year. Public school property aggregates in value \$1,835,800, and the expenditure for public schools during 1895-96 was \$536,924. In 1898 there were 8 daily, 30 weekly, 4 semi-monthly, and 37 monthly periodicals. The estimated population on Jan. 1, 1897, was 169,150.

INDIANA, UNIVERSITY of, Bloomington, Ind., non-sectarian; co-educational; had at close of 1897, 55 professors and instructors; 1,000 students; 25,000 volumes in library; \$200,000 invested in grounds and buildings; \$60,000 in scientific apparatus and library; \$600,000 in productive funds; \$80,000 income; president, Joseph Swain, LL.D.

INDIAN TERRITORY, an unorganized territory of the United States of North America; set apart by Congress for Indian reservations in 1834; and containing

in 1896 the Cherokee Nation, area, 7,861 square miles, capital, Tahlequah; the Chickasaw Nation, area, 7,267 square miles, capital, Tishomingo; the Choctaw Nation, area, 10,450 square miles, capital, Atoka; the Creek Nation, area, 5,024 square miles, capital, Okmulgee; the Seminole Nation, area, 312½ square miles, capital, Wewoka; and several smaller reservations of minor tribes. Each of the great nations is allowed self-government under officers chosen by popular election; each maintains educational institutions in addition to those supported by the United States government and by religious organizations; and for all the United States treasury holds trust funds exceeding \$8,000,000, the interest of which is paid regularly to the national treasurers.

Mineral Products.—The principal source of mineral wealth so far developed is the bituminous coal belt, mostly in the Choctaw Nation. The production in 1894 was 969,606 short tons, valued at the mines at \$1,541,293, a reduction in quantity, owing to a strike, from 1,252,110 tons in the previous year, the largest output in the history of the Territory. Of the total product, 923,581 tons were loaded at the mines for shipment, chiefly to Texas. There is a coking plant at McAlester, with 80 ovens, which consumed 7,274 short tons of coal, and yielded 3,051 tons of coke, valued at \$10,693, a large decrease from the totals of former years. A fine lubricating grade of petroleum is found in the Cherokee Nation, on an extension of the Kansas oil belt. Two districts had 14 wells in operation, and the total production was 130 bbls., valued at \$810. Near Lehigh large deposits of manganese ore have been discovered recently, but mining is restricted by inadequate means of transportation.

Banks.—On Oct. 31, 1897, there were 11 national banks in operation, with a combined capital of \$620,000, and holding \$138,000 in United States bonds. The banks had outstanding on loans and discounts \$1,084,917, represented by demand paper with individual or firm names, \$7,478; the same secured by stocks, bonds, and other personal securities, \$591; time paper with two or more individual or firm names, \$502,174; time paper with single individual or firm name, \$140,736; and the same secured by stocks, bonds, and other personal securities \$433,939. Together the banks held \$78,813 in coin and coin certificates, of which \$26,355 was in gold coin. The circulation account was: Total issue, \$278,400; redeemed, \$120,360; outstanding, \$158,040. There were deposits, \$1,150,400; reserve required, \$172,560; reserve held, \$549,360; ratio of reserve, 47.75 per cent. The private banks, June 30, 1897, numbered 14, and had capital, \$286,000; deposits, \$373,580; resources, \$685,010, and surplus and profits, \$25,430.

Railroads.—On June 30, 1896, the total railroad mileage was 1,182. Besides the roads operating in Indian and Oklahoma Territories, a number of important lines have been granted a right of way and valuable privileges in Indian Territory by recent acts of Congress.

Publications.—Reported March, 1898: Daily, 5; weekly, 62; semi-monthly 1; and monthly, 2.

Post-Offices.—Reported Jan. 1, 1897: Second-class 1; third-class, 7 (presidential 8); fourth-class, 461; money order offices, 87; and limited money order offices, 6.

Churches.—The Methodist Episcopal, South, is the strongest denomination in the Territory, and is followed in their order by the Regular Baptist, South; Disciples of Christ; Presbyterian, North; Roman Catholic; Cumberland Presbyterian; Church of God; African Methodist; Presbyterian, South; and Friends. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Indian Territory 387 evangelical Sunday schools, 2,942 officers and teachers, and 16,393 scholars—total 19,335.

Schools.—No general statistics of schools are available, but the Five Nations, the United States government, and a number of religious societies support institutions of different grades, the nations maintaining about 350 primary schools, 15 higher grade schools, and several orphanages. Among denominational schools of secondary grade are the Indian University (Baptist), at Bacone; Spencer Academy (Presbyterian), at Nelson; Willie-Halsell College (Methodist Episcopal, South), at Vinita; Worcester Academy (Congregational), at Vinita; Wheelock Seminary (Presbyterian), at Wheelock; Baptist Academy, at Atoka; Harrell Institute (Methodist Episcopal, South), at Muscogee; and New Hope Female Seminary (Methodist Episcopal), at Oak Lodge.

Libraries.—In 1896 there were reported 2 public libraries of 1,000 volumes each and upward, with a total of 2,205 bound volumes and 708 pamphlets.

New Survey.—In April, 1895, the United States General Land Office began a new survey of the Territory, ostensibly with the view of opening up the region to settlement by the whites, the last survey being preliminary to the setting apart of Oklahoma Territory. Congress appropriated \$400,000 for the work, which was supposed to require two years' time, and would comprise the laying off of the country in counties, sections, townships, and ranges. The work created excitement among the Indians, who believed that their tribal relations were doomed.

Proposed Reorganization.—For several years attempts have been made in Congress to pass bills either to create a new State out of the Territory, or to give the whole or a part of it a regular territorial form of government. These efforts have been resisted by the Five Nations as prospective violations of their treaty rights. In December, 1894, a bill to provide a temporary form of government for that part of the Territory occupied by the Five Nations was introduced in the Senate, and in January, 1896, another, to establish a new government over the same section and to call the area the Territory of Indianola. The movement to secure for the whites a greater freedom in the Territory, supplemented by successful resistance to the Dawes Commission, which was appointed under an act of Congress to negotiate with the authorities of the Five Nations for a voluntary abandonment of their tribal relations, induced the Five Nations to send a joint delegation to Washington, in January, 1896, to lay their protests against the propositions of the Dawes Commission and the Indianola bill and their appeals for justice directly before the president. The general Indian appropriation act for 1897 provided that on and after Jan. 1, 1898, the United States courts in the Territory should have original and exclusive jurisdiction and authority to try and determine all civil causes in law and equity thereafter instituted and all criminal causes for the punishment of any offence committed after Jan. 1, 1898, by any person in said Territory. The same act conferred on United States commissioners the full powers within the Territory which they exercise elsewhere under the Federal law; the laws of the United States and the State of Arkansas in force in the Territory were made applicable to all persons, irrespective of race; and any citizen of any one of the five civilized tribes, "otherwise qualified, who can speak and understand the English language, may serve as a juror" in any of the courts. In January, 1898, the joint sub-committees of the Senate and House which had been for several months trying to agree on the basis of new laws for the Indian Territory, authorized Representative Curtis to prepare and introduce a bill providing for the allotment of the use of the Indian lands, for the regulation of town sites, for the ousting of intruders and authorizing the Dawes Commission to prepare a roll of citizens. The provision in regard to town sites will allow the incorporation of town companies and permit them to purchase their sites from the

Indians, with the consent of the National government, granting a lease in the meantime.

Population.—Only an approximation of the population can be given. The census estimates are as follows: Cherokee Nation, 56,000; Chickasaw, 57,000; Choctaw, 43,000; Creek, 17,000; and Seminole, 2,700—total, 165,700; other Indians, 12,397—in all, 178,097. It is safe to say that less than half of this total are Indians, as tribal laws allow a white man marrying a squaw to be counted as an Indian, and many white men have so married in order to acquire property in the different nations.

INDO-CHINA, name applied to the French possessions in the Annamese peninsula, now including Cochin-China, Annam, Cambodia, and Tonquin. Cochin-China has an estimated area of 23,082 square miles, and a population (1897) of 2,034,453, consisting chiefly of Annamites; Annam has an area of 81,042 square miles, and a population variously estimated at from 2,000,000 to 6,000,000; Cambodia has an area of 40,000 square miles, and a population estimated at 1,500,000 to 2,200,000; and Tonquin has an area of 34,740 square miles, 14 provinces, 8,000 villages, and a population estimated at 9,000,000. During 1893-96 about 110,000 square miles of Siam to the east of the Mekong were annexed to these possessions by France. The possessions are immediately governed by a Superior Council of Indo-China, which fixes the budget of Cochin-China, and advises as to the budgets of Annam, Cambodia and Tonquin. The expenditure of France for Cochin-China, according to the budget of 1897, was 3,109,201 fr., and for Tonquin, 24,390,000 fr. In 1896 Great Britain and France signed an agreement defining the boundaries of their respective spheres in Burmah and Indo-China, and also affecting the boundaries of Siam.

INDUSTRY, AGRICULTURAL. The following tables show the acreage production and value of principal crops of the United States in the year ending Dec. 31, 1897:

States and Territories.	CORN.			WHEAT.		
	Acres.	Bushels.	Value.	Acres.	Bushels.	Value.
Maine.....	9,003	360,411	\$172,213	1,494	24,651	\$26,130
New Hampshire.....	24,004	818,176	818,176	511	8,175	8,994
Vermont.....	45,237	1,583,295	680,819	3,518	59,806	62,198
Massachusetts.....	39,486	1,283,296	603,149	.....	.....	.....
Rhode Island.....	8,494	263,314	142,190	.....	.....	.....
Connecticut.....	45,238	1,325,027	698,557	159	3,000	3,000
New York.....	494,682	15,335,142	6,134,057	344,608	7,371,611	6,337,159
New Jersey.....	271,283	8,545,414	3,247,257	1,484,498	2,154,584	2,493,763
Pennsylvania.....	1,246,281	44,866,116	15,254,479	54,498	28,959,611	25,716,246
Delaware.....	219,773	6,373,417	1,912,025	57,187	1,229,520	1,155,749
Maryland.....	616,774	20,358,542	6,106,063	639,139	12,277,056	11,117,662
Virginia.....	1,752,808	31,552,164	11,888,822	704,322	8,451,264	7,755,715
North Carolina.....	2,409,505	31,823,565	13,469,133	321,240	4,169,680	3,919,199
South Carolina.....	1,700,881	15,307,929	7,500,885	87,065	757,736	894,117
Georgia.....	2,924,821	32,173,064	15,443,071	173,821	1,633,046	1,682,961
Florida.....	470,372	3,810,976	2,096,637	.....	.....	.....
Alabama.....	2,543,604	30,524,328	14,041,101	30,286	302,800	305,889
Mississippi.....	2,092,834	30,345,048	13,935,677	1,237	12,370	12,316
Louisiana.....	1,269,149	21,575,533	9,708,390	.....	.....	.....
Texas.....	3,301,359	72,175,112	29,591,808	444,826	7,028,251	6,255,143
Arkansas.....	2,225,785	35,580,590	14,232,224	169,821	1,781,120	1,497,321
Tennessee.....	3,032,028	63,672,588	22,922,132	897,540	10,652,408	9,549,826
West Virginia.....	694,053	17,004,298	6,801,719	439,062	5,885,431	5,239,254
Kentucky.....	2,803,728	64,485,744	22,570,010	963,187	12,288,343	10,932,175
Ohio.....	2,835,864	92,165,580	33,041,395	2,251,128	38,049,133	33,483,237
Michigan.....	999,511	31,291,096	8,424,296	1,519,240	33,700,144	29,619,125
Indiana.....	3,640,844	109,825,320	23,063,317	2,515,477	32,675,201	29,481,029
Illinois.....	7,167,018	232,928,083	48,914,808	1,405,570	11,579,083	10,394,423
Wisconsin.....	1,019,551	33,645,183	8,411,296	615,262	7,636,775	6,462,251
Minnesota.....	669,880	25,840,880	6,201,811	4,607,008	59,891,104	46,116,150
Iowa.....	7,580,281	220,680,149	37,415,155	1,011,778	13,154,114	9,864,836
Missouri.....	6,012,457	171,923,882	41,291,732	1,567,162	14,104,458	11,088,789

States and Territories.	CORN.			WHEAT.		
	Acres.	Bushels.	Value.	Acres.	Bushels.	Value.
Kansas.....	9,024,596	162,142,728	35,737,400	3,066,655	47,998,152	35,518,632
Nebraska.....	8,042,283	241,308,490	41,015,643	1,893,266	27,152,647	18,942,326
South Dakota.....	993,087	23,855,688	5,005,694	2,680,156	21,441,248	14,794,461
North Dakota.....	25,060	426,620	136,326	2,752,772	28,353,552	20,981,628
Montana.....	1,065	19,170	12,460	69,792	2,268,240	1,542,403
Wyoming.....	2,359	28,308	14,154	19,083	477,075	333,032
Colorado.....	176,525	3,559,975	1,274,510	213,231	5,317,544	3,282,281
New Mexico.....	24,566	661,581	383,717	178,452	4,382,848	3,212,136
Arizona.....	.....	.....	.....	20,559	370,782	374,379
Utah.....	8,477	186,494	102,572	151,940	3,190,740	2,169,703
Nevada.....	.....	.....	.....	34,298	833,441	750,097
Idaho.....	.....	.....	.....	123,076	2,767,672	1,868,370
Washington.....	6,477	716,286	64,122	856,398	20,124,648	13,684,761
Oregon.....	13,228	331,450	175,698	1,067,043	18,155,031	13,071,622
California.....	60,729	1,912,680	1,071,101	3,230,402	32,304,020	26,887,037
Oklahoma.....	.....	.....	.....	546,818	10,380,542	7,806,052
Total.....	80,093,051	1,962,967,933	\$501,072,932	39,465,066	530,149,168	\$428,547,121

States and Territories.	OATS.			BARLEY.		
	Acres.	Bushels.	Value.	Acres.	Bushels.	Value.
Maine.....	133,540	4,139,740	\$1,324,717	12,231	305,775	\$168,176
New Hampshire.....	30,226	1,058,260	402,129	5,015	112,858	67,703
Vermont.....	165,571	3,497,043	1,110,054	17,563	590,546	230,251
Massachusetts.....	15,274	488,738	161,293	1,720	59,659	39,830
Rhode Island.....	3,690	118,080	40,147	132	8,736	4,717
Connecticut.....	20,929	698,971	207,500	.....	.....	.....
New York.....	1,482,356	45,353,039	12,407,320	191,443	4,786,075	2,010,152
New Jersey.....	162,526	2,535,650	736,605	.....	.....	.....
Delaware.....	18,710	411,620	94,673	8,918	218,491	85,211
Pennsylvania.....	1,129,168	31,842,538	8,595,485	.....	.....	.....
Maryland.....	81,728	1,388,192	503,930	.....	.....	.....
Virginia.....	430,091	5,239,092	1,517,597	.....	.....	.....
North Carolina.....	447,737	5,830,551	2,153,615	.....	.....	.....
South Carolina.....	247,129	3,839,590	1,728,722	.....	.....	.....
Georgia.....	394,110	5,517,540	2,317,367	.....	.....	.....
Florida.....	43,979	395,811	269,780	.....	.....	.....
Alabama.....	302,295	3,629,835	1,089,829	.....	.....	.....
Mississippi.....	119,329	1,679,020	735,074	.....	.....	.....
Louisiana.....	36,963	465,334	252,827	2,039	31,323	22,070
Texas.....	652,446	16,311,150	4,404,010	.....	.....	.....
Arkansas.....	310,872	5,284,824	1,743,962	1,073	25,514	20,933
Tennessee.....	384,289	3,842,890	1,076,009	.....	.....	.....
West Virginia.....	157,121	3,142,120	942,726	1,644	32,820	13,128
Kentucky.....	433,662	7,841,516	2,117,317	23,691	674,388	276,479
Ohio.....	934,606	29,907,392	5,981,478	47,293	1,014,864	463,946
Michigan.....	882,325	22,940,450	5,276,394	5,068	96,292	42,268
Indiana.....	1,116,112	33,706,582	6,704,251	13,834	345,850	131,423
Illinois.....	2,839,353	62,738,496	16,763,720	.....	.....	.....
Wisconsin.....	1,827,915	62,125,310	11,899,869	280,726	7,360,328	2,574,395
Minnesota.....	1,582,577	41,147,092	7,817,930	392,405	9,241,328	2,517,919
Iowa.....	3,457,370	103,721,100	16,595,376	381,815	9,163,590	2,199,254
Missouri.....	1,003,553	22,078,160	4,194,852	730	15,181	6,072
Kansas.....	1,611,670	38,080,080	6,092,414	17,529	396,690	76,650
Nebraska.....	1,698,745	51,791,065	7,733,654	42,880	943,360	226,446
South Dakota.....	620,348	13,814,656	2,456,728	109,130	2,182,640	480,172
North Dakota.....	495,528	11,397,144	2,063,257	207,258	4,693,395	1,259,092
Montana.....	61,664	2,589,888	854,693	5,188	197,144	98,572
Wyoming.....	12,693	473,275	167,739	.....	.....	.....
Colorado.....	82,310	2,095,540	949,933	.....	.....	.....
New Mexico.....	7,290	258,735	106,106	1,179	38,318	21,075
Utah.....	25,353	838,355	276,657	5,920	183,529	83,584
Idaho.....	28,834	1,046,674	334,936	10,818	378,630	159,025
Washington.....	79,636	3,822,528	1,337,883	37,688	1,695,960	725,393
Oregon.....	179,808	5,735,776	2,014,522	29,418	953,760	499,062
California.....	57,173	1,629,114	584,266	810,166	20,277,927	10,950,081
Total.....	25,739,375	698,767,869	\$147,974,719	2,710,116	66,685,137	25,142,139

INDUSTRY.

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States and Territories.	POTATOES.			HAY.		
	Acres.	Bushels.	Value.	Acres.	Tons.	Value.
Maine.....	41,769	2,464,371	\$2,100,290	957,976	1,033,774	\$10,271,296
New Hampshire.....	17,294	881,994	793,795	6,238	692,680	7,965,924
Vermont.....	23,783	1,094,810	1,105,397	802,203	1,107,150	10,248,328
Massachusetts.....	25,243	1,365,096	1,408,559	885,296	819,288	11,388,313
Rhode Island.....	6,192	681,120	660,686	73,074	81,035	1,318,508
Connecticut.....	24,104	1,301,616	1,171,454	461,543	553,852	7,200,076
New York.....	339,679	21,060,098	11,110,266	4,451,757	6,009,890	49,581,667
New Jersey.....	12,325	2,878,100	2,244,008	490,318	770,596	7,530,927
Pennsylvania.....	169,969	10,650,780	7,025,515	2,696,928	3,691,439	33,767,517
Delaware.....	5,035	392,100	196,365	52,470	70,834	709,340
Maryland.....	21,542	1,504,108	1,083,668	290,063	390,154	4,096,617
Virginia.....	34,759	2,120,116	1,484,081	548,254	592,114	6,069,168
North Carolina.....	16,295	1,075,470	688,301	132,367	165,634	1,614,082
South Carolina.....	4,050	293,835	277,027	137,735	187,135	1,584,642
Georgia.....	5,137	267,124	267,124	123,710	167,019	2,171,697
Florida.....	1,295	97,125	116,550	6,283	6,283	90,058
Alabama.....	6,583	362,175	340,444	54,111	78,461	804,225
Mississippi.....	5,886	317,274	284,765	35,480	82,125	780,188
Louisiana.....	8,743	329,232	475,610	21,227	40,631	492,771
Texas.....	13,162	780,720	780,234	965,145	427,243	3,097,282
Arkansas.....	24,139	1,327,645	1,115,222	143,109	186,012	1,699,263
Tennessee.....	29,265	1,108,291	832,786	282,175	469,154	4,308,406
West Virginia.....	39,762	2,038,672	1,328,137	594,141	680,260	6,023,222
Kentucky.....	42,644	2,941,298	1,942,860	339,719	410,234	4,163,340
Ohio.....	174,053	7,310,226	4,532,340	1,819,429	2,619,978	16,374,862
Michigan.....	175,944	12,692,889	5,419,238	1,469,895	2,100,669	16,280,417
Indiana.....	96,891	3,943,621	1,862,215	1,678,003	2,309,544	11,157,310
Illinois.....	163,740	6,490,120	3,990,674	2,017,474	2,602,544	16,065,627
Wisconsin.....	198,808	11,731,922	5,398,157	1,161,033	1,972,420	12,387,625
Minnesota.....	107,969	11,443,760	3,547,596	1,514,992	2,378,537	10,743,116
Iowa.....	200,695	12,026,949	5,657,061	4,474,206	6,711,309	28,523,063
Missouri.....	97,717	4,104,114	2,585,352	2,214,177	2,546,394	15,659,771
Kansas.....	101,710	4,882,080	2,685,144	3,125,850	4,063,605	18,816,257
Nebraska.....	193,547	9,076,053	4,174,081	1,116,678	3,649,883	9,289,651
South Dakota.....	54,183	5,073,292	1,629,825	1,886,710	2,235,388	6,657,515
North Dakota.....	29,857	2,355,843	975,428	388,163	621,061	2,018,448
Montana.....	4,096	702,695	281,174	328,305	492,158	3,816,550
Wyoming.....	3,613	455,100	250,295	228,923	377,729	2,266,358
Colorado.....	32,622	3,196,131	1,730,435	784,628	1,765,430	9,709,898
New Mexico.....	737	65,430	51,035	37,676	132,916	930,412
Arizona.....			33,961	33,961	101,888	509,115
Utah.....	5,293	783,264	235,069	183,185	543,296	2,566,881
Nevada.....	1,343	182,115	132,944	145,721	304,392	1,821,510
Idaho.....	3,888	544,229	174,782	181,482	422,666	2,215,547
Washington.....	14,233	2,354,670	659,398	922,025	1,657,056	5,013,504
Oregon.....	14,935	2,389,690	955,840	572,691	1,087,392	8,431,350
California.....	21,493	2,256,765	1,105,815	1,697,592	2,716,099	24,444,891
Totals.....	2,334,577	164,015,954	\$80,643,059	42,126,770	60,661,876	\$61,390,728

RYE.

BUCKWHEAT.

States and Territories.	RYE.			BUCKWHEAT.		
	Acres.	Bushels.	Value.	Acres.	Bushels.	Value.
Maine.....	983	13,270	\$10,881	24,236	848,260	\$973,234
New Hampshire.....	683	17,394	14,863	5,962	77,274	42,501
Vermont.....	3,249	431,296	30,778	10,369	248,526	114,474
Massachusetts.....	9,135	178,132	108,661	2,373	45,087	29,757
Rhode Island.....						
Connecticut.....	14,537	276,203	162,060	3,532	60,044	34,225
New York.....	211,497	4,467,140	2,144,227	257,695	5,067,310	2,266,924
New Jersey.....	71,518	1,218,016	693,038	11,136	182,370	89,658
Pennsylvania.....	28,1854	5,355,226	2,392,747	338	5,038,088	2,116,165
Delaware.....					6,282	2,344
Maryland.....	28,238	480,389	220,078	7,437	111,393	72,065
Virginia.....	30,882	438,792	219,351	1,897	67,298	33,419
North Carolina.....	49,611	436,663	261,363	1,459	16,049	7,864
South Carolina.....	4,005	36,820	23,073			
Georgia.....	16,472	121,803	112,142			
Florida.....						

States and Territories.	RYE.			BUCKWHEAT.		
	Acres.	Bushels.	Value.	Acres.	Bushels.	Value.
Alabama.....	1,979	18,998	\$22,418			
Mississippi.....						
Louisiana.....						
Texas.....	3,861	46,332	33,359			
Arkansas.....	2,133	23,463	20,178			
Tennessee.....	14,846	148,460	86,107	1,260	22,680	\$12,928
West Virginia.....	14,215	163,472	83,371	15,207	288,633	141,577
Kentucky.....	27,391	356,083	188,734			
Ohio.....	47,247	850,446	374,196	10,773	193,914	96,957
Michigan.....	105,329	1,579,890	663,516	32,521	552,840	210,079
Indiana.....	46,720	607,391	253,691	5,696	79,744	39,075
Illinois.....	78,526	1,217,153	535,547	5,353	69,321	30,518
Wisconsin.....	227,411	3,628,576	1,491,816	40,878	735,804	279,046
Minnesota.....	58,861	1,012,409	374,591	15,218	298,766	116,418
Iowa.....	69,611	1,113,776	409,959	16,214	275,638	135,063
Missouri.....	14,239	170,868	75,182	2,576	38,640	23,184
Kansas.....	110,742	1,559,388	639,155			
Nebraska.....	69,332	1,048,084	322,875	5,330	77,546	36,548
South Dakota.....	2,727	44,096	15,749			
North Dakota.....	1,648	23,896	8,603			
Montana.....						
Wyoming.....						
Colorado.....	2,612	39,182	20,374			
New Mexico.....						
Arizona.....						
Utah.....	3,558	42,696	25,618			
Nevada.....						
Idaho.....						
Washington.....	2,465	48,028	20,777			
Oregon.....	5,511	82,665	48,772	250	4,500	2,475
California.....	40,484	493,905	321,038			
Total.....	1,703,561	27,363,324	\$12,239,647	717,836	14,997,451	\$6,319,188

INGELOW, JEAN, poet and novelist, was born in Boston, England, in 1820; died in London, England, July 19, 1897.

INSANITY. The annual report of the British Commissioners on Lunacy issued in 1897 contained statistics that are not only curious in their details but afford data of much value to students of alienation. One of the main tables shows that on Jan. 1, 1897, the total number of lunatics in England and Wales was 99,365, as compared with 96,446 on the corresponding day of 1896, being an increase of 2,919. The number of persons reported as insane has steadily increased. In 1859 one person in every 536 of the population was under treatment; in 1869, one in every 418; in 1879, one in every 363; and every year the state of affairs has been getting worse, till in 1895 there was one in every 323, in 1896 one in every 318, and in 1897 one in every 313. The death rate has decreased in 10 years; for 1896 it was estimated at 9.05 per cent. of the total number of patients; and the recoveries, reported at 38.53 per cent., were only 0.48 per cent. below the average. Liability to insanity is greatest in the month of May. April, however, runs May close, and July makes a pretty fair third. April is the month for mania, and June, just as the holidays are beginning, for melancholia. In February most forms of the disease seem to be at their ebb. The five months, March, April, May, June, and July, are usually responsible for many more cases of insanity than the rest of the year.

The following shows the principal causes of insanity, with the percentages of sex:

Causes.	Females Males	
Hereditary influences.....	29.9	20.8
Previous attacks.....	22.0	16.4
Domestic troubles.....	9.2	4.3
Intemperance in drink.....	8.5	20.9
Old age.....	6.7	5.9
Parturition, etc.....	6.5	.....
Mental anxiety, worry, and overwork.....	5.9	6.2
Change of life.....	4.6	.....
Business anxieties and pecuniary difficulties.....	4.5	7.4
Congenital defect.....	3.7	5.2
Love affairs.....	2.2	0.6
Religious excitement.....	1.8	1.5
Fright and nervous shock.....	1.8	0.8
Privation and starvation.....	1.5	1.3
Lactation.....	1.5	.....
Pregnancy.....	1.1	.....
Uterine and ovarian disorders.....	1.1	.....
Puberty.....	0.9	0.9
Accident or injury.....	0.9	4.8

During the five years from 1891 to 1895, inclusive, 962 married men with suicidal propensities were yearly under treatment, 738 bachelors, and 171 widowers. The married women numbered 1,222, the spinsters 939, and the widows 353.

INSURANCE, LABOR. In 1897 the Insurance Bureau of the German Empire published a pamphlet concerning the State insurance of German workingmen, showing results that constitute a suggestive feature of the widespread discussion of the relations of capital to labor. The three branches of German workingmen's insurance, viz., sickness, accident, and old age, complement each other and form one compact whole. By law, the State, employer, and employed are ordered to contribute each one-third of the monthly or annual charge. As a rule, employers have paid two-thirds and the State one-third. The sums to be paid by the help have been paid thus far, as a rule, by the employers. The following table, showing particulars of the workingmen's insurance in 1895, is exceedingly distinct and therefore the best illustration of what the German Empire has been doing for the insurance of its working population:

Description.	Insurance Against—		
	Sickness.	Accidents.	Invalidity.
Number of persons insured.....	8,005,000	18,389,000	11,585,000
Number of persons having received payments.....	2,930,000	388,200	947,700
Receipts.....	\$37,305,548.00	\$21,166,934.00	\$31,449,320.00
Employers' contributions.....	9,336,502.00	16,284,912.00	12,233,200.00
Workingmen's contributions.....	21,236,978.00	.....	12,233,200.00
Expenditures.....	35,328,006.00	16,284,912.00	31,449,320.00
Claims paid.....	27,519,792.00	11,920,940.00	10,211,960.00
Cost of management.....	1,692,908.00	2,408,596.00	1,425,820.00
Balance on hand (total, 1885-1895).....	31,573,556.00	84,129,200.00	98,532,000.00
Average of claims paid.....	9.85	30.70	28.80
Contributions of insured, per capita..	3.81	.88	2.45

From 1885 to 1895, 25,061,620 persons have, upon the strength of these laws, been paid claims for sickness and pensions, amounting in all to \$206,015,824. During the same time the employers contributed \$230,798,596; the contributions of the workmen amounted to \$211,311,870, so that the latter received about \$85,000,000 more in compensation than they paid in small subscriptions. On Oct. 1, 1895, ten years after organization, there were 426,000 concerns with 18,000,000 persons insured, against 269,000 concerns and 3,000,000 persons insured, on Oct. 1, 1885. In the ten years, 361,000 wounded persons were paid pensions of 193,000,000 marks (\$45,934,000). Of these 45,600 were killed; the money was paid to their families. On Jan. 1, 1897, the old age and invalid insurance system was six years old. During this time, 101,544 pensions were granted to invalids and 241,700 to aged persons. The number of invalid pensioners paid was: In 1892, 17,000; in 1894, 47,000; thus leading the number paid pensions on account of old age (34,000) in 1896.

INTERNAL REVENUE. The following table shows the aggregated collections of internal revenue, by States and Territories, during the fiscal year ending June 30, 1896:

States and Territories.	Aggregate Collections.	States and Territories.	Aggregate Collections.
Alabama.....	\$196,317.30	Montana (g).....	\$194,447.94
Arkansas.....	89,642.14	Nebraska (h).....	627,093.71
California (a).....	2,554,131.26	New Hampshire (i).....	498,924.13
Colorado (b).....	356,719.15	New Jersey.....	4,111,712.89
Connecticut (c).....	1,099,924.22	New Mexico (k).....	56,404.45
Florida.....	508,994.42	New York.....	21,630,470.64
Georgia.....	478,070.59	North Carolina.....	2,739,552.75
Illinois.....	31,873,133.52	Ohio.....	11,947,724.18
Indiana.....	7,693,154.44	Oregon (l).....	325,368.77
Iowa.....	438,864.06	Pennsylvania.....	11,145,548.70
Kansas (d).....	248,729.01	South Carolina.....	198,204.16
Kentucky.....	14,903,110.99	Tennessee.....	925,500.44
Louisiana (e).....	1,465,548.80	Texas.....	422,033.94
Maryland (f).....	5,968,895.08	Virginia.....	2,872,122.33
Massachusetts.....	4,367,266.24	West Virginia.....	640,992.15
Michigan.....	2,150,144.98	Wisconsin.....	5,012,677.82
Minnesota.....	2,187,876.86		
Missouri.....	6,959,915.32	Total.....	\$146,830,615.66

(a) Including the State of Nevada.

(b) Including the State of Wyoming.

(c) Including the State of Rhode Island.

(d) Including the Indian Territory and the Territory of Oklahoma.

(e) Including the State of Mississippi.

(f) Including the State of Delaware, District of Columbia, and two counties of Virginia.

(g) Including the States of Idaho and Utah.

(h) Including the States of North Dakota and South Dakota.

(i) Including the States of Maine and Vermont.

(j) Including the Territory of Arizona.

(k) Including the Territory of Washington and the Territory of Alaska.

The sources of this revenue were: Spirits, \$80,670,070.77; tobacco, \$30,711,-629.11; fermented liquors, \$33,784,235.26; oleomargarine, \$1,219,432.46; banks, bankers, etc., \$134.85; and miscellaneous, of which playing cards and penalties were the largest items, \$445,113.21. The aggregate was a net increase of \$3,584,-537.91 over that of the previous year.

In the year ending June 30, 1897, the aggregate was \$146,619,593, a decrease in the year of \$211,022. There was an increase of \$1,338,472 in the receipts

from distilled spirits, as compared with 1896, and a decrease of practically the same amount in the receipts from fermented liquors. The total cost of collection for the last fiscal year was \$3,848,469, a decrease from 1896 of \$237,822. The total production of distilled spirits, exclusive of fruit brandies, during the fiscal year, was 62,465,648 taxable gals., a decrease in production, as compared with 1896, of 24,123,055. There was also produced 298,921 gals. of apple brandy, 17,251 gals. of peach brandy, 1,496,686 gals. of grape brandy, and varying amounts of other fruit brandies, making a total of 1,813,427 gals., or an aggregate decrease of 1,590,425 gals. The quantity of distilled spirits gauged was 246,096,921 gals.—23,237,841 gals. less than in 1896. During the year 3,158 distilleries of all kinds were operated, a decrease of 3,029. There were produced 34,462,822 bbls. of beer, a decrease, as compared with 1896, of 1,396,428 bbls. The total receipts from the taxes on tobacco, cigars, cigarettes, snuff, etc., were \$30,710,297, a decrease for the year of \$1,331.

INTERNATIONAL ARBITRATION. The treaty of arbitration which was signed at Washington Jan. 11, 1897, by the British ambassador and the American secretary of state, was rejected by the Senate May 5. The affirmative vote was only 43 and the negative 26; ratification could be effected only by a two-thirds majority, and the opposition had 4 votes more than the requisite one-third. While the instrument was under discussion in the Senate it was amended in many essential particulars, and in its final form had little in common with the treaty as signed by the representatives of the two governments. The essential provisions of the treaty as signed were: 1. That all questions in difference between the two powers which might fail of settlement by diplomacy were to be arbitrated. 2. All purely pecuniary claims not exceeding \$500,000 should be decided by an arbitral tribunal, its judgment to be without appeal. 3. Each government shall appoint for this tribunal an arbitrator, and these two shall select an umpire; provision is made for selecting the umpire if the two arbitrators do not agree. 4. Purely pecuniary claims exceeding \$500,000 shall be determined by a distinct arbitral tribunal. 5. Such claims are to be submitted to the tribunal mentioned in Art. 3 above; its decision, if unanimous, is final. If not unanimous, another arbitral tribunal is to be chosen as before. The award of the majority is final. 6. Controversies regarding territorial claims are to be submitted to a tribunal of six members, viz., three judges of United States courts and three judges of British courts; an award made by 5 votes out of the 6 is final. If this tribunal does not determine the question then mediation of one or more friendly powers is to be invoked. 7. If it shall appear that in a question coming under provisions 3 or 5, national or territorial rights are involved, then that question must go to the tribunal provided in Art. 6. 8. In a question involving any particular State or Territory of the United States, the President of the United States may name a judicial officer of such State, etc., to be an arbitrator; the same right is accorded to Great Britain. 9. This article defines the meaning of "territorial claims." 10. The King of Sweden is named for umpire in case of failure to choose an umpire under Arts. 3 and 5; but provision is made for selection of another umpire on motion of either government. 11. The cases of an umpire's death, resignation, etc., are provided for. 12. The expenses of the tribunal to be borne by the two governments equally. 13. The tribunals decide the time and place of their meetings. 14. The treaty to remain in force five years from the date at which it comes into operation. 15. After due ratification by both governments, there shall be a mutual exchange of ratifications. President McKinley in June was in consultation with Mr. Sherman, secretary of

state, regarding a new treaty. It was expected that the draft of a new treaty would be ready for submission to the Senate in December. At the international conference to promote arbitration held in Brussels in August, the British representatives offered resolutions expressing regret for the refusal of the United States to ratify the Anglo-American treaty, but at the same time expressing satisfaction over its adoption by the British Parliament and the assurance that another treaty was preparing at the instance of President McKinley. See also **ARBITRATION; BOUNDARY LINES.**

IOWA one of the United States of North America; admitted to the Union Dec. 28, 1846; counties, 99; capital, Des Moines.

State Officers, 1898-1900.—Governor, (elected for 2 years, salary \$3,000 per annum), Leslie M. Shaw; lieutenant-governor, J. C. Milliman; secretary of state, George L. Dobson; treasurer, John Herriott; attorney-general, Milton Remley; auditor, C. G. McCarthy; superintendent of public instruction, R. C. Barrett; adjutant-general, H. H. Wright; secretary of agriculture, P. L. Fowler; chief justice of the supreme court, H. E. Deemer; associate justices, Scott M. Ladd, C. T. Granger, G. S. Robinson, Josiah Given and C. M. Waterman; clerk, C. T. Jones—all Republicans.

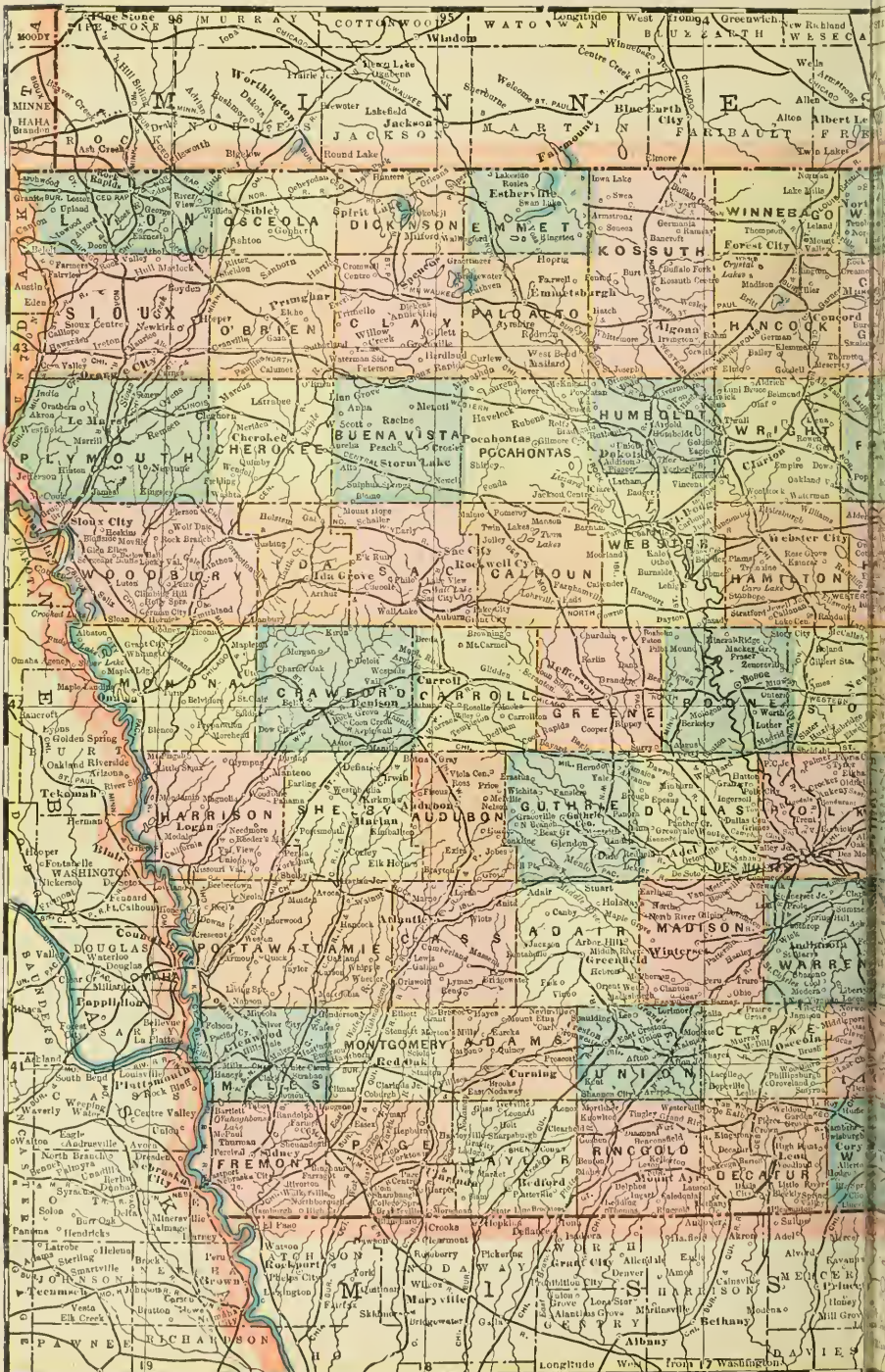
Legislature, 1898.—Republicans, senate 39, house 62, joint ballot 101; Democrats, senate 11, house 38, joint ballot 49; Republican majority, senate 28, house 24, joint ballot 52.

Elections.—In the State elections 1897 there were 436,909 votes cast for governor, of which the Republican candidate (Shaw) received 224,501; the Fusion (White) 194,514; the Prohibition (Leland) 8,357; the Independent Populist (Lloyd) 5,269; and the National Democratic (Cleggett) 4,268. The Congressional elections in 1896 resulted in the choice of all the Republican candidates. In the Presidential election the Republican candidate received 289,293 votes; the Democratic, 223,741; the National Democratic, 4,516; the Prohibition, 3,192; and the Social Labor, 453.

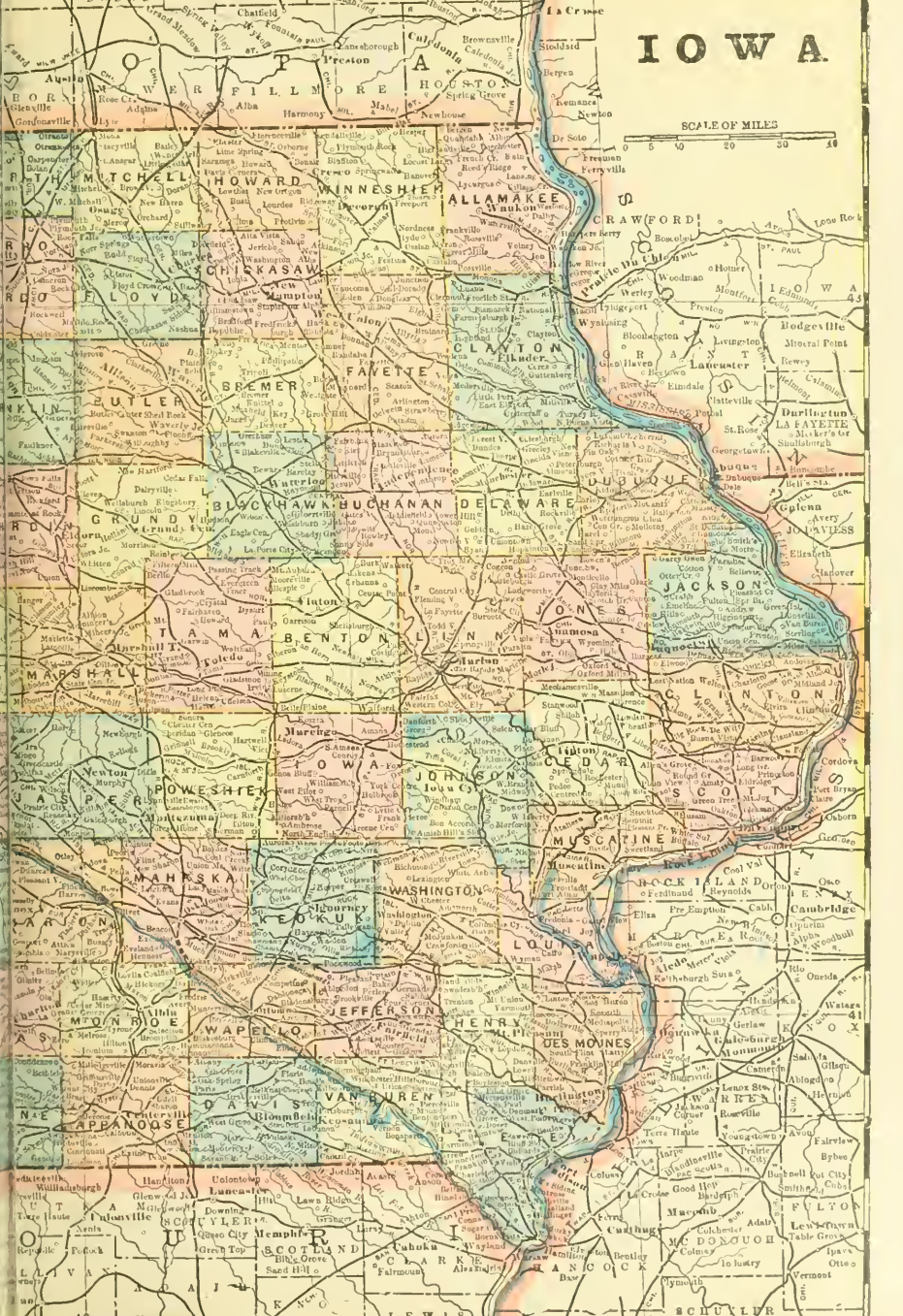
Farm Products.—Reported Dec. 31, 1895: Corn, 298,502,650 bush., from 8,504,349 acres, value \$53,730,477; wheat, 13,654,778 bush., from 700,245 acres, value \$6,281,198; oats, 182,967,338 bush., from 3,960,332 acres, value \$25,615,427; rye, 1,554,970 bush., from 75,484 acres, value \$482,041; potatoes, 21,340,980 bush., from 201,330 acres, value \$4,054,786; and hay, 4,612,583 tons, from 4,270,910 acres, value \$29,751,141—total value, \$119,915,070. In production the State held first rank in corn, oats, and hay, and fifth in rye and potatoes.

Farm Animals.—Reported Jan. 1, 1897: Horses, 1,087,492, value \$31,469,631; mules, 33,704, value \$1,195,015; cows, 1,190,534, value \$33,501,627; cattle, 2,196,755, value \$54,901,306; sheep, 553,834, value \$1,672,578; and swine 3,737,970, value \$21,182,330—total value \$143,922,487. The State held first rank in number and value of swine, second in number and first in value of horses, and second in number and value of milch cows and cattle.

Mineral Products.—The following is a summary of the mineral products for the calendar year 1894, the last reported: In coal the State ranked 7th in production, with an output of 3,967,253 short tons, valued at the mines at \$4,997,939. The worked coal area extended over 24 counties and covered a little more than one-third of the entire surface of the State. There were 174 mines in operation, all practically free from inflammable gas. Of the total output, 3,390,751 tons were loaded at the mines for shipment. The most productive counties were Mahaska (1,152,988 tons), Appanoose (667,271), Monroe (505,164), Polk (395,647), Wapello (278,583), and Boone (241,522). The clay industry ranked second in im-



IOWA



portance in the mineralogy of the State, and 437 concerns reported the total value of output at \$2,379,506. Other products were sandstone, \$11,639, principally from Marion and Hardin counties, and largely decreased; limestone, \$616,630, from 41 counties, used mostly for building purposes; and gypsum, product, 17,906 short tons, value commercially prepared, \$44,700.

Finances.—The State is exceptionally notable for having no debt of any kind. In the biennial period ending June 30, 1895, the treasury receipts from all sources aggregated \$3,524,251; disbursements, \$3,624,378; the balance at the beginning of the term was \$412,981; and at the end, \$312,854. The equalized assessed valuations in 1896 were: Lands, \$413,970,588; personal property, \$96,765,620; railroads, \$44,532,125; telegraph and telephone companies, \$706,315—total, \$555,974,648.

Banks.—On Oct. 31, 1897, there were 165 national banks in operation and 73 in liquidation, the active ones having a combined capital of \$13,500,000, and holding \$4,170,450 in United States bonds. These banks had outstanding on loans and discounts \$32,251,157, represented by demand paper with individual or firm names, \$2,995,496; the same secured by stocks, bonds, and other personal securities, \$1,532,397; time paper with two or more individual or firm names, \$13,751,946; time paper with single individual or firm name, \$6,961,564; and the same secured by stocks, bonds, and other personal securities, \$7,003,754. The banks held \$2,406,010 in coin and coin certificates, of which \$1,625,719 was in gold coin. The circulation account was: Total issue, \$30,825,160; redeemed, \$26,766,218; outstanding, \$4,058,942. There were deposits, \$31,694,324; reserve required, \$5,085,193; reserve held, \$10,660,757; ratio of reserve, in Des Moines, 34.64 per cent., in whole State, 33.52. During the year ending Sept. 30, 1897, the exchanges at the United States clearing house at Des Moines aggregated \$49,145,060, a decrease of \$2,121,376 from the total of the previous corresponding period. The State banks, June 30, 1897, numbered 206, and had capital \$9,135,700; deposits, \$16,857,239; resources, \$28,202,746; and surplus and profits, \$1,978,095. Stock savings banks numbered 166, and had capital, \$7,151,500; depositors, 78,967; deposits, \$28,585,655; resources, \$37,596,695; and surplus and profits, \$1,760,519. Of private banking establishments there were 117, with combined capital of \$3,142,531; deposits, \$5,085,914; resources, \$9,640,625; and surplus and profits, \$1,231,996. Combining all these institutions, the State had an aggregate banking capital of \$32,929,731.

Insurance.—During 1894 the State fire insurance companies had outstanding risks \$94,687,546, premium receipts \$2,002,382, and loss payments \$894,728; out of State fire companies had risks \$455,814,959, premiums \$2,251,976, and losses \$1,513,282; and companies other than fire and life had risks \$8,889,256, premiums \$84,108, and losses \$51,459.

Building and Loan Associations.—The last general report on these associations (1893) showed a total of 89 organizations, of which 81 were local, 8 national, 59 serial, 23 permanent, and 7 terminating. There were reported by 86 associations, shareholders, 31,025; by 60, shares issued, 221,967; by 75, shares matured, 6,159; by 84, shares free, 138,423; and by 84, shares borrowed on, 53,472. The total assets and liabilities were \$2,591,585; loans on real estate \$6,543,775; and dues and profits, \$6,058,661. During the life of 86 associations, 165 mortgages were foreclosed, involving \$116,609, on which there was a loss of \$1,715. Of all associations, 73 reported 8,093 homes and 78 reported 499 other buildings acquired.

Internal Revenue.—During the fiscal year ending June 30, 1897, the collection

of internal revenue aggregated \$452,241.65, from the following sources: Distilled spirits, \$101,761.48; tobacco, \$190,487.51; fermented liquors, \$156,493.63; miscellaneous, \$11.36; and penalties, \$3,465.80. During that year there were 634 single-account cigar factories, which used 1,139,789 lbs. of tobacco, and had an output of 57,282,564 cigars and 194,700 cigarettes; and 117 other tobacco factories, which used 411,960 lbs. of materials, and had an output of 10,910 lbs. of fine-cut tobacco, 731 lbs. of snuff and 374,750 lbs. of smoking tobacco. The quantity of spirits rectified was 74,247.54 gals.; spirits gauged, 140,467 gals.; and fermented liquors produced, 142,153 bbls.

Railroads.—On Jan. 1, 1895, the total railroad mileage was 8,513.44. The companies had a combined capital of \$65,362,758; funded debt, \$58,560,259; total investment, \$128,314,224; and had expended for construction and equipment \$120,692,110. The State assessments on railroad property generally and on sleeping cars were reduced; an increase in rates for freight was refused by the railroad commissioners; and two roads were authorized to increase their passenger rates from 3 to 3½ cents per mile and two others from 3½ to 4.

Commerce.—Iowa has four interior ports to which merchandise can be transported without appraisement at the receiving ports—Council Bluffs, Des Moines, Dubuque, and Sioux City. During the calendar year 1897 the imports of merchandise had a value of \$153,122. There were no exports.

Publications.—Reported March, 1898: Daily, 67; tri-weekly, 5; semi-weekly, 34; weekly, 863; bi-weekly, 2; semi-monthly, 6; monthly, 71; and quarterly, 5.

Post-offices.—Reported Jan. 1, 1897: First-class, 8; second-class, 26; third-class, 171 (presidential, 205); fourth-class, 1,647; money order offices, 882; money order stations, 10; limited money order offices, 57.

Churches.—The Roman Catholic is the strongest denomination in the State, and is followed in their order by the Methodist Episcopal; Disciples of Christ; Regular Baptist; Presbyterian, North; Lutheran, Independent Synods; Congregational; Lutheran, General Council; Lutheran, Synodical Conference; United Brethren; and Friends. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Iowa 6,286 evangelical Sunday Schools, 50,288 officers and teachers, and 414,152 scholars—total members 464,440, a gain of 76,332 in three years.

Schools.—At the end of the school year 1895-96, the number of children of school age in the State was estimated at 629,900, of whom 543,052 were enrolled in the public schools, and 345,242 were in average daily attendance. There were 28,121 teachers, public school property valued at \$15,867,425, and expenditures, excluding payments on debt, \$7,899,024. There were 23 universities and colleges of liberal arts, with a total of 440 professors and instructors; 6,837 students in all departments (4,284 males and 2,553 females); 7 fellowships; 135 scholarships; 146,670 bound volumes in the libraries; \$387,405 in total income; \$2,506,765 invested in grounds and buildings; \$1,543,171 in productive funds; \$355,772 in scientific apparatus and libraries; and \$196,438 receipts from gifts. The endowed academies, seminaries, and other private secondary schools numbered 38; public normal schools, 4; private normal schools, 16; colleges with normal departments, 11; public high schools, 329; and commercial and business colleges, 20. For the defective classes there are a State School for the Deaf at Council Bluffs; a private school for the deaf at Dubuque; a State College for the Blind at Vinton; a State Institution for Feeble-minded Children at Glenwood; and State Industrial Schools at Mitchellville and Eldora. In 1895 the Association of College Professors resolved to suspend all inter-collegiate games of football in their colleges till the rules of the

game have been modified so as to make it proper to be played by gentlemen. A Danish university has been founded at Des Moines, under an annual grant by the Danish government.

Libraries.—In 1896 there were reported 113 public libraries of 1,000 volumes each and upward, with a total of 607,765 bound volumes and 56,339 pamphlets.

Population.—In 1890, 1,911,896, of whom 994,453 were males; 917,443 females; 1,587,827 natives; 324,069 foreign-born; 1,901,086 whites; and 10,810 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 2,133,000.

IOWA COLLEGE, Grinnell, Ia., Congregational; co-educational; had at close of 1897, 29 professors and instructors; 457 students; 23,600 volumes in the library; \$150,000 invested in grounds and buildings; \$300,000 in productive funds; \$43,000 income; president, George A. Gates, D.D.

IOWA STATE AGRICULTURAL COLLEGE, Ames, Ia., non-sectarian; co-educational; had at close of 1897, 46 professors and instructors; 14 on experimental station staff; 545 students in all departments; 12,000 volumes in the library; 300 acres under cultivation; \$27,000 in farm lands; and \$475,000 in buildings and equipments; president, W. M. Beardshear, LL.D.

IOWA STATE UNIVERSITY, Iowa City, Ia., non-sectarian; co-educational; had at close of 1897, 101 professors and instructors; 1,331 students; 42,000 volumes in the library; \$160,000 invested in grounds and buildings; \$200,000 in scientific apparatus and libraries; \$230,000 in productive funds; \$145,000 income; president, C. A. Schaeffer, PH.D., LL.D.

IOWA WESLEYAN UNIVERSITY, Mt. Pleasant, Ia., Methodist Episcopal; co-educational; had at close of 1896, 16 professors and instructors; 310 students; 4,000 volumes in the library; \$300,000 invested in grounds and buildings; \$60,000 in productive funds; \$22,000 gifts; \$8,433 income; president, C. L. Stafford, D.D.

IRELAND. A Parnellite convention was held in Dublin, under the leadership of John Redmond, on April 20, 1897, at which a resolution was adopted providing for the foundation of an Independent Irish League. The new organization, as projected, is to be one in which agrarian interests are not to be dominant and which will be founded upon "the broader and sounder basis of independent political action for the benefit of the whole Irish nation." Second, the object of the league will be "civil and religious liberty and no further interference of priests in politics." Third, absolute independence of alliances with any English party and reverting to the old demand for a co-ordinate parliament, the principle of federalism and Mr. Gladstone's home rule proposals, and fourth, "manhood suffrage, which will give to Parnellites a political majority in Ireland." The league will also urge the immediate redress of Ireland's financial grievances, amnesty for political prisoners, land law reform, and the development and encouragement of labor and the industrial resources of the country. Timothy Harrington objected to the formation of the new league, and his amendment against the formation was defeated by a vote of 230 to 22, whereupon he left the hall with his supporters. The first general convention of the league was held in Dublin in October, with over 800 delegates in attendance. The principal of the resolutions adopted was the one declaring that "the Irish question can only be settled by the concession of national self-government."

The Duke and Duchess of York visited Ireland in August, and contrary to expectations in some quarters, their visit was unaccompanied by any unpleasant

feature. The Duke and Lord Roberts were installed as Knights of St. Patrick. After a series of loyal receptions in Dublin, the duke and duchess went to Killybegs, and were cordially greeted at all the towns along the route. During the visit the duchess made particular inquiries concerning the famine, and soon after her return to England it was announced that she would issue an appeal for relief.

Concerning the threatened famine, two views appeared in September. It was declared that the council of the National Federation had decided that the country was on the brink of a widespread calamity, and called upon Messrs. Dillon and Harrington to convoke a meeting of the Irish members of Parliament for the purpose of requesting A. J. Balfour, the government leader in the Commons and First Lord of the Treasury, to call an autumn session of Parliament for the purpose of devising relief measures and to pass a bill reducing rents in Ireland in proportion to the loss incurred by the tenants owing to the wholesale destruction of their crops. In keeping with this, John Redmond was quoted as saying:

"The failure of the crops, especially the potato crop, means that a large section of the people of Ireland will shortly be on the verge of starvation. It is already reported that the inhabitants of many places in Connaught are eating bread, which in ordinary times is regarded as a luxury and is not used except when potatoes are unobtainable. Agricultural experts have information to the effect that the present harvest is the worst since 1879, which was the most distressing recorded during the present generation, and the suffering of the poor during the next eight months threatens to almost equal the horrors of the famine of 1846. All the boards of guardians are providing for a large increase of poverty, necessitating doubling the rates in some districts. But immediate steps must be taken by the government if the people are to be saved."

In opposition to this view the *Dublin Express* said that the cry of famine was only a continuation of the party war, which was raised every year the Unionists were in office. The *Daily Independent*, alluding to the Duchess of York's proposed appeal, denied that Ireland as a whole would suffer acute distress, and said that if the country were ten times as badly off as it is likely to be, it would resent any charitable appeal to the English.

The report of the registrar-general of Ireland for the year 1896, issued in 1897, states that the marriage rate for that part of the United Kingdom, although not high in 1896, was considerably in excess of the decennial average, and was the highest for any year since 1871. The birth rate was somewhat above the average, and was the highest for any year since 1884, while on the other hand the death rate was much below the average, being only 16.6 per 1,000, and was the lowest for any year since 1871. The excess of births over deaths was 31,941. As the loss by emigration amounted to 38,995, there was an apparent decrease of 7,054 in the population during the year. But against this decrease there is a set-off in immigration, of which no official record has been obtained. The estimated population in the middle of the year 1896 was 4,560,378. The rate of emigration that year per 1,000 of the estimated population was 8.6, the average rate for the previous ten years being 12.7. The emigration which took place in 1896 comprised 3,842 from the Province of Leinster, 15,485 from Munster, 7,434 from Ulster, and 12,234 from Connaught. Of the total emigrants from Ireland, 6.9 per cent. were under fifteen years of age, 83.7 per cent. between fifteen and thirty-five years old, 9.4 per cent. were thirty-five or upward, and in ten instances the ages were not specified. The great bulk, therefore, were in the prime of life.

On Sunday, Oct. 10, 1897, over 5,000 Nationalists paraded the streets of Dub-

lin to the Glasnevin cemetery and there heaped high the grave of Charles S. Parnell with flowers brought from every county in Ireland. The day was the sixth anniversary of Parnell's death. Nearly every delegation carried the United States flag with the green banner of Ireland.

On Feb. 21, 1898, Gerald Balfour, the chief secretary for Ireland, introduced into the House of Commons a new Irish local government bill. The government proposed that the local administration be distributed between county councils, urban and rural district councils, and boards of guardians, the election of which would be by parliamentary franchise, with the addition of peers and women. The qualifications and disqualifications for election as councilors would be the same as in England, except that ministers of religion would be disqualified from sitting in the county or district council, the government acting therein in accordance with precedents. For the sake of convenience, the boundaries of the existing unions and also of the counties would be modified, and the county councils would take over the duties of grand juries; but only in fiscal matters, and would not include criminal jurisdiction or questions of compensations for malicious injuries. The elections for county and district councils would be triennial, and all would retire together. The county councils would be the sole rate-collecting authority, and would control the expenditure. They would also be responsible for dealing with exceptional distress, and would decide when the request of boards of guardians for outdoor relief should be granted. Dublin, Belfast, Cork, Limerick, Londonderry, and Waterford would be constituted independent county councils. The county would be responsible for half the extra expenditure. The bill also provided that the occupier was liable to both the county cess and poor rates, whether in a town or rural district, which would involve a readjustment of rents, an equal sum to be granted from the imperial exchequer as an agricultural grant.

Timothy M. Healy, Irish Nationalist, member for North Louth, praised the bill, and Michael Davitt, Irish Nationalist, threatened opposition to the part of the bill promising relief to the landlords in the shape of an agricultural grant. John Morley, formerly chief secretary for Ireland in the late Liberal administration, welcomed the bill as being a "genuine democratic effort." John Dillon, chairman of the Irish Parliamentary Party, said he thought the measure was an immense advance over the bill of 1892, and fulfilled the promises of the government, but he claimed it was not equal to the English and Scotch measures. He pointed out that control of the police was not given to the Councils. Nevertheless, he added, the bill would do much good, and his party would endeavor to execute it in good faith. John Redmond, the Parnellite leader, also welcomed the bill, but he criticized some points of the measure. He added that if it worked successfully it would be an unanswerable argument in favor of home rule. Col. Edward J. Sanderson, Conservative, member for North Armagh, said a majority of the landlords recognized the necessity of the measure, which, he added, offered an opportunity for all classes of Irishmen to unite for a common purpose.

IRON PRODUCTION. According to the report of the Division of Mineral Resources of the United States Geological Survey, the production of pig iron in the United States in 1896 was 8,623,127 long tons, valued at \$90,250,000. As this is the most valuable mineral production of the United States excepting coal, it will be interesting to compare this output with that of the principal European producers for approximately the same date. England continued to hold the lead with 8,750,000 tons, and was followed by Spain, with 6,808,000 tons; Germany,

with 6,460,000; France (1895), with 2,006,000 tons; Austria-Hungary (1895), with 1,025,000 tons; and Belgium (1895), with 829,000 tons. Each of these countries showed an increase in the year reported, excepting the United States, which had a decreased output from that of 1895, when it led all the great iron-producing countries of the world, with an aggregate of 9,446,308 long tons. In 1895 Austria-Hungary exported 10,000 tons and imported 175,000; Belgium exported 24,000 and imported 268,000; France exported 185,000 and imported 114,000; Germany exported 220,000 and imported nearly as much; England exported 1,172,000 and imported almost none; and of Spain's total production, 6,289,257 tons were exported, chiefly to Germany, with some to England, whence Spain imports nearly all the steel rails, machinery, and other products of iron which she requires.

ITALY, a kingdom in Europe; area, 114,410 square miles; population (last census, 1881), 28,953,480; estimated (Dec. 31, 1895), 31,102,833; capital, Rome; sovereign, King Humberto I.

Finances.—The financial year ends June 30. The total revenue in 1895-96 was \$363,824,795; expenditure, \$363,542,415; official budget estimates for 1896-97: Revenue, \$345,595,837; expenditure, \$342,515,293; showing a surplus of \$7,840,696 in ordinary revenue, a deficit of \$4,758,351 in extraordinary revenue, and a net surplus of \$3,081,744. The capital of the consolidated and redeemable debt on July 1, 1895, was \$2,451,400,046, and the state held property valued at \$939,254,986. The real and personal property valuations of the kingdom were estimated at \$10,633,680,000.

Commerce.—The special trade (imports for domestic consumption and exports of national merchandise) of 1895 was: Imports, \$237,457,641; exports, \$207,541,519; and the movement of the precious metals was: Imports, \$1,458,680; exports, \$4,260,420. During the fiscal year ending June 30, 1897, the United States imported from Italy merchandise valued at \$19,067,195, and exported thereto merchandise valued at \$21,502,423.

Agriculture.—Of the total area, 70.6 per cent. is productive, 16.2 per cent. non-productive, and 13.2 per cent. produces little or nothing. The agricultural population is estimated at 14,900,000. In 1895 over 550,000 persons were engaged in rearing silkworms, and 172,000 persons were engaged in preparing and manufacturing silk. The total production, agricultural, animal and forest, had a value of \$863,400,000.

Mining.—The last official report (for 1894) showed 880 mines of various kinds in operation, which employed 51,996 persons, and had a combined output of 1,200,065 tons, valued at \$10,408,461.

Fisheries.—Over 21,825 boats are engaged in the fishery industry, including 1,465 in deep-sea fishing, 105 in coral fishing, and 101 in sponge fishing. The industry employs over 70,500 persons, and yields about \$4,000,000 annually.

Army.—The army comprises the permanent force, of 12 corps, the mobile militia, the territorial militia, and a special African corps, and the total strength, Jan. 1, 1896, was: Permanent army, under arms, 235,091 officers and men; on unlimited leave, 604,079; mobile and Sardinian militia, 488,063; territorial militia, 2,130,049; African corps, 6,099—total, 3,462,381.

Navy.—The personnel of the navy in 1896 comprised 1 admiral, 20 vice and rear-admirals, 140 captains, 543 other officers, 80 engineer officers, 663 officers of mechanicians, 18,822 non-commissioned officers and men, and 4,189 men on shore duty—total, 24,560. Excluding all non-effective vessels, the strength in ships on Jan. 1, 1897, was: First-class battleships, 5 (building 2); second-class, 4; third-

class, 1; port defense ships, 2; first-class cruisers 6 (3); second-class, 17 (1); third-class, 26 (3); first-class torpedo boats, 104 (2); second-class, 4; third-class, 37; heavy guns or primary batteries, 354; secondary batteries, 801. The heaviest guns are 105-ton Armstrongs. Italy was the pioneer in Europe in the construction of monster battleships with enormous guns, but the policy has been changed so as to provide less displacement and superior protection.

Communications.—In 1896 there was a total of 9,580 miles of railroad in operation, a large part belonging to the government, but worked by private corporations under contract. There were over 7,000 post-offices and collection-boxes, and a total of 24,716 miles of telegraph line, and 95,675 miles of wire, the greater part belonging to the government. The net revenue of the post-office and the telegraph monopoly was \$2,820,582.

Banking.—The gold and silver coinage was withdrawn from circulation in 1894, and in 1896 the actual currency comprised \$80,000,000 in state notes, \$22,000,000 in one and two lire notes guaranteed by silver in the treasury, \$216,971,455 in banknotes, and \$20,000,000 in copper and nickel coin. There is no national bank, and only three banks of issue. Other banks comprise 950 co-operative credit societies and popular banks, 140 ordinary credit companies, 8 agrarian credit companies, 10 credit fonder companies, and 4,763 post-office savings bank offices and 395 ordinary savings bank offices.

Churches.—Religious freedom is guaranteed to the adherents of all creeds, but almost the entire service is that of the Roman Catholic Church. The hierarchy beside the Pope consists of 49 archbishoprics, 221 bishoprics, and 6 cardinal-bishoprics near Rome. The wealth, privileges, and jurisdiction of the church have been curtailed by parliamentary legislation very largely in recent years. The government guaranteed to the Holy See a permanent annuity of \$645,000, besides possession of the Vatican and Lateran palaces and the villa of Castel Gandolfo, but no part of the money has been claimed. The allowance aggregated \$16,770,000 in 1897.

Schools.—The government exercises control over public instruction, makes elementary education compulsory for children of 6 to 9 years, and either by itself or in co-operation with the provinces and communes maintains public schools of every grade. Since 1865 there has been an increase of 80 per cent. in public school attendance. There are 21 universities, with (1895) 978 teachers and 21,470 students and auditors; 13 university institutions; 9 superior special schools; 33 special schools of agriculture; 4 schools of mining; 178 industrial and commercial schools; 15 government fine art institutes; and 6 government conservatories of music. There are over 1,800 libraries and (1895) 1,903 periodical publications.

Recent Events.—In the Abyssinian campaign the Italians under General Baratieri (*q. v.*) were severely defeated at Aderva in March, 1896, which led to the resignation of the Crispi cabinet and the formation of a new one under the Marquis di Rudini. Royal decrees granted amnesty to participants in the Sicilian and Massa-Carraran riots, and provided a new form of government for Sicily. The Rudini cabinet resigned in July, but the premier reconstructed it. A commercial treaty with France was signed Sept. 30; the marriage of the Prince of Naples and Princess Helen of Montenegro was celebrated Oct. 24; the conclusion of peace with Abyssinia was announced Nov. 16, involving the recognition of the independence of that country; the terms of the settlement of the dispute with Brazil were settled Nov. 19; and the Italian navy co-operated with those of the great powers in the operations at Crete (*q. v.*) in the early part of 1897. A

sesqui-centennial exposition was arranged to be held in Turin in 1898, with an international section of electricity and a section for "Italians abroad" as leading features.

ITO HIROBUMI, MARQUIS, statesman, was born in the province of Choshu, Japan, about 1837; became minister of public works in 1876, minister of the interior later, and prime minister in 1885, 1892, and 1898; with the Marquis Mutsu negotiated the treaty of peace with Li Hung Chang in 1895; visited the United States in 1868, 1872, and 1897; and was the principal framer of the Japanese constitution promulgated in 1889.

JACKSON, HOWELL EDMUNDS, associate justice of the United States Supreme Court, was born in Paris, Tenn., April 8, 1832; died in West Mead, Tenn., Aug. 8, 1895.

JACKSON, SHELDON, clergyman, was born in Minaville, N. Y., May 18, 1834; since 1885, general agent of the United States Bureau of Education in Alaska; elected moderator of the General Assembly of the Presbyterian Church in 1897.

JAMESON, LEANDER STAR, leader of the raid into the Transvaal Republic, was born in Scotland; educated for a physician; went to Kimberley, South Africa, to practice; and there attracted the attention of Cecil Rhodes, who offered him an opportunity of playing an influential part in the opening of a new country. He became administrator for the British South African Company in Mashonaland; secured important concessions from King Lobengula of the Matabele nation where others had failed; distinguished himself as an explorer, and opened a new commercial route to the ocean; and in 1893 invaded Matabeleland, and caused the downfall of its great king. For details of his raid into the Transvaal in 1895, see CAPE COLONY and CHAMBERLAIN, JOSEPH. On the surrender of Dr. Jameson and his associates by President Krüger, they were ordered to report to London, where indictments were found against the leaders, who, after a lengthy trial, were found guilty of having violated English laws by taking part in an armed expedition against a state with which Great Britain was at peace. Brief sentences of imprisonment without hard labor were imposed July 28, 1896. A parliamentary commission, appointed to investigate the circumstances of the raid, made a report in July, 1897, expressing an emphatic opinion that, whatever justification there might have been for action on the part of the people of Johannesburg, there was none whatever for Cecil Rhodes' conduct in subsidizing, organizing, and stimulating an armed insurrection against the government of the Transvaal. The commission also declared that as Alfred Beit, a former director of the British South African Company, was cognizant of the plans of Cecil Rhodes, and was intrusted with money to promote a revolutionary movement, he must share the full responsibility for the consequences. In August following it was reported that Cecil Rhodes and Alfred Beit had paid the Transvaal government £250,000 as indemnity for the Jameson raid. When Dr. Jameson was turned over by the Boers to the British authorities, immediately after the raid, it was expressly stipulated that he should under no circumstances be permitted by the English government to return to South Africa. In September, however, it became known that he had returned in an official capacity, and it was believed that it was this breach of faith which led President Krüger to declare that his government absolutely declined to recognize the suzerainty of Great Britain over the Transvaal.

JANSSENS, FRANCIS, Roman Catholic archbishop of New Orleans since 1888, was born in Tilburg, Holland, Oct. 17, 1847; died at sea between New Orleans and New York, June 10, 1897.

JAPAN, an empire in Asia; area, prior to 1895, 147,655 square miles; with Formosa and the Pescadore Islands, ceded by China, 161,215 square miles; population, prior to 1895, 41,813,215; with the Chinese cessions, 43,855,024; sovereign, Kotei Mutsuhito.

Finances.—The revenue in the fiscal year 1894-95 was \$98,113,467; expenditure, \$78,120,589; and the budget estimates for the year ending March 31, 1897, were: Surplus of previous year, \$17,477,332; revenue, \$179,720,380; expenditure, \$193,425,717. The public debt, March 31, 1895, was: Domestic, \$408,456,587; foreign, \$1,203,408—total, \$409,659,995. The principal item of revenue was the land tax, \$38,536,933; and the principal items of expenditure were: Defenses \$65,760,146, war department \$24,116,811, and public debt interest and fees, \$22,808,028.

Commerce.—Foreign trade is now carried on through 6 officially open and 13 other ports, and in 1895 the imports were valued at \$138,674,842, of which \$19,994,718 were non-dutiable, and the exports, \$136,186,328, of which \$64,182,491 were non-dutiable. The principal export trade is to the United States, and the principal import trade from Great Britain; principal item of export, silk, raw, waste, etc.; principal item of import, cotton. During the fiscal year ending June 30, 1896, the United States imported from Japan merchandise to the value of \$25,537,038, and exported thereto merchandise valued at \$7,689,685.

Agriculture.—There are but few tenant farmers, nearly all lands being cultivated by peasant proprietors. The surveyed public lands aggregate 4,325,050 acres, and include 2,885,776 acres of forests, and 1,412,179 acres of open field; and the private taxed land aggregates 3,388,212 acres, and includes 1,235,917 acres under cultivation, 1,789,438 acres of forests, and 262,774 acres of open field. The principal productions in 1895 were: Rice, 198,127,873 bush.; barley, 42,367,136; rye, 34,818,262; wheat, 19,719,457; and sugar, 118,821,321 lbs. The cocoon product was over 11,000,000 bush., and the raw silk over 15,500,000 lbs. Cattle exceeded 1,000,000, and horses 1,500,000.

Mining.—Operations are carried on by government and private enterprise, and the official mines in 1891-95 yielded about 753 lbs. avoirdupois of gold, 22,224 lbs. of silver, and 2,657,061 lbs. of iron; and the private mines (1894) about 139,114 lbs. of silver, 1,011 lbs. of gold, 43,188,510 lbs. of copper, 41,259,463 lbs. of sulphur, 10,098,259 lbs. of iron, and 4,238,929 tons of coal.

Manufactures.—The silk, cotton, and other textile manufactures in 1894 had a value of \$58,623,792, and the production of cotton yarn was about 138,500 lbs.

Fisheries.—It is estimated that there are over 375,000 boats and 2,500,000 persons wholly or partly engaged in fishing. The principal commercial products are salt and dried fish, fish manure, fish oil, and seaweed.

Army.—The army is now organized on the basis of conscription, and comprises the Imperial Guard and 6 divisions, besides the Jesso militia. The total strength on a peace footing is 4,786 officers and 94,175 men with 28,350 horses. The reserve comprises 83,080 officers and men, and the landwehr, 105,954. All the firearms, ordnance, and ammunition used in the army are now manufactured in the arsenals at Tokio and Osaka, and the Murata rifle, with which the men are armed, is a recent Japanese invention.

Navy.—The personnel of the navy in 1896 comprised 3 admirals of the fleet, 10 admirals, 20 vice-admirals, 30 rear-admirals, 208 captains, 304 commanders, and 1,150 lieutenants. Of vessels, excluding non-effectives, there were: First-class battleships, 2 (building, 6); second-class, 1 (captured from the Chinese); second-class cruisers, 17 (4); third-class cruisers, 10 (6); first-class torpedo

boats, 4; second-class, 20; third-class, 4. In 1897 two first-class battleships were being constructed in England and two in the United States, the last to be similar to the United States cruiser *Olympia*. The vessels in service carried 132 heavy guns or primary batteries and 202 secondary batteries.

Communications.—In 1895 there were 580.86 miles of state railroads, and 1,537.44 miles of roads owned by private companies, a total of 2,118.30 miles. Internal communication is facilitated by 4,481 miles of non-metallic state roads, and 15,362 miles of similar provincial roads. All the open ports and the principal cities and towns are connected with each other and with Europe by telegraph. In 1896 there were 9,740 miles of telegraph line, with 29,802 miles of wire, in addition to 344 miles of submarine cable, with 1,017 miles of wire. The postal service had 15,299 offices, and handled during the year 448,071,687 pieces.

Banking.—Banking operations are carried on through the Nippon Ginko or Bank of Japan, capital \$10,000,000; the Kokuritsu Ginko, or national banks, 133 head offices, 175 branches, capital \$48,816,000; the Shokin Ginko, or specie bank, capital \$4,500,000; and about 700 private banks, with combined capital \$37,410,781. The post-offices act as savings banks. In the year ending March 31, 1896, the coinage of the imperial mint was: Gold coins, \$1,423,750; silver, \$20,007,377; and nickel, \$51,500—total, \$21,482,627. The paper money in circulation, exchangeable for silver, aggregated \$180,008,763. The unit of account is the gold yen, worth 99.7 cents in United States gold.

Churches.—The new constitution guarantees freedom of religious worship when not conflicting with the public peace. There is no state religion, nor is state support given to any sect, excepting that the principal Shinto temples receive some state or local aid. The chief forms are Shintoism, with ten sects, 190,803 temples, and 14,829 priests; and Buddhism, with twelve sects, 30 creeds, 71,831 temples, and 52,994 priests.

Schools.—Attendance on elementary schools is compulsory. On Jan. 1, 1895, there were 7,320,191 children of school age, of whom 3,591,071 were enrolled in 24,946 elementary schools, under 63,035 instructors. There were 84 lower middle schools, 7 high schools, 13 high schools for girls, 49 normal schools, 86 technical schools, 1,352 special schools, three universities, and 198 kindergartens. Among the special schools are a staff college, military college, cadet college, military school, gunnery school, and a school for non-commissioned officers. The libraries in 1894 numbered 25, with 415,524 volumes, and the periodical publications, 814.

Recent Events.—The third election for the House of Representatives took place in March, 1894, and resulted in the return of 150 supporters of the government and of 144 opposition members. The Kaishinto, or progressive party, under Count Okuma, formed the chief group in the opposition, and demanded that the ministers should be made responsible to the Parliament, which the government opposed. The programme of the opposition was not pushed during the war with China, but in 1896 the agitation was resumed, and led to the resignation of the ministry of the Marquis Ito, Aug. 28, and the formation of a new one with Count Matsukata as premier and minister of finance, and Count Okuma as minister for foreign affairs, Sept. 18. A commercial treaty was concluded with Great Britain in 1894, and similar ones with Germany in 1896 and with the United States in 1897. The last was ratified by the United States Senate on Feb. 1, goes into operation on July 17, 1899, and is to remain in force for twelve years. In 1897 Japan also established treaty relations with Chile for the first

time, the treaty being signed in Washington. Subsequently, their relations became strained, doubtless because of the unusual concessions made by China to Germany and Russia, the most important relating to strategical points, the occupation of which by nations unfriendly to Japan would prove injurious to her. Since the close of the war with China, Japan has made remarkable advances in its commercial and industrial interests. During the first half of 1896 the imports increased 33 per cent., and the demand for all kinds of goods was extremely large, and in ten years the exports had more than trebled, the United States receiving nearly one-half of all the manufactures exported. Manufacturing also has been greatly quickened. The most unfavorable event was the destruction of several towns in the northeast provinces by earthquakes and tidal waves in June and September, 1896, in which it was believed that over 10,000 persons had lost their lives. Toward the close of 1897 Japan was actively preparing to maintain her rights in the complications arising out of the movements of and against China. It was believed that she had made an alliance with Great Britain for common action in the East, the imperial Diet was dissolved, Dec. 26; the Matsukata-Saigo ministry resigned on the 28th; and the former premier, Marquis Ito, was called on to form a new one. After much difficulty and the personal intervention of the mikado, Marquis Ito constructed a ministry independent of political parties which was installed Jan. 12, 1898, as follows: Minister president, Marquis Ito; minister of foreign affairs, Baron Nishi; finance, Count Inouye; home affairs, Viscount Yoshikawa; education, Marquis Saionji; war, Viscount Katsura; navy, Marquis Saigo; agriculture and commerce, Baron Ito Miyoji; communications, Baron Suyematsu; justice, Mr. Sone Arasuke.

A part of Japan's preparation for possible emergencies was the construction in various parts of the world of 65 war vessels and 126 torpedo boats. These ships will be up to the very latest date in the matter of improvements, and the cruisers are designed to beat in speed their corresponding types belonging to other countries. It will require from two to three years yet before this great fleet is ready for use. The following is a list of the principal vessels under construction on Jan. 1, 1898: Three warships of 14,800 tons each, in England; one warship of 10,000 tons, in England; four armored cruisers of 9,600 tons and calculated for twenty knots an hour, two of each in England, one in Germany, and one in France; two protected cruisers of 5,000 tons and twenty-three knots, one in San Francisco and one in Philadelphia (named the Kasaga, and launched Jan. 16); one protected cruiser of 4,300 tons and twenty-three knots, in England; eight torpedo destroyers of thirty knots, in England; twelve torpedo boats of ninety tons, eight in Germany and four in France; one cruiser of 9,600 tons and twenty knots, three cruisers of 3,000 tons and twenty knots, three torpedo catchers, and a dispatch boat, in Japan; also two cruisers of 9,000 tons and twenty-one knots, built in England for Chile, bought recently by Japan. See also HAWAII; SEAL CONFERENCE, INTERNATIONAL.

JEROME, JEROME Klapka, author, was born in Walsall, England, May 2, 1861. He published *Sketches in Lavender, Blue, and Green* (1897).

JERSEY CITY, city, capital of Hudson county, N. J.; population (1890) 163,003; (1895, State census) 182,713. In 1896 the assessed valuations were: Real estate, \$81,020,120; personal property, \$7,040,230—total, \$88,060,350; tax rate, \$27.40 per \$1,000. The total debt and liabilities, excluding the water debt, on Dec. 1, 1896, aggregated \$14,398,201; total resources, \$10,212,788; net liabilities, \$4,185,412; water debt, \$5,136,000. The appropriations for 1897-98 aggregated \$2,233,717, against \$2,043,861 in the previous year, and the tax rate

was increased to \$28.92 per \$1,000. The waterworks plant is owned by the city, and is self-supporting. There are 200 miles of streets, of which 75 miles are paved, 115 miles of sewers; and 184 miles of water mains. The annual cost of maintaining the city government is over \$1,760,000; expenditure for public schools, \$468,335; value of public school property, \$1,040,000. There are 4 national banks, with combined capital, \$1,100,000; deposits, \$7,231,818; and resources, \$10,779,994. In 1896-97 the Erie Railroad Company was expending over \$1,500,000 in improving its terminal property here, with the intention of elevating all its tracks.

JERUSALEM AND THE ZIONISTS. When in the beginning of the last decade of the 19th century the ancient persecution of the Jews had a recrudescence in Russia and the only recourse of the harassed people was seen to be emigration in mass, their leaders throughout the world contributed freely of their riches to provide for them homes in this western world, and a great many families were enabled to settle in the United States. A fund also was provided to continue the work of settlement in this and other new countries after the first great tide of emigration should have been disposed of. But many leading Jews—Hirsch, Brodski, the Rothschilds—while heartily supporting that philanthropic movement at the same time gave material aid to the project of colonizing with European Jews the ancient home of the race. That project had already passed beyond the experimental stage, for even in 1893 the Jews in Jerusalem were three times as numerous as in 1883, and constituted one-half of the city's population (80,000), while 2,000 Jews were agriculturists where two years previously not one Jew followed the plow. Out of this movement grew the project of a Jewish political state in Palestine, the chief advocate of which is Dr. Theodore Herzl, of Vienna, editor of the *Neue Freie Presse*. He is president of the Zionists, as the members of the association are called, which proposes to found the new state. The vice-president is Dr. Max Simon Nordau (*q. v.*). At the end of August, 1897, a convention of Zionists was held at Basle, which was attended by 204 delegates from all parts of the world. At that convention Max Nordau made an official declaration of the reasons for forming the association and a statement of its aims. Throughout Europe, he said, the Jews are oppressed by governments and subjected to cruelty and ridicule in private life. The Jews are friendless among the races of the world; they must stand together and help each other. The best course is to colonize Palestine. It will take about \$100,000,000 to carry out the work, and the money is to be raised from the Jews themselves. Every Jew in the world is to be asked to contribute at least 25 cents a year. If successful, the association will plant 5,000,000 Jews in Palestine; and each family must be provided with land, horse, cow, and implements of agriculture. At the congress reports were read telling of the condition of the Jews in several countries. Such reports were received from Russia, but for obvious reasons were not read in convention; but in Russia the Jews are in worse state under Nicholas than under his father. There are 720,000 Jews in Roumania; they have absolutely no rights. In Galicia a million Jews live in one small quarter; they have civil rights on paper, none in fact. The delegate from the United States, Rev. Dr. Schaffer, of Baltimore, made a tour of observation in Russia on his own account. Of the 5,000,000 Jews in that country he reports that they are "so jammed into one little district that life is almost unbearable." They have no rights and only 5 per cent. of the children are permitted to attend the schools. See PALESTINE.

JOHN B. STETSON UNIVERSITY, Deland, Fla., Baptist; co-educational; had at the close of 1897, 22 professors and instructors; 300 students; 7,000 volumes in the library; \$200,000 in grounds and buildings; \$10,000 in scientific apparatus; \$100,000 in productive funds; \$60,946 in gifts; \$61,760 in income; president, John F. Forbes, Ph.D.

JOHNS HOKPINS UNIVERSITY, Baltimore, Md., non-sectarian; had at close of 1897, 109 professors and instructors; 520 students; 80,000 volumes in library; 21 fellowships; 72 scholarships; \$838,859 invested in grounds and buildings; \$236,206 in scientific apparatus and library; \$3,000,000 in productive funds; \$63,000 in gifts; \$177,000 in income; president, Daniel C. Gilman, A.M., LL.D. President Gilman's annual report in January, 1897, gave an interesting review of the history of the university since its opening. This retrospect showed that since 1876 there had been 3,112 students at the university, of whom 496 won the degree of bachelor of arts, and 391 the higher degree of doctor of philosophy. Not far from half the entire number of graduates have since engaged in teaching, and more than 800 former students now fill positions in the faculties of the leading colleges of this country.

JOHNSON, ROSSITER, Ph.D., LL.D., author and editor, was born in Rochester, N. Y., Jan. 27, 1840. In 1896-97 he edited the *Authorized History of the World's Columbian Exposition* (4 vols.), which differs from similar works in that it is a readable narrative instead of a mere printing of official reports; and in 1898 he undertook the chief editorship of *The World's Great Books*, a series selected by a committee consisting (beside himself) of Hon. Thomas B. Reed, Edward Everett Hale, William R. Harper, and Ainsworth R. Spofford. In 1897 he was chairman of the Associated Lecturers and was elected president of the New York Association of the Phi Beta Kappa, and in 1898 he became president of the newly organized People's University Extension Society.

JOKAI, MOR (OR MATRICE), poet laureate of Hungary, was born in Komorn, Feb. 19, 1825. Since 1894, when all Hungary celebrated the 50th anniversary of the completion of his first book, he has been the subject of widespread literary criticism. He has published over 200 works, the latest including *Timar's Two Worlds*; *Eyes Like the Sea*; *Black Diamonds*; and *The Green Book, or Freedom Under the Snow* (1897).

JONES, JAMES K., lawyer, was born in Marshall county, Miss., Sept. 29, 1839; received a classical education; served several terms in the State Senate and in the United States House of Representatives; elected United States senator in 1885, 1890 and 1897; and was chairman of the Democratic National Committee and manager of William J. Bryan's campaign for the presidency in 1896.

JONES, JOHN PERCIVAL, United States senator from Nevada since 1873, was born in Herefordshire, England, in 1830. He was interested in the development of the mining industry of Nevada for many years; was conspicuous among the silver leaders in the Senate and the presidential campaign of 1896; and was re-elected United States senator in 1897.

JONES, ROBERT ELLIS, educator, was born in New York City; graduated at Williams College in 1879; was engaged on the United States Geological Survey in 1881-82; abandoned a scientific career for theology; studied with Bishop Pinkney, of Maryland, and at the University of Berlin; held pastorates in Williminstown, Mass., Kalamazoo, Mich., and Columbus, O., and an assistant charge in New York City; and was elected president of Hobart College, Geneva, N. Y., in June, 1897.

JORDAN, DAVID STARR, naturalist, since 1891 president of the Leland Stanford Junior University, at Palo Alto, Cal., was born in Gainesville, N. Y., Jan. 19, 1851. In 1896 he was appointed president of the newly created Bering Sea Commission, and after making a trip to Alaska to study the seal question, made a preliminary report in 1897. See BERING SEA QUESTION: SEAL CONFERENCE, INTERNATIONAL.

JORDAN, WILLIAM GEORGE, editor, was born in New York, March 6, 1864. He was educated at the College of the City of New York; began his literary career as editor of *Book Chat* in 1884; was for several years editor of *Current Literature*; became managing editor of *The Ladies' Home Journal* in 1897; and was called to the editorship of *The Saturday Evening Post*, of Philadelphia, established in 1728, and the oldest periodical in the United States, in 1898. Since 1884 he has been engaged in the compilation of *Jordan's Guide to Poetry and Prose*, a key to the treasures of literature for five centuries, by which it will be possible to locate the book and page containing any one of over 125,000 famous and fugitive selections in prose and verse. He has also lectured with gratifying results on an original system of education, which he calls *Mental Training by Analysis, Law, and Analogy*.

JUBILEE OF QUEEN VICTORIA. The commemoration of Queen Victoria's completed 60 years of reign was commenced Sunday, June 20, 1897, with private religious exercises in the chapel of Windsor Castle, when the *Te Deum* was chanted as "a solemn thanksgiving to Almighty God for the completion of 60 years of the happy reign" of Victoria. The queen arrived in London on Monday and received in great state at Buckingham Palace the royal guests, the Indian princes, and the special ambassadors of foreign powers. The grand procession took place on Tuesday. It was the greatest and most splendid pageant ever seen. The city, especially the line of march, was splendidly decorated, and spectators in millions occupied every inch of standing ground, at windows, on roofs, on balconies, on improvised stands. Every race and all climates were represented in the great throng. A salvo of artillery announced at 11 o'clock the start of the procession. The head of the line was taken by the royal horse guards, and after them came the numerous corps of colonial troops from every quarter of the globe in gala array, under command of Gen. Lord Frederick Roberts. Canadian troops came first—hussars and dragoons; after them a contingent from the antipodes—the New South Wales mounted rifles and the New South Wales lancers; then other corps from the Southern ocean—Victorian mounted troops, a strong contingent from New Zealand, mounted infantry from Queensland. The representatives of Cape Colony followed—the Cape mounted rifles; and then succeeded mounted troops from Natal and a troop of horse from Cecil Rhodes' dominion. A varied but not motley column came next, made up of troops from Hong-Kong, Singapore, Ceylon, Mauritius, Jamaica, St. Lucia, Bermuda; a contingent from Malta, Zaptichs from Cyprus, a band of Dyaks from Borneo. Governors of colonies rode on horseback or in carriages at the head of their several contingents of troops. After this martial column followed a line of state carriages carrying royalties, British and foreign. The Queen's carriage was preceded by a special colonial escort, made up of military representatives of all the colonies of Great Britain and by a cavalcade of princes—Prince Henry of Prussia, Prince Albert of Schleswig-Holstein, the Duke of Mecklenburg-Strelitz, the Duke of York, Prince Waldemar of Denmark, the Prince of Naples, Prince Mahit of Siam, and very many more in glittering array. The Queen was accompanied in her carriage by the Princess of Wales and Princess Christian. The Duke of Cambridge and the

Prince of Wales rode beside the royal carriage. At Temple Bar the Lord Mayor in robes of state did homage in traditional form to the sovereign. At St. Paul's Cathedral the Queen was received by the highest dignitaries of the Established Church and of several representatives of the dissenting sects. A *Te Deum* was chanted, and then the national anthem *God Save the Queen*. Victoria did not leave her carriage and the religious function was performed at a temporary altar erected in front of the church. Then the procession took up the return line of march to Buckingham Palace. The great naval review at Spithead, June 26, was a grand demonstration of England's power as a maritime nation. There were 170 ships drawn up in 5 lines almost 5 miles long—torpedo boats and other small craft, backed by gunboats, cruisers and battleships; yet not a ship was withdrawn from any of the foreign stations to make the display; those ships all belonged to the channel squadron and the coast defense fleet. Not less striking than the gorgeousness of the spectacle of the celebration in London was the unbounded enthusiasm of the millions who viewed it and the perfect order maintained throughout the week. The United States government was represented by Whitelaw Reid as special ambassador; the army, by Gen. Nelson A. Miles, senior major-general commanding; and the navy, by Rear-admiral Joseph N. Miller.

JUDGE, WILLIAM QUAY, president of the Theosophical Society in America, was born in Dublin, Ireland, April 13, 1851; died in New York City, March 21, 1896.

JUVENILE DELINQUENTS. The only general report published since the United States census of 1890 concerning this class of wayward youth is that by the United States Commissioner of Education. The report for the school year 1894-95 showed a total of 83 institutions for the reclamation of boys and girls beyond parental and other ordinary control. These held by various commitments 17,867 boys and 4,031 girls, in all 21,898. Of the total, 17,568 were white and 2,375 colored, and 7,717 had native and 6,288 had foreign-born parents. During the year 10,889 commitments were made, and 9,973 discharges. Those classed as illiterates numbered 6,534, of whom 4,216 could only read, and 2,318 could neither read nor write. The schools attached to the institutions had 495 teachers, and were attended by 19,862 pupils, and of the latter 9,619 received instruction in some gainful mechanical trade. The institutions combined had grounds and buildings valued at \$16,644,061, and the expenditures of the year included \$707,356 for buildings and improvements, and \$3,422,260 for maintenance. The geographical distribution of these institutions is neither a test of the prevalence of illiteracy nor of the number of juvenile delinquents, for while the North Atlantic and North Central divisions of States show the largest number of institutions respectively, those States are the largest in population, and have naturally the largest number of subjects for this kind of reformatory work, and the largest means at command for carrying it on. The foregoing review is of interest mainly because it shows the extent to which State and municipal governments have gone to reclaim youth who would doubtless be confirmed in their early vicious course of life by being compelled to associate with hardened criminals in penitentiaries.

KAISER WILHELM CANAL. From July 1, 1895, to June 30, 1896, there passed through the new Kaiser Wilhelm Canal 16,834 ships that had to pay toll. Their tonnage was 1,505,983 tons. Of these, 7,531 were steamships with 1,140,573 tons; 14,957 ships carried German, 3 Belgian, 184 British, 812 Danish, 8 French, 381 Dutch, 60 Norwegian, 84 Russian, and 336 Swedish colors, and 9 the colors of other countries. The year's expenses were 827,876 marks (about \$200,000). The money taken in, including towage, was 896,452 marks (a trifle over \$200,000). See CANALS: SUEZ CANAL: BALTIC AND NORTH SEA CANAL.

KALAMAZOO COLLEGE, Kalamazoo, Mich., Baptist; co-educational; had at close of 1896, 14 professors and instructors; 187 students; 5,996 volumes in library; president, A. G. Slocum, LL.D.

KANSAS, one of the United States of North America; admitted to the Union Jan. 29, 1861; counties, 106; capital, Topeka.

State Officers, 1897-99.—Governor (elected for 2 years, salary \$3,000 per annum), John W. Leedy; lieutenant-governor, A. M. Harvey; secretary of state, W. E. Bush; treasurer, D. H. Heflebower; auditor, W. H. Morris; attorney-general, L. C. Boyle; adjutant-general, Hiram Allen; superintendent of public instruction, William Stryker; bank commissioner, John W. Breidenthal; superintendent of insurance, Webb McNall; commissioner of agriculture, F. D. Coburn; chief justice of the supreme court, Frank Doster; associate justices, W. A. Johnston and S. H. Allen; clerk, C. J. Brown; State government, all Fusion excepting Coburn; judiciary, Judges Doster and Allen, Populists, Judge Johnston, Republican.

Legislature, 1897.—Populists, senate 27, house 65, joint ballot 92; Republicans, house 11, senate 48, joint ballot, 59; Democrats, senate 2, house 9, joint ballot 11; Free Silver Republicans, senate 3, joint ballot 3.

Elections.—In the State elections in 1896 there were 332,378 votes cast for governor, of which the Democratic-Populist candidate (Leedy) received 168,041; the Republican (Morrill), 160,530; the Prohibition (Hurley), 2,347; the National Democratic (Donthard), 757; and the Independent (Kepford), 703. The congressional elections resulted in the choice of 1 Populist, 2 Republican, and 4 Fusion candidates; and for representative-at-large, J. D. Botkin, the Fusion candidate, received 168,400 votes, R. W. Blue, the Republican, 158,140, and M. Williams, the Prohibition, 1,947. In the presidential election, the Democratic-Populist candidate received 171,614 votes; the Republican, 159,345; the Prohibition, 1,611; and the National Democratic, 1,209.

Farm Products.—Reported Dec. 31, 1895: Corn, 204,759,746 bush., from 8,426,327 acres, value \$61,427,924; wheat, 22,919,566 bush., from 2,976,567 acres, value \$10,313,805; oats, 30,075,992 bush., from 1,580,223 acres, value \$5,112,919; rye, 731,830 bush., from 124,039 acres, value \$278,095; potatoes, 7,869,240 bush., from 109,295 acres, value \$3,305,081; and hay, 4,181,289 tons, from 3,372,007 acres, value \$13,631,002—total value, \$94,068,826. In production the State held second rank in hay, fourth in corn, and sixth in wheat.

Farm Animals.—Reported Jan. 1, 1897: Horses, 797,744, value \$18,780,168; mules, 82,269, value \$2,553,469; cows, 629,121, value \$15,413,464; cattle, 1,801,570, value \$39,133,349; sheep, 222,215, value \$398,965; and swine, 1,659,722, value \$7,648,165—total value, \$83,927,580. The State held third rank in the number and value of cattle.

Mineral Products.—The following is a summary of the mineral products for the calendar year 1894, the last reported: In coal the State ranked tenth in production, with an output of 3,388,251 short tons, valued at the mines at \$4,178,998, the largest output in the history of the State. The worked area extended over about one-third the entire surface of the State. Of the total product, 3,066,398 short tons were loaded at the mines for shipment. The most productive counties were Crawford (1,554,253 tons), Cherokee (948,142), Leavenworth (395,967), and Osage (322,189). Six coking plants with 61 ovens consumed 13,288 tons of coal and produced for local smelters, 8,439 short tons of coke, value \$15,660. *Quarrying* was restricted to sandstone, found in nearly all parts of the State and most productive in Brown, Phillips, and Rawlins counties.

KANSAS

Scale of Miles

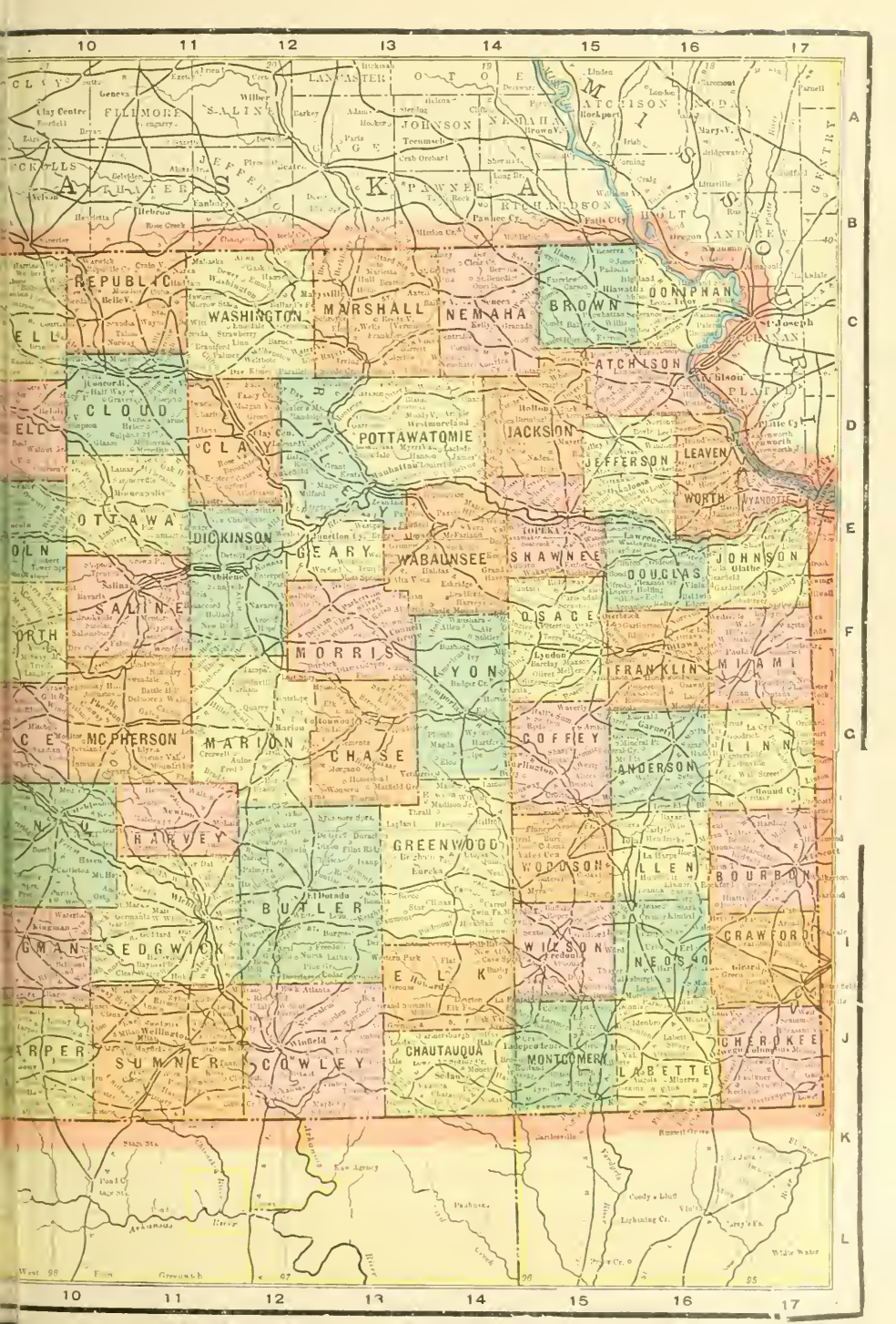
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\$30,265; and limestone, chiefly in the vicinity of Atchison, Leavenworth, Topeka, and Fort Scott, and used principally for building and road making, \$241,039. The *clay* industry had products valued at \$218,575; the *gypsum* yielded 64,889 short tons, value \$301,884; the *zinc*, 25,588 short tons; and the *salt*, 1,382,409 bbls. (of 5 bush. each), value \$529,392, of which 949,596 bbls. were made from brine and 432,813 from rock.

Finances.—On Jan. 1, 1896, the bonded debt was \$752,000, of which the State University held \$9,000, the permanent school fund \$487,000, and the public \$256,000. The equalized assessed valuation of all taxable property was \$337,-501,722, and tax rate \$3.90 per \$1,000 in 1894; and \$329,939.31 and tax rate \$4.25 per \$1,000 in 1895; and \$321,216.938 and tax rate \$4.25 per \$1,000 in 1896. The amount of State taxes collected in 1895 was \$1,316,257.

Banks.—On Oct. 31, 1897, there were 103 national banks in operation and 114 in liquidation, the active ones having a combined capital of \$8,717,100, and holding \$2,455,250 in United States bonds. These banks had outstanding on loans and discounts \$18,682,123, represented by demand paper with individual or firm names, \$604,258; the same secured by stocks, bonds, and other personal securities, \$246,229; time paper with two or more individual or firm names, \$4,448,754; time paper with single individual or firm name, \$3,021,336; and the same secured by stocks, bonds and other personal securities, \$10,361,545. The banks held in coin and coin certificates \$1,488,740 of which \$1,036,139 was in gold coin. The circulation account was: Total issue, \$14,836,780; redeemed, \$12,252,779; outstanding, \$2,584,001. There were deposits, \$19,531,209; reserve required, \$2,929,681; reserve held, \$7,819,981; ratio of reserve, 40.19 per cent. The State and private banks (both here included), June 21, 1897, numbered 377, and had capital \$7,494,630; deposits, \$17,484,057; resources, \$27,280,000; and surplus and profits, \$1,935,589. Combining all these institutions, the State had an aggregate banking capital of \$16,211,730.

Building and Loan Associations.—The last general report on these associations (1893) showed a total of 72 organizations, of which 71 were local, 1 national, 48 serial, 9 permanent, and 15 terminating. There were reported by 70 associations, shareholders, 8,155; by 65, shares issued, 107,021; by 69, shares matured, 3,236; by 70, shares free, 34,951; and by 70, shares borrowed on, 17,481. The total assets and liabilities were \$2,591,585; loans on real estate, \$2,158,794; and dues and profits, \$2,345,852. During the life of 66 associations, 207 mortgages were foreclosed, involving \$152,956, on which there was a loss of \$7,690. Of all associations, 68 reported 3,732 homes and 156 other buildings acquired.

Internal Revenue.—During the fiscal year ending June 30, 1897, the collections of internal revenue in Kansas and Indian and Oklahoma Territories aggregated \$250,398.32, from the following sources: Distilled spirits, \$58,353.21; tobacco, \$59,340.63; fermented liquors, \$17,898.33; oleomargarine, \$114,213.14; and penalties, \$574.98. In that year there were 323 single-account cigar factories, which used 347,324 lbs. of tobacco, and had an output of 17,911,224 cigars; and 48 other tobacco factories, which used 36,180 lbs. of materials, and had an output of 442 lbs of plug tobacco, and 31,987 lbs. of smoking. The quantity of spirits gauged was 3,892 gals., and fermented liquors produced, 6,255 bbls.

Railroads.—On Jan. 1, 1895, the State had a total railroad mileage of 8,934.58, and ranked fourth in this respect. The State assessment against railroad property was \$59,645,740, a decrease of \$118,942 from that of 1894. A report at the close of 1893 showed: Capital stock, \$143,835,650; funded debt, \$280,108,-814; total investment, \$436,638,086; cost of railroads and equipments, \$173,-

157,191; gross earnings, \$47,961,221; net earnings, \$11,772,526, and interest paid on bonds, \$10,440,926.

Publications.—Reported March, 1898: Daily, 49; semi-weekly, 5; weekly, 589; semi-monthly, 3; monthly, 54; bi-monthly, 1; and quarterly, 2.

Post-offices.—Reported Jan. 1, 1897: First-class, 3; second-class, 17; third class, 104 (presidential, 124); fourth-class, 1,550; money-order offices, 662; money-order stations, 3; and limited money-order offices, 45

Churches.—The Methodist Episcopal is the strongest denomination in the State, and is followed in their order by the Roman Catholic; Regular Baptist, North; Disciples of Christ; Presbyterian, North; United Brethren; Congregational; Friends; and Lutheran, General Council. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Kansas 4,811 evangelical Sunday schools, 44,909 officers and teachers, and 281,499 scholars—total members, 326,408, a gain of 41,859 in three years.

Schools.—At the end of the school year 1895-96, the number of children of school age in the State was estimated at 419,750, of whom 378,339 were enrolled in the public schools, and 252,727 were in average daily attendance. There were 11,700 teachers, and the expenditures of the year, excluding payments on debt, aggregated \$4,133,195. There were 18 universities and colleges of liberal arts, with a total of 304 professors and instructors; 4,813 students in all departments (2,803 males and 2,010 females); 92,521 bound volumes in the libraries; \$270,327 in total income; \$1,731,300 invested in grounds and buildings; \$556,000 in productive funds; and \$51,961 receipts from gifts. In 1896 there were 9,418 public school buildings; public school property valued at \$10,145,631; 168 public high schools; 21 private high schools and academies; a State public school fund of \$9,686,993; and an Agricultural College fund, \$502,927, State University fund, \$140,731, and State Normal School fund, \$137,211. Among other institutions are colleges exclusively for women at Oswego and Topeka; a private normal college at Fort Scott; and 8 commercial and business colleges. Normal training is also provided in 6 colleges.

Libraries.—In 1896 there were reported 63 public libraries of 1,000 volumes each and upward, with a total of 302,780 bound volumes and 83,569 pamphlets.

Population.—In 1890, 1,427,096, of whom 752,112 were males; 674,984 females; 1,279,258 natives; 147,838 foreign-born; 1,376,553 whites; and 50,543 colored of all races. The State census of 1895 showed a total of 1,334,668, a decrease in ten years of 66,138 and in one year of 3,663. In one year 40 counties increased from 11 to 4,144 each, aggregating 30,246, and 61 counties decreased from 2 to 2,988 each, aggregating 33,909. The counties with 20,000 population and upward each were: Wyandotte, 57,286; Shawnee, 47,978; Sedgwick, 39,108; Crawford, 33,846; Cherokee, 30,651; Cowley, 28,860; Labette, 27,023; Atchison, 26,995; Reno, 26,492; Bourbon, 25,849; Osage, 24,818; Marshall, 24,567; Sumner, 24,138; Montgomery, 23,948; Lyon, 23,794; Douglas, 23,587; Washington, 21,602; Dickinson, 20,926; Franklin, 20,734; Marion, 20,374; and McPherson, 20,317. The cities and towns with 10,000 and upward each were: Kansas City, 40,673; Topeka, 30,151; Leavenworth, 20,882; Wichita, 20,841; Atchison, 15,500; Fort Scott, 11,108; and Lawrence, 10,084. On June 1, 1897, the United States government actuary estimated the population at 1,342,000.

KANSAS CITY, city, Jackson county, Mo.; population (1890) 132,716. In 1896 the assessed valuations were: Real estate, \$44,150,790; personal property, \$10,924,120; merchants, banks, corporations, etc., \$3,954,950—total, \$59,029,860;

city tax rate, \$13 per \$1,000. The total bonded debt Jan. 1, 1897, was \$3,760,000; sinking funds, \$105,000—net debt, \$3,655,000. Of the total debt, \$3,100,000 represents the water debt. The waterworks are self-sustaining. The city has 8 national banks, with combined capital, \$3,600,000; deposits, \$9,729,447; and resources, \$23,510,581. The exchanges at the clearing house in the year ending Sept. 30, 1896, aggregated \$509,330,339, an increase of \$515,001 over those of the previous year. Public school property is valued at \$2,500,000, and the expenditure for public education exceeds \$400,000 per annum. In September, 1897, the last rail was laid on the line of the Kansas City, Pittsburg and Gulf railroad, uniting Kansas City and Port Arthur, on the Gulf of Mexico, giving Kansas City the shortest route to the gulf, and making it practically a seaport. The city is now the focal point of 17 lines of railroad.

KANSAS UNIVERSITY OF, Lawrence, Kan., non-sectarian; co-educational; had at close of 1897, 57 professors and instructors; 1,004 students; 27,800 volumes in library; \$400,000 in grounds and buildings; \$200,000 in scientific apparatus and library; \$235,000 in productive funds; \$106,500 income; president, F. H. Snow, PH. D., LL. D.

KANSAS WESLEYAN UNIVERSITY, Salina, Kan., Methodist Episcopal; co-educational; had at close of 1897, 15 professors and instructors; 472 students; 3,500 volumes in library; \$35,000 in grounds and buildings; \$7,000 in productive funds; \$9,000 in income; president, G. J. Hagerty, A. M.

KASSON, JOHN ADAMS, diplomat, was born near Burlington, Vt., Jan. 11, 1822. In 1897 President McKinley appointed him a special commissioner with large powers to carry out the reciprocity provisions of sections 3 and 4 of the new tariff act.

KEANE, JOHN JOSEPH, Roman Catholic archbishop *in partibus infidelium*, was born in Ballyshannon, Ireland, Sept. 12, 1839. Ordained priest 1865, he was consecrated bishop of Richmond, Va., 1878; became first rector of the Catholic University, Washington, D. C., 1888; resigned that office at the pope's request and took up his residence in Rome, 1896. He was made prelate assistant at the pontifical throne and a canon of St. John Lateran, also consultant on American affairs to the Congregation of Propaganda and to the Congregation of Studies. He spent several months in 1897 in the United States, under instructions from the Propaganda to report on the condition of the Roman Catholic Church.

KEELY, PATRICK C., architect, was born in Kilkenny, Ireland, Aug. 9, 1816; died in Brooklyn, N. Y., Aug. 12, 1896. He designed and built over 600 Roman Catholic churches in the United States, including the cathedrals in Chicago, Providence, Boston, Hartford, and Brooklyn.

KELLER, HELEN ADAMS, an interesting blind and deaf mute, was born in Tusculum, Ala., June 27, 1880. After a severe illness at the age of 19 months she was found to be blind, deaf and dumb. An instructress, Annie M. Sullivan, was employed for her in 1886, and thereafter carried on the child's education with marvelous success. Miss Sullivan is herself blind and a pupil of the Perkins Institution for the Blind, Boston. There she commenced the work of teaching Helen in 1887. By 1891 Helen had acquired a good acquaintance with the English language, wrote English with great propriety of expression, and having been taught articulation, was able to converse. She had also acquired much skill as a pianist. To catch the words spoken to her she puts one finger across the speaker's lips and another on the throat over the larynx. She entered the Arthur Gilman School in Boston as a preparation for Radcliffe College in 1897. She had

already a good knowledge of the German and French languages, and passed all the usual tests for admission to the school. Her preceptress, Miss Sullivan, accompanied her.

KELLY, JAMES EDWARD, sculptor, was born in New York, June 30, 1855. His recent works include *The Call to Arms*, the colossal figure for the Soldiers' Monument at Troy, N. Y.; the tomb of Gen. J. B. Wheeler; the monument to General Buford, on the field of Gettysburg; and a work commemorating the battle of Harlem Heights for the Sons of the Revolution. In 1897 he was engaged on a colossal monument in honor of the defenders of New Haven, Conn., for the Sons of the American Revolution.

KELVIN, WILLIAM THOMPSON, First Lord, physicist, was born in Belfast, Ireland, June, 1824. He was knighted 1866, in recognition of his distinguished services in laying the second transatlantic cable; is a most eminent mathematician and electrician, and member of all the great learned societies at home and abroad; and was raised to the British peerage 1892. He visited the United States twice, latest in 1897, after attending the meeting of the British Association for the Advancement of Science at Toronto. In 1897 he was chosen an honorary member of the Russian Academy of Sciences.

KENTUCKY, one of the United States of North America; admitted to the Union June 1, 1792; counties, 119; capital, Frankfort.

State Officers, 1896-1900.—Governor (elected for 4 years, salary \$6,500 per annum), William O. Bradley; lieutenant-governor, W. J. Worthington; secretary of state, Charles Finley; treasurer, G. W. Long; auditor, Samuel H. Stone; superintendent of public instruction, W. J. Davidson; attorney-general, W. S. Taylor; commissioner of agriculture, Lucas Moore; adjutant-general, D. R. Collins; chief justice of the court of appeals, Joseph H. Lewis; associate justices, James A. Hazelrigg, Thomas H. Paynter, J. D. White, A. Rollins Burnam, George Durell, and B. L. D. Guffy; clerk, Samuel J. Shackelford—all State officers Republicans; judicial, Democrats, excepting Guffy, Durell and Burnam, Republicans.

Legislature, 1897-98.—Republicans, senate 11, house 27, joint ballot 38; Democrats, senate 26, house 73, joint ballot 99; Populists, senate 1, joint ballot 1; National Democrats, house 2, joint ballot 2.

Elections.—The State elections 1895 resulted in the success of the entire Republican ticket. There were 357,057 votes cast for governor, of which the Republican candidate (Bradley) received 172,436; the Democratic candidate (Hardin), 163,524; the Populist candidate (Pettit), 16,911; and the Prohibition candidate (Demaree), 4,186; Republican plurality, 8,912. The Congressional elections 1896 resulted in the choice of 7 Democratic and 4 Republican candidates. In March, 1896, several members of the legislature were unseated; riotous demonstrations ensued; the governor called out the militia to preserve order at the capital; and on the 17th the legislature adjourned without having done anything to relieve the financial straits of the State and without electing a United States senator to succeed Senator Blackburn. In the presidential election the Republican candidate received 218,171 votes; the Democratic, 217,890; and the National Democratic, 5,114.

Farm Products.—Reported Dec. 31, 1895: Corn, 93,939,331 bush., from 3,010,876 acres, value \$25,363,619; wheat, 9,501,225 bush., from 871,672 acres, value \$5,795,747; oats, 13,252,458 bush., from 505,819 acres, value \$3,445,639; rye, 479,978 bush., from 36,362 acres, value \$268,788; potatoes, 3,908,184 bush.,

[Kentucky and Tennessee.]

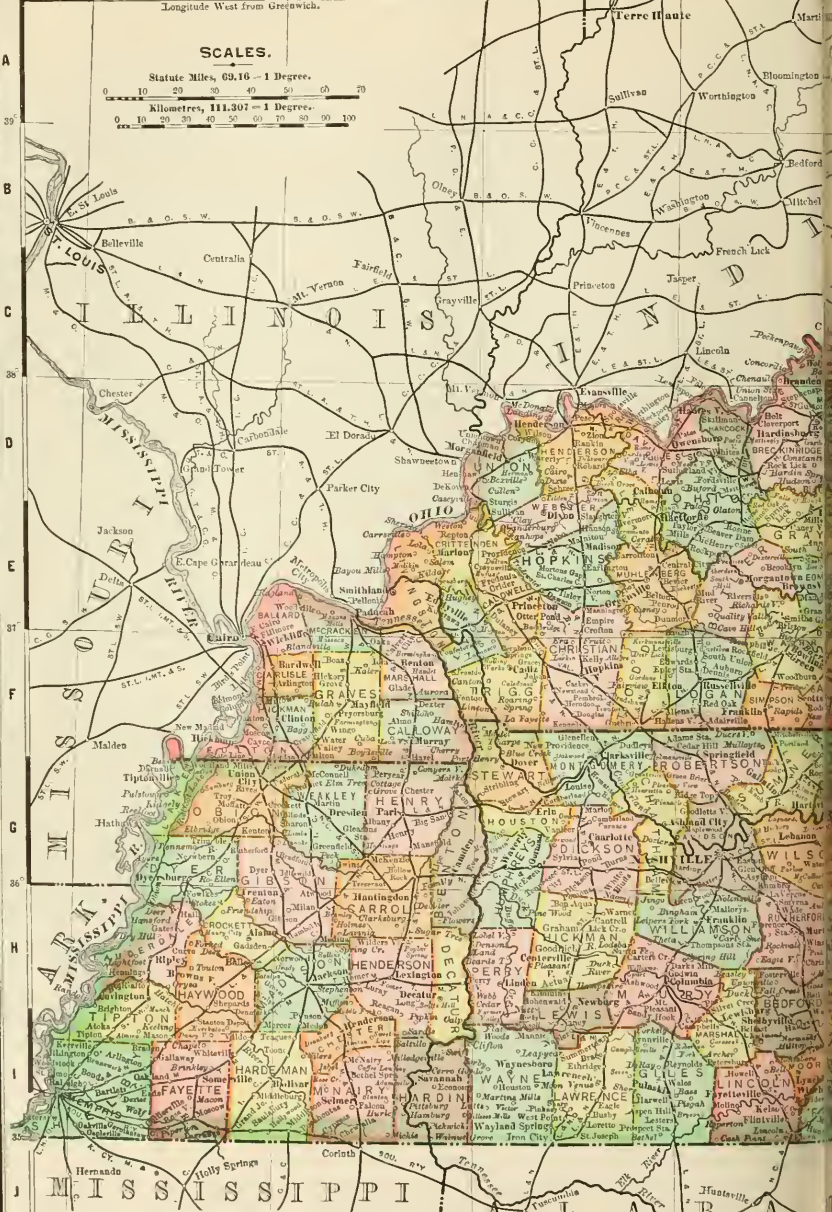
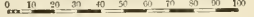
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SCALES.

Stature Miles, 69.16 = 1 Degree.

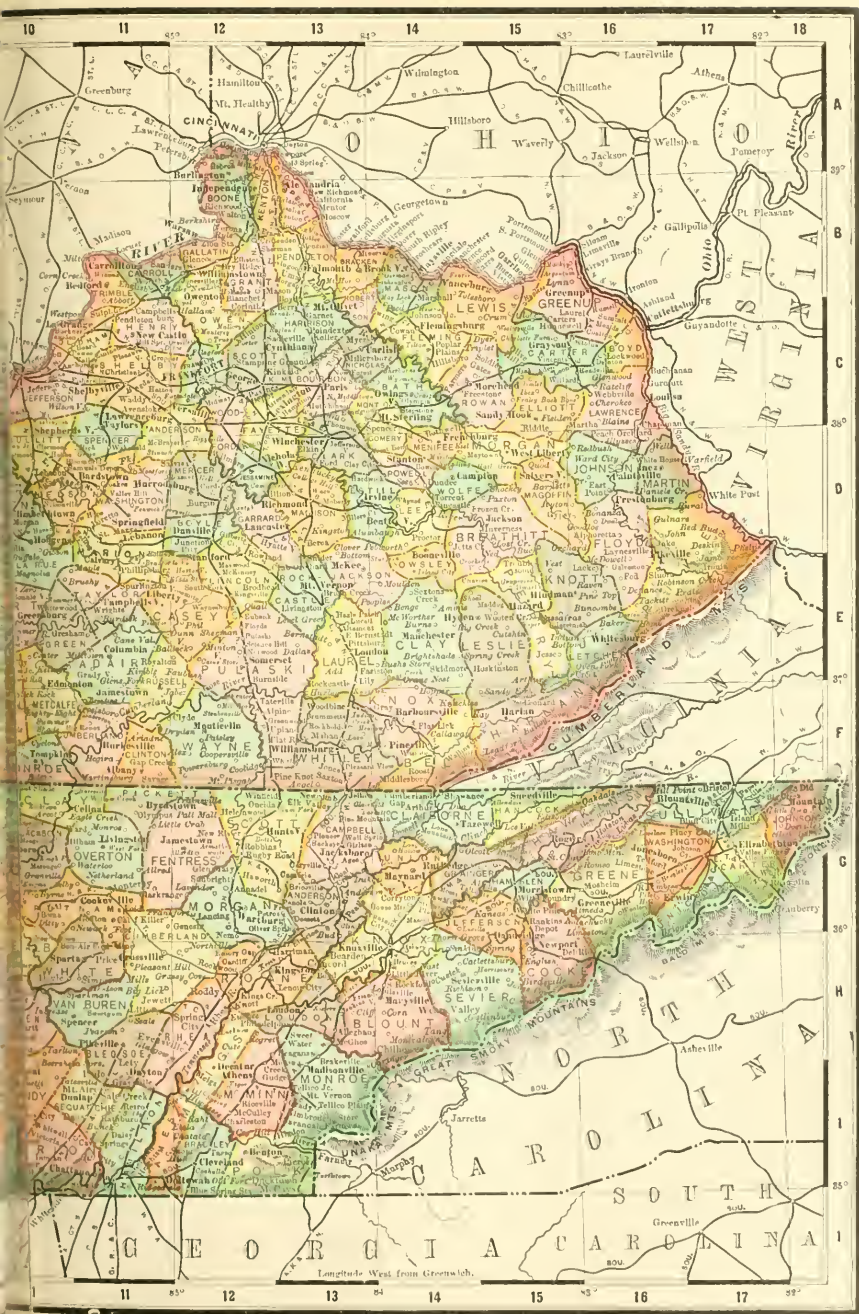


Kilometres, 111.307 = 1 Degree.



Rand, McNally & Co.'s New 1" x 14 Map of Kentucky and Tennessee.
Copyright, 1906, by Rand, McNally & Co.

1 90° 2 3 4 5 6 7 8
Longitude West from Greenwich.



from 45,444 acres, value \$1,524,192; tobacco, 179,753,000 lbs., from 223,574 acres, value \$9,526,909; and hay, 693,718 tons, from 513,865 acres, value \$7,589,275—total value, \$53,514,169. In production the State held first rank in tobacco.

Farm Animals.—Reported Jan. 1, 1897: Horses, 400,879, value \$13,056,621; mules, 116,854, value \$3,969,482; cows, 285,461, value \$5,646,419; cattle, 461,367, value \$8,168,601; sheep, 738,195, value \$1,405,229; and swine, 1,604,164, value \$5,359,192—total value, \$37,604,114.

Mineral Products.—The following is a summary of the mineral products for the calendar year 1894, the last reported: In *coal* the State ranked eleventh in production, with an output of 3,111,192 short tons, valued at the mines at \$2,749,932. The two fields worked had a combined area of about 15,680 square miles, and of the total product, 2,734,847 tons were loaded at the mines for shipment. The most productive counties were Hopkins (811,759 tons), Knox and Whitley combined (422,140), Ohio (318,937), Muhlenberg (269,580), and Laurel (261,177). There were 8,083 miners employed, who worked an average of 145 days. Six coking plants with 293 ovens consumed 66,418 short tons of coal and produced 29,718 short tons of *coke*, value \$51,566, a decrease owing to the depression in the iron business. The *petroleum* output was 1,500 bbls., value \$450, a decrease of one-half; and the value of *natural gas* consumed was \$89,200, chiefly obtained in Meade county, with some in Henderson, Breckinridge, and Daviess counties. There was an output of *asphaltum* of 5,383 short tons, value \$21,409. *Sandstone*, found in 7 counties, showed a large decrease, and output was valued at \$27,868; and *limestone* was quarried in 18 counties to the value of \$113,934, the greater part for building and road making. In *clay* products 87 concerns reported, value of output of common and pressed brick, \$418,886; fancy brick, \$50,700; firebrick, \$87,800; vitrified paving brick, \$51,389; drain tile, \$31,100; other tile, \$60,000; sewer pipe, \$15,000; and miscellaneous, \$41,500—total, \$759,675.

Finances.—In January, 1896, the State was in a bad way financially, and the failure of the legislature to provide means for increasing the revenues and for adjusting the indebtedness left the treasury virtually bankrupt. The new treasurer reported on Jan. 16 that when he assumed office the general, sinking, and school funds held a total of \$153,744.38; that the State owed the public school teachers over \$414,000; that there was on hand to pay accrued obligations and conduct the government till June 30, \$169,78; that unpaid warrants and other claims would make a deficit of \$1,250,000; and that it would require at least \$2,500,000 to pay all demands against the State at the end of the fiscal year 1895-96. The bonded debt, excluding that contracted for educational purposes, on Jan. 6, 1896, was \$614,000; State and county debt for schools, \$2,312,596; net floating debt, \$1,239,685. On March 1, 1897, the total bonded debt, excepting the educational bonds, was \$671,394; floating debt, \$1,911,228; sinking fund, \$813,280; net floating debt, \$1,100,948. The equalized assessed valuations in 1896 aggregated \$570,926,762.

Banks.—On Oct. 31, 1897, there were 75 national banks in operation and 31 in liquidation, the active ones having a combined capital of \$11,664,900, and holding \$1,991,750 in United States bonds. These banks had outstanding on loans and discounts \$24,548,267; represented by demand paper with individual or firm names, \$1,371,913; the same secured by stocks, bonds, and other personal securities, \$1,379,374; time paper with two or more individual or firm names, \$13,315,569; time paper with single individual or firm name, \$1,176,159; and the same secured by stocks, bonds, and other personal securities, \$7,002,252. The banks

held in coin and coin certificates \$1,559,728, of which \$1,311,496 was in gold coin. The circulation account was: Total issue, \$44,264,775; redeemed, \$38,579,852; outstanding, \$5,684,923. There were deposits, \$21,917,236; reserve required, \$4,168,412; reserve held, \$7,934,924; ratio of reserve, 6 banks in Louisville, 38.86 per cent., 69 other banks in the State, 34.42. During the year ending Sept. 30, 1897, the exchanges at the United States clearing house at Louisville aggregated \$310,805,180, an increase of \$18,927,032 over the total of the previous corresponding period. The State and private banks, June 30, 1897, numbered 190, and had capital \$15,546,739; deposits, \$24,830,413; resources, \$51,056,352; and surplus and profits, \$6,854,275.

Building and Loan Associations.—The last general report on these associations (1893) showed a total of 148 organizations, of which 131 were local, 17 national, 52 serial, 83 permanent, and 13 terminating. There were reported by 145 associations, shareholders, 55,721; by 144, shares issued, 601,332; by 146, shares matured, 18,509; by 143, shares free, 222,579; and shares borrowed, on 80,797. The total assets and liabilities were \$14,003,262; loans on real estate, \$13,097,750; and dues and profits, \$12,351,426.

Internal Revenue.—During the fiscal year ending June 30, 1897, the collections of internal revenue aggregated \$15,658,057.67, from the following sources: Distilled spirits, \$12,603,812.20; tobacco, \$2,685,523.78; fermented liquors, \$359,340.49; oleomargarine, \$4,400; miscellaneous, \$111.52; and penalties, \$3,-827.58. During that year there were 345 single-account cigar factories, which used 778,330 lbs. of tobacco, and had an output of 38,247,312 cigars and 13,700 cigarettes; and 136 other tobacco factories, which used 48,233,506 lbs. of materials, and had an output of 34,175,577 lbs. of plug tobacco, 221,955 lbs. of fine cut, 3,630,602 lbs. of smoking, and 249,034 lbs. of snuff. There were 209 grain and 167 fruit distilleries in operation; 4,708,335.71 gals. of spirits rectified and 27,877,210 gals. gauged; and 378,290 lbs. of fermented liquors produced.

Railroads.—On Jan. 1, 1895, the total railroad mileage was 3,051.25, and in the fiscal year 1895-96 the companies paid into the State treasury \$200,000. A report at the close of 1893 showed: Capital stock, \$114,972,322, funded debt \$151,484,824, total investment, \$272,219,231; cost of roads and equipments, \$242,654,811; gross earnings, \$32,272,828; net earnings, \$10,632,088.

Publications.—Reported March, 1898. Daily, 27; tri-weekly, 1; semi-weekly, 15; weekly, 234; bi-weekly, 2; semi-monthly, 8; monthly, 29; and quarterly, 2.

Churches.—The Regular Baptist, South, is the strongest denomination in the State, and is followed in their order by the Roman Catholic; Methodist Episcopal, South; Disciples of Christ; Regular Baptist, Colored; Methodist Episcopal; African Methodist; and Presbyterian, South. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Kentucky, 3,350 evangelical Sunday schools, 22,894 officers and teachers, and 224,856 scholars—total members, 247,750, a gain of 27,435 in three years.

Schools.—At the end of the school year 1895-96, the number of children of school age in the State was estimated at 652,800, of whom 400,126 were enrolled in the public schools, and 286,861, were in average daily attendance. There were 10,209 teachers; public school property valued at \$4,216,750; and expenditures, excluding payments on debt, \$2,919,045. There were 13 universities and colleges of liberal arts, with a total of 190 professors and instructors; 3,907 students in all departments (2,956 males and 951 females); 215 scholarships; 68,044; bound volumes in the libraries; \$215,209 in total

income; \$1,118,400 invested in grounds and buildings; \$1,353,877 in productive funds; and \$92,750 receipts from gifts. Of the total enrollment, 337,618 pupils were white and 62,508 colored; of the average daily attendance, 247,203 were white and 39,658 colored; and of the total teachers, 8,727 were white and 1,482 colored.

Libraries.—In 1896 there were reported 47 public libraries of 1,000 volumes each and upward, with a total of 318,661 bound volumes and 27,739 pamphlets.

Population.—In 1890, 1,858,635, of whom 942,758 were males; 915,877 females; 1,799,279 natives; 59,356 foreign-born; 1,590,462 white; and 268,173 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 2,085,000.

KENTUCKY UNIVERSITY, Lexington, Ky., Disciples; co-educational; had at close of 1896, 24 professors and instructors; 756 students; 14,672 volumes in library; \$250,000 in grounds and buildings; \$25,000 in scientific apparatus and library; \$203,479 in productive funds; \$17,710 income; president, Reuben L. Cave, D.D.

KENTUCKY WESLEYAN COLLEGE, Winchester, Ky., Methodist Episcopal; co-educational; had at close of 1897, 14 professors and instructors; 332 students; 3,000 volumes in library; \$50,000 in grounds and buildings, \$35,000 in productive funds; \$28,125 income; president, Eugene H. Pearce, D.D.

KENYON COLLEGE, Gambier, O., Protestant Episcopal; had at close of 1897, 19 professors and instructors; 160 students; 30,000 volumes in library; \$300,000 in grounds and buildings; \$35,000 in scientific apparatus and library; \$265,000 in productive funds; \$6,000 in gifts; \$16,743 income; president, W. F. Pierce, M.A.

KEUKA COLLEGE, Keuka College, N. Y., Free Baptist; co-educational; had at close of 1897, 17 professors and instructors; 150 students; 1,500 volumes in library; \$150,000 in productive funds; \$25,000 in gifts; \$29,500 in income; president, George H. Ball, D.D.

KING, CHARLES, author, was born in Albany, N. Y., Oct. 12, 1844. His latest stories of military life include *Under Fire*; *Trooper Ross and Signal Butte*; *Foes in Ambush*; *Starlight Ranch*; *The Story of Fort Fragye*; *Sunset Pass*; *An Army Wife*; *A Garrison Tangle*, and *Warrior Gap*.

KING, EDWARD, author and war correspondent, was born in Middlefield Mass., July 31, 1848; died in Brooklyn, N. Y., March 28, 1896.

KING'S DAUGHTERS AND SONS, INTERNATIONAL ORDER OF THE, a religious interdenominational organization, founded in New York City in 1886, whose members agree collectively and individually to serve the needy and the suffering and to do all that lies in their power to promote the interests of humanity. It has had a rapid growth and is represented in every State of the American Union and in the principal foreign countries. The membership is estimated at nearly 400,000 men, women, and children. Corresponding secretary, Mrs. Isabella Charles Davis, No. 156 Fifth Avenue, New York.

KIPLING, RUDYARD, author, was born in Bombay, India, in 1864; resident of Brattleboro, Vt., since 1891. Among his latest publications are: *The Second Jungle Book*, *Out of India*, *The Naulahka* (all in 1895, the last in collaboration with Wolcott Balestier); *The Seven Seas* (1896); and *Slaves of the Lamp* and *Captains Courageous* (both 1897).

KITCHENER, SIR HORATIO HERBERT, English soldier, commander-in-chief of the Anglo-Egyptian expedition against the Mahdists in the Soudan, 1896, was

born in England in 1851. He attained the rank of lieutenant in the British army 1871; thereafter till 1882 his occupations were mostly of a civil character—making topographical surveys. He entered the service of the khedive as major of cavalry, 1882, and took part in the first Nile expedition and in the war against Arabi, 1889. He was placed temporarily in command of the expedition of 1896, or till an officer of higher rank should arrive from England; but from the first he gave such proof of capacity and enterprise that he was retained in command. His march to Dongola and capture of that place was a feat seldom excelled in rapidity of movement, or in vigilant provision against all contingencies. See DONGOLA.

KITE FLYING. Within a few years great progress has been made in the construction and the flying of kites and their utilization for scientific ends. Two very successful experimenters are Gilbert T. Woglom, of New York, and William A. Eddy, of Bayonne, N. J. Mr. Woglom's purpose when he began his experiments was to develop the kite into an instrument for meteorological observations—especially of the air currents of the upper atmosphere. He first became interested in the two-stick tailless Malay kite. The leader of a tandem of seven kites sent up by him Dec. 15, 1894, soared to the height of 5,590 ft. An interesting meteorological observation made by Mr. Eddy on a day preceding a violent tornado which burst with violence on Bergen Point, in the vicinity of Bayonne, led him to infer that tornadoes are always preceded by waves of warm air extending to a considerable height above the earth. The day in question was excessively hot at the earth's surface; at an elevation of 1,500 ft. a self-registering thermometer showed the same temperature as at the surface. Usually the temperature of the atmosphere lowers in proportion to the elevation. He believes that the approach of cooler weather or a cold wave may be detected by the presence of an abnormal low temperature in the upper air. Mr. Eddy early made experiments in taking photographs by means of a camera supported by kites. At the same time he contrived an apparatus for collecting atmospheric electricity. It consists of a wooden frame covered with mosquito netting over which is spread tin foil; a fine copper wire is wrought into the kite string and at the lower end is fastened to a reel; a brass rod driven into the ground near the wire draws off the current and it is grounded; when the collector is sent up a few hundred feet, even in the clearest weather, a spark may be drawn from the wire. Both Eddy and Woglom have experimented with great success in photographing with cameras sent into the upper air. In June, 1897, Mr. Eddy took the first double photograph in mid-air ever taken, as a test of a patent by which he declares it will be possible to take from mid-air a perfect photograph of the entire horizon line. This test was made in New York, by the aid of nine large kites. To the main one was attached his patented apparatus, a whirling table supporting two snap-shot cameras. Fruitful experiments have been made also by the United States Weather Service at Washington. All kite records were broken at the Blue Hill Observatory (Mass.), on Sept. 20, 1897, when the topmost kite of a string of seven, all of the Hargrave type, with four miles of wire, attained an altitude of 10,016 ft. above sea level, or 9,386 ft. above the summit of the hill. An aluminum box was sent up containing an instrument for recording pressure, temperature, and humidity. At the highest point the temperature was 38°, while at the surface of the earth it was 63°. At Governor's Island, in New York harbor, Lieut. H. D. Wise, U. S. A., made an ascension of 42 ft., upborne by four kites in tandem, Jan. 22, 1897. This is believed to have been the third successful experiment of the kind. The first was that of Capt. H. Baden-Powell, of the

British army, who went up 100 ft. carrying a parachute; the second that of Lawrence Hargrave, in Australia, who went up 40 ft. The usefulness of kites in war is patent. A plan of an enemy's works can be taken by a kite-borne camera with infallible certainty. Balloons have been used for a similar purpose; but balloons are hard to control, are at the mercy of air currents, and if held captive are forced to the ground by wind pressure.

KLONDIKE GOLD FIELD, a region in the Northwest Territory of Canada, bordering the Klondike River, which came into phenomenal notoriety in July, 1897, because of the extraordinary finds of gold there. While it is believed that gold exists in large quantities in an area of country extending through the Northwest Territory and into British Columbia on the east, and a long distance into Alaska on the west and south, the principal diggings of 1897 were about 650 miles northwest of Juneau, Alaska. They were reached from Juneau by way of Chikoot Pass, or by boat up the Yukon, starting from St. Michael at the mouth of that stream. The center of the region is about lat. 65°, long. 140°. Gold was first discovered here in 1887, on Bonanza Creek, a branch of the Klondike River, which is an affluent of the Yukon, by J. W. Carmack, who, with the help of two men and using the most primitive methods, washed out in eight days \$1,200 of gold. The first large receipt of gold from the region was in 1897, but prospectors had entered the place in considerable numbers before 1890 and taken up claims. On July 14, 1897, forty miners from the Klondike arrived in San Francisco, bringing over \$500,000 in gold dust; the steamer that brought them carried also \$250,000 for the Commercial Company. An assay of the nuggets showed that the Alaska gold in the native state is not as pure as California gold; it is combined with a greater proportion of base metals—iron, lead, etc., and also with a considerable proportion of silver. The nuggets are worth \$17 to \$18 an ounce, while California nuggets are worth about \$1 an ounce more. On July 17 the second steamer of that season arrived at San Francisco from St. Michael, bringing 68 miners and \$1,250,000 gold. Everywhere the "Klondike fever" spread quickly and gold seekers taxed and overtaxed the carrying capacity of every steamer leaving for St. Michael, Juneau, and Dyea. Serious apprehensions were felt that, owing to the lack of provisions for the multitude at the diggings, many of them must inevitably perish of hunger before the opening of the passes and of the icebound streams in the following spring. Of the extent and richness of the gold deposits existing in the region, Dr. W. H. Dall, of the National Museum, Washington, D. C., who is perfectly familiar with the whole region drained by the Yukon, says that the reports of the returning miners do not exaggerate their importance. For 20 years he has known of the existence of gold in the bed of the Yukon River, but has suspected the existence of infinitely greater quantities in that river's tributaries. He believes that the gold deposits exist over a length of 500 miles. William Ogilvy, chief of the Canadian International Boundary Survey, reports that "Some of the claims are so rich that every night a few pans of dirt suffice to pay the help when there is any. Claim owners are now very reticent about what they get, so you can hardly credit anything you hear; but one thing is certain, that we have one of the richest mining areas ever found, with a fair prospect that we have not yet discovered its limits."

In February, 1898, the United States Coast and Geodetic Survey issued a revised map of the Yukon River region, which is believed to be the first accurate chart of that river and its gold-bearing tributaries. The map embraces the territory between 138 and 166° of west longitude and 60 to 67° of north latitude. The Yukon is traced from its mouth to where it crosses long. 138°, or consider-

ably beyond the Klondike region and three degrees east of the Canadian boundary line, which is at long. 141°. The Alaskan or American part of the river is the most fully treated, but the country between Forty-Mile Post and Stewart River is sketched with great clearness, elaborateness, and precision. The names of even the smallest gold-bearing creeks are plainly shown, and their courses carefully traced. This is also true as to the creeks tributary to the Tanana, Porcupine, and other rivers. The coast is delineated from Golofuin Sound to Kuskokwim Bay, which embraces all the Yukon delta and contiguous territory. According to the notes accompanying the map, steamers can rarely make St. Michael before the last week in June; small vessels can make their way into the Yukon about the same date or a little later. Steamers wintering on the lower river can usually reach Fort Yukon by June 15, about one month earlier than those starting from St. Michael. The lower river freezes about the end of October, and the ice begins to break in the later half of May, or early in June. The map gives also a useful table of distances, as follows:

Via Chilkoot Pass:		Miles.
Seattle to Dyea.....	1,115	
Dyea to Dawson.....	527	
Total.....	1,642	
Via Skookum River:		
Seattle to Wrangell.....	854	
Wrangell to Telegraph Creek.....	140	
Telegraph Creek to head of Teslin Lake.....	237	
Head of Teslin Lake to Dawson.....	525	
Total.....	1,746	
Via St. Michael and Yukon River:		
San Francisco to Dutch Harbor.....	2,345	
Seattle to Dutch Harbor.....	1,955	
Dutch Harbor to St. Michael.....	750	
St. Michael to mouth of Yukon.....	91	
St. Michael to Holy Cross Mission.....	310	
St. Michael to Nulato.....	505	
St. Michael to mouth of Koyukuk River.....	525	
St. Michael to mouth of Tanana River.....	738	
St. Michael to Rampart City.....	775	
St. Michael to Shaman's Village.....	855	
St. Michael to mouth of Porcupine River.....	995	
St. Michael to Cf. cle.....	1,075	
St. Michael to Forty-Mile.....	1,295	
St. Michael to Dawson.....	1,313	

This gives a total of 4,408 miles from San Francisco to Dawson City, and of 4,018 miles from Seattle to the same point. For fuller treatment of the region on the Alaskan and Canadian side of the boundary, see ALASKA, *Minerals*.

KNEIPP, SEBASTIAN, Roman Catholic priest and founder of a water-cure system, was born in Stefansried, Bavaria, May 17, 1821; died in Woerishofen, Swabia, June 17, 1897.

KNOX COLLEGE, Galesburg, Ill., non-sectarian; co-educational; had at close of 1897, 40 professors and instructors; 650 students; 10,000 volumes in library; \$200,000 in grounds and buildings; \$10,000 in scientific apparatus; \$173,850 in productive funds; \$12,500 in gifts; \$23,734 in income; president, John H. Finley, A. M., PH. D.

KNOX, THOMAS WALLACE, author and traveler, was born in Pembroke, N. H., June 25, 1835; died in New York City, Jan. 6, 1896. His last publications included *A Boy's Life of General Grant*, and *In Wild Africa* (all 1895).

KNOXVILLE, city, capital of Knox county, Ill.; population (1890) 22,535. In 1896 the assessed valuations were: Real estate, \$7,965,059; personal property, \$1,782,494—total, \$9,747,553; combined tax rate, \$23.40 per \$1,000. The bonded debt March 1, 1897, was \$1,026,600. The city has 5 national banks, with combined capital, \$875,000; deposits, \$1,995,424; and resources, \$3,973,-674; 6 private banks; and 7 building and loan associations. There are 20 iron street bridges; 2 railroad and 2 highway bridges across the river; 50 churches; electric lights; 20 miles of electric street railroads; over 25 miles of sewers; 51 miles of macadamized streets; 50 miles of water mains; and 3 daily, 7 weekly, and 6 monthly periodicals.

KONGO FREE STATE, an independent State in Africa; constituted, declared neutral and free to the trade of the world, and placed under the individual sovereignty of the King of the Belgians by an international conference in 1885, and had all of the king's sovereign rights in it transferred to Belgium by the king in 1889; area, estimated 900,000 square miles; population, estimated 14,000,000; capital, Boma. It has a dual government; a central at Brussels, consisting of the king, a secretary of state, and secretaries of foreign affairs, finance, and the interior; and a local, consisting of a governor-general, a vice-governor-general, state inspector, general secretary, director of justice, director of finance, and commander of the forces. The State is divided into 12 administrative divisions or provinces, besides the Tanganika region. Commerce is promoted by a fleet of seven steamers on the Lower and twelve on the Upper Kongo River, besides numerous sailing and rowboats, and internal transit, by a railway projected from Vivi to Leopoldville, 250 miles, of which over 65 miles was opened to traffic in 1895. The revenue, derived from an annual subsidy of \$400,000 by the King of the Belgians, a similar one for ten years from 1890 by the Belgian government, from taxes, and the sale and lease of public lands, aggregated in 1894-95, \$1,292,-760; and the expenditure, \$1,495,179. During 1894 the imports, principally textiles, gums, powder, spirits, and tobacco, amounted to \$2,673,000, and the exports, chiefly palm-oil, rubber, ivory, orchilla weed, gum copal, groundnuts, and cam-wood, to \$2,430,000. In the previous year 677 vessels of 217,996 tons entered the ports of Banana and Boma. The army consists of 9,000 natives, commanded by 143 European officers, mostly Belgians, for whom there are four camps for military instruction. The State has regular steamship communication with Europe and belongs to the Postal Union.

In 1895 an attempt was made to formally annex the State to Belgium, and a treaty was concluded, Jan. 9, by which the king ceded to Belgium the sovereignty of the State. While a bill for annexation was pending in the Belgian Chamber, Feb. 12, a decision was reached that the movement was inopportune, and the project was indefinitely postponed. The Chamber, however, agreed to aid the State by paying off a special debt of \$1,057,100, and by granting a mortgage loan to its railway. During the last half of the year there was diplomatic correspondence between Great Britain and Belgium, growing out of the hanging by Captain Lothaire at Lindi of an English trader named Stokes, accused of having sold arms and ammunition to the slave traders in January. The British government claimed that Stokes had been illegally tried, and demanded of Belgium an indemnity and a trial in Brussels of Captain Lothaire for his alleged illegal action in ordering the execution of Stokes. The Belgian government formally apologized for the act of its official in Kongo, agreed to pay an indemnity to Stokes' family, and ordered Captain Lothaire to Brussels for trial, whereupon Great Britain agreed to take no further action.

The charge has been frequently repeated since the founding of the State that its officials, civil and military, habitually treat the natives with inhumanity, and that in their eyes the life of a native man and the honor of a native woman are held to be of no account. The King of the Belgians sent out a commission to investigate the grounds of the charges, but according to the statement of the Rev. Mr. Sjoblom, of the American Baptist Missionary Society, who arrived in London in May, 1897, from the Kongo, there is no amendment. The officials will not act on testimony submitted by missionaries. The iniquitous rubber traffic continues. When the natives fail to bring in the stated amount of rubber to the stations the troops burn the villages, murder the people, and cut off their hands, which afterward are smoked, and sent to the officials. Open war exists in parts of the equatorial districts. The latter part of the missionary's statement is strongly confirmed by intelligence received in Europe in the middle of June, 1897, that Baron Dhanis, commanding an expedition the purpose of which is not clear, had been massacred with all his European officers and his faithful native followers. Whether the expedition had for its object the suppression of slave trading, or whether its objective point was the Mahdi's country, there to help England in suppressing the "rebellion" of the dervishes, it appears certain that in the northeastern part of the Kongo State's territory, between the headwaters of the Makua-Mobangi and Aruwimi Rivers, the 1,500 Batetela natives, forming the main body of the expedition, revolted. Great alarm was felt throughout the Free State; the native rising threatened to become general; and a massacre of all the Europeans was apprehended. In September, 1897, advices were received which tended to show that their fears were not without ground. The native soldiers of the State in the Torro district had killed 50 Belgian officers, and were destroying the forts and committing depredations right and left. The mutineers had 8 Maxim guns, and were well supplied with breech-loading rifles. In October it was officially reported that the Kongo troops under Lieutenant Henry had won a decisive victory over the revolted native soldiers, encountering the rebels near Lake Albert Edward Nyanza, killing 400 of them, and forcing the remainder to flee to the mountains.

KOREA, a kingdom in Asia, lying between the Sea of Japan and the Yellow Sea; under an absolute and hereditary monarchy; area, estimated 82,000 square miles; population reported 1894, 10,528,937; capital, Seoul; king, Li Hi. From remote times till 1895 the kingdom was under the suzerainty of China, and its form of government and penal code were modeled after those of that country. Formerly there were six administrative departments: civil affairs, revenue, ceremonies, war, justice, and public works; but these have undergone material changes by the Japanese since the war with China, who relinquished her suzerainty over the kingdom and acknowledged its independence in the treaty of Shimonoseki. It is only within recent years that the outside world has known much of anything concerning the internal condition and affairs of Korea, which, by reason of its extreme exclusiveness, was long known as the "hermit kingdom." The worship of ancestors is observed as in China; Confucianism is esteemed by the higher classes; temples and priests are prohibited in the capital; there are numerous Buddhist monasteries outside the capital; and about 40 British and American Protestant missionaries and 20 Roman Catholics have been permitted to establish themselves. The revenue is derived from a land tax, sale of trade monopolies, poll tax, and some other levies, and the court and palace are maintained by the sale of ginseng, a government monopoly, and the customs on foreign trade, which aggregate about \$500,000 per annum. In 1893 the value of

the merchandise trade at the three open ports of Jenchuan, Fusan, and Yuensan, was, imports, \$3,880,155; exports, \$1,698,116; principal imports, cotton, woolen, and piece goods, and metals; exports, beans, cowhides, and rice. Foreign trade is much larger, but no account is kept of that at the non-treaty ports or on the Russian and Chinese frontier. The exportation of ginseng is wholly to China, and reaches in value over \$200,000 per annum. Excepting small Japanese steamers on the Star River between Chemulpo and Seoul, internal transportation is by porters, pack-horses, and oxen. There is a royal mint in Chemulpo coining Japanese metal. Three lines of telegraph have been established, and a postal bureau operated in connection therewith was organized in 1895 and uses stamps made in Washington. According to the *Official Gazette* of June 22, 1895, the army consists of 8 regiments of infantry with 344 officers and 3,200 men; 2 trains with 800 men; and 2 regiments of cavalry, with 86 officers and 800 men. The government maintains a naval school under an English instructor, and a military school under two former officers of the United States army.

The war between China (*q. v.*) and Japan (*q. v.*), 1894-95, began in a struggle for supremacy in Korea. The Japanese took possession of the capital, secured a treaty of alliance, undertook the shaping of administration, and insisted on the independence of the kingdom in the negotiations for peace. Independence was proclaimed Jan. 8, 1895; internal troubles almost immediately broke out, culminating in an attack on the palace and the alleged murder of the queen Oct. 8; the queen was officially declared dead subsequently, but in January, 1896, was said to be alive and in hiding; a revolution broke out in the capital on Feb. 11, during which the prime minister and seven other high officials were murdered and the king and crown prince compelled to take refuge in the Russian legation; Russia organized a military and naval expedition; and British, American, and French marines were sent to Seoul, Feb. 15, to protect the interests of their respective countries. A new cabinet was said to have decreed the execution of a number of former ministers. A review of the situation, March 10, indicated that the internal troubles since the occupation of the capital by the Japanese were an outgrowth of Russian designs to embarrass Japan. After the suppression of the revolt, Feb. 11, 1896, the king, his ministers and the crown prince still continued to reside at the Russian legation, and there was a semblance of order in the capital, but at various points there were collisions between Japanese and Koreans; Japanese ascendancy seemed at an end and Russian influence was paramount. In the meantime concessions were granted for the construction of a railroad from Seoul to Chemulpo and one from Seoul to the mouth of the Yalu River. In February, 1897, official announcement was made in the Japanese Diet of a treaty having been concluded between Japan and Russia under which Korea's independence in both domestic and foreign affairs was acknowledged; Russia and Japan were to aid the king in maintaining order; both Russia and Japan were to keep a definite force of gendarmes and soldiers to protect their respective interests and subjects till order should be finally assured. The king returned to his own palace. In June, 1897, another conspiracy was discovered at the capital, the object being the return of the king to one of the foreign legations, overthrow of the Japanese faction, and appointment of a regent. On Oct. 15 the king proclaimed himself emperor from that date, and it was believed that the transition which Korea then made from a kingdom to an empire would have considerable influence in Oriental affairs. The treaty between China and Japan recognized the independence of Korea of the alleged suzerainty of China, and this status was strengthened by the terms of the treaty between Japan and Russia

above mentioned. Korea, therefore, was free to act as seemed best, and the change to an empire is regarded as a triumph of the Progressive party. On assuming the imperial title the emperor proclaimed a change in the name of the country from Cho-Sen to Harn, which it is to bear in the future.

KRAPOTKIN, PRINCE PETER, sociologist, was born at Moscow, Dec. 9, 1842. He was distinguished as a geologist and was secretary of the Russian Geographical Society for many years before he began the study of social questions. He sympathized with the radical socialists and was sentenced to imprisonment, 1877, but made his escape. He was expelled from Switzerland in 1881, and 1883 was condemned in France to 5 years' imprisonment. After 3 years he was released. He has since resided in England. He is a frequent contributor of weighty articles on sociology, political economy, agriculture, physical science, etc., to English periodicals. In the autumn of 1897 he made a lecturing tour of the United States.

KRUGER, PAUL, president of the Transvaal Republic, in South Africa, was born about 1827; and is a native Boer of Scandinavian descent. He belongs to the Dopper, the most conservative sect among the Boers. His early life was spent in tending cattle and fighting the Kaffirs. He has made two journeys to England in the interest of his people, by whom he is beloved, and has proved himself a man of great physical courage, of remarkable executive ability, and of shrewd political acumen. In 1880 he became the leader and president of his people, and has held their confidence and the office ever since. In 1897, yielding to the entreaty of his wife, he decided to retire wholly from public life; but in 1898 accepted a fourth election to the presidency. His personal independence is characteristically attested by his refusal to accept the invitation of Joseph Chamberlain, British colonial secretary, to visit England after the Jameson raid, and by his declaration in the Transvaal Volksrad, Aug. 25, 1897, that the Transvaal Republic did not recognize the suzerainty of Great Britain over it, a direct contradiction of a speech by the colonial secretary in the British House of Commons. For further glimpses of his interesting personality, see BOERS: CAPE COLONY; CHAMBERLAIN, JOSEPH; and JAMESON, LEANDER STAR.

LA CROSSE, city, capital of La Crosse county, Wis.; population (1890) 25,090; (1895, State census) 28,769. In 1896 the assessed valuations were: Real estate, \$9,660,381; public property, \$84,650; personal property, \$2,513,362—total, \$12,258,393; tax rate, \$21 per \$1,000. The bonded debt Jan. 1, 1897, was \$554,500; sinking funds, \$105,268; net debt, \$449,232. There is one national bank, with capital \$250,000; deposits, \$666,767; and resources, \$1,225,404. The city has an electric street railroad, operating over 10 miles of track within the city. According to the State census of 1895, the manufacturing establishments had \$2,099,550 invested in real estate and machinery and \$773,754 in stock and fixtures; employed 4,200 persons; paid \$1,352,471 in wages during the year; and had products: Lumber, shingles, and lath, \$1,911,858; beer, \$564,925; cotton goods, \$464,500; leather, \$409,200; iron products, \$320,700; cigars and cigarettes, \$189,717; carriages, wagons, and sleighs, \$105,634; woolen goods, \$100,000; articles of wood, \$51,325; flour, grist, etc., \$26,100; all other articles, \$791,894.

LA FARGE, JOHN, landscape painter, designer of several notable pictures in stained glass, and author, was born in New York City, March 31, 1835. His latest publications include *Considerations on Painting* (1895) and *An Artist's Letters from Japan* (1897).

LA FAYETTE COLLEGE, La Fayette, Ala., non-sectarian; co-educational; had at close of 1897, 8 professors and instructors; 212 students; 1,200 volumes in the library; \$15,000 in grounds and buildings; \$4,000 income; presidents, L. Jones, A. F. Trimble.

LAFAYETTE COLLEGE, Easton, Pa., Presbyterian; had at close of 1897, 28 professors and instructors; 311 students; 25,600 volumes in library; \$302,000 in productive funds; \$5,000 gifts; \$37,000 income; president, E. D. Warfield, LL.D.

LA GRANGE COLLEGE, La Grange, Mo., Baptist; co-educational; had at close of 1897, 10 professors and instructors; 200 students; 6,000 volumes in library; \$10,000 in productive funds; \$3,500 income; president, Jere. F. Muir, LL.D.

LAKE FOREST UNIVERSITY, Lake Forest, Ill., Presbyterian; co-educational; had at close of 1897, 134 professors and instructors; 2,170 students; 15,600 volumes in library; \$500,000 in productive funds; \$40,000 gifts; \$75,000 income; president, James G. K. McClure, D.D.

LAMBETH CONFERENCE, an assembly of bishops of Anglican and Episcopal churches throughout the world, in communion with the Church of England, held in Lambeth Palace, London, in July, 1897. There were present 194 bishops, and their deliberations were presided over by the Archbishop of Canterbury, Most Rev. Frederic Temple. The results of the deliberations are summed up in the encyclical letter given out July 31, 1897, and more fully detailed in the formal resolutions of the conference.

The matters treated of in the encyclical letter are: Intemperance and the work of temperance societies; impurity, the organization of societies to promote purity and the effect of state laws for checking the spread of loathsome diseases; marriage and divorce, with solemn warning against hasty unions and unwarranted dissolutions of a most sacred bond; industrial problems and the "great principle of the brotherhood of man;" poverty, and the duty of churchmen not only to give up their worldly goods, but also of "their time, their trouble, and their careful thought to the discovery of the best mode of helping individual cases of need;" international arbitration, which far better than war "saves the honor of the nations concerned and yet determines the question at issue with completeness," and which "leaves behind it a generous sense of passious restrained and justice sought for."

Passing from moral questions to ecclesiastical, the bishops expressed an earnest desire for unity among all the members of the Anglican churches throughout the world; to this end they recommended the formation of a "central consultative body for supplying information and advice." This duty was imposed on the Archbishop of Canterbury. The bishops further suggested the "natural and spontaneous formation of provinces," that is, of archiepiscopal or metropolitan jurisdictions presided over by archbishops. Regarding religious communities, *i. e.*, monastic or semi-monastic communities, the bishops declared that such communities "are capable of rendering great services, and have indeed already done so;" but they need further regulation. Of critical study of the Bible it is declared that such study "is essential to the maintenance in the church of a healthy faith." A refusal on the part of teachers of religion to face questions that may be raised regarding either the authority or the genuineness of any part of the Scriptures "creates painful suspicion in the minds of many whom we have to teach, and will weaken the strength of our own conviction of the truth that God has revealed to us." Treating of theological study, the bishops declared

that all the teaching of the Anglican church is founded on "Scripture and antiquity," and that "for interpreting the Bible, next after the Bible itself, the study of the writings and practices of the primitive church is of paramount importance." No definite resolution was reached in the conference as to ways and means of promoting unity among the Anglican churches; but a warm desire was expressed for friendly relations with certain communions outside the Anglican fold—the Moravians, the Scandinavian churches, the "Old Catholics," and similar bodies of seceders from the Papal communion. Work for conversion of Jews and Mohammedans is specially commended. Regarding the Jews "it seems probable that the English-speaking people can do more than any other in winning them." The time for approaching the Mohammedans seems to have come, and "the call to approach them would seem to have been made specially on" the Anglican churches. In the field of missions to pagans there is danger of collision "between different churches within our communion," meaning American and British Anglican churches. To prevent such occurrences, canons should be made "to prevent, as far as possible, the unseemliness of two bishops exercising jurisdiction in the same place." Different is the case where an Anglican mission is confronted in pagan countries by dissenters—Methodists, Baptists, etc. Where "signal spiritual blessings" attend the labors of the dissenters the Anglican missionaries "are to avoid as far as possible, without compromise of principle, whatever tends to prevent the due growth and manifestations of that 'unity of the spirit' which should ever mark the Church of Christ."

Appended to the encyclical letter are 63 resolutions formally adopted by the conference. Most of them are found expressed in the encyclical letter, but these are worthy of separate mention: 2, That a similar conference be held every 10 years; 5, that a consultative body be formed to give information or advice to the several national churches; 15, that the tendency of many Christians to have an unduly high opinion of Buddhism and Hinduism "should be vigorously corrected;" 35, that special intercession be made for the unity of the church; 36, that an effort be made to establish close relations between the Anglican church and the Russian and Oriental churches; 47, that the Archbishop of Canterbury take steps for the retranslation of the *Quicumque vult*, as the Athanasian creed is rather oddly designated. One of the resolutions, that relating to critical study of the Scriptures (No. 13 and commended in the encyclical letter), has for its basis a rather lengthy report of the special committee on that subject. The following paragraph from the report shows within what limits the critical study of the Bible is approved by the conference: "Your committee do not hold that a true view of Holy Scripture forecloses any legitimate question about the literary character and literal accuracy of different parts or statements of the Old Testament; but keeping in view the example of Christ and his apostles they hold that we should refuse to accept any conclusion which would withdraw any portion of the Bible from the category of 'God-inspired' scripture."

LAMSON, CHARLES M., clergyman, was born in Hadley, Mass., May 16, 1843; graduated at Amherst College in 1864; studied theology at Halle University; pastor in Worcester, Mass., in 1871-85; at St. Johnsbury, Vt., in 1885-93; and at Hartford, Conn., in 1893-97; and was elected president of the American Board of Commissioners for Foreign Missions, succeeding the Rev. R. S. Storrs, D.D., Oct. 14, 1897.

LANG, ANDREW, author, was born in Selkirk, Scotland, March 31, 1844. His recent works include *A Monk of Fife*; *The Poetical Works of Sir Walter Scott*,

selected and edited, with notes (both 1895); *The Animal Story Book*; *Pickle the Spy, or the Incognito of Prince Charles*; *The Life and Letters of John Gibson Lockhart* (all 1896); *At the Sign of the Ship*; *A Book of Dreams and Ghosts*; and *The Pink Fairy Book for 1897* (all, 1897).

LANGTRY, EMILY CHARLOTTE (LE BRETON), professional beauty and actress, was born on the Isle of Jersey in 1853; was married to Edward Langtry in 1873; separated from him in 1881; and secured a divorce from him in a California court in May, 1897. In September following, her engagement to marry Prince Esterhazy was authoritatively announced; in October she gained a notable social triumph at the races at Newmarket, England, through the favor of the Prince of Wales, and captured the Cesarewitch stakes at Newmarket, with her Australian horse Merman. Her divorced husband died in an asylum for the insane, Oct. 15.

LANSIL, WILBOR HENRY, animal painter, was born in Bangor, Me., Feb. 24, 1855; died in Dorchester, Mass., June 26, 1897.

LATHROP, GEORGE PARSONS, author, was born in Honolulu, Hawaii, Aug. 25, 1851; died in New York city, April 19, 1898.

LAURIER, SIR WILFRED, Canadian statesman, was born in Quebec, in 1841. He entered public life in 1871 as member of the Quebec legislature; was a cabinet minister in the Dominion government, 1877; became leader of the Liberal party, 1887; and premier, 1896; and soon after was knighted. He represented the Canadian government at the Queen's Jubilee, and received the honorary degree of LL.D. from Cambridge University, 1897. In November, 1897, he visited Washington, D. C.; was cordially received by President McKinley; and had several interviews with Secretary Sherman concerning causes of friction between the United States and Canada, which it was hoped might be terminated speedily by treaty or otherwise. He is an impressive, graceful and persuasive orator, and has earned the title "Silver-tongued Laurier."

LAWRENCE, city, capital of Essex county, Mass.; population (1890) 41,654; (1895, State census) 52,164. The assessed valuations in 1896 were: Real estate, \$26,669,525; personal property, 88,214,698—total, \$34,884,223; tax rate, \$15.60 per \$1,000; and the net debt, including a water debt of \$902,000, was \$1,283,745. The waterworks plant was valued at \$1,136,799, and with it the city owns property valued at \$2,138,783. There are electric street railroads connecting with Lowell, Haverhill, Methuen, Andover, and North Andover; 5 national banks, with combined capital \$1,025,000, deposits \$1,654,927, and resources \$3,116,046; 3 savings banks, with deposits \$9,217,499, and guaranty fund and surplus \$760,833; 2 libraries; and 5 daily and 7 weekly newspapers.

LAWRENCE UNIVERSITY, Appleton, Wis., Methodist Episcopal; co-educational; had at close of 1896, 24 professors and instructors; 361 students; 15,461 volumes in the library; \$220,000 in productive funds; \$101,000 gifts; \$123,000 income; president, Samuel Plautz. PH.D., D.D.

LEADVILLE, city, capital of Lake county, Col.; population (1890) 10,384 (1897) estimated 12,000. It is the principal city and trade center of the great gold, silver and lead mining region of Colorado. In 1896 the assessed valuations were: Real estate, \$1,320,641; personal, \$435,410—total \$1,755,781; total tax rate, \$65 per \$1,000; and in 1897 the net debt, all floating, was \$219,393. There were 2 national banks, with combined capital \$200,000, deposits \$1,712,880, and resources \$2,087,396; public school property valued at \$60,000; and 4 daily and 2 weekly newspapers.

LEAGUE OF AMERICAN MUNICIPALITIES, an organization founded for the purpose of inaugurating and promoting reforms in the methods of municipal government. At the annual meeting in Columbus, O., on Oct. 1, 1897 the principal feature was a paper by Allen Ripley Foote, from which the following extracts are taken:

"In 1888 it was reported that there were in the United States 544 municipal waterworks, 5 municipal gasworks, no municipal electric lighting works, and no municipal street railways. It is estimated that in 1897 there are 1,350 municipal waterworks, 12 municipal gas works and no municipal street railways. While ownership and operation may be intrusted to private corporations, regulation must always be a governmental function. The struggle for municipal ownership and operation is a struggle to depress the cost of rendering services, not to raise prices for services rendered. This is the meaning of the agitation for the municipal ownership and operation of public service industries that has taken place in almost every city and town in the United States within the last ten years, and is now rapidly reaching an acute stage of development through being made a political issue. If the investigation of the United States Department of Labor shall show that price cost to users and taxpayers charged by private corporations is unreasonably higher than cost price under municipal ownership and operation, private corporations will have no choice but to reduce their prices or to sell out to the municipalities in which they are located. To this final crucial test private corporations must submit. This test will bring the struggle to depress the cost of rendering municipal industrial services to an acute stage of development."

LEE, FITZHUGH, military officer and nephew of Gen. Robert E. Lee, was born in Clermont, Va., Nov. 19, 1835. He was appointed collector of internal revenue for the Western District of Virginia in 1895, and United States consul-general at Havana in 1896. The last post was a particularly delicate one, in view of the insurrection in Cuba, the fitting out of illegal expeditions in the United States by Cubans and their sympathizers, the necessity for preserving neutrality on the part of the United States, the countless complaints against the Spanish authorities by persons on the island claiming United States citizenship; and more particularly because of the excitement growing out of the blowing up of the United States battleship *Maine* in the harbor of Havana, on Feb. 15, 1898. General Lee was President Cleveland's personal selection for the office, and President McKinley deemed it unwise to accept his proffered resignation after the change in the administration. See HAVANA.

LEE, SAMUEL PHILLIPS, rear-admiral United States Navy, was born in Fairfax county, Va., Feb. 13, 1812; died in Silver Springs, D. C., June 5, 1897.

LEHIGH UNIVERSITY, South Bethlehem, Pa., non-sectarian; had at close of 1896, 37 professors and instructors; 350 students; 100,000 volumes in library; \$2,000,000 in productive funds; president, Thomas M. Drown, LL.D.

LELAND STANFORD JR. UNIVERSITY, Stanford University Station, Cal., non-sectarian; co-educational; had at close of 1896, 80 professors and instructors; 1,100 students; 35,000 volumes in library, \$2,000,000 in productive funds; president, David Starr Jordan, LL.D. In February, 1897, Mrs. Leland Stanford notified the trustees that she had made a deed of gift to the university, to take effect at her death, of the Stanford mansion in San Francisco, with all the furnishings, paintings, and other works of art, valued in all at over \$1,000,000. In April following she secured an insurance on her life in favor of the university

for \$1,000,000, and under the contract with the company this sum will be doubled in case she lives ten years and continues her premium payments.

LELAND UNIVERSITY, New Orleans, La., non-sectarian; co-educational; had at close of 1896, 18 professors and instructors; 455 students; 1,000 volumes in library; \$92,750 in productive funds; \$1,046 gifts; \$8,647 income; president, Edward C. Mitchell, D.D.

LEO XIII. (GIOVACCHINO VINCENZO PECCI), pope, was born in Carpineto, Italy, March 2, 1810; succeeded Pius IX. in 1878. In June, 1896, he promulgated an encyclical on "the reunion of all Christian churches," which was ordered to be read in all Roman Catholic churches in the world, and which attracted marked interest beyond the pale of the Roman church as the last official utterance of its head. The pope's argument for the necessity of union among Christians, in belief and in church government, is based on analogy and on the express word of Scripture. In his usual providence God makes use of human instruments to effect the sanctification and salvation of men; and the Son of God, in order to perpetuate his mission, chose apostles and disciples, whom he trained that they might communicate to the world his teachings. Those teachers were commissioned to execute their mission "to the end of time," and to teach all nations; reciprocally, obligation was imposed on all mankind to hear and obey their word. In Scripture the church is called the "body of Christ;" the church is therefore a body, living, organized, visible, animated with a supernatural life, acting and speaking with Christ's power and authority. Those who either deny that Christ's church is a visible body, or refuse to allow that it is the perennial communication of the gifts of divine grace, are in grievous error. The connection and union of both elements—visibility and supernatural life—"is as absolutely necessary to the true church as the intimate union of soul and body is to human nature." What was the intent of Christ in founding his church? He certainly wished it to be one. His mission was to save, not some nations, but the whole human race, without distinction of time or place; and as the mission of his church was to hand down through every age the blessings of salvation, it is essential that his church should be one in all lands and in all times. It was Christ's will that the unity among his followers "might in some measure shadow forth the union between himself and his Father." To this end there must be in his church unity of faith; and the nature of this unity of faith is to be ascertained from the commands and teachings of Christ himself. The mere possession of the Bible is not sufficient to insure unity of faith, and as a fact does not insure it. There had to be another agency to insure this unity; what means did Christ adopt for this end?

Christ gave to his apostles authority like his own, and promised that the spirit of truth would abide with them forever; it was no more allowable to reject the apostles' teaching than Christ's own. But the apostles' commission had no limit in time or space; they died, but the commission did not expire with them; the authority given to them must persist to the end of time. The church possesses the fullness of that authority. Hence when the church declares that this or that doctrine is contained in the deposit of divine revelation, that doctrine must be believed by every one as true.

Besides being the custodian of the faith and its divinely instituted teacher, the church is also the instrument, the channel through which is communicated to men the salvation purchased by Christ. The dispensation of the divine mysteries was not committed indiscriminately to all Christians, but to the apostles and their successors; thus a duly constituted society was formed out of the divided

multitudes of peoples, one in faith, one in end, one in participation of the means to that end, one as subject to the same authority.

Where does the supreme authority reside? It cannot be doubted, from the words of Holy Writ, that the church, by the will of God, rests on St. Peter: to him were given the "keys of the kingdom of heaven," and power "to bind and to loose." The metaphorical expressions of "keys" and of "binding and loosing" signify the power of legislating, of judging, of punishing. And as the governing authority belongs to the very essence of the church's mission to teach all nations to the end of time, it passed, on Peter's death, to his immediate successor, and thence is transmitted from age to age. This is not to say that the authority of Peter and Peter's successors is the only divine authority in the church; the bishops, who are the successors of the apostles, inherit the apostles' power; they are, consequently, not to be regarded as mere vicars of the Roman pontiffs; they exercise a power which is truly their own over the people whom they rule. But in the exercise of this power they must be in accord with the successor of St. Peter; bishops are deprived of the right and power of ruling if they deliberately secede from Peter and his successors, because by that secession they separated themselves from the foundation on which the whole edifice rests. For the due preservation of unity of faith it is not sufficient that the head should have been charged merely with the office of overseer, or should have been invested merely with the power of direction: it is absolutely necessary that he should have received real and sovereign authority over the entire community of the faithful. Not only are the bishops individually subject to the supreme authority of the see of Peter: they are no less subject when congregated in councils. The Scripture attests that the keys of the kingdom of heaven were given to Peter alone, while the power of loosing or binding was conferred on all the apostles with Peter; but there is nothing to show that the apostles received supreme power without Peter or against Peter. Wherefore, in the decree of the Vatican Council as to the nature and authority of the primacy of Peter's successor, no newly conceived opinion is set forth but the venerable and constant belief of the church in all ages.

LIBRARIES IN THE UNITED STATES. The United States Commissioner of Education, in his annual report for the school year 1895-96, issued in 1897, treats with much fullness the public, society, and school libraries of the country. The report shows that 4,026 libraries of 1,000 volumes and upward each, responded to the commissioner's request for information. These libraries had a total of 33,051,872 volumes, indicating an increase in five years of 523 libraries and 7,074,229 volumes. More than half the increase in the number of volumes was made by the libraries in the North Atlantic Division, which shows an increase of more than 28 per cent. in the five years. The North Central Division also shows an increase of about 28 per cent. in the number of volumes, while the Western Division increased its number of volumes nearly 40 per cent. The increase in the South Atlantic Division was 18 per cent. and in the South Central 21 per cent. Of all libraries reporting, 2,166 had reading-rooms supplied with periodicals aggregating 116,248; 1,852 libraries reported the issue of 35,075,055 books for home reading; 1,147 libraries are supported by taxation, 2,346 by corporations, and 14 by both; 1,558 are entirely free, 635 free for reference only, and 772 free to subscribers; 605 have permanent endowments amounting to \$17,570,673; 567 have buildings valued at \$33,291,259; and 2,333 added books during the year that cost \$1,574,410. Two libraries have more than 500,000 volumes

each; 4 more have over 300,000; 28 additional have over 100,000; 69 more have over 50,000; and 155 others have over 25,000. The following table summarizes the number and distribution of libraries of 1,000 volumes and upward:

States and Territories.	Libraries Reporting.	Volunes.	Pamphlets.
United States.....	4,026	33,051,872	5,444,788
North Atlantic Division.....	2,000	17,647,723	2,801,370
South Atlantic Division.....	322	4,015,087	966,599
South Central Division.....	255	1,390,451	215,856
North Central Division.....	1,195	8,016,780	1,250,342
Western Division.....	254	2,011,831	210,321
North Atlantic Division:			
Maine.....	93	542,666	100,443
New Hampshire.....	122	505,890	108,887
Vermont.....	67	359,213	73,827
Massachusetts.....	494	5,436,397	1,231,963
Rhode Island.....	74	580,305	95,550
Connecticut.....	151	1,102,082	214,405
New York.....	572	5,251,347	563,914
New Jersey.....	94	801,152	116,337
Pennsylvania.....	339	2,964,761	355,564
South Atlantic Division:			
Delaware.....	11	83,763	15,364
Maryland.....	67	985,330	127,669
District of Columbia.....	15	1,730,910	736,321
Virginia.....	50	341,225	31,559
West Virginia.....	10	46,137	7,548
North Carolina.....	40	218,757	16,192
South Carolina.....	32	232,418	9,372
Georgia.....	41	270,041	19,292
Florida.....	13	43,506	4,920
South Central Division:			
Kentucky.....	47	318,661	27,739
Tennessee.....	62	318,571	29,436
Alabama.....	28	117,337	35,121
Mississippi.....	31	196,870	22,015
Louisiana.....	27	212,828	46,431
Texas.....	39	151,222	13,894
Arkansas.....	17	87,690	37,592
Oklahoma.....	2	5,157	1,299
Indian Territory.....	2	2,205	798
North Central Division:			
Ohio.....	202	1,587,861	205,754
Indiana.....	107	654,651	53,357
Illinois.....	214	1,822,580	447,198
Michigan.....	133	975,031	70,155
Wisconsin.....	162	626,142	132,224
Minnesota.....	75	467,397	46,364
Iowa.....	113	667,765	56,339
Missouri.....	194	686,355	115,355
North Dakota.....	6	23,082	3,190
South Dakota.....	14	31,893	10,561
Nebraska.....	42	226,713	26,691
Kansas.....	63	302,789	83,569
Western Division:			
Montana.....	13	69,222	9,892
Wyoming.....	4	23,785	3,299
Colorado.....	34	300,199	29,318
New Mexico.....	6	13,273	3,399
Arizona.....	4	17,472	359
Utah.....	11	49,682	18,002
Nevada.....	6	49,989	2,240
Idaho.....	5	13,623	10,220
Washington.....	20	76,416	19,380
Oregon.....	10	91,190	64,628
California.....	35	1,307,659	116,981

LIBRARY CONFERENCE, INTERNATIONAL. The Second International Library Conference was held in London, England, in July, 1897, under the presidency of Sir John Lubbock. There was a large attendance, representing libraries in every part of the United Kingdom, and there were also present many librarians and others connected with public libraries in the United States, Canada, the West Indies, Australia, Denmark, and other countries. The delegates and guests were welcomed by the Lord Mayor and Corporation of London. In his inaugural address Sir John Lubbock said that the existence of the library congress was an indirect result of an act passed in 1850, which had been adopted since by some 350 places in the United Kingdom, containing nearly half the population. During 1857-66 it was adopted by 15 localities; in 1887-96, by 190. In London the recent progress was remarkable. In 1850-66 only one public library was established, and Westminster took the lead; in 1867-76, not one; in 1876-86, only two; and in 1887-96, 32. These libraries now contain over 5,000,000 volumes, their annual issues amount to over 27,000,000, and the attendance to 60,000,000. Australia had 844 public libraries, with 1,400,000 volumes; New Zealand, 298 with 330,000 volumes; South Africa, about 100 with 300,000; and the public libraries of Canada organized under the act contained over 1,500,000 volumes. There are also many libraries of a public character not included in the above statement, like that of the British Museum with its 2,000,000 volumes, because not organized under the public libraries act. A further interesting feature of Sir John's address was his announcement of the steps already taken to secure catalogues of important publications. The Royal Colonial Institute had recently forwarded to every colonial government a request for the issue, through their official gazettes or otherwise, of registers containing entries of all publications within given periods, and also all other locally published works, with their full titles, so as to furnish for general information complete records of the literature of each colony. In the department of science, the British Royal Society had accomplished a great and useful work in its catalogue of scientific papers, contained in 9 thick quarto volumes, and was organizing a catalogue intended to contain the titles of scientific publications, whether appearing in periodicals or independently, arranged both according to the authors' names and the subject-matter. The society had appointed a committee to inquire into and report on the feasibility of adding to the completeness of such a catalogue by international co-operation. Sir John also called attention to the classified index of the London library, in which were given the names of the principal authors who had written on each subject, and declared the assistance there given to the student to be invaluable. See **LIBRARIES IN THE UNITED STATES.**

LI HUNG CHANG, statesman, was born in Seu-chew, Nganhwuy province, China, Feb. 16, 1823. He suppressed the great Taiping rebellion in 1864 and the Nienfei uprising in 1868; was appointed viceroy of the metropolitan province of Chihli, in which Peking is situated, in 1870; was special imperial commissioner to negotiate peace with Japan in 1895; and has held the offices of senior grand secretary of state, high imperial commissioner of foreign affairs, director-general of the coast defenses of the north and of the imperial navy, northern superintendent of trade, and commander-in-chief of the army of North China. Nearly all the progress of China in the last thirty years can be traced directly to his influence. He made an official visit to the United States in the summer of 1896, bearing a message from the emperor to the president.

LILIUOKALANI (MRS. DOMINIS), ex-queen of Hawaii. She accepted as final the overthrow of royalty in Hawaii, Jan. 22, 1895, in a formal document addressed to President Dole. On Oct. 23, 1896, the government of the republic

extended to her a full pardon. The ex-queen visited the United States, 1897, and Jan. 25 paid a visit to President Cleveland, and expressed to him her thanks for his having withdrawn from the Senate the treaty of annexation of Hawaii to the United States. When, in June, a new treaty was under consideration in the United States Senate, Liliuokalani entered a solemn protest against its ratification. In the protest she describes herself as "by the grace of God queen of the Hawaiian Islands on the 17th day of January, 1893." The treaty is declared to be "an act of wrong toward the native and part native people of Hawaii . . . in violation of international rights." She published *Hawaii's Story, by Hawaii's Queen* (1898). See HAWAII.

LINCOLN, city, capital of Nebraska and of Lancaster county; population (1890), 55,154. In 1896 the assessed valuations were: Real estate, \$4,873,076; personal property, \$612,234—total, \$5,485,310; total tax rate, \$70 per \$1,000. The bonded debt, Jan. 8, 1897, was \$1,169,100; floating debt, about \$35,000; and there was also a district paving debt of \$452,083, not included in the city debt. There are 3 national banks, with combined capital, \$850,000; deposits, \$1,043,295; and resources, \$2,431,746; electric street railroad, with 40 miles of track; 5 daily, 17 weekly, 3 semi-monthly, and 6 monthly periodicals; and City, State, State Historical Society, Teachers' and University libraries.

LINCOLN TERRITORY. A movement to divide the Territory of Alaska and to organize out of the northwest portion a new territory to be known as Lincoln gained a new impetus in the latter part of 1897 because of the phenomenal development of the Klondike and Yukon gold regions. A bill was prepared during the summer for introduction into Congress at the session of 1897-98, according to which the new territory would have for its southeastern boundary Mount St. Elias; from that point the eastern boundary would run directly to the Arctic Ocean, which would form the northern boundary; the line of the western boundary would run down the coast line below St. Michael to the top of the divide between the Yukon and continue to the Kokyn River; and the southern boundary would follow the 62d parallel east to the Copper River, and thence to Mount St. Elias. The new territory would contain the rich placer mining region of the Yukon as far as the boundary line, with the old and new trading posts and settlements from St. Michael to Circle City; and the Territory of Alaska proper would include the Aleutian Islands, the coaling stations of Dutch Harbor and Unalaska, and the balance of the Alaskan peninsula, the island of Unga and its quartz mines, Kodiak Island, Kanai peninsula and the placer mines of Cook Inlet, Prince William Sound, and the placer mines along the Copper River, the towns of Wrangel, Sitka, Juneau, Dyea, Skagway, and the passes on the overland route to the Yukon. The bill named the city of Weare, on the Yukon, about halfway between Dawson City and St. Michael, as the capital of the proposed territory. The Department of the Interior had decided to locate a new United States land office at Circle City, but as that place practically became deserted, owing to the rush to the regions further north, it was believed that the office would be established at the new capital. The population of the area inclosed within the boundary lines of the proposed new territory was estimated in 1897 at over 3,000 whites and 8,000 natives.

LINCOLN UNIVERSITY, Lincoln, Ill., Cumberland Presbyterian; had at close of 1896, 9 professors and instructors; 175 students; 3,000 volumes in library; \$49,700 in productive funds; \$3,800 gifts; \$7,255 income; president, Archelaus E. Turner, A.M.

LINCOLN UNIVERSITY, Oxford, Pa., Presbyterian; co-educational; had at close of 1895, 11 professors and instructors; 191 students; 14,000 volumes in library; \$394,800 in productive funds; \$35,000 income; president, I. N. Rendall, D.D.

LISTER, SIR JOSEPH, surgeon, was born in Upton, Essex, England, in 1827. He is the founder of modern antiseptic surgery, and one of the first to study the question of disease germs. In recognition of his scientific services he was made a baronet 1883. As president of the British Association, 1896, he reviewed his connection with antiseptic studies. He was elected president of the Royal Society, 1895.

LITTLE ROCK, city, capital of Arkansas and of Pulaski county; population (1890) 25,874. The last reported assessed valuations were: Real estate, \$8,449,435; personal property, \$2,979,068—total, \$11,428,503; and the total debt, Jan. 1, 1897, was \$248,798; cash on hand, \$8,034; net debt, \$240,764. There are 2 national banks, with combined capital, \$500,000; deposits, \$711,268; and resources, \$1,628,705. The city has an electric street railroad, using 20 miles of track. The libraries comprise the Marquand, State, University, Supreme Court, and the Arkansas Female College. Public school property, for white and colored pupils, is valued at over \$300,000. The newspapers and periodicals comprise 2 dailies, 9 weeklies, and 4 monthlies.

LITTLE ROCK UNIVERSITY, Little Rock, Ark., Methodist Episcopal; co-educational; had at close of 1896, 15 professors and instructors; 200 students; 2,500 volumes in library; gifts, \$500; income, \$5,500; president, J. W. Wilkison, LL.D.

LIU TSAO HUNG, grand counselor of China and chief opponent of Li Hung Chang, was born in Central China about 1835; died in Peking, in August, 1897.

LOCKJAW, popular name of the malady known in medical science as tetanus. The success of the diphtheria antitoxin (see DIPHTHERIA) led Prof. Dr. von Behring, of Halle, and Professor Knorr, of Marburg, to undertake experiments to secure a tetanus antitoxin, and in October, 1896, the *Deutsche Medicinische Wochenschrift*, of Berlin, contained an article signed by both professors, describing the qualities and best methods of using an antitoxin for tetanus, which is now prepared under government supervision as a commercial product, and offered for use by medical practitioners under the same conditions as diphtheria antitoxin from the same source. The disease has its characteristic microbe, which has been recognized, isolated, described, and reproduced by artificial culture. The tetanus antitoxin is similar in nature, action, and in the methods of its preparation to the antitoxin of diphtheria. It is prepared for use both as a dry powder, for the treatment of developed cases of tetanus in men and animals, and as a liquid solution, employed for prophylactic purposes. In the dry form it is designated as a hundredfold normal antitoxin, is put up in vials containing 5 grams each, and each vial is believed to contain a sufficient quantity for the cure of a developed case. The contents of one vial are dissolved in 50 cubic centimeters of sterilized water at a temperature of 40° C., and injected hypodermically at a single dose. The solution is of fivefold strength, and is put up in sealed 5-gram vials. In the presence of wounds, from which lockjaw is feared, a small subcutaneous injection of the solution is made, and the wounds should be treated antiseptically.

LOMBARD UNIVERSITY, Galesburg, Ill., Universalist; co-educational; had at close of 1896, 19 professors and instructors; 175 students; 7,000 volumes in

library; \$200,000 in productive funds; \$11,000 gifts; \$14,000 income; president, Charles E. Nash, A.M., D.D.

LONDON, city, capital of the British Empire and of England; population (1891), 4,232,118; (1896) 4,443,018. The city has an area of 118 square miles, and according to the census of 1891, a population of 35,865 to the square mile.

Growth.—In the year ending in August, 1897, the number of houses erected in the city was 14,591. This is, of course, in the Greater London of the Registrar-General. The London of the School Board contained in 1891 the vast aggregate of 557,134 inhabited houses, which was more than one-tenth of all the dwellings in England and Wales; Birmingham had 85,624; Liverpool, 91,484, and Manchester, 100,249. But in the Greater London of the Registrar-General's weekly return, the number of inhabited houses was 767,679, or nearly one-sixth of the houses in England and Wales. The largest aggregate of inhabited dwellings next to that in the Thames Valley is that on the Irwell, where the twin towns of Manchester and Salford had between them 139,412 inhabited houses. But London, at the present rate of growth, is adding more to its streets and squares in ten years than the whole of Manchester and Salford put together. There really is a new town, for each year London adds an Ipswich, a Northampton, a Southampton, or a Reading to its already gigantic size. Neither of these towns, large, active, enterprising as they are, contained in 1891 so many houses as are added to London every year. They are all growing with great rapidity, and probably each of them now contains nearly as many houses as London adds to itself yearly.

Cost of Government.—During the fiscal year 1896-97, the expenditures of the city government aggregated £2,432,932, or \$11,824,650. The budget for 1897-98 estimated the expenditure at £2,068,842 on the county account, and £383,647 on the special county account, a total of £2,452,489. On April 8, 1897, the valuations were: County, excluding the city parishes, £31,614,470; city parishes, £1,484,252—total, £36,098,722. A penny rate over the whole county produced to the council in 1896-97, £149,306; it is estimated to produce in 1897-98 £150,411. The new rate will be 11½d. in the pound—viz.: 12d. for general county purposes and 2½d. for special county purposes. The large balances brought forward from 1896-97, aided by the improved receipt from Exchequer contribution, must be regarded as somewhat exceptional, and they have operated to reduce the rate for 1897-98. For the past year it was 15d. The costs of prosecutors and witnesses in criminal prosecutions stand at £19,950; pensions, etc., at £22,075, and the grant to guardians for indoor paupers at £326,809. The Bridges Committee desired £17,840 for Woolwich Ferry, £10,160 for the county bridges, and £9,575 for the maintenance of Blackwall Tunnel. Under the cognizance of the Building Act Committee, occur charges in connection with sky signs (£385), and the inspection of factories and workshops (£1,550). To pay salaries, wages, rents, taxes, and other charges of the council's establishment, £126,265 was required. For the Fire Brigade, "staff" represented £92,715, "stations" £32,600, and "plant" £28,850. The Highways Committee needed £12,310 for the maintenance of the Victoria Albert and Chelsea Embankments, £1,245 for inspection and testing in connection with electric lighting, and £11,100 for payments to local authorities in regard to main roads. A sum of £232,330 was associated with the main drainage system, and the maintenance of parks and open spaces demanded £107,590, including £7,800 for music. Parliamentary expenses figured at £10,000.

Water Supply.—The water supply of London reaches 841,461 houses, and the

average daily consumption is 187,580,233 gals., or a daily average of about 33 gals. per capita in a population of 5,675,270. The area supplied is 845 square miles, and there are 5,147 miles of water pipe and 33,965 fire hydrants. Of this water 107,000,000 gals. come from the river Thames, 51,000,000 from the river Lea, and the rest from springs and artesian wells. In former years there was a great deal of criticism directed against the London water supply because of its insufficient quantity and its impure quality, but since 1893, when a parliamentary commission was appointed to investigate the question, there has been no cause of complaint. The greater part of the supply taken from the Thames comes from above Richmond, where the water is comparatively pure, and is conducted by a series of aqueducts into 54 different reservoirs, covering 580 acres, with an aggregate capacity of 1,935,100,000 gals. From these the water is passed through 120 filtering beds, some of which absorb 1,000,000 gals. a minute. The water passes through 6 or 7 inches of sand before it reaches the pipes, and this sand is cleaned carefully every month.

Proposed New Supply.—The County Council has before it plans for a new metropolitan water supply that are colossal, both in design and cost. The plan, as prepared by the council's engineer, contemplates taking the new supply from Wales, at a cost in the first instance of £17,500,000, to be increased when additional supplies are obtained to £38,000,000. Two of the reservoirs will be the largest ever constructed in the country. The works would possess a dual character, including two aqueducts, the largest in the world, one 150 miles in length and the other 176 miles. The former would be the first to be constructed, the latter awaiting commencement at a subsequent date. Each is to convey 200,000,000 gals. per day, and both are to be entirely covered over for their whole length. The northern or midland counties aqueduct will start from Hay, in the Wye Valley, and discharge into a service reservoir a little to the north of the Elstree Hills. The southern aqueduct would also pass from the Wye Valley, and would run parallel with the first as far as Chedworth, after which it would proceed by way of Hungerford, Basingstoke, and Guildford, to Banstead. The proposed sources of supply are situated at altitudes ranging from 600 to 2,800 ft. above the sea level, at the headwaters of the rivers Usk, Wye, and Towy, in the counties of Cardigan, Brecon, Radnor, and Montgomery. The water will flow by gravitation into the service reservoirs; and the only pumping required will be for the small areas on the summits of Hampstead, Highgate, Shooter's Hill, and the Sydenham Hills. In 1896 the council decided to prepare for introduction in Parliament, in the session of 1897, bills for the purchase of the property and franchises of the eight metropolitan companies now supplying water.

Another Great Fire.—One of the most disastrous fires the city has had since the great conflagration of 1666 broke out on Nov. 19, 1897; raged furiously for nearly five hours despite the drenchings of more than 100 steam fire engines; burned over two acres of ground; destroyed upward of 150 warehouses, manufactories, and other buildings; and caused a pecuniary loss exceeding \$25,000,000. It originated in the explosion of a gas engine, and ravaged the district bounded by Aldersgate Street, Redcross Street, Maidenhead Court, and Bradford Avenue. The historic church of St. Giles, Cripplegate, which contains the tombs of John Milton, John Fox, Frobisher, the voyager, and Speed, the typographer, and a stained-glass window to Milton's memory, presented by George W. Childs, was much damaged and its vicarage destroyed. The principal buildings burned down were stocked with goods made up for the Christmas trade, or contained goods in various stages of manufacture.

LONG, JOHN DAVIS, lawyer, was born in Buckfield, Me., Oct. 27, 1838; was graduated at Harvard in 1857; admitted to the bar in 1861; elected governor of Massachusetts in 1879, 1880, and 1881, and representative in Congress, serving in 1883-89; received degree of LL.D. from Harvard in 1880; published a translation of Virgil's *Æneid* (1879); edited *The Republican Party: Its History, Principles, and Policies* (1892); and became secretary of the navy in 1897.

LONGSTREET, JAMES, lieutenant-general in the Confederate army, was born in Edgefield District, S. C., Jan. 8, 1821. In October, 1897, he was appointed by President McKinley United States commissioner of railroads, to succeed Wade Hampton, another Confederate lieutenant-general.

LORNE, SIR JOHN GEORGE EDWARD HENRY DOUGLAS SUTHERLAND CAMPBELL, MARQUIS of, son of the Duke of Argyll, son-in-law of Queen Victoria, and author, was born in London, England, in 1845. He was elected to Parliament for Manchester, South, on the Liberal Union ticket in 1895. His last literary production was the libretto for the opera of *Diarmid* by Hamish McCann, which was first produced at Covent Garden Theater, London, on Oct. 23, 1897. The occasion proved an interesting musical and dramatic event.

LOS ANGELES, city, capital of Los Angeles county, Cal.; population (1890) 50,395. In 1896 the city had an assessed real estate valuation of \$44,488,922; and Feb. 23, 1897, a bonded debt of \$1,408,900 (including water debt \$29,250); sinking fund, \$58,253; net debt, \$1,350,647; and no floating debt. There are 4 national banks, with combined capital, \$1,350,000; deposits, \$2,796,676; and resources, \$5,515,805; 380 miles of streets, of which 13 are paved; 100 miles of sewers; and 317 miles of water mains. Including interest charges on debt, the expenditures for maintenance of the city government aggregate \$800,000 per annum, and expenditures for public education \$323,161. The city has public school property valued at \$755,000; 7 libraries of all kinds; and 6 daily, 26 weekly, and 9 monthly periodicals.

LOUISIANA, one of the United States of North America; admitted to the Union April 30, 1812; seceded Jan. 26, 1861; readmitted July 13, 1868; counties, 99; capital, Baton Rouge.

State Officers, 1896-1900.—Governor (elected for 4 years, salary \$4,000 per annum), Murphy J. Foster; lieutenant-governor, R. H. Snyder; secretary of state, John T. Michel; treasurer, A. V. Fournet; auditor, W. W. Heard; attorney-general, Milton J. Cunningham; adjutant-general, Allen Gumel; superintendent of public education, J. V. Calhoun; commissioner of agriculture, T. G. Lee; commissioner of insurance, J. J. McCann; chief justice of the supreme court, Francis T. Nicholls; associate justices, Newton C. Blanchard, Lynn B. Watkins, Joseph A. Breaux, and Henry C. Miller; clerk, T. McC. Hyman—all Democrats.

Legislature, 1897.—Democrats, senate 28, house 60, joint ballot 88; Republicans, senate 7, house 24, joint ballot 31; Populists, senate 1, house 11, joint ballot 15; Democratic majority, senate 20, house 22, joint ballot 42.

Elections.—In the State elections, April 21, 1896, Governor Foster (renominate) received 116,216 votes, and John N. Pharr, Fusion, 90,188, and the legislature, May 14, declared the governor re-elected. The congressional elections resulted in the choice of the Democratic candidate in each district. In the presidential election the Democratic candidate received 77,175 votes; the Republican 22,036; and the National Democratic 1,915.

Farm Products.—Reported Dec. 31, 1895: Corn, 22,574,284 bush., from 1,247,198 acres, value \$9,029,714; oats, 575,715 bush., from 38,383 acres, value \$207,-

268; potatoes, 827,789 bush., from 9,301 acres, value \$596,008; and hay, 74,532 tons, from 36,897 acres, value \$718,488. The sugar output was 710,427,838 lbs., or 355,384 tons, as compared with 297,737 tons in 1894. This was the largest crop ever produced in the State, and entitled the planters to \$14,216,558 under the sugar bounty law. The production also included 28,334,513 gals. of molasses. The cotton crop for the year ending Aug. 31, 1895, was estimated at 600,000 bales. Rice, despite a drought during the growing season, yielded 98,867,200 lbs. in 1894, and, with a largely decreased output in 1895, gave growers better prices because of the Chinese-Japanese war.

Farm Animals.—Reported Jan. 1, 1897: Horses, 141,164, value \$3,855,824; mules, 88,239, value \$4,661,317; cows, 153,538, value \$2,341,454; cattle, 268,425, value \$2,321,531; sheep, 136,311, value \$166,885; and swine, 790,961, value \$2,235,255—total value, \$15,582,266.

Sulphur Mining.—The most important development of mineral resources in late years was accomplished in 1895, when a syndicate owning a great deposit of sulphur at Sulphur City, Colcasieu parish, succeeded in liquefying the rock by forcing superheated water to it through a bore hole. In a molten state the sulphur was pumped out and evaporated. This achievement was the result of experiments extending over 35 years, the difficulty being previously to reach the rock through several hundred feet of quicksand that covered it. Initial operations yielded 100 tons of sulphur per day, and it was expected that there would soon be a steady supply large enough to relieve the United States from importing the mineral and to supply the world's demands.

Mineral Products.—Excepting sulphur, the mineral products of the State in 1894, the last year reported, were restricted to productions of clay and salt. In the former industry, 50 establishments reported value of output as follows: Common and pressed brick, \$442,862; fancy brick, \$52,500; vitrified paving brick, \$9,400; drain tile, \$12,500—total, \$517,262. The salt product was 186,050 bbls.

Finances.—On Feb. 15, 1897, the recognized bonded debt was: Interest-bearing, \$10,877,800; baby bonds and certificates, not now bearing interest, \$915,917—total, \$11,793,717; and judicial expense fund, \$223,827—total debt, \$12,017,544. Bonds not recognized aggregate \$3,953,000, and fraudulent consols and baby bonds outstanding, \$795,535. The total assessed valuation in 1894 was \$251,091,348; in 1895, \$249,621,419; and in 1896, \$251,911,316, the largest since 1870, which was \$253,371,890. In 1895 the board of liquidation began buying State bonds with the surplus of interest funds in the treasury.

Banks.—On Oct. 31, 1897, there were 19 national banks in operation and 8 in liquidation, the active ones having a combined capital of \$3,360,000, and holding \$1,187,000 in United States bonds. These banks had outstanding on loans and discounts \$14,036,509, represented by demand paper with individual or firm names, \$1,167,521; the same secured by stocks, bonds, and other personal securities, \$2,758,644; time paper with two or more individual or firm names, \$5,085,721; time paper with single individual or firm name, \$1,256,828; and the same secured by stocks, bonds, and other personal securities, \$3,767,795. The banks held in coin and coin certificates \$1,593,419, of which \$805,945 was in gold coin. The circulation account was: Total issue, \$12,699,060; redeemed, \$11,310,651; outstanding, \$1,388,409. There were deposits, \$15,766,527; reserve required, \$3,751,178; reserve held, \$4,775,875; ratio of reserve, 7 banks in New Orleans, 30.23 per cent, 12 other banks in the State, 30.73. During the year ending Sept. 30, 1897, the exchanges at the United States clearing house at New Orleans

aggregated \$420,182,685, an increase of \$92,638,472 over the total of the previous corresponding period. The State banks, June 30, 1897, numbered 20, and had capital, \$2,413,150; deposits, \$7,322,044; resources, \$10,305,164; and surplus and profits, \$417,381. There were 4 stock saving banks, with capital, \$400,000; deposits, \$2,519,393; resources, \$3,218,479; and surplus and profits, \$299,086. Combining all these institutions, the State had an aggregate banking capital of \$6,173,150.

Building and Loan Associations.—The last general report on these associations (1893) showed a total of 28 organizations, of which 26 were local, 2 national, 26 serial, and 2 permanent. There were reported by all associations, shareholders, 15,196; by 22, shares issued, 215,724; and by all, shares matured, 2,738, shares free, 82,723, and shares borrowed on, 28,568. The total assets and liabilities were \$4,829,271; loans on real estate, \$1,390,566; and dues and profits, \$3,972,317. During the life of 26 associations, 40 mortgages were foreclosed, involving \$72,050, on which there was a loss of \$11,542. Of all associations, 27 reported 2,927 homes and 146 other buildings acquired.

Internal Revenue.—During the fiscal year ending June 30, 1897, the collections of internal revenue in Louisiana and Mississippi aggregated \$1,299,526.39, from the following sources: Distilled spirits, \$759,573.77; tobacco, \$296,169.23; fermented liquors, \$238,156.68; oleomargarine, \$5,220; and penalties, \$117.53. During that year there were 177 single-account cigar factories, which used 1,431,114 lbs. of tobacco, and had an output of 50,054,727 cigars and 149,608,361 cigarettes; and 67 other tobacco factories, which used 1,470,280 lbs. of materials, and had an output of 3,465 lbs. of plug, 1,321,979 lbs. of smoking tobacco, and 13,661 lbs. of snuff. The quantity of spirits rectified was 1,111,833.70 gals.; gauged, 3,656,222; fermented liquors produced, 249,250 blis.

Railroads.—On Jan. 1, 1894, the total railroad mileage was 1,992.84. During that year 7 companies constructed a total of 91 miles of new road, making Jan. 1, 1895, a total mileage of 2,083.81. A report at the close of 1894 showed: Capital stock, \$34,052,425; funded debt, \$29,440,251; total investment, \$64,490,642; cost of roads and equipments, \$66,545,119; gross earnings, \$2,332,090; net earnings, \$429,993; interest paid on bonds, \$785,720; and dividends paid on stock, \$6,554.

Commerce.—During the fiscal year ending June 30, 1897, the imports of merchandise at the ports of New Orleans and Teche had a value of \$16,251,950, and of gold and silver, \$610,242; and the exports of merchandise were valued at \$101,497,072; exports of gold and silver, none.

Manufactures.—Among the special manufacturing plants in 1895 were 449 sugar houses, a decrease of 50 from those in operation in 1894. The largest outputs of individual plants were 27,676,632 lbs., 22,186,441 lbs., 11,532,537 lbs., 10,467,981 lbs., three of over 9,000,000 lbs. each, and seven of over 5,000,000 lbs. each. There were six active cotton mills, four of which reported an aggregate capital of \$1,025,000; spindles, 56,708; and looms, 1,512. A single mill in New Orleans had \$500,000 capital, 35,328 spindles, 1,112 looms, and 196 cards.

Publications.—Reported March, 1898: Daily, 20; semi-weekly, 4; weekly, 143; semi-monthly, 4; and monthly, 10.

Churches.—The Roman Catholic is the strongest denomination in the State, and is followed in their order by the Regular Baptist, Colored; Regular Baptist, South; Methodist Episcopal, South; African Methodist; Methodist Episcopal; Protestant Episcopal; and Presbyterian, South. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Louisiana, 700 evangelical Sunday schools, 6,000 officers and teachers, and 40,000 scholars, total members 46,000, a gain of 3,918 in three years.

Schools.—At the end of the school year 1895-96, the number of children of school age in the State was estimated at 420,100, of whom 164,317 were enrolled in the public schools, and 115,316 were in average daily attendance. There were 3,537 teachers; 2,894 public schools; public school property valued at \$930,000; total receipts from State and local taxes, \$804,047; and expenditures, excluding payments on debt, \$1,256,596. Of the total enrollment, 98,400 pupils were white and 65,917 colored; of the average daily attendance, 70,373 were white and 44,943 colored; and of the total teachers, 2,576 were white and 961 colored. There were 9 universities and colleges of liberal arts, with a total of 207 professors and instructors; 3,063 students in all departments (1,992 males and 1,071 females); 104,152 bound volumes in the libraries; 196 scholarships; \$240,347 in total income; \$1,755,000 invested in grounds and buildings; \$1,510,571 in productive funds; and \$6,225 receipts from gifts. The State Chautauqua at Ruston had 15 acres of ground, an auditorium seating 2,000 persons, and 103 enrolled students. There were 20 public high schools; 27 endowed academies, seminaries, and other private secondary schools; 3 colleges exclusively for women at New Orleans, Mansfield and Minden; two public normal schools and normal departments in 5 colleges; and a commercial and business college in New Orleans. The Agricultural and Mechanical College for white students is a part of the State University, and in 1895-96 had 310 acres under cultivation, valued at \$33,300, special buildings and equipments valued at \$125,000, a faculty of 22, and total students 261. A similar college for colored students at New Orleans had 40 acres under cultivation, valued at \$6,000, buildings and equipments valued at \$52,972, a faculty of 13, and total students 590. For the defective classes there were a State institution for the deaf and dumb at Baton Rouge; a private school for the deaf at Chinchuba; a State institution for the blind at Baton Rouge; and a boys' reformatory at New Orleans.

Libraries.—In 1896 there were reported 27 public libraries of 1,000 volumes each and upward, with 212,828 bound volumes and 46,431 pamphlets.

Population.—In 1890, 1,118,587, of whom 559,350 were males; 559,237 females; 1,068,840 natives; 49,747 foreign-born; 558,395 whites; and 560,192 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 1,262,000.

LOUISIANA STATE UNIVERSITY, Baton Rouge, La., non-sectarian; had at close of 1896, 22 professors and instructors; 266 students; 20,000 volumes in library; \$250,000 in grounds and buildings; \$318,313 in productive funds; \$25,000 in scientific apparatus and library; \$58,387 income; president, Thomas D. Boyd, A.M.

LOUISVILLE, city, capital of Jefferson county, Ky.; population (1890), 161,129. In 1897 the assessed valuations were: Real estate, \$85,985,000; personal property, \$28,715,000—total, \$117,700,000; tax rate, \$22.75 per \$1,000; and the bonded debt, excluding a water debt of \$943,932, was \$8,714,000; floating debt, \$276,247—total, \$8,990,247. There are 7 national banks, with combined capital, \$3,601,500; deposits, \$4,589,454; and resources, \$13,856,789. The exchanges at the clearing house in the year ending Sept. 30, 1896, aggregated \$210,717,076. The city has 250 miles of streets, of which 150 miles are paved; 32 miles of sewers; 188 miles of water mains; waterworks owned by the city that cost \$5,523,391; annual expenditure for maintaining the city government \$2,000,000; annual cost of public education, \$560,000; and public school property valued at \$1,250,000. In 1896 there were reported 8 libraries of all kinds,

and in 1897, 6 daily, 2 semi-weekly, 27 weekly, 2 bi-weekly, 6 semi-monthly, and 13 monthly periodicals.

LOW, SETH, LL.D. educator, was born in Brooklyn, N. Y., Jan. 18, 1850; became president of Columbia University in 1889, and subsequently a member of the New York Rapid Transit Commission and of the Greater New York Commission; was largely instrumental in organizing Columbia College on the university system; and undertook to defray the entire expense of erecting and equipping a magnificent library building for the university on its new grounds on Morning-side Heights, at a cost of \$1,000,000. In September, 1897, he was nominated in four of the five boroughs of the consolidated city of New York for the office of mayor, on the Citizens' Union ticket, and at once entered on an energetic canvass. In the election on Nov. 2 he received 148,215 votes to 228,531 for the Democratic candidate, 101,994 for the Republican, and 19,836 for the Jefferson Democratic. See NEW YORK, *The Greater New York*.

LOWELL, JOHN, ex-judge United States Circuit Court, and an authority on bankruptcy, patents, and admiralty laws, was born in Boston, Mass., Oct. 18, 1824; died in Brookline, Mass., May 14, 1897.

LOWELL, city, capital of Middlesex county, Mass.; population (1890), 77,696; (1895, State census), 81,367. In 1896 the assessed valuations were: Real estate, \$53,935,960; personal property, \$15,965,987—total, \$69,901,947; tax rate, \$15 per \$1,000. The total debt, Jan. 1, 1897, including a water debt of \$1,275,000, was \$3,820,310; sinking funds, \$391,279; net debt, \$3,429,061. The real estate and other property owned by the city has a value of \$6,349,057. There are 8 national banks, with combined capital, \$2,300,000; deposits, \$4,099,150; and resources, \$718,569,552; 7 savings banks, with deposits, \$19,401,718, and guaranty funds and surplus, \$1,455,653; electric street railroads connecting with Lawrence, Nashua, and all adjoining towns; and 6 daily and 6 weekly newspapers.

LUNT, ORRINGTON, one of the founders of Northwestern University and the Garrett Biblical Institute, was born in Bowdoinham, Me.; died in Evanston, Ill., April 5, 1897.

LUSK, WILLIAM THOMPSON, M.D., gynecologist, president of Bellevue Hospital Medical College, and author of numerous medical works, was born in Norwich, Conn., in 1838; died in New York City, June 12, 1897.

LUTHERAN CHURCHES. There were in 1897 five general bodies, besides 14 independent synods, making in all 60 synods, and also a number of congregations not connected with any synod, embracing in all 5,993 ministers; 10,022 churches and 1,420,905 communicants; an increase in a year of 308 ministers, 529 churches, and 30,130 communicants; and an increase since 1890 of 1,362 ministers, 1,141 churches, and 210,411 communicants. There are 4,125 parochial schools, with 2,643 teachers and 203,340 pupils, mostly Germans and Scandinavians; and 5,842 Sunday schools, with 51,969 officers and teachers, and 508,010 scholars. The parochial schools are chiefly maintained by foreign-born, and the Sunday schools by American-born Lutherans. Under denominational control are 26 theological seminaries, 42 colleges, 41 academies, and 13 ladies' seminaries, holding property valued at \$4,620,839, and endowments aggregating \$1,478,541. They employ 747 instructors, and have 11,350 students, of whom 2,738 are preparing for the ministry. There are 92 benevolent institutions, with property worth \$2,667,875, and endowments of \$200,562, and with 34,875 in-

LUTHERAN CHURCHES.

mates. The benevolent contributions reported through the various synodical boards, exclusive of educational work, benevolent work not under synodical control, and missionary work of societies in other countries, amounted to \$1,000,467. The gospel is now preached by the Lutheran church in 14 different languages; and there are 156 periodicals published in the various languages spoken by the 6,000,000 adherents of this faith. The following table shows the numerical strength of the five general bodies and the independent synods:

Name.	Organized.	Ministers.	Churches	Communicants.
General Synod.....	1821	1,155	1,467	173,313
United Synod in the South.....	1886	211	437	41,304
General Council.....	1867	1,106	1,786	315,239
Synodical Conference.....	1872	1,775	2,418	462,580
United Norwegian.....	.....	350	1,130	110,000
Independent Synods and Independent Congregations.....	.....	1,396	2,794	228,469
Total.....	.....	5,993	10,622	1,430,905

Synodical Conference.—This, the largest of all Lutheran organizations, composed of the large synods of Missouri, Ohio, and other States, and taking in nearly every State and Territory in the Union and parts of Canada, with nearly 2,500 churches and nearly 500,000 communicants, held its 16th biennial convention at Evansville, Ind., Aug. 12-17, 1896, under the presidency of the Rev. John Bading, Milwaukee, Wis. There are within the synods of this conference 1,747 parochial schools, with 854 teachers and 97,310 pupils, 3 theological seminaries, 10 colleges, 7 academies, 10 orphanages, and 9 institutions of mercy. The year's benevolent contributions were \$281,020. Among freedmen 32 missionaries are at work, at 52 stations. There are now 10,000 members. Aggressive work was carried on among Indians and among Germans in the Eastern States. About \$50,000 was expended in home mission work.

General Council.—Prominent among doings within this body in 1897 was the preparation by the ministerium of Pennsylvania, the oldest and largest of its synods, for the celebration of its 150th anniversary in 1898. At the same time missionary, educational, and benevolent operations were being vigorously pushed. The General Council publishes an official organ and Sunday school literature in English. Its home missionary operations cover the United States, together with Manitoba and Nova Scotia. Benevolent and educational operations were greatly strengthened during 1897. The various synods composing this body control 3 theological seminaries, 7 colleges, 4 academies, 12 orphanages, and 26 other benevolent institutions. The benevolent contributions of the year were \$265,214.

Independent Synods.—These support about 1,890 parochial schools, with 1,169 teachers and 81,769 pupils; also 2,079 Sunday schools, with 5,881 officers and teachers and 95,466 scholars. Benevolent contributions, \$197,546. The joint synod of Ohio, with 85,000 members, held its 31st biennial convention at Dayton, Sept. 1-10, 1896, received reports from the 8 district synods and 4

educational institutions supported by the synod, and voted down by a large majority a proposition to consolidate the four theological seminaries located at Columbus and Woodville, O., St. Paul, Minn., and Hickory, N. C. The synod has 53 missionaries at work in 20 States, at an annual expense of \$10,000. The benevolent contributions of the year were \$46,380.

Deaconess Conference.—The first general conference of Lutheran Deaconess Mother Houses in America was held in the Mary J. Drexel Home for Deaconesses, Philadelphia, Pa., on Sept. 16-18, 1896, Rev. Adolph Speath, D.D., LL. D., president. The conference was called in order to establish a permanent bond of union between the various Lutheran Deaconess Homes in the United States. Four out of 7 of the institutions were represented. Dr. Speath presented a thesis on the female diaconate, showing its position in the Scriptures and in the Lutheran Church, and wherein it differed from similar institutions in the Roman Catholic Church. Papers were also read by Pastor Goeddel on *The Organization of the More Important Mother Houses in Germany*, and by Rev. Dr. Jeremiah F. Ohl, of Milwaukee, on *The Female Diaconate in America Outside of the Lutheran Church*. At the close, Dr. Speath recited the principles, methods of work, and history of Deaconess work in America. There are 7 houses with 143 sisters; value of property, \$700,000; annual expenses, \$70,000.

Luther League.—The second annual convention was held in Chicago, Ill., Nov. 17-20, 1896; president, F. F. Eibert, of New York. Mayor Swift delivered an address of welcome. There were 232 delegates from 16 States, representing a membership of 50,000. A large number of addresses were delivered and resolutions passed commending *The Luther League Review*, the official organ of Lutheran young people, favoring the observance by all local leagues of the 400th birthday of Malancthon and proposing to hold a world convention at Wittenberg in 1900 for the purpose of organizing a World Luther League among the 50,000,000 Lutherans of the world. The Luther League was organized at a convention of local leagues held in Pittsburg, Pa., in 1895.

LYNN, city, Essex county, Mass.; population (1890), 55,727; (1895, State census), 62,354. In 1896 the assessed valuations were: Real estate, \$40,153,141; personal property, \$10,288,605—total, \$50,741,746; tax rate, \$17.40 per \$1,000. The net debt was \$3,096,038, and the city owned property valued at \$1,622,625. The waterworks cost to date \$2,232,430, and the balance of the water debt was \$1,780,300. There were 6 national banks, with combined capital, \$1,300,000; deposits, \$2,465,345; and resources, \$5,432,986; and 2 savings banks, with deposits, \$6,929,740, and guaranty funds and surplus, \$704,243. The city had 141 miles of streets; 50 miles of sewers; 110 miles of water mains; and electric railroads connecting with Boston, Lowell, Salem, Marblehead, Danvers, Peabody, Wakefield, and Woburn. There were over 300 shoe factories, with an annual product of over \$25,000,000, and the extensive works of the General Electric Company.

MAARTENS, MAARTEN (DEB DADE of J. M. W. VAN DER POORTEN SCHWARTZ), was born in Holland about 1858; educated at the universities of Bonn and Utrecht; has published *The Sun of Joost Avelingh, An Old Maid's Love, God's Fool, The Greater Glory, My Lady Nobody* (1895), etc.

MACHINE GUN. In January, 1896, the Bureau of Ordnance of the United States Navy Department adopted for use in the navy the Browning machine gun, and gave to the Colt Arms Company an order for 50 of the guns. This was done

after a competitive test of seven different types of machine guns. The Browning gun is the invention of John M. and Matthew F. Browning, of Ogden, Utah, and is known as a gas-operating and breech-loading gun. In it the gases produced by explosion, after giving a sufficient initial velocity to the projectile, are further utilized to operate the breech mechanism. The gunner has simply to fire the first shot and thereafter to feed in the cartridges. The results of the official test are thus stated summarily: 100 rounds fired deliberately, no interruptions; 100 rounds fired rapidly, no delays; 20 rounds discharged in 4 seconds; 40 rounds in 7 seconds; 80 rounds in 14 seconds; 100 rounds in 23 seconds. The gun worked satisfactorily throughout, the automatic gear operating smoothly and with precision, except twice, when there were brief stops in the firing. Then followed the discharge of 200 rounds in 34 seconds, and 400 rounds in 1 minute 49 seconds. Whenever there was any check it was necessary only to pull the trigger with the finger and then the process went on regularly as before. In all 1,053 cartridges were exploded, and there was but one misfire. The Browning gun is so made that it can be readily used and carried either by infantry or cavalry; or it may be mounted on a police patrol wagon. It weighs 40 lbs.

A similar arm is the Maxim quick-firing gun, invented by Hiram Maxim. It is in use in the British army, and has played a notable part in England's "little wars" with African tribes. The Maxim gun was exhibited in presence of the Ordnance Board of the United States Army at Sandy Hook, N. J., in July, 1895. A report of the tests, published in a technological journal, *Cassier's Magazine* shows a performance equal to that of the Browning gun. In the Maxim gun, or "Maxim," as it is usually called, there is no pause in firing after the trigger is pulled till the store of cartridges is exhausted. The gun is automatic after the first shot is fired. The recoil from the exploded cartridge gives to the barrel, which has a rear attachment, a backward motion. The recoiling motion is only about one inch, as a crank comes in contact with the breech casing and causes it to rotate and strike a buffer spring, which restores it to firing position. The crank also works the breech lock. The cartridges are fed to the gun by means of a belt. The recoil of the barrel from the discharge of the first cartridge inserts the next charge from the belt, raises the breech lock, cocks the hammer, and fires, extracts and ejects the shells. With its case of sole-leather, an extra barrel, duplicate mechanism, and tools, the gun weighs only 45 lbs. It can discharge more than 500 cartridges per minute.

McCABE, CHARLES CARDWELL, clergyman, was born in Athens, O., Oct. 11, 1836; educated at the Ohio Wesleyan University; entered the Ohio Conference of the Methodist Episcopal Church in 1860; was a chaplain in the Union army in the civil war and a Libby prisoner; became agent of the Church Extension Society in 1868; and subsequently distinguished himself by raising large sums of money, including the notable "million for missions," which he twice raised. In 1896 he was elected a bishop of his church.

McCARTHY, JUSTIN, journalist and historian, was born in Cork, Ireland, in 1830. He was re-elected to Parliament in 1895 for North Longford; resigned the chairmanship of the Irish Nationalist party in the House of Commons in 1896, and among recent works published *The Dictator* and *Red Diamond* (1893); *Life of Leo XIII.*, and *The Riddle Ring* (1896); and published *A History of Our Own Times from 1880 to the Diamond Jubilee* and *The Story of Gladstone's Life* (both 1897).

McCLURE, JAMES G. K., educator, was born in Albany, N. Y., in 1848;

graduated at Yale in 1870, and at Princeton Theological Seminary in 1873; pastor of a Presbyterian church in New Scotland, N. Y., in 1874-79, and in Lake Forest, Ill., in 1881-97; and was elected president of Lake Forest University in 1907.

MCCOMAS, LOUIS EMERY, jurist, was born in Washington county, Md., Oct. 28, 1846; was a Republican member of Congress in 1882-90; appointed a judge of the Supreme Court of the District of Columbia in 1892; elected United States senator in 1898.

MCCORMACK THEOLOGICAL SEMINARY, Chicago, Ill., Presbyterian; had at close of 1897, 7 professors and instructors; 150 students; 20,000 volumes in library; \$534,000 in productive funds; \$25,000 gifts; \$30,500 income; president, A. C. Zenoss, D.D.

MACDONALD, GEORGE, novelist and poet, was born in Huntley, Scotland, in 1824. His latest works include *Lilith* (1895) and *Salted with Fire* (1897).

McKINLEY, WILLIAM, 25th president of the United States, was born in Niles, O., Jan. 29, 1843. He received an academical education; enlisted as a private in the 23d Ohio Volunteers, in May, 1861; served through the war, and was mustered out with the rank of captain and brevet major. After the war he studied law; was admitted to the bar in 1867; and settled in Canton, O., to practice. He served as prosecuting attorney of Stark county, O., in 1869-71; was elected to Congress as a Republican in 1876, '78, '80, '82, '84, '86, and '88; was unseated in 1884; and was defeated for re-election in 1890. In 1891 he was elected governor of Ohio, chiefly on the tariff issue, by a majority of about 21,000 over ex-Gov. James E. Campbell, Democrat, and in 1893 was re-elected by a plurality of 80,995. He was permanent chairman of the Republican National Convention at Minneapolis in 1892, and received 182 votes for the presidential nomination. While in Congress he particularly distinguished himself by his advocacy of a protective tariff. He succeeded General Garfield as chairman of the House Committee on Ways and Means, and in that capacity prepared the bill to reduce the revenue and equalize duties on imports, which has been known since as the McKinley Bill. This measure was adopted in the House, May 21, 1890, and in the Senate Sept. 10; was sent to a conference committee, whose report was accepted by the House, Sept. 27, and the Senate, Sept. 30, and was approved by the President, Oct. 1. In the congressional elections that were held the following month the Republicans suffered widespread defeat and the Democrats gained control of the House of Representatives. At the St. Louis convention, June 16-18, 1896, Governor McKinley was nominated for President on the first ballot, the votes being: McKinley, 661½; Reed, 84½; Quay, 61½; Morton, 58; and Allison, 35½; and by a rising vote the nomination was made unanimous.

Election.—In the presidential campaign of 1896 there were seven regular tickets in the field, viz.: Republican, William McKinley and Garret A. Hobart; Democrat, William J. Bryan and Arthur Sewall; National Democrat, John M. Palmer and Simon B. Buckner; Prohibition, Joshua Levering and Hale Johnson; Socialist Labor, Charles H. Mchett and Matthew Maguire; Populist, William J. Bryan and Thomas E. Watson; and Free-Silver Prohibition, Charles E. Bentley and James H. Southgate. The popular vote in 1896 was 13,930,942, an increase of 1,776,400 over the total of 1892. The total vote for Bryan and Watson was 144,928. McKinley's plurality over Bryan was 618,742; majority over all, 311,742.

The following table shows the popular and electoral votes for the principal candidates, the Bryan column including the Democratic and Populist votes.

State.	THE PRESIDENTIAL VOTE.					Electoral Vote.	
	Popular Vote.					McK.	Bry.
	McKinley	Bryan.	Palmer	Levering.	Matchett.		
Alabama.....	54,737	131,226	5,671	2,147	.....	11	8
Arkansas.....	37,512	110,103	.....	893	.....	8	1
California.....	146,688	144,766	2,006	2,573	1,611	6	4
Colorado.....	29,379	161,269	.....	.....	.....	.....	.....
Connecticut.....	110,295	56,734	4,332	1,804	1,329	6	.....
Delaware.....	18,699	15,505	927	467	.....	3	.....
Florida.....	11,288	32,736	1,778	654	.....	4	.....
Georgia.....	60,091	94,232	2,788	5,592	.....	13	13
Idaho.....	6,314	23,135	.....	172	.....	.....	3
Illinois.....	667,130	485,613	6,300	9,818	1,147	24	.....
Indiana.....	323,754	305,528	2,145	3,056	324	15	.....
Iowa.....	289,293	223,741	4,516	3,192	453	13	.....
Kansas.....	159,345	171,614	1,399	1,611	.....	10	.....
Kentucky.....	278,771	217,890	5,114	.....	.....	12	1
Louisiana.....	23,696	77,175	1,915	.....	.....	.....	8
Maine.....	89,464	34,487	1,864	1,571	.....	6	.....
Maryland.....	136,959	104,735	2,597	5,918	587	8	.....
Massachusetts.....	278,376	165,711	11,749	2,998	2,114	15	.....
Michigan.....	293,382	27,298	6,968	5,025	292	14	.....
Minnesota.....	193,393	139,735	3,229	4,348	.....	9	.....
Mississippi.....	4,849	63,253	1,021	390	.....	.....	9
Missouri.....	304,940	363,667	2,365	2,169	599	.....	17
Montana.....	10,494	42,537	.....	186	.....	.....	3
Nebraska.....	162,565	115,625	2,797	1,192	170	.....	8
Nevada.....	1,998	8,377	.....	.....	.....	.....	3
New Hampshire.....	57,444	21,650	3,520	779	293	4	.....
New Jersey.....	221,267	133,675	6,373	5,614	3,985	10	.....
New York.....	819,838	551,513	19,295	16,086	17,731	36	.....
North Carolina.....	153,222	174,488	578	635	.....	.....	11
North Dakota.....	29,396	29,686	.....	328	.....	.....	3
Ohio.....	525,991	477,497	1,857	5,068	1,167	23	.....
Oregon.....	48,779	46,739	977	910	.....	.....	4
Pennsylvania.....	728,400	433,228	11,090	19,274	1,683	32	.....
Rhode Island.....	37,437	14,459	1,166	1,160	558	4	.....
South Carolina.....	9,220	58,801	824	.....	.....	.....	9
South Dakota.....	41,042	41,225	664	.....	.....	.....	4
Tennessee.....	168,773	108,176	1,951	3,098	.....	.....	12
Texas.....	158,889	361,224	4,853	1,722	.....	.....	15
Utah.....	13,418	67,434	.....	.....	.....	.....	3
Vermont.....	31,127	10,640	1,331	791	.....	4	.....
Virginia.....	135,388	154,985	2,127	2,351	115	.....	12
Washington.....	39,153	51,646	1,968	968	.....	.....	4
West Virginia.....	105,379	94,488	679	1,223	.....	6	.....
Wisconsin.....	368,135	165,523	4,584	7,507	1,314	12	.....
Wyoming.....	19,672	10,861	.....	159	.....	.....	3
Total.....	7,121,342	6,502,600	134,731	123,428	35,306	271	176

Early Administration.—Following his inauguration, President McKinley selected his cabinet advisers as follows: Secretary of state, John Sherman, of Ohio; secretary of the treasury, Lyman J. Gage, of Illinois; secretary of war, Russell A. Alger, of Michigan; attorney-general, Joseph McKenna, of California; postmaster-general, James A. Gary, of Maryland; secretary of the navy, John D. Long, of Massachusetts; secretary of the interior, Cornelius N. Bliss, of New York; and secretary of agriculture, James Wilson, of Iowa. Ellis H. Roberts, of New York, was appointed treasurer of the United States. The principal diplomatic appointments were: Ambassador to Great Britain, John Hay, of Washington, D. C.; ambassador to France, Horace Porter, of New York; ambassador to Germany, Andrew D. White, of New York; ambassador to Italy, William F. Draper, of Massachusetts; minister to Russia, Nathan A. Hitchcock, of Missouri; minister to Austria-Hungary, Charlemagne Tower, of Pennsylvania; minister to

Spain, Stewart L. Woodford, of New York; minister to Japan, A. E. Buek, of Georgia; minister to Turkey, James B. Angell, of Michigan; minister to Hawaii, Harold M. Sewall, of Maine; minister to Belgium, Bellamy Storer, of Ohio; minister to the Netherlands, Stanford Newall, of Minnesota; minister to Brazil, Edwin H. Conger, of Iowa; minister to Colombia, Charles H. Hart; minister to Chile, Henry L. Wilson, of Washington; minister to Switzerland, John G. A. Leishman, of Pennsylvania; minister to Greece, Roumania, and Servia, William W. Rockhill, of Washington, D. C.; minister to Portugal, Lawrence Townsend, of Pennsylvania; minister to Venezuela, Francis B. Loomis; minister to Mexico, Powell Clayton, of Arkansas; and minister to Persia, Arthur S. Hardy, of New Hampshire. Among special appointments were those of Whitelaw Reid, to be special ambassador of the United States government to Great Britain on the occasion of the Queen's Jubilee, and Gen. Nelson A. Miles, U. S. A., and Rear-Admiral Joseph M. Miller, U. S. N., to represent the army and navy on the same occasion, and William J. Calhoun, to be a special commissioner to Cuba.

Special Session of Congress.—The president issued a proclamation calling an extra session of the 55th Congress to meet on March 15. A number of bills left unfinished by the previous Congress were reintroduced. A new tariff bill, introduced on the opening day, was passed, and signed by the President on July 24. The arbitration treaty with Great Britain was taken up, on a favorable report thereon by the Senate Committee on Foreign Relations, March 18; the committee amendments were adopted on the 22d; a large number of amendments were proposed subsequently; and the treaty was rejected May 5, by a vote of 43 to 29. In response to a message from the President, Congress appropriated \$200,000 for the relief of sufferers by the Mississippi floods, April 7. On May 6 the Sundry Civil Appropriation bill was passed by the Senate, with an amendment revoking President Cleveland's forest reserve order. The Senate, acting on a special message from the President, appropriated \$50,000 for the relief of distressed American citizens in Cuba, May 17, and Senator Morgan's resolution recognizing the Cuban insurgents as belligerents was passed in the Senate by a vote of 41 to 14 on the 20th. The House authorized the President to appoint a currency commission, in accordance with his recommendation in a special message, July 24. The special session of Congress came to an end on July 24. A controversy having arisen concerning the interpretation of section 22 of the new tariff, Attorney-General McKenna rendered a decision Sept. 21, to the effect that the discriminating duty did not apply to goods brought into the United States through Canadian ports, or goods imported in British vessels. See also CUBA; HAVANA; UNITED STATES.

McGOWAN, SAMUEL, commander of the famous McGowan's Brigade of the Confederate army, was born in Laurens county, S. C., in 1819; died in Abbeville, S. C., Aug. 9, 1897.

McHVAINE, JOSEFA HALL, D. D., founder and president of Evelyn College for women, at Princeton, N. J., was born in Lewes, Del., March 1, 1815; died in Princeton, Jan. 30, 1897.

McKENDREE COLLEGE, Lebanon, Ill. Episcopal; co-educational; had at close of 1897, 14 professors and instructors; 308 students; 8,000 volumes in library; \$25,000 in productive funds; \$3,025 gifts; \$7,604 income; president, McK. H. Chamberlin, A. M.

McKENNA, JOSEPH, jurist, was born in Philadelphia, Pa., Aug. 10, 1813; removed to Benicia, Cal., in 1855; admitted to the bar there in 1865; elected district attorney of Solano county in 1865 and 1867; member of the State Assembly

in 1875-76; defeated for Congress in 1876, and elected in 1884, 1886, 1888 and 1890; appointed United States circuit judge for the 9th circuit in 1892; became attorney-general of the United States in President McKinley's cabinet in 1897; and an associate justice of the United States Supreme Court in 1898.

McLAURIN, JOHN LOUNDES, lawyer, was born in Red Bluff, S. C., May 9, 1860, educated at Swarthmore College, the South Carolina Military Academy, and the University of Virginia; admitted to the bar in 1882; elected attorney-general of South Carolina in 1891; elected to Congress in 1892, 1894, and 1896; appointed United States senator to fill the vacancy caused by the death of Senator Earle, in May, 1897, and elected for the five years of the unexpired term, in August following; after a notably exciting campaign.

MACMONNIES, FREDERICK WILLIAM, sculptor, was born in Brooklyn, N. Y., Sept. 28, 1863. His latest works include the grand fountain at the World's Columbian Exposition at Chicago; the Nathan Hale statue in City Hall Park, New York; *Fame*, at West Point; *Diana*; *Bacchante*; *Pan of Rhodion*; the quadriga and two accompanying groups of statuary for the Brooklyn Memorial Arch; and bronze eagles for the entrance to Prospect Park, Brooklyn. He gave the statue of *Bacchante* to his friend, C. F. McKim, the architect of the new public library building in Boston, who presented it to the trustees of the library, by whom it was rejected on account of a popular outcry against it, whereupon Mr. McKim withdrew it, and in 1897 presented it to the trustees of the Metropolitan Museum of Art, in New York, who accepted it with thanks. The statue is valued at \$35,000.

McVICKER, WILLIAM NELSON, D. D., clergyman, was born in New York City, Oct. 19, 1843; was graduated at Columbia College in 1865, and at the General Theological Seminary in 1868; ordained priest in the Protestant Episcopal Church in 1868; held rectorships in New York City in 1868-75, and in Philadelphia in 1875-97; and was elected coadjutor bishop of Rhode Island Oct. 19, 1897.

MADAGASCAR, island, and, till 1895, kingdom in the Indian Ocean, off the southeast coast of Africa; area, with its depending islands, about 228,500 square miles; population estimated at from 2,500,000 to 5,000,000; capital, Antananarivo; last sovereign, Queen Ranavalona III. France claimed a protectorate over the kingdom under a treaty of 1785, and Great Britain recognized that status in an agreement with France in 1890; but the Hova, or native government, repudiated the pretension and refused to recognize the right of France to regulate the foreign affairs of the kingdom. Because of complications arising from the stand taken by the Hova government, the French government sent a military expedition to the island to enforce its claims, in May, 1895. After a stubborn resistance, the French captured the capital on Sept. 30, and on the following day a treaty was signed by the queen and the French commander, General Duchesne (*q. v.*), providing that the French should maintain a rigorous protectorate; that the island should not be annexed to France; that the reign of the queen should be continued; and that the prime minister, her husband, should be exiled. In January, 1896, the island was made a French possession, and on Aug. 6, following, Madagascar and its depending islands were declared a French colony, with the queen retaining her station nominally, with a French resident-general in control of the administration, and with a French military force in possession of the country. Under the treaty, General Gallieni was appointed resident-general. Swift as were these movements, they were not accomplished without serious opposition, not only on the part of the natives, but in the French cabinet and the Senate and

Chamber of Deputies. The natives kept up a harassing warfare on the French, especially attacking the French posts established in the interior and near the west coast. Among important orders of the resident-general toward the close of 1896 were those placing Imerina and Betsileo in a state of siege; proclaiming the abolition of slavery on the island; prohibiting interference by teachers in political affairs, and urging instruction in the French language; and imposing taxes on all persons doing business in Madagascar, and on every foreigner of Asiatic and African origin who desires to reside in the colony.

MADRAZO, RAIMUNDO DE, portrait painter, son of Frederico de Madrazo, painter to the Court of Spain, was born in Rome, Italy, July 24, 1841. He studied in Rome, Paris, and Madrid; applied himself to portraiture and genre pictures; won gold medals and promotion in the Legion of Honor by exhibits at the two last Paris expositions; and came to the United States in 1897 for a season of sightseeing and portrait painting. There are numerous specimens of his work in New York City.

MAHAN, ALFRED THAYER, naval officer, was born in West Point, N. Y., Sept. 27, 1840. He was placed on the retired list of the United States navy, at his own request, after 40 years' active service, Nov. 17, 1896. His remarkable success as a writer on naval subjects brought him such pressing literary engagements that he was forced to retire from active service. Beside numerous magazine articles and introductions to other works, his latest books include *The Life of Nelson; The Embodiment of the Sea Power of Great Britain*, and *The Interest of the United States in Sea Power, Present and Future* (both 1897).

MAINE, one of the United States of North America; admitted to the Union March 15, 1820; counties, 16; capital, Augusta.

State Officers, 1897-99.—Governor (elected for 2 years, salary \$2,500 per annum), Lewellyn Powers; secretary of state, Byron Boyd; treasurer, F. M. Simpson; attorney-general, William T. Haines; superintendent of public instruction, W. W. Stetson; adjutant-general, John T. Richards; commissioner of insurance, S. W. Carr; chief justice of the supreme court, John A. Peters; associate justices, Andrew P. Wiswell, Lucilius A. Emery, Enoch Foster, W. P. Whitehouse, Thomas H. Haskell, and Sewall C. Strout; clerk, W. S. Choate—all Republicans, excepting Judge Strout, Democrat.

Legislature, 1897.—Republicans, senate 31, house 145, joint ballot 176; Democrats, house 6, joint ballot 6; Republican majority, senate 31, house 139, joint ballot 170.

Elections.—In the State elections 1896 there were 123,144 votes cast for governor, of which the Republican candidate (Powers) received 82,764; the Democratic (Frank) 34,387; the Populist (Bateman) 3,332; and the Prohibition (Ladd) 2,661. The congressional elections resulted in the choice of the Republican candidate in each district. In the presidential election the Republican candidate received 80,464 votes; the Democratic, 34,487; the National Democratic, 1,864; and the Prohibition, 1,571.

Farm Products.—Reported Dec. 31, 1895: Corn, 596,904 bush., from 14,212 acres, value \$322,328; wheat, 83,808 bush., from 4,365 acres, value \$68,723; oats, 5,551,184 bush., from 138,441 acres, value 1,887,505; rye, 19,258 bush., from 1,003 acres, value \$16,369; potatoes, 10,139,089 bush., from 62,203 acres, value \$3,147,290; and hay, 1,127,031 tons, from 1,104,932 acres, value \$10,909,660—total value, \$16,651,875. This potato crop was the largest ever gathered in the State, and the crops of hay, grain, and corn showed a large increase. During

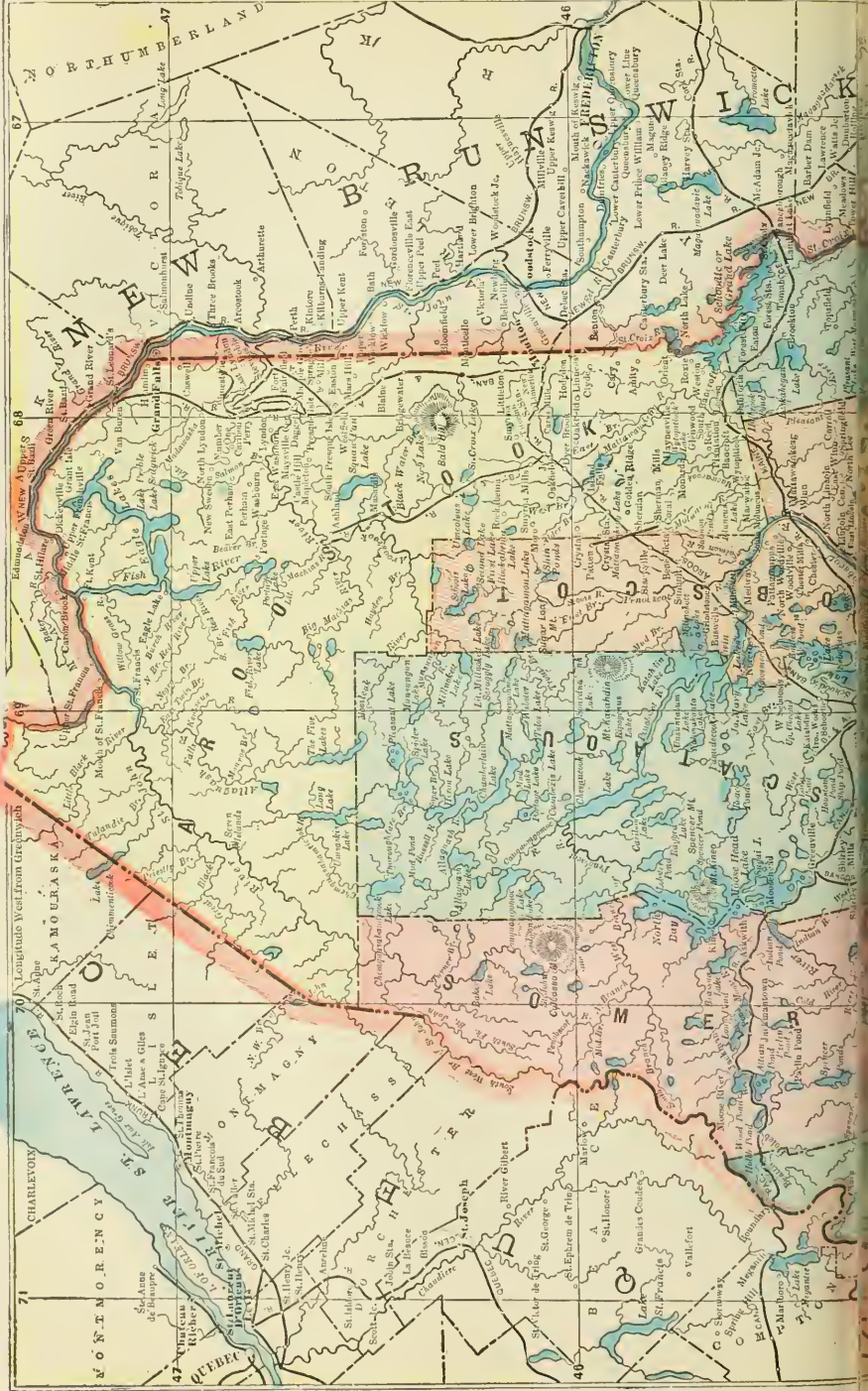
the year, 46 farmers' institutes were held, with an attendance of over 6,000 persons.

Farm Animals.—Reported Jan. 1, 1897: Horses, 115,426, value \$5,376,791; cows, 192,077, value \$4,813,450; cattle, 108,378, value \$2,181,493; sheep, 230,364, value \$471,671; and swine, 76,835, value \$456,092—total value, \$13,299,497.

Mineral Products.—The following is a summary of the mineral products for the calendar year 1894, the last reported: In *granite* the State ranked second in production, with an output valued at \$1,551,036, principally from Hancock, Knox, Waldo, Kennebec, and York counties, a large part of which was cut into paving blocks. The *slate* product, wholly in Piscataquis county, was valued at \$146,836, and included 24,690 squares for roofing, value \$123,937; and the *limestone*, principally in Knox county, and all burned into lime, \$810,089. The total quarry output was valued at \$2,507,963. In *clay* products, 109 concerns reported, value of output of common and pressed brick, \$401,982; fancy brick, \$200; firebrick, \$20,000; vitrified paving brick, \$11,200; drain tile, \$8,400; sewer pipe, \$390,000—total, \$831,782. There were 14 mineral springs, of which 10 reported commercial sales of 969,984 gals., value \$105,659. Green, yellow, and white *beryl* were found in the vicinity of Topsham, some of which were doubly terminated crystals, 5 in. long and an inch in diameter and equal to those of the Ural Mountains; and many *amethyst* crystals at Deer Hill and Stowe, which cut into handsome gems of a remarkably deep purple color.

Finances.—The total bonded debt, Jan. 1, 1897, was \$2,303,000, a reduction of \$50,000 during 1896. The assessed valuations, made every two years, in 1896 were: Real, \$257,389,047; personal, \$71,111,947—total, \$328,500,994; tax rate, \$2.25 per \$1,000.

Banks.—On Oct. 31, 1897, there were 83 national banks in operation and 16 in liquidation, the active ones having a combined capital of \$11,171,000, and holding \$5,952,700 in United States bonds. These banks had outstanding on loans and discounts, \$23,558,869, represented by demand paper with individual or firm names, \$1,202,091; the same, secured by stocks, bonds, and other personal securities, \$1,297,417; time paper with two or more individual or firm names, \$16,321,277; time paper with single individual or firm name, \$1,836,732; and the same secured by stocks, bonds, and other personal securities, \$2,901,346. The banks held in coin and coin certificates, \$1,241,876, of which \$983,937 was in gold coin. The circulation account was: Total issue, \$47,491,180; redeemed, \$41,645,753; outstanding, \$5,845,427. There were deposits, \$18,537,719; reserve required, \$2,780,657; reserve held, \$5,976,737; ratio of reserve, 32.24 per cent. During the year ending Sept. 30, 1897, the exchanges at the United States clearing house at Portland aggregated 68,045,299, an increase of \$2,035,022 over the total of the previous corresponding period. The loan and trust companies, Nov. 7, 1896, numbered 18, and had capital, \$1,511,400; deposits, \$4,508,381; resources, \$7,048,760; and surplus and profits, \$387,441. There were on the same date 52 mutual savings banks, with depositors, 163,115; deposits, \$57,476,896; resources, \$60,719,380; and surplus and undivided profits, \$3,189,990. Combining all these institutions, the State had an aggregate banking capital of \$12,682,400. In 1895 the legislature adopted an amendment of Section 100, Chapter 47, of the Revised Statutes, which made radical changes in the powers and restrictions concerning savings banks investments. Among other matters it provides that no such bank or institution shall hold, by way of investment or as security for loans, more than one-fifth of the capital stock of any corporation, nor invest more than 10 per cent. of its deposits, not exceeding \$60,000, in the capital



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NORTHUMBERLAND

WATERBURY

WINDSOR

AMHERST

BRANTFORD

WATERLOO

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LONGITUDES WEST FROM GREENWICH

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QUEBEC

ST. LOUIS

ST. CHARLES

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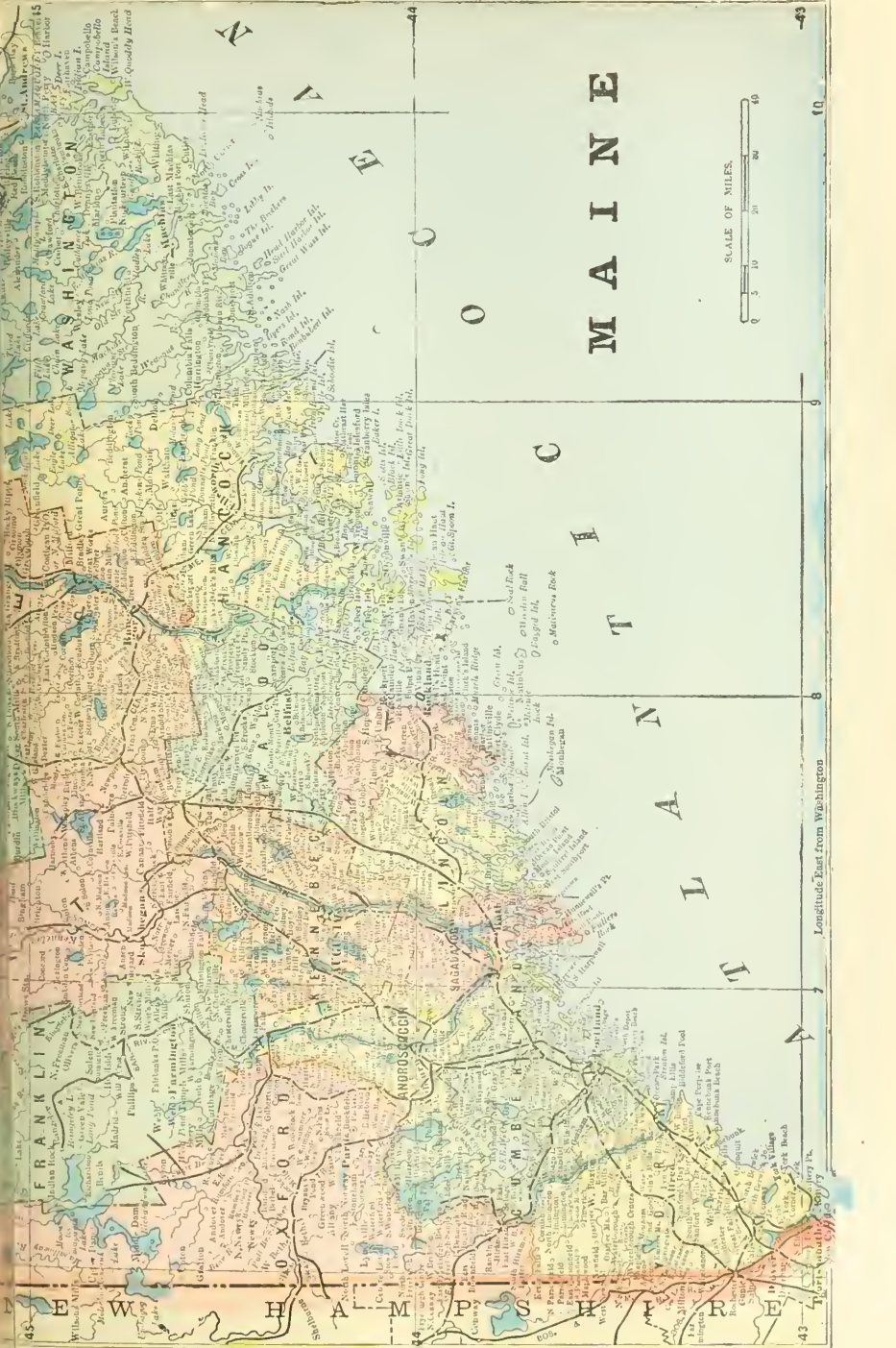
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MAINE



Longitude East from Washington

43° 30' North Latitude

stock of any corporation, nor have more than 50 per cent. of its deposits in mortgages of real estate. No loan can be made directly or indirectly to any officer of a bank, or to any firm of which such officer is a member, and no officer can receive any gift, fee, commission or brokerage, on account of any transaction to which the bank is a party. Any bank may hold real estate in the city or town in which it is situated to an amount not exceeding 5 per cent. of its deposits. Savings banks are also authorized to deposit on call in banks or banking associations incorporated under the authority of the State or the laws of the United States, and receive interest for the same. Other provisions specify the stocks, bonds, public funds, and other securities in which deposits may be invested, and the character of other loans that may be made.

Building and Loan Associations.—The last general report on these associations (1893) showed a total of 29 organizations, all of which were local and serial. There were reported by 28 associations, shareholders, 6,737; by 28, shares in force, 33,472; by 19, shares issued, 25,715; by 27, shares free, 23,768, and shares borrowed on, 5,404. The total assets and liabilities were \$1,375,227; loans on real estate, \$1,278,425; and dues and profits, \$1,301,040. During the life of all associations, 6 mortgages were foreclosed, involving \$4,400; on which no loss was reported. Of all associations, 16 reported 66 homes and 19 reported 10 other buildings acquired. A special report in 1897 showed number of associations, 33; shares outstanding, 42,817; installment dues paid in, paid up and prepaid stock, and profits, \$2,356,549; loans, \$2,304,802; and total assets, \$2,469,884.

Internal Revenue.—The States of Maine, Vermont and New Hampshire are considered a unit in reports of internal revenue collections and manufactures, and the transactions in each State cannot be given separately.

Fisheries.—The sea and shore fisheries employ over 10,000 persons; 437 sea-going vessels; over 6,000 shore boats valued at about \$500,000; and a capital investment of \$3,000,000.

Railroads.—On Jan. 1, 1894, the total railroad mileage was 1,515; during that year four companies built 111.7 miles of new road, and during 1895 the mileage was increased by 117.86 of new road, and decreased by 7.5 of discontinued road; making the mileage, Jan. 1, 1896, 1,737.06. In 1895 the Maine Central reported gross earnings and various other items, \$4,839,761.38; operating expenses, \$3,035,172.23; total income, \$1,831,819.35; net income, \$420,889.38; and total surplus, \$612,669.94. This and three other roads reported gross earnings, \$5,852,591.50; and with two other roads, operating expenses, \$3,609,913.86, and net income, \$510,029.38. In transportation earnings there was an aggregate gain of \$581,735.06 in 1895 over 1894. The street railroads had a total mileage of 93.89, and transportation earnings, \$502,477.80.

Commerce.—During the fiscal year ending June 30, 1897, the imports of merchandise at the ports of Aroostook, Bangor, Bath, Belfast, Castine, Frenchman Bay, Machias, Passamaquoddy, Portland and Falmouth, Waldoboro, and Wiscasset had a value of \$1,933,058; and the exports were valued at \$5,431,536.

Publications.—Reported March, 1898: Daily, 16; semi-weekly, 3; weekly, 11; bi-weekly, 1; semi-monthly, 2; monthly, 27; and quarterly, 5.

Churches.—The Roman Catholic is the strongest denomination in the State, and is followed in their order by the Congregational; Methodist Episcopal; Regular Baptist; Free-will Baptist; Advent Christian; Protestant Episcopal; and Universalist. The following are the statistics of the churches as revised May 1, 1895: Roman Catholic, 84 churches and chapels, 83 priests, 30 educational and charitable institutions, and 83,000 Catholic population; Congregational, 239

-churches, 180 ministers, 21,453 members; Methodist Episcopal, 2 conferences, 283 churches, 260 ministers, 19,780 members; Regular Baptist, 245 churches, 145 ministers, 18,422 members; Freewill Baptist, 250 churches, 168 ministers, 13,795 members; Advent Christian, 110 churches, 70 ministers, 5,000 members; Christian, 35 ministers, 3,600 members; Protestant Episcopal, 48 churches, 35 clergy, 3,364 members; Universalist, 100 parishes, 91 churches, 43 preachers, 3,000 members; Friends, 24 meeting houses, 1,500 members; Disciples, 7 churches, 500 members; Evangelical Lutheran, 2 churches, 500 members; Church of the New Jerusalem, 4 churches, 347 members; Church of God, 12 churches, 16 ministers, 250 members; Presbyterian, 2 churches, 2 ministers, 106 members; Unitarian, 21 churches, membership not reported. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Maine, 2,000 evangelical Sunday schools, 13,500 officers and teachers, and 96,425 scholars—total members, 109,985, a gain of 3,985 in three years.

Schools.—At the end of the school year 1895-96 the number of children of school age in the State was estimated at 161,300, of whom 134,140 were enrolled in the public schools, and 94,912 were in average daily attendance. There were 6,786 teachers; public school property valued at \$3,738,506; and expenditures of the year, excluding payments on debt, \$1,638,598. The universities and colleges of liberal arts numbered 3, with a total of 62 professors and instructors; 786 students in all departments (623 males and 163 females); 205 scholarships; 106,412 bound volumes in the libraries; \$115,618 in total income; \$950,000 invested in grounds and buildings; \$1,368,838 in productive funds; and \$19,904 receipts from gifts. There were 120 public high schools; 35 endowed academies, seminaries, and other private secondary schools; 2 colleges for women; 6 public and 2 private normal schools, and one collegiate normal department; and 6 commercial and business colleges. Hereafter the State superintendent will issue teachers' certificates after examination for probationary (three years and renewable) or life periods, according to the fitness of the candidates. The State Agricultural and Mechanical College, at Orono, had a faculty of 24; students, 353; land under cultivation, 120 acres, value 9,325; and special buildings and equipments valued at \$85,600. For the defective classes there were a public day school for the deaf at Portland, a State industrial school for girls at Hallowell, and a State reform school at Portland.

Libraries.—In 1896 there were reported 93 public libraries of 1,000 volumes each and upward, with a total of 542,666 bound volumes and 100,443 pamphlets. The legislature of 1895 provided that cities or towns with more than 10,000 inhabitants might receive a State stipend of 10 per cent. on every \$1,000 locally appropriated for free public libraries.

State Charities.—The legislative appropriations for 1896 included the following: Pensions, \$140,000; Eastern Insane Hospital, \$150,000; General Hospital, \$15,000; Eye and Ear Infirmary, \$10,000; Bangor General Hospital, \$10,000; Central General Hospital, \$20,000; Penobscot Indians, \$16,164; Passamaquoddy Indians, \$16,080; State Insane Hospital, \$14,000; Reform School, \$50,500; Military and Naval Orphan Asylum, \$19,500; School for the Deaf, \$16,000; State Industrial School, \$14,000; and Children's Aid Society of Belfast, \$3,000.

New Towns and Cities.—The legislature of 1895 set off the towns of Winter Harbor from Gouldsboro; Sorrento from Sullivan; and South Portland from Cape Elizabeth; and granted city charters to Dexter and South Portland.

Population.—In 1890, 661,086, of whom 332,590 were males; 328,496 females; 582,125 natives; 78,961 foreign born; 659,263 whites; and 1,823 colored of all

rates. On June 1, 1897, the United States government actuary estimated the population at 684,000.

MAINE STATE COLLEGE, Orone, Me., non-sectarian; co-educational; had at close of 1897, 39 professors and instructors; 312 students; 10,500 volumes in library; \$1,800,000 productive funds; \$86,762 income; president, Amos W. Harris, sc.D.

MALLORY, GEORGE SCOVILLE, D.D., editor of *The Churchman*, was born in Watertown, Conn., June 5, 1838; died in New York City, March 2, 1897.

MALLORY, STEPHEN RUSSELL, lawyer, son of the late Stephen R. Mallory, United States senator and secretary of the Confederate navy; was born in Pensacola, Fla., Nov. 2, 1848; served in the Confederate army and navy; was graduated at Georgetown College (D. C.) in 1869; admitted to the bar of Louisiana in 1872; removed to Florida in 1874; served in both branches of the legislature; elected to Congress as a Democrat in 1890; and elected United States senator in 1897.

MANCHESTER, city, one of the capitals of Hillsboro county, N. H.; population (1890), 44,126. In 1896 the assessed valuations were: Real estate, \$25,031,116; personal property, \$4,412,552—total, \$29,443,668; tax rate, \$18.60 per \$1,000. The total bonded debt, Jan. 1, 1897, including a water debt of \$900,000, was \$1,917,250; floating debt, \$100,000; cash assets, \$160,863. There are 5 national banks, with combined capital, \$750,000; deposits, \$1,853,955; and resources, \$3,943,346; public school property valued at about \$550,000; city and State Industrial School libraries; electric street railroad, using over 20 miles of track; and 2 daily, 7 weekly, a semi-monthly, and 2 monthly periodicals.

MANHATTAN COLLEGE, New York City, Roman Catholic; had at close of 1897, 36 professors and instructors; 657 students; 9,110 volumes in library; \$616,705 invested in grounds and buildings; \$23,011 in scientific apparatus and library; \$42,982 in income; president, Brother Justin, LL.D.

MANITOBA, a province of Canada, formerly the Red River Settlement; entered the Dominion, 1870; area, 73,956 square miles; population, 193,425; capital, Winnipeg. The executive power is vested in a lieutenant-governor, appointed by the governor-general of Canada, and an executive council of 5 members; the legislative assembly has 40 members. The province sends 4 members to the Dominion Senate and 5 to the Dominion House of Commons. In 1890 the separate state-supported Roman Catholic schools were abolished. The agitation to restore them reached a crisis in 1895. A compromise on the question was reached in the Dominion Parliament, and an act passed which was adopted by the Manitoba legislature, March 24, 1897. Under the act religious instruction is permitted to be given in the schools between 3:30 and 4 o'clock under certain conditions. In cities and towns where the Catholic or the non-Catholic school population is 40 or upward and in rural districts where it is 25 or upward, the trustees shall appoint a Catholic or non-Catholic teacher respectively. No separation of pupils according to religious beliefs shall take place during the school work proper.

MARETZEK, MAX, impresario, was born in Brunn, Austria, June 28, 1821; died on Staten Island, N. Y., May 14, 1897.

MARIETTA COLLEGE, Marietta, O., non-sectarian; co-educational; had at close of 1897, 20 professors and instructors; 261 students; 52,000 volumes in library; \$150,000 in productive funds; \$162,000 in grounds and buildings; dean, J. H. Chamberlain, PH.D.

MARQUAND, HENRY GERDON, banker, was born in New York City, April 11, 1819. He has greatly distinguished himself by his large philanthropy and his princely generosity to the Metropolitan Museum of Art, New York. His really great gifts to the latter were supplemented in 1897 by the presentation of a remarkable collection of ancient bronzes, one piece dating from about the 4th century B.C., for which \$28,000 was offered, the whole valued at more than \$50,000.

MARTIN, HOMER DODGE, landscape painter, was born in Albany, N. Y., Oct. 28, 1836; died in St. Paul, Minn., Feb. 12, 1897.

MARTINELLI, SEBASTIANO, apostolic delegate to the United States, was born in Borgo St. Ann, near Lucca, Italy, Aug. 20, 1848. He was a brother of the late Cardinal Martinelli; was ordained to the priesthood March 4, 1871; appointed prior-general of the Augustinian Order in 1889 and 1895; presided over the chapter of the order in Bryn Mawr, Pa., in 1894; was appointed successor to Cardinal Satolli as papal delegate in July, 1896; consecrated a special archbishop in Rome on Aug. 30 following; and entered on his new office on Oct. 5.

MARYLAND, one of the United States of North America; the seventh of the original thirteen States to ratify the Federal constitution (April 28, 1788); counties, 24; capital, Annapolis.

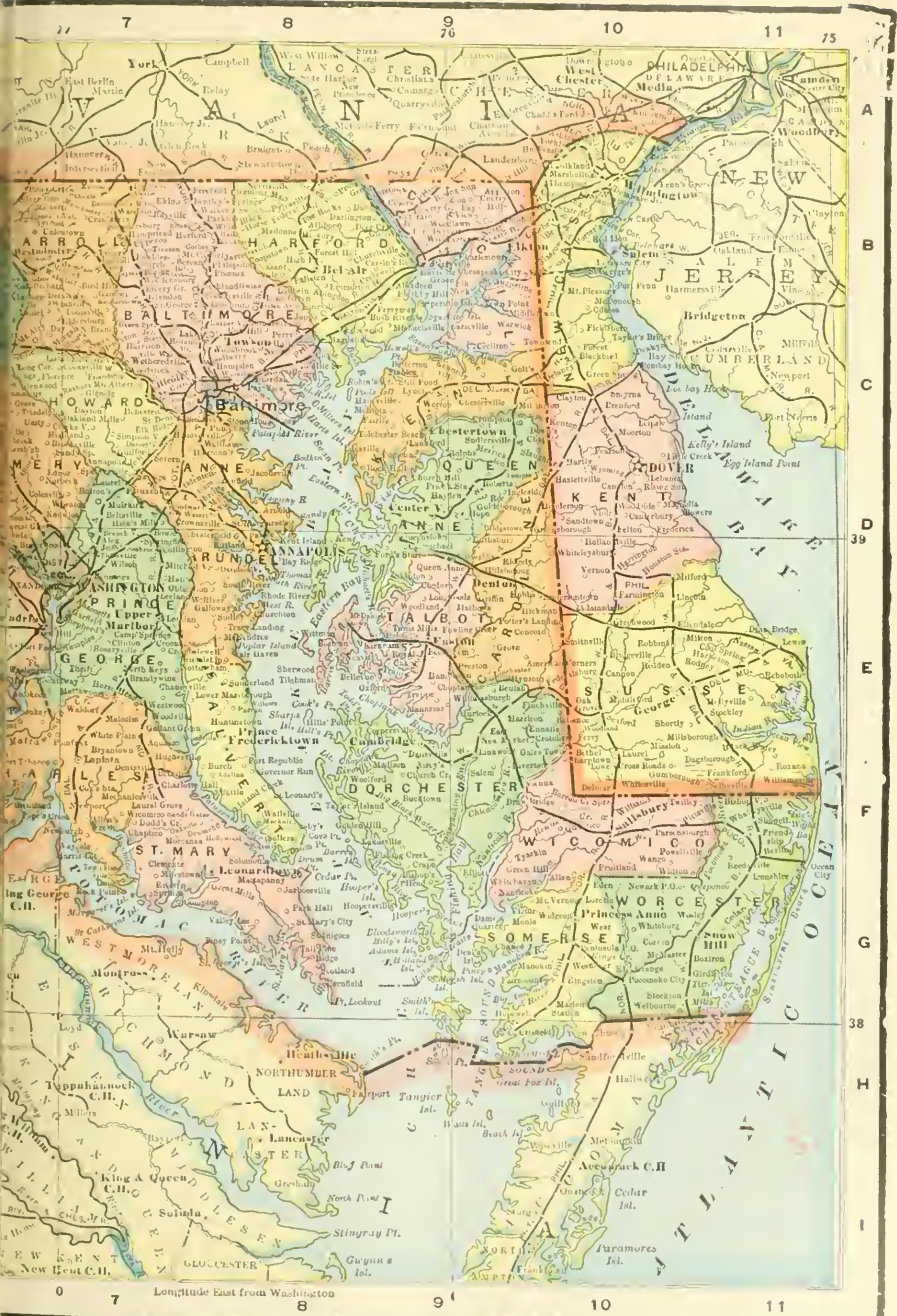
State Officers, 1896-1900.—Governor (elected for 4 years, salary \$4,500 per annum), Lloyd Lowndes; secretary of state, Richard Dallam; comptroller, P. L. Goldsborough; treasurer, Thomas J. Shryock; attorney-general, H. M. Claybaugh; adjutant-general, A. L. Wilmer; superintendent of public instruction, E. B. Prettyman; chief justice of the court of appeals, James McSherry; associate justices, David Fowler, A. Hunter Boyd, Henry Page, Charles B. Roberts, John P. Briscoe, W. Shepard Bryan, and James A. Pearce; clerk, Allan Rutherford—State government, all Republicans excepting Prettyman; judiciary, all Democrats excepting Rutherford.

Legislature, 1898.—Republicans, senate 18, house 49, joint ballot 67; Democrats, senate 8, house 42, joint ballot 50; Republican majority, house 10, senate 7, joint ballot 17.

Elections.—In the State elections 1895 there were 240,205 votes cast for governor, of which the Republican candidate (Lowndes) received 124,936; the Democratic candidate (Hurst) 106,169; and the Prohibition candidate (Levering), 7,719; Republican plurality, 18,767. The Republican candidate for comptroller was elected at the same time by a plurality of 15,637, and the Republican candidate for attorney-general by a plurality of 16,337. The congressional elections 1896 resulted in the choice of the Republican candidate in each district. In the presidential election the Republican candidate received 136,959 votes; the Democratic, 104,735; the Prohibition, 5,918; the National Democratic, 2,507; and the Social Labor, 587.

Farm Products.—Reported Dec. 31, 1895: Corn, 16,531,205 bush., from 616,836 acres, value \$6,116,546; wheat, 7,800,000 bush., from 458,868 acres, value \$4,992,484; oats, 2,320,010 bush., from 88,550 acres, value \$626,403; rye, 379,712 bush., from 29,435 acres, value \$186,059; potatoes, 2,366,400 bush., from 27,200 acres, value \$709,920; tobacco, 12,796,000 lbs., from 15,233 acres, value \$742,168; and hay, 436,298 tons, from 349,038 acres, value \$5,039,242—total value, \$18,412,822.

Farm Animals.—Reported Jan. 1, 1896: Horses, 134,995, value \$6,040,939; mules, 13,213, value \$806,321; cows, 150,477, value \$3,686,687; cattle, 116,045, value \$2,241,000; sheep, 129,884, value \$348,375; and swine, 338,659, value \$1,800,651—total value, \$14,923,973.



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Mineral Products.—The following is a summary of the mineral products for the calendar year 1894, the last reported: In *quarrying* the State had an output of granite valued at \$308,966; sandstone, principally from Montgomery county, \$3,450; slate, all from Harford county, and nearly all for roofing, \$153,068; marble, all from Baltimore county, \$175,000; limestone, two-thirds from Frederick county, and nearly all burned into lime, \$672,786—total value, \$1,313,270. In *coal* mining 3,971 persons were employed, who worked an average of 215 days, and the output was 3,501,428 short tons, valued at the mines at \$2,687,270, a decrease of 214,613 tons from the 1893 output. Of the total product, 3,435,600 tons were loaded at the mines for shipment. The value of the various *clay* products was reported by 67 concerns as follows: Common and pressed brick, \$974,669; fancy brick, \$1,100; firebrick, \$164,848; vitrified paving brick, \$470; drain tile, \$3,050; other tile, \$23,500; miscellaneous, \$177,228—total, \$1,344,865. Maryland and Delaware yielded *iron* ore, all carbonate, valued at \$17,809, a decrease, and Maryland alone, with 9 blast furnaces, made 5,600 long tons of pig iron. Among other products was *gold* to the value of \$978.

Finances.—The total bonded debt, Sept. 30, 1896, was \$9,284,986; sinking funds and other assets, \$5,946,433; net debt, \$3,338,553; against which the State held unproductive stocks aggregating \$8,140,627, and claims against accounting officers and incorporated institutions amounting to \$761,580. The last item and the sale of assets at market value would more than liquidate the entire debt. The condition of the treasury at the end of the fiscal year 1894-95 was: Balance at beginning of year, \$550,074.47; receipts, \$2,609,244.09; disbursements, \$2,454,750.37; balance at end of year, \$704,568.19. In 1896 the total assessed valuation reached the highest point in the history of the State, \$540,461,747; tax rate, \$1.77½ per \$1,000.

Banks.—On Oct. 31, 1897, there were 69 national banks in operation and 3 in liquidation, the active ones having a combined capital of \$17,079,960, and holding \$4,850,750 in United States bonds. These banks had outstanding on loans and discounts, \$13,344,892; represented by demand paper with individual or firm names, \$1,938,566; the same secured by stocks, bonds, and other personal securities, \$6,182,028; time paper with two or more individual or firm names, \$19,667,996; time paper with single individual or firm name, \$8,159,397; and the same secured by stocks, bonds and other personal securities, \$7,396,906. The banks held in coin and coin certificates \$4,321,089, of which \$2,096,569 was in gold coin. The circulation account was: Total issue, \$47,772,030; redeemed, \$42,641,480; outstanding, \$5,130,550. There were deposits, \$39,921,215; reserve required, \$8,852,036; reserve held, \$12,515,487; ratio of reserve, 22 banks in Baltimore, 32.13 per cent., 46 other banks in the State, 29.38. During the year ending Sept. 30, 1897, the exchanges at the United States clearing house at Baltimore aggregated \$763,189,980, an increase of \$44,290,378 over the total of the previous corresponding period. The State banks, June 30, 1897, numbered 12, and had capital, \$1,180,670; deposits, \$3,110,700; resources, \$4,886,667; and surplus and profits, \$494,956. Of loan and trust companies there were 2 with capital \$1,200,000; deposits, \$3,679,173; resources, \$6,009,865; and surplus and profits \$1,130,692. There were also 28 mutual savings banks, with depositors, 161,058; savings deposits, \$51,810,877; resources, \$54,931,190; and surplus and profits, \$2,389,561; and 4 private banks, with capital, \$113,000; deposits, \$212,729; resources, \$408,693; and surplus and profits, \$39,194. Combining all these institutions, the State had banking capital of \$19,573,630.

Building and Loan Associations.—The last general report on these associations

(1893) showed a total of 240 organizations, of which 237 were local, 3 national, 8 serial, 214 permanent, and 18 terminating. There were reported by 235 associations, shareholders, 62,225, and shares in force, 343,158; by 235, shares free, 233,024; and by 236, shares borrowed on, 110,557. The total assets and liabilities were \$12,465,078; loans on real estate, \$10,734,578; and dues and profits, \$11,197,736. During the life of 204 associations 340 mortgages were foreclosed, involving \$259,142, on which there was a loss of \$18,325. Of all associations 181 reported 14,318 homes and 206 reported 220 other buildings acquired.

Internal Revenue.—During the fiscal year ending June 30, 1897, the collections of internal revenue in Maryland, Delaware, District of Columbia, and two counties in Virginia aggregated \$5,454,795.82, from the following sources: Distilled spirits, \$3,685,798.85; tobacco, \$903,996.27; fermented liquors, \$858,476.51; oleomargarine, \$5,612; and penalties, \$422.88. During that year this consolidated district had 931 single-account cigar factories, which used 1,847,583 lbs. of tobacco, and had an output of 75,603,088 cigars and 97,129,080 cigarettes; and 40 other tobacco factories, which used 14,456,072 lbs. of materials, and had an output of 244,263 lbs. of fine cut tobacco, 8,685,803 lbs. of smoking, and 803,519 lbs. of snuff. There were 17 grain and 16 fruit distilleries in operation; 4,480,-752.34 gals. of spirits rectified and 13,454,668 gals. gauged; and 916,130 bbls. of fermented liquors produced.

Railroads.—On Jan. 1, 1895, the total railroad mileage was 1,300.80. A report at the close of 1894, covering this mileage, and also 20.66 miles in the District of Columbia, showed: Capital stock, \$71,374,124; funded debt, \$114,487,906; total investment, \$193,101,022; cost of roads and equipments, \$128,293,226; gross earnings, \$15,612,382; net earnings, \$5,813,634; interest paid on bonds, \$3,181,-652; and dividends paid on stock, \$1,314,255. During 1895 work was begun on the construction of an electrical railroad between Baltimore and Washington, 37 miles, the corporation having an authorized capital of \$4,000,000, and being bonded for \$6,000,000; and the Baltimore and Ohio Railroad Company was using successfully a 96-ton electric locomotive to haul freight through the belt-line tunnel at Baltimore.

Commerce.—During the fiscal year ending June 30, 1897, the imports of merchandise at the port of Baltimore had a value of \$11,371,193; and the exports were valued at \$85,692,651, besides gold and silver, \$549.

Publications.—Reported March, 1898: Daily, 16; semi-weekly, 1; weekly, 147; bi-weekly, 1; semi-monthly, 2; monthly, 34; bi-monthly, 1; and quarterly, 6.

Churches.—The Roman Catholic is the strongest denomination in the State, and is followed in their order by the Methodist Episcopal; Protestant Episcopal; Lutheran, General Synod; African Methodist; Methodist Protestant; Reformed; Methodist Episcopal, South; Presbyterian, North; and Regular Baptist, South. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Maryland 2,528 evangelical Sunday schools, 34,942 officers and teachers, and 261,941 scholars—total members, 296,883, a gain of 25,688 in three years.

Schools.—At the end of the school year 1895-96 the number of children of school age in the State was estimated at 339,200, of whom 219,362 were enrolled in the public schools and 123,227 were in average daily attendance. There were 4,616 teachers; public school property valued at \$4,000,000; and expenditures of the year, excluding payments on debt, \$2,534,531. Of the total enrollment, 179,-408 were white pupils and 39,954 colored; attendance, 103,798 whites and 19,429 colored; and teachers, 3,892 whites and 724 colored. The universities and col-

leges of liberal arts numbered 10, and had a total of 224 professors and instructors; 2,010 students in all departments (1,785 males and 225 females); 21 fellowships; 190 scholarships; 171,500 bound volumes in the libraries; \$255,037 in total income; \$2,003,859 invested in grounds and buildings; \$3,052,000 in productive funds; and \$15,786 receipts from gifts. There were 45 public high schools; 45 endowed academies, seminaries, and other private secondary schools; 5 colleges for women; a public and 2 private normal schools, and one college with a normal department; and 2 commercial and business colleges. The State Agricultural and Mechanical College, at College Park, had staff at experiment station, 8; faculty, 17; students, 118; land under cultivation, 140 acres, value \$11,000, and special buildings and equipments valued at \$50,000. For the defective classes there were a State School for the Deaf and Dumb; a State School for the Colored Blind and Deaf; a private school for the deaf at Baltimore; a State School for the Blind; and 5 reform schools.

Libraries.—In 1896 there were reported 67 public libraries of 1,000 volumes each and upward, with a total of 985,330 bound volumes and 127,660 pamphlets.

Population.—In 1890, 1,042,390, of whom 515,691 were males; 526,699 females; 948,094 natives; 94,296 foreign born; 826,493 whites; and 215,897 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 1,180,000.

MARYVILLE COLLEGE, Maryville, Tenn., Presbyterian; co-educational; had at close of 1897, 15 professors and instructors; 338 students; 12,000 volumes in library; \$250,000 in productive funds; \$100,000 gifts; \$17,501 income; president, S. W. Boardman, D.D., LL.D.

MASON, WILLIAM E., lawyer, was born in Franklinville, N. Y., July 7, 1850; received a collegiate education; was admitted to the bar at Des Moines, Ia.; removed to Chicago, Ill., in 1872; served in both branches of the legislature; elected to Congress in 1890, and defeated for re-election in 1892; and was elected United States senator, Jan. 29, 1897, by a strict party vote, receiving 125 votes to 78 for John T. Altgeld, Democrat.

MASSACHUSETTS, one of the United States of North America; the sixth of the original thirteen States to ratify the Federal constitution (Feb. 6, 1788); counties, 14; capital, Boston.

State Officers, 1898-99.—Governor (elected for one year, salary \$8,000 per annum), Roger Wolcott; lieutenant-governor, W. M. Crane; secretary of the commonwealth, William M. Olin; treasurer, Edward P. Shaw; auditor, John W. Kimball; attorney-general, Hosea M. Knowlton; adjutant-general, Samuel Dalton; secretary of the board of education, Frank A. Hill; secretary of the board of agriculture, W. R. Sessions; insurance commissioner, F. L. Cutting; chief justice of the supreme judicial court, Walbridge A. Field; associate justices, Charles Allen, Oliver Wendell Holmes, Marcus P. Knowlton, James M. Morton, John Lathrop, and James M. Barker; clerk, Henry A. Clapp—all Republicans.

Legislature, 1898.—Republicans, senate 33, house 179, joint ballot 212; Democrats, senate 7, house 53, joint ballot 60; Republican majority, senate 26, house 118, joint ballot 144.

Elections.—In the State elections 1897 there were 269,795 votes cast for governor, of which the Republican candidate (Wolcott) received 165,095; the Democratic candidate (Williams), 79,552; the National Democratic candidate (Everett), 13,879; the Social Labor candidate (Brophy), 5,301; and the Prohibition candidate (Bascom), 4,918; Republican plurality, 85,543. The congressional

elections 1896 resulted in the choice of 12 Republican candidates and 1 Democratic. In the presidential election the Republican candidate received 278,976 votes; the Democratic, 105,711; the National Democratic, 11,749; the Prohibition, 2,998; and the Social Labor, 2,114.

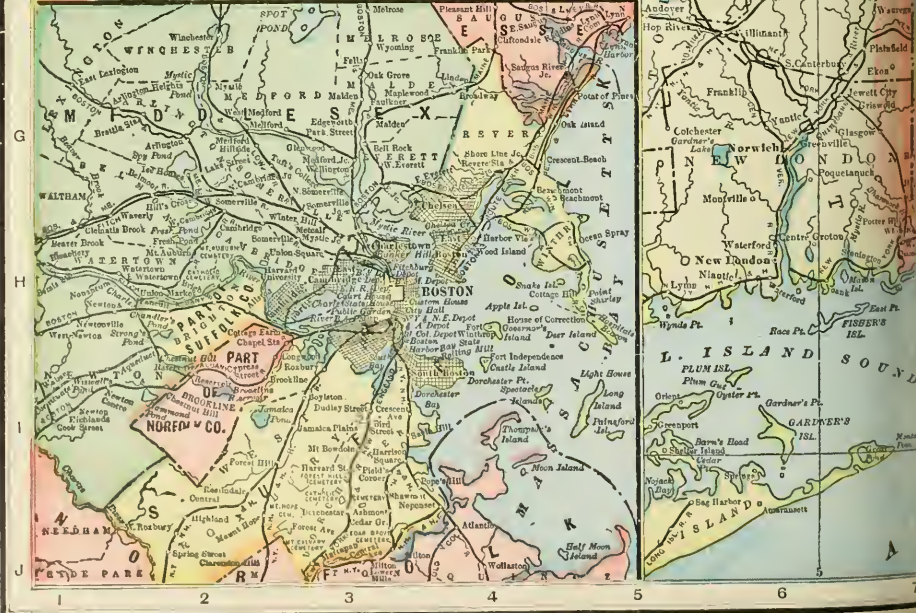
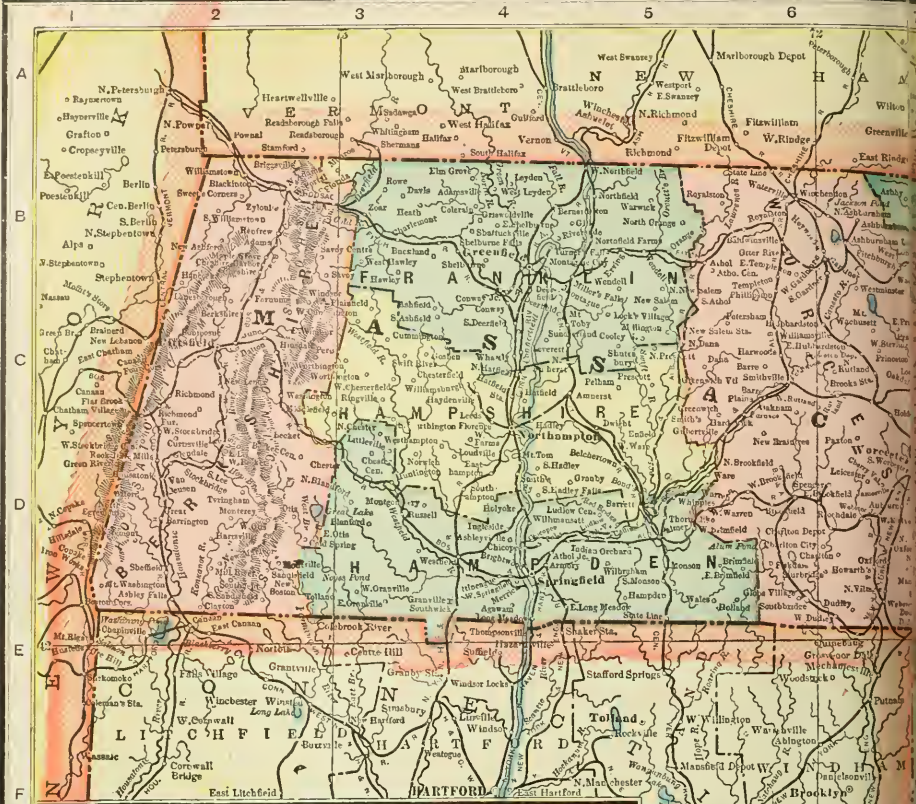
Farm Products.—Reported Dec. 31, 1895: Corn, 1,847,224 bush., from 42,078 acres value \$960,556; oats, 549,864 bush., from 15,274 acres, value \$186,954; rye, 205,806 bush., from 10,343 acres, value \$137,890; potatoes, 4,303,082 bush., from 32,354 acres, value \$2,065,479; tobacco, 3,160,000 lbs., from 1,975 acres, value \$442,400; and hay, 649,838 tons, from 585,440 acres, value \$11,372,165—total value, \$15,165,445.

Farm Animals.—Reported Jan. 1, 1896: Horses, 65,102, value \$4,719,255; cows, 174,572, value \$6,045,428; cattle, 80,476, value \$2,121,662; sheep, 48,395, value \$159,703; and swine, 60,726, value \$512,647—total value, \$13,558,695.

Mineral Products.—The following is a summary of the mineral products for the calendar year 1894, the last reported: In *quarrying* the State ranked first in production of granite, with an output valued at \$1,994,830, a considerable increase over that of the previous year. The most productive counties were Essex, Worcester, Norfolk, Middlesex, Bristol and Hampden, and a large part of the output was cut for paving and monument purposes. Sandstone had a decreased output, aggregating \$150,231, principally in Hampden, Suffolk, Norfolk, and Hampshire counties. The limestone output, \$195,982, was wholly in Berkshire county, and nearly all was burned into lime. The total quarry output of the year was valued at \$2,341,043. The value of the various *clay* products was reported by 114 concerns as follows: Common and pressed brick, \$1,648,065; fancy brick, \$139,100; firebrick, \$93,825; vitrified paving brick, \$14,530; ornamental terra cotta work, \$48,000; terra cotta lumber, \$50,000; tile other than drain, \$46,983; and miscellaneous, \$299,431—total, \$2,339,934. Of 27 mineral springs, 25 reported commercial sales of 2,347,789 gals., valued at \$103,134, giving the State second rank.

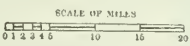
Finances.—The total bonded debt, Jan. 1, 1897, was \$40,636,729; sinking funds, \$13,458,574; net debt, \$27,178,155. During 1896 the bonded debt was increased by new bonds aggregating \$11,730,000, for the following purposes: Grade crossings, \$3,500,000; metropolitan waterworks, \$4,775,000; metropolitan park loan, \$1,400,000; State-house construction loan, \$625,000; State highways, \$600,000; State-house loan (1901), \$500,000; armory loan, \$150,000; and metropolitan sewerage loans, \$180,000. The assessed valuations in 1896 were: Real property, \$2,040,200,644; personal, \$1,330,153,386—total, \$3,370,354,030, the highest ever reached.

Banks.—On Oct. 31, 1897, there were 267 national banks in operation and 21 in liquidation, the active ones having a combined capital of \$94,327,500, and holding \$30,170,900 in United States bonds. These banks had outstanding on loans and discounts, \$275,228,174; represented by demand paper with individual or firm names, \$14,585,189; the same secured by stocks, bonds, and other personal securities, \$36,067,035; time paper with two or more individual or firm names, \$133,480,880; time paper with single individual or firm name, \$50,996,290; and the same secured by stocks, bonds, and other personal securities, \$40,098,779. The banks held in coin and coin certificates \$15,939,452, of which \$10,454,204 was in gold coin. The circulation account was: Total issue, \$379,248,865; redeemed, \$347,122,362; outstanding, \$32,126,503. There were deposits, \$241,189,582; reserve required, \$51,575,187; reserve held, \$70,889,293; ratio of reserve, 54 banks in Boston, 31.31 per cent., 213 other banks in the State, 26.





**MASSACHUSETTS
AND
RHODE ISLAND**



During the year ending Sept. 30, 1897, the exchanges at the United States clearing houses at Boston, New Bedford and Springfield aggregated \$5,044,915,777, a net increase of \$395,026,676 over the totals of the previous corresponding period.

The savings bank commissioners, Jan. 1, 1896, reported 119 co-operative banks with assets of \$20,552,667; two collateral mortgage companies, assets \$428,108; a mortgage loan company, assets \$819,386; and one mortgage loan company in the hands of a receiver. In the co-operative banks, 1,523 shares, valued at \$308,267, were matured during 1895, canceling 74 loans on real estate aggregating \$74,530, and 94 loans on shares, \$30,415. The receipts were for dues, \$5,404,195; interest, \$1,121,865; premiums, \$65,238; and fines, \$39,775—total, \$6,631,073; and the disbursements, for dues paid on shares withdrawn, \$2,341,237; for dues on shares forfeited, \$36,082; for dues on shares retired, \$1,255,277; for dues on shares matured, \$209,825; and for earnings of savings, \$750,101—total, \$4,592,522. During the year, 126,674 new shares were issued; 80,703 withdrawn; 15,389 retired; 1,613 forfeited; and 1,523 matured. The increase in the dues capital was \$1,573,216; in profits capital, \$374,832; in assets, \$1,967,995; in loans on real estate, \$1,836,809; and in loans on shares, \$66,599.

On Oct. 31, 1896, there were 187 mutual savings banks which had depositors 1,340,668; deposits, \$453,220,257; resources, \$481,995,826; and surplus and profits, \$28,605,721. There were also 32 loan and trust companies, with capital, \$10,975,000; deposits, \$4,508,381; resources, \$110,372,753; and surplus and profits, \$8,694,915.

Internal Revenue.—During the fiscal year ending June 30, 1897, the collections of internal revenue aggregated \$4,018,399.74, from the following sources: Distilled spirits, \$2,113,944.31; tobacco, \$331,693.56; fermented liquors, \$1,564,008.93; oleomargarine, \$1,108; and penalties, \$4,229.30. During that year there were 767 single-account cigar factories in operation, which used 2,315,686 lbs. of tobacco, and had an output of 103,705,343 cigars and 1,416,620 cigarettes; and 28 other tobacco factories which used 135,193 lbs. of materials, and had an output of 50 lbs. of fine cut tobacco, 16,015 lbs. of smoking, and 64,618 lbs. of snuff. There were 11 distilleries in operation; 3,524,525.92 gals. of spirits were rectified and 10,633,222 gals. gauged; and 1,670,556 bbls. of fermented liquors produced.

Railroads.—Of 50 railroad corporations, 12 were in active business Jan. 1, 1896, and 5 of them operated nearly 96 per cent. of the total mileage and did nearly 99 per cent. of the whole railroad business of the State. The total length of track within the State was 4,228.16 miles, and of track owned by Massachusetts companies in and out of the State, 6,684.52 miles. The aggregate capital stock of the 50 corporations was \$193,506,847.35; funded debt, \$128,991,352.97; unfunded debt, \$24,142,319.79; gross debt, \$153,232,672.76; net debt, \$132,723,453.87; and cash dividends, \$11,364,564.80. During the year the casualties to persons numbered 981, of which 248 resulted fatally; 48 were to passengers, 600 to employees, 81 to persons at crossings and stations, and 252 to trespassers. The street railways in the State had a total length of 1,155.25 miles, and were operated by 75 corporations. Of the whole 1,080 miles of main track, there were less than 62 miles that were not electrically equipped. Cash dividends by 33 of the corporations aggregated \$1,606,196, or about 5.76 per cent. on the capital stock. During the year, 1,507 persons received injuries, 25 fatal.

Commerce.—During the fiscal year ending June 30, 1897, the imports of merchandise at the ports of Barnstable, Boston, Fall River, Gloucester, Marblehead, New Bedford, Newburyport, Plymouth and Salem aggregated in value \$90,944,855, and the exports were valued at \$100,878,018. The imports of gold and silver coin and bullion had a value of \$3,724,582; exports, silver, \$4,000.

Publications.—Reported March, 1898: Daily, 84; semi-weekly, 5; weekly, 315; bi-weekly, 7; semi-monthly, 11; monthly, 170; semi-quarterly, 1; bi-monthly, 4; and quarterly, 19.

Churches.—The Roman Catholic is the strongest denomination in the State, and is followed in their order by the Congregational; Regular Baptist; Methodist Episcopal; Unitarian; Protestant Episcopal; Spiritualist; and Universalist. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Massachusetts, 1,915 evangelical Sunday schools, 39,162 officers and teachers, and 287,013 scholars—total members, 326,175, a gain of 29,453 in three years.

Schools.—At the end of the school year 1895-96, the number of children of school age in the State was estimated at 582,400, of whom 424,353 were enrolled in the public schools, and 321,685 were in average daily attendance. There were 12,275 teachers; 4,539 schools; public school property valued at \$36,780,727; and total expenditures, excluding payments on debt, \$11,829,191. The universities and colleges of liberal arts in 1896 numbered 9, with a total of 687 professors and instructors; 7,002 students in all departments (6,475 males and 527 females); 49 fellowships; 642 scholarships; 686,310 bound volumes in the libraries; \$1,676,256 in total income; \$7,596,000 invested in grounds and buildings; \$13,579,666 in productive funds; and \$304,389 receipts from gifts. There were 219 public high schools; 98 endowed academies, seminaries, and other private secondary schools; 5 colleges for women; 5 training schools for nurses; 9 public and 3 private normal schools and two collegiate normal departments; 15 commercial and business colleges; a State institution of technology; and a State nautical school. The State Agricultural and Mechanical College, at Amherst, in 1896 had faculty, 18; students, 176; volumes in library, 17,365; land under cultivation, 260 acres, value \$45,000; and special buildings and equipments valued at \$218,859. For the defective classes there were a State Institution for the Deaf at Beverley; Public Day School for the Deaf, Boston; two private institutions for the deaf, North Hampton and West Medford; Public Institution for the Blind, South Boston; State School for the Feeble-minded, Waverley; 3 private schools for the same class, Amherst, Barre, and Fayville; and 12 reform schools.

State Charities.—In the year ending Sept. 30, 1895, relief was given to 74,466 poor persons at a total cost of \$2,631,221; the number of insane persons under State supervision was 6,768; children subject to official visitation, 2,593, of whom 375 were in institutions, 2,218 in their homes or in selected families, and 1,482 were self-supporting; and whole number of prisoners in all the prisons, 44,376, of whom 7,628 remained in custody at the end of the year.

Libraries.—In 1896 there were reported 494 public libraries of 1,000 volumes each and upward, with a total of 5,450,397 bound volumes and 231,953 pamphlets. The public libraries commission reported in 1896 that under the State law 256 towns had established free public libraries and that only 24 in the State had not done so.

Population.—In 1890, 2,238,943, of whom 1,087,709 were males; 1,151,234 females; 1,581,806 natives; 657,137 foreign-born; 2,215,373 whites; and 23,570 colored of all races. The State census of 1895 showed a total of 2,500,183, divided between the counties as follows: Barnstable, 27,654; Berkshire, 86,292; Bristol, 219,019; Dukes, 4,238; Essex, 330,393; Franklin, 40,145; Hampden, 152,938; Hampshire, 54,710; Middlesex, 499,217; Nantucket, 3,016; Norfolk, 134,819; Plymouth, 101,498; Suffolk, 539,799; and Worcester, 98,767. The most populous cities were: Boston, 496,920; Worcester, 98,767; Fall River, 89,203; Lowell,

84,367; Cambridge, 81,643; Lynn, 62,354; New Bedford, 55,251; Somerville, 52,200; Lawrence, 52,164; Springfield, 51,522; Holyoke, 40,322; Salem, 34,473; Brockton, 33,165; Chelsea, 31,264; Haverhill, 30,209; all others, below 30,000. On June 1, 1897, the United States government actuary estimated the population at 2,662,000.

MASSACHUSETTS AGRICULTURAL COLLEGE, Amherst, Mass., non-sectarian; co-educational; had at close of 1896, 19 professors and instructors; 176 students; 17,630 volumes in library; \$70,000 income; president, Henry H. Goodell, LL.D.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY, Boston, Mass., non-sectarian; co-educational; had at close of 1896, 140 professors and instructors; 1,215 students; 40,000 volumes in library; \$780,000 in productive funds; \$86,000 gifts; \$291,000 income; president, Francis A. Walker, PH.D., LL.D. (died 1897, and was succeeded by Prof. James M. Crafts).

MASSENA, village, St. Lawrence county, N. Y.; population (1890), 1,049. It is on the Grass River, about 3 miles from the St. Lawrence, and opposite it, on the St. Lawrence River, are the famous Long Sault Rapids, which fall more than 50 feet between that point and the mouth of the Grass River. The little village suddenly became famous in the summer of 1897, by the formation of a syndicate with a capital of \$3,000,000 for the purpose of developing an immense electrical and hydraulic power plant at this point. A canal is to be cut from the St. Lawrence to the Grass River through the intervening plateau, and the fall of the water will yield 150,000 horse power. The work, which was actually begun in August, is believed to be the largest enterprise of its kind ever undertaken. The canal and power-house will cost \$3,000,000, and contracts have been given out for 15 electrical generators to cost \$1,000,000. The greater part of the money required has been furnished by English capitalists, and the manufacturing plants to be installed first at Massena are now in operation in various English cities.

MATTHEWS, JAMES BRANDER, educator and author, was born in New Orleans, La., Feb. 21, 1852. His latest publications include an *Introduction to the Study of American Literature*, *Tales of Fantasy and Fact*, *Aspects of Fiction*, and *The Dream Gown of the Japanese Ambassador* (1896); *His Father's Son* (1897).

MAYER, ALFRED MARSHALL, author and professor of physics at Stevens Institute of Technology, Hoboken, N. J., since 1871, was born in Baltimore, Md., Nov. 13, 1836; died in Maplewood, N. J., July 13, 1897.

MAYFLOWER, LOG OF THE, a MS. not properly the ship's log, but a journal of the experiences of the Plymouth Pilgrims from the day of their sailing for new homes in the West (1602) till 1646. It was written by William Bradford, second governor of the colony, and comprises 270 closely written pages. It was transferred to England probably in 1776, and deposited in the library of the Bishop of London. At the petition of the governor of Massachusetts, the Massachusetts Historical Society, the Pilgrim Society of Plymouth, and other learned bodies, the Log was committed to the care of Mr. Bayard, the American ambassador, for delivery to the governor of Massachusetts. The conditions of transfer were that persons desiring certified copies of entries might obtain them at reasonable cost, and that certified copies of the entire MS. should be deposited in the bishop's library. On May 26, 1891, Mr. Bayard, in a joint meeting of the Massachusetts legislature, formally transferred the document to the commonwealth.

MEADE, RICHARD WORSAM, rear-admiral U. S. N., was born in New York City Oct. 9, 1837; died in Washington, D. C., May 4, 1897.

MEILHAC, HENRI, dramatic author and member of the French Academy, was born in Paris, Feb. 25, 1831; died there July 5, 1897.

MEMPHIS, city, capital of Shelby county, Tenn.; population (1890), 64,495. The last obtainable local reports showed a net public debt of \$3,091,500; property valuations, assessed at about three-fifths of actual value (1894): Real estate, \$27,-282,302; personal, \$8,212,375—total, \$35,494,677; miles of streets, 63; miles paved, 39; miles of sewers, 56; miles of water mains, 70; cost of waterworks, \$1,750,000; annual cost of maintaining the city government, \$350,000; appropriation for public schools, \$90,000; pupils in public schools, 6,933; value of public school property, \$343,000. There are 5 national banks, with combined capital, \$2,350,000; deposits, \$4,389,122; and resources, \$9,932,890. The exchanges at the clearing house in the year ending Sept. 30, 1897, aggregated \$93,935,946, a decrease of \$11,586,311, from the previous year. The city has over 60 miles of electric street railroads; and 3 daily, 10 weekly, and 2 monthly periodicals.

MENNONITES. The aggregate strength of this denomination in the United States, as reported in 1897, was 962 ministers, 614 churches, and 52,964 communicants, a gain of 12 ministers, 14 churches, and 4,275 communicants. The Mennonites constitute 12 distinct bodies. In 6 of these gains have been made as follows: General Conference, 2,023; Mennonite, 1,073; Amish, 900; Bundes Conference, 650; Brethren in Christ, 329; and Defenseless, 300. The strongest of Mennonite bodies at present are the Mennonite, with 19,451 communicants; the Amish, with 11,600; the General Conference, with 8,023; the Brethren in Christ, with 4,329; the Bundes Conference, with 2,650; and the Old Amish, with 2,438.

MERCER COLLEGE, Macon, Ga., Baptist; had at close of 1896, 13 professors and instructors; 200 students; 15,000 volumes in library; president, P. D. Pollock, A. M.

MERCHANT MARINE. The registered merchant marine of the United States on June 30, 1897, aggregated 22,633 vessels of 4,769,020 gross tons, an increase of 65,400 tons over June 30, 1896, and a decrease of 275 vessels. The tonnage of the Atlantic and Gulf coasts was 2,647,796, a decrease of 20,000 tons. The tonnage of the Great Lakes was 1,410,103 tons, an increase of 86,000 tons. Pacific coast tonnage was virtually stationary. The steam tonnage amounted to 6,599 vessels of 2,358,558 gross tons, an increase of 51,000 tons over the previous year. Nearly all of this increase was on the Great Lakes, where steam vessels numbered 1,775, of 977,235 tons. New York had the largest merchant marine—4,857 vessels of 1,331,743 gross tons, an increase of 27,000 tons. The State exempts from taxation its tonnage in foreign trade. Michigan ranked second, with 1,132 vessels of 477,602 tons. Ohio's vessels were the largest and most modern, numbering 558, of 390,052 tons. Maine's fleet numbered 1,871 vessels of 299,592 tons. Steel and iron vessels numbered 1,023, of 1,207,222 tons, an increase of 117,000 tons. During the year 68 iron or steel vessels, of 124,395 tons, were built and documented. Vessels registered for foreign trade numbered 1,230, of 805,584 tons. Of 72,000 shipments of seamen on American merchant vessels before the United States Shipping Commissioners for the last fiscal year, 22,500 were of Americans, 18,000 Scandinavians, 13,000 British, 8,000 Germans, and the balance of other nationalities. Shipments at New York numbered 23,000, San Francisco, 12,500, Boston, 7,700, Philadelphia, 7,000, and New Orleans, 4,700.

MESA, ENCANTADA, LA, a detached cliff of the extensive mesa or tableland of western New Mexico. This cliff rises 430 ft. above the plain, but for 224 ft. the

ascent is gradual over the *débris* forming the talus at its base. The area of surface at the top is about 15 acres. Katzimo, la Mesa Encantada, is in the pueblo of the Acoma Indians. According to the stories current among the Acomas, the mesa was once the home, the stronghold, and the refuge of their fathers. By means of a sort of ladder in the native rock the men of the tribe were able to descend to the plain to cultivate their fields, leaving the women and children in security from enemies upon the top of the mesa. But one day came a great thunderstorm; by a bolt the rock was riven, and the rock ladder was torn away from the face of the cliff, leaving the mesa inaccessible. The women and children could not be rescued, and they all perished on the inhospitable rock. F. W. Hodge, of the Bureau of American Ethnology, Washington, D. C., visited the Acoma country in 1895, and made an attempt to ascend the enchanted mesa. While clambering up the slope of the talus he collected a number of pottery fragments, some of them bearing decorations in vitreous glaze, and in these found at least partial confirmation of the traditions of the Acomas. The fragments must have been washed down by the rains from the summit; therefore the summit must at some time have been inhabited. On that occasion Mr. Hodge, after climbing to the top of the talus slope, attempted further to climb up the rocky cleft which forms one of the many drainage ways from the top during rainstorms. In this way he reached a sloping terrace about 50 ft. below the summit; but there arose a sheer wall of 30 ft. and his progress was stopped, for he had no ladder nor other means of ascent. Prof. William Libbey, of Princeton University, with a small party, succeeded in making the ascent July 20, 1897, using such tackle as is employed in life-saving stations for rescuing crews of stranded ships. A line was shot across the rock, and this was used to haul up a 3-in. rope, carrying a traveling block, to which was attached a boatswain's chair. A team of horses supplied the motive power, and one by one the explorers were hoisted to the top. A storm was threatening, and the party did not stay long on the mesa; they made a careful search for relics or evidences of human occupation, but reported that no objects of man's handiwork were discoverable. "No evidences whatever of former human occupation were found," writes Prof. Libbey, "and the case on that point may be considered settled." On Sept. 3 following, Mr. Hodge returned to the attack on the Mesa Encantada. Accompanied by George H. Pradt, formerly a deputy United States surveyor, A. C. Vrooman, photographer, from Pasadena, Cal., H. C. Hayt, of Chicago, and two Indians, he reached the same point as in 1895—a shelf in the cleft 50 ft. below the summit, 30 ft. being sheer rock wall. In the outfit of the party was a ladder in 6 sections of 6 ft. each. Length by length the sections were joined and the ladder reared against the cliff wall. Mr. Hodge was the first to mount; the rest followed, carrying the baggage. Within five minutes a fragment of weatherworn pottery was picked up by Mr. Pradt. Then a sort of "cairn" was found—a long, narrow slab of the cliff sandstone, 3 ft. in height, held erect by smaller slabs laid flat on both sides of the upright stone. Other pottery fragments were also discovered, also an arrow-point of stone, a fragment of a shell bracelet, and two stone war-axes. Seeing how thoroughly the summit of the cliff had for centuries been swept by rainstorms, Mr. Hodge was surprised that so many relics should be found.

METHODIST CHURCH IN CANADA. There are 2,051 ministers of all kinds, including 227 probationers, and over 300 supernumerary and other ministers without appointment. The treasurer, at the last meeting of the General Board of Missions, reported receipts from all sources, \$252,740, an increase of

\$5,243 over last year. Contributions from ordinary sources fell short of last year by \$2,529, but the shortage was more than made good by legacies. The church is vigorously pushing its missions in British Columbia and among the French and the Indians in Canada. A proposition to put all missions having 150 or more members on a gradually decreasing appropriation is being considered by a special committee. The Students' Campaign movement, organized in 1895, for the purpose of employing college and university students in colporteur and missionary work during vacation, is making satisfactory progress, 207 young men and women having been so engaged last year. It is intended to interest the Epworth Leagues in this movement.

METHODIST EPISCOPAL CHURCHES. *The Methodist Episcopal Church in the United States.*—This body operates mainly in the Northern States. In 1897 there were 27 bishops, 16,248 ordained ministers, over 14,000 local preachers, 2,675,035 members, and 30,849 Sunday schools, with 355,899 officers and teachers, and 2,607,241 scholars. There were 29,849 churches, valued at \$109,641,191, and 10,059 parsonages, valued at \$16,880,417. There were over 200,000 baptisms, both adults and children. The sales at publishing houses and depositories amounted to \$7,950,096.

The General Conference met at Cleveland, O., May 1, 1896, in its 22d quadrennial session. A matter of importance dealt with was the question of the eligibility of women delegates, which was to be submitted to the annual conferences at their next sessions, a majority of three-fourths of all members of the annual conferences being necessary in order to adopt the amendment. Bishops Bowman and Foster were declared unable to perform the duties of their office on account of advanced age, and Drs. McCabe and Cranston were chosen bishops. Missionary-Bishop William Taylor of Africa was declared non-effective, and Rev. J. C. Hartzell, D.D., was elected to succeed him. The Epworth League was declared to be a distinctively denominational society. A proposition to remove certain amusements from the prohibited class in the Book of Discipline was rejected.

The Church Extension Society met in Pittsburg, Pa., on Nov. 5, 1896. The receipts of the year were \$226,753, of which \$80,922 were for the loan fund. Applications for aid were made by 471 churches, of which 367 were granted, the remaining 104 being refused for lack of funds. The capital of the fund has reached nearly \$1,000,000. A legacy of \$5,000 was reported during the meeting. The Missionary Society at its annual meeting reported total receipts, \$1,221,258, of which \$42,889 were special gifts, and \$78,098 were special collections for the debt, which now stands at \$299,504, a reduction of \$15,288 during the year. Appropriations were made for foreign missions, including South America, \$586,800, for missions in the United States, \$432,593, miscellaneous appropriations, \$120,000—total, \$1,139,493. The Freedmen's Aid and Southern Education Society spent in the year closed \$212,922, in the support of 22 schools, one being a theological seminary with 96 students. There are in the 22 schools, 477 teachers and 8,396 students, 225 of whom are preparing for the ministry. Value of property, \$1,978,800. Appropriations for the next year, \$109,775.

The Women's Societies, both for home and foreign work, continued to do excellent work, the former showing an expenditure of \$238,129, and holding school and other property worth \$465,800. The \$50,000 debt has been reduced to half that amount. The Foreign Missionary Society raised \$285,770, or \$3,457 less than the previous year, and employed 170 missionaries, and 750 Bible readers. The society supports 390 day schools with 12,000 pupils, and 50 boarding schools with 4,000 pupils; also 11 orphanages, 10 training schools, and 14 hospitals and dispensaries. The appropriations for the next year were \$327,309.

By an action of the Wesleyan Conference of England, held in Liverpool, July 21, 1896, the confectional missions of that body in Germany were transferred to the Methodist Episcopal Church in the United States.

Methodist Episcopal Church, South.—This body operates in the Southern States and Territories. The latest reports give 5,861 ordained ministers, 13,673 churches, and 1,437,672 members. The receipts for missionary work amounted to \$311,151, which sum included \$70,319 collected by the Woman's Board. The foreign missionary operations of the church are carried on mainly in China, Japan, Brazil and Mexico, where 105 missionaries and 268 native helpers are maintained, among 7,888 church members. There are also 71 boarding and day schools, with 2,081 pupils, and 217 Sunday schools, with 6,862 scholars, 19 Epworth Leagues, with a membership of 587. One hospital and three dispensaries are also supported, at which 12,015 patients were treated in the year. The mission property is valued at \$458,406. Home missions are also maintained among the Indians, the Germans, and the Cubans of Florida.

The Woman's Foreign Mission Board reports receipts of \$121,157. The appropriations for the current year were, for Mexico, \$37,965, Brazil \$14,225, China \$27,960, Indian Territory and other fields \$13,150, making a total of \$93,300. The Woman's Parsonage and Home Mission Society, through its central committee and local organizations, aided 60 parsonages at a cost of \$7,000. Supplies were also sent out to the value of \$3,096. Four schools are supported by the society; new buildings have just been completed at Ybor City, Fla., and a building is being erected at London, Ky. The society also publishes a large amount of literature, and supports 9 missionaries in large cities. The receipts of the society were \$17,500, being more than double those of the previous year.

Methodist Episcopal Church, African.—This church has 1,680 ministers, 4,850 churches, and 615,858 members. During the past four years there were receipts for general expenses, \$351,952, for educational work, which witnessed marked prosperity during this period, \$269,762, and for improvement in school property, \$31,264. There is now a school property valued at \$571,532. There are 52 schools, with 167 instructors and 5,533 students, which have turned out in the past 12 years 496 graduates. The organ of the church, *The African Methodist Episcopal Church Review*, has been more than self-sustaining during the past 4 years. The largest and most influential colored school in America, Wilberforce University, at Wilberforce, O., is under the control of this body. An important matter that will come before the General Conference in 1900 is the admission of women delegates, a resolution looking in that direction having been presented and referred at the last General Conference in Wilmington, N. C. At this meeting, also, the Revs. William B. Derrick, James H. Armstrong, and James C. Embree were elected bishops.

Methodist Episcopal Church, African, Zion.—This church has now 36 regularly organized conferences in the United States and Canada, and one in Africa, with 2,561 ministers, 1,750 church organizations, 492,888 church members, and over 1,600 church edifices owned by the church. Its church and other property is valued at \$2,750,130, which includes 17 educational institutions. It publishes a weekly denominational paper, a *Quarterly Review*, Sunday school literature, and its own hymn book. Recently Bishop Hood published a Centennial History of the Church. At the last General Conference, held in Mobile, Ala., the Revs. George W. Clinton, Jehu Holliday, and John B. Small were elected bishops. On Oct. 1-12, 1896, the 100th anniversary of the church was celebrated in New York City, where the church had its rise under James Varick, in 1796, when the

history and growth of the denomination and its various interests were recited, papers read, addresses delivered, and fraternal representatives of several other Christian bodies were received. The celebrations were concluded with a public meeting at Carnegie Hall on Nov. 2, at which Mayor Strong presided, followed by a banquet.

METHODIST PROTESTANT CHURCH. The latest reports give 2,100 ministers, 2,267 churches, with 183,418 church members, and 4,624 probationers; 595 Christian Endeavor Societies, with 27,693 members; 2,018 Sunday schools, with 17,567 officers and teachers, and 107,490 scholars. The value of church property, exclusive of college property, is \$4,519,357, an increase of nearly \$1,000,000 in 4 years. The receipts for missions during four years were \$52,251, and those of the Woman's Board, \$17,822. Twenty-five workers are supported in Japan, where there are 10 charges, 275 members, 44 probationers, and 17 Sunday schools. The Woman's Society has a school at Yokohama with 50 pupils, and also has 7 missionaries engaged in evangelistic work.

Among the important transactions at the 17th quadrennial session of the General Conference, which met at Kansas City, Mo., May 15, 1896, with Dr. J. W. Hering, of Maryland, president, were the declaration that annual conferences had rejected the proposition to exclude women delegates from the General Conference, and the sending down of a new overture to be voted on by the coming annual conferences, declaring women eligible as delegates, and also eligible to the order of elder in the church; also an overture proposing that the General Conference be held every 6, instead of every 4 years. The word Catholic was stricken from the Apostles' Creed, as printed in the Discipline of the Church in order to avoid misapprehension. Baptism by immersion, at the desire of the candidate, was sanctioned. The Primitive Methodist Conference, of Providence, R. I., made application for admission, which was referred to a committee to report at the next conference. Three new buildings have been lately erected for the Western Maryland College, and the cornerstone of the new Kansas City University was laid during the session of the conference.

METHODISTS, AMERICAN WESLEYAN. This body has now 600 ministers, 565 churches, and 18,400 members. The Book Committee, constituting the Board of Managers, for all the connectional societies, reported, late in 1897, total receipts for the year from the business, \$18,251, and the net assets, \$67,702, an increase of \$248. The receipts for home missions were \$1,480, assets \$3,453. Receipts for church buildings, \$3,115; for foreign missions, \$3,818; and of the Educational Society, \$2,540, an increase of \$253. The Besse Fund stands at \$41,404, yielding an income of \$4,649; the Jackson Fund at \$3,100; and the Superannuation Fund at \$955. The Educational Society received \$2,000 from the estate of Grace Elmer. The missionary work in Africa is reported to be in excellent condition.

MEXICO, a republic in North America; area, 767,005 square miles; population (1895) 12,570,195; capital, Mexico City; president, 1896-1900, Porfirio Diaz.

Finances.—The monetary unit is the standard silver dollar, worth 53.3 cents in United States gold. In the fiscal year 1895-96 the treasury receipts were \$50,521,470, and expenditures, \$45,070,123; and the budget estimates for the year ending June 30, 1897, were: Receipts, \$47,220,000, and expenditures, \$47,554,926. The principal item of revenue is the import and export duties, and the principal expenditures are on account of the public debt and pensions, and for the army and navy. The total debt, June 30, 1895, was \$189,906,976, of which

\$109,596,000 was foreign and \$80,310,976 domestic. The last assessed valuation of property was \$497,865,196.

Commerce.—The foreign trade of 1895-96 was: Imports, \$42,253,938; exports, merchandise, \$40,178,306, precious metals, \$64,838,596—total, \$105,016,902. The foreign trade is principally with the United States. During the calendar year 1897, the United States imported from Mexico merchandise valued at \$19,650,099, and gold and silver coin and bullion, \$31,756,021, and exported thereto merchandise valued at \$21,061,152, and coin and bullion, \$98,829—value of total trade, in United States gold, \$72,566,082.

Agriculture.—The entire territory is estimated to contain 479 square leagues of forest, 18,134 square leagues of mountain land, and 4,822 square leagues of uncultivated land. The agricultural industry is backward, because of the larger attention paid to mining; but the government is liberally promoting the development of farming. The principal products are rice, maize, barley, wheat, beans, cocoa, coffee, and tobacco.

Mining.—The country is rich in gold, silver, lead, iron, copper, quicksilver, tin, cobalt, antimony, sulphur, coal, and petroleum. Mining operations are carried on under the liberal law of 1892. There are 4 government mints and 7 assay offices. Every producer may have his bullion coined on a payment of less than 5 per cent. There are nearly 4,000 mining enterprises, more than one-third belonging to foreigners. Silver bullion and ore have formed the principal items of export for many years. In 1893 the production of gold was valued at \$1,326,564, and of silver, \$56,467,431. In 1895 a new law relating to precious metals reduced the mintage fees on gold and silver to 2 per cent., and created a new stamp tax on gold and silver of 3 cents per \$1.

Manufactures.—There are nearly 4,000 manufactories, of which 2,899 are for sugar and brandy; 123 for woolen and cotton yarns and textiles; and 41 for tobacco.

Army.—In 1895 the army consisted of 23,730 infantry; 11,069 cavalry; and 2,304 artillery and train—total, 37,103, with 2,270 officers. Including the reserves, the war strength is estimated at 132,000 infantry, 25,000 cavalry, and 8,000 artillery. Every citizen capable of carrying arms is liable for military service between the ages of 20 and 50 years.

Navy.—Although having a long coast line, Mexico has not felt the necessity for providing a large navy to defend it. The fleet comprises 2 dispatch vessels and 2 unarmored gunboats, all of a type antedating 1880. Recently there has been completed a steel training-ship, and in 1897, 4 gunboats were being built, a battleship and a cruiser were projected, and 5 first-class torpedo-boats had been ordered in England. The personnel comprised 90 officers and 500 men. See NAVIES OF THE WORLD.

Communications.—In 1896 there were in operation 6,933 miles of steam railroad and 127 miles of street railroad, the greater part of the first having been built with foreign capital. The telegraph lines aggregated 40,990 miles, of which more than half belonged to the Federal government and a large part of the remainder to the State governments. There were 1,560 post-offices, which handled in the year 30,473,230 pieces. The mercantile marine consisted of 52 steamers and 222 sailing vessels, besides many small boats engaged in the coasting trade.

Banking.—Banking business is carried on through the Banco Nacional, which has the exclusive right to issue notes that are received in payment of all taxes, but are not guaranteed by the government, and by 11 minor banks. The Banco Nacional, which occupies about the same relation to the government as the Bank of England does to the British government, had in 1896, capital, \$12,000,000,

total assets, \$77,469,325, notes in circulation, \$22,414,708, and reserve fund, \$5,212,344. The mints coin a large amount of silver dollars annually for use in China, Indo-China, and the Eastern Archipelago.

Churches.—All forms of religion are tolerated, but the Roman Catholic is the dominant one. For many years it has been wholly separated from the government. There are over 10,000 Roman Catholic churches and chapels and over 120 Protestant churches in the country.

Schools.—The law makes primary education free and compulsory, but it is not thoroughly enforced. The municipalities chiefly bear the expense of primary instruction, the Federal government making frequent grants to aid them. Institutions for higher education consist of secondary schools, seminaries, and professional colleges. Statistics of 1894 showed: Federal, State, and municipal schools, primary, 8,556; secondary, 38; professional, 42; directors and teachers, 11,526; students in average attendance, 377,706; aggregate appropriation, \$4,598,670. The government maintains a military and a naval college. Private and denominational schools were, primary, 2,088; secondary, 29; professional, 10; average attendance, 78,291. Besides the National Library of over 160,000 volumes there were 12 public libraries; and there were also 12 scientific and educational museums and 3 meteorological observatories. The periodical publications numbered 363.

Recent Events.—In his semi-annual message to Congress, Sept. 16, 1897, President Diaz thus alluded to the movement in silver: "Unfortunately, the present fiscal year does not begin under as good auspices as the previous, for the excessive weakness and fluctuations of silver, often sudden and violent in their character, have so influenced economic situations of the country that it is demanding the serious attention of the government and has caused the adoption of measures of prudence, all expenses not absolutely necessary being opposed or reduced. The magnitude and sudden character of the present perturbation in silver certainly does not correspond to the known causes which have produced it, and, therefore, there are well-founded motives for expecting that the factors, more or less artificial, which may have had an influence in the decline of silver will be of short duration, and may even soon bring about a favorable reaction. There is not, therefore, for the present any serious reason for alarm." Concerning the general condition of the country, he said there was every reason for congratulation, as it was steadily growing richer, while the government revenue was continually increasing. The exportation of minerals rose in the last fiscal year to \$74,000,000, silver remaining about as in the previous year, while gold was \$1,000,000 greater. The harvest in previous years amounted in value to an annual average of \$208,000,000, and in 1897 would show a substantial increase. The post-office department and the telegraphs owned by the government show a remarkable increase of business.

MICHEL, LOUISE, agitator, was born in Upper Marne, France, May 29, 1830. In the summer of 1897 she planned to visit the United States, accompanied by prominent English and other anarchists, and in September undertook a fortnight's lecturing campaign in Belgium, but on the 16th she and her companions were expelled from Brussels by armed police. Prompted by the assassination of the Spanish premier, Señor Canovas del Castillo, on Aug. 8, 1917, the United States government placed itself in co-operation with European governments, with a view of checking the spread of anarchism, and instructed all its representatives abroad to promptly notify the State Department of the departure of any anarchists for the United States.

MICHIGAN, one of the United States of North America; admitted to the Union Jan. 26, 1837; counties, 83; capital, Lansing.

State Officers, 1896-98.—Governor (elected for 2 years, salary \$4,000 per annum), Hazen S. Pingree; lieutenant-governor, Thomas B. Dunstan; secretary of state, Washington Gardner; treasurer, George A. Steel; auditor, Roscoe D. Dix; adjutant-general, Charles L. Eaton; attorney-general, Frederick A. Maynard; superintendent of public instruction, Jason E. Hammond; insurance commissioner, Milo D. Campbell; chief justice of the supreme court, Claudius B. Grant; associate justices, Robert M. Montgomery, Frank H. Hooker, Joseph B. Moore and Charles D. Long; clerk, Charles C. Hopkins—all Republicans.

Legislature, 1897.—Republicans, senate 27, house 81, joint ballot 108; Democrat-Populists, senate 5, house 19, joint ballot, 24; Republican majority, senate 22, house 62, joint ballot 84.

Elections.—In the State elections 1896 there were 542,634 votes cast for governor, of which the Republican candidate (Pingree) received 304,431; the Democrat-Populist (Sligh) 221,022; the National Democratic (Sprague), 9,738; the Prohibition (Safford), 5,499; and the National Prohibition (Gilberson), 1,944; Republican plurality, 83,409. The congressional elections resulted in the choice of 10 Republican and 2 Democrat-Populist candidates. In the presidential election the Republican candidate received 293,582 votes; the Democratic, 237,268; the National Democratic, 6,968; the Prohibition, 5,025; and the Social Labor, 292.

Farm Products.—According to the State census of 1894, there were 178,051 farms reported, with total area of 15,296,078 acres, valued with buildings and fences at \$528,249,503. The dairy products were: Milk, 212,070,373 gals.; value of milk and cream sold, \$2,970,385; butter, 48,951,378 lbs.; and cheese, 206,660 lbs. Other farm products reported Dec. 31, 1895, were: Corn, 33,600,242 bush., from 994,090 acres, value \$10,752,077; wheat 15,237,803 bush. from 1,154,379 acres value \$9,112,682; oats, 23,265,192 bush., from 973,439 acres, value \$5,350,994; rye, 1,491,254 bush., from 109,651 acres, value \$596,502; potatoes, 23,916,497, bush., from 236,797 acres, value \$3,826,610; and hay, 720,968 bush., from 9,243,048 acres, value \$9,437,479—total value, \$39,105,366.

Farm Animals.—Reported Jan. 1, 1898: Horses, 418,786, value \$19,446,741; mules, 2,756, value \$127,969; cows, 454,561, value \$14,023,207; cattle, 348,505, value \$8,062,319; sheep, 1,355,591, value \$4,695,075; and swine, 727,757, value \$4,118,943—total value, \$50,504,254.

Mineral Products.—The State produces about one-third of the entire copper output of the country, but no statement of total amount and values can be given as some of the largest corporations decline to make their reports public. Nine mines, however, had an output of 52,369,777 lbs. in 1894. In production of iron ore the State holds first rank, with an output in 1894 of 4,419,074 long tons, the greater part of which was red hematite. The output of pig iron was 95,171 long tons, and 45,868 tons in the first half of 1895. The value of the various clay products 1894 was reported by 196 concerns as follows: Common and pressed brick, \$924,872; fancy brick, \$54,750; firebrick, \$401,880; vitrified paving brick, \$1,560; drain tile, \$741,327; other tile, \$1,300; sewer pipe, \$99,040; and miscellaneous, \$26,600—total, \$2,254,329. By a decreased output of *soil* 1894 the State fell from first to second rank, the production being 3,341,425 bbls., chiefly common fine, value \$1,243,619. Other products were: Coal, 70,022 short tons, value \$103,049; sandstone, in Houghton and Marquette counties, \$34,086; limestone, in Huron, Monroe, Wayne, Charlevoix, and Alpena counties, used chiefly

for building and road making, \$336,287; gypsum, in which the State ranked second, 79,958 tons, value as manufactured \$189,620; and mineral water from 13 out of 15 springs, 540,550 gals., value \$150,282.

Finances.—The State has no public debt. The receipts of the treasury during 1895 were \$4,075,575.39; disbursements, \$4,079,890.76; leaving, with a balance from 1894, a balance at the end of the year of \$62,578.87. The legislature appropriated \$1,900,000 for 1895 and \$1,171,000 for 1896, and the apportionment for taxes 1895 was \$3,013,919.52. The equalized valuations and tax rate, determined every five years, were in 1896: Real estate, \$805,553,976; personal, \$140,455,965—total, \$946,009,941; tax rate, \$1.41 per \$1,000.

Productive Industries.—Including mines and fisheries, the State census reported 8,812 industrial establishments; capital, \$251,356,205; value of materials used, \$125,743,139; persons employed, 165,649; wages paid, \$60,188,142; and value of total output, \$237,857,772.

Banks.—On Oct. 31, 1897, there were 84 national banks in operation and 84 in liquidation, the active ones having a combined capital of \$12,295,000, and holding \$4,112,000 in United States bonds, an excess of \$2,310,750 over the amount required. These banks had outstanding on loans and discounts \$40,927,680; represented by demand paper with individual or firm names \$3,215,870; the same secured by stocks, bonds and other personal securities, \$3,184,528; time paper with two or more individual or firm names, \$22,329,744; time paper with single individual or firm name, \$6,056,354; and the same secured by stocks, bonds, and other personal securities, \$6,141,184. The banks held in coin and coin certificates \$3,482,039, of which \$2,852,321 was in gold coin. The circulation account was: Total issue, \$38,364,940; redeemed, \$33,962,975; outstanding, \$4,401,965. There were deposits, \$45,759,959; reserve required, \$8,670,176; reserve held, \$15,535,091; ratio of reserve, 6 banks in Detroit, 34.83 per cent., 78 other banks in the State, 33.38. During the year ending Sept. 30, 1897, the exchanges at the United States clearing house at Detroit aggregated \$292,865,813, a decrease of \$17,643,074 from the total of the previous corresponding period. The State banks, July 23, 1897, numbered 179, and had capital, \$12,096,600; deposits, \$69,990,353; resources, \$89,605,176; and surplus and profits, \$4,561,851. There were also 35 private banks, with capital, \$521,089; deposits, \$1,539,000; resources, \$2,270,014; and surplus and profits, \$179,573. Combining all these institutions, the State had an aggregate banking capital of \$24,912,689.

Building and Loan Associations.—The last general report on these associations (1893) showed a total of 75 organizations, of which 72 were local, 3 national, 50 serial, 17 permanent, and 8 terminating. There were reported by 74 associations, shareholders, 39,325; by 74, shares in force, 283,867; by 64, shares issued, 415,494; and by 74, shares free, 209,135, and shares borrowed on, 74,732. The total assets and liabilities were \$7,399,865; loans on real estate, \$6,899,828; and dues and profits, \$6,777,601. During the life of all associations, 24 mortgages were foreclosed, involving \$31,083, on which there was a loss of \$80. Of all associations, 47 reported 3,886 homes and 462 other buildings acquired.

Insurance.—In 1894 there were 4 State, 87 other State, and 34 foreign fire and marine companies doing business in the State; 37 level premium life companies; and 19 casualty companies. The total amount of premium received during the year was \$4,530,275.91; total losses incurred, \$2,035,112.87.

Internal Revenue.—During the fiscal year ending June 30, 1897, the collections of internal revenue aggregated \$2,241,503.18, from the following sources:

Distilled spirits, \$2,140,312.80; tobacco, \$1,408,235.77; fermented liquors, \$645,771.56; oleomargarine, \$10,632; miscellaneous, \$35,220.62; and penalties, \$1,326.17. During that year there were 1,252 single-account cigar factories, which used 1,764,971 lbs. of tobacco, and had an output of 99,723,295 cigars and 123,500 cigarettes; and 169 other tobacco factories, which used 15,896,850 lbs. of materials, and had an output of 3,551,319 lbs. of plug tobacco, 3,865,336 lbs. of fine cut, 7,693,916 lbs. of smoking, and 29,353 lbs. of snuff. There were 260,420.90 gals. of spirits rectified and 488,345 gals. gauged; and 675,184 bbls. of fermented liquors were produced.

Railroads.—On Jan. 1, 1894, the total railroad mileage was 7,492.33. During that year 6 companies constructed a total of 112 miles of new road, making Jan. 1, 1895, a total mileage of 7,604.33. A report at the close of 1894 showed: Capital stock, \$111,045,110; funded debt, \$122,761,705; total investment, \$246,042,392; cost of roads and equipments, \$247,454,127; gross earnings, \$28,621,281; net earnings, \$6,394,593; interest paid on bonds, \$5,975,504; and dividends paid on stock, \$1,265,160.

Commerce.—During the calendar year 1897 the imports of merchandise at the ports of Detroit, Huron, Michigan, and Superior aggregated in value \$6,106,765, and the exports were valued at \$22,068,879.

Publications.—Reported March, 1898: Daily, 70; tri-weekly, 2; semi-weekly, 13; weekly, 614; bi-weekly, 1; tri-monthly, 1; semi-monthly, 8; monthly, 3; bi-monthly, 3; and quarterly, 1.

Churches.—The Roman Catholic is the strongest denomination in the State, and is followed in their order by the Methodist Episcopal; Regular Baptist; Lutheran, General Conference; Lutheran, Independent Synods; Presbyterian; Congregational; Protestant Episcopal; Reformed; German Evangelical Synod; and United Brethren. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Michigan, 4,200 evangelical Sunday schools, 47,000 officers and teachers, and 324,000 scholars—total members, 371,000, a gain of 40,000 in three years.

Schools.—In 1895, according to the State census, the number of children of school age in the State was estimated at 622,400, of whom 476,684 were enrolled in the public schools, and 324,622 were in average daily attendance. There were 16,013 teachers; public school property valued at \$16,766,882; and expenditures, excluding payments on debt, \$6,428,003. The universities and colleges of liberal arts numbered 11, with a total of 361 professors and instructors; 6,399 students in all departments (4,313 males and 2,086 females); 3 fellowships; 359 scholarships; 206,367 bound volumes in the libraries; \$562,246 in total income; \$2,111,793 invested in grounds and buildings; \$1,601,292 in productive funds; and \$48,723 receipts from gifts. There were 281 public high schools; 17 endowed academies, seminaries, and other private secondary schools; 3 public and 4 private normal schools and 5 collegiate normal departments; and 16 commercial and business colleges. The State Agricultural College had experiment station staff, 15; faculty 31; students, 393; land under cultivation, 500 acres, value \$17,320; and special buildings and equipments valued at \$547,279. For the defective classes there were a State School for the Deaf at Flint; Lutheran Deaf and Dumb Asylum, North Detroit; State School for the Blind, Lansing; private home and school for the feeble-minded, Kalamazoo; and 4 reform schools.

Libraries.—In 1896 there were reported 153 public libraries of 1,000 volumes each and upward, with a total of 975,031 bound volumes and 70,455 pamphlets.

Population.—In 1890, 2,093,889, of whom 1,091,780 were males; 1,002,109

females; 1,550,009 natives; 543,880 foreign-born; 2,072,884 whites; and 21,005 colored of all races. The State census of 1894 showed a total population of 2,241,454. The most populous counties were: Wayne, 292,495; Kent, 121,919; Saginaw, 81,841; Bay, 61,292; St. Clair, 54,315; Lenawee, 48,541; Calhoun, 47,471; Jackson, 46,527; Berrien, 45,628; Houghton, 44,174; Washtenaw, 43,491; Oakland, 42,668; Kalamazoo, 42,055; Genesee, 40,553; all others, below 40,000. The cities of 10,000 each and upward were: Detroit, 237,837; Grand Rapids, 79,424; Saginaw, 44,642; Bay City, 30,939; Jackson, 22,614; Kalamazoo, 21,053; Muskegon, 20,222; Port Huron, 18,140; Lansing, 15,847; Battle Creek, 15,522; Manistee, 13,449; Menominee, 12,532; West Bay City, 12,337; Alpena, 12,139; Ishpeming, 11,687; Ann Arbor, 11,169; and Flint, 10,420. On June 1, 1897, the United States government actuary estimated the population at 2,377,000.

MICHIGAN AGRICULTURAL COLLEGE, Agricultural College, Mich., non-sectarian; co-educational; had at close of 1896, 31 professors and instructors; 393 students; 18,793 volumes in library; \$547,279 in productive funds; \$94,022 income; president, J. L. Snyder, A.M.

MICHIGAN, UNIVERSITY OF, Ann Arbor, Mich., non-sectarian; co-educational; had at close of 1897, 167 professors and instructors; 3,150 students; 112,275 volumes in library; \$421,635 income; \$959,822 invested in grounds and buildings; \$778,350 in scientific apparatus and library; \$545,926 in productive funds; president, James B. Angell, LL.D.

MICROSCOPY. For several years Dr. Elmer Gates, of Washington, D. C., has been conducting experiments to obtain, by a combination of microscopes, magnifying powers immeasurably superior to anything previously known. In October, 1897, he made public the manner of his experiments, and detailed some marvelous results he had accomplished. The value of the results he described may be weighed by the judgment of such scientists and specialists as Dr. Thomas Taylor, formerly chief of the division of microscopy of the United States Agricultural Department; Prof. W. J. Magee, chief of the United States Bureau of Ethnology; Dr. William T. Harris, United States Commissioner of Education; Dr. Robert Reyburn; and Prof. H. H. Doubleday, corresponding secretary of the American Microscopical Society. These authorities have declared that if Dr. Gates has attained the results he claims, the value of his invention is incalculable; that the results seem impossible; that the whole study of micro-organism will be revolutionized; that researches in astronomy, which have been fruitless beyond a certain point, will be aided materially; and that Dr. Gates has done as much for the development of the microscopy of the hitherto invisible as the earlier microscopists did for the visible.

Dr. Gates has made a full public exposition of his claim, and placed his laboratory, instruments, and special appliances at the disposal of expert investigators. He gives to the complex of instruments the name Photomicrographoscope, to indicate its function of producing photograph images of microscopic objects. By applying this instrument to a telescope, objects upon which the telescope is directed are magnified in a like ratio. In describing his combined microscope and telescope, which he calls Telemicroscope, Dr. Gates briefly narrates the history of his invention of the Photomicrographoscope. First he applied the objective of a second microscope to the focal plane produced by the objective, or the objective and ocular, of a first microscope. "By this method," says he, "I succeeded in resolving the markings of a test object by a 6-inch objective in the first instrument and no ocular, and a $\frac{3}{8}$ -inch objective in the second, which could

not be seen or resolved by a $\frac{1}{16}$ -inch oil immersion lens and a $\frac{1}{2}$ -inch ocular full tube length." Sept. 12, 1897, he made the first photomicrograph by this method, and then began his experiments in combining the microscope with the telescope; after two days he was successful. "I used for the purpose," he writes, "my $2\frac{1}{2}$ -inch Bardou telescope, with low power terrestrial eyepiece, and focused it upon a pine tree at Fort Reno, about $2\frac{1}{2}$ miles distant. Two entire trees were included in the field of vision, and any particular branch looked like an irregular patch of green. Then I removed from the eyepiece of the telescope the front lens and adjusted my microscope so as to focus upon the focal plane in the telescope. The microscope had a 4-inch objective and a 1-inch ocular. . . . I distinctly saw the separate pine needles upon a single twig. . . . But this is a mere trifle to what the new instrument can do. A 6-inch lens for the objective of the microscope instead of the 1-inch, and the magnification is more than 500 times greater; and to this there is no limit, except the capability of the art of photomicrography to produce a picture by exceedingly faint light." But Dr. Gates, with his new microscope, is able to photograph with light "many thousand times fainter than has hitherto been deemed possible. What I have accomplished is the power to photograph with such an infinitesimal quantity of light that in all former methods of photomicrography there would not be the slightest trace of an image produced."

In describing his method of producing images with infinitesimal light, Dr. Gates observes that in producing micrographs by the usual means with a magnification of 10,000 diameters, or 100,000 times the diameter of the object, any given detail in the image is produced with only 100-millionth as much light as comes from an equal area of the object. "But," he writes, "I have succeeded in getting a photograph with only $\frac{1}{1,300}$ of that much light, because I did not use a lens of small aperture, like a $\frac{1}{16}$, the hole of which is not larger than one of the periods with which this article is punctuated, nor with a $\frac{1}{45}$, the hole of which is still smaller; but instead I used large 6-inch objectives in each microscope, and got a magnification far beyond that which any single objective has ever made." He then tells of a method of using still less light than $\frac{1}{1,300}$ of 100-millionth of the intensity of the object, viz., by preventing the loss of light rays in the camera and microscope, due to the presence of dust and vapor; he finds that "the illumination permits the use of at least $\frac{1}{100}$ less light, *i.e.*, $\frac{1}{100}$ of $\frac{1}{1,300}$ of the 100 millionth of the intensity of the light which comes from the object; this is equal to a magnification of 3,500,000 diameters, or an area of 12 trillion, and I have made one photograph—a very poor one—of such a magnification." Now what may be expected of this instrument? If no further improvement were made, then a 10-inch telescope can be made to magnify 25,000 diameters, which is far beyond the power of the best existing instruments. With the microscope attachment applied to the largest existing telescopes we may expect to see lunar objects 30 ft. wide. The new telescope, if it accomplishes no more than it has already accomplished, will enable us, says Dr. Gates, "to see objects $\frac{1}{25}$ the size which the present telescope makes possible. I have shown experiments to a number of people in my laboratory, wherein I secured a magnification at least 200 times greater. The magnification will be limited only by our power to photograph with light of extreme faintness; and if there be no nearer limit than this, a million diameters can easily be obtained, and even much greater, and objects the size of a man could easily be seen upon the planets."

MILES, NELSON APPLETON, military officer, was born in Westminster, Mass., Aug. 8, 1839. He succeeded to the command of the United States army, as the

senior major-general, on the retirement of Lieut.-Gen. John M. Schofield, in 1895. His military career is exceptional from the facts that he entered the army from a business office, that he had no military education, that he achieved distinction by personal merit in the face of opposition because he was not a "West Pointer," and that he is the first man who has risen from civil life to the command of the army. He published *Personal Recollections* in 1896, and represented the United States army at Queen Victoria's Jubilee in 1897. In April, 1898, his authority as actual commander of the army was greatly increased by the opening of the war between the United States and Spain; by the adoption in Congress of bills providing for the reorganization of the regular army and the creation of a volunteer army; and by the proclamation of President McKinley calling for 125,000 volunteers, to serve for two years unless sooner discharged. From the time of the destruction of the battleship *Maine* in the harbor of Havana (*q. v.*), General Miles was in almost daily consultation with the secretary of war and other officials. He urged the calling out of at least 100,000 volunteers, the strengthening of the regular army, and the mobilizing of troops at convenient points in the South, so as to facilitate the speedy transfer of an effective force to Cuba, should such a course become necessary. He also was active in laying out the plans for a military campaign and for increasing the efficiency of such points on the coasts as the army would be expected to defend wholly or in part. The points selected for the mobilization of the troops in the South were Chickamauga, Tampa, Mobile, and New Orleans, and the officers chosen to command them were Maj.-Gen. J. R. Brooke, Brig.-Gen. J. F. Wade, Brig.-Gen. J. J. Coppinger, and Brig.-Gen. W. B. Shafter respectively. A new department, that of the Gulf, was created, with headquarters at Atlanta, under command of Brig.-Gen. W. M. Graham.

MILLAIS, SIR JOHN EVERETT, painter and president of the Royal Academy, was born in Southampton, England, June 8, 1829; died in London, England, Aug. 13, 1896. He became president of the Royal Academy on the death of Lord Frederick Leighton, Jan. 25, 1896.

MILLER, JOSEPH NELSON, naval officer, was born in Springfield, O., Nov. 22, 1836. He entered the United States navy in 1851; became a rear-admiral in 1897; and represented the United States navy at Queen Victoria's Jubilee in 1897.

MILLER, OLIVE THORNE, author, was born in Auburn, N. Y., in 1831. For several years she made a special study of bird life and afterward of pet animals. Her latest publications include *A Bird-Lover in the West: Four-Handed Folk* (1896); and *Upon the Tree-Tops* (1897).

MILWAUKEE, city, capital of Milwaukee county, Wis.; population (1890), 204,468; (1895, State census) 249,290. In 1896 the assessed valuations were: Real estate, \$119,441,715; personal property, \$24,329,904—total, \$143,771,619; tax rate, \$23.59 per \$1,000. Including a water debt of \$1,654,250, the city had a total bonded debt, Jan. 1, 1897, of \$6,352,250; sinking funds, \$484,250—net debt, \$5,868,000. The waterworks, owned by the city, represent an investment of \$4,689,002, and yield an income in excess of the total interest charges on the debt. The various properties owned by the city have a value of \$19,673,405. There are 498 miles of streets, of which 72 miles are paved; 298 miles of sewers; and 305 miles of water mains. The annual cost of maintaining the city government is about \$2,480,000; expenditure for public education, \$600,000; and value

of public school property, \$2,000,000. There are 5 national banks, with combined capital, \$3,250,000; deposits, \$14,402,209; and resources, \$22,407,115. The exchanges at the clearing house in the year ending Sept. 30, 1897, aggregated \$176,268,302, an increase of \$1,438,252 in a year. In the calendar year 1897 the imports of merchandise at this port had a value of \$536,386; exports, none. According to the State census of 1895, the manufacturing establishments had \$32,869,962 invested in real estate and machinery, and \$19,017,496 in stock and fixtures; employed 34,364 persons; paid \$13,714,500 in wages during the year; and had products, beer, \$13,836,737; iron and manufactures of, \$12,111,342; leather and manufactures of, \$9,145,830; flour, grist, etc., \$4,630,542; articles of wood, \$4,348,142; tobacco in all forms, \$1,820,262; whisky, \$810,837; wagons, carriages, and sleighs, \$506,820; vinegar, \$277,000; linseed oil, \$250,000; drain tile, \$226,700; woolen goods, \$78,000; lead and manufactures of, \$46,000; earthenware, \$18,600; and sundries, 129,301,658. Under an act of the legislature authorizing the city to issue special bonds, the city in 1897 began the construction of flushing works and a tunnel, by which clear water from Lake Michigan will be let into the Kinnickinnic River at regular intervals and so purify that stream.

MINERAL PRODUCTIONS, UNITED KINGDOM. According to a government *Blue Book* issued in 1897, dealing with the mineral productions in the calendar year 1896, the total value of the mineral product was £69,088,366 (\$335,769,458), as compared with £69,133,161 (\$335,987,177) in the previous year. Coal is by far the most important of the minerals, both as to quantity and value. The output in 1896 was 195,361,260 tons, valued at the mines at £57,190,147. Although the output was larger than in 1895, the money value was smaller. In the previous year 189,661,362 tons were valued at £57,231,213. Iron comes next to coal. In 1896 the output was 13,700,764 tons, valued at £3,150,424, as compared with 12,615,414 tons, valued at £2,865,700 in 1895. Clays, limestone, sandstone, and slate come next, ranging in value from £1,412,069 to £1,215,604. In the case of Scotland the minerals in 1896 were valued at £9,310,256, as compared with £9,539,282 in the previous year, and of this total coal itself represents £7,256,036 for an output of 28,326,700 tons. The average price of coal at the pit's mouth in Scotland during the year is given as 5s. 1d., as against 5s. 4d. in 1895, and 6s. in 1891. The North British Railway is credited with carrying 10,988,493 tons, the Caledonian Railway, 10,624,686 tons, and the Glasgow and Southwestern Railway, 2,416,122 tons of the coal produced in Scotland. Copper mining is an industry which is rapidly decreasing in importance in Great Britain. In 1863 the production of copper ore and copper precipitate amounted to upward of 210,000 tons, valued at over £1,000,000, whereas in 1896 the production was 9,168 tons valued at £23,710. The production of gold is also decreasing. In 1895 Wales yielded 6,600 ozs., while last year the quantity was only 1,352 ozs. The total production of oil shale, which is almost entirely credited to Scotland, was 2,419,525 tons, valued at the mines at £604,881. On the other hand, the imports of petroleum into the United Kingdom in 1896 were 189,953,945 gals., valued at £3,732,056, an increase both in quantity and money value as compared with the previous year. The value of the minerals obtained from British colonies, possessions, and dependencies in 1896 is given as £29,830,071, of which Australia contributes £13,919,968, Africa and Asia over £5,000,000 each, and North America, £3,842,586. Gold heads the list, valued at £10,750,000, coal and diamonds over £4,000,000, and tin over £3,000,000.

MINERAL PRODUCTIONS, UNITED STATES. The following table shows the amounts and values of the mineral products of the United States in the calendar year 1896:

Producers.	Customary Measures.	1895.		1896.	
		Quantity.	Value.	Quantity.	Value.
<i>Metallic Products.</i>					
Pig iron, spot value.....	Long tons.	9,446,308	\$105,198,550	8,622,127	\$91,250,000
Silver, coining value.....	Troy ozs..	55,727,000	72,051,000	58,834,800	76,089,236
Gold, coining value.....	Troy ozs..	2,254,760	46,610,000	2,568,182	53,088,000
Copper, value at New York.....	Pounds....	362,639,964	38,682,347	453,067,159	48,668,267
Lead, value at New York.....	Short tons.	170,000	11,229,000	187,000	10,472,000
Zinc, value at New York.....	Short tons.	89,086	6,278,020	81,456	6,519,920
Quicksilver, value at San Francisco.....	Flasks....	36,104	1,337,131	30,765	1,075,449
Aluminum, value at Pittsburg.....	Pounds....	920,000	464,600	1,300,000	520,000
Antimony, value at San Francisco.....	Short tons.	450	68,000	601	84,290
Nickel, value at Philadelphia.....	Pounds....	10,302	3,691	17,170	4,464
Platinum (crude), value at San Francisco.....	Troy ozs..	150	900	163	944
Total value of metallic products.....			\$281,913,639		\$286,782,570
<i>Non-Metallic (Spot Values).</i>					
Bituminous coal.....	Short tons.	135,118,193	\$115,740,771	137,640,276	\$114,891,515
Pennsylvania anthracite.....	Long tons.	51,785,132	82,019,272	48,010,616	81,415,785
Building stone.....			34,688,816		31,346,171
Petroleum.....	Barrels....	52,983,526	57,691,279	60,960,361	58,518,709
Natural gas.....			18,066,650		12,450,260
Brick clay.....			9,000,000		9,000,000
Clay (all other than brick).....	Long tons.	360,000	83,000	360,000	83,000
Cement.....	Barrels....	8,731,401	5,482,254	9,473,473	6,378,385
Mineral waters.....	Gals sold..	27,463,543	4,254,237	25,446,312	4,129,862
Phosphate Rock.....	Long tons.	1,638,551	3,606,094	948,720	2,898,454
Salt.....	Barrels....	13,669,649	4,425,084	13,870,726	4,040,839
Limestone for iron flux.....	Long tons.	5,247,949	2,625,974	5,112	2,660,000
Zinc (white).....	Short tons.	20,710	1,449,700	20,000	1,400,000
Gypsum.....	Short tons.	265,503	867,447	224,139	572,344
Borax.....	Pounds....	11,918,000	565,900	13,508,000	675,400
Mineral paints.....	Short tons.	50,635	621,532	48,032	530,455
Grindstones.....			295,708		326,826
Fibrous tale.....	Short tons.	39,240	370,815	46,069	399,443
Asphaltum.....	Short tons.	68,163	348,281	80,503	577,563
Soapstone.....	Short tons.	21,435	266,495	22,183	354,065
Precious stones.....			113,321		97,050
Pyrites.....	Long tons.	30,549	322,845	115,483	320,163
Corundum and emery.....	Short tons.	2,162	106,256	2,129	113,246
Oilstones, etc.....	Pounds....		155,881		127,068
Mica.....	Pounds....		55,831		57,041
Barytes (crude).....	Long tons.	21,529	68,321	17,068	46,513
Bromine.....	Pounds....	517,421	134,343	546,380	144,501
Fluorspar.....	Short tons.	4,000	24,000	6,500	52,000
Feldspar.....	Long tons.	23,200	133,400	7,614	30,700
Manganese ore.....	Long tons.	9,547	71,769	9,979	88,812
Flint.....	Long tons.	36,800	117,769	12,274	21,038
Monazite.....	Pounds....	1,573,000	137,150	30,000	1,500
Graphite.....	Pounds....		52,282		48,460
Bauxite.....	Long tons.	17,969	44,000	18,364	47,338
Sulphur.....	Short tons.	1,800	42,000	5,260	87,200
Fuller's earth.....	Short tons.	6,300	41,400	3,872	59,360
Marls.....	Short tons.	60,000	30,000	60,000	30,000
Infusorial earth.....	Short tons.	4,954	20,514	2,846	16,792
Milstones.....			22,542		22,567
Chronic iron ore.....	Long tons.	1,740	16,705	796	6,667
Cobalt oxide.....	Pounds....	14,452	20,675	10,700	15,301
Magnesite.....	Short tons.	2,200	17,000	1,500	11,000
Asbestos.....	Short tons.	795	13,825	504	6,100
Rutile.....	Pounds....	100	350	100	350
Total value of non-metallic products.....			\$339,774,029		\$334,187,373
Total value of metallic products.....			281,913,639		286,782,570
Estimated value of unspecifed products.....			1,000,000		1,000,000
Grand total.....			\$622,687,668		\$621,969,943

MINNEAPOLIS, city, capital of Hennepin county, Minn.; population (1890), 164,738; (1895, State census) 192,833. In 1896 the assessed property valuations, at one-half actual value, aggregated \$109,276,016, and the tax rate was \$23.25 per \$1,000. The bonded debt Jan. 1, 1897, including a water debt of \$1,430,000, was \$7,840,000; sinking funds, \$1,342,907—net debt, \$6,497,093. The city has 800 miles of streets, of which 98 miles are paved; 135 miles of sewers; and 243 miles of water mains. The waterworks, owned by the city, represent an investment of \$3,500,000, and yield an annual income of more than double their operating expenses. Appropriations for maintenance of the city government aggregate \$2,300,000; public education costs over \$750,000 per annum; and public school property has a value of over \$2,500,000. There are 8 national banks, with combined capital, \$5,200,000; deposits, \$7,212,535; and resources, \$16,993,338. The exchanges at the clearing house in the year ending Sept. 30, 1897, aggregated \$388,603,538, a decrease of \$57,052,906 in a year. In 1897 there were reported 5 daily, 41 weekly, 6 semi-monthly, and 31 monthly periodicals. Much attention is being given to the development of a system of public parks, boulevards, and driveways. The parks now comprise an area of over 1,500 acres, and the improved boulevards and driveways have a stretch of about 30 miles. The most noteworthy park is Minnehaha, comprising 125 acres immediately surrounding the beautiful Minnehaha Falls, and having on its edge the State Soldiers' Home, and next in point of beauty is Loring Park, of 36 acres, in the center of the city.

MINNESOTA, one of the United States of North America; admitted to the Union May 11, 1858; counties, 80; capital, St. Paul.

State Officers, 1897-99.—Governor (elected for 2 years, salary \$5,000 per annum), David M. Clough; lieutenant-governor, John L. Gibbs; secretary of state, Albert Berg; treasurer, A. T. Koerner; auditor, R. C. Dunn; attorney-general, H. U. Childs; adjutant-general, H. Muehlberg; superintendent of education, W. W. Pendergast; commissioner of insurance, E. H. Dearth; chief justice of the supreme court, Charles M. Start; associate justices, William Mitchell, Daniel Buck, Thomas Canty, and L. W. Collins; clerk, Darius F. Reese—all Republicans excepting Judges Mitchell, Buck and Canty.

Legislature, 1897.—Republicans, senate 44, house 90, joint ballot 131; Populists, senate 5, house 13, joint ballot 18; Democrats, senate 3, house 11, joint ballot 14; Silver Republicans, senate 2, joint ballot 2; Republican majority, senate 34, house 66, joint ballot 100.

Elections.—In the State elections 1896 there were 337,116 votes cast for governor, of which the Republican candidate (Clough) received 165,807; the Fusion (Lind) 162,311; the Prohibition (Dean) 5,062; the Independent (Ames), 2,868; and the Social Labor (Hammond), 1,098. The congressional elections resulted in the choice of the Republican candidate in each district. In the presidential election, the Republican candidate received 193,503 votes; the Democratic, 139,735; the Prohibition, 1,318; and the National Democratic, 3,222.

Farm Products.—Reported Dec. 31, 1897: Corn, 25,810,880 bush., from 993,880 acres, value \$6,201,811; wheat, 59,891,104 bush., from 1,607,008 acres, value \$46,116,150; oats, 41,147,002 bush., from 1,582,577 acres, value \$7,817,930; rye, 1,012,409 bush., from 58,861 acres, value \$374,591; barley, 9,241,328 bush., from 362,405 acres, value \$2,217,919; buckwheat, 258,706 bush., from 15,218 acres, value \$116,418; potatoes, 11,443,760 bush., from 107,960 acres, value \$3,547,566; and hay 2,378,537 tons, from 1,514,992 acres, value \$10,703,416—total value, \$77,095,801.

Farm Animals.—Reported Jan. 1, 1898: Horses, 464,410, value \$18,276,398; mules, 8,588, value \$386,231; cows, 633,993, value \$17,434,808, cattle, 593,922, value \$12,465,824; sheep, \$406,929, value \$1,164,631; and swine, 433,003, value \$2,331,722—total value, \$52,059,614.

Mineral Products.—The following is a summary of the mineral products for the calendar year 1894, the last reported: In *iron* ore the State advanced to second rank, with an output of 2,968,463 long tons, valued at \$2,165,802, or 24.99 per cent. of the total production of the country. The ore was all red hematite, and the Mesabi range alone yielded 1,781,000 tons. Mining operations were much restricted by litigations over ore land. *Quarrying* showed decreased outputs, caused mainly by business depression, as follows: Granite, \$153,936; sandstone, \$8,415; limestone, \$291,263—total, \$453,614. The value of the various *clay* products was reported by 122 concerns as follows: Common and pressed brick, \$473,904; fancy brick, \$1,340; firebrick, \$3,950; drain tile, \$77,300; sewer pipe, \$543,065; terra cotta lumber, \$34,500; and miscellaneous, \$111,250—total, \$1,245,309. Valuable deposits of nickel and aluminum were discovered early in 1896, in Cook and Lake counties, and a company was organized to control and develop the field, which has but one district on the continent to compete with, the Sudbury nickel district in Canada.

Finances.—On Feb. 1, 1897, the bonded debt was \$1,509,000, of which the various State funds held \$554,000. In the year ending July 31, 1895, the treasury receipts were \$5,426,935.96; balance at beginning of the year, \$2,095,924.95—total, \$7,522,860.91; disbursements, \$5,478,751.55; balance at end of year, \$2,044,109.36. Among the sources of receipts were: Railroad companies, \$851,394.25; stumpage on State lands, \$227,712.19; and mineral leases on State lands, \$137,075.60. The assessed valuations in 1896 aggregated \$583,372,644, a decrease of \$59,877,637 in a year.

Banks.—On Oct. 31, 1897, there were 71 national banks in operation and 39 in liquidation, the active ones having a combined capital of \$13,865,000, and holding \$1,873,500 in United States bonds. These banks had outstanding on loans and discounts, \$31,742,362; represented by demand paper with individual or firm names, \$3,390,317; the same secured by stocks, bonds, and other personal securities, \$2,806,234; time paper with two or more individual or firm names, \$11,538,881; time paper with single individual or firm name, \$6,366,113; and the same secured by stocks, bonds, and other personal securities, \$7,640,819. The banks held in coin and coin certificates \$4,576,482, of which \$3,707,482 was in gold coin. The circulation account was: Total issue, \$16,564,570; redeemed, \$14,542,958; outstanding, \$2,021,612. There were deposits, \$38,776,868; reserve required, \$8,123,955; reserve held, \$17,794,977; rates of reserve, 5 banks in St. Paul, 54.11 per cent., 6 banks in Minneapolis, 48.11, and 60 other banks in the State, 37.46. During the year ending Sept. 30, 1897, the exchanges at the United States clearing houses at Minneapolis and St. Paul aggregated \$578,657,887, a decrease of \$52,016,799 from the total of the previous corresponding period. The State banks, July 23, 1897, numbered 145, and had capital, \$6,196,200; deposits, \$17,087,619; resources, \$26,066,691; and surplus and profits, \$1,280,419. There were 8 loan and trust companies, with capital, \$3,664,226; check deposits, \$6,867,060; savings deposits, \$940,905; resources, \$5,563,395; and surplus, \$262,281. The stock savings banks, Jan. 1, 1897, numbered 13, and had capital, \$200,000; depositors, 44,643; deposits, \$3,545,008; resources, \$10,920,767; and surplus and profits, \$153,376. There were also 40 private banks with capital, \$639,927; deposits, \$1,568,417; resources, \$2,482,347; and surplus and profits,

MINNESOTA

Greenwich, 93

Longitude, 94 West

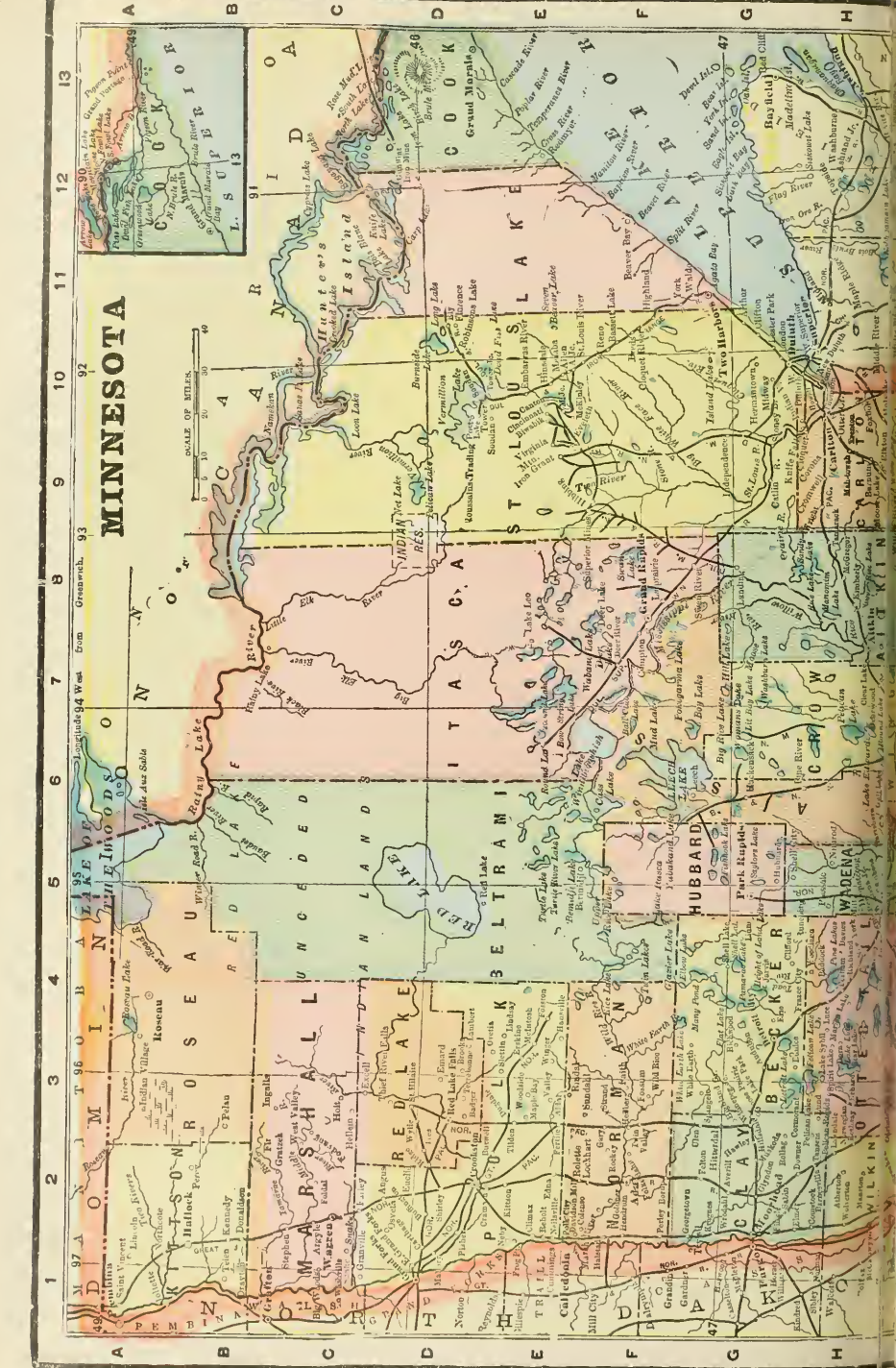
Latitude, 47 North

Scale of Miles

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\$244,940. Combining all these institutions, the State had an aggregate banking capital of \$20,901,127.

Building and Loan Associations.—The last general report on these associations (1893) showed a total of 97 organizations, of which 82 were local, 15 national, 84 serial, and 13 permanent. There were reported by 95 associations, shareholders, 47,628; by all, shares in force, \$593,580; by 77, shares issued, \$1,432,023; and by 95, shares free, \$382,985, and shares borrowed on, \$114,348. The total assets and liabilities were \$15,739,680; loans on real estate, \$11,747,252; and dues and profits, \$11,490,008. During the life of 93 associations, 1,064 mortgages were foreclosed, involving \$1,757,173, on which there was a loss of \$103,535. Of all associations, 78 reported 6,529 homes and 79 reported 684 other buildings acquired.

Internal Revenue.—During the fiscal year ending June 30, 1897, the collections of internal revenue aggregated \$2,221,315.85, from the following sources: Distilled spirits, \$1,594,291.15; tobacco, \$137,319.78; fermented liquors, \$486,396.97; oleomargarine, \$480; and penalties, \$5,810.73. During that year there were 554 single-account cigar factories, which used 844,122 lbs. of tobacco and had an output of 42,968,111 cigars and 519,120 cigarettes; and 105 other tobacco factories, which used 150,958 lbs. of materials and had an output of 3,310 lbs. of fine cut, 129,482 lbs. of smoking, and 16,699 lbs. of snuff. There were 499,636.62 gals. of spirits rectified, 3,697,973 gals. gauged, and 492,814 bbls. of fermented liquors produced.

Railroads.—On Jan. 1, 1894, the total railroad mileage was 5,944.58. During that year 6 companies constructed a total of 69.12 miles of new road, making Jan. 1, 1895, a total mileage of 6,013.70. A report at the close of 1894 showed: Capital stock, \$292,991,901; funded debt, \$364,493,824; total investment, \$671,064,873; cost of roads and equipments, \$622,648,691; gross earnings, \$52,119,946; net earnings, \$21,151,774; interest paid on bonds, \$17,672,491; and dividends paid on stock, \$4,846,676.

Commerce.—During the calendar year 1897, the imports of merchandise at the ports of Duluth and Minnesota aggregated in value \$2,882,812, and the exports were valued at \$1,406,579.

Publications.—Reported March, 1898: Daily, 38; semi-weekly, 3; weekly, 490; tri-monthly, 1; bi-weekly, 2; semi-monthly, 13; monthly, 51; bi-monthly, 1; and quarterly, 2.

Churches.—The Roman Catholic is the strongest denomination in the State, and is followed in their order by the Lutheran, Independent Synods; Methodist Episcopal; Lutheran, Synodical Conference; Lutheran, General Council; Regular Baptist; Presbyterian; Congregational; and the Protestant Episcopal. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Minnesota 1,550 evangelical Sunday schools, 18,250 officers and teachers, and 150,500 scholars—total members, 168,750, a gain of 11,062 in three years.

Schools.—At the end of the school year 1895-96 the number of children of school age in the State was estimated at 174,700, of whom 354,657 were enrolled in the public schools, and 230,596 were in average daily attendance. There were 11,519 teachers; public school property valued at \$14,271,771; and expenditures, excluding payments on debts, \$5,200,206. The universities and colleges of liberal arts numbered 10, with a total of 335 professors and instructors; 4,261 students in all departments (3,042 males and 1,219 females); 2 fellowships; 18 scholarships; 85,130 bound volumes in the libraries; \$368,955 in total income;

\$2,682,740 invested in grounds and buildings; \$1,609,751 in productive funds; and \$31,477 receipts from gifts. The permanent school fund was \$4,918,588; permanent university fund, \$577,800. There were 101 public high schools; 29 endowed academies, seminaries, and other private secondary schools; a college exclusively for women; 5 public and 2 private normal schools, and 4 collegiate normal departments; and 15 commercial business colleges. The State Agricultural and Mechanical College, a part of the State University, had experiment station staff, 15; students, 545; land under cultivation, 210 acres, value \$300,000; and special buildings and equipments valued at \$330,000. For the defective classes there were a State School for the Deaf at Faribault; private school for the deaf, St. Paul; State School for the Blind, and State School for the Feeble-minded, both Faribault; and 4 State reform schools.

Libraries.—In 1896 there were reported 75 public libraries of 1,000 volumes each and upward, with a total of 467,397 bound volumes and 46,364 pamphlets.

Population.—In 1890, 1,301,826, of whom 695,321 were males; 606,505 females; 834,470 natives; 467,356 foreign-born; 1,296,159 whites; and 5,667 colored of all races. The State census of 1895 showed a total population of 1,573,350. The most populous counties were: Hennepin, 217,798; Ramsey 147,537; St. Louis, 77,487; Stearns, 41,612; Otter Tail, 40,002; Polk, 39,171; Winona, 37,134; Blue Earth, 32,303; Goodhue, 32,268; Fillmore, 28,599; Wright, 27,653; Washington, 27,417; Rice, 26,838; Renville, 21,818; Mower, 21,546; Dakota, 21,345; Ohnsted, 21,316; Freeborn, 21,138; Le Sueur, 20,915; Faribault, 20,139; Morrison, 19,163; McLeod, 19,136; Wabasha, 18,587; Brown, 18,431; Todd, 17,674; Carver, 17,567; Meeker, 17,389; Douglas, 16,942; Scott, 16,494; Sibley, 16,436; Kandiyohie, 16,402; Steele, 15,818; Houston, 15,646; Clay, 15,154; Waseca, 14,713; Nicollet, 14,299; all others, below 14,000. The most populous cities were Minneapolis, 192,383, and St. Paul, 140,292. On June 1, 1897, the United States government actuary estimated the population at 1,768,000.

MINNESOTA, UNIVERSITY OF, Minneapolis, Minn., non-sectarian; co-educational; had at close of 1897, 188 professors and instructors; 2,825 students; 2 fellowships; 44,000 volumes in library; \$1,587,000 invested in grounds and buildings; \$135,00 in scientific apparatus and library; \$1,201,238 in productive funds; \$284,000 income; president, Cyrus Northrop, LL.D.

MINTS OF THE UNITED STATES. In his annual report for 1897, Director Preston estimated the world's production of gold in the year at \$240,000,000, of which the manufacturing arts would require \$80,000,000, thus leaving the immense sum of \$160,000,000 for commercial purposes and coinage. The production was an increase of more than \$35,000,000 over that of the previous year. Estimates of the silver production showed a large decline in several countries, and indicated a net output about equal to that of the preceding year. The production in the United States in the calendar year 1896 was gold, 2,568,132 troy ounces, of a coining value of \$53,088,000; silver, 58,834,000 troy ounces, of a coining value of \$76,069,236; and the total coinage at the various mints in the fiscal year 1896-97 was, gold, \$71,646,705; silver, \$24,327,786. On Oct. 1, 1897, the value of the entire stock of gold coin of the United States was \$682,437,123, of which \$154,338,370 was in the United States treasury, and \$528,098,753 in circulation. Of silver, in standard dollars and subsidiary coin, the entire stock was valued at \$526,725,382, of which \$408,403,197 was in the United States treasury, and only \$118,322,185 in circulation. On the same date the treasury held \$30,223,294 in gold bullion and \$105,078,550 in silver bullion.

Experiments have been resumed to determine whether it is advisable to substitute pure nickel in the 5-cent and 1-cent pieces in places of the alloys now used. Pure nickel is much harder than the alloy now used, and, it is said, would not abrade so quickly. The present alloy of the 5-cent piece is 25 per cent. nickel and 75 per cent. copper. Under the new process there would be about 94 per cent. nickel in the coin. The 2-cent pieces have 95 per cent. copper and 5 per cent. of tin and zinc.

MIREX, an explosive agent invented by Wm. S. Darley and Herman G. Pfeiffer, of Chicago, in 1897. No electric current or mechanical device is used to explode the charge, and there is no danger of failure because of an outside agency failing to operate. Depending on the action of water pressure, a projectile can be discharged and regulated to explode at any depth desired. From 3 to 8 lbs., it is claimed, suffices to destroy the most powerful battleship. Experiments made at Chicago seemed to justify the anticipations of the inventors. The explosive was encased in a brass tube $\frac{1}{2}$ inches long, $1\frac{1}{4}$ inch diameter. This was tossed into the water and fell about 50 ft. from the pier from which the observers watched the results. The cartridge was regulated to explode at 15 ft. depth. An explosion was caused which shook the pier to its foundation. A second cartridge exploded at a depth of 5 ft. produced a shower of water rising 30 ft. high.

MISSIONARY ASSOCIATION, AMERICAN. The 51st annual meeting of the American Missionary Association was held in Minneapolis, Minn., in October, 1897. The report of the treasurer showed expenditures for the year ending Sept. 30: The South, \$211,225; the Indians, \$36,500; the Chinese, \$10,951; foreign missions, \$4,481; publications, \$12,208; agencies, \$17,881; administration, \$19,245; for annual meeting, wills, and estates, interest, etc., \$5,254, adding the debt balance, Sept. 30, 1896, \$66,572, makes \$384,385. The receipts from donations (including jubilee pledges), \$184,251; estates, \$82,169; income, sundry funds, \$10,877; income, Talladega College, Erwin fund, \$4,000; tuition, \$40,433; Slater fund, paid to institutions, \$7,500; sales of property, \$210—\$329,410; debt balance, Sept. 30, 1896, \$66,572; credit balance on year 1896-97, \$11,627—\$54,945—\$384,385. Receipts for 1896-97: For current work, \$329,410; income Daniel Hand fund, \$74,650; total, \$401,090; endowment funds received during the year, \$275—\$401,371. The executive committee reported on the educational work in the Southern States: Chartered institutions, 6; normal graded schools, 44; common schools, 27; totals, schools, 77; instructors, 413; pupils, 12,348. The theological pupils number 69, the collegiate, 70, the college preparatory, 330, the normal 1,439, the grammar, 2,672, the intermediate 2,919, the primary, 5,061; total, 12,560. The receipts through women's missionary societies for the year were \$28,753.51. They rendered valuable help in the furnishing of supplies in the missionary schools. Thirty-two of the State unions were on the contributing list.

MISSIONS, AMERICAN BOARD OF FOREIGN. The 87th annual meeting of the American Board of Commissioners for Foreign Missions was held in New Haven, Conn., in October, 1897. The Rev. Dr. Richard S. Storrs resigned the presidency of the board and was succeeded by the Rev. Dr. Charles M. Lamsen. In the various missions now under direction of the board are 471 Christian churches, with 43,043 members, and over 3,000 added during the year; 18 theological seminaries; 59 colleges and high schools for boys; 64 boarding schools for girls and 922 common schools, the attendance aggregating 52,654. The working force is 555 missionaries, skilled workers sent out from churches in this country, and nearly 3,000 trained native agents. There are 3 women's organizations auxiliary

to the American Board—the Woman's Board of Missions, Boston; the Congregational Woman's Board of Missions of the Interior, Chicago; and the Woman's Board of Missions for the Pacific. The total receipts in 1896 were \$643,283; expenditures, \$688,414; debt, \$45,130. The Prudential Committee reported: "More new missionaries have been sent to the field this year than last. The support for 5 of these missionaries is provided for outside the usual resources of the board. Four men, 1 a physician, 5 wives of missionaries, 1 unmarried man, and 12 single women, 2 of whom are physicians, 22 in all, represent the additions to our missionary force since the annual meeting. Their names are as follows: Zulu, Rev. Frederick B. Bridgman, Mrs. Clara Davis Bridgman, Miss Hattie Clark; Marathi, Miss Mary B. Harding; Madura, Rev. William W. Wallace, Mrs. Geneveive T. Wallace; Ceylon, Mary H. Irwin, m.d., Isabella H. Curr, m.d.; North China, Rev. Horace T. Pitkin, Mrs. Letitia T. Pitkin; Japan, Miss Pauline Swartz, Miss Gertrude M. Wilcox, Miss Cora McCandish; Eastern Turkey, Rev. Charles R. Ashdown, Miss Jane Dickie; Western Turkey, Thomas S. Carrington, m.d., Mrs. Phebe W. Carrington, Miss Minnie B. Mills; Mexico, Mrs. Helen Cattell Olds, Miss Mary F. Long, Miss Isabel Miller; Micronesia, Miss Jennie Olin. They have left pastorates, declined flattering calls, given up lucrative medical practice, resigned from responsible positions in high and common schools and the kindergarten, in order to answer to the call of the Master to fill important vacancies on the foreign field."

MISSISSIPPI, one of the United States of North America; admitted to the Union Dec. 10, 1817; seceded Jan. 9, 1861; readmitted Feb. 23, 1870; counties, 76; capital, Jackson.

State Officers, 1896-1900.—Governor (elected for 4 years, salary \$3,500 per annum), Anselm J. McLaurin; lieutenant-governor, J. H. Jones; secretary of state, J. L. Power; treasurer, Albert Q. May; auditor, W. D. Holder; superintendent of public education, A. A. Kincannon; attorney-general, W. N. Nash; adjutant-general, William Henry; revenue agent, Wirt Adams; land commissioner, J. M. Simonton; railroad commissioners, J. D. McInnis, M. M. Evans, and J. J. Evans; chief justice of the supreme court, Thomas H. Woods; associate justices, Albert H. Whitfield and S. H. Terral; clerk, Edward W. Brown—all Democrats.

Legislature, 1897.—Excepting two Populists in the house, the legislature elected in 1895 was wholly Democratic.

Elections.—In the State elections 1895 there were 64,343 votes cast for governor, of which the Democratic candidate (McLaurin) received 46,873, and the Populist candidate (Burkitt) 17,466; Democratic majority, 29,407. The congressional elections 1896 resulted in the choice of the Democratic candidate in each district. The State Democratic Convention, April 29, 1896, declared in favor of the free and unlimited coinage of silver and gold at the ratio of 16 to 1, irrespective of what other nations might do, and instructed its delegates to the National Convention to vote for no man for president or vice-president who was not fully and unequivocally in favor of this principle. In the presidential election the Democratic candidate received 63,253 votes; the Republican, 4,849; the National Democratic, 1,021; and the Prohibition, 390.

Farm Products.—Reported Dec. 31, 1897: Corn, 30,345,948 bush., from 2,092,824 acres, value \$13,655,677; wheat, 12,370 bush., from 1,237 acres, value \$12,246; oats, 1,670,620 bush., from 119,330 acres, value \$735,073; potatoes, 347,274 bush., from 5,886 acres, value \$281,765; and hay, 182,125 tons, from

55,490 acres, value, \$780,188—total value, \$15,167,629. The cotton crop for the year 1896-97 was estimated at 1,291,000 bales.

Farm Animals.—Reported Jan. 1, 1898: Horses, 199,482, value \$7,061,779; mules, 162,432, value \$8,029,440; cows, 267,657, value \$3,974,706; cattle, 370,876, value \$3,082,348; sheep, 266,356, value \$372,898; and swine, 1,199,019, value \$5,432,741—total value, \$27,953,912.

Mineral Products.—The only mineral products of commercial value in the calendar year 1895 were those of the *clay* industry, on which 38 concerns reported as follows: Common and pressed brick, \$187,450; fancy brick, \$500; firebrick, \$3,300; drain tile, \$500; stoneware, \$1,500; miscellaneous, \$1,500—total \$194,750.

Finances.—During the year ending Sept. 30, 1895, the receipts of the treasury aggregated \$1,277,142.69; disbursements, \$1,369,954.19; excess of disbursements in the year, \$92,811.50; excess in the biennial period then ended, \$181,765.30. The total debt, July 1, 1896, was \$2,611,201, of which a large part was held in State funds. The assessed valuation (1893) was: Real property, \$113,409,358; personal, \$47,540,169—total, \$160,949,527; tax rate, \$5 per \$1,000; and in 1896 the aggregate was \$177,312,169, and tax rate \$6.

Banks.—On Oct. 31, 1897, there were 10 national banks in operation and 5 in liquidation, the active ones having a combined capital of \$755,000, and holding \$243,150 in United States bonds. These banks had outstanding on loans and discounts \$2,501,411, represented by demand paper with individual or firm names \$78,426; the same secured by stocks, bonds, and other personal securities, \$156,452; time paper with two or more individual or firm names, \$813,799; time paper with single individual or firm name, \$278,545; and the same secured by stocks, bonds, and other personal securities, \$1,177,189. The banks had in coin and coin certificates \$145,290, of which \$76,795 was in gold coin. The circulation account was: Total issue, \$1,207,820; redeemed, \$984,013; outstanding, \$223,807. There were deposits, \$2,025,175; reserve required, \$303,776; reserve held, \$569,131; ratio of reserve, 28.10 per cent. The State banks, July 19, 1897, numbered 83, and had capital, \$3,581,225; deposits, \$7,673,246; resources, \$13,320,594; and surplus and profits, \$929,631. Combining these institutions, the State had an aggregate banking capital of \$4,336,225.

Building and Loan Associations.—The last general report on these associations (1893) showed a total of 32 organizations, of which 30 were local, 2 national, 28 serial, 3 permanent, and 1 terminating. There were reported by 31 associations, shareholders, 5,560; by all, shares in force, 51,364; by 26, shares issued, 86,481; and by all, shares free, 36,379, and shares borrowed on, 14,985. The total assets and liabilities were \$2,896,197; loans on real estate, \$2,525,776; and dues and profits, \$2,626,144. During the life of all associations, 31 reported 43 mortgages foreclosed, involving \$49,008, on which no loss was reported. Of all associations, 29 reported 1,921 homes and 135 other buildings acquired.

Internal Revenue.—The collections and details of taxable manufactures are included in the totals for Louisiana (*q. v.*).

Railroads.—On Jan. 1, 1891, the total railroad mileage was 2,459.22. During that year 3 companies constructed a total of 20 miles of new road, making Jan. 1, 1895, a total mileage of 2,479.22. In 1895 work was begun on the Gulf and Ship Island road, which will have a length of 72 miles, and will open up valuable pine tracts. Reports of local roads at the end of 1894 showed: Capital stock, \$7,456,000; funded debt, \$11,631,360; total investment, \$19,102,842; cost of roads and equipments, \$18,098,516; net earnings, \$9,575,333; and dividends paid on stock, \$201,780.

Commerce.—The State has one port of entry, Pearl River, on the gulf, where during the fiscal year ending June 30, 1897, the export of domestic merchandise aggregated in value \$1,744,300; imports, \$817.

Post-Offices.—Reported Jan. 1, 1897: Second-class, 5; third-class, 36 (presidential, 41); fourth-class, 1,631; money-order offices, 267; and limited money-order offices, 21.

Publications.—Reported March, 1898: Daily, 11; semi-weekly, 5; weekly, 170; semi-monthly, 8; and monthly, 17.

Churches.—The Regular Baptist, Colored, is the strongest denomination in the State, and is followed in their order by the Regular Baptist; Methodist Episcopal, South; African Methodist; Methodist Episcopal; Roman Catholic; Presbyterian, South; Cumberland Presbyterian; Disciples of Christ; and Protestant Episcopal. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Mississippi, 1,664 evangelical Sunday schools, 11,967 officers and teachers, and 94,533 scholars—total members, 106,500, a gain of 10,056 in three years.

Schools.—At the end of the school year 1894-95, the number of children of school age in the State was 522,500; of whom 350,615 were enrolled in the public schools, and 202,683 were in average daily attendance. Of the total enrollment, 209,126 were white pupils and 274,614 colored, and of the total teachers, 4,591 were white and 3,264 colored. The expenditure for public school purposes during the year was \$1,276,501, and the value of all public school property was \$1,636,055. The universities and colleges of liberal arts numbered 5, with a total of 48 professors and instructors, 1,020 students in all departments (781 males and 239 females); 24,000 bound volumes in the libraries; \$77,413 in total income; \$480,000 invested in grounds and buildings; \$704,400 in productive funds; and \$4,864 receipts from gifts. Details of reports for year 1892-93 include: Number of public high schools, 32; instructors, 82; secondary students, 1,436; and classical and scientific students, 376; number of endowed and private secondary schools, 53; instructors, 149; secondary students, 3,208; classical and scientific students, 872; volumes in libraries, 15,900; value of grounds and buildings, \$386,450; and total income, \$86,675; number of normal schools, 1 public, 2 private, and 5 collegiate; colleges exclusively for women, 10, with 77 professors and instructors, 1,258 students in all departments, 9,300 volumes in the libraries, and grounds and buildings valued at \$304,600; and commercial colleges, 3, with 23 instructors and 577 students in all classes. The State Agricultural and Mechanical College for white students had (1894-95) experimental station staff, 5; faculty, 25; students, 329; land under cultivation, 450 acres, value \$42,773; and special buildings and equipments, \$57,746. The Alcorn Agricultural and Mechanical College for colored students, at Westside, had faculty, 15; students, 305; land under cultivation, 90 acres, value \$2,500; and buildings and equipments valued at \$18,200. For the defective classes there were a State Institution for the Deaf and Dumb of both races and a State Institution for the Blind, whites only, both at Jackson.

Libraries.—In 1896 there were reported 31 public libraries of 1,000 volumes each and upward, with a total of 166,870 bound volumes and 23,915 pamphlets.

Population.—In 1890, 1,289,600, of whom 649,987 were males; 639,913 females; 1,281,648 natives; 7,952 foreign-born; 544,851 whites; and 744,749 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 1,444,000.

MISSISSIPPI AGRICULTURAL AND MECHANICAL COLLEGE, Agricultural College Station, Miss., non-sectarian; had at close of 1897, 24 professors and instructors; 368 students; 5,231 volumes in library; \$98,575 in productive funds; \$68,227 income; president, Stephen D. Lee, LL.D.

MISSISSIPPI COLLEGE, Clinton, Miss., Baptist; had at close of 1897, 12 professors and instructors; 228 students; 8,000 volumes in library; 2 scholarships; \$50,000 in grounds and buildings; \$42,000 in productive funds; \$12,000 income; president, J. W. Provine, PH.D.

MISSISSIPPI RIVER IMPROVEMENT. The Mississippi River Commission, in 1897, estimated the cost of improving the river, by the only method that appeared to insure good results, at \$30 per ft., or \$150,000 per mile. But not every mile of shore requires this expensive treatment; the 950 miles (or, reckoning both shores, the 1,900 miles) between Cairo and New Orleans would need not more than 650 miles of revetment. This possibly might not cost over \$63,000,000, but it might cost \$100,000,000, and maintenance would cost 10 per cent. per annum. The work, however, would extend over a period of nearly 40 years. The present annual supply of material for the wicker mattresses is enough for only 15 miles. The width of channel decided on is about 3,000 ft. Where the river is broader than that, it is proposed to build a series of low dikes out from the present shore for the proper distance to check the flow, thus promoting the deposit of silt where the current is thus made sluggish, and by natural processes gradually building up new banks. The main channel would be narrowed, and the current in it and the scour improved by these means. Erosion will be prevented by protecting the banks with wicker mattresses covered with stone work. The commissioners at their meeting in New York, in June, 1897, made the following apportionment of the moneys appropriated by Congress: For dredging the Mississippi, \$400,000; for levees, \$2,000,000; the remainder, \$533,633, to be expended for general expenses of the commission in the preservation of the banks and revetments. A part of this sum is also devoted to the putting into proper condition of the plant already on hand and the purchase of a new plant and other purposes. The apportionment for the various districts is as follows: Lower St. Francis, \$77,325; Upper Yazoo, \$88,825; White River, \$150,000; Lower Yazoo, \$675,925; Upper Tensas, \$364,400; Palmyra, \$5,000; Lower Tensas, \$278,350; Atchafalaya, \$168,750; Lafourche, \$50,625; Pontchartrain, \$137,675; Lake Borgne, \$2,700, and Barataria, \$23,625.

The levee system of the Mississippi has received a great deal of attention from the commission. As to the value of levees, apart from other protective works, for keeping the channel open at low water, engineers are divided. There has always been a majority of the commission favorable to the theory that levees are useful in promoting navigation, and a strong popular argument for levees is found in the protection of the population along the river and the promotion of the agricultural interests of extensive regions in Missouri, Arkansas, Tennessee, Mississippi, and Louisiana. For a time Congress distinctly forbade the diversion of any of its Mississippi River appropriations to the reclamation of lands or kindred purposes. But in 1892 its policy was definitely changed. Since that time it has authorized expenditure on the levees systematically. Hence, of the \$2,000,000 or \$3,000,000 given to the commission every year, now fully one-half, and sometimes three-fifths, is used for this purpose. A great deal has been done by the five States named toward the construction of levees during the last 50 years. Something like \$35,000,000 has been spent on levees, and nearly or quite half of

this sum was contributed by the taxpayers of the localities immediately benefited. In their report the commission estimated that about \$18,000,000 was needed to complete the levees. If this is obtained within a few years the levee system will be complete, and thereafter only necessary repairs need be provided for. Disastrous floods occurred throughout the Mississippi River valley in the early spring of 1897, and Congress appropriated \$200,000 (April 8) toward relieving the consequent distress.

MISSISSIPPI, UNIVERSITY OF, University Station, Miss.; non-sectarian; co-educational; had at close of 1897, 20 professors and instructors; 296 students; 14,000 volumes in library; 3 fellowships; 6 scholarships; \$200,000 in grounds and buildings; \$100,000 in scientific apparatus and library; \$540,000 in productive funds; \$38,000 in income; president, Robert B. Fulton, LL.D.

MISSOURI, one of the United States of North America; admitted to the Union Aug. 10, 1821; counties, 115; capital, Jefferson City.

State Officers, 1896-1901.—Governor (elected for 4 years, salary \$5,000 per annum), Lon V. Stephens; lieutenant-governor, August H. Bolte; secretary of State, Alexander A. Lesneur; treasurer, Frank L. Pitts; auditor, James M. Seibert; attorney-general, E. C. Crow; adjutant-general, M. Frederick Bell; superintendent of public schools, John R. Kirk; commissioner of insurance, Edward T. Crear; railroad and warehouse commissioner, T. J. Hennessey; secretary of state board of agriculture, John R. Rippey; chief justice of the supreme court, Shepard Barclay; associate justices, Thomas A. Sherwood, James B. Gantt, Gavin D. Burgess, George E. Macfarlane, Walter M. Robinson, and Theodore Brace; clerk, J. R. Green—all Democrats, excepting Kirk and Robinson, Republicans.

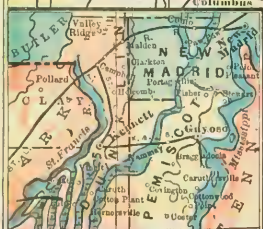
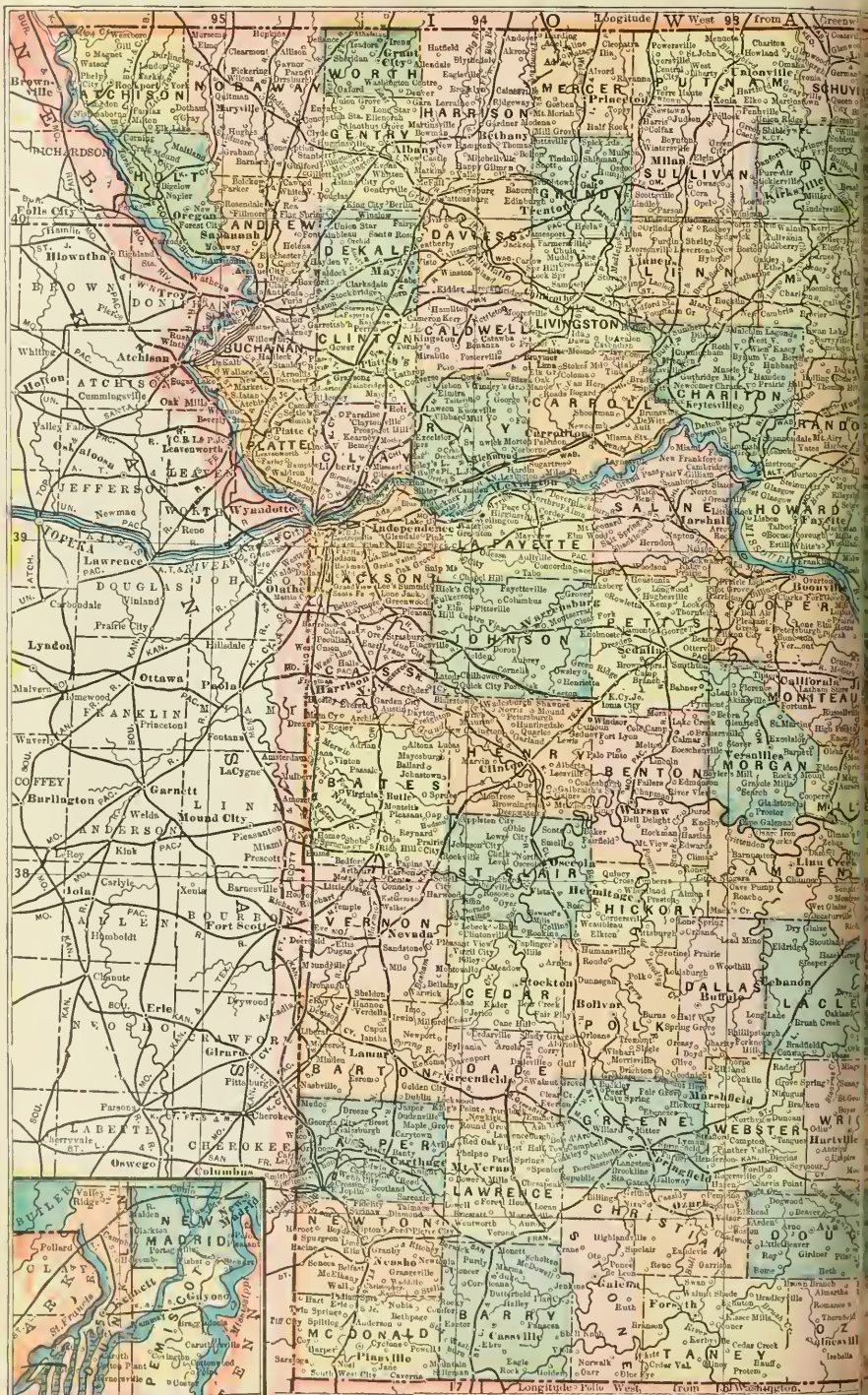
Legislature, 1897.—Democrats, senate 19, house 79, joint ballot 98; Republicans, senate 15, house 47, joint ballot 62; Populists, house 14, joint ballot 14; Democratic majority, senate 4, house 18, joint ballot 22.

Elections.—In the State elections 1896 there were 663,945 votes cast for governor, of which the Democratic candidate (Stephens) received 351,062; the Republican (Levis), 307,729; the Prohibition (Paris), 2,588; the National Democratic (Trimble), 1,809; and the Social Labor (Fay), 757; Democratic plurality, 43,333. The congressional elections resulted in the choice of 12 Democratic and 3 Republican candidates. In the presidential election the Democratic candidate received 363,667 votes; the Republican, 304,940; the National Democratic, 2,365; the Prohibition, 2,169; and the Social Labor, 599.

Farm Products.—Reported Dec. 31, 1897: Corn, 171,923,882 bush., from 6,612,457 acres, value \$41,261,732; wheat, 14,104,458 bush., from 1,567,162 acres, value \$11,988,789; oats, 22,078,166 bush., from 1,003,553 acres, value \$4,194,852; rye, 170,868 bush., from 14,239 acres, value \$75,182; potatoes, 4,104,114 bush, from 97,717 acres, value \$2,585,392; and hay, 2,546,304 tons, from 2,214,177 acres, value \$15,659,770—total value, \$75,765,717.

Farm Animals.—Reported Jan. 1, 1898: Horses, 802,878, value \$20,292,746; mules, 199,306, value \$6,373,297; cows, 666,530, value \$17,829,678; cattle, 1,537,523, value \$38,129,028; sheep, 655,428, value \$1,727,708; and swine, 3,105,072, value \$12,358,188—total value, \$96,710,645.

Mineral Products.—The following is a summary of the mineral productions for the calendar year 1895: Coal mining was carried on in 122 mines, the output being 2,372,393 short tons, valued at the mines at \$2,651,612, an increase in the year of 127,363 tons. The area worked was about 25,000 square miles, covering all or parts of 57 counties, and the product was nearly all bituminous, the exception being cannel. The most productive counties were Macon, Bates, Vernon,





MISSOURI

SCALE OF MILES
0 5 10 20 30 40 50 60

Lafayette, Randolph, Henry, Barton, Putnam, and Ray. There were 6,299 men employed at the mines, who worked an average of 163 days. Of the total product, 2,104,452 tons were loaded at the mines for shipment. The production of iron ore was 12,512 long tons of red hematite, value \$16,968, showing a steady decline. The ore was all of the carbonate variety, in the production of which the State held first rank. Pig iron showed a large increase, with a total output of 27,518 long tons. The value of the various clay products was reported by 221 concerns as follows: Common and pressed brick, \$1,526,925; fancy brick, \$41,500; firebrick, \$484,145; vitrified paving brick, \$154,640; drain tile, \$115,820; other tile, \$94,504; sewer pipe, \$212,000; and miscellaneous, \$384,114—total, \$2,799,218. *Quarrying* showed a generally increased production. The granite output had a value of \$128,987, principally in Iron, Wayne, St. Francois, and Madison counties; sandstone, \$100,000, in Jackson, St. Clair, and Cape Girardeau counties; and limestone, \$897,318, used principally for heavy masonry work, in St. Louis, Jackson, Marion, Greene, Buchanan, Dade, Pike, Jasper, and Perry counties. There was also an output of 1,065 short tons of ocher, valued at \$9,468.

Finances.—The treasury had a balance, Jan. 1, 1895, of \$719,725.43; received from all sources during the year, \$3,805,977.49; disbursed for all purposes, \$4,191,666.77; and had a balance, Dec. 31, 1895, of \$334,014.15. The appropriations for general expenses were \$1,687,279.60 for 1895, and \$1,061,198.93 for 1896. The total bonded debt, Jan. 1, 1897, was \$5,000,000; school and seminary certificates, \$4,369,839; total debt, \$9,369,839. The constitution requires that at least \$250,000 of the State debt must be paid annually. The assessed valuations, about one-fourth of actual value, in 1896 aggregated \$1,021,993,628, and the tax rate was \$2.50 per \$1,000.

Banks.—On Oct. 31, 1897, there were 63 national banks in operation and 61 in liquidation, the active ones having a combined capital of \$15,065,000, and holding \$3,672,050 in United States bonds. These banks had outstanding, on loans and discounts, \$56,769,619, represented by demand paper with individual or firm names, \$4,276,989; the same secured by stocks, bonds, and other personal securities, \$6,944,909; time paper with two or more individual or firm names, \$22,678,959; time paper with single individual or firm name, \$7,517,535; and the same secured by stocks, bonds, and other personal securities, \$15,351,256. The banks held an aggregate of \$4,041,273 in coin and coin certificates, of which \$1,937,351 was in gold coin. The circulation account was: Total issue, \$23,800,535; redeemed, \$20,092,210; outstanding, \$3,708,325. There were deposits, \$66,399,138; reserve required, \$15,820,794; reserve held, \$20,950,532; ratio of reserve, 6 banks in St. Louis, 24.75 per cent., 5 in Kansas City, 39.57; 2 in St. Joseph, 42.12; and 50 others in the State, 33.15. During the year ending Sept. 30, 1897, the exchanges at the United States clearing houses at St. Louis, Kansas City, and St. Joseph aggregated \$1,888,982,979, a net increase of \$33,627,136 over the total of the previous corresponding period. The State banks, Jan. 21, 1897, numbered 509, and had capital \$20,057,450; deposits, \$68,494,773; resources, \$101,847,640; and surplus and profits, \$8,164,419. Of private banking establishments there were 106, with combined capital of \$1,002,000; deposits, \$4,433,852; resources, \$6,159,499; and surplus, \$317,708. Combining all these institutions, the State had an aggregate banking capital of \$36,124,450.

Building and Loan Associations.—The last general report on these associations (1893) showed a total of 366 such organizations, of which 349 were local, 17 national, 252 serial, 25 permanent, and 80 terminating. There were reported by

364 associations, shareholders, 83,756; by 364, shares in force, 465,388; by 333, shares issued, 716,708; by 364, shares free, 308,475; and by 365, shares borrowed on, 156,930. The total assets and liabilities were \$35,841,500; loans on real estate, \$32,695,196; and dues and profits, \$27,553,283. During the year of all associations 363 reported 412 mortgages foreclosed, involving \$654,229, on which there was a loss of \$3,533. Of all associations, 339 reported 16,915 homes and 338 reported 1,199 other buildings acquired. A special report in 1897 showed, number of associations, 292; shares outstanding, 299,663; installment dues paid in, paid up and prepaid stock, and profits, \$21,926,871; loans, \$23,304,140; total assets, \$26,352,955.

Internal Revenue.—During the fiscal year ending June 30, 1897, the collections of internal revenue aggregated \$7,364,682.86, from the following sources: Distilled spirits, \$1,347,494.38; tobacco, \$3,900,331.50; fermented liquors, \$2,100,266.79; oleomargarine, \$10,938; and penalties, \$3,848.63. During that year there were 938 single-account cigar factories, which used 2,136,129 lbs. of tobacco, and had an output of 62,557,850 cigars and 317,760,870 cigarettes; and 91 other tobacco factories, which used 62,257,364 lbs. of materials, and had an output of 4,632,504 lbs. of plug tobacco, 82,137 lbs. of fine cut, 48,146,619 lbs. of smoking, and 21,732 lbs. of snuff. There were 59 grain and 53 fruit distilleries in operation; 2,563,428.16 gals. of spirits rectified and 7,178,752 gals. gauged; and 2,246,477 bbls. of fermented liquors produced.

Railroads.—On Jan. 1, 1894, the State had a total railroad mileage of 6,464.30. During the year 5 companies constructed a total of 59 miles of new road, making the mileage 6,523.30 on Jan. 1, 1895. A report at the end of 1894 on the roads operating in the State showed: Capital stock, \$259,283,355; funded debt, \$285,638,254; total investment, \$555,402,935; cost of roads and equipments, \$502,685,835; gross earnings, \$53,436,592; net earnings, \$13,580,163; interest paid on bonds, \$13,992,232; and dividends paid on stock, \$1,102,610. Total mileage, 1896, 6,591.97.

Commerce.—The State has three interior ports of entry—Kansas City, St. Joseph, and St. Louis, and in the calendar year 1897, the value of foreign merchandise received there was \$2,977,840; exports, none.

Publications.—Reported March, 1898: Daily, 85; semi-weekly, 22; weekly, 765; bi-weekly, 6; semi-monthly, 14; monthly, 131; bi-monthly, 2; and quarterly, 9.

Post-Offices.—Reported Jan. 1, 1897: First-class, 3; second-class, 19; third-class, 114 (presidential, 136); fourth-class, 2,588; money-order offices, 741; money-order stations, 37; and limited money-order offices, 77.

Churches.—The Roman Catholic is the strongest denomination in the State, and is followed in their order by the Regular Baptist, South; Disciples of Christ; Methodist Episcopal, South; Methodist Episcopal; German Evangelical Synod; Cumberland Presbyterian; Lutheran, Synod, Conference; Regular Baptist, Colored; Presbyterian, North; African Methodist; and Presbyterian, South. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Missouri, 7,137 evangelical Sunday schools, 68,937 officers and teachers, and 626,868 scholars—total members, 695,805, a gain of 157,690 in three years.

Schools.—At the end of the school year 1895-96 the number of children of school age in the State was estimated at 934,800, of whom 664,947 were enrolled in the public schools, and 436,388 were in average daily attendance. There were 14,844 teachers; public school property valued at \$15,032,082; and expenditures,

excluding payments on debt, \$5,006,683. There were 28 universities and colleges of liberal arts, with a total of 531 professors and instructors; 7,011 students in all departments (4,897 males and 2,144 females); 5 fellowships; 110 scholarships; 154,162 bound volumes in the libraries; \$623,921 in total income; \$4,455,000 invested in grounds and buildings; \$3,454,839, in productive funds; and \$120,072 receipts from gifts. Public high schools numbered 169, and had over 70,000 volumes in the libraries; endowed seminaries, academies, and other private secondary schools, 87, with over 47,000 volumes in the libraries and \$1,555,700 invested in grounds and buildings; colleges for males only, 5; for males and females, 23; and for females only, 12; the last having over 15,000 volumes in the libraries and \$657,000 in grounds and building; public normal schools, 5; private 7; and collegiate departments, 9; and commercial colleges, 14. The scientific institutions comprised the agricultural and mechanical department of the State University at Columbia and the State School of Mines at Rollo. For the defective classes there were a State Institution for the Deaf and Dumb at Fulton; day school for the deaf at St. Louis; two private deaf-mute schools at St. Louis; State Institution for the Blind at St. Louis; and State reform schools at Booneville, Chillicothe, and St. Louis.

Libraries.—In 1896 there were reported 104 public libraries of 1,000 volumes each and upward, with a total of 686,955 bound volumes and 115,355 pamphlets.

Population.—In 1890, 2,679,184, of whom 1,385,238 were males; 1,293,946 females; 2,444,315 natives; 234,869 foreign-born; 2,528,458 whites; and 150,726 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 3,202,000.

MISSOURI, UNIVERSITY OF, Columbia, Mo., non-sectarian; co-educational; had at close of 1897, 60 professors and instructors; 705 students; 25,000 volumes in library; 4 fellowships; 6 scholarships; \$898,000 invested in grounds and buildings; \$136,500 in scientific apparatus and library; \$1,288,000 in productive funds; \$185,877 income; president, Richard Henry Jesse, LL.D.

MISSOURI VALLEY COLLEGE, Marshall, Mo., Cumberland Presbyterian; co-educational; had at close of 1897, 13 professors and instructors; 232 students; 2,700 volumes in library; \$125,000 in grounds and buildings; \$115,000 in productive funds; \$19,000 income; president, William H. Black, A.M., D.D.

MITCHELL, DONALD GRANT, author, widely known as *IK MARVEL*, was born in Norwich, Conn., April 12, 1822. His latest publications include *Queen Anne and the Georges* (1895), and *American Lands and Letters, from the Mayflower to Rip Van Winkle* (1897).

MITCHELL, SILAS WEIR, physician and author, was born in Philadelphia, Pa., Feb. 15, 1829. He received the degree of LL.D. from Edinburgh University (1895), and published *Collected Poems* (1896), and *Hugh Wynne* (1897).

MOBILE, city, capital of Mobile county, Ala.; population (1890), 31,076. In 1896 the assessed valuations were: Real estate, \$10,303,555; personal property, \$4,252,872—total, \$14,556,427; total tax rate, \$13.50 per \$1,000. The total bonded debt was \$2,264,492. There is 1 national bank, with capital, \$300,000; deposits, \$1,333,609; and resources, \$2,093,174. Local reports for the commercial year ending Sept. 1, 1897, showed: Value of imports of merchandise, \$10,131,000, an increase of 45 per cent. in a year; cotton receipts, 303,000 bales, and exports, 180,000 bales, increase 15 and 76 per cent. respectively; grain receipts, 4,230,955 bush., increase 85 per cent.; lumber and timber handled, 209,738,500 superficial ft., increase 30 per cent.; tonnage by the 3 railroads which do all the handling by land, 1,544,800,000 lbs., increase 37 per cent.; and increase of tonnage receipts, 55 per cent. Trade with Florida and Mexico showed encouraging increase, and

among receipts were 2,067,755 bunches of bananas, against 1,887,059 in the previous year. The city has become the third cotton market in the country. In April, 1898, it was made a concentrating point for the army.

MONETARY COMMISSION. A national monetary conference, called at the request of the Indianapolis Board of Trade, and composed of representatives of similar organizations in all parts of the United States, was held in Indianapolis, Ind., in January, 1897. Nearly 300 delegates were present. Among the points made in the addresses and papers were: That the greenbacks should be retired; that national banks should be permitted to issue notes up to the par value of bonds deposited to secure their payment; that the country needed a stable tariff, stable government and stable currency; that prosperity could only be restored by the establishment of a sound monetary system; that the government should base all its issues on the gold standard and replace all notes by coin certificates protected by a 25 per cent. gold reserve; that the government should withdraw from the banking business; that postal savings banks should be established, and that legislation was necessary for the maintenance of the gold standard, cancellation of United States legal tender notes, and the creation of a safe and expansive currency on the basis of the plan followed in Baltimore, where there had been no bank failure in 60 years. Under a resolution, the conference appointed a monetary commission, and charged it with the duty of making a comprehensive investigation of the existing currency system with a view to urging a currency reform measure on Congress at its session of 1897-98. The commission consisted of ex-Senator Edmunds, of Vermont; ex-Secretary Charles S. Fairchild, of New York; Stewart Patterson, of Philadelphia; John W. Fries, of North Carolina; T. G. Bush, of Alabama; G. E. Leighton, of St. Louis; W. B. Dean, of St. Paul; Prof. J. L. Laughlin, of Chicago; L. A. Garnett, of San Francisco; Stuyvesant Fish, of New York; H. H. Hanna, of Indianapolis, and Robert S. Taylor, of Indiana. At a session of the commission, Sept. 28, President Edmunds announced the following committees: On Metallic Currency—C. Stuart Patterson, of Pennsylvania; Louis A. Garnett, of California, and J. Laurence Laughlin, of Illinois. On Demand Obligations of the Government—Robert S. Taylor, of Indiana; Stuyvesant Fish, of New York; J. W. Fries, of North Carolina, and George F. Edmunds, of Vermont. On the Banking System—Charles S. Fairchild, of New York; T. G. Bush, of Alabama; W. B. Dean, of Minnesota, and George E. Leighton, of Missouri. The commission held its final meeting in Washington, Dec. 17, and adopted an elaborate report to the Executive Committee of the Indianapolis Convention.

In January, 1898, a second monetary conference was held in Indianapolis, during which the report of the Commission was unanimously adopted. The report, after reciting the facts as to the currency, the demand obligations of the government, and the banking system, gave the following plan of currency reform:

I. METALLIC CURRENCY AND DEMAND OBLIGATIONS.

1. The existing gold standard shall be maintained; and to this end the standard unit of value shall continue, as now, to consist of 25.8 grains of gold, nine-tenths fine, or 23.22 grains of pure gold, as now represented by the one-tenth part of the eagle. All obligations for the payment of money shall be performed in conformity to the standard aforesaid; but this provision shall not be deemed to affect the present legal tender quality of the silver coinage of the United States or of their paper currency having the quality of legal tender. All obligations of the United States for the payment of money now existing, or hereafter entered into, shall, unless otherwise expressly provided, be deemed, and held, to be payable in gold coin of the United States as defined in the standard aforesaid.

2. There shall continue to be free coinage of gold into coins of the denominations, weight, fineness, and legal tender quality prescribed by existing laws.

3. No silver dollars shall be hereafter coined.

4. Silver coins of denominations less than \$1 shall be coined upon government account, of the denominations, weight, fineness and legal tender quality prescribed by existing laws.

5. Minor coins shall continue to be coined upon government account, of the denomination, weight, fineness, and legal tender quality prescribed by existing laws.

6. Subsidiary and minor coins shall be issued and exchanged as prescribed by existing laws, except as hereinafter otherwise provided.

7. There shall be created a separate division in the Treasury Department, to be known as the Division of Issue and Redemption, under the charge of an Assistant Treasurer of the United States, who shall be appointed by the President by and with the advice and consent of the Senate.

8. To this division shall be committed all functions of the Treasury Department pertaining to the issue and redemption of notes or certificates, and to the exchange of coins, and this division shall have the custody of the guaranty and redemption funds of the national banks, and shall conduct all the operations of redeeming national bank notes, as prescribed by law, and to this division shall be transferred all gold coin held against outstanding gold certificates, all United States notes held against outstanding currency certificates, all silver dollars held against outstanding silver certificates, and all silver dollars and silver bullion held against outstanding treasury notes of 1890, and all subsidiary and minor coins needed for the issue and exchange of such coins, and the funds deposited with the Treasury for the liquidation of national bank notes. All accounts relating to the business of this division shall be kept entirely apart and distinct from those of the fiscal departments of the treasury, and the accounts relating to the national banks shall be kept separate and apart from all other accounts.

9. A reserve shall be established in this division by the transfer to it by the treasurer of the United States from the general funds of the treasury of an amount of gold in coin and bullion equal to 25 per cent. of the aggregate amount of both the United States notes and treasury notes issued under the act of July 14, 1890, outstanding, and a further sum in gold equal to 5 per cent. of the aggregate amount of the coinage of silver dollars. This reserve shall be held as a common fund, and used solely for the redemption of such notes and in exchange for such notes, and for silver and subsidiary and minor coins.

10. It shall be the duty of the secretary of the treasury to maintain the gold reserve in the division of issue and redemption at such sum as shall secure the certain and immediate resumption of all notes and silver dollars presented, and the preservation of public confidence; and for this purpose he shall from time to time as needed transfer from the general fund of the treasury to the division of issue and redemption any surplus revenue not otherwise appropriated, and in addition thereto he shall be authorized to issue and sell, whenever it is in his judgment necessary for that purpose, bonds of the United States bearing interest not exceeding 3 per cent., running 20 years, but redeemable in gold coin, at the option of the United States, after one year; and the proceeds of all such sales shall be paid into the division of issue and redemption for the purposes aforesaid.

11. To provide for any temporary deficiency which may at any time exist in the fiscal department of the treasury of the United States, the secretary of the treasury shall be authorized, at his discretion, to issue certificates of indebted-

ness of the United States, payable in from 1 to 5 years, after their date, to the bearer, of the denominations of \$50, or multiples thereof, with interest at a rate not to exceed 3 per centum per annum, and to sell and dispose of the same for lawful money at the treasury department, and at the sub-treasuries and designated depositories of the United States, and at such post-offices as he may select. And such certificates shall have the like privileges and exemptions provided in the act to authorize the refunding of the national debt, approved July 14, 1870.

12. Whenever money is to be borrowed on the credit of the United States the secretary of the treasury shall be authorized, instead of issuing the usual forms of engraved bonds, upon receiving lawful money of the United States in sums of not less than fifty dollars (\$50) in any single payment, to cause a record of all such payments to be made in books to be kept for that purpose in Washington, and thereafter, from time to time, to pay to those so registered on such books interest not exceeding 3 per cent. per annum in gold coin on the amount with which they shall severally stand credited on such books in the same manner and at the same dates as if they were the holders and owners of registered bonds of the United States; and he shall also pay to those so registered the principal sum originally deposited, in gold coin, at the date of maturity of such inscribed loans. Suitable arrangements shall be made at each and every money-order post-office in the United States for receiving such payments into the treasury on like terms, as well as for the transfer, on proper identification, of any inscription on the books in Washington, or of any part thereof not less than fifty dollars (\$50). No interest shall accrue or be paid on inscriptions which shall have been reduced below fifty dollars (\$50). No charge of any kind shall be made by any department, or officer of the government for any service in connection with the receipt or transmission of the lawful money, nor in the transfer of inscriptions on the books at Washington.

13. The division of issue and redemption shall on demand at Washington, and at such sub-treasuries of the United States as the secretary of the treasury may from time to time designate:

- (a) Pay out gold coin for gold certificates.
- (b) Pay out gold coin in redemption of United States notes or Treasury notes of 1890.
- (c) Pay out silver dollars for silver certificates of any denomination.
- (d) Issue silver certificates of denominations of \$1, \$2, and \$5, in exchange for silver dollars, and for silver certificates in denominations above \$5.
- (e) Pay out gold coin in exchange for silver dollars.
- (f) Pay out silver dollars in exchange for gold coin, United States notes or treasury notes.
- (g) Pay out United States notes or treasury notes, not subject to immediate cancellation, in exchange for gold coin.
- (h) Pay out and redeem subsidiary and minor coins as provided by existing laws.
- (i) Pay out United States notes in exchange for currency certificates.

14. United States notes or treasury notes once redeemed shall not be paid out again except for gold coin unless there shall be an accumulation of such notes in the division of issue and redemption which cannot then be canceled under the provisions of the act, in which case the secretary of the treasury shall have authority, if in his judgment that course is necessary for the public welfare, to invest the same or any portion thereof in bonds of the United States for the benefit of the redemption fund, such bonds to be held in the division of issue and

redemption, subject to sale at the discretion of the secretary of the treasury for the benefit of the division of issue and redemption, and not for any other purpose.

15. The secretary of the treasury shall be authorized to sell from time to time, in his discretion, any silver bullion in the division of issue and redemption; and the proceeds in gold of such sales shall be placed to the account of the gold reserve in the division of issue and redemption.

16. The gold certificates and the currency certificates shall, whenever presented and paid or received in the treasury, be retired and not reissued.

17. No United States note or treasury note of 1890 of a denomination less than \$10 shall hereafter be issued; and silver certificates shall hereafter be issued or paid out only in denominations of \$1, \$2 and \$5 against silver dollars held by or deposited in the treasury.

18. The assistant treasurer in charge of the division of issue and redemption shall, on demand, pay in gold coin all United States notes and treasury notes presented for payment, and as paid cancel the same up to the amount of \$50,000,000. After that amount shall have been paid and canceled, he shall then from time to time cancel such further amounts of notes so paid as shall equal, but not exceed, the increase of national bank notes issued subsequent to the taking effect of the proposed act.

19. If at the end of five years next after the taking effect of the proposed act any United States notes or treasury notes shall be outstanding, a sum not exceeding one-fifth of such outstanding amount shall be retired, and canceled each year thereafter; and at the end of 10 years after the passage of the proposed act the United States notes and treasury notes then outstanding shall cease to be legal tender for all debts, public and private, except for dues to the United States.

20. The secretary of the treasury may, in his discretion, transfer from surplus revenue in the general treasury to the division of issue and redemption any United States notes or treasury notes which on such transfer could then lawfully be canceled under the provisions of the proposed act if they had been redeemed on presentation; and when so transferred the same shall be canceled. The secretary of the treasury, in his discretion, whenever there may be United States notes or treasury notes in the general treasury, which are not available as surplus revenue, and which, upon transfer to the division of issue and redemption could then lawfully be canceled under the provisions of the act, may exchange such notes with the division of issue and redemption for gold coin, and such notes shall thereupon be canceled.

21. All vested rights of property or contract, and all penalties incurred before the taking effect of the proposed act or any part of it, shall not be affected by the passage thereof, and all provisions of law inconsistent with any of the provisions of the proposed act should be repealed.

II. BANKING SYSTEM.

22. The total issues of any national bank shall not exceed the amount of its paid-up and unimpaired capital, exclusive of so much thereof as is invested in real estate. All such notes shall be of uniform design and quality, and shall be made a first lien upon all the assets of the issuing bank, including the personal liability of the stockholders. No such notes shall be of less denomination than \$10.

23. Up to an amount equal to 25 per cent. of the capital stock of the bank (the whole of its capital being unimpaired), the notes issued by it shall not exceed the value of United States bonds, to be fixed as hereinafter provided, deposited with

the treasurer of the United States. The additional notes authorized may be issued without further deposit of bonds.

Beginning 5 years after the passage of the proposed act, the amount of bonds required to be deposited before issuing notes in excess thereof shall be reduced each year by one-fifth of the 25 per cent. of capital herein provided for, and thereafter any bank may at any time withdraw any bonds deposited in excess of the requirements hereof.

24. Every national bank shall pay a tax at the rate of 2 per cent. per annum, payable monthly, upon the amount of its notes outstanding in excess of 60 per cent. and not in excess of 80 per cent. of its capital, and a tax at the rate of 6 per cent. per annum payable monthly, upon the amount of its notes outstanding in excess of 80 per cent. of its capital.

25. Any bank may deposit any lawful money with the treasurer of the United State for the retirement of any of its notes; and every such deposit shall be treated as a reduction of its outstanding notes to that extent; and the tax above provided for shall cease as of the 1st of the following month on an equal amount of its notes.

26. The secretary of the treasury shall annually fix the value of each series of bonds of the United States bearing a rate of interest exceeding 3 per cent. as equalized upon the rate of interest of 3 per cent. per annum, and such valuation as fixed by the secretary on this basis shall be the valuation at which the bonds will be receivable upon deposit. Bonds payable at the option of the government shall be receivable at 95 per cent. of their then market value as determined by the secretary of the treasury. If any bonds shall be issued hereafter payable at a date named and bearing interest at 3 per cent. or less, they shall be receivable at par.

27. The controller of the currency shall from time to time, as called for, issue to any bank the capital of which is full paid and unimpaired any of the notes herein elsewhere provided for, on the payment to the treasurer of the United States in gold coin, of 5 per cent. of the amount of notes thus called for, which payments shall go into the common guaranty fund, for the prompt payment of the notes of any defaulted national bank. Upon the failure of any bank to redeem its notes, they shall be paid from the said guaranty fund, and forthwith proceedings shall be taken to collect from the assets of the bank and from the stockholders thereof, if necessary, a sum sufficient to repay to said guaranty fund the amount thereof that shall have been used to redeem said notes; and also such further sums as shall be adequate to the redemption of all the unpaid notes of said bank outstanding.

28. Persons who, having been stockholders of the bank, have transferred their shares, or any of them, to others, or registered the transfer thereof within 60 days before the commencement of the suspension of payment by the bank, shall be liable to all calls on the shares held or subscribed for by them, as if they held such shares at the time of suspension of payment, saving their recourse against those by whom such shares were then actually held. So long as any obligation of the bank shall remain unsatisfied, the liability of each stockholder shall extend to, but not exceed in the whole, an amount equal to the par of his stock.

29. If the said guaranty fund of 5 per cent. of all the notes outstanding shall become impaired by reason of payment made to redeem the said notes as herein provided, the controller of the currency shall make an assessment upon all the banks in proportion to their notes then outstanding sufficient to make said fund equal to 5 per cent. of said outstanding notes.

Any bank may deposit any lawful money with the treasurer of the United States for the retirement of any of its notes, or return its own notes for cancella-

tion, whereupon the controller shall direct the repayment to such bank of whatever sum may be the unimpaired portion of said bank's contribution to the guaranty fund on account of said notes.

Any portion of the guaranty fund may be invested in United States bonds in the discretion of the secretary of the treasury.

The taxes on circulation, provided for in Paragraph 24, as well as the interest accruing from investment of any part of the guaranty fund, shall be held in the division of issue and redemption in gold coin or in United States bonds, in the discretion of the secretary of the treasury, and shall be a fund supplementary and in addition to the guaranty fund, to be used only in case said guaranty fund shall ever become insufficient to redeem any banknotes issued hereunder, and it shall not be taken into account in estimating the amount of assessments necessary to replenish said guaranty fund or in repayments to banks of their contributions to the guaranty fund.

30. The present system of national banknote redemption should be continued, with a constantly maintained redemption fund of 5 per cent. in gold coin, and with power conferred on the controller of the currency, with the approval of the secretary of the treasury, to establish additional redemption agencies at any or all of the sub-treasuries of the United States, as he may determine.

31. So much of the provisions of existing law as require each national bank to receive at par, in payment of debts to it, the notes of other national banks, and making such notes receivable at par in payment of all dues to the United States except duties on imports, shall be extended to cover notes issued under the proposed plan.

32. National banks shall hold reserves in lawful money against their deposits of not less than 25 per cent. and 15 per cent. for the respective classes, as now provided by law, at least one-fourth of which reserve shall be in coin, and held in the vaults of the bank. Neither the 5 per cent. redemption fund nor the 5 per cent. guaranty fund shall be counted as part of the reserve required. No bank shall count or report any of its own notes as a part of its cash or cash assets on hand.

33. Permit the organization of national banks with a capital stock of \$25,000 in places of 1,000 population or less.

34. Provision should be made whereby branch banks may be established, with the consent of the controller of the currency and approval of the secretary of the treasury.

35. For the purpose of meeting the expenses of the treasury in connection with the national bank system, a tax of one-eighth of 1 per cent. per annum upon its franchise, as measured by the amount of its capital, surplus, and undivided profits, shall be imposed upon each bank.

36. To so amend existing laws as to provide

(a) For more frequent and thorough examinations of banks.

(b) For fixed salaries for bank examiners.

(c) To provide for rotation of examiners.

(d) For public reports, regular or special at the call of the controller of the currency.

(e) To make it penal for any bank to loan money, or grant any gratuity, to an examiner of that bank, and penal for such examiner to receive it.

37. Any national banking association heretofore organized may at any time within 1 year from the passage of the proposed act, and with the approval of the controller of the currency, be granted, as herein provided, all the rights, and be

subject to all the liabilities of national banking associations organized hereunder; provided, that such action on the part of such associations shall be authorized by the consent in writing of shareholders owning not less than two-thirds of the capital stock of the association.

38. Any national banking association now organized which shall not, within one year after the passage of the proposed act, become a national banking association under the provisions hereinbefore stated, and which shall not place in the hands of the treasurer of the United States the sums hereinbefore provided for the redemption and guarantee of its circulating notes, or which shall fail to comply with any other provision of the proposed act, shall be dissolved, but such dissolution shall not take away or impair any remedy against such corporation, its stockholders or officers, for any liability or penalty which shall have been previously incurred.

39. Any bank or banking association incorporated by special law of any State, or organized under the general laws of any State, and having a paid-up and unimpaired capital sufficient to entitle it to become a national banking association under the provisions of the proposed act, may, by the consent in writing of the shareholders owning not less than two-thirds of the capital stock of such bank or banking association, and with the approval of the controller of the currency, become a national bank under this system, under its former name or by any name approved by the controller. The directors thereof may continue to be the directors of the association so organized until others are elected or appointed in accordance with the provisions of the law. When the controller of the currency has given to such bank or banking association a certificate that the provisions of this act have been complied with, such bank or banking association, and all its stockholders, officers, and employees shall have the same powers and privileges, and shall be subject to the same duties, liabilities, and regulations, in all respects, as shall have been prescribed for associations originally organized as national banking associations under the proposed act.

MONETARY COMMISSION, INTERNATIONAL. On April 12, 1897, President McKinley appointed a commission consisting of Edward O. Wolcott, United States senator from Colorado, ex-Vice-President Adlai E. Stevenson, of Illinois, and Charles J. Paine, of Massachusetts, for the purpose of endeavoring to bring about an international conference, having for its object the larger use of silver as money. The commission met with much encouragement in France, where an agreement was reached to send representatives, should such a conference be held. In England, however, the attempts of the commission to obtain the co-operation of the British government led to a widespread discussion of bimetallism, a large measure of excitement in financial and political circles, and an ultimate refusal. In September the governor of the Bank of England announced that the bank was willing to maintain one-fifth of its bullion reserve in silver. This declaration led the bankers of London to protest against the proposed action, and under the name of the Clearing House Association, to adopt a resolution disapproving of the policy announced by the governor. Inasmuch as the parliament had unanimously resolved that measures should be taken to secure a stable par of exchange between gold and silver, and the chancellor of the exchequer had pledged himself to do all in his power to carry the resolution into effect, and further, as 10 of the 14 members of the agricultural commission had signed a report recommending bimetallism as a palliative for the agricultural depression in England, the protest of the bankers was considered as an attempt to force the government to recede from its stand for bimetallism. It was published as an "open secret" in London, that at the begin-

ning of negotiations by the United States commissioners, they had a promise that England would co-operate with France and the United States in the opening of their respective mints to the coinage of silver, and it was also believed that Italy would join the agreement. The action of Germany, it was conceded, would depend on that of Great Britain. Formal conferences were held at the British foreign office on July 12 and 15, in which the Marquis of Salisbury, the secretary of state for India, the chancellor of the exchequer, the first lord of the treasury, the United States ambassador, the French ambassador, and the United States commissioners, participated. On the invitation of the British premier Senator Wolcott opened the first conference by stating the object of the mission, declaring that France would open her mints at the ratio of $15\frac{1}{2}$, and presenting the following contributions, which he suggested Great Britain might make:

"First—The opening of the Indian mints and the repeal of the order making the sovereign legal tender in India.

"Second—Placing one-fifth of the bullion in the issue department of the Bank of England in silver.

"Third—Raising the legal tender limit of silver to say, £10 and issuing 20s. notes based on silver, which shall be legal tender, and the retirement, in graduation or otherwise, of the 10s. gold pieces and the substitution of paper based on silver.

"Fourth—An agreement to coin annually so much silver, the amount to be left open.

"Fifth—The opening of the Indian mints to the coinage of rupees and to the coinage of British dollars, which shall be full tender in the Straits Settlements and other silver-standard colonies, and tender in the United Kingdom to the limit of silver legal tender.

"Sixth—Colonial action and coinage of silver in Egypt.

"Seventh—Something having the general scope of the Huskisson plan."

At the second conference the French ambassador said France was ready to reopen her mints to the coinage of silver if the commercial nations adopted the same course, and he advocated at great length the ratio of $15\frac{1}{2}$. But France would not consider the reopening of the mints of India alone as being sufficient guarantee to permit the reopening of the French mints to the free coinage of silver.

On Oct. 20 the Marquis of Salisbury sent to the United States ambassador the reply of the government to the proposals of the United States commission, which declared that the government was not able to reopen the mints at present; that it regretted the inability to accede to the proposals; that Great Britain had as great an interest as the United States and France in securing a stable par of exchange for gold and silver, and an enlarged use of silver; and that while the government, under existing circumstances, did not see the desirability of an international monetary conference, it would be pleased to consider any other practical suggestions from the United States. In an address in the United States Senate Jan. 17, 1898, Senator Wolcott, summarized the situation by saying that it was apparent that for the time being it was useless to count on any co-operation from Great Britain toward a bimetallic agreement. He thought it might be necessary to change the ratio to something like 20 to 1. See also BIMETALLISM.

MONEY. FOREIGN. The following table, computed by the director of the United States mint, shows the equivalent in United States gold of all foreign coins, on July 1, 1897:

Country.	Standard.	Monetary Unit.	Value, U. S. Gold.	
Argentina	Gold and silver.	Peso	\$0.96.5	
Austria Hungary	Gold.	Crown	20.3	
Belgium	Gold and silver.	Franc	19.3	
Bolivia	Silver.	Boliviano	44.3	
Brazil	Gold.	Milreis	54.6	
British Possessions, N. A. (except New- foundland)	Gold.	Dollar.	1.00.0	
Central American States:				
Costa Rica	Gold.	Colon	46.5	
Costa Rica	Silver.	Peso.	.....
Guatemala	Silver.	Peso	44.3	
Honduras				
Nicaragua				
Salvador				
Chile	Gold and silver.	Peso	e.36.5	
China	Silver.	Tael	Amoy	71.7
			Canton	71.5
			Chefoo	68.6
			Chin Kiang	70.0
			Fuchan	66.3
			Haikwan (customs)	73.0
			Hankow	67.1
			Hongkong	(c)
			Niuchwang	67.2
			Ningpo	68.9
			Shanghai	65.5
			Swatow	66.2
Takao	72.2			
Tien-Tsin	69.5			
Colombia	Silver.	Peso	44.3	
Cuba	Gold and silver.	Peso	42.6	
Denmark	Gold.	Crown	36.8	
Ecuador	Silver.	Sucre	44.3	
Egypt	Gold.	Pound (100 piasters)	4.94.3	
Finland	Gold.	Mark	19.3	
France	Gold and silver.	Franc	19.3	
German Empire	Gold.	Mark	25.8	
Great Britain	Gold.	Pound sterling	4.86.6½	
Greece	Gold and silver.	Drachma	19.3	
Haiti	Gold and silver.	Gourde	96.5	
India	Silver.	Rupee <i>f</i>	31.1	
Italy	Gold and silver.	Lira	19.3	
Japan	Gold and silver <i>a</i>	Yen. } Gold	99.7	
		} Silver	47.8	
Liberia	Gold.	Dollar	1.00.0	
Mexico	Silver.	Dollar	48.2	
Netherlands	Gold and silver.	Florin	40.2	
Newfoundland	Gold.	Dollar	1.01.4	
Norway	Gold.	Crown	26.8	
Persia	Silver.	Kran	08.2	
Peru	Silver.	Sol	44.3	
Portugal	Gold.	Milreis } Gold	1.08.0	
		} Silver	77.2	
Russia	Silver <i>b</i>	Ruble <i>g</i> } Silver .....	.....
Spain	Gold and silver.	Peseta	19.3	
Sweden	Gold.	Crown	20.8	
Switzerland	Gold and silver.	Franc	19.3	
Tripoli	Silver.	Malhub of 20 piasters .....	.....
Turkey	Gold.	Piaster	04.4	
Uruguay	Gold.	Peso	1.03.4	
Venezuela	Gold and silver.	Bolivar	d.19.3	

(a) Gold the nominal standard. Silver practically the standard.

(b) Silver the nominal standard. Paper the actual currency, the depreciation of which is measured by the gold standard.

(c) The "British dollar" has the same legal value as the Mexican dollar in Hongkong, the Straits Settlements, and Labuan.

(d) Value of the silver bolivar.

(e) The law of February 11, 1895, introduced the gold standard, with an ideal gold peso weighing .599 grams as the monetary unit.

(f) Value of the rupee to be determined by consular certificate.

(g) By Imperial ukase January 3-15, 1897, 1½ paper rubles = 1 gold ruble.

MONTANA, one of the United States of North America; admitted to the Union Nov. 8, 1889; counties, 21; capital, Helena.

State Officers, 1896-1901.—Governor (elected for 4 years, salary \$5,000 per annum), Robert B. Smith; lieutenant-governor, A. E. Spriggs; secretary of state, T. S. Hogan; treasurer, T. E. Collins; auditor, T. W. Poindexter; attorney-general, C. B. Nolan; adjutant-general, J. W. Drennan; superintendent of public instruction, E. A. Carleton; chief justice of the supreme court, William Y. Pemberton; associate justices, W. H. Hunt and H. R. Buck; clerk, Benjamin Webster. State government, all Democrat-Populist Fusion; judiciary, Judges Pemberton, Democrat-Populist, Buck, Democrat, Hunt, Republican.

Legislature, 1897.—Republicans, senate 11, house 8, joint ballot 19; Democrats, senate 9, house 41, joint ballot 53; Populists, senate 3, house 16, joint ballot 19.

Elections.—In the State elections 1896 there were 51,681 votes cast for governor, of which the Populist candidate (Smith) received 36,688, and the Republican candidate (Botkin), 14,993. The congressional election resulted in the choice of Charles S. Hartman (renominate), Silver Republican, by a vote of 33,932 to 9,429 for O. F. Goddard, Gold Republican. In the presidential election, the Democratic candidate received 42,537 votes; the Republican, 10,494; and the Prohibition, 186.

Farm Products.—Reported Dec. 31, 1897: Corn, 19,170 bush., from 1,065 acres, value \$12,460; wheat, 2,268,240 bush., from 69,792 acres, value \$1,542,403; oats, 2,589,888 bush., from 61,664 acres, value \$854,663; barley, 197,144 bush., from 5,188 acres, value \$98,572; potatoes, 702,936 bush., from 4,506 acres, value \$281,174; and hay, 492,458 tons, from 328,305 acres, value \$3,816,550—total value, \$6,605,822.

Farm Animals.—Reported Jan. 1, 1898: Horses, 171,795, value \$3,131,388; mules, 915, value \$29,984; cows, 42,713, value \$1,336,917; cattle, 1,082,498, value \$23,814,965; sheep, 3,247,641, value \$7,804,081; and swine, 16,961, value \$340,935—total value, \$36,458,270. The wool clip amounted to 20,110,391 lbs., washed and unwashed, and 7,440,815 lbs., scoured.

Mineral Products.—According to the report of the assayer in charge of the United States assay office in Helena, the output of the *precious metals* in the State in the calendar year 1895 was as follows: Gold, 209,320 fine oz., coining value \$4,327,040; silver, 17,701,658 fine oz., coining value in silver dollars, \$22,886,992; copper, 201,093,992 lbs., value \$21,114,869; and lead, 24,139,504 lbs., value \$751,350—total value, \$49,083,251. The State ranked first in the production of copper, and had an increase over 1894 in gold to the value of \$676,000, and in silver to the extent of 4,881,000 fine oz. New gold discoveries were made at Harley Creek in 1895 and at Flint Creek in 1896, and a large interest in the famous Anaconda mine was purchased by the Rothschilds in two lots in 1895 and 1896. The following is a summary of other productions, all for the calendar year 1895, the last reported: *Coal* showed an increased output, with a yield of 1,504,193 short tons, valued at the mines at \$2,850,906, of which 924,862 tons were loaded at the mines for shipment. The coal was all bituminous and was mined principally in Cascade (713,877), Park (503,200), and Gallatin (98,398) counties. Coking operations were confined to the Bozeman and Gardner fields, where 55,770 short tons of coal were used, and 25,337 tons of coke produced, valued at \$189,856. *Quarrying*, a comparatively new industry, had an output valued at \$126,190, comprising sandstone, \$31,069, and limestone, used about equally for building and lime, \$95,121. *Clay* products, reported by 18 concerns, were: Common and

pressed brick, \$127,823; firebrick, \$69,035; paving, \$330; sewer-pipe, \$3,517; tile, other than drain, \$1,586; miscellaneous, \$1,355—total, \$204,193. There were two valuable beds of *sapphires*, one of 1,500 acres, about 25 miles west of Phillipsburg, another of 2,500 acres, about 5 miles east of the mining camp of Champion, in Deer Lodge county. *Manganiferous silver* ore, mined solely for its lead and silver contents, had an output at Neihart, Meagher county, of 1,048.6 tons. Park county contained deposits of unusually pure asphaltum, and *tin* in various forms and small quantities was found near Helena and elsewhere.

Finances.—In 1896 the assessed valuations were: Real estate, \$64,981,321; personal property, \$45,289,159; railroads, \$10,438,231—total, \$120,708,719; assessments are presumably full cash values. The State had outstanding loans aggregating \$150,000, the bonds being issued on land grants in aid of the Agricultural College and the Normal School.

Banks.—On Oct. 31, 1897, there were 21 national banks in operation and 23 in liquidation, the active ones having a combined capital of \$3,855,000, and holding \$739,350 in United States bonds. These banks had outstanding on loans and discounts \$7,088,229, represented by demand paper with individual or firm names, \$694,583; the same secured by stocks, bonds, and other personal securities, \$267,476; time paper with two or more individual or firm names, \$1,667,656; time paper with single individual or firm name, \$2,092,541; and the same secured by stocks, bonds, and other personal securities, \$2,365,973. The banks held an aggregate of \$839,961 in coin and coin certificates, of which \$691,786 was in gold coin. The circulation account was: Total issue, \$3,916,020; redeemed, \$3,153,974; outstanding, \$762,046. There were deposits, \$10,349,087; reserve required, \$1,552,363; reserve held, \$4,539,575; ratio of reserve, 43.86 per cent. The State banks, June 30, 1897, numbered 7, and had capital, \$405,000; deposits, \$983,733; resources, \$1,555,244; and surplus and profits, \$126,560. There were 2 stock savings banks, with combined capital, \$200,000; check deposits, \$357,382, and savings deposits, \$1,123,481; resources, \$1,803,678; and surplus and profits, \$117,830. Of private banking establishments there were 3, with capital, \$45,000; deposits, \$147,882; resources, \$226,103; and surplus and profits, \$26,091. Combining all these institutions, the State had an aggregate banking capital of \$4,505,000.

Railroads.—On Jan. 1, 1894, the State had a total railroad mileage of 2,721.63. During the year one company constructed 101.17 miles of new road, making the mileage 2,822.80 on Jan. 1, 1895. A report at the end of 1894 on the roads belonging to the State showed: Capital stock, \$13,976,100, funded debt, \$19,943,000, total investment, \$35,232,810; cost of roads and equipments, \$34,870,866; gross earnings, \$1,658,917; net earnings, \$513,764; and interest paid on bonds, \$824,360.

Post-Offices.—Reported Jan. 1, 1897: First-class, 2; second-class, 4; third-class, 15 (presidential, 21); fourth-class, 405; money-order offices, 116; money-order stations, 1; and limited money-order offices, 8.

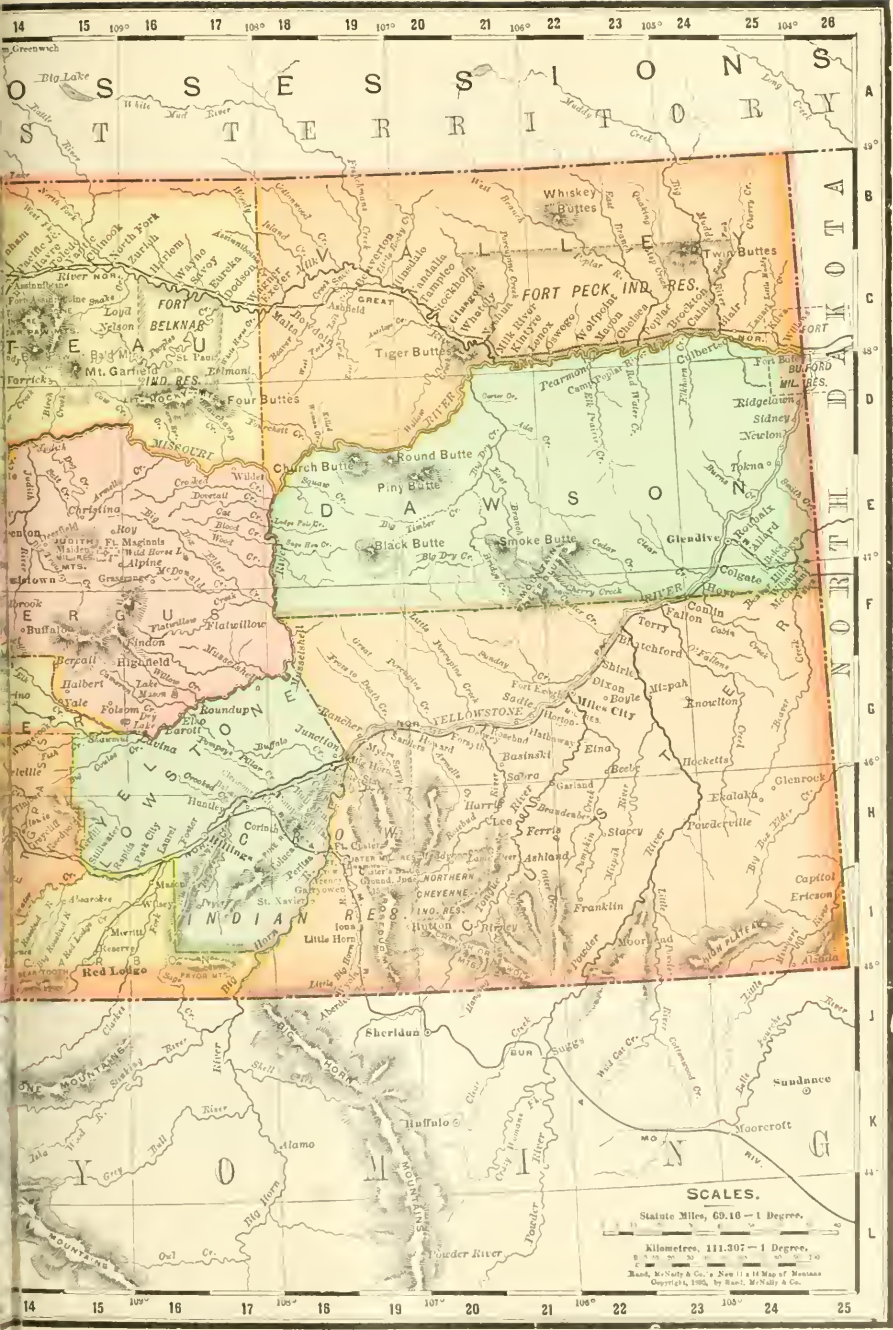
Publications.—Reported March, 1898: Daily, 11; tri-weekly, 1; semi-weekly, 2; weekly, 72; and monthly, 7.

Churches.—The Roman Catholic is the strongest denomination in the State, and is followed in their order by the Methodist Episcopal; Presbyterian, North; Protestant Episcopal; Disciples of Christ; Regular Baptist, North; and Methodist Episcopal, South. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Montana 267 evangelical Sunday schools, 1,740 officers and teachers, and 14,509 scholars—total members, 16,249, a gain of 5,484 in 3 years.



TERRITORY BETWEEN
BUTTE AND HELENA.

SCALE OF MILES.
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SCALES.
Statute Miles, 69.16 = 1 Degree.
Kilometres, 111.307 = 1 Degree.
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Schools.—At the end of the school year 1895-96 the number of children of school age was estimated at 37,890, of whom 28,876 were enrolled in the public schools, and 19,443 were in average daily attendance. There were 956 teachers; public school property valued at \$1,933,395; and expenditures, excluding payments on debt, \$677,301. The State University, at Missoula, was opened for the first time in September, 1895, in a new building loaned by the town till the State erects a permanent one. In 1895 contracts were signed for the erection of a State Normal School at Dillon, and the State Agricultural College at Bozeman closed its first year with faculty, 19; students, 120; land under cultivation, 160 acres, value \$10,000; and special buildings and equipments valued at \$15,000. Additional buildings were under contract. Other institutions are 16 public high schools, with grounds, buildings, and scientific apparatus valued at \$566,500; 3 endowed schools for secondary instruction (all Roman Catholic), with grounds and buildings valued at \$15,000; a normal department in the State University, and a private normal school; and 3 commercial colleges. There is a State reform school at Miles City.

Libraries.—In 1896 there were reported 13 public libraries of 1,000 volumes each and upward, with a total of 69,222 bound volumes and 9,892 pamphlets.

Population.—In 1890, 132,159, of whom 87,882 were males; 44,277 females; 89,063 natives; 43,096 foreign-born; 127,271 whites; and 4,888 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 225,000.

MONTANA, UNIVERSITY OF, Missoula, Mont., non-sectarian; co-educational; had at close of 1897, 10 professors and instructors; 176 students; 2,000 volumes in library; \$35,000 in grounds and buildings; \$8,000 in scientific apparatus and library; \$21,000 in income; president, Oscar J. Craig, A.M., PH.D.

MONTENEGRO, an independent principality in Europe, on a patriarchal foundation; area, 3,630 square miles; population (1896, estimated), 200,000; capital, Cetinje; reigning prince, Nicholas I. The annual revenue is about \$316,000, derived chiefly from taxes on land and cattle, the salt monopoly, and customs duties, and the expenditure is about the same. The public debt is between \$350,000 and \$400,000. The maritime and sanitary policing of the coast is by treaty in the hands of Austria. There is no standing army, but all able-bodied male inhabitants are trained as soldiers and liable for war service. The number of trained men is reported, at 35,870 infantry, and 856 artillery. The prevailing religion is the Greek orthodox, which has 177 churches, 180 clergy, and 188,100 adherents. Excepting that the prince appoints the bishops, the church is independent of the state. Education is free and compulsory; the government maintains numerous elementary schools; and there are high-grade colleges at Cetinje. The principal industry is agriculture. In 1896 the bicentenary of the founding of the reigning dynasty was appropriately observed, and on Oct. 24 Princess Helen, one of the daughters of Prince Nicholas, was married to the Prince of Naples in Rome.

MONTREAL, city, Hochelaga county, Quebec, Canada; commercial metropolis and largest city in the Dominion; population (1891), 216,650; (1895, with suburbs), about 300,000. In September, 1897, considerable surprise was created in the city by a telegraphic announcement from England that the Dominion government had ordered a large number of fortification guns for the defense of the city and for batteries to be constructed along the river below. Lord Chelmsford, the British general who made a signal failure as commander in the early part of the

Zulu war, was known to have made a tour of inspection of the frontier defenses of Canada, and was credited with having said that in case of war with the United States the country about Montreal and in the Richelieu Valley would be the principal field of operations. Of a more peaceful tenor, engaging the attention of the local shipping and business interests as well as of the Dominion government, was the proposed enlargement of the elevator and wharfage facilities of the port. Alarm was felt at the great diversion of the wheat traffic of Manitoba and the Northwest Territories from the St. Lawrence route to Buffalo and New York. It is declared that in round figures \$65,000,000 has already been spent on the canals, and by the time the proposed uniform depth of 14 ft. is obtained between Lake Erie and Montreal, the cost to the country will not have been less than \$75,000,000, but the expenditure, even with the enlargement of the facilities at Montreal, will not be sufficient to prevent the great bulk of the grain traffic of the northwest going to Europe by way of Buffalo and New York, and, as time goes on, in constantly increasing proportion. Nothing short of a deepening of the Canadian canals to a minimum depth of 20 or 21 ft., the improving of the port of Montreal, and the establishment of a fast Canadian Atlantic service will be able to accomplish this. In September, 1897, the British Medical Association held its annual session in this city, and in October the Fourteenth Biennial Conference of the International Board of Women's and Young Women's Christian Associations was held here.

MOORE'S HILL COLLEGE, Moore's Hill, Ind., Methodist Episcopal; co-educational; had at close of 1897, 9 professors and instructors; 156 students; 5,000 volumes in library; \$25,000 in productive funds; \$5,000 income; president, Charles W. Lewis, M.S.

MORAVIANS. In the United States and Canada there are 123 ministers, 109 congregations, and 13,614 communicant and 1,281 non-communicant members. There are also 6,000 children, making a present total following of 20,895. There are 1,503 teachers and 12,799 scholars in the Sunday schools. The increase in membership during the year is 691 communicants, 19 non-communicants, 311 children, 109 teachers, and 643 Sunday school scholars. Baptisms of adults were more numerous than those of infants. There is a very prosperous missionary work carried on in Alaska, where there are 12 missionaries, 27 native helpers, and 240 communicant and 210 non-communicant members, an increase of 224 of both classes in a year.

MORGAN, JOHN PIERPONT, financier, was born in Hartford, Conn., April 17, 1837. In 1895 he signed an agreement with Secretary Carlisle, under which he and his associates supplied the United States Government with 3,500,000 ounces of standard gold, and in 1896 organized a syndicate which took a large part of the \$100,000,000 issue of 30-year 4 per cent. bonds offered by the secretary of the treasury. For details of these transactions, see CARLISLE, JOHN GRIFFIN. He has since been conspicuous in several great railroad reorganization schemes, for which he has placed bonds covering many millions of dollars in foreign markets. Mr. Morgan is a man of princely generosity. He gave \$500,000 for the endowment of the New York Trade Schools, and in 1897 agreed to erect a new building for the Society of the Lying-in Hospital of the City of New York at a cost of \$1,000,000.

MORMONS. At the semi-annual conference of the Church of Jesus Christ of Latter-Day Saints, held in the great Tabernacle, Salt Lake City, Utah, during October, 1897, the president, Wilford Woodruff, in the presence of 12,000 Mor-

mons from all over the State, made the following remarkable deliverance, which, coming from such a source and on such an occasion, is regarded as having the weight of an order to the members of the Mormon Church: "The day has come when the mouths of Wilford Woodruff, George Q. Cannon, Joseph F. Smith, and the twelve apostles should not be closed. God Almighty requires you to unite in your temple work, and unite in your politics. You should unite to elect your city council and also all your State officials. You must put aside your Democracy and Republicanism, and, as Latter-Day Saints, unite, and you will not be taxed to death." This declaration is considered all the more remarkable in view of past events in the history of the church, to which reference must be made in order to an intelligent comprehension of the new attitude of the Mormon Church toward affairs of State. It was in 1847 that Brigham Young, with 142 men, first set foot in the Salt Lake Valley; and on Sept. 20, 1848, he and 2,000 followers made it the center of Mormonism. In 1850 Utah was established as a Territory, but in the same year United States authority was so openly disregarded and defied that the Federal judges were forced by threats of violence to leave Utah. On Aug. 29, 1852, the doctrine of polygamy was openly announced as a divine revelation and a tenet of the church; following which, opposition to authority became so vehement that in February, 1856, a mob of armed Mormons, instigated by sermons from the heads of the church, broke into the courtroom of the United States district judge and compelled him to adjourn court. The mob rule was only terminated by the presence of 2,500 United States soldiers under command of Gen. Albert S. Johnston, and the Mormons received a pardon on promise of submission to Federal authorities. The promise was not kept, and in 1862 the first law prohibiting polygamy in the Territories was passed by Congress. The law was at first ignored, then defied, and last of all its constitutionality was challenged, and in 1879 the United States Supreme Court declared it constitutional. The Mormons, however, continued to contract plural marriages, and in 1882 another law was enacted, which was also openly disregarded. In 1887 the famous Edmunds-Tucker bill was passed, which not only prohibited polygamy, but made ample provision for the enforcement of law; annulled all Territorial laws inconsistent with its own provisions; dissolved the corporations of the Mormon church, and of the Permanent Immigration Fund Company, and escheated their property to the United States, to be used for common school education in Utah. Under this law about 1,100 Mormons, including many of the leaders of the church, were fined and imprisoned, most of them on several counts. In 1890, the constitutionality of the law was affirmed by the Supreme Court, and on Sept. 24, of the same year, the Mormon church, for the first time in its history, presented a policy of acquiescence instead of opposition, which was embodied in a remarkable manifesto, issued by Wilford Woodruff, then as now president of the church, in which he solemnly denied that the church was then practicing polygamy or plural marriage, and stated that the Endowment House had been taken down by his orders on account of a report that a plural marriage, without his knowledge or consent, had taken place there in the spring of the previous year. The manifesto concluded as follows: "Inasmuch as laws have been enacted by Congress forbidding plural marriages, which laws have been pronounced constitutional by the court of last resort, I do hereby declare my intention to submit to those laws, and to use all my influence with the members of the church over which I preside to have them do likewise. There is nothing in my teachings to the church, or in those of my associates, during the time specified, which can reasonably be construed to inculcate or encourage polygamy, and when any elder of the church has

used language which appeared to convey such teaching he has been promptly re-proved; and I now publicly declare that my advice to the Latter-Day Saints is to refrain from contracting any marriage forbidden by the laws of the land." On Oct. 6 of the same year the great semi-annual conference of the church, attended by apostles, bishops elders, and about 1,000 people, unanimously adopted the following resolution: "That, recognizing Wilford Woodruff as the president of the Church of Jesus Christ of Latter-Day Saints, and the only man on earth, at the present time, who holds the keys of the sealing ordinances, we consider him fully authorized, by virtue of his position, to issue the manifesto which has been read in our hearing, and which is dated Sept. 24, 1890, and that as a church in General Conference assembled, we accept his declaration concerning plural marriages as authoritative and binding." President Woodruff said at the time: "The action of the conference is conclusive. The church has no disposition to violate the laws or defy the government. The revelation of God requires us to obey the constitutional laws of the land. The Supreme Court of the United States is the legal interpreter of the laws and the final arbitrator as to their validity. The Territorial Convention has also pronounced in favor of full allegiance to the government, and willing submission to its authority. Judge Zane has recognized the action of the church as sincere and final, and has rescinded the rule excluding Mormon aliens from naturalization." Not only did Judge Zane recognize the action of the church as sincere, but Governor Thomas telegraphed, after the confirmation of the manifesto by the conference, that it now came with the force of a new revelation, and that it was the most important event in the Mormon church for many years, as polygamy had been buried never to be resurrected. On pledges of the membership of the church, and on recommendation of the Utah Commission, President Harrison, on Jan. 4, 1893, issued a proclamation granting full amnesty and pardon to all persons who had, since Nov. 1, 1890, abstained from unlawful cohabitation, "but upon express conditions that they shall in future faithfully obey the laws of the United States." And on Sept. 27, 1894, President Cleveland issued a similar proclamation of amnesty to those who had failed to avail themselves of the clemency offered by President Harrison's proclamation. Polygamy now having been stamped out, and the separation of the Mormon church from State affairs being regarded as complete, the way was open for the admission of Utah into statehood, and accordingly an act to enable Utah to form a State government was passed by Congress on July 16, 1894. On Jan. 4, 1896, President Cleveland issued the proclamation admitting the State of Utah, and on the 6th of the same month the territorial government went out of existence, and the first State officers were inaugurated. (See UTAH.) Promises were made in 1892 by Mormon leaders that the church would refrain from all interference or dictation in political matters. The different political parties have on several occasions charged the church authorities with undue interference, but up to the time of the startling declaration of President Woodruff in October, 1897, the church had always denied such interference.

MORRIS, WILLIAM, poet, decorative artist and socialist, was born near London, England, March 24, 1834; died in London, England, October, 1896. He was offered the post of poet laureate, but declined because of his socialist principles.

MORTALITY RATES. An interesting contribution to the vital statistics of the United States was made in 1897 by the United States Marine Hospital Service in a report concerning the mortality in the different States for the year ending

Dec. 31, 1896, compared with the mortality for the year ending Dec. 31, 1890. The figures of 1890 were those of the United States census; those of 1896 were estimates of State and city boards of health, based on police, school, or other local censuses. According to this report, the average number of deaths per 1,000 of total inhabitants in 1890 was 19.06; in 1896 it was 14.90; much of the increased healthfulness of the country is believed to be due to improved sanitary conditions. The following table from the report shows significant changes in the totals for the different States:

States.	1890.	1896.
Alabama.....	23.90	19.06
Arizona.....	7.82	4.00
Arkansas.....	22.94	10.61
California.....	20.30	15.23
Colorado.....	17.91	12.03
Connecticut.....	21.27	17.55
Delaware.....	18.59	16.00
District of Columbia.....	25.30	20.96
Florida.....	20.87	16.37
Georgia.....	26.83	18.90
Illinois.....	24.01	14.01
Indiana.....	16.36	10.70
Iowa.....	14.87	12.38
Kansas.....	18.94	9.89
Kentucky.....	16.34	13.04
Louisiana.....	30.99	27.14
Maine.....	16.01	15.81
Maryland.....	22.82	19.57
Massachusetts.....	22.67	16.35
Michigan.....	14.59	12.93
Minnesota.....	12.43	9.52
Mississippi.....	5.88	6.00
Missouri.....	20.53	16.55
Montana.....	13.33	10.00
Nebraska.....	6.19	6.21
New Hampshire.....	19.47	17.24
New Jersey.....	26.11	21.13
New Mexico.....	13.00	9.59
New York.....	23.87	18.92
North Carolina.....	24.68	18.91
Ohio.....	17.04	13.32
Oregon.....	18.01	10.46
Pennsylvania.....	20.87	17.32
Rhode Island.....	21.46	19.31
South Carolina.....	23.41	26.51
South Dakota.....	8.65	7.62
Tennessee.....	22.10	19.21
Texas.....	18.51	8.58
Utah.....	15.10	10.53
Vermont.....	18.27	16.10
Virginia.....	21.25	16.75
Washington.....	11.77	8.60
West Virginia.....	18.35	11.94
Wisconsin.....	16.00	13.14

MOSCOW, city, and one of the imperial residences of Russia; population (1897) 988,610. The Emperor Nicholas II. and Empress Alexandra Feodorovna were crowned in the Grand Kremlin here on May 26, 1896. The festivities accompanying the ceremony lasted nearly three weeks, were of remarkable splendor, and were concluded on May 30, when a great multitude was feasted on the Khadinsky Plain. At this popular demonstration, the crowd was so great that

the barriers set up to regulate the movement of the people gave way, and in the eagerness of the multitude to honor the emperor and empress over 2,000 people were trampled to death and many others more or less injured. The emperor celebrated his coronation by a proclamation lowering the land tax one-half for 10 years; granting amnesty to refugees who took part in the Polish insurrection, and immunity to other political offenders whose offenses were more than 15 years old; remitting one-third of the sentences of criminals imprisoned in Siberia; remitting all arrears of taxation in European Russia and Poland; remitting or reducing all fines; and making other concessions.

MT. HOLYOKE COLLEGE, South Hadley, Mass., non-sectarian; for women only; had at close of 1897, 38 professors and instructors; 396 students; 16,000 volumes in library; \$300,000 in productive funds; \$113,846 gifts; \$182,189 income; president, Mrs. E. Storrs Mead, A.M. The main building of the college and the gymnasium building adjoining were destroyed by fire, Sept. 27, 1896, causing a loss of \$200,000. Immediately friends of the institution came to its aid, and within a year there were erected a new administration building; the Mary Lyon Hall; the Mary Brigham Hall; the Pearsons Hall; the Rockefeller Hall; and two other dormitories.

MT. ST. ELIAS. This highest peak in Alaska was climbed to its summit for the first time July 31, 1897, by Prince Luigi, of Savoy. He was accompanied by Lieutenant Cogni, of the Italian navy. The ascent was most arduous, and was commenced at 1 o'clock in the morning from an elevation of 8,000 ft. between Mt. St. Elias and Mt. Newton; but the particulars of the exploit were withheld until the prince should return to Italy and make his first report to the Italian Alpine Club. The height of the summit was determined to be 18,120 ft. The last few hundred feet of the ascent was over a solid ice-cap. From the summit the view was impressive—miles on miles of glaciers, broken here and there by fissures, the rugged edges of which glistened like diamonds in the noonday sun. There was neither wind nor fog, and the thermometer stood 20° below zero. Photographs of the scenery were taken successfully, but the pictures were not to be developed till the party returned to Rome.

MT. ST. MARY'S COLLEGE, Emmitsburg, Md., Roman Catholic; had at close of 1897, 35 professors and instructors; 195 students; 20,000 volumes in library; \$7,000 gifts; \$60,000 income; president, Rev. W. L. O'Hara, M.A.

MT. UNION COLLEGE, Alliance, O., Methodist Episcopal; co-educational; had at close of 1897, 18 professors and instructors; 475 students; president, T. P. Marsh, D.D., LL.D.

MUHLENBERG COLLEGE, Allentown, Pa., Lutheran; had at close of 1897, 12 professors and instructors; 146 students; 10,000 volumes in library; \$175,000 in productive funds; \$12,000 income; president, Theo. L. Seip, D.D.

MUNDY, JOHNSON MARCHANT, blind sculptor, was born in New Brunswick, N. J., in May, 1833; died in Geneva, N. Y., Aug. 16, 1897.

MURAVIEFF, MICHEL, statesman, was born in St. Petersburg, Russia, about 1845. He is a grandson of Gen. Nicholas Muravieff, the conqueror of the Amur province, to whom Russia is indebted for the acquisition of the greater part of its Siberian empire; a son of the successful governor of the Baltic provinces of Russia; and a cousin of the present Russian minister of justice; he has had a long diplomatic experience; is a personal favorite of the imperial family; and in 1897 was appointed foreign minister of the empire.

MURDOCK, JOHN NELSON, D.D., honorary secretary of the American Baptist Missionary Union, was born in Oswego, N. Y., Dec. 18, 1820; died in Clifton Springs, N. Y., Feb. 16, 1897.

MUSKINGUM COLLEGE, New Concord, O., United Presbyterian; co-educational; had at close of 1897, 13 professors and instructors; 213 students; 3,000 volumes in library; \$38,000 in productive funds; \$1,200 gifts; \$7,975 income; president, Jesse Johnson, D.D.

MUTSU, MUMEMITSE, formerly Japanese minister of foreign affairs and minister to the United States; representative of Japan in the peace negotiations at Shimonoseki in 1895; was born about 1847; died in August, 1897.

NANSEN, FRINJOR, Arctic explorer, was born near Christiania, Norway, Oct. 10, 1861. On his last voyage he sailed from Christiania on the schooner *Fram*, on June 24, 1893, with the intention of proceeding to the New Siberian islands, and thence sailing directly north till the vessel became imbedded in ice, when he would drift along with it, following the west coast of any land that might be met. On March 14, 1895, he left the *Fram* at a point $83^{\circ} 59'$ north, to explore the sea to the north, and reach the highest latitude possible. On March 25 he reached $85^{\circ} 19'$; on the 29th, $85^{\circ} 30'$; on April 4, $86^{\circ} 5'$; and on the 7th, $86^{\circ} 14'$, the highest point ever reached, when he abandoned further march. No land was sighted north of latitude 82° and at $86^{\circ} 14'$, from the highest hummock he could find he saw only "packed and piled-up ice as far as the horizon." He reached Vardøe, on his return voyage, Aug. 13, 1896. In 1897 he published a narrative of this expedition under the title of *Farthest North*, and near the close of the year came to the United States on a lecturing tour. He was received by President McKinley in the White House; given a welcome by the American Geographical Society in New York; and presented by the latter with the Cullom medal for explorers and geographers of most distinguished achievement.

NASHVILLE, city, capital of Tennessee and of Davidson county; population (1890), 76,168. In 1896 the assessed property valuations were: Real estate, \$28,496,870; personal property, \$7,168,900—total, \$35,665,770; tax rate, \$15 per \$1,000. The bonded debt, Jan. 1, 1897, including a water debt of \$1,472,000, was \$3,337,700, and there was neither a floating debt nor sinking fund. The waterworks belong to the city, which has expended about \$1,500,000 on the plant. Nashville has 165 miles of streets, of which 140 miles are paved; 41 miles of sewers; and 62 miles of water mains. The annual cost of maintaining the city government is about \$610,000; expenditure for public education, over \$156,000; and value of public school property, \$420,000. There are 3 national banks, with combined capital, \$2,600,000; deposits, \$3,226,757; and resources, \$8,079,354. The exchanges at the clearing house in the year ending Sept. 30, 1897, aggregated \$53,204,226, an increase of \$1,268,760 over the total of the previous year.

Centennial Exposition.—The year 1897 was memorable in the history of Nashville because of the Tennessee Centennial Exposition held there from May 1 to Oct. 30, inclusive. To insure its success the Federal government appropriated \$130,000; the State legislature, \$50,000; Davidson county, \$50,000; and the city of Nashville, \$100,000; and the subscriptions of private individuals and business corporations brought the total amount up to \$1,000,000. About 2 miles from the city hall a handsome park of 200 acres was laid out for the exposition grounds. The central building of the group was a reproduction of the Parthenon, with a

colossal statue of Pallas Athene directly in front of it, and the Commerce building behind it. Other principal buildings were the Erechtheon or History building; the Education and Hygiene building; Agricultural building; Transportation building; Negro building, with exhibits showing the progress of the negro race from the old plantation days to the present time; Machinery building; United States Government building; Woman's building; and Minerals and Forestry building. The Commerce building contained the manufacturing and liberal arts exhibits, and the Children's building was interesting in design and contents because erected by funds collected solely by children. The "Midway Plaisance" feature of the World's Columbian Exposition was here represented by a Vanity Fair, arranged at the west part of the park, and containing an almost endless variety of curious and attractive objects. At the end of a telegraphic circuit of a little over 700 miles President McKinley pressed the button in the White House at 1: 13 p.m., on May 1, which discharged a gun on the exposition grounds and inaugurated the event. During the exposition a number of national congresses were held and various "State days" were observed with special exercises. The attendance exceeded 1,250,000, and the exposition was a grand success.

NASHVILLE, UNIVERSITY OF, Nashville, Tenn., non-sectarian; co-educational; had at close of 1897, 58 professors and instructors; 1,339 students; 12,000 volumes in the library; productive funds, \$300,000; \$67,685 income; president, W. H. Payne, LL.D., PH.D.

NATIONAL ACADEMY OF DESIGN. The annual meeting of the academy was held in New York City, May, 1897, and the former officers were re-elected, as follows: Thomas W. Wood, president; James M. Hart, vice-president; J. Carroll Beckwith, corresponding secretary; George H. Smillie, recording secretary, and James D. Smillie, treasurer. The members of the council were all re-elected, with the exception of Walter Shirlaw, who retired in consequence of having served three years. Harry W. Watrous was elected in his place, so that the council is now composed as follows: J. G. Brown, Robert Blum, F. S. Church, Frederick Dielman, and H. Bolton Jones. The jury of selection elected was C. T. Turner, Frederick R. Vinton, Horatio Walker, Edgar M. Ward, J. Q. A. Ward, H. W. Watrous, and John F. Ware, for the academicians, and J. Appleton Brown and George De Forest Brush, from the associates. The hanging committee elected was C. D. Weldon, Louis Moeller, academicians, and Edward Gay, associate. William H. Lippincott, Walter L. Palmer, and William H. Howe were elected academicians, and W. T. Smedley, Bruce Crane, R. W. Van Boskerck, Frank Russell Green, and Howard Russell Butler, associates. The academy is preparing to erect a new building on Cathedral Heights, which will have in addition to its various schoolrooms, art library, and exhibition galleries, a historical gallery for the reception and preservation of representative works of early American painters.

NATIONAL ACADEMY OF SCIENCES. The annual spring meeting of the academy was held in Washington, D. C., in April, 1897. Only 3 officers were to be elected, and of these Prof. Asaph Hall was chosen vice-president; Prof. Alexander Graham Bell, treasurer; and Prof. Ira Remsen, of Baltimore, Md., home secretary. The following additional members of the council were elected: Dr. H. P. Bowditch, of Boston; Prof. G. J. Brush, of Yale; Dr. John S. Billings, of New York City; Prof. O. O. Marsh, of Yale; Prof. Simon Newcomb, U. S. N.;

and Dr. Arnold Hague, of Washington, D. C. Among the papers presented were a biographical memoir of the late Dr. G. Brown Goode, assistant secretary of the Smithsonian Institution, by Prof. Samuel P. Langley, the secretary; a memoir of the late Gen. Thomas L. Casey, by Gen. Henry L. Abbott; and a paper on *A Ring Pendulum for the Absolute Determination of Gravity*, by Dr. Thomas C. Mendenhall and A. S. Kimball.

NATIONAL APPROPRIATIONS. The various appropriation bills of the 54th Congress of the United States for the fiscal year 1897-98, as they were sent to the President for approval, carried the following totals:

Agriculture.....	\$3,182,902.00
Army.....	24,129,344.30
Diplomatic and Consular.....	1,695,308.76
District of Columbia.....	6,187,591.06
Fortifications.....	9,517,141.00
Indian.....	7,470,283.89
Legislative, Executive, and Judicial.....	21,680,795.90
Military Academy.....	479,572.83
Naval.....	33,128,334.39
Pension.....	141,293,880.00
Post Office.....	93,665,338.75
Sundry Civil.....	53,030,000.00
Deficiency (for the Navy and courts).....	884,885.78
Total.....	\$397,525,186.56
Permanent annual appropriations.....	130,078,230.00
Grand total.....	\$517,603,406.56

Adding to this \$8,442,027.85 for the General Deficiency bill (which was the sum voted by the House) and \$500,000 for miscellaneous objects, the total appropriation for 1898 would be \$526,545,434.41, against \$515,845,194.57 for 1897. After the close of the last session the clerks of the Senate and House Committees on Appropriations revised the completed appropriations, with the following result:

General appropriation acts.....	\$397,100,384
Deficiency acts.....	10,557,017
Miscellaneous acts.....	369,057
Total.....	\$408,026,458
Permanent annual appropriations.....	130,078,231
Making a total of appropriations made at both sessions of.....	\$538,104,689

Besides these amounts, Congress authorized contracts, requiring future appropriations, aggregating \$2,269,375.

NATIONAL BANKS. The following is a summary of the principal details of the official reports of the national banks in the United States for Oct. 31, 1897:

NATIONAL BANKS.

States and Territories.	Banks.			Capital stock paid.	United States bonds on deposit.	Circulation.		
	Organized.	In liquidation.	In Operation.			Issued.	Redeemed.	Outstanding. <i>a</i>
Maine.....	99	16	83	\$11,171,000	\$5,952,700	\$47,491,180	\$41,645,753	\$5,845,427
New Hampshire.....	61	10	51	5,805,000	3,053,750	32,347,145	28,581,573	3,765,572
Vermont.....	68	19	49	6,985,000	4,275,500	41,034,290	37,169,129	3,865,161
Massachusetts.....	288	21	267	94,357,500	30,170,000	579,248,865	347,122,362	32,126,503
Rhode Island.....	64	7	57	19,337,050	7,819,000	82,838,773	75,103,892	7,734,881
Connecticut.....	98	17	81	21,641,070	9,021,000	105,490,880	96,952,561	8,538,319
Total.....	678	90	588	159,266,620	61,192,850	688,472,185	526,575,270	61,896,875
New York.....	473	117	356	83,664,940	37,531,000	371,694,485	332,518,146	39,181,539
New Jersey.....	117	14	103	14,445,000	5,677,250	64,456,500	58,962,747	5,493,753
Pennsylvania.....	493	66	427	75,345,240	32,821,050	256,548,545	224,661,466	31,887,079
Delaware.....	18	.....	18	2,083,985	795,000	8,866,985	8,116,194	690,401
Maryland.....	72	3	69	17,070,990	4,850,750	47,722,030	42,641,480	5,130,550
Dist. Columbia.....	19	6	13	3,127,000	1,170,150	7,990,000	6,491,488	1,297,512
Total.....	1,192	236	956	195,746,125	82,854,200	756,977,265	673,386,821	83,501,441
Virginia.....	54	19	35	4,646,300	2,252,250	16,599,430	14,483,279	2,114,151
West Virginia.....	41	8	33	3,451,000	1,424,450	10,060,320	8,713,740	1,346,580
North Carolina.....	27	10	17	2,801,000	748,500	8,415,690	7,541,304	874,386
South Carolina.....	21	5	16	1,890,100	537,250	6,774,435	6,240,637	533,798
Georgia.....	44	14	30	4,016,000	1,211,000	10,902,560	9,674,440	1,228,520
Florida.....	25	10	15	1,485,000	442,500	1,471,590	1,136,737	334,853
Alabama.....	39	13	26	3,453,000	1,333,500	7,939,840	6,735,793	1,204,047
Mississippi.....	15	5	10	735,000	243,150	1,207,820	984,013	223,807
Louisiana.....	27	8	19	3,360,000	1,187,000	12,069,060	11,310,651	758,409
Texas.....	266	64	202	20,106,200	4,993,700	18,901,450	14,000,549	4,900,104
Arkansas.....	14	5	9	1,220,000	351,500	2,032,040	1,771,435	261,505
Kentucky.....	109	34	75	11,064,500	4,991,750	44,294,775	38,570,852	5,684,923
Tennessee.....	78	29	49	8,760,000	1,785,350	14,637,500	13,010,418	1,617,072
Total.....	770	224	546	67,610,500	21,270,000	153,904,060	134,184,805	21,719,255
Missouri.....	124	61	63	15,065,000	3,072,050	32,801,335	29,062,210	3,739,125
Ohio.....	354	105	249	45,330,100	18,894,100	134,771,910	116,362,315	18,409,595
Indiana.....	186	71	115	14,237,000	5,229,050	62,356,985	56,664,312	5,691,773
Illinois.....	305	85	220	37,320,000	7,611,500	65,189,385	58,539,211	7,650,174
Michigan.....	168	84	84	12,295,000	4,112,000	38,364,240	33,962,975	4,401,265
Wisconsin.....	123	44	79	10,310,000	3,107,750	18,965,950	15,982,135	2,983,815
Iowa.....	298	73	165	13,500,000	4,170,450	30,825,160	26,709,218	4,035,942
Minnesota.....	110	39	71	13,865,000	1,873,500	16,564,570	14,542,358	2,021,612
North Dakota.....	43	16	27	1,985,000	555,000	2,428,520	1,900,060	528,460
South Dakota.....	53	26	27	1,745,000	523,750	2,867,780	2,293,725	514,055
Kansas.....	217	114	103	8,717,100	2,445,250	14,897,780	12,252,779	2,644,001
Nebraska.....	166	62	104	10,775,000	2,318,400	13,169,440	10,829,781	2,339,659
Total.....	2,087	780	1,307	185,450,200	54,569,800	425,111,985	370,079,739	55,031,346
Nevada.....	3	2	1	82,000	33,000	368,150	359,428	38,722
Oregon.....	42	12	30	3,070,000	1,051,050	3,884,960	2,870,216	1,014,744
Colorado.....	65	24	41	3,232,000	1,274,000	8,552,170	7,207,567	1,344,603
Idaho.....	14	4	10	675,000	206,250	917,000	743,811	173,279
Montana.....	44	23	21	3,855,000	739,350	3,916,020	3,153,974	762,046
Wyoming.....	15	4	11	860,000	215,000	1,212,350	1,027,878	184,472
Washington.....	77	42	35	4,738,000	1,004,800	5,133,180	3,694,085	1,439,095
California.....	49	17	32	7,360,000	1,788,250	7,331,820	5,858,157	1,473,663
Utah.....	17	6	11	1,750,000	812,500	2,945,000	2,172,861	772,239
New Mexico.....	15	9	6	600,000	340,000	2,291,980	1,948,976	343,004
Arizona.....	8	3	5	400,000	150,000	391,180	234,042	157,138
Oklahoma.....	8	3	6	300,000	103,000	180,780	138,570	46,910
Indian Territory.....	11	.....	11	620,000	138,000	278,400	129,369	158,030
Total.....	368	148	220	29,542,000	7,855,700	37,614,070	29,806,225	7,807,845
Total currency banks.....	.....	.....	.....	.....	.....	2,064,075,225	1,834,032,860	230,046,365
Add gold banks.....	.....	.....	.....	.....	.....	3,465,240	3,389,600	84,640
United States.....	5,085	61,478	3,617	637,615,445	237,742,500	2,067,514,465	1,837,413,460	230,131,005

a Including \$26,305,320 for which lawful money has been deposited with the Treasurer of the United States to retire an equal amount of circulation which has not been presented for redemption.

b Exclusive of 15 banks formerly in the hands of receivers, which have been restored to solvency.

NATIONAL BANKS.

The amount of deposits and the reserve held by the banks were as follows:

Cities, States and Territories.		Deposits.	Reserve Required.	Reserve Held.	Ratio of Reserve.
			<i>25 Per Cent.</i>		<i>Per Cent</i>
1	New York City.....	\$506,807,545 15	\$126,724,386 29	\$137,340,548 15	27 10
2	Chicago.....	165,714,526 92	26,428,631 73	28,117,032 55	26 06
3	St. Louis.....	83,921,396 66	8,255,349 16	8,174,036 69	24 75
	Total of central reserve cities.....	645,683,468 73	161,408,367 18	183,628,627 30	28 44
4	Boston.....	153,967,503 31	38,491,875 83	48,297,211 26	31 31
5	Albany.....	10,401,524 08	2,601,381 92	3,369,114 74	37 78
6	Brooklyn.....	16,541,140 93	4,161,295 23	4,935,148 57	28 04
7	Philadelphia.....	19,212,141 30	29,868,110 33	38,243,418 26	32 65
8	Pittsburg.....	45,655,087 47	11,418,771 87	11,318,222 45	31 36
9	Baltimore.....	28,638,536 19	7,159,634 65	9,200,535 46	32 13
10	Washington.....	13,710,733 47	3,427,685 57	5,135,197 90	35 45
11	Savannah.....	85,348 00	146,487 00	325,860 62	55 61
12	New Orleans.....	13,861,190 78	3,495,497 69	4,190,652 43	30 23
13	Louisville.....	8,808,268 32	2,262,067 08	3,422,958 11	38 86
14	Houston.....	3,394,632 46	848,658 32	2,651,234 96	78 10
15	Cincinnati.....	29,643,108 61	7,410,739 65	9,696,379 63	32 71
16	Cleveland.....	24,824,791 94	6,206,197 99	8,766,690 68	32 25
17	Detroit.....	18,061,818 80	4,515,154 70	6,290,135 19	34 83
18	Milwaukee.....	23,762,726 23	5,940,681 26	10,388,597 11	43 63
19	Des Moines.....	3,310,449 09	827,612 27	1,116,814 76	34 64
20	St. Paul.....	13,515,799 83	3,379,677 49	7,315,429 80	54 11
21	Memphis.....	9,555,536 73	2,388,854 18	4,757,394 22	48 11
22	Kansas City.....	22,778,425 78	5,694,606 54	9,012,611 25	39 57
23	St. Joseph.....	2,809,119 60	702,354 90	1,183,358 66	42 12
24	Lincoln.....	1,641,001 86	411,009 46	510,244 46	31 04
25	Omaha.....	13,235,052 38	3,308,763 09	5,553,159 51	41 96
26	San Francisco.....	8,119,255 31	2,104,813 63	2,900,129 25	34 45
	Total of other reserve cities.....	586,411,252 40	146,610,313 12	208,841,891 53	34 25
	Total of all reserve cities.....	1,232,074,721 23	308,018,680 30	384,481,569 83	31 21
			<i>15 Per Cent.</i>		<i>Per Cent</i>
27	Maine.....	18,537,719 10	2,780,657 87	5,976,737 30	32 24
28	New Hampshire.....	11,140,849 59	1,671,129 09	3,575,481 41	31 69
29	Vermont.....	9,423,963 09	1,413,585 45	3,449,200 28	34 83
30	Massachusetts.....	87,222,678 87	13,082,311 82	22,482,081 75	26 00
31	Rhode Island.....	21,378,497 26	3,181,313 09	5,812,451 68	27 41
32	Connecticut.....	35,990,965 73	5,344,041 86	10,580,269 33	29 71
	Total of New England States.....	183,140,294 55	27,171,044 18	51,571,844 81	28 16
33	New York.....	93,414,922 25	14,012,298 34	23,836,193 07	27 68
34	New Jersey.....	58,218,430 48	8,782,764 57	17,287,157 64	29 69
35	Pennsylvania.....	117,559,188 22	17,633,323 23	34,717,553 65	29 58
36	Delaware.....	5,265,828 11	789,874 22	1,598,401 42	29 59
37	Maryland.....	11,282,679 41	1,692,101 91	3,314,622 62	29 28
38	District of Columbia.....	840,111 94	126,010 65	304,465 62	43 38
	Total of Eastern States.....	286,581,459 51	42,987,218 92	83,091,627 2	29 00
39	Virginia.....	15,888,769 81	2,382,667 47	4,844,193 71	34 37
40	West Virginia.....	8,122,629 74	1,233,265 09	2,613,114 14	31 68
41	North Carolina.....	5,492,467 24	819,374 58	1,445,232 19	26 47
42	South Carolina.....	4,067,577 97	601,136 71	942,791 02	23 53
43	Georgia.....	6,354,470 14	953,211 02	1,629,579 47	26 11
44	Florida.....	3,901,839 65	585,275 95	1,203,487 65	31 04
45	Alabama.....	6,947,484 20	947,122 18	1,929,755 52	27 41
46	Mississippi.....	2,925,175 94	303,776 39	569,131 29	26 19
47	Louisiana.....	1,904,536 37	285,680 46	565,223 10	30 73
48	Texas.....	31,629,252 73	4,743,637 91	11,015,151 65	31 84
49	Arkansas.....	1,782,870 85	267,430 62	536,713 92	31 21
50	Kentucky.....	13,308,967 82	1,996,315 17	4,511,952 36	31 69
51	Tennessee.....	18,058,371 38	2,708,733 71	5,665,252 82	31 34
	Total of Southern States.....	118,510,720 84	17,770,698 12	37,606,657 14	31 11

NATIONAL POLITICAL PARTIES.

	Cities, States, and Territories.	Deposits.	Reserve	Reserve Held.	Ratio of
			Required.		Ratio.
		<i>15 Per Cent.</i>			<i>Per Cent</i>
52	Ohio.....	\$63,167,933 42	\$9,475,190 01	\$22,072,416 58	34.94
53	Indiana.....	32,986,969 37	4,847,869 89	13,555,849 03	41.22
54	Illinois.....	49,025,054 54	7,443,738 18	17,773,294 39	35.82
55	Michigan.....	37,098,140 44	4,154,721 07	9,244,956 24	33.28
56	Wisconsin.....	21,162,290 36	3,174,330 05	7,418,475 31	35.06
57	Minnesota.....	15,792,621 69	2,355,369 25	5,882,153 81	37.46
58	Iowa.....	28,383,875 83	4,257,581 37	9,513,943 45	33.52
59	Missouri.....	7,789,896 49	1,108,484 47	2,582,493 61	33.15
Total of Middle States.....		246,513,722 04	36,977,358 29	88,083,525 22	35.73
60	North Dakota.....	5,625,848 62	843,877 29	2,261,566 57	40.20
61	South Dakota.....	4,314,737 55	647,210 62	1,711,524 08	39.67
62	Nebraska.....	11,678,154 03	1,731,723 19	4,058,779 58	34.83
63	Kansas.....	19,531,219 32	2,920,681 40	7,849,081 33	40.19
64	Montana.....	10,349,087 89	1,552,363 18	4,539,575 62	43.86
65	Wyoming.....	2,636,380 27	395,457 04	1,139,148 44	42.89
66	Colorado.....	30,551,264 57	4,582,680 68	13,879,192 55	45.43
67	New Mexico.....	2,900,123 45	435,019 42	973,604 01	33.57
68	Oklahoma.....	646,746 24	97,011 94	301,925 30	46.68
69	Indian Territory.....	1,150,400 73	172,560 12	549,360 46	47.76
Total of Western States.....		89,383,959 55	13,407,593 88	37,294,467 94	41.66
70	Washington.....	10,010,972 80	1,501,618 92	3,582,022 39	35.78
71	Oregon.....	9,682,644 83	1,452,306 73	3,178,415 79	32.83
72	California.....	12,250,925 07	1,839,138 76	3,962,892 34	32.32
73	Idaho.....	2,264,319 00	344,147 85	928,813 75	40.48
74	Utah.....	3,836,420 55	575,369 08	1,654,146 84	43.12
75	Nevada.....	251,037 05	37,655 69	59,653 33	23.76
76	Arizona.....	1,127,389 80	169,108 47	479,375 35	42.52
Total of Pacific States.....		39,463,530 00	5,919,529 50	18,845,619 76	43.08
Total of country banks.....		963,505,686 19	144,539,352 80	311,441,556 92	32.32
Total of United States.....		2,195,670,497 41	452,558,033 19	695,922,155 77	31.70

See also BANKS AND BANKING: SAVINGS BANKS.

NATIONAL POLITICAL PARTIES. The first national political parties in the United States had their origin in patriotic movements preceding the Revolutionary war. The people who believed in the justice and wisdom of the policy of the British government toward the colonies constituted the Tory, or Loyalist party; and those who opposed that policy took the name of Whig, or Patriot party. The success of the war ended the career of the Tory party as a factor in national politics, and left the Whigs in full possession of the field. This supremacy, however, was short-lived, for in the first constitutional convention, the Whigs split on the question of the character of the compact with the new States, and two new parties were formed from the Whig. The Federalists urged the establishment of a union of States with equal individual powers, but all under the control of a supreme governing body; the Anti-Federalists opposed the scheme of a superior centralized authority, declaring that such would be too similar to the monarchical form from which the colonies had escaped. The contentions of the two parties in the convention were exceedingly bitter, and when the Federalists carried their draft of a constitution, the controversy spread to the States, and was the cause of the delay in securing the necessary ratifications. The Federalists made presidential nominations in 1792, 1796, 1800, 1804, 1808, 1812, and 1816, and were successful in two campaigns, in 1792 with Washington, and in 1796 with John Adams. They opposed the war of 1812, and, though showing some vitality in State matters, they ceased to exert national influence after 1817, and cast no electoral votes in 1820.

During the career of the Federalists, a faction of the Anti-Federalists began to advocate a more direct control of the government by the people, a restriction of the supreme authority, and a greater conservation of the rights which the constitution confirmed to the States. The advocates of this policy received from the Federalists the name of Republicans, and in contrasting them with the regular Anti-Federalists Thomas Jefferson wrote under date of May 13, 1792: "The Republican party, who wish to preserve the government in its present form, are fewer in number." This party, organized early in 1792, was the first to bear the name Republican. In the same year numerous societies were formed in the States on the plan of the Jacobin clubs of Paris. Their members opposed the Federalists as representatives of the aristocracy, and also opposed the Republicans as being less aggressive than a popular party should be; but in political action they gave their aid to the Republicans till 1796, when they withdrew and took the name of the Democratic-Republican party. The Republican party made presidential nominations in 1792, 1796, 1800, 1801, 1812, 1816, 1820, and 1824, and were successful in 1800 and 1804 with Jefferson, in 1808 and 1812 with Madison, in 1816 and 1820 with Monroe, and in 1824 with Jackson.

Soon after the campaign of 1824, a split occurred in the Republican party. A portion led by John Quincy Adams took the name of the National Republican party; the other, led by Andrew Jackson, that of the Democratic party. In the election of 1828 both leaders were candidates for the presidency, and Jackson was successful, receiving 647,276 popular and 178 electoral votes, to 508,074 popular and 83 electoral votes for Adams. In the next campaign the opponents of President Jackson withdrew from the new Democratic party, formed a new one, and gave it the old name of Whig. This campaign is memorable from the appearance in the national field of the Anti-Masonic party, whose candidate, William Wirt, received 7 electoral votes, all in Vermont, though the party was of New York origin. This party elected its candidate for governor of New York in 1833, and was absorbed by the Whigs about 1840. The Whig party made presidential nominations in 1836, 1840, 1844, 1848, and 1852; was successful in 1840 with Harrison, and in 1848 with Taylor; and closed its national career with the campaign of 1852.

The slavery question now became an active and potent factor in national politics, and one of its first achievements was to give birth to a dual Free-soil party. One branch of this party was the result of a split in the Democratic party (anti-Jackson) in New York State, and became divided into two factions, known as the Barnburners, or Softs, and the Hunkers, or Hards. This branch was opposed to the extension of slavery; the other branch, which gained considerable strength in the Northern States, favored the restriction of slavery to the States in which it was then permitted. The first branch in 1848 nominated Martin Van Buren for president and Charles Francis Adams for vice-president, and its candidates received 291,263 popular, but no electoral votes. The second branch, drawing from the second Whig party and the anti-slavery section of the regular Democratic party, in 1852 nominated John P. Hale for president, and George W. Julian for vice-president, and its candidates received 155,825 popular but no electoral votes. In the campaigns of 1848 and 1852, the Free-soil party had the support of the Liberty party, which was organized in Warsaw, N. Y., in 1839, had presidential tickets in 1840 and 1844, received 7,069 and 62,300 popular votes respectively, and was merged into the Republican party of to-day in 1856.

The campaign of 1856 saw three national parties in the field: the Democratic, which had come down through the Republican of Jefferson and the Democratic of

Jackson; the Republican, composed of representatives of several parties that had ceased to exist as distinct political organizations, and differing radically from the Republican, the Democratic-Republican, and the National Republican already mentioned; and the American, organized in 1854, and composed of elements from the old Whig and Democratic parties and factions in several States that were opposed to foreign influence and to any political interference of the Roman Catholic Church with public affairs. The modern Democratic party was successful in 1856 with James Buchanan, who received 1,838,169 popular and 174 electoral votes; in 1884 with Grover Cleveland, who received 4,874,986 popular and 219 electoral votes; and in 1892, also with Cleveland, who then received 5,554,685 popular and 277 electoral votes. The new Republican party was successful in the election of 1860, and with the exception of those of 1884 and 1892, in every succeeding one to the present time. The American party in 1856 nominated Fillmore and Donelson, who received 874,534 popular and 8 electoral votes; made no nominations in 1860, but united with the Constitutional Union party, whose candidates, Bell and Everett, received 590,631 popular and 39 electoral votes; reappeared with a ticket in 1880, which received 707 popular votes, and again in 1888, when 1,591 votes were cast for it in California; and has made no nominations since.

After 1860, the number of presidential tickets increased, as follows: The Liberal Republican, which nominated Horace Greeley, and was merged into the Democratic in 1872; the National Temperance, in 1872; the National Greenback, in 1876, 1880, and 1884; the National Prohibition, in 1876, and each succeeding campaign; the Women's National Rights, in 1884; the National Union Labor and the United Labor, both in 1888; the Social Labor, in 1892 and 1896; the People's, in 1892, and, under its new name, the Populist, in 1896; and the National Democratic, and Free Silver Prohibition, both in 1896. In the presidential, congressional, and State elections in 1896, dissatisfaction with the declarations of the regular Democratic and Republican platforms on the silver question led to the nomination of many Fusion tickets. Some Democrats allied themselves with the Republicans on the national issue; some Republicans went with the Democrats; and some gold, or "hard-money," Democrats organized the National Democratic party. The Populist party nominated the Democratic nominee for president for the head of its ticket, but set up a candidate of its own for vice-president; hence the vote for William J. Bryan represented both the regular Democratic and the Populist parties. The Democratic vote for Bryan was 6,257,198, and the Populist, 245,728; and these totals indicate also the strength of the Democratic and Populist candidates for vice-president respectively. For details of this election see MCKINLEY, WILLIAM, *Election*.

NAVAL MILITIA. In April, 1897, the secretary of the navy made the annual allotment of the fund of \$50,000 appropriated by Congress for the naval militia of the States. Deducting \$2,000, reserved for the purchase of text-books, the remainder of the appropriation is allotted among the States having naval militia organizations in proportion to the number of uniformed petty officers and men they had on their rolls on Jan. 1, 1897. The formation of battalions of naval militia has been authorized by law or executive action in 18 States, and in 15 such battalions have been organized. The aggregate strength of the naval militia battalions in these 15 States on Jan. 1, 1897, was 4,037, consisting of 344 commissioned officers and 3,693 petty officers and enlisted men. The result is as follows:

States.	Strength.	Allotment
Massachusetts.....	434	\$5,625
Rhode Island.....	158	2,048
Connecticut.....	185	1,749
New York.....	367	4,757
New Jersey.....	357	4,368
Pennsylvania.....	183	2,572
Maryland.....	223	3,020
South Carolina.....	165	1,814
North Carolina.....	140	2,158
Georgia.....	188	2,436
Louisiana.....	209	2,700
California.....	355	4,991
Illinois.....	448	5,807
Ohio.....	174	2,255
Michigan.....	177	2,294

Assistant-Secretary Theodore Roosevelt, reporting on a special inspection of the naval militia of several of the largest States, in August, 1897, said: "Most of the naval militia are now in condition to render immediate service of a very valuable kind in what may be called the second line of defense. They could operate signal stations, help handle torpedoes and mines, officer and man auxiliary cruisers, and assist in the defense of points which were not covered by the army. There are numbers of advanced bases which do not come under the present scheme of army coast defense, and which would have to be defended, at any rate, during the first weeks of war, by bodies of naval militia; while the knowledge they get by their incessant practice in boats on the local waters would be invaluable."

Officers of the naval militia now have the privilege of receiving instruction at the torpedo station of the Naval War College, at Newport, R. I. The work of this branch of the public service is growing more important every year, and the Federal government assists it by providing the several bodies with war vessels not in use for sea practice, and by giving the men, as far as possible, an annual cruise on a war vessel in full commission. To systematize the work that the government expects the militia to perform in time of peace, the Navy Department has issued blanks to be filled with special information concerning the local conditions with which the several battalions are most familiar. Among the items of information thus called for are the following:

First—Character of water approach.

Second—Depth of low water.

Third—Information concerning creeks—(a) Width. (b) How far navigable for cutters or steam launches? (c) To what extent could rioters annoy boat parties from buildings along banks? (d) Are the creeks crossed by railway? If so, give name of road, also the number, style and clearance of the bridge for freight cars (overhead), and for boats passing underneath. (e) Could small torpedo-boats be launched from the bridge? If so, how?

Fourth—Bearing and distance of nearest telegraph or telephone station from point of landing.

Fifth—Information regarding proposed signal stations—(a) Place. (b) Height above sea. (c) Extent of sea horizon. (d) Background from the sea. (e) What method of signaling is recommended to be used from the station? (f) Communications with other points. (g) Other signal stations in sight. (h) Distances

and bearings of other stations. (i) Backgrounds of other stations from it. (j) Easiness of attack or defense. (k) Facility of concealment of position from an enemy. (l) Accessibility. (m) Is there any flagpole near which is visible from a distance? (n) Any place near suitable for landing from a fleet? (o) Character of country between landing places and nearest town.

Sixth—Note on sheet or give sketch with bearings and descriptions of fortifications existing or proposed, or where improvised batteries might be located for the defense of water approaches. Note, by conventional signs, guns, mortars, masked batteries, position of operating stations, cable galleries for mines, observation points, location for searchlights and range-finders, submarine mines, the 4 and 5 fathom curves, good anchorage for vessels of different classes, torpedo-boats, harbors and places of refuge for torpedo and guard-boats, places for obstructions to effectually block a channel.

Seventh—Note on charts, by conventional signs, existing and proposed signal stations, telegraph, telephone and submarine cable lines, railroads, trolley lines, marine railways, shipyards, wharves, drydocks, canals, coal depots, churches and hospitals, and machine and repair shops for marine engines and boilers. State in all cases the class and maximum draught and size of vessel which can be accommodated, repaired, docked, transported or handled.

Eighth—Note good camping grounds near or on navigable waters.

In April, 1898, the naval militias of New York, Pennsylvania, and New Jersey were called on for detachments to take the monitors laid up at League Island, Philadelphia, to designated points along the New England and Middle State coast, in anticipation of war with Spain. Subsequently, the remainder of these forces and those of other Atlantic, Gulf, and Pacific States were called out for coast patrol and other active service.

NAVIES OF THE WORLD. The naval forces of the world, as regards ships, were as follows in 1896:

Argentine Republic.—Two port-defense armor-clads; 2 first-class cruisers; 3 armored cruisers; 3 second-class cruisers; 6 third-class cruisers; 10 first-class and 4 third-class torpedo-boats; 2 first-class torpedo-boats building. Officers and men, 1,530.

Austria-Hungary.—Mainly a coast-defense force; 1 first-class battleship; 5 second-class, 2 third-class; 8 port-defense ships; 1 first-class cruiser, 4 second-class, 23 third-class; 25 first-class torpedo-boats, 5 second-class, 26 third-class. Officers and men, 13,074.

Brazil.—One second-class battleship; 7 port-defense armor-clads; 1 first-class cruiser; 4 second-class cruisers; 9 third-class cruisers; 8 first-class, 6 third-class torpedo-boats. Officers and men, 8,900.

British Empire.—Twenty-eight first-class battleships, 5 building, 5 second-class, 9 third-class; 23 port-defense ships; 45 first-class cruisers, 10 building, 54 second-class, 7 building, 174 third-class; 125 torpedo-craft, first-class, 42 building, 4 second-class, 20 third-class. Officers and men, 93,750.

Chile.—One first-class battleship; 1 port-defense armor-clad; 1 armored cruiser; 1 first-class cruiser, 1 building; 4 second-class cruisers; 11 third-class, 2 building; 5 first-class and 8 third-class torpedo-boats; 4 torpedo-destroyers building. Officers and men, 1,860.

China.—Seven second-class cruisers, 4 third-class; 7 first-class torpedo-boats, 4 building, 25 second-class, 2 third-class.

Denmark.—One second-class battleship; 3 port-defense ships; 3 first-class armored cruisers, 1 second-class, 16 third-class; 6 cruisers; 7 first-class torpedo-boats, 3 second-class, 2 third-class. Officers and men, 1,420.

Ecuador.—One torpedo launch; 1 transport. Officers and men about 128.

France.—Twenty first-class battleships, 1 building, 8 second-class, 6 third-class; 14 port-defense ships; 14 first-class cruisers, 3 building; 29 second-class, 3 building, 106 third-class, 3 building; 102 first-class torpedo-craft, 9 building, 80 second-class, 29 third-class. Officers and men, 50,000.

German Empire.—Five first-class battleships, 1 building, 5 second-class, 4 third-class; 20 port-defense ships; 1 first-class cruiser, 6 building, 10 second-class, 1 building, 24 third-class; 101 torpedo-craft, 9 building, 4 second-class. Officers and men, 25,000.

Greece.—Five armor-clad vessels; 17 torpedo-boats; of unprotected vessels, 2 corvettes, 2 cruisers, 12 gunboats. Officers and men before the late war, 3,160.

Haiti.—Six small third-class cruisers; 1 dispatch gunboat.

Italy.—Five first-class battleships, 2 building, 4 second-class, 1 third-class; 2 port-defense ships; 6 first-class cruisers, 3 building, 17 second-class, 1 building, 26 third-class, 3 building; 104 first-class torpedo-craft, 2 building, 4 second-class, 37 third-class. Officers and men, 24,560.

Japan.—Two first-class battleships, 1 second-class; 5 armored cruisers, 10 second-class cruisers; 17 third-class cruisers; 4 first-class torpedo-boats, 20 second-class, 4 third-class; 2 torpedo-destroyers building. Commissioned officers, lieutenants and sub-lieutenants, 11,150; commanders, 301; captains, 208; rear-admirals, 30; vice-admirals, 20; admirals, 10.

Mexico.—Two dispatch vessels; 2 unarmored gun-vessels; 1 steel training-ship; gunboats and 15 first-class torpedo boats building. Officers and men, 540.

Netherlands.—Twenty-eight port-defense ships; 1 first-class cruiser, 9 second-class, 69 third-class; 28 first-class torpedo-craft, 3 second-class, 6 third-class. Officers and men, 7,030.

Norway.—Four iron-clad monitors; 2 iron-clads building; 1 wooden corvette; 4 unarmored gun-vessels; 20 small gunboats; a small torpedo flotilla. Officers and men, 550.

Paraguay.—One steamer of 440 tons and 2 smaller steamers.

Persia.—One screw steamship of 450 h. p. and 1 small river steamer.

Peru.—One cruiser; 3 old steamers; 1 training-ship.

Portugal.—One armored cruiser; 30 third-class cruisers; 1 third-class cruiser building; 2 torpedo gunboats building; 15 first-class torpedo-boats, 5 second-class, 1 third-class; several training-ships, transports, etc. Officers and men, 4,618.

Roumania.—One protected cruiser; 1 training-ship; 1 dispatch vessel; 8 gunboats; 6 first-class and 2 second-class torpedo-boats. Officers and men, 1,650.

Russia.—In the three fleets—Baltic, Black Sea, Siberia—15 first-class battleships, 12 building; 1 third-class battleship; 16 port-defense vessels; 11 first-class cruisers, 3 building; 2 second-class cruisers, 1 building; 54 third-class, 24 building; 50 first-class torpedo-craft, 24 building; 1 of second and 1 of third-class. Officers and men about 38,500.

Santo Domingo.—Two small steamers, 1 building.

Sum.—Twenty-two vessels, including a cruiser yacht, 1 small cruiser, 5 gunboats, 1 torpedo-boat, transports, dispatch boats, etc. Ten thousand men serve these vessels in 5 relays.

Spain.—One first-class battleship, 1 building; 1 port-defense ship; 8 first-class cruisers, 3 building, 6 second-class, 1 building, 99 third-class, 3 building; 36 first-class torpedo-craft, 2 building, 2 second-class. Officers and men, 15,727.

Sweden.—Four first-class armored coast-defense turret-ships, 4 second-class, 9

third-class; 3 steam corvettes; 11 gunboats and dispatch vessels; 16 torpedo-boats; 12 schoolships. Officers in active service, 177.

Turkish Empire.—One first-class battleship, 1 third-class; 7 port-defense ships; 9 first-class cruisers, 1 building, 2 second-class building, 50 third-class, 9 building; 30 first-class torpedo, 7 third-class.

Uruguay.—Three gunboats, 1 small steamer. Officers and men, 184.

Venezuela.—Three steamers, 2 sailing vessels.

NAVY OF THE UNITED STATES. The following table gives a list of all vessels in the United States navy, with details of construction and condition, Jan. 1, 1897:

ABBREVIATIONS.—Hull: S., steel; I., iron; W., wood. Propulsion: S., screw; T. S., twin screw; Tr. S., triple screw; P., paddle; M. P., Mallory propeller.						
FIRST RATE.						
Name.	Displacement (Tons).	Type.	Hull.	I. H. P.	Propulsion.	Guns (Main Battery).
Indiana.....	10,288	First-class battleship.....	S.	9,738	T. S.	16
Massachusetts.....	10,288	First-class battleship.....	S.	10,403	T. S.	16
Oregon.....	10,288	First-class battleship.....	S.	11,111	T. S.	16
Brooklyn.....	9,271	Armored cruiser.....	S.	18,769	T. S.	20
New York.....	8,200	Armored cruiser.....	S.	17,401	T. S.	18
Columbia.....	7,375	Protected cruiser.....	S.	18,509	Tr. S.	11
Minneapolis.....	7,375	Protected cruiser.....	S.	20,862	Tr. S.	11
Maine.....	6,682	Second-class battleship.....	S.	9,263	T. S.	10
Texas.....	6,315	Second-class battleship.....	S.	8,600	T. S.	8
Puritan.....	6,060	Double-turret monitor.....	I.	3,700	T. S.	10
Olympia.....	5,870	Protected cruiser.....	S.	17,313	T. S.	14
SECOND RATE.						
Chicago.....	4,500	Partially protected cruiser.....	S.	9,000	T. S.	18
Baltimore.....	4,413	Protected cruiser.....	S.	10,064	T. S.	10
Philadelphia.....	4,324	Protected cruiser.....	S.	8,815	T. S.	12
Monterey.....	4,084	Barbette turret, low free-board monitor.....	S.	5,244	T. S.	4
Newark.....	4,068	Protected cruiser.....	S.	8,869	T. S.	12
Sau Francisco.....	4,098	Protected cruiser.....	S.	9,913	T. S.	12
Charleston.....	3,730	Protected cruiser.....	S.	6,666	T. S.	8
Miantonomah.....	3,990	Double-turret monitor.....	I.	1,425	T. S.	4
Amphitrite.....	3,990	Double-turret monitor.....	I.	1,600	T. S.	6
Monadnock.....	3,990	Double-turret monitor.....	I.	3,900	T. S.	6
Terror.....	3,990	Double-turret monitor.....	I.	1,600	T. S.	4
Lancaster.....	3,250	Cruiser.....	W.	1,000	S.	12
Cincinnati.....	3,213	Protected cruiser.....	S.	10,000	T. S.	11
Raleigh.....	3,213	Protected cruiser.....	S.	10,000	T. S.	11
Athens.....	3,000	Partially protected cruiser.....	S.	4,030	S.	8
Boston.....	3,000	Partially protected cruiser.....	S.	4,030	S.	8
THIRD RATE.						
Hartford.....	2,790	Cruiser.....	W.	2,000	S.	13
Katahdin.....	2,155	Harbor-defense ram.....	S.	5,068	T. S.	2
Ajax.....	2,100	Single-turret monitor.....	I.	340	S.	2
Canonius.....	2,100	Single-turret monitor.....	I.	340	S.	2
Mahopac.....	2,100	Single-turret monitor.....	I.	340	S.	2
Manhattan.....	2,100	Single-turret monitor.....	I.	340	S.	2
Wyandotte.....	2,100	Single-turret monitor.....	I.	340	S.	2
Detroit.....	2,080	Cruiser.....	S.	5,227	S.	8
Montgomery.....	2,080	Cruiser.....	S.	5,580	T. S.	10
Marblehead.....	2,080	Cruiser.....	S.	5,451	T. S.	9
Marion.....	1,900	Cruiser.....	W.	1,100	S.	8
Mohican.....	1,900	Cruiser.....	W.	1,100	S.	10

Name.	Displacement (Tons).	Type.	Hull.	Propulsion,		Guns (Main Battery).
				I.	P.	
Camanche.....	1,875	Single-turret monitor.....	L	340	Z	
Catskill.....	1,875	Single-turret monitor.....	L	340	Z	
Jason.....	1,875	Single-turret monitor.....	L	340	Z	
Lehigh.....	1,875	Single-turret monitor.....	L	340	Z	
Montauk.....	1,875	Single-turret monitor.....	L	340	Z	
Nahant.....	1,875	Single-turret monitor.....	L	340	Z	
Nantucket.....	1,875	Single-turret monitor.....	L	340	Z	
Passaic.....	1,875	Single-turret monitor.....	L	340	Z	
Bennington.....	1,710	Gunboat.....	S	3,436	T	6
Concord.....	1,710	Gunboat.....	S	3,405	T	6
Yorktown.....	1,710	Gunboat.....	S	3,392	T	6
Dolphin.....	1,486	Dispatch boat.....	S	2,233	Z	6
Adams.....	1,375	Cruiser.....	W	800	Z	6
Albatross.....	1,375	Cruiser.....	W	800	Z	6
Essex.....	1,375	Cruiser.....	W	800	Z	6
Enterprise.....	1,375	Cruiser.....	W	800	Z	4
Monocacy.....	1,370	Cruiser.....	L	850	P	6
Thetis.....	1,250	Cruiser.....	W	530	S	6
Castine.....	1,177	Gunboat.....	S	2,199	T	8
Machias.....	1,177	Gunboat.....	S	2,046	T	8
Alert.....	1,020	Cruiser.....	L	500	S	3
Hanger.....	1,020	Cruiser.....	L	500	S	4

FOURTH RATE.

Vesuvius.....	929	Dynamite-gun vessel.....	S	3,795	T	3
Yantic.....	900	Cruiser.....	W	310	Z	4
Petrel.....	802	Gunboat.....	S	1,335	Z	4
Ferris.....	840	Transport steamer.....	W	800	Z	4
Bancroft.....	839	Gunboat.....	S	1,213	T	4
Michigan.....	685	Cruiser.....	L	365	P	4
Pinta.....	550	Gunboat.....	L	320	S	4

TORPEDO BOATS.

Alarm.....	800	Torpedo ram.....	L	600	M. P.	...
Eriasson.....	790	Torpedo boat.....	S	1,800	T, S.	03
Cushing.....	305	Torpedo boat.....	S	1,730	T, S.	03
Stiletto.....	31	Torpedo boat.....	W	350	S	...

TUGS.

Fortune.....	450	Tug.....	L	340	Z	...
Iwawa.....	192	Tug.....	S	390	Z	...
Leyden.....	450	Tug.....	L	340	Z	...
Narkeeta.....	192	Tug.....	S	390	Z	...
Nina.....	357	Tug.....	L	388	Z	...
Rocket.....	187	Tug.....	W	147	Z	...
Standish.....	450	Tug.....	L	340	Z	...
Traffic.....	280	Tug.....	W	300	Z	...
Triton.....	212	Tug.....	S	300	Z	...
Wahpetta.....	192	Tug.....	S	300	Z	...
Unadilla.....	345	Tug.....	S	500	Z	...

SAILING SHIPS.

Monongahela.....	2,100	.....	W	.....	Sails.	4
Constellation.....	1,186	.....	W	.....	Sails.	8
Jamestown.....	1,150	.....	W	.....	Sails.	1
Portsmouth.....	1,125	.....	W	.....	Sails.	19
Saratoga.....	1,025	.....	W	.....	Sails.	1
St. Mary's.....	1,025	.....	W	.....	Sails.	1

NAVY OF THE UNITED STATES.

RECEIVING SHIPS.							
Name.	Displacement (Tons).	Type.	Hull.	I. H. P.	Propulsion.	Guns (Main Battery).	
Franklin.....	5,170	.....	W.	1,050	S.	4	.....
Wabash.....	4,650	.....	W.	950	S.	1	.....
Vermont.....	4,150	.....	W.	.....	Sails.	6	.....
Independence.....	3,270	.....	W.	.....	Sails.	14	.....
Richmond.....	2,700	.....	W.	692	S.	.....	.....
UNSERVICABLE.							
New Hampshire.....	4,150	Sailing ship.....	W.	.....	Sails.	.....	.....
Pensacola.....	3,000	Cruiser.....	W.	680	S.	.....	.....
Omaha.....	2,400	Cruiser.....	W.	933	S.	.....	.....
Constitution.....	2,200	.....	W.	.....	Sails.	4	.....
Iroquois.....	1,575	Cruiser.....	W.	1,302	S.	.....	.....
Nipsic.....	1,375	Cruiser.....	W.	839	S.	.....	.....
St. Louis.....	890	Sailing ship.....	W.	.....	Sails.	.....	.....
Dale.....	675	Sailing ship.....	W.	.....	Sails.	.....	.....
Minnesota.....	4,700	Cruiser.....	W.	1,000	S.	.....	9
UNDER CONSTRUCTION.							
Kearsarge.....	11,525	First-class battleship.....	S.	10,000	T. S.	22	.....
Kentucky.....	11,525	First-class battleship.....	S.	10,000	T. S.	22	.....
Illinois.....	11,525	First-class battleship.....	S.	10,000	T. S.	18	.....
Alabama.....	11,525	First-class battleship.....	S.	10,000	T. S.	18	.....
Wisconsin.....	11,525	First-class battleship.....	S.	10,000	T. S.	18	.....
Iowa.....	11,410	First-class battleship.....	S.	11,000	T. S.	18	.....
Nashville.....	1,371	Light-draft gunboat.....	S.	1,750	T. S.	8	.....
Wilmington.....	1,392	Light-draft gunboat.....	S.	1,600	T. S.	8	.....
Helena.....	1,392	Light-draft gunboat.....	S.	1,600	T. S.	8	.....
Annapolis.....	1,000	Composite gunboat.....	Comp	800	S.	6	.....
Vicksburg.....	1,000	Composite gunboat.....	Comp	800	S.	6	.....
Newport.....	1,000	Composite gunboat.....	Comp	800	S.	6	.....
Princeton.....	1,000	Composite gunboat.....	Comp	800	S.	6	.....
Wheeling.....	1,000	Composite gunboat.....	Comp	800	T. S.	6	.....
Marietta.....	1,000	Composite gunboat.....	Comp	800	T. S.	6	.....
Torpedo boat No. 3.....	142	Torpedo boat.....	S.	2,000	T. S.	03	.....
Torpedo boat No. 4.....	142	Torpedo boat.....	S.	2,000	T. S.	03	.....
Torpedo boat No. 5.....	142	Torpedo boat.....	S.	2,000	T. S.	03	.....
Torpedo boat No. 6.....	.....	Torpedo boat.....	S.	.....	T. S.	03	.....
Torpedo boat No. 7.....	.....	Torpedo boat.....	S.	.....	T. S.	03	.....
Torpedo boat No. 8.....	182	Torpedo boat.....	S.	3,200	T. S.	03	.....
Torpedo boat No. 9.....	146	Torpedo boat.....	S.	4,200	T. S.	03	.....
Torpedo boat No. 10.....	146	Torpedo boat.....	S.	4,200	T. S.	03	.....
Torpedo boat No. 11.....	273	Torpedo boat.....	S.	5,600	T. S.	02	.....
Torpedo boat No. 12.....	128	Torpedo boat.....	S.	1,750	T. S.	04	.....

(a) Torpedo tubes.

Progress in 1897.—The report of the chief naval constructor, Philip Hichborn, covering the first 10 months of 1897, showed the advance toward completion of 23 vessels. The armed force at that the beginning of the year consisted of 3 first-class battleships, the *Indiana*, the *Massachusetts*, and the *Oregon*; 2 second-class battleships, the *Maine* and the *Texas*; 18 cruisers, the *Brooklyn*, the *New York*, the *Columbia*, the *Minneapolis*, the *Olympia*, the *Chicago*, the *Baltimore*, the *Philadelphia*, the *Newark*, the *San Francisco*, the *Charleston*, the *Cincinnati*, the *Raleigh*, the *Atlanta*, the *Boston*, the *Detroit*, the *Montgomery*, and the *Marblehead*; 7 gunboats, the *Bennington*, the *Concord*, the *Yorktown*, the *Castine*, the *Machias*, the *Bancroft*, and the *Petrel*; 6 double-turreted coast-defense armor clads, the *Puritan*, the *Monterey*, the *Miantonomah*, the *Amphitrite*, the *Monadnock*, and the

Terror: 3 torpedo-boats, the *Eriesson*, the *Cushing*, and the *Stiletto*; 2 dispatch boats, the *Dolphin* and the *Vesuvius*, and 1 ram, the *Katahdin*. During the first 10 months of 1897 12 new vessels were added to the commissioned fleet, as follows: The battleship *Iowa*, the gunboats *Nashville*, *Wilmington*, *Helena*, *Annapolis*, *Vicksburg*, *Newport*, *Wheeling*, and *Maretta*; and the torpedo-boats, *Foote*, *Porter*, and *Dupont*. These brought the number of war vessels completed in the last 14 years up to 57, all of the most modern types. It was expected that in 1898 the navy would have 80 effective vessels, besides a large number of old monitors and many of the old-type wooden vessels that are still available for peaceful service.

War Measures of 1898.—Within two months after the destruction of the battleship *Maine* in the harbor of Havana, on Feb. 15, the government secured by purchase in Europe and the United States a powerful additional force, comprising cruisers, gunboats, torpedo-boats, merchant steamships for auxiliary cruisers, ocean-going tugs, fast steam pleasure yachts, and other craft. Uniting the regular vessels of the navy, including the long-disused monitors, with the purchased craft, the government strengthened its squadron at Hong Kong for operations against the Philippine Islands, reinforced the fleet on the Pacific, and organized a Cuban blockading squadron under Rear-Admiral W. T. Sampson, a flying squadron under Com. F. S. Schley, and a mosquito, or coast-patrol fleet, under Com. J. A. Howell. As the purchasing and mobilizing of vessels was still in progress at the time this edition went to press, an accurate statement of the actual condition of the navy was impossible.

NEBRASKA, one of the United States of North America; admitted to the Union March 1, 1867; counties, 90; capital, Lincoln.

State Officers, 1897-99.—Governor (elected for 2 years, salary \$2,500 per annum), Silas A. Holcomb; lieutenant-governor, James E. Harris; secretary of state, W. F. Porter; treasurer, J. B. Meserve; auditor, J. F. Cornell; superintendent of public instruction, W. R. Jackson; attorney-general, C. J. Smythe; adjutant-general, Patrick H. Barry; chief justice of the supreme court, T. O. C. Harrison; associate justices, T. L. Norvel and J. J. Sullivan; clerk, D. A. Campbell. State government all Fusionists; judiciary all Republican excepting Judge Sullivan, Fusionist.

Legislature, 1897—Fusionists, senate 17, house 40, joint ballot 57; Republicans senate 8, house 31, joint ballot 39; Independents, senate 7, house 23, joint ballot 30; Democrats, senate 1, house 6, joint ballot 7.

Elections.—In the State elections 1896 there were 217,763 votes cast for governor, of which the Democrat-Populist candidate (Holcomb) received 116,415; the Republican (MacColl), 94,723; the Gold Democratic (Bibb), 3,557; the Prohibition (Warner), 1,560; the National Democratic (Hawley), 930; and the Social Labor (Sadilek), 578. In the congressional elections, 4 Democratic-Populist and 2 Republican candidates were chosen. For President, the Democratic candidate received 115,625 votes; the Republican, 102,565; the National Democratic, 2,797; the Prohibition, 1,192; and the Social Labor, 170. In an election in 1897 for supreme court judge, the Fusion candidate (Sullivan) was elected by a vote of 102,828 to 89,009 for the Republican candidate (Post) and 1,625 for the Prohibition (Strong).

Farm Products.—Reported Dec. 31, 1897: Corn, 241,268,490 bush., from 8,042,283 acres, value \$41,015,643; wheat, 27,452,647 bush., from 1,893,286 acres, value \$18,942,326; oats, 51,731,095 bush., from 1,668,745 acres, value \$7,759,664; rye, 1,550,388 bush., from 110,742 acres, value \$620,155; barley,

943,360 bush., from 42,880 acres, value \$226,406; buckwheat, 77,546 bush., from 5,539 acres, value \$39,548; potatoes, 9,076,053 bush., from 131,537 acres, value \$4,174,984; and hay, 3,069,885 tons, from 1,918,678 acres, value \$9,209,655—total value, \$81,368,226. Other valuable crops of unreported yield were sugar beets and alfalfa. The State had 372 irrigating canals either finished or building, of a total length of 1,908 miles, placing nearly 900,000 acres under ditch, and costing over \$2,000,000.

Farm Animals.—Reported Jan. 1, 1898: Horses, 592,985, value \$18,102,648; mules, 42,590, value \$1,585,625; cows, 571,591, value \$17,519,264; cattle, 1,213,764, value \$32,548,295; sheep, 266,163, value \$759,362; and swine, 1,327,128, value \$7,146,582—total value, \$77,661,776.

Mineral Products.—The principal mineral products of commercial value in the calendar year 1895 were those of the *clay* industry, on which 105 concerns reported as follows: Common and pressed brick, \$205,139; fancy brick, \$3,202; vitrified paving brick, \$3,800; drain tile, \$1,800; other tile, \$600—total, \$214,541. There was a largely reduced output of limestone and a small one of coal in the southwestern part of the State.

Finances.—The last statement of the public debt, September, 1896, showed: Outstanding bonds, \$123,000; bonds in permanent school fund, \$326,267—total funded debt, \$449,267; resources, comprising cash on hand and delinquent accounts, \$593,190. The school fund held an aggregate in cash, warrants and bonds of \$3,589,133. Excepting for specific emergencies the State debt is limited to \$100,000. The assessed valuations in 1896 were \$167,078,270. The highest valuation was reached in 1893, \$194,733,124.

Banks.—On Oct. 31, 1897, there were 104 national banks in operation and 62 in liquidation, the active ones having a combined capital of \$10,775,000, and holding \$2,318,400 in United States bonds. These banks had outstanding on loans and discounts, \$22,926,784, represented by demand paper with individual or firm names, \$1,495,433; the same secured by stocks, bonds, and other personal securities, \$1,156,660; time paper with two or more individual or firm names, \$7,733,670; time paper with single individual or firm name, \$3,145,731; and the same secured by stocks, bonds, and other personal securities, \$9,393,290. The banks held an aggregate of \$2,864,333 in coin and coin certificates, of which \$1,562,400 was in gold coin. The circulation account was: Total issue, \$13,169,440; redeemed, \$10,820,781; outstanding, \$2,348,659. There were deposits, \$26,557,208; reserve required, \$5,471,488; reserve held, \$10,102,478; ratio of reserve, 3 banks in Lincoln, 31.04 per cent.; 8 in Omaha, 41.96; and 93 elsewhere in the State, 34.58. The State and private banks reported together Sept. 8, 1897, numbered 398, and had capital, \$7,863,779; deposits, \$13,622,388; resources, \$23,551,257; and surplus and profits, \$1,751,868. Combining all these institutions, the State had an aggregate banking capital of \$18,638,779. During the year ending Sept. 30, 1897, the exchanges at the United States clearing houses at Lincoln and Omaha amounted to \$235,885,580, a net increase of \$1,088,551 over the total of the previous corresponding period.

Building and Loan Associations.—The last general report on these associations (1893) showed a total of 70 such organizations, of which 66 were local, 4 national, 60 serial, 6 permanent, and 4 terminating. There were reported by 68 associations, shareholders, 9,060; by all, shares in force, 51,567; by 65, shares issued, 80,135; by all, shares free, 35,954, and shares borrowed on, 15,613. The total assets and liabilities were \$3,073,563; loans on real estate, \$2,560,031; and dues and profits, \$2,880,054. During the life of all associations 68 reported 130

mortgages foreclosed, involving \$112,933, on which there was a loss of \$8,497. Of all associations, 69 reported 2,676 homes and 293 other buildings acquired. A special report in 1897 showed number of associations, 81; shares outstanding, 70,615; installment dues paid in, paid up, and prepaid stock, and profits, \$3,624,-743; loans, \$3,085,930; and total assets, \$3,924,778.

Internal Revenue.—The collections and details of taxable manufactures in Nebraska, North Dakota, and South Dakota are officially reported together and credited to the former. During the fiscal year ending June 30, 1897, the collections aggregated \$1,313,881.81, from the following sources: Distilled spirits, \$1,076,330.68; tobacco, \$55,686.84; fermented liquors, \$178,737.96; oleomargarine, \$952.80; and penalties, \$2,097.81. During that year there were 331 single-account cigar factories, which used 344,372 lbs. of tobacco, and had an output of 17,744,960 cigars; and 57 other tobacco factories, which used 35,506 lbs. of materials, and had an output of 35,506 lbs. of smoking tobacco. There were one grain and two fruit distilleries in operation; 244,101.74 gals. of spirits rectified and 3,286,211 gals. gauged; and 173,498 bbls. of fermented liquors produced.

Railroads.—In 1894, 13 corporations operated 5,529.22 miles of railroad in the State. A detailed report at the end of 1894 showed: Capital stock, \$74,857,830; funded debt, \$145,174,147; total investment, \$229,952,966; cost of roads and equipments, \$203,703,792; gross earnings, \$19,267,577; net earnings, \$5,168,-656; and interest paid on bonds, \$6,288,403. In 1896 the total mileage was 5,565.67.

Commerce.—The State has two interior ports of entry, Lincoln and Omaha, and in the calendar year 1897, the value of foreign merchandise received there was \$283,979. There were no direct exports from either port.

Publications.—Reported March, 1898: Daily, 31; tri-weekly, 1; semi-weekly, 8; weekly, 522; bi-weekly, 2; semi-monthly, 7; and monthly, 28.

Post-offices.—Reported Jan. 1, 1897: First-class, 2; second-class, 9; third-class, 79 (presidential, 90); fourth-class, 977; money-order offices, 484; money-order stations, 2; limited money-order offices, 24.

Churches.—The Roman Catholic is the strongest denomination in the State, and is followed in their order by the Methodist Episcopal; Lutheran, Synod. Conference; Presbyterian, North; Regular Baptist, North; Congregational; Disciples of Christ; Lutheran, Gen. Council; and United Brethren. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Nebraska, 3,430 evangelical Sunday schools, 27,838 officers and teachers, and 183,944 scholars; total members, 211,782.

Schools.—At the end of the school year 1895-96 the number of children of school age in the State was estimated at 334,500, of whom 272,310 were enrolled in the public schools, and 174,837 were in average daily attendance. There were 10,968 teachers; public school property valued at \$8,779,760; and expenditures, excluding payments on debt, \$2,090,125. There were 10 universities and colleges of liberal arts, with a total of 358 professors and instructors; 3,488 students (2,146 males and 1,342 females); 11 scholarships; 63,460 bound volumes in the libraries; \$235,547 in total income; \$1,827,000 invested in grounds and buildings; \$1,271,184 in productive funds; and \$11,746 receipts from gifts. The public high schools numbered 197, and had 38,365 volumes in their libraries and \$2,537,262 invested in grounds, buildings, and apparatus. There were 14 endowed seminaries, academies, and other denominational secondary schools, with 66 instructors; 557 students; 13,995 volumes in

their libraries; and \$686,500 invested in grounds and buildings. Normal training was provided by 1 public and 4 private normal schools and by 4 colleges, and there were 8 commercial colleges. For the defective classes there were a State Institute for the Deaf and Dumb at Omaha; State School for the Blind at Nebraska City; State Institution for Feeble-minded Youth at Beatrice; and State Industrial Schools for Juvenile Delinquents at Kearney (boys) and Geneva (girls).

Libraries.—In 1896 there were reported 42 public libraries of 1,000 volumes each and upward, with a total of 226,743 bound volumes and 26,093 pamphlets.

Population.—In 1890, 1,058,910 of whom 572,824 were males; 486,086 females; 856,368 natives; 202,542 foreign-born; 1,046,888 whites; and 12,022 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 1,400,000.

NEBRASKA, UNIVERSITY OF, Lincoln, Neb., non-sectarian; co-educational; had at close of 1897, 104 professors and instructors; 1,653 students; 35,000 volumes in library; \$700,000 invested in grounds and buildings; \$1,000,000 in productive funds; \$150,000 in scientific apparatus and library; \$202,072 in income; president, George E. McLean, LL.D.

NEBRASKA WESLEYAN UNIVERSITY, University Place, Neb., Methodist Episcopal; co-educational; had at close of 1896, 27 professors and instructors; 475 students; 3,500 volumes in library; \$150,000 in grounds and buildings; \$30,000 in productive funds; \$6,000 in scientific apparatus; \$8,500 in income; acting chancellor, C. M. Ellinwood.

NETHERLANDS, a kingdom of Europe; area, 12,648 square miles; population (1895), 4,859,451; capital, The Hague; regent, the Queen-dowager Emma, during the minority of the queen, Wilhelmina Helena Pauline Maria, born Aug. 31, 1880, who becomes of age and queen-regnant in 1898. The first legislative election held under the new law of manhood suffrage took place June 15, 1897. Every male subject of the age of 25 years or over is entitled to vote on any one of these conditions: That he pay a minimum state tax (about 50 cents); that he pay a certain minimum house rent (or is a freeholder); or owns or leases a vessel; or has had steady employment for a year; or is a pensioner of government; or owns a government bond of 100 florins or has 50 florins in the state savings bank; or can give proof of ability to exercise a trade or profession or to fill an office under the government. A curious result of the enlargement of the electorate was that it caused the Catholics and the orthodox Protestants to coalesce on candidates in order to defeat the Liberals. The result of the election was that there were elected to the Chamber of Deputies a large Conservative majority of Catholic and orthodox Protestant candidates. The budget estimates for 1897 showed: Revenue, \$53,569,986; expenditure, \$54,909,176; total debt, \$443,846,537. The Netherlands is a free-trading country, and but few duties are levied. The estimated value of imports for home consumption during 1895 was \$577,600,000, and value of exports of home produce, \$471,200,000. In 1895 there were 1,674 miles of railroads, of which the state owned 886 miles; 3,500 miles of state telegraph lines, with 12,521 miles of wire, and 514 offices; 282 private savings banks; a state postal savings bank, with 500,000 depositors; and a peace army of 1,850 officers and 19,774 men.

NEVADA, one of the United States of North America; admitted to the Union Oct. 31, 1864; counties, 14; capital, Carson City.

State Officers, 1895-99.—Governor (elected for 4 years, salary \$4,000 per



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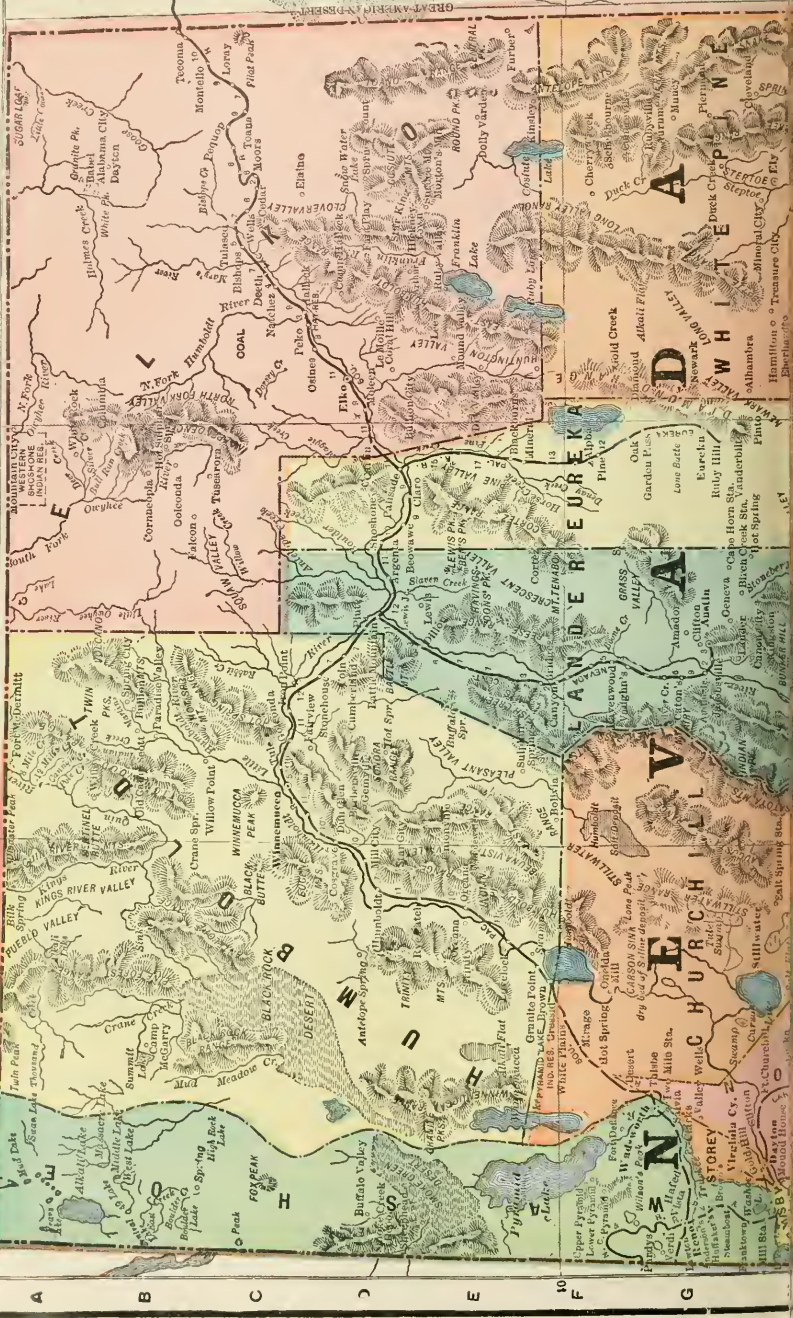
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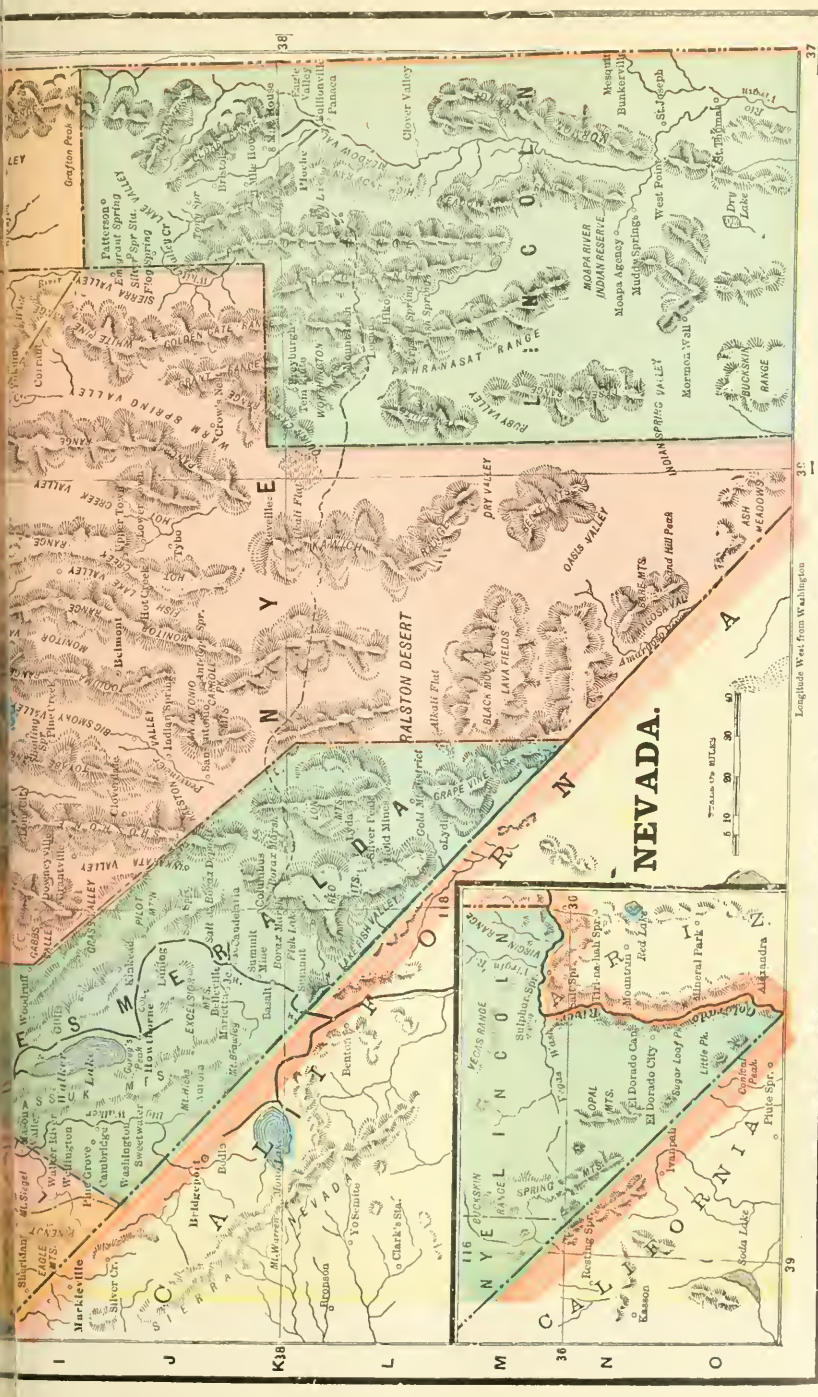
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GREAT AMERICA - N. PRESENT

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annum), Reinhold Sadler; lieutenant-governor, C. H. E. Hardin; secretary of state, Eugene Howell; treasurer, W. J. Westerfield; comptroller, C. A. La Grove; superintendent of public instruction, H. C. Cutting; attorney-general, James R. Judge; adjutant-general, C. H. Galusha; chief-justice of the supreme court, Charles H. Belknap; associate justices, M. S. Bloomfield and W. A. Massey; clerk, Eugene Howell—all Silver party except Galusha, Republican.

Legislature, 1897.—Silver party, senate 9, house 26, joint ballot 35; Republicans, senate 4, house 2, joint ballot 6; Democrats, senate 1, house 1, joint ballot 2; Independent, senate 1, house 1, joint ballot 2; Silver majority, senate 6, house 4, joint ballot 10.

Elections.—In the State elections 1894, there was a total of 10,473 votes cast for governor, of which the Silver candidate (Jones) received 5,523; the Republican candidate (Cleveland), 3,861; the Populist candidate (Peckham), 711; and the Democratic candidate (Winters), 678; Silver plurality, 1,362. Governor Jones died April 10, 1896, and was succeeded by Lieutenant-Governor Sallier. For representative in Congress, in 1896, there were 9,796 votes cast, of which the Silver-Democrat candidate (Newlands) received 6,529; the Republican candidate (Davis), 1,319; and the Populist candidate (Dougherty), 1,948. The State Democratic Convention, held June 10, 1896, instructed the delegates to the National Convention to use all honorable means to secure the adoption of a plank in the platform favoring the free and unlimited coinage of silver as money, and the nomination of candidates known to be friends of silver. In the presidential election, the Democratic candidate received 8,377 votes, and the Republican, 1,938.

Farm Products.—Reported Dec. 31, 1897: Wheat, 833,444 bush., from 34,298 acres, value \$750,097; potatoes, 182,115 bush., from 1,349 acres, value \$132,944; and hay, 361,302 tons, from 145,721 acres, value \$1,821,510—total value, \$2,704,551.

Farm Animals.—Reported Jan. 1, 1898: Horses 50,347, value, \$645,200; mules, 1,408, value \$30,843; cows, 18,105, value \$504,224; cattle, 241,201, value \$4,109,350; sheep, 549,518; value \$1,206,467; and swine, 11,349, value \$44,716—total value, \$6,540,800.

Mineral Products.—The chief mineral productions are silver and gold, and in 1895 the outputs were: Silver, 956,200 fine oz., value \$1,236,290; gold, 75,088 fine oz., value \$1,552,200—total value, \$2,788,490, an increase in the calendar year of \$317,094. Several products allied to the silver-mining industry showed largely reduced outputs in 1894, as lead, 2,254 short tons; salt, a large part of which was used by smelters, 3,670 bbls., value \$4,030, a decrease from 60,799 bbls. in 1891; and coal, just beginning to be developed in Esmeralda county, 150 short tons, sold for \$475. In 1894 the State for the first time was a producer of iron ore in a commercial quantity, and shipped the entire output to the Pacific coast. The coal is semi-bituminous, and some of it is pronounced good for coke. There was scarcely any demand for it owing to the restricted silver mining. There are about 2,000 acres of prime borax land in Washoe county, and 63 alkali, 13 mineral, 5 soda, 8 sulphur, 8 thermal, 22 warm, and numerous other springs distributed over the State.

Finances.—The treasury statement Jan. 1, 1895, showed: Balance at beginning of 1894, \$384,546.45; received during the year, \$453,461.23; disbursements, \$522,174.56; balance, \$315,846.62. The State, in 1897, had an irredeemable school bond debt of \$380,000, and other bonded debts amounting to \$227,000, and held cash assets of \$134,746, making the net actual public debt \$92,254. The assessed valuations in 1894 were: Real property, \$16,754,871; personal,

\$6,873,849—total, \$23,628,720; total in 1896, \$23,106,134, the lowest in over 25 years.

Banks.—On Oct. 31, 1897, there were 1 national bank in operation and 2 in liquidation, the active one having a capital of \$82,000; loans and discounts, \$212,165; deposits, \$251,037; reserve, \$59,653; and outstanding circulation, \$28,722. There were also 3 State banks, with capital \$323,200, deposits \$462,016, and resources \$907,061.

Internal Revenue.—The collections and details of taxable manufactures are included in the totals for California (*q. v.*)

Railroads.—For several years the mileage has been practically stationary at about 923. A report at the end of 1894 showed: Capital stock, \$12,120,000, funded debt, \$4,580,000, total investment, \$16,811,361; cost of roads and equipments, \$16,614,656; gross earnings, \$486,966; and net earnings, \$118,155.

Publications.—Reported March, 1898: Daily, 8; semi-weekly, 1; weekly, 17; and semi-monthly, 2.

Post-Offices.—Reported Jan. 1, 1897: Second-class, 1; third-class, 5 (presidential, 6); fourth-class, 168; money-order offices, 37; and limited money-order offices, 3.

Churches.—The Roman Catholic is the strongest denomination in the State, and is followed in their order by the Protestant Episcopal; Mormons; Methodist Episcopal; and Presbyterian. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Nevada, 59 evangelical Sunday schools, 868 officers and teachers, and 3,342 scholars—total members, 4,210.

Schools.—At the end of the school year 1895-96, the number of children of school age in the State was 9,080, of whom 7,267 were enrolled in the public schools, and 5,312 were in average daily attendance. There were 225 public school buildings; 290 teachers; public school property valued at \$298,414; and expenditures in the year, \$75,232. In November, 1895, the agricultural and mechanical department of the university was crippled by the burning of the mechanical building. The department had an experimental station staff of 5; faculty, 7; students, 33; volumes in the library, 4,013; and pamphlets, 2,399; land under cultivation, 30 acres; value of farm lands, \$13,000; value of special buildings and equipments prior to the fire, \$85,000.

Libraries.—In 1896 there were reported 6 public libraries of 1,000 volumes each and upward, with a total of 49,989 bound volumes and 2,240 pamphlets.

Population.—In 1890, 45,761, of whom 29,214 were males; 16,547 females; 31,955 natives; 14,706 foreign-born; 39,084 whites; and 6,677 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 45,000.

NEVADA, UNIVERSITY OF, Reno, Nev., non-sectarian; co-educational; had at close of 1896, 10 professors and instructors; 334 students; 4,892 volumes in library; 2 scholarships; \$120,000 in grounds and buildings; \$24,400 in scientific apparatus and library; \$105,000 in total income; president, Joseph E. Stubbs, D. D., LL. D.

NEWARK, city, capital of Essex county, N. J.; population (1890), 181,830; (1895, State census) 215,806. In 1896 the assessed valuations were: Real estate, \$108,872,790; personal property, 26,130,716—total, \$133,483,311; tax rate, \$19.60 per \$1,000. In 1897 the valuations aggregated \$137,042,491; tax rate, \$19.80 per \$1,000; water debt, \$7,757,000; other city debts, \$6,016,000—total debt, \$13,773,000; sinking funds, \$2,784,653; net debt, \$10,988,347. The gross

debt is far within the limit prescribed by law, and in the period Jan. 1, 1894, to Jan. 1, 1897, the net debt was reduced by \$878,903. There are 204 miles of streets, of which 65 are paved; 112 miles of sewers; and 203 miles of water mains. The annual cost of maintaining the city government is over \$1,250,000; cost of public education, over \$600,000; pupils in public schools, 55,941; in private schools, 8,387; children attending no school, 13,638; and value of public school property, over \$1,550,000. In 1898 plans and bonds were out for new high school and public library buildings; and an extensive group of public parks was being laid out in the city and suburbs, and plans were completed for the erection of a Roman Catholic cathedral to cost \$1,000,000. On Oct. 31, 1897, there were 9 national banks with combined capital, \$2,950,000; deposits, \$14,301,427; and resources, \$21,867,086; several life and fire insurance companies of wide reputation; 4 savings banks; and numerous building and loan associations with large assets. There are free public, county, law, board of trade, State Historical Society, and school libraries, and 3 daily, 11 weekly, 2 semi-monthly, and 2 monthly periodicals.

NEW BEDFORD, city, capital of Bristol county, Mass.; population (1890), 40,733; (1895, State census) 53,251. The assessed valuations (actual values) in 1896 were: Real estate, \$33,920,700; personal property, \$22,360,417—total, \$56,034,917; tax rate, \$15.40 per \$1,000. The total debt March 1, 1897, including a water debt of \$1,800,000 and a park debt of \$100,000 was \$3,520,000; sinking funds, \$463,175; net debt, \$3,056,825. There was no floating debt. In 1897 there were 5 national banks, with combined capital, \$3,850,000; deposits, \$2,938,183; and resources, \$9,874,302; and 2 savings banks, with deposits, \$18,146,583, and guaranty funds and surplus, \$1,156,078. The imports of merchandise, in the year ending June 30, 1897, aggregated in value \$500,136, and the exports, \$11,276. There are 3 daily, 4 weekly, and 2 monthly periodicals. The celebration of the semi-centennial of the city began on Oct. 10, 1897, with services in the churches and in a great tent on Union Street. On the following day the exercises were opened with a salute at sunrise fired by the United States monitor *Amphitrite*, lying in the harbor. Literary exercises were held in the large tent, and an industrial exposition, illustrative of the city's prominence in the manufacturing world, was opened by President McKinley by pressing a button in the White House which set the machinery in the exposition building in motion.

NEWCOMB, SIMON, astronomer, mathematician, and superintendent of *The Nautical Almanac*, was born in Wallace, Nova Scotia, March 12, 1835. In 1895 he was elected an associate of the French Academy of Sciences, and in 1897 an honorary member of the Russian Academy of Science. He was an associate editor of the revised edition of *Johnson's Universal Cyclopedia* (1892-95), and was placed on the retired list of the navy in 1897. His latest publication is *The Problem of Economic Education*.

NEWFOUNDLAND, island and British colony in North America; area, with Labrador, 162,200 square miles; population (1891), 197,934, with Labrador, 202,100; capital, Newfoundland, St. John's; Labrador, Hopedale. In 1895 the colony passed through a severe financial crisis, when the Commercial and Union banks were forced to suspend. Much distress followed, and when in August an attempt was made to induce the British House of Commons to appropriate money for relief, Colonial Secretary Chamberlain declared that the distress arose from bad government. The colony again refused to enter the Dominion of Canada, though the business people and property owners desired such a change, which

would take the colony out of the hands of the local politicians. The debts then aggregated \$10,500,000, and liabilities had been incurred for \$5,000,000. During the year a new tariff was adopted, and the long-agitated "French shore question" again assumed a critical phase. Sir Herbert H. Murray, the new governor, was sworn into office Nov. 29. In 1896 indictments were filed against the directors of the suspended banks. In opening the legislature, June 11, Governor Murray announced a surplus of \$200,000 on the fiscal operations of the previous year; but in August disclosures of irregular practices were made which would reduce the surplus to about \$50,000. Toward the close of the year the government announced that it had purchased all the rights of the Newfoundland Railway Company for about \$1,500,000, thus bringing all the railway systems of the colony under government management. In the general legislative elections, November, 1897, the opposition party, led by Sir James Winter, won a sweeping victory over the government candidates, securing 22 seats out of 35. The same month the long-deferred trial of the directors of the suspended banks was begun before Sir David P. Chalmers, the former chief justice of British Guiana, who was sent from England for the purpose, as all local judges were ineligible because more or less interested in the banks.

NEW GUINEA, the second largest island in the world, lying directly north of Australia; estimated gross area, 305,900 square miles; divided by treaty between Great Britain, Germany, and the Netherlands. BRITISH NEW GUINEA, in the southeastern part, has an area of 88,460 square miles, and an estimated population (1896) of 350,000. The cost of administration is defrayed by the colonies of Queensland, New South Wales, and Victoria, amounting to about \$75,000 per annum. The trade in 1895-96, wholly with Queensland and New South Wales, was, imports, \$167,772, and exports, \$94,288. The German possession is known officially as KAISER WILHELM'S LAND, is in the north section of the southeastern part of the island, and has an estimated area of 70,000 square miles and a population (1896) of about 110,000. The estimated revenue in 1896-97 was \$22,134; expenditure, \$64,974; and imports from European ports, over \$120,000. This possession is administered by the German New Guinea Company, which is giving the territory a rapid and thorough development. DUTCH NEW GUINEA is west of British New Guinea, has an area of 151,789 square miles, and an estimated population (1896) of 200,000, and politically belongs to the residency of Ternate, Molucca Islands. It is the least developed part of the island.

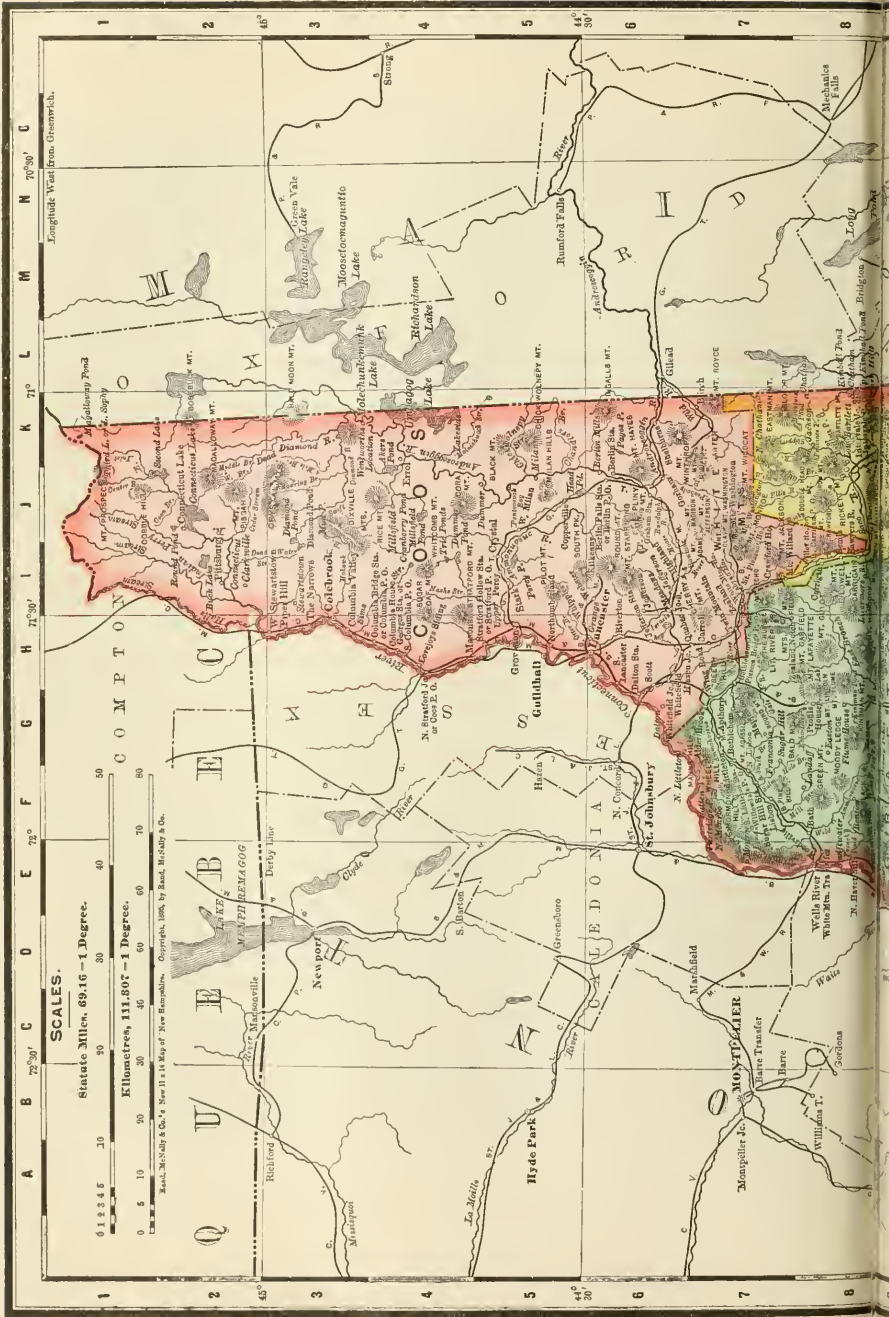
NEW HAMPSHIRE, one of the United States of North America; the ninth of the original 13 States to ratify the Federal constitution (June 21, 1788); counties, 10; capital, Concord.

State Officers, 1897-99.—Governor (elected for 2 years, salary \$2,000 per annum), George A. Ramsdell; secretary of state, Ezra S. Stearns; treasurer, Solon A. Carter; attorney-general, Edwin J. Eastman; adjutant-general, A. D. Ayling; superintendent of public instruction, Frederic Gowing; chief justice of the supreme court, Alonzo P. Carpenter; associate justices, William M. Chase, R. M. Wallace, Isaac N. Blodgett, Lewis W. Clark, Frank N. Parsons, and Robert G. Pike; clerk, A. J. Shurteff. State government, all Republican; judiciary, Republican excepting Judges Chase, Blodgett, and Clark, Democratic.

Legislature, 1897.—Republicans, senate 22, house 291, joint ballot 313; Democrats, senate 2, house 66, joint ballot 68; Republican majority, senate 20, house 225, joint ballot 245.

Elections.—In the State elections 1896 there were 78,710 votes cast for governor, of which the State Republican candidate (Ramsdell), received 48,387; the

New Hampshire.]

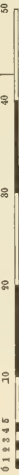


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Statute Miles, 69.16 = 1 Degree.



Kilometres, 111.807 = 1 Degree.



Scale, W. Nash & Co.'s, New H. 11 May of New Hampshire. Geography, 1868, by Rand, McNally & Co.

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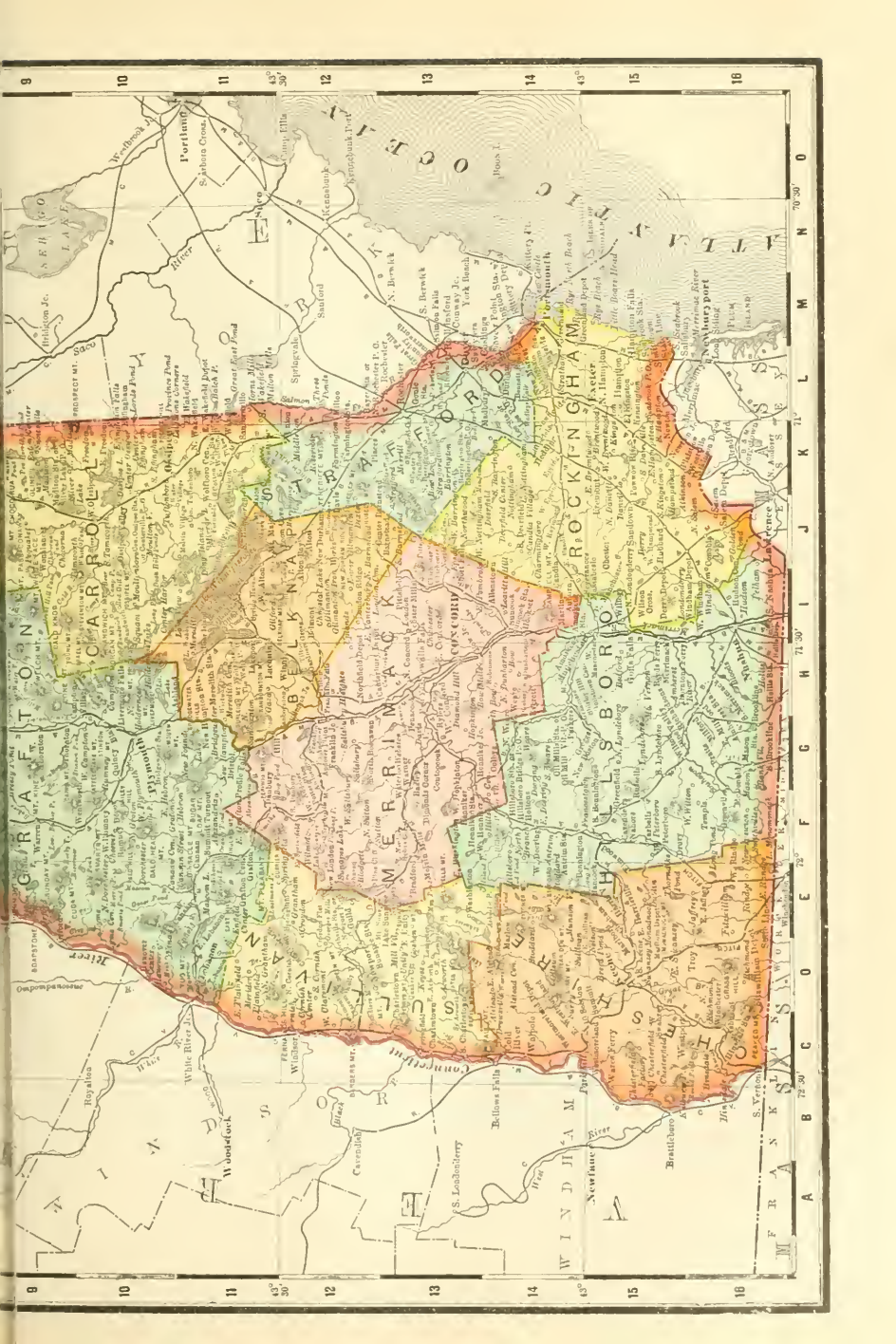
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Democratic (Kent), 28,333; the Prohibition (Berry), 1,052; the Social Labor (Acton), 483; the Populist (Greenleaf), 286; and the National Prohibition (Barnard), 229. The congressional elections resulted in the choice of the Republican candidate in each district. In the presidential election the Republican candidate received 57,444 votes; the Democratic, 21,650; the National Democratic, 3,520; the Prohibition, 779; and the Social Labor, 223.

Farm Products.—Reported Dec. 31, 1897: Corn, 818,176 bush., from 24,064 acres, value \$818,176; wheat, 8,176 bush., from 511 acres, value \$8,994; oats, 1,058,260 bush., from 30,236 acres, value \$102,139; rye, 17,694 bush., from 983 acres, value \$14,863; barley, 112,838 bush., from 5,015 acres, value \$67,703; buckwheat, 77,274 bush., from 2,862 acres, value \$42,501; potatoes, 881,994 bush., from 17,294 acres, value \$793,795; and hay, 692,689 tons, from 602,338 acres, value \$7,965,924—total value, \$10,114,695.

Farm Animals.—Reported Jan. 1, 1898: Horses, 54,483, value \$2,592,999; cows, 132,840, value \$3,938,706; cattle, 76,327, value \$1,876,685; sheep, 76,754, value \$227,959; and swine, 55,825, value \$454,972—total value, \$9,091,321.

Mineral Products.—The principal mineral product of commercial value is *granite*, which in the calendar year 1895 had an output valued at \$480,000, a decrease in a year of \$344,702. Many new firms engaged in quarrying in 1894 and 1895. The most productive counties were Carroll, Cheshire, Hillsboro, Merrimack, and Strafford; and after them, Grafton, Sullivan, and Rockingham. In the *clay* industry, 54 concerns reported on their outputs in 1895 as follows: Common and pressed brick, \$493,367; fancy brick, \$800; firebrick, \$12,400; tile, not drain, \$15,000—total, \$521,567.

Finances.—The treasury statement, June 1, 1896, showed: Cash on hand June 1, 1895, \$143,192.81; receipts during the year, \$1,528,863.36; expenditures, \$1,460,547.30; balance, \$211,508.87. The property valuations, as equalized for taxation purposes in the period 1895-1900, aggregate \$286,756,618, the highest amount ever fixed. The principal sources of increase were savings banks deposits, railroad property, and insurance capital. The net bonded debt, June 1, 1896, was \$1,827,741. Besides other payments on the bonded debt, the State, on Jan. 1, 1895, made the first of eleven annual payments of \$150,000 on the 1872 municipal war-loan bonds. In 1896 the State held \$653,818 in trust funds, paying interest on all excepting about \$1,700.

Banks.—On Oct. 31, 1897, there were 51 national banks in operation and 10 in liquidation, the active ones having a combined capital of \$5,805,000, and holding \$3,953,750 in United States bonds. These banks had outstanding on loans and discounts \$11,025,417, represented by demand paper with individual or firm names, \$2,002,120; the same secured by stocks, bonds, and other personal securities, 1,667,458; time paper with two or more individual or firm names, \$5,062,074; time paper with single individual or firm name, \$645,610; and the same secured by stocks, bonds, and other personal securities, \$1,648,154. The banks had in coin and coin certificates \$634,914, of which \$438,228 was in gold coin. The circulation account was: Total issue, \$32,347,115; redeemed, \$28,581,573; outstanding, \$3,765,572. There were deposits, \$11,140,860; reserve required, \$1,671,129; reserve held, \$3,520,814; ratio of reserve, 31.60 per cent. The mutual savings banks, June 29, 1897, numbered 52, and had combined depositors, 126,563; deposits, \$49,493,056; resources, \$55,458,146; and surplus and profits, \$3,912,943. The act to regulate the investments of savings banks was remodeled by the legislature, and in its new form went into effect July 1, 1895.

Building and Loan Associations.—The last general report on these associations

(1893) showed a total of 17 organizations, of which 16 were local, 1 national, 15 serial, and 2 permanent. All associations reported, shareholders, 8,193; shares issued, 99,507; shares in force, 55,406; shares free, 48,813; and shares borrowed on, 6,593. The total assets and liabilities were \$1,447,489; loans on real estate, \$1,299,021; and dues and profits, \$865,031. During the life of all associations, 2 mortgages were foreclosed, involving \$1,000. Of all associations, 15 reported 350 homes and 2 other buildings acquired. A special report in 1897 showed, number of associations, 33; shares outstanding, 42,817; installment dues paid in, paid-up and prepaid stock, and profits, \$2,356,549; loans, \$2,304,802; and total assets, \$2,469,884.

Internal Revenue.—The collections and details of taxable manufactures in New Hampshire, Maine, and Vermont are officially reported together and credited to the former. During the fiscal year ending June 30, 1897, the collections aggregated \$403,719.62, from the following sources: Distilled spirits, \$78,300.07; tobacco, \$45,275.71; fermented liquors, \$277,652.97; oleomargarine, \$284; and penalties, \$2,190.03. During that year there were 180 single-account cigar factories, which used 359,325 lbs. of tobacco, and had an output of 15,281,827 cigars, and 86,315 cigarettes; and 11 other tobacco factories, which used 3,014 lbs. of materials, and had an output of 3,014 lbs. of smoking tobacco. There were 11,580 gals. of distilled spirits gauged, and 285,554 hbls. of fermented liquors produced.

Railroads.—By the lease of the Concord and Montreal railroad to the Boston and Maine in 1895, the control of all the railroads passed to parties outside the State. On Jan. 1, 1894, the total railroad mileage was 1,155.88. During that year one company constructed 7.60 miles of new road, making, Jan. 1, 1895, a total mileage of 1,163.48. A report at the end of 1894 showed: Capital stock, \$15,733,150; funded debt, \$8,339,900; total investment, \$25,191,853; cost of roads and equipments, \$21,695,743; gross earnings, \$2,623,959; net earnings, \$744,476; interest paid on bonds, \$366,915; and dividends paid, \$1,002,050.

Publications.—Reported March, 1898: Daily, 14; tri-weekly, 1; weekly, 73; semi-monthly, 2; monthly, 12; and quarterly, 1.

Post-Offices.—Reported Jan. 1, 1897: First-class, 2; second-class, 8; third-class, 36 (presidential, 46); fourth-class, 514; money-order offices, 237; limited money-order offices, 2.

Churches.—The Roman Catholic is the strongest denomination in the State, and is followed in their order by the Congregational; Methodist; Regular Baptist; Freewill Baptist; Unitarian; Episcopal; and Universalist. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for New Hampshire 563 evangelical Sunday schools, 6,550 officers and teachers, and 54,171 scholars—total members, 60,721, a gain of 4,746 in 3 years.

Schools.—At the end of the school year 1893-94, the number of children of school age in the State was estimated at 86,700, of whom 62,437 were enrolled in the public schools, and 42,030 were in average daily attendance. There were 2,222 public schools, 3,187 teachers, and expenditures \$920,803. The private schools had an attendance of 7,425. Public school property was valued at over \$3,075,000. There was 1 college of liberal arts, Dartmouth, at Hanover. The State College of Agriculture and Mechanic Arts, at Durham, had experimental staff, 8; faculty, 17; students, 97; farm lands valued at \$18,000; and buildings and equipments valued at \$79,500. Other institutions were 52 public high schools; public normal schools at Manchester and Plymouth; a college for women

only at Tilton; 22 endowed and private secondary schools, with about 35,000 volumes in the libraries, and grounds and buildings valued at over \$780,000; commercial colleges at New Hampton and Portsmouth; and a State industrial school at Manchester.

Librarians.—In 1896 there were reported 122 public libraries of 1,000 volumes each and upward, with a total of 595,800 bound volumes and 108,887 pamphlets.

Population.—In 1890, 376,530, of whom 186,566 were males; 189,964 females; 304,190 natives; 72,340 foreign-born; 375,840 whites; and 690 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 389,000.

NEW HAVEN, city, capital of New Haven county, Conn.; population (1890), 81,298; (1897, city census), 117,000. In 1896 the assessed valuations aggregated \$56,000,000; tax rate, \$13.50 per \$1,000; bonded debt, \$1,295,000; sinking funds, \$354,837; net debt, \$940,163. The various properties of and in the city that are exempted from taxation have an estimated valuation of \$13,000,000. The net debt of the town was \$1,173,229, and of the school district, \$706,675. The town and school district are co-extensive; the city is within the town; and all 3 have separate debts and assets. In 1896 there were 7 national banks with combined capital, \$3,114,800; deposits, \$5,341,129; and resources, \$11,969,071; 2 State banks, with capital, \$800,000, and surplus, \$95,000; 3 saving banks, with deposits, \$15,906,115; and a co-operative savings fund and loan association, with deposits, \$46,182. There are 145 miles of streets, of which 40 miles are paved; 82 miles of sewers; and 140 miles of water mains. The annual cost of maintaining the city government is about \$790,000; cost of public education, \$313,000; pupils in public schools, 16,000; and value of public school property, about \$1,200,000. In 1897 there were reported 8 daily, 13 weekly, 2 bi-weekly, 11 monthly, and 3 quarterly periodicals.

The scheme of the Federal government for strengthening the defenses of the most important coast ports includes the construction of a double fortification with heavy guns and modern defense machinery at this city. One part of the work, at the eastern entrance to the harbor, is designed to guard it from possible invasion at that point, and the other, at or near Savin Rock, will be mounted so as to defend the west shore and entrance. The eastern work will be near the site of old Fort Hale, of brilliant 1812 memory. The plan is to build fortified wells of steel or otherwise protected armor, and supply them with the new 12-inch or 14-inch disappearing guns. It is believed that between the two fortifications the new west breakwater would force any hostile vessel from making an entrance at any other spot than directly in range of these monster guns. The first appropriation for the work was over \$600,000.

NEW JERSEY, one of the United States of North America; the third of the original thirteen States to ratify the Federal constitution (Dec. 18, 1787); counties, 21; capital, Trenton.

State Officers, 1896-99.—Governor (elected for 3 years, salary \$10,000 per annum), John W. Griggs (resigned in 1898 on being appointed attorney-general of the United States, and succeeded by Foster M. Voorhees, president of the Senate); secretary of state, George Wurtz; treasurer, George B. Swain; comptroller, William S. Hancock; attorney-general, Samuel H. Grey; adjutant-general, William S. Stryker; superintendent of public education, C. J. Baxter; chief-justice of the supreme court, William J. Magie; associate justices, David A. Depue, Jonathan Dixon, Bennet Van Syckel, Charles G. Garrison, Job H. Lippincott, W. G. Gummere, and George G. Ludlow; clerk, Benjamin F. Lee; chan-

cellor, Alexander T. McGill; court of errors and appeals, Judges J. W. Bogert, Godfrey Krueger, John S. Barkalow, Charles E. Hendrickson, James H. Nixon; the chancellor, and the supreme court judges—State government, all Republican; supreme court, half Republican and half Democratic.

Legislature, 1897.—Republicans, senate 14, house 37, joint ballot 51; Democrats, senate 7, house 23, joint ballot 30; Republican majority, senate 7, house 23, joint ballot 21.

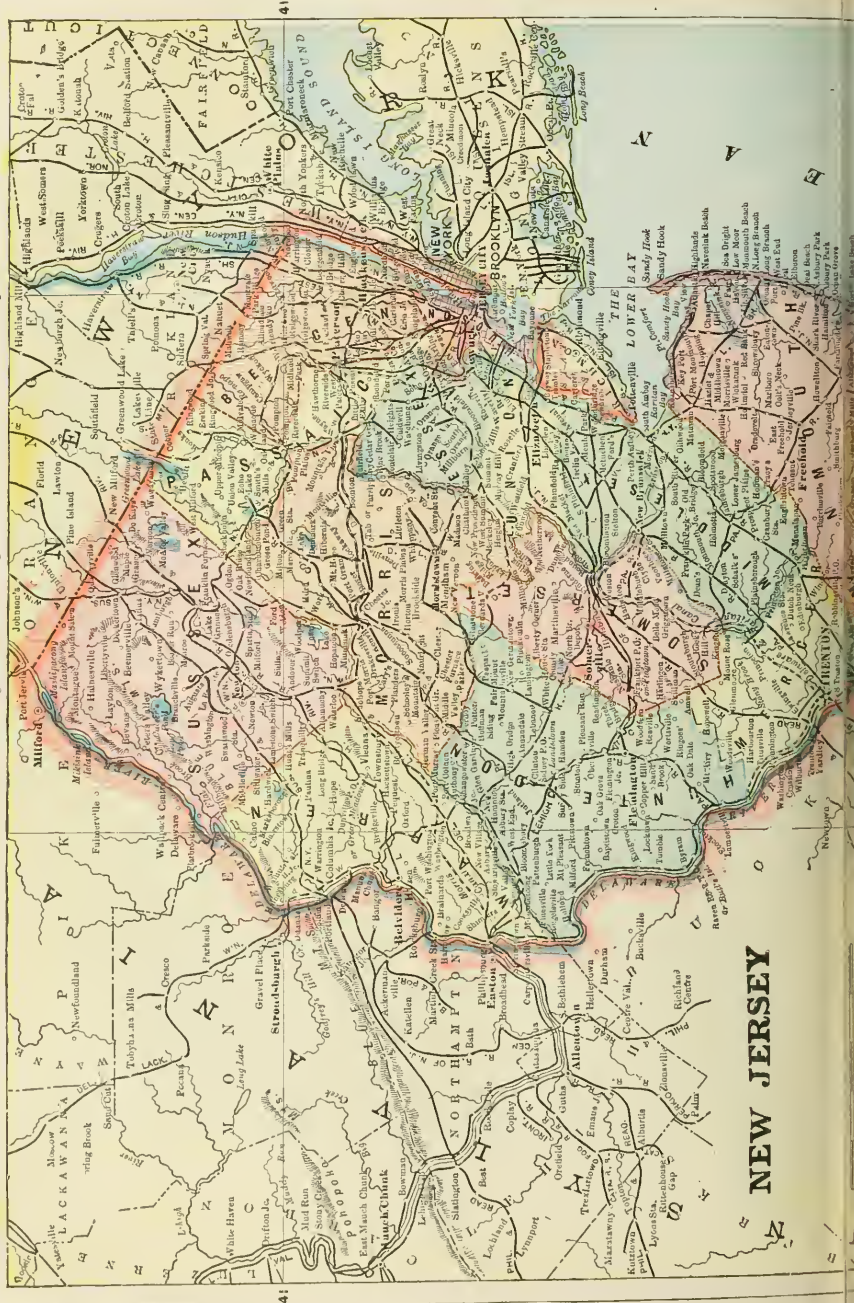
Elections.—In the State elections 1895, there were 311,618 votes cast for governor, of which the Republican candidate (Griggs) received 162,900; the Democratic candidate (McGill), 136,000; the Prohibition candidate (Wilbur), 6,661; the Social Labor candidate (Klein), 4,147; and the Populist candidate (Ellis), 1,901; Republican plurality, 26,900. The congressional elections 1896 resulted in the choice of the Republican candidate in each district. The State Democratic Convention, held May 7, 1896, pronounced in favor of a firm, unvarying maintenance of the present gold standard, and in opposition to the free coinage of silver at any ratio and to the compulsory purchase of silver bullion by the government. The platform also declared the belief that the interests of the people demanded that the earnings of trade, agriculture, manufacture, and commerce, and especially the wages of labor, should be paid in money of the greatest intrinsic value and of the highest standard adopted by the civilized nations of the world. On Sept. 9 the same organization indorsed the Chicago platform, and nominated a Bryan-Sewall and Bryan-Watson fusion electoral ticket. In the presidential election, the Republican candidate received 221,367 votes; the Democratic, 133,675; the National Democratic, 6,373; the Prohibition, 5,614; and the Social Labor, 3,985.

Farm Products.—Reported Dec. 31, 1897: Corn, 8,545,414 bush., from 271,283 acres, value \$3,247,257; wheat, 2,154,584 bush., from 116,464 acres, value \$2,003,763; oats, 2,555,650 bush., from 102,226 acres, value \$766,695; rye, 1,218,016 bush., from 71,648 acres, value \$609,008; buckwheat, 182,976 bush., from 11,436 acres, value \$89,658; potatoes, 2,878,100 bush., from 42,325 acres, value \$2,244,918; and hay, 700,556 tons, from 400,318 acres, value \$7,550,977—total value, \$16,512,276.

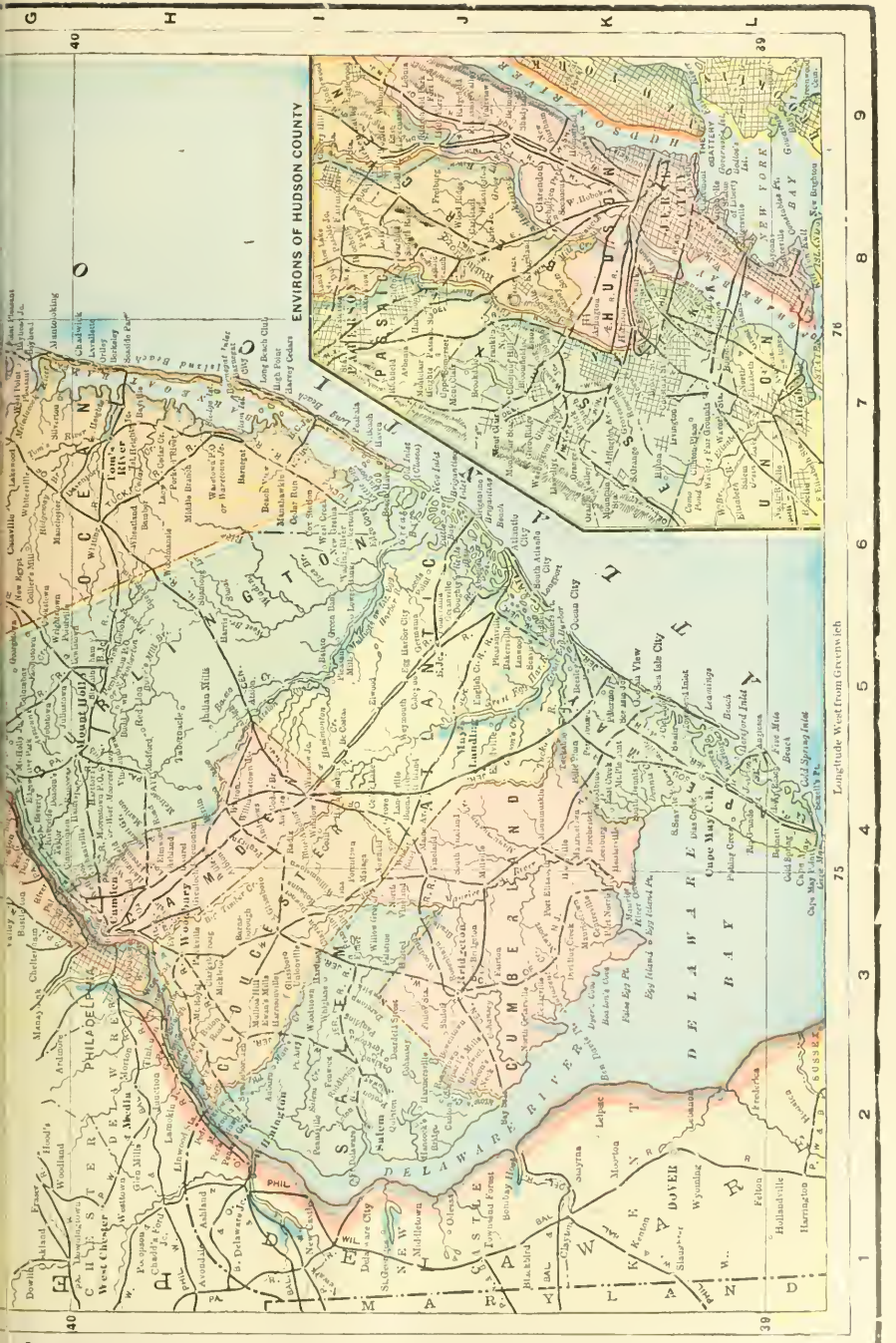
Farm Animals.—Reported Jan. 1, 1897: Horses, 79,980, value \$5,137,961; mules, 7,342, value \$592,786; cows, 208,421, value \$7,523,998; cattle, 42,406; value \$1,066,254; sheep, 41,067, value \$155,193; and swine, 150,368, value \$1,090,545—total value, \$15,566,737.

Mineral Products.—The principal mineral productions of commercial value are those connected with the *clay* industry. For the calendar year 1895 reports from 130 concerns showed the following values of output: Common and pressed brick, \$1,484,800; fancy brick, \$179,828; firebrick, \$456,825; vitrified paving brick, \$30,000; drain tile, \$14,024; other tile, \$850,014; sewer pipe, \$101,316; terra cotta work, \$763,420; terra cotta lumber, \$285,165; and miscellaneous, \$733,728—total, \$4,899,120, giving the State fifth rank. Trenton is one of the two great pottery centers of the country, and has an annual output of porcelain and china wares valued at about \$4,000,000. A large decline in *quarry* products was reported, the outputs being granite, including trap rock, \$151,343; sandstone, \$111,823; slate, \$700; and limestone, used mostly for lime, \$150,000—in all, \$413,866. Sussex county is the only place in the country producing manganese zinc ore, of which there was an output of 26,981 tons, value \$20,464. In magnetite iron ore the State held a second rank, with a yield of 282,433 long tons, valued at \$612,671. This was the only ore produced. The output of pig iron was 55,502 long tons, showing a

Longitude East from Washington



NEW JERSEY



ENVIRONS OF HUDSON COUNTY

Longitude West from Greenwich

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Map labels including: Philadelphia, Camden, Trenton, Newark, Jersey City, New York City, Delaware River, Schuylkill River, Hudson River, Pennsylvania, New Jersey, Delaware, and various smaller towns and landmarks.

steady decline, and two concerns manufactured 155,000 bbls. of Portland cement, value \$232,500.

Finances.—The treasury statement for the year ending Oct. 31, 1896, showed: Balance from 1895, \$893,747.88; receipts, \$2,138,532.88; disbursements, \$2,072,651.78; balance, \$959,628.08. The largest items of receipts were, State tax on railroad corporations, \$1,079,687.84, and tax on miscellaneous corporations, \$707,951.45. The State was practically out of debt, holding more than \$959,629 in excess of all liabilities, confined to \$593,400 of outstanding war loan. There is no floating debt, and no State tax has been levied for several years. The valuations as assessed in 1896 for taxation in 1897 were: Real and personal property, \$794,428,048; railroad and canal property, \$220,337,807—total, \$1,014,765,856. In 1896 the counties of the State had a total debt of \$6,403,429; cities, \$42,877,595; towns, \$2,273,092; townships, \$2,706,572; boroughs, \$962,135; and villages, \$129,436—total, \$65,811,146; sinking funds, \$7,905,023; net debt of all local governments, \$57,906,123.

Banks.—On Oct. 31, 1897, there were 103 national banks in operation and 14 in liquidation, the active ones having a combined capital of \$14,445,000 and holding \$5,677,250 in United States bonds. These banks had outstanding on loans and discounts \$52,105,939, represented by demand paper with individual or firm names, \$2,388,148; the same secured by stock, bonds, and other personal securities, \$8,378,474; time paper with two or more individual or firm names, \$30,734,807; time paper with single individual or firm name, \$4,967,199; and the same secured by stocks, bonds, and other personal securities, \$5,637,312. The banks had in coin and coin certificates \$3,371,814, of which \$1,777,883 was in gold coin. The circulation account was: Total issue, \$64,456,590; redeemed, \$58,962,747; outstanding, \$5,493,843. There were deposits, \$58,218,430; reserve required, \$8,732,764; reserve held, \$17,287,157; ratio of reserve, 29.69 per cent. The State banks, July 23, 1897, numbered 21, and had capital, \$1,735,460; deposits, \$6,867,399; resources, \$10,374,297; and surplus and profits, \$1,278,269. There were 22 loan and trust companies, with capital, \$2,327,250; deposits, \$18,584,768; resources, \$23,787,082; and surplus and profits, \$1,396,563. Mutual savings banks numbered 25, and had depositors, 161,710; deposits, \$43,271,047; resources, \$47,874,873; and surplus, \$4,513,114. Combining all these institutions, the State had a total banking capital of \$18,537,710.

Building and Loan Associations.—The last general report on these associations (1893) showed a total of 288 organizations, of which 286 were local, 2 national, 252 serial, 12 permanent, and 24 terminating. Of all associations, 287 reported shareholders, 87,041; 217, shares issued, 745,319; 284, shares in force, 577,163, and shares free, 408,525; and all, shares borrowed on, 157,806. The total assets and liabilities were \$31,714,681; loans on real estate, \$28,774,645; and dues and profits, \$29,691,643. During the life of all associations, 263 reported 298 mortgages foreclosed, involving \$495,942, on which there was a loss of \$44,962. Of all associations, 189 reported 8,930 homes and 198 reported 578 other buildings acquired. A State report covering 1895 showed: Number of associations 317; shareholders, 101,619; shares in force, 693,810; shares pledged, 202,639; borrowers, 25,598; and net assets, \$38,882,110. Of the total number, one, belonging to New Hampshire, was authorized to operate in the State; of 316, 7 were national, 10 State, 299 local, 282 serial, 20 permanent, and 14 terminating; and of all, 301 reported fully the items in the foregoing summary of operations. During the year 63 series were matured; 177 mortgages were foreclosed, involv-

ing \$344,849, on which there was a loss of \$5,951. A special report in 1897 showed, number of associations, 316; shares outstanding, 693,810; installment dues paid in, paid up, and prepaid stock and profits, \$37,913,775; and total assets, \$38,882,110.

Internal Revenue.—During the fiscal year ending June 30, 1897, the collections of internal revenue aggregated \$4,111,098.27, from the following sources: Distilled spirits, \$798,173.80; tobacco, \$1,422,827.56; fermented liquors, \$1,872,866.86; oleomargarine, \$14,798.20; and penalties, \$2,415.99. During that year there were 1,068 single-account cigar factories, which used 1,434,311 lbs. of tobacco, and had an output of 70,473,042 cigars and 293,300 cigarettes; and 71 other tobacco factories, which used 27,743,313 lbs. of materials, and had an output of 7,142,797 lbs. of plug tobacco, 2,394,888 lbs. of fine cut, 5,512,309 lbs. of smoking, and 4,591,366 lbs. of snuff. There were 61 distilleries in operation; 241,618.13 gals. of spirits rectified and 1,485,896 gals. gauged; and 2,001,029 bbls. of fermented liquors produced.

Railroads.—On Jan. 1, 1894, the total main track mileage was 2,176.10. During that year 3 companies constructed 33.13 miles of new road, making, Jan. 1, 1895, a total mileage of 2,209.23, or with second, third, and fourth tracks, and sidings, about 4,300. A detailed report at the end of 1894 showed: Capital stock, \$139,190,928; funded debt, \$168,249,864; total investment, \$321,408,176; cost of roads and equipments, \$281,236,781; gross earnings, \$36,523,792; net earnings, \$11,745,538; interest paid on bonds, \$8,492,337; and dividends paid on stocks, \$5,712,971.

Commerce.—During the calendar year 1897, the imports of merchandise at the ports of Bridgeton, Newark, and Perth Amboy were valued at \$625,605; and the value of exports aggregated \$1,765,982. The large trade of Jersey City is credited to the customs district of New York.

Publications.—Reported March, 1898: Daily, 50; semi-weekly, 1; weekly, 285; bi-weekly, 2; semi-monthly, 7; monthly, 45; and quarterly, 1.

Post-Offices.—Reported Jan. 1, 1897: First-class, 8; second-class, 39; third-class, 49 (presidential, 96); fourth-class, 807; money-order offices, 419; money-order stations, 30; and limited money-order office, 1.

Churches.—The Roman Catholic is the strongest denomination in the State, and is followed in their order by the Methodist Episcopal; Presbyterian, North; Regular Baptist; Protestant Episcopal; Reformed; African Methodist; Lutheran, General Council; and Congregational. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for New Jersey 2,252 evangelical Sunday schools, 38,939 officers and teachers, and 301,417 scholars—total members, 340,356.

Schools.—At the end of the school year 1895-96, the number of children of school age in the State was estimated at 438,969, of whom 280,330 were enrolled in the public schools, and 175,895 were in average daily attendance. There were 5,620 public school teachers; 1,763 schoolhouses; public school property valued at \$11,928,227; and expenditures \$4,971,444. The private school enrollment was 45,021. Public high schools numbered 73, with 337 teachers and 7,801 pupils, and private secondary schools, 70, with 407 teachers, 3,957 pupils, and grounds and buildings valued at over \$3,500,000. There were 4 public normal schools, and 4 colleges of liberal arts, with a total of 134 professors and instructors; 1,614 students in all departments (1,584 males and 30 females); 7 fellowships; 98 scholarships; 221,159 bound volumes in the libraries; \$313,500 in total income; \$2,530,000 invested in grounds and buildings; \$3,750,000 in pro-

ductive funds; \$720,400 in scientific apparatus; and \$1,353,000 in gifts. In May, 1896, the name of the College of New Jersey was changed to Princeton University, and in honor of the sesquicentennial of the institution in October following, its friends made it gifts of buildings and contributions to the general fund aggregating over \$2,000,000. The State Agricultural and Mechanical College is connected with Rutgers College, New Brunswick. Other educational institutions include colleges for women only at Bordentown and Princeton; schools of science at Newark, New Brunswick, Hoboken, and Princeton; schools of theology at Bloomfield, Madison, New Brunswick, Princeton, and South Orange; training schools for nurses at Camden, Orange and Paterson; and 7 commercial colleges. For the defective classes there are a State School for Deaf Mutes at Trenton; State Institution for Feeble-minded Women, and State Home for the Education of Feeble-minded Youth, both at Vineland; State Custodial Asylum for Feeble-minded Women at Newark; private schools for the feeble-minded at Cranbury and Haddonfield; and reform schools at Jamesburg (boys), Trenton (girls), and Verona (both sexes).

Libraries.—In 1896 there were reported 94 public libraries of 1,000 volumes each and upward, with a total of 801,152 bound volumes and 116,327 pamphlets.

Population.—In 1890, 1,444,933, of whom 720,819 were males; 724,114 females; 1,115,958 natives; 328,975 foreign-born; 1,396,581 whites; and 48,352 colored of all races. The State census of 1895 gave a total of 1,673,106, of whom 835,115 were males; 837,991 females; 1,315,913 natives; 357,193 foreign-born; 1,256,903 native whites; and 59,010 native colored. There were 357,108 families and 279,792 dwelling houses. The most populous counties were: Hudson, 328,080; Essex, 312,000; Passaic, 133,227; Camden, 100,104; Mercer, 85,838; Union, 85,404; Monmouth, 75,543; Middlesex, 70,058; Bergen, 65,415; Morris, 59,536; and Burlington, 59,117. The principal cities and towns were: Newark, 215,806; Jersey City, 182,713; Paterson, 97,344; Camden, 63,467; Trenton, 62,518; Hoboken, 54,083; Elizabeth, 43,834; and Orange, 22,792. On June 1, 1897, the United States government actuary estimated the population at 1,780,000.

NEW MEXICO, one of the Territories of the United States of North America; organized Sept. 9, 1850; counties, 18; capital, Santa Fé.

Territorial Officers, 1897.—Governor (appointed for 4 years, salary \$2,600 per annum), Miguel A. Otero; secretary, George H. Wallace; treasurer, Samuel Eldodt; auditor, Marcellus Gareia; solicitor-general, A. B. Fall; adjutant-general, H. B. Hersey; superintendent of public instruction, Amado Chavez; chief justice of the supreme court, Thomas Smith; associate justices, N. C. Collier, N. B. Laughlin, G. D. Bantz, and H. B. Hamilton; clerk, George D. Wyllys. Territorial government (subject to changes), Otero, Wallace, and Hersey, Republicans, the others, Democrats; judiciary, all Democrats.

Legislature, 1898.—Tied in each house between the Republicans and Democrats.

Elections.—In the election for a delegate in Congress, 1896, there were 36,030 votes east, of which the Democratic-Populist candidate (Fergusson) received 18,947; the Republican, renominated (Catron) 17,017; and the Gold Democratic (Dane) 66.

Farm Products.—Reported Dec. 31, 1897: Corn, 661,581 bush., from 24,503 acres, value \$383,717; wheat, 4,282,848 bush., from 178,452 acres, value \$3,212,136; oats, 258,795 bush., from 7,290 acres, value \$106,106; barley, 38,318 bush., from 1,179 acres, value \$21,075; potatoes, 65,430 bush., from 727 acres, value

\$51,035; and hay, 132,916 tons, from 37,976 acres, value \$930,412—total value, \$4,704,481. Irrigation in the Bluewater valley was prosecuted with much vigor in 1894-95, and by Aug. 16, in the last year, a dam, with 150 ft. base, 260 ft. length and 42 ft. depth, providing a storage capacity of 6,000 acre-feet of water, had been constructed, and also 31 miles of canals and laterals. Over 2,500 acres of sage-brush land had been cleared and plowed, and nearly all put under crop.

Farm Animals.—Reported Jan. 1, 1898: Horses, 83,854, value \$1,524,176; mules, 3,507, value \$113,978; cows, 19,126, value \$507,795; cattle, 731,216, value \$12,329,397; sheep, 2,844,265, value \$5,364,284; and swine, 29,905, value \$181,524—total value, \$20,021,154. The legislature in 1895 passed laws regulating cattle brands, providing for the appointment of sheep inspectors, and vesting the Cattle Board with jurisdiction over diseased cattle.

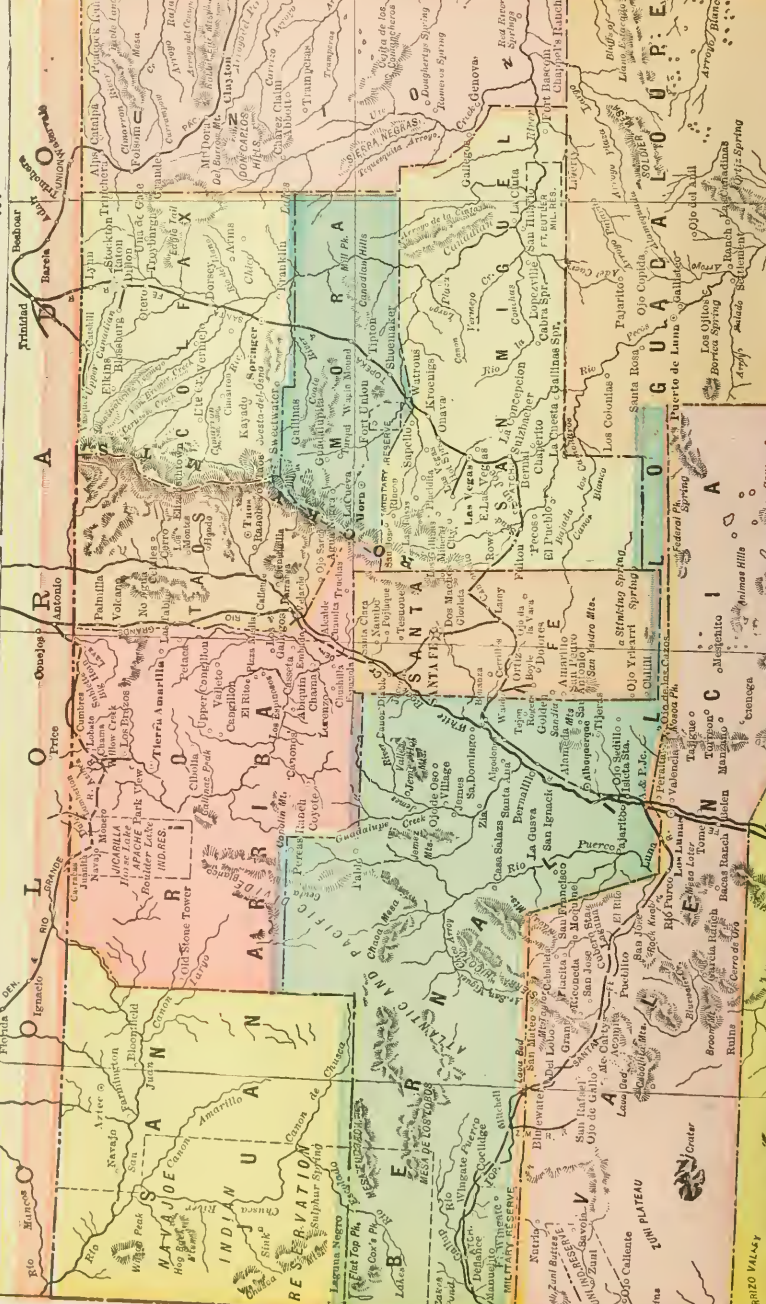
Mineral Products.—In New Mexico, as in Colorado, there has been a large decrease in the output of the silver mines and a correspondingly large increase in that of gold, since the repeal of the silver-purchase clause of the Sherman act. The production of the two metals in the calendar year 1894 was reported as follows: Gold, 27,465 fine oz., value \$567,751; silver, 632,183 fine oz., value \$817,368—total value, \$1,365,110. For 1895 the silver output was estimated at 694,800 fine oz., and the gold, 23,810 fine oz.; total value, \$1,390,520. The following is a summary of other mineral products for the calendar year 1895: In *coal*, there was an output of 720,654 short tons, valued at the mines at \$1,072,520, of which 695,634 tons were loaded for direct shipment. The coal fields are of large extent, contain the brown, anthracite, and bituminous varieties, and the most productive were in Bernalillo, Colfax, Grant, Lincoln, Rio Arriba, San Juan, Santa Fé, and Socorro counties. There were 22 mines in operation, which employed an average of 1,383 persons for an average of 190 days. A coking plant with 50 ovens used 22,385 short tons of coal, and produced 14,663 short tons of *coke*, valued at \$29,491. The Territory ranked 15th as a producer of *iron ore*, with a small but increased output, which was used chiefly for fluxing.

Finances.—During the year ending Aug. 29, 1896, the territorial receipts from all sources with balance aggregated \$334,017.97, and the expenditures, \$265,195.15; balance, \$68,822.82. The recognized indebtedness, June 30, 1896, was \$909,500, and the debt not recognized by the legislature comprised old militia warrants, which in 1894 amounted to \$650,000. The largest item of debt was the capitol building and the capitol contingent-fund bonds, \$250,000, due in 1902, 1904, and 1905. The assessed valuations on all kinds of taxable property in 1895, less exemptions, amounted to \$40,518,037; and the collections were, for territorial purposes, \$247,072; territorial institutions, \$72,059; and cattle indemnity, \$2,305—total, \$321,437.

Banks.—On Oct. 31, 1897, there were 6 national banks in operation and 9 in liquidation, the active ones having a combined capital of \$600,000, and holding \$340,000 in United States bonds. These banks had outstanding on loans and discounts \$1,551,071; held in coin and coin certificates, \$142,455; had issued for circulation \$2,291,980, redeemed \$1,948,976, and had outstanding \$343,004; held deposits, \$2,900,129, and reserve, \$973,604; and had ratio of reserve, 33.57 per cent. The territorial banks, June 30, 1897, numbered 6, and had capital, \$241,700; deposits, \$798,276; resources, \$1,076,399; and surplus and profits, \$36,423. There was one private bank which had capital, \$20,000; deposits, \$21,708, resources, \$61,708, and surplus, \$20,000.

Internal Revenue.—The details of collections and taxable manufactures, credited to New Mexico, also cover Arizona. During the year ending June 30,

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A B C D E F G

80°

36°

80°

36°

Fort Sumner
Military Reserve

San Juan

Los Alamos

Albuquerque

Santa Fe

Las Alamos

Los Alamos

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1897, the collections aggregated \$38,019.20, principally from distilled spirits, \$28,809.47, and fermented liquors, \$6,211.40. In that year there were 391,900 cigars and 319,000 cigarettes manufactured; 7,419.50 gals. of spirits rectified and 13,988 gals. gauged; and 3,891 bbls. of fermented liquors produced.

Railroads.—On Jan. 1, 1894, the total mileage was 1,433.50. During that year one company constructed 75.20 miles of new road, making a total, Jan. 1, 1895, of 1,511.70 miles. There was no new construction in 1895, but several new roads and branches were projected. A report at the end of 1894, covering the roads operating in the territory, showed: Capital stock, \$88,244,100; funded debt, \$45,070,629; total investment, \$173,498,254; cost of roads and equipments, \$136,543,679; gross earnings, \$90,611; net earnings, \$30,276; and interest paid on bonds, \$56,062.

Statehood.—The long effort to secure the admission of the Territory into the Union as a State came nearest to success in 1896, when (April 9) the Committee on Territories decided by a vote of 7 to 3 to report favorably a bill for admission, substantially the same on which Utah was admitted; but Congress adjourned before taking final action.

Peralta Claim.—The Court of Private Land Claims, on Oct. 25, 1895, rejected the famous Peralta-Reavis land grant claim for 12,500,000 acres, worth \$25,000,000, in Southern New Mexico and Arizona, and J. A. Peralta-Reavis, the claimant, was found guilty, July 2, 1896, on a charge of presenting a fraudulent claim against the United States government.

Publications.—Reported March, 1898: Daily, 5; tri-weekly, 1; semi-weekly, 1; weekly, 47; and monthly, 3.

Post-Offices.—Reported Jan. 1, 1897: Second-class, 2; third-class, 10 (presidential, 12); fourth-class, 292; money-order offices, 67; limited money-order offices, 6.

Churches.—The Roman Catholic is the strongest denomination, and is followed in their order by the Methodist Episcopal; Presbyterian, North; Methodist Episcopal, South; Mormon; Protestant Episcopal; and Regular Baptist, North. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for New Mexico 90 evangelical Sunday schools, 592 officers and teachers, and 4,900 scholars—total members, 5,492.

Schools.—At the end of the school year 1895-96, the number of children of school age was estimated at 49,730, of whom 23,359 were enrolled in the public schools, and 15,937 were in average daily attendance. There were 584 teachers, 492 public schools, public school property valued at \$264,430, expenditures, \$161,494, and 7 public and 5 private high schools. The Presbyterian Home Mission maintained 24 private schools, with nearly 1,500 day pupils; the United States government had Indian schools at Jemes, Laguna, and Zuni; and Santa Fé and Albuquerque had prosperous Indian industrial schools. The territorial institutions comprised a university at Albuquerque; school of mines at Socorro; normal schools at Silver City and Las Vegas; agricultural college at Las Cruces; a military institute at Roswell; and an institution for the education of the deaf, dumb, and blind at Santa Fé. The Sisters of Charity conduct the St. Vincent Orphans' Home and Industrial School for girls only, at Santa Fé, and there are other denominational institutions in the principal towns and pueblos.

Libraries.—In 1896 there were reported 6 public libraries of 1,000 volumes each and upward, with a total of 13,273 bound volumes and 3,200 pamphlets.

Population.—In 1890, 153,593, of whom 83,055 were males; 70,538 females; 142,334 natives; 11,259 foreign-born; 142,719 whites; and 10,874 colored of all

ances, principally Indians. On June 1, 1897, the United States government actually estimated the population at 197,000.

NEW MEXICO, UNIVERSITY OF, Albuquerque, N. M., non-sectarian; co-educational; had at close of 1897, 12 professors and instructors; 95 students; 977 volumes in library; \$40,000 in grounds and buildings; \$14,220 income; president, C. L. Herrick, m.s.

NEW ORLEANS, city, port of entry, capital of Orleans parish, La., with which it is co-extensive; population (1890), 242,039. In 1896 the assessed valuations were: Real estate, \$100,529,530; personal property, \$40,037,913—total, \$140,567,443; city tax rate, \$20 per \$1,000. Under the provisions of an amendment to the constitution, up to Jan. 1, 1897, the city had issued 4 per cent. 50-year bonds to the amount of \$8,998,500 for the purpose of refunding its debt at a lower rate of interest, and had paid to the departments of public schools and public works about \$250,000, the excess of the interest tax over requirements. The total bonded debt, Jan. 1, 1897, was \$14,639,050. In 1897 there were 7 national banks, with combined capital, \$2,300,000; deposits, \$13,337,610; and resources, \$20,696,855. The exchanges at the clearing house in the year ending Sept. 30, 1897, aggregated \$420,182,685, an increase of \$92,638,472 in a year. New Orleans has 625 miles of streets, of which 157 are paved; 118 miles of water mains; waterworks plant operated by a private company, cost \$3,500,000, capacity, 45,000,000 gals.; gas and electric light plants; and 6 daily, 3 semi-weekly, 34 weekly, 2 semi-monthly, and 9 monthly periodicals. The annual cost of maintaining the city government is about \$2,800,000; expenditures for public education, \$420,000; pupils in public schools, 27,000. The commercial movement in the year ending June 30, 1897, was as follows: Merchandise, imports, \$16,618,727; exports, \$101,494,120; gold and silver coin and bullion, imports, \$610,242—total foreign trade, \$118,723,089. In the summer of 1896 4 banks were obliged to suspend within a short time, and to relieve the consequent pressure on the other banks the United States treasury department transferred from New York to New Orleans in one day by telegraph the sum of \$900,000, and sent by telegraph and express in 2 days \$1,350,000 to be used in promptly meeting claims against the Federal government. In 1897, for the first time in many years, the city and suburbs shared with various places in Alabama, Mississippi, Florida, and Texas, a severe visitation of yellow fever supposed to have originated in Havana. On Oct. 3 Dr. Joseph Holt, former president of the board of health, and originator of the system of maritime quarantine that was rigidly enforced, estimated the loss to business in New Orleans alone at \$25,000,000, and in the entire stricken section at \$38,000,000, and the total loss of life at about 250. In April, 1898, the city was selected as one of four points for the mobilization of the U. S. regular and volunteer armies in anticipation of the occupation of Cuba.

NEWPORT, city, capital of Newport county, and one of the capitals of Rhode Island; population (1890), 21,537; (1897, estimated) 23,000. In 1895 the assessed valuations—about actual value—were: Real estate, \$29,939,500; personal property, \$6,640,100—total, \$36,579,600; total tax rate, \$10.50 per \$1,000. The total bonded debt, Jan. 1, 1897, was \$511,000; sinking funds, \$69,088; net debt, \$441,912; value of real estate and other property owned by the city, \$671,420. There are 6 national banks, with combined capital, \$795,250; deposits, \$1,659,621; and resources, \$3,466,802; Middletown Free, Newport Historical Society, People's, Fort Adams' Post, Redwood, and Y. M. C. A. libraries; electric street railroads; and 2 daily and 3 weekly newspapers. For more than 20 years Con-

gress has been urged to put the fine harbor and approaches of the city in a state of adequate defense. According to the report of the chief of engineers of the army for 1897 plans had been prepared and approved by the secretary of war for proper defensive works on Narragansett Bay, and negotiations were in progress for the acquisition of additional sites. General Miles, in his report for the same period, recommended an appropriation of \$833,600 for fortifications at this port. The plans for the harbor call for two batteries of 16 mortars each, grouped in sections of 4 mortars, with a casemate or protecting pocket for the gunners, all within a wall sufficiently strong to resist an attack of shot and shell. One group of batteries would be installed at Fort Adams; the other at Dutch Island; the first would assist in defending the main entrance to Narragansett Bay; the other would resist the approach of an enemy through the West Passage. Torpedo casemates have been constructed already, as a part of the general plan, at Fort Adams and Dutch Island, for the particular purpose of protecting the torpedo and training station on Goat Island.

NEWPORT NEWS, town, port of entry, and capital of Warwick county, Va.; population (1890), 4,449. Since the completion of its railroad and docking facilities and of the extensive ship-building and drydock plant, the town has had a rapid growth, and is now a port of large commercial value. The drydock is a marvel of engineering construction, and has successfully docked the great steamship *New York*, of the American line, the largest vessel ever so handled in the United States. In 1897 the battleships *Kearsarge*, *Kentucky*, and *Illinois* were under construction here, and the gunboats *Nashville*, *Wilmington*, and *Helena* were completed. In March, 1898, the Newport News Shipbuilding and Drydock Company began the construction of an additional drydock, to be the largest on the continent, and to cost upward of \$1,000,000. The commercial movement, all in merchandise, in the years ending June 30, 1896 and 1897, was respectively: Imports, \$1,131,628 and \$1,169,315; exports, \$11,850,117 and \$22,109,575—a total foreign trade of \$15,981,745 and \$23,278,890.

NEW SOUTH WALES, the oldest of the British Australasian colonies; area, 31,700 square miles; population (1891), 1,132,234; (estimated Dec. 31, 1895) 1,277,870; governor, 1897, the Rt. Hon. Henry Robert Viscount Hampden.

Finances.—The gross revenue in the fiscal year ending June 30, 1896, was £9,251,845 (\$41,963,966), of which £2,566,113 was from taxation, £2,018,196 from land revenue, £4,354,821 from railway, tramway, post, telegraph, and other services, and £312,715 from miscellaneous sources. The expenditures, exclusive of that from loans, aggregated £9,886,277 (\$48,047,306), and the largest items were for public works and services, interest on debt, and payment of loan. The public debt June 30, 1896, was £62,263,173 (\$302,600,178). At the close of 1892 the wealth of the colony was estimated as follows: Colonial property, £181,925,500; municipal, £7,213,000; private, £404,148,000—total, £593,286,500 (\$2,883,372,390).

Commerce.—The total value of the imports into the colony in 1896 was \$100,062,593, of which \$8,418,427, more than double the amount in 1895, was from the United States; and the exports aggregated \$112,434,447, of which \$10,049,146, almost three times that of the preceding year, was to the United States. There was a notable increase in both the import and the export trade, and of the latter, wool represented more than half.

Agriculture.—In 1896 about one-fourth of the area of the colony was under forest, and 1,348,600 acres were under crop, principally in holdings of less than

500 acres. The leading crops were: Wheat, 5,195,312 bush.; maize, 5,687,030 bush.; barley, 96,119 bush.; oats, 374,196 bush.; potatoes, 56,179 tons; lucerne and sown grasses, 48,959 tons; tobacco, 11,142 cwt.; sugar cane, 207,771 tons; and oranges, 5,954,940 doz. The live stock comprised 47,617,687 sheep; 2,150,057 cattle; 487,943 horses; and 221,597 swine.

Mining.—The production of silver in 1895 was 550,142 ozs.; silver-lead ore and metal, 219,881 tons—total value, £1,560,813; copper, £136,969; coal, 3,738,589 tons, value, £1,095,327. Nearly all the gold produced in the colony is sent to the mint for coinage; value of output for 1896, \$5,223,506. The colony has 20 smelting furnaces, principally for silver, tin, and copper, and about 40,000 persons engaged in mining and smelting.

Manufactures.—Official returns for 1895 showed 2,403 manufacturing establishments, employing a capital of £15,649,704, and hands, 43,719. The most numerous plants were those for the preparation of food and drink; building materials; metal works, machinery, etc.; paper, printing, binding, etc.; and for treating raw pastoral products.

Communications.—In 1896 there were 2,531 miles of government and 84 miles of private railways in operation, which had cost for construction and equipment \$180,000,000; 61 miles of street railway belonging to the government; 1,470 post-offices and 502 receiving offices; and 12,316 miles of telegraph posts, with 28,799 miles of wire.

Banking.—There are 13 banks of circulation in the colony; a savings bank in Sydney, with 12 branches in the country districts; numerous banks connected with land, building, and investment companies and benefit building societies; and post-office savings banks.

Churches and Schools.—There is no state church nor is state aid given to religion. The Church of England has a metropolitan, who is also primate of Australia and Tasmania, and 6 dioceses, and the Church of Rome has a cardinal-archbishop of Sydney, who is also primate of Australasia, and 7 dioceses. The principal denominations are the Church of England, 333 clergy, 502,980 communicants; Church of Rome, 295 clergy, 286,911 communicants; Presbyterian, 156 clergy, 109,390 communicants; and Wesleyan, 133 clergy, 87,516 communicants. Education is under state control and is compulsory. There are 2,563 State schools, with 4,477 teachers and 216,396 enrolled pupils, and 882 private schools, with 2,940 teachers and 51,563 pupils. For higher education there is a university at Sydney and a technical college with more than a dozen departments and several branch schools.

Recent Events.—The premiers of all the Australian colonies met in Sydney, March 4, 1896, for a conference on the questions of Federal defense, the Japanese treaty, the restriction of undesirable immigration, Federal quarantine, and light-houses for the coast. The legislative council adopted bills for conserving the public health, preventing the adulteration of food, regulating factories and workshops, and restricting the influx of the colored races.

NEWTON, city, Middlesex county, Mass.; population (1890), 24,379; (1895, State census) 27,590. In 1896 the assessed valuations were: Real estate, \$39,223,450; personal property, \$10,728,375—total, \$49,951,825; the total tax rate, \$16.60 per \$1,000. The city debt, Jan. 1, 1897, was \$2,925,613; water debt, \$1,955,000—total, \$4,880,613; sinking fund, \$888,446; net debt, \$3,992,166. Electric street railroads connect the city with Boston, Waltham, and Watertown. The city contains 13 villages; manufactories of woollen, silk, and knit goods, cotton gins, machinery, cordage, fire alarms, etc.; a national and 2 savings banks;

public and theological institute libraries; public school property valued at \$650,000; many residences of Boston business men; and 3 weekly newspapers.

NEWTON, HERBERT ANSON, LL.D., mathematician, was born in Sherburne, N. Y., March 19, 1830; died in New Haven, Conn., Aug. 12, 1896. He was one of the 50 original members of the National Academy of Sciences, and from 1855 till his death was professor of mathematics at Yale University.

NEW YORK, one of the United States of North America; the 11th of the original 13 States to ratify the Federal constitution (July 26, 1788); counties, 60; capital, Albany.

State Officers, 1896-98.—Governor (elected for 2 years, salary \$10,000 per annum), Frank S. Black; lieutenant-governor, Timothy L. Woodruff; secretary of state, John Palmer; treasurer, Addison B. Colvin; comptroller, James A. Roberts; attorney-general, Theodore E. Hancock; adjutant-general, C. W. Tillinghast; superintendent of public instruction, Charles R. Skinner; state engineer, Campbell W. Adams; superintendent of insurance, Louis F. Payn; superintendent of banking, F. D. Kilburn; superintendent of public works, George W. Albridge; railroad commissioners, Frank M. Baker, Ashley W. Cole, and George W. Dunn; chief justice of the court of appeals, Alton B. Parker; associate justices, Albert Haight, John C. Gray, Irving G. Vann, Denis O'Brien, Edward T. Bartlett, and Celora E. Martin.

Legislature, 1898.—Republicans, senate 36, house 78, joint ballot 114; Democratic, senate 14, house 69, joint ballot 83; Independent Republican, house 2, joint ballot 2; Republican majority, senate 22, house 6, joint ballot 28.

Elections.—In the State elections 1896 there were 1,421,549 regular votes cast for governor, of which the Republican candidate (Black) received 787,516; the Democratic (Porter), 574,524; the National Democratic (Griffin), 26,698; the Social Labor (Balkam), 18,362; and the Prohibition (Smith), 17,419. The congressional elections resulted in the choice of 29 Republican candidates, 4 Democratic, and 1 Independent Republican. In the presidential election the Republican candidate received 819,838 votes; the Democratic, 551,513; the National Democratic, 19,295; the Social Labor, 17,731; and the Prohibition, 16,086. In an election in 1897 for chief justice of the court of appeals, the Democratic candidate (Parker) received 551,680 votes; the Republican (Wallace), 493,791; the Social Labor (Cuno) 20,851; and the Prohibition (Baldwin), 19,653.

Farm Products.—Reported Dec. 31, 1897: Corn, 15,335,112 bush., from 494,682 acres, value \$6,134,057; wheat, 7,374,611 bush., from 344,608 acres, value \$6,637,150; oats, 45,953,036 bush., from 1,482,356 acres, value \$12,407,320; rye, 4,467,110 bush., from 211,467 acres, value \$2,144,227; barley, 4,786,075 bush., from 191,443 acres, value \$2,010,152; buckwheat, 5,667,310 bush., from 257,605 acres, value \$2,266,924; potatoes, 21,060,098 bush., from 339,679 acres, value \$14,110,266; and hay, 6,009,899 tons, from 4,451,777 acres, value \$49,581,667—total value, \$95,291,763.

Farm Animals.—Reported Jan. 1, 1898: Horses, 608,916, value \$33,781,467; mules, 4,511, value \$262,746; cows, 1,402,161, value \$44,869,248; cattle, 544,735, value \$14,256,261; sheep, 825,446, value \$3,332,739; and swine, 638,849, value \$4,626,544—total value, \$105,129,005.

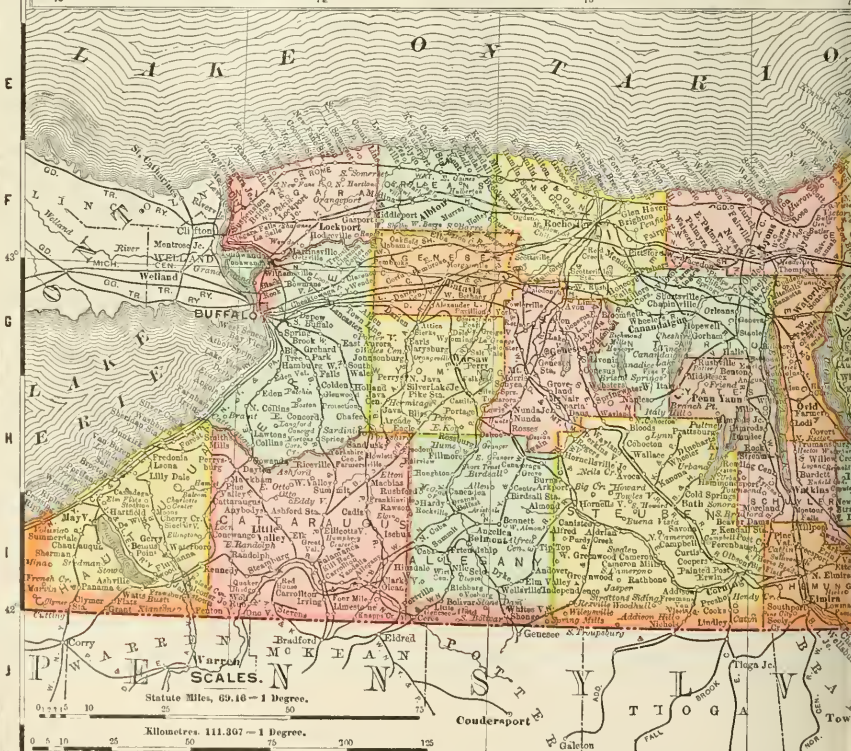
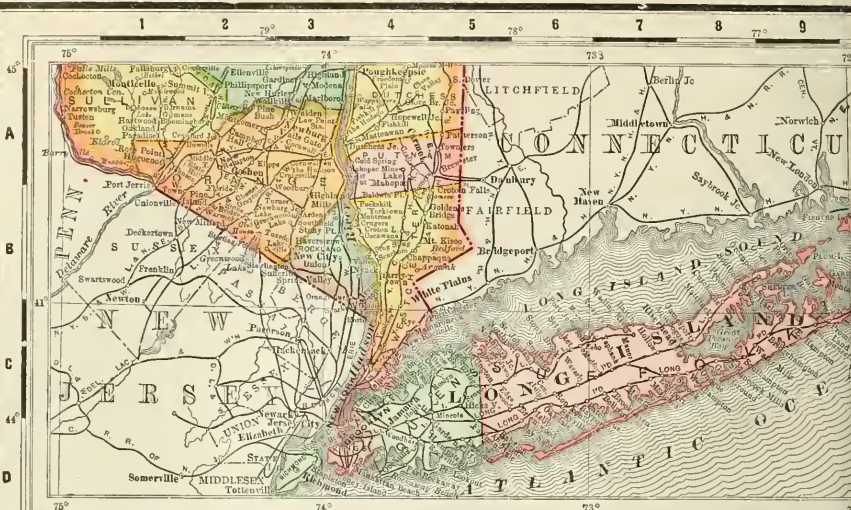
Mineral Products.—The following is a summary of the mineral products for the calendar year 1895: In *iron ore*, the output was 6,769 long tons of red hematite, 26,462 of brown hematite, 260,139 of magnetite, and 13,886 of carbonate, in all 307,256 tons, valued at \$598,313. The output was 64,497 tons greater than that of the previous year, and the State ranked 8th in general production, 2d in car-

bonate, 3d in magnetite, and 9th in brown hematite. With 23 furnaces in blast there was an output of 181,702 long tons of pig iron. In *clay* products, 280 concerns reported value of output of common and pressed brick, \$4,686,937; fancy brick, \$1,025; firebrick, \$302,407; vitrified paving brick, \$121,892; drain tile, \$56,740; other tile, \$143,465; sewer pipe, \$133,000; terra cotta work, \$336,000; stoneware, \$44,033; and miscellaneous, \$63,997—total, \$5,889,496. The *quarrying* industry showed granite output, \$68,474, in Essex, Richmond, Orange, and Westchester counties, a decrease; sandstone, \$415,644, principally in Orleans and St. Lawrence counties, a decrease; slate, \$91,875, an increase, all in Washington county, and of a cherry-red color, the only slate of its kind in the world and commanding a higher price than any other; marble, \$207,828, in St. Lawrence, Westchester, Columbia, and Warren counties, a large decrease; and limestone, \$1,043,182, about equally divided between building and road making and lime; total value, \$1,827,003. There was also an output of bluestone, for flagging and other purposes, of an estimated value of \$750,060. In *cement*, there were 26 works which yielded 3,939,727 bbls. of hydraulic, valued at \$2,285,094, and 4 works which yielded 159,320 bbls. of Portland, valued at \$278,810. The State ranked first in *salt*, with a product of 6,832,331 bbls., value \$1,943,398, principally rock, common fine, and table. Other products included *petroleum*, 912,948 bbls., value \$1,240,468; *natural gas*, \$241,530; *gypsum*, 33,587 short tons, value in commercial form, \$59,321; *metallic paint*, 6,083 short tons, value \$67,361; and *fibrous tale*, 39,240 short tons, value \$370,897. The entire supply of the country of the last product was from Gouverneur, St. Lawrence county.

Finances.—The State treasurer's report for the year ending Sept. 30, 1897, showed: Balance, beginning of the year, \$4,930,046.43; receipts, \$32,678,112.09; expenditures, \$30,364,254.21; balance at end of the year, \$7,243,904.31. The total funded debt was \$5,765,660. The receipts from licenses to sell liquor under the Raines law, tax on inheritances, etc., were \$8,245,172.87; and the expenditures for asylums, hospitals, reformatories, etc., were \$7,362,559.85. The assessed valuations in 1897 were: Real estate, \$4,349,882,088; personal, \$649,386,812; total, \$4,999,268,900; valuation as equalized by the State Board, \$4,506,985,694, a net increase in a year of \$140,963,226; State tax rate, \$2.67 per \$1,000, producing \$12,033,681.80.

Banks.—*National.*—On Oct. 31, 1897, there were 326 national banks in operation and 147 in liquidation, the active ones having a combined capital of \$83,664,940, holding \$37,531,000 in United States bonds. These banks had outstanding on loans and discounts \$521,778,737; represented by demand paper with individual or firm names, \$12,702,257; the same secured by stocks, bonds, and other personal securities, \$157,655,316; time paper with two or more individual or firm names, \$179,639,165; time paper with single individual or firm name, \$78,633,128; and the same secured by stocks, bonds, and other personal securities, \$93,148,874. The banks held in coin and coin certificates \$84,418,083, of which \$19,277,969 was in gold coin. The circulation account was: Total issue, \$371,694,685; redeemed, \$332,513,146; outstanding, \$39,181,539. There were deposits, \$637,355,132; reserve required, \$147,497,291; reserve held, \$171,802,042; ratio of reserve, 48 banks in New York City, 27.10 per cent., 6 in Albany, 37.78, 5 in Brooklyn, 28.04, and 267 elsewhere in the State, 27.68. During the year ending Sept. 30, 1897, the exchanges at the United States clearing houses at New York City, Buffalo, Rochester, Syracuse, and Binghamton aggregated \$31,686,872,281, an increase of \$1,958,264,584 over the total of the previous corresponding period.

State Banks.—On Sept. 30, 1897, there were 212 State banks in operation,



STATUTE MILES, 69.16 — 1 DEGREE.

0 1 2 3 4 5 6 7 8 9 10

Kilometres, 111.367 — 1 DEGREE.

0 5 10 25 50 75 100 125

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with combined capital, \$30,570,700; deposits, \$224,349,746; loans and discounts, \$174,202,642; resources, \$329,272,539; surplus, \$19,291,514; and undivided profits, \$7,983,495. *Loan and Trust Companies.*—On July 1, 1897, there were 44 such corporations, with capital, \$33,100,000; deposits in trusts, \$185,099,694; general deposits, \$198,229,029; resources, \$483,739,925; surplus, \$47,191,701; and undivided profits, \$7,813,229. *Savings Banks.*—These banks were all mutual, and, Jan. 1, 1898, numbered 128. There were reported, open accounts, 1,805,280; deposits, \$766,684,916; withdrawals in 1897, \$195,603,240; resources, \$869,751,244; and surplus, \$102,426,162. *Private Banks.*—There was a total of 11 reported June 30, 1897, with capital, \$345,000; deposits, \$1,553,842; loans and discounts, \$1,036,160; resources, \$2,033,621; and surplus and profits, \$127,380. Combining all these institutions, the State had an aggregate banking capital of \$147,680,640.

Building and Loan Associations.—The report of the State Banking Department for the year ending Dec. 31, 1895, showed 385 such organizations in operation, of which 360 made full reports. According to these there were 1,424,481 shares in force; 337,232 shares borrowed on; 30,791 borrowing and 135,694 non-borrowing members; and aggregate loans on real estate, \$34,433,137. The total assets of the associations reporting were \$50,168,683; amount due shareholders, \$35,001,030; earnings credited to shareholders, \$5,082,095; receipts during the year, \$27,625,380; loans during the year, \$12,028,151; expenses during the year, \$1,031,043; and foreclosures during the year, 578. A special report in 1897 showed, number of associations, 383; shares outstanding, 1,414,166; installment dues paid in, paid up and prepaid stock and profits, \$43,574,394; loans, \$44,215,710; total assets, \$50,168,683.

Insurance.—The official report on the business of the life, casualty, title, credit, mortgage guarantee, and assessment insurance companies for the year ending Dec. 31, 1895, showed: Gross assets of life companies doing business in the State, \$1,142,419,926, of which \$689,420,488 belonged to State corporations; total liabilities, excepting \$9,570,500 of capital stock, were \$982,669,752; gross divisible surplus, \$159,750,174, of which State companies held \$100,952,817; gross receipts, \$266,897,202; premium receipts, \$215,199,302; disbursements, \$185,772,902; paid policy holders, \$122,978,718; new policies issued, 366,565, insuring \$864,815,534; and policies in force at end of year (excluding industrial companies), 1,877,808, insuring \$4,818,170,945. The casualty and fidelity companies numbered 24, and had capital, \$9,679,600; other liabilities, \$11,722,981; net surplus, \$4,689,278; receipts, \$15,333,787; disbursements, \$13,415,785; and risks in force, \$2,597,298. The State Insurance Department held on deposit for the protection of policy holders in the State securities aggregating \$16,540,747. On Dec. 31, 1897, there was a total of 228 companies doing business in the State, representing a capital of \$77,820,975, and having a surplus of \$265,390,505.

Internal Revenue.—During the fiscal year ending June 30, 1897, the collections of internal revenue aggregated \$18,420,766.74, from the following sources: Distilled spirits, \$4,708,391.66; tobacco, \$4,775,587.84; fermented liquors, \$8,846,816.85; oleomargarine, \$1,374; miscellaneous, \$75,445.28; and penalties, \$12,392.02. During that year there were 7,309 single-account cigar factories, which used 28,062,265 lbs. of tobacco, and had an output of 909,074,978 cigars and 2,361,258,845 cigarettes; and 491 other factories which used 19,605,917 lbs. of materials, and had an output of 2,566,976 lbs. of plug tobacco, 1,891,615 lbs. of fine cut, 12,757,369 lbs. of smoking, and 80,215 lbs. of snuff. The number of distilleries of all kinds in operation was 49; amount of fruit brandy produced, 86,879 gals.; spirits rectified, 10,560,605 gals., and gauged, 28,025,328 gals., and fermented liquors produced, 9,490,132 bbls.

Railroads.—The following is a summary of the report of the State Board of Railroad Commissioners for the year ending June 30, 1895: Number of miles of main line in the State, 8,032; cost of roads and equipments, \$1,391,577,446; capital stock, \$727,066,078; funded debt, \$732,363,503; operating expenses, \$136,337,603; net earnings from operations, \$62,860,751; liabilities besides capital and funded debt, \$99,360,452; interest paid and accrued, \$31,110,172; and dividends declared, \$19,079,343. The report on street surface roads showed: Capital stock, \$89,693,580; funded debt, \$80,080,423, and unfunded, \$12,056,519; cost of roads and equipments, \$170,647,265; operating expenses, \$16,628,451; net earnings from operations, \$8,848,775; interest paid, \$2,911,115; rentals, \$3,623,245; dividends, \$1,993,772; and surplus, \$171,130. Ten corporations operated 423 miles of railroad, surface and elevated, in New York City. Reports for the year ending June 30, 1897, showed the aggregate mileage for the State as follows: Surface, steam, 8,113.52; surface, street, 1,178.79; elevated, 65.71—total, 9,358.02. During the year 1896-97 there was a decrease in gross earnings, as compared with the previous year of \$5,901,397; a decrease in operating expenses of \$6,977,196; an increase in capital stock of \$3,238,855, and in funded debt of \$28,698,185; a decrease in other liabilities of \$1,388,874; and an increase in cost of roads and equipments of \$19,647,093.

Commerce.—During the year ending June 30, 1897, the imports of merchandise at the ports of Albany, New York City, Buffalo Creek, Cape Vincent, Champlain, Dunkirk, Genesee, Niagara, Oswegatchie, Oswego, and Syracuse aggregated in value \$500,370,575. The exports of merchandise from all ports excepting Dunkirk and Syracuse had a value of \$413,484,825. The movement of gold and silver coin and bullion at the ports of New York City, Champlain, and Niagara was: Imports, \$66,777,343; exports, \$90,087,842.

Publications.—Reported March, 1898: Daily, 183; tri-weekly, 3; semi-weekly, 43; weekly, 1,112; bi-weekly, 11; semi-monthly, 46; monthly, 550; bi-monthly, 14; and quarterly, 46.

Post-Offices.—Reported Jan. 1, 1897: First-class, 17; second-class, 84; third-class, 214 (presidential, 315); fourth-class, 3,305; money-order offices, 1,715; money-order stations, 202; and limited money-order offices, 14.

Churches.—The Roman Catholic is the strongest denomination in the State, and is followed in their order by the Methodist Episcopal; Presbyterian; Regular Baptist; Protestant Episcopal; Reformed; Jewish; Congregational; Lutheran, Gen. Council; and Lutheran, Synod. Conference. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for New York, 9,002 evangelical Sunday schools, 12,777 officers and teachers, and 1,209,244 scholars, total members 1,334,021—gain in membership in three years, 160,994.

Schools.—The following is a summary of the report of the State superintendent of public instruction for the year 1897: The total expenditure in the State for school purposes was \$26,689,856, as compared with \$23,173,830 the previous year. Of the expenditures \$7,537,212 was devoted to rural districts, and \$19,152,644 to cities, which shows an increase of \$3,610,573 in city districts, and a decrease of \$94,547 in rural districts. The amount of salaries paid to teachers in cities was \$9,158,205, and in rural districts \$5,001,854. School buildings erected, repaired, and equipped during the year involved an expenditure of \$8,398,676, of which \$1,171,976 was spent in the country districts. There are 11,738 school districts in the State, as compared with 11,800 one year ago. There is a decrease of 83 in the number of districts in the country, but an increase of

20 in the cities. The total valuation of schoolhouses and sites is \$66,077,600, the city schools being valued at \$49,784,983. - The total increase in the valuation over the previous year is \$5,774,474, which is confined exclusively to city districts, as there is a small decrease in the valuation in the country districts. The number of teachers employed in the entire State is 34,363, of which 5,461 are men and 28,902 women, a net increase of 565 over last year. In cities 15,283 teachers are employed, and in the country 19,102, this being an increase in the cities of 1,794 and a decrease in the country of 1,229. The average annual salary paid to teachers in the State is \$495.43, an increase of \$8.06. In cities the average is \$720.09, a decrease of \$5.10, and in the country it is \$312.12, an increase of \$5.94. The teachers report 1,203,199 children in attendance at school between the ages of five and eighteen, of whom 685,803 live in the cities and 517,396 in the country. The annual report of the regents of the State University for 1897 showed that the colleges and professional and technical schools in seven years had increased their expenditures from \$2,733,860 to \$5,771,325; value of buildings and grounds from \$15,129,028 to \$28,447,974; library and apparatus from \$1,896,959 to \$3,542,456, and the total property owned from \$39,045,604 to \$77,148,944. The number of institutions increased in five years from 81 to 101, the students from 22,062 to 28,007, and the graduates receiving first degrees from 2,305 to 2,728. During the last three years the medical students increased from 3,420 to 4,025. In law schools the gain was from 1,486 to 2,011. Students already holding academic degrees increased from 510 to 652. Receipts grew from \$124,857.32 to \$187,151.88. Five years ago one-quarter of the academic students was in private schools. In 1897 the number had fallen to one sixth. The number of boys in high schools rose to 19,504, a gain of 63 per cent. and of girls to 24,322, a gain of 49 per cent. New York then had in her high schools and academies 53,464 students, or one-eleventh of the whole number in the United States.

Libraries.—The regents of the State University reported in 1897 that there were 806 libraries in the State, of 300 volumes each and upward. The report showed that of 32 libraries chartered by the legislature, 4 were in the university. Of 39 libraries incorporated under general laws, 17 were in the university; 90 libraries hold Regents' charters, 502 belonged to as many teaching institutions in the university, and 75 others belonged to institutions not in the university—such as schools, clubs, hospitals, and Christian associations—and 69 reporting libraries were neither chartered nor under the care of any chartered bodies. The total number of volumes reported was 4,647,661, of which 1,313,299, or a little more than one-fourth, were in the free lending libraries. The total circulation of the year 1896 was 5,008,402 volumes, an increase of 851,658 over 1895. The increase for two previous years was 500,000 a year.

Population.—In 1890, 5,997,853, of whom 2,976,893 were males; 3,020,960 females; 4,426,803 natives; 1,571,050 foreign-born; 5,923,952 whites; and 73,904 colored of all races. The population in 1892 according to the State census was 6,513,344; and on June 1, 1897, the United States government actuary estimated it at 6,923,000.

NEW YORK, city, and commercial metropolis of the United States; population (1890, United States census), 1,515,501; (1892, State census), 1,801,739; (1896, Board of Health estimate) 1,945,371.

Finances.—In 1896 the assessed valuations were: Real estate, \$1,731,509,143; personal property, \$374,975,762—total, \$2,106,484,905; tax rate, \$21.40 per \$1,000; and expenditures, \$45,298,418, of which \$6,439,550 were for State taxes.

and the remainder for municipal expenses proper. Among the largest items of local expenditures were: Interest on the city debt, \$5,340,549; payment on debt, \$2,979,020; police department, \$5,955,912; board of education, \$5,522,625; public works department, \$3,208,358; street cleaning, \$2,845,220; fire department, \$2,314,480; public parks, \$1,208,967; judiciary department, \$1,738,744; public charities and correction, \$1,891,456; and asylums, reformatories, etc., \$1,302,317. On Jan. 1, 1897, the total funded debt was \$195,907,690; sinking funds, \$77,630,491; net funded debt, \$118,277,198; revenue bonds, \$2,433,326; total net debt, \$120,710,525. The sinking fund assets consisted of city bonds of a par value of \$73,687,799, and cash, \$3,942,692. In 1897 the assessed valuations were increased by \$62,150,951, making a total of \$2,168,635,856, and the amount to be raised by taxation was fixed at \$44,429,555. The real estate valuation was fixed at \$1,787,186,791, and the personal at \$381,449,065.

Banking.—On Oct. 5, 1897, there were 48 national banks in operation with a combined capital of \$48,600,000; individual deposits, \$341,886,866; loans and discounts, \$408,335,475; surplus, \$42,892,000; and total resources, \$733,611,682. The exchanges at the clearing house in the year ending Sept. 30, 1897, aggregated \$31,337,760,948, an increase of \$1,986,866,064 in a year. The savings banks on June 30, 1897, numbered 26, and had total resources, \$458,288,574; surplus, \$53,322,046; open accounts, \$906,128; deposits received during the year, \$104,078,639; deposits withdrawn during the year, \$15,608,297; interest added to deposits during the year, \$13,868,531; and total running expenses, \$1,185,543.

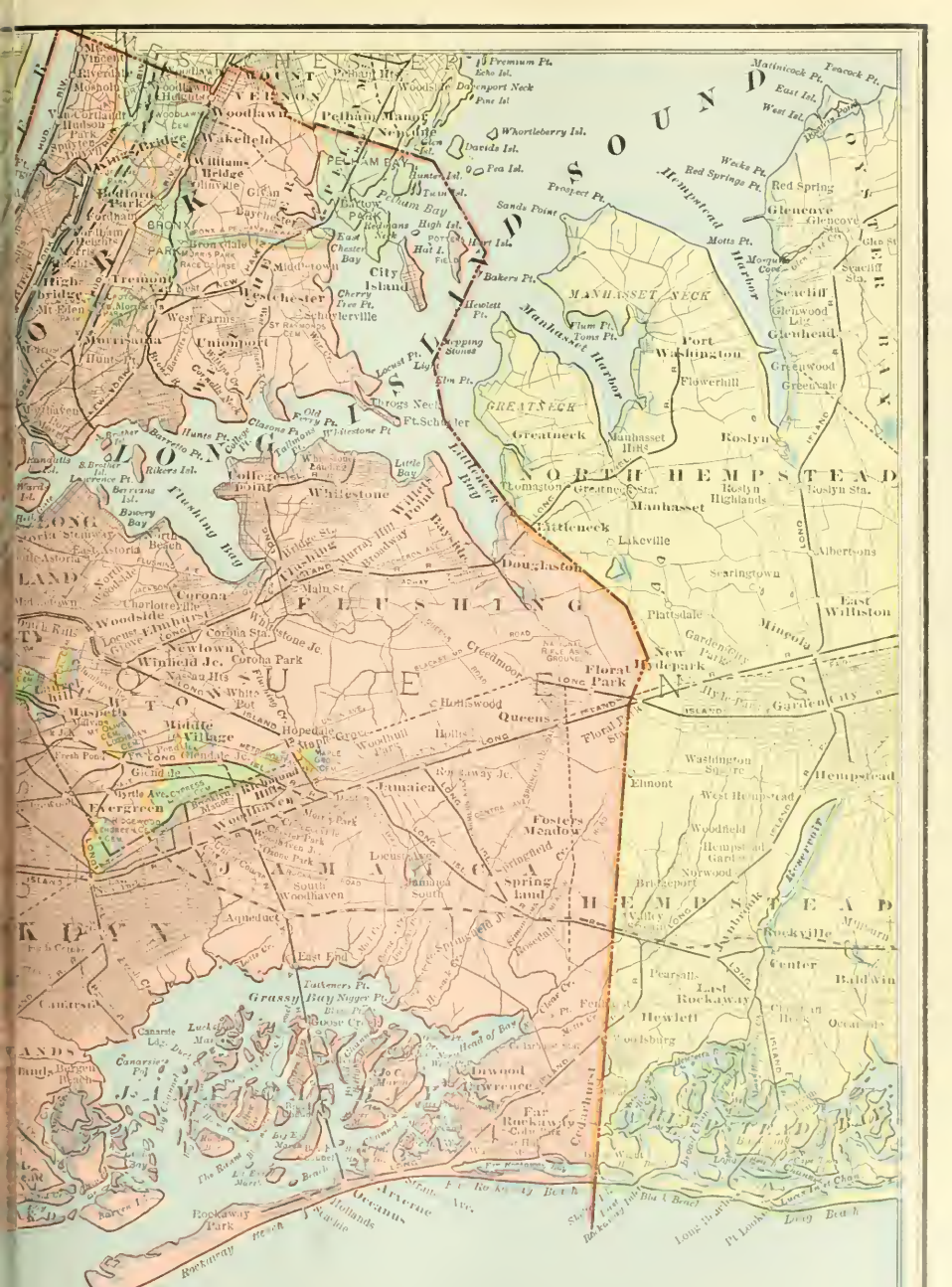
Commerce.—The commercial movement in the years ending June 30, 1896 and 1897, was respectively as follows: Merchandise, imports, \$499,932,792 and \$480,603,680; exports, \$354,274,941 and \$391,679,907; gold and silver coin and bullion, imports, \$25,030,400 and \$65,385,972; exports, \$153,431,104 and \$86,420,604; making a total foreign trade in 1896 of \$1,032,669,237, and in 1897 of \$1,024,090,063. In the same periods the total imports of merchandise for the entire country were \$779,724,674 and \$764,717,609; exports, \$882,606,938 and \$1,050,987,253; imports of gold and silver coin and bullion, \$44,638,445 and \$92,402,238; exports, \$172,172,092 and \$101,145,728; making a total foreign trade in 1896 of \$1,879,142,149, and in 1897 of \$2,009,252,828. Hence, the combined foreign trade of the entire country exceeded that of New York alone by only \$846,472,912 in 1896, and \$955,162,765 in 1897.

Miscellaneous.—The transition state of the city at the time of writing, with all local interests and conditions undergoing readjustment for the Greater New York, forbade as full statistical treatment as would have been given otherwise. About to become the second largest city in the world in population, the first in the number of Irish inhabitants, and the second in German; with enlarged territory, powers, and capabilities; and with the opening of a new epoch in municipal history at hand, the usual statistical statements would have proved misleading and confusing. In brief it may be said that immediately prior to Jan. 1, 1898, there were, in what constituted New York City, 635 miles of streets, of which 406 were paved; 456 miles of sewers; 820 miles of water mains; a waterworks system that cost \$78,000,000; a police force of 4,490 officers and men; a fire department of 1,113 officers and men; over 400 churches; and public school property valued at over \$20,000,000.

The Greater New York.—The city as constituted by the charter granted by the State legislature (Laws of 1897, chap. 378) comprises the five boroughs: Manhattan, Brooklyn, the Bronx, Queens, and Richmond; area 35,975 square miles; population, 3,204,360; assessed real estate valuation, \$2,367,659,607; personal,



Coney Island
W. Road from the
Dyckman River



GREATER NEW YORK

\$404,001,063; bonded debt, \$212,923,116. The city comprises 61 Assembly districts, 20 Senate districts, 16 Congressional districts. The borough of Manhattan comprises the island of Manhattan with adjacent islands; the borough of Brooklyn has the same limits as the former city of Brooklyn; the borough of the Bronx includes all the area of the former city of New York lying north or east of the borough of Manhattan; the borough of Queens consists of a part of Queens county, Long Island; and the borough of Richmond includes the whole of Staten Island. The charter became effective Jan. 1, 1898.

The legislative power is vested in two houses, a Council and a Board of Aldermen, together styled the "Municipal Assembly." The council consists of 29 members, including its president, who is chosen by the qualified voters of the city; the other 28 members are chosen by the people of 10 council districts for the term of 4 years; ex-mayors residing in the city are entitled to seats in the council, but without a vote; in default of the mayor the president of the council acts as mayor. The board of aldermen is elected for 2 years, 1 member from each assembly district; vacancies in both boards are filled by vote of the members of each respectively. The president of the board of aldermen is chosen by its members from their own number. Every ordinance or resolution of the Municipal Assembly must be presented to the mayor for approval; if he disapproves the measure can be passed by a two-thirds vote of both houses. The rights of the city to its water fronts, landings, docks, streets, and avenues is inalienable.

The executive power is vested in the mayor, elected by the people for 4 years. He may within the first 6 months of office remove public officers holding by his appointment, but certain officers are exempted from removal by him. The controller, head of the finance department, is chosen by the people for 4 years. He is removable by the governor for cause. The 4 police commissioners are appointed by the mayor for 4 years, except the members appointed in the first year, they to hold for 1, 2, 3, and 4 years respectively. The board of public improvements includes 6 departments, viz., water supply, highways, street cleaning, sewers, public buildings, lighting and supplies, and bridges. The heads of the departments are appointed by the mayor; and they are members of the board of public improvements, the president of which is chosen by the mayor; the term of all these officers is 6 years. The heads of the other departments are also chosen by the mayor. He is himself removable by the governor for cause.

Each borough has a president elected by the people for 4 years, who is *ex officio* chairman of the local board of every district of local improvement in his borough; but he has no veto. The local boards have power to act in all matters of street opening, paving, sewerage, etc., wherever improvements are made at the cost mainly of local property owners. They hear complaints of nuisances, disorderly places, etc., and pass such resolutions concerning them as may be within their powers.

There is a board of education for the whole city and a school board for each borough; the mayor appoints the members of the borough boards for the term of 3 years. The board of education consists of 19 members, 5 of them being the chairmen of the borough school boards, the rest chosen by the borough boards. Each borough has its own superintendent of schools and associate superintendents.

Under the new charter the mayor has direct and indirect control of a patronage greater than any other mayor in the world has at his disposal; the new civil list provides for more than 33,000 municipal employees, including 245 department chiefs; the annual salaries aggregate about \$33,000,000; and the budget exceeds \$70,000,000.

The Election.—The first municipal election under the new charter occurred on Nov. 2, 1897. The candidates for the office of mayor were: Republican, Benjamin F. Tracy; Democratic, Robert A. Van Wyck; National Democratic, Seth Low (indorsed); Socialist Labor, Lucien Sanial; Prohibition, William T. Wardwell; United Democratic, Alfred B. Cruikshank; Citizens' Union, Seth Low (the first of the candidates nominated); Democracy of Thomas Jefferson, Henry George; and neither Tea nor Tiger, Patrick J. Gleason. The campaign was an unusually exciting one, and was rendered doubly memorable by the sudden death of Henry George, the distinguished reformer and author of *Progress and Poverty*, who was one of the candidates for the office of mayor. After his death his party friends placed his son, of the same name, in nomination in his stead. The total registration in the 5 boroughs was 567,608, and the 4 principal candidates divided 498,576 votes, the Democratic candidate receiving 228,531; the Republican, 101,994; the Citizens' Union, 148,215; and the Jefferson Democratic, 19,836—the totals giving the Democratic candidate a plurality of 80,316. The Democrats made almost a clean sweep of the Greater New York, electing every candidate on the city, county, and borough ticket, with the exception of 2 councilmen in Brooklyn and 13 out of the 60 aldermen in the greater city. The council is composed of 27 Democrats and 2 Republicans, and the board of aldermen of 47 Democrats and 13 Republicans. The Democratic candidates for the offices of controller and president of the council received pluralities of 106,487 and 112,210 respectively.

The New Mayor.—At the time of his election, Robert A. Van Wyck was chief justice of the city court of New York. He was born in New York City in 1850; was graduated at the Columbia College Law School in 1872; and was elected to the bench of the city court in 1889. He is a descendant on the paternal side of Cornelius Barents Van Wyck, who removed from the town of Wyck, Holland, to New Netherlands in 1650.

NEW YORK PUBLIC LIBRARY, institution formed by the consolidation of the Astor and Lenox Libraries and the Tilden Trust Fund; incorporated in 1895; president of the board of trustees, John Bigelow, LL.D.; superintendent-in-chief, John S. Billings, M.D., LL.D. On consolidation, the library had 420,000 volumes, a large collection of valuable manuscripts and pamphlets, and an endowment of \$3,500,000. The board of aldermen granted the trustees the Bryant Park reservoir tract on 5th Avenue and 42d Street for a building site, and the legislature authorized the city to issue bonds for \$2,500,000 for the erection and equipment of a suitable structure. The accepted plans for the new building were by Messrs. Carrère and Hastings. The greatest projection of the main façade of the building is 75 ft. back of the 5th Avenue building line. It is intended to treat this 75 ft. of foreground, 455 ft. long, as a terrace or esplanade, and in a formal way as a grand approach to the main entrance. At both ends are fountains, groups of figures or monuments, to be designed in character with a building devoted to library purposes. The level of this terrace will be about halfway between the level of the main floor of the library building and the 5th Avenue sidewalk. Immediately upon entering the building, there will be a large monumental hallway, 80 ft. long and 40 ft. wide, going through 2 stories. The ceilings are vaulted with stone, and stone staircases at both ends, 12 ft. wide, ascend 1 flight to the main hallway on the second floor; and from there, crossing this hallway, another flight of stairs leads to the third floor, arriving directly at the entrance to the great reading-rooms. The main entrance of the 3 great arches, each 35 ft. high and 15 ft. wide, with deep recesses, like 3 great triumphal arches, form the main entrance to this great vestibule or hallway. The same arches, as

shown in the façade, go around all 4 sides of this hallway. On the west side there are balconies from the second floor. Between the courtyards, and centering with the main axis of this great hallway, is the main exhibition room, which is to be devoted to the exhibition of bookbinding and ornamental book covers, both of historic and artistic interest. Flanking the main central motive in elevation are 2 very large niches, with fountains and allegorical figures, representing science and art. On 42d Street, at the center of this façade, is another important entrance to the building, only a few steps above the sidewalk at that point, entering at the basement level. This large vestibule goes through the basement and the first story, and makes a direct approach to the lending and delivery rooms occupying 1 of 2 courts 85 ft. square. This court will be covered with glass under the level of the sills of the first-story windows. There is a third less important entrance on 40th Street communicating directly with stairs and elevators for the service of the building, all of this part of the building being devoted to practical purposes for the administration of the library. There will be in this part the business superintendent, the receiving and checking rooms, the catalogue room, accession rooms, ordering, printing and binding rooms, etc. The new library will be open to the public every week day and evening and on Sundays from 1 in the afternoon until 9 in the evening. The city will annually provide funds for the care and maintenance of the library, and the Park department will have charge of the walks, gardening and approaches of the building.

NEW YORK, UNIVERSITY OF THE CITY OF, non-sectarian; partially co-educational; had at close of 1897, 112 professors and instructors; 1,313 students; 37,111 volumes in library; \$1,000,000 in productive funds; \$253,199 gifts; \$524,667 income; chancellor, H. M. McCracken, D.D., LL.D.

NIAGARA UNIVERSITY, Niagara University Station, N. Y., Roman Catholic; partially co-educational; had at close of 1897, 61 professors and instructors; 260 students; 9,000 volumes in library; \$5,000 gifts; \$45,000 income; president, Patrick McHale, c.m.

NICARAGUA, a republic of Central America; area, 49,200 English square miles; population (1895), 380,000, including uncivilized Indians, 120,000; capital, Managua; president, José Santos Zelaya. The area includes the former Mosquito Reservation, annexed in 1894 as the Department of Zelaya, and the republic forms, with Salvador and Honduras, the Greater Republic of Central America, as constituted of the promotion of mutual foreign affairs in September, 1896. A British naval force took possession of the city and port of Corinto, 1896, in satisfaction of damages done to British interests and insult to a British acting consul. Security was given for the payment of the claim and the British force was withdrawn. Arbitration was offered by Nicaragua and refused. A treaty with Germany was ratified by the Congress in 1896.

The 76th anniversary of Nicaraguan independence was celebrated Sept. 15, 1897. At the same time a revolutionary movement had developed at Grenada and Jinotepe under Generals Palz and Alfaro, and President Zelaya was forwarding government troops to the disaffected localities. Later in the month the government troops defeated the insurgents under Palz, near Rivas; captured the leader, who within a few hours committed suicide; and re-established mail communications. On Oct. 1 there was much rejoicing at the capital over the announcement that the engineer appointed by President Cleveland to settle the boundary dispute between Costa Rica and Nicaragua had decided that the boundary between the two republics began at the harbor head of Greytown, as claimed by Nicaragua.

If the contention of Costa Rica had prevailed the entrance of the Nicaragua canal would have been wholly on Costa Rican territory, there being a difference of several leagues between the points claimed by each republic. A new complication in the matter of the construction of the projected canal arose during the session of Congress, over the approval by that body of a contract between the government and the Atlas Steamship Company, a British corporation, granting the company for 30 years the exclusive right to steam navigation on the San Juan River and Lake Nicaragua, two of the links of what will ultimately be the canal, and other powers which would practically rest the entire control of the canal in the steamship company. Congress authorized the government to lease or sell the national railroads; abolished capital punishment by act of July 1; authorized the establishment of duties on wine, beer, and spirituous liquors imported into the country; sanctioned a presidential proclamation of amnesty for all persons connected with the revolution in the summer; and provided for the inauguration at the national capital of a museum for the permanent exhibition of the products of the country. A meeting of merchants held at Managua, Aug. 31, adopted resolutions petitioning the government to place the finances on a gold basis, estimating the paper or silver dollar at 30 cents gold. The financial situation was desperate.

NICARAGUA CANAL. No constructive work on the projected canal has been done for a considerable period, and at the close of 1897 there were no indications of activity in the near future. The line as finally adopted shows a total length of 169.4 miles, of which 26.79 is in excavation, 56.5 through Lake Nicaragua, 21.6 in Decado, and San Francisco and Tolabasius, and 64.5 through the San Juan River. The plans showed 3 locks each at the east and west divides. In 1895 President Cleveland appointed a commission of engineers to report on the feasibility of constructing the canal on the plans adopted, and the report favored the Nicaragua route as the best for an interoceanic canal; recommended a number of deviations in the line as adopted; urged government control of the enterprise; and estimated the cost of the work, with the alterations suggested by the commission, at \$133,472,893, or nearly double the original estimate. In 1897 a new commission was appointed, with Rear-admiral John G. Walker, retired, as president, which went to Nicaragua on a naval vessel in November. The execution of a contract between the government of Nicaragua and a British steamship company, which would give the latter paramount interests in the waterways on the line of the projected route, and other exceptional privileges (see NICARAGUA), made it apparent that the United States government or the American Maritime Canal Company should take prompt steps to ascertain how far this contract would conflict with the concessions previously made by Nicaragua to interested parties in the United States. This view was accentuated in September, when a statement was made that Japan was negotiating with the Diet of the Greater Republic of Central America for control of the route of the canal.

NICOLL, WILLIAM ROBERTSON, LL. D., clergyman and author, was born in Aberdeen, Scotland, Oct. 10, 1851. Ill health caused him to turn from the pulpit to journalism about 1886, and he has been editor of *The Expositor*, *The British Weekly*, *The Bookman* (the two last he founded), and *The Expositor's Bible* (projected by him, to comprise about 40 volumes). He published with C. K. Shorter a new *Life of the Frontés* (1895); has been the London correspondent of *The Bookman*, of New York, since its inception in 1895; and "brought out" the distinguished authors James W. Barric, Samuel R. Crockett, and the Rev. John Watson, better known as Ian MacLaren.

NIVEN, WILLIAM, mineralogist and explorer, was born in Glasgow, Scotland;

spent 1879-84 in prospecting in Colorado, New Mexico, Arizona and Mexico; discovered the minerals thurougumite, ythridlite, and nivenite in Texas; aguilarite in Mexico; and several rare and valuable minerals on Manhattan Island and at West Paterson, N. J.; located in New York; and became a life member of the American Museum of Natural History and a member of the New York Academy of Science and of the Brooklyn Institute. In 1894 he discovered part of a ruined city in Mexico, but withheld public announcement pending negotiations with the Mexican government for the right of exploration. Gaining this he resumed his task, and in November, 1896, he was enabled to announce his discovery in the Mexican State of Guerrero of the great prehistoric city of Quechumietoplican, whose existence passed almost from memory for ages, and which has been considered a myth for many years. His excavations showed evidences of three distinct races of people which succeeded each other, and disclosed in all 22 temples, many with walls still standing, high altars, decorations in terra cotta, and hieroglyphics. Mr. Niven made a large shipment of objects found in the ruined city to the American Museum of Natural History, and in October, 1897, returned to Mexico for further excavations under an exclusive five-years' concession by the government.

NORDAU, Max Simon, physician and author, was born in Buda-Pesth, Hungary, July 29, 1849. Since 1873 he has resided in Paris, and besides many *feuilletons* and reviews has published numerous political, critical, and social works, of which the latest are *Degeneration* (1895), and the novels *The Comedy of Sentiment* (1895) and *The Drones Must Die* (1897).

NORFOLK, city and port of entry, Norfolk county, Va.; population (1890), 34,871. In 1896 the assessed valuations were: Real estate, \$21,220,090; personal property, \$3,980,180—total, \$25,200,270; tax rate, \$21 per \$1,000. The total bonded debt, Feb. 10, 1897, including a water debt of \$700,000, was \$3,570,700; sinking funds, \$310,000; net debt, \$3,260,700. The city owns the waterworks plant and other property valued at over \$700,000. The commercial movement of the customs district of Norfolk and Portsmouth in the years ending June 30, 1896 and 1897, was respectively as follows, all merchandise: Imports, \$219,350 and \$121,858; exports, \$6,761,484 and \$18,581,532—total foreign trade, \$7,980,834 and \$18,703,390. There are two national banks, with combined capital, \$600,000; deposits, \$1,584,118; and resources, \$3,333,026; electric street railroads with about 40 miles of track; electric lights; good sewerage; paved streets; steamship lines connecting regularly with Brazilian, European, and domestic ports; and 5 daily, 6 weekly, and 3 monthly periodicals. The United States Naval Station of Norfolk, formerly known as the Gosport Navy Yard, is at Portsmouth, practically a part of Norfolk, and is the largest one in the United States. Here the battleship *Texas* and the protected cruiser *Balough* were built, the reconstructed monitor *Amphitrite* completed, and several of the largest cruisers afloat, among them the *Columbia*, *Minneapolis*, and *New York* repaired or overhauled. The harbor and adjoining roadstead formed the rendezvous of the navies of the world that took part in the Columbian demonstration in 1893, and of the famous White Squadron during the excitement over Venezuela in 1895-96.

NORMAN, HENRY, journalist, was born in Leicester, England, about 1857; educated in Paris, Harvard College, and Leipsic; entered journalism on the staff of the *Pall Mall Gazette*; traveled in China, Japan, Korea, Siberia, Tonquin, and Malaya, and explored a hitherto unknown part of the Malay Peninsula; became assistant editor of the London *Daily Chronicle* in 1895; and was the

special correspondent of that paper in the United States during the winter of 1895-96, when the United States and Great Britain were particularly excited over the Venezuela boundary dispute, the Monroe doctrine, and the Anglo-American arbitration treaty. His letters and telegrams to the *Chronicle* on the state of public opinion in the United States had a large circulation, and, it is believed, a large influence for good. His best-known books are *The Real Japan* and *The Peoples and Politics of the Far East* (new editions, 1898), and *The Near East* (1898).

NORTH CAROLINA, one of the United States of North America; the twelfth of the original thirteen States to ratify the Federal constitution (Nov. 21, 1789); counties, 96; capital, Raleigh.

State Officers, 1897-1901.—Governor (elected for 4 years, salary \$3,000 per annum), Daniel L. Russell; lieutenant-governor, C. A. Reynolds; secretary of state, Cyrus Thompson; treasurer, William H. Worth; auditor, H. W. Ayer; attorney-general, Z. V. Wanser; adjutant-general, A. D. Cowles; superintendent of public instruction, Charles H. Mebane; chief justice of the supreme court, William T. Faircloth; associate justices, Robert M. Douglas, Walter Clark, D. M. Furches and W. A. Montgomery; clerk, Thomas S. Kenan—State government Republican, excepting Thompson, Worth, and Ayer, Populists; judiciary Republican, excepting Clark and Montgomery, Democrats.

Legislature, 1897.—Populists, senate 24, house 34, joint ballot 58; Republicans, senate 17, house 49, joint ballot 66; Democrats, senate 9, house 36, joint ballot 45.

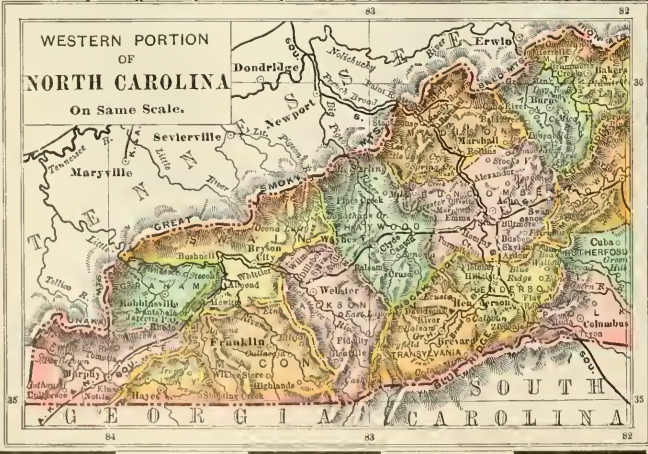
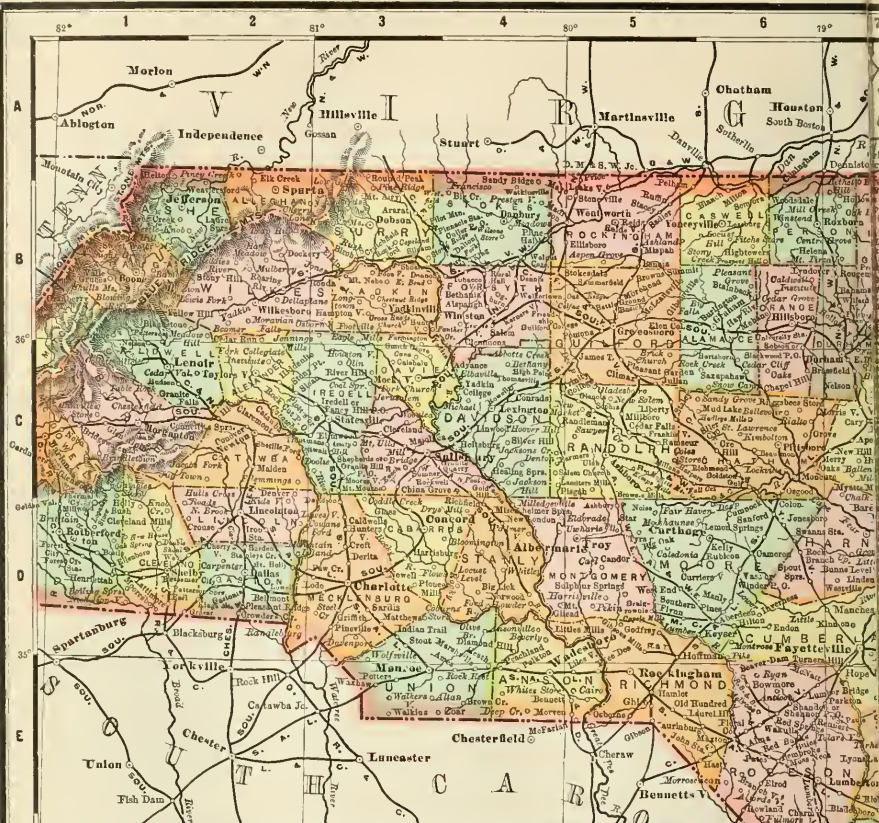
Elections.—In the State elections 1896 there were 330,200 votes cast for governor, of which the Republican candidate (Russell) received 154,052; the Democratic (Watson), 145,216; and the Populist (Guthrie), 30,932; Republican plurality, 8,936. The vote for associate justice of the Supreme Court was Democratic (Montgomery) 184,007, (Avery) 147,192, and (Brown) 143,950; Republican (Douglas), 179,126. The congressional elections resulted in the choice of a Democratic, 4 Populist, and 4 Republican candidates. In the presidential election, the Democratic candidate received 174,488 votes; the Republican, 155,222; the Prohibition, 635; the National Democratic, 578; and the National Prohibition, 247.

Farm Products.—Reported Dec. 31, 1897: Corn, 31,323,565 bush., from 2,409,505 acres, value \$13,469,133; wheat, 4,169,680 bush., from 521,210 acres, value \$3,919,499; oats, 5,820,581 bush., from 447,737 acres, value \$2,153,615; rye, 436,603 bush., from 49,614 acres, value \$261,962; buckwheat, 16,049 bush., from 1,459 acres, value \$7,864; potatoes, 1,075,470 bush., from 16,295 acres, value \$688,301; and hay, 165,634 tons, from 132,507 acres, value \$1,614,932—total value, \$22,115,306. The State had a cotton crop of 521,795 bales.

Farm Animals.—Reported Jan. 1, 1898: Horses, 146,991, value \$6,931,728; mules, 112,523, value \$6,036,220; cows, 258,607, value \$3,801,523; cattle, 321,228, value \$3,188,029; sheep, 290,445, value \$425,502; and swine, 1,426,774, value \$4,318,844—total value, \$24,701,846.

Mineral Products.—The production of the precious metals in the calendar year 1895 was estimated as follows: Gold, 2,622 fine oz., value \$54,200; silver, 400 fine oz., value \$520. Other products were coal, 24,900 short tons, value \$29,675; sandstone, \$3,500; granite, \$75,000; clay products, reported by 96 concerns and mostly common and pressed brick, \$400,983, and barytes, about 5,000 tons.

Finances.—The assessed valuations in 1895 were: Real estate, \$158,088,064; personal, \$76,391,837; railroads, \$25,084,549—total, \$259,564,450, the assessment being about 60 per cent. of cash value. The recognized funded debt, 1897, included 6 per cent. consols \$2,720,000, and 4 per cent. consols, \$3,360,700,



and the recognized unfunded debt, \$25,000 of the first and \$255,070 of the second consols. Interest on the 6 per cent. consols is paid from a special fund under the lease of the North Carolina railroad, of whose stock the State owns \$3,000,000, and practically the State debt is \$3,080,700, for the sale of the railroad stock would more than pay the principal of the 6 per cent. bonds.

Banks.—On Oct. 31, 1897, there were 27 national banks in operation and 10 in liquidation, the active ones having a combined capital of \$2,801,000, and holding \$748,500 in United States bonds. These banks had outstanding on loans and discounts \$6,770,284; held in coin and coin certificates \$435,356; had circulating notes outstanding \$874,356; held deposits \$5,462,497, and reserve \$1,445,732; and had ratio of reserve 26.47 per cent. The State banks, July 23, 1897, numbered 45, and had capital, \$2,046,870; deposits, \$3,379,895; resources, \$6,477,051; and surplus and undivided profits, \$494,712. There were 6 stock savings banks, with combined capital, \$280,000; depositors, 18,743; check deposits, \$126,746; and savings deposits, \$905,477; resources, \$1,373,491; and surplus and profits, \$39,591. The private banks numbered 16, with capital, \$279,560; deposits, \$780,113; resources, \$1,284,300; and surplus and profits, \$114,119. Combining all these institutions, the State had an aggregate banking capital of \$5,407,430.

Internal Revenue.—During the year ending June 30, 1897, the collections of internal revenue aggregated \$2,760,821.98, from the following sources: Distilled spirits, \$823,303.36; tobacco, \$1,922,989.34; fermented liquors, \$1,989.17; oleo-margarine, \$168; and penalties, \$12,271.65. During that year there were 42 single-account cigar factories, which used 3,118,709 lbs. of tobacco, and had an output of 5,060,905 cigars and 937,319,550 cigarettes; and 232 other tobacco factories, which used 33,834,931 lbs. of materials, and had an output of 17,374,486 lbs. of plug tobacco, 6,530 lbs. of fine cut, 7,228,198 lbs. of smoking, and 104,926 lbs. of snuff. The number of distilleries of all kinds in operation was 908; amount of fruit brandy produced, 9,312 gals.; and spirits rectified, 260,547.35 gals., and gauged, 1,744,848 gals.

Cotton Mills.—In February, 1896, there were reported in operation, 184 cotton and woolen mills, having 989,093 spindles and 24,624 looms; employing \$16,710,600 capital and 24,825 operatives; and using in manufacture during 1895 a total of 374,220 bales of cotton. It is a matter of local pride that nearly all the operatives are natives of the State; that nearly the entire consumption of cotton was grown in the State; that the great bulk of the capital investment belonged in the State; and that for several years the profits have been from 14 to 45 per cent. per annum. The output of 1895 included 79,475,949 lbs. of yarn in 26 counties; 87,742,655 yds. of domestic in 13 counties; 51,737,547 yds. of plaids in 6 counties; and 2,000,000 yds. of woolen goods in two counties.

Railroads.—The annual report of the State Railway Commissioners for 1895 showed: Length of roads in the State, 3,616 miles; value, \$24,502,000, an increase in five years of \$12,500,000; number of officers and employees, 10,000; net earnings, \$2,974,000; increase in value of property during the year, \$538,000; roads in hands of receivers, 3; and roads abandoned during the year, 3. The Atlantic Coast Line system comprised 14 roads in the State; the Southern Railway system, 17; and the Seaboard Air Line system, 11.

Commerce.—During the calendar year 1897, the imports of merchandise at the ports of Pamlico and Wilmington had a value of \$210,849; and the exports aggregated \$8,359,979.

Publications.—Reported March, 1898: Daily, 25; semi-weekly, 3; weekly, 195; semi-monthly, 8; and monthly, 23.

Post-Offices.—Reported Jan. 1, 1897: Second-class, 9; third-class, 32 (presidential, 41); fourth-class, 2,808; money-order offices, 306; limited money-order offices, 24.

Churches.—The Regular Baptist, South, is the strongest denomination in the State, and is followed in their order by the Regular Baptist, Colored; African Methodist; Methodist Episcopal, South; Presbyterian, South; Methodist Episcopal; Methodist Protestant; Christian; and Disciples of Christ. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for North Carolina, 5,905 evangelical Sunday schools, 46,897 officers and teachers, and 392,706 scholars—total members, 439,603.

Schools.—At the end of the school year 1895-96, the number of children of school age in the State was estimated at 623,400, of whom 370,920 were enrolled in the public schools, and 231,725 were in average daily attendance. There were 7,885 teachers; public school property valued at \$1,003,165; and expenditure in the year \$817,562. Of the total enrollment 244,376 were white pupils and 126,544 colored; of the attendance 155,899 were white and 75,826 colored; and of the teachers, 5,129 were white, and 2,756 colored. There were 15 universities and colleges of liberal arts, with a total of 189 professors and instructors; 3,126 students in all departments (2,380 males and 746 females); 197 scholarships; 91,450 bound volumes in the libraries; \$185,275 in total income; \$1,506,693 invested in grounds and buildings; \$664,629 in productive funds; and \$101,805 receipts from gifts. The centennial commencement of the State University was held June 4-6, 1895, and during the year the agricultural department of the State was consolidated with the Agricultural and Mechanical College. The appropriations of the legislature in 1895 for educational purposes for the ensuing biennial period included Deaf and Dumb Institute, \$91,500; Blind Institute, \$80,000; State University, \$20,000; Normal and Industrial School, \$37,500; Agricultural and Mechanical College, \$50,000; similar institution for colored youth, \$10,000; and colored normal schools, \$13,250.

Libraries.—In 1896, there were reported 40 public libraries of 1,000 volumes each and upward, with a total of 218,757 bound volumes and 16,192 pamphlets.

Population.—In 1890, 1,617,947, of whom 799,149 were males: 818,798 females; 1,614,245 natives; 3,702 foreign-born; 1,055,382 whites; and 562,565 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 1,780,000.

NORTH DAKOTA, one of the United States of North America; admitted to the Union Nov. 2, 1889; counties, 39; capital, Bismarck.

State Officers, 1897-99.—Governor (elected for 2 years, salary \$3,000 per annum), Frank A. Briggs; lieutenant-governor, J. M. Devine; secretary of state, Frederick Farley; treasurer, George E. Nichols; auditor, N. B. Hannum; attorney-general, John F. Cowan; superintendent of public instruction, J. G. Holland; commissioner of agriculture, H. V. Thomas; commissioner of insurance, Frederick B. Fancher; chief justice of the supreme court, Guy C. H. Corliss; associate justices, Alfred Wallin and J. M. Bartholomew; clerk, R. D. Hoskins—all Republican.

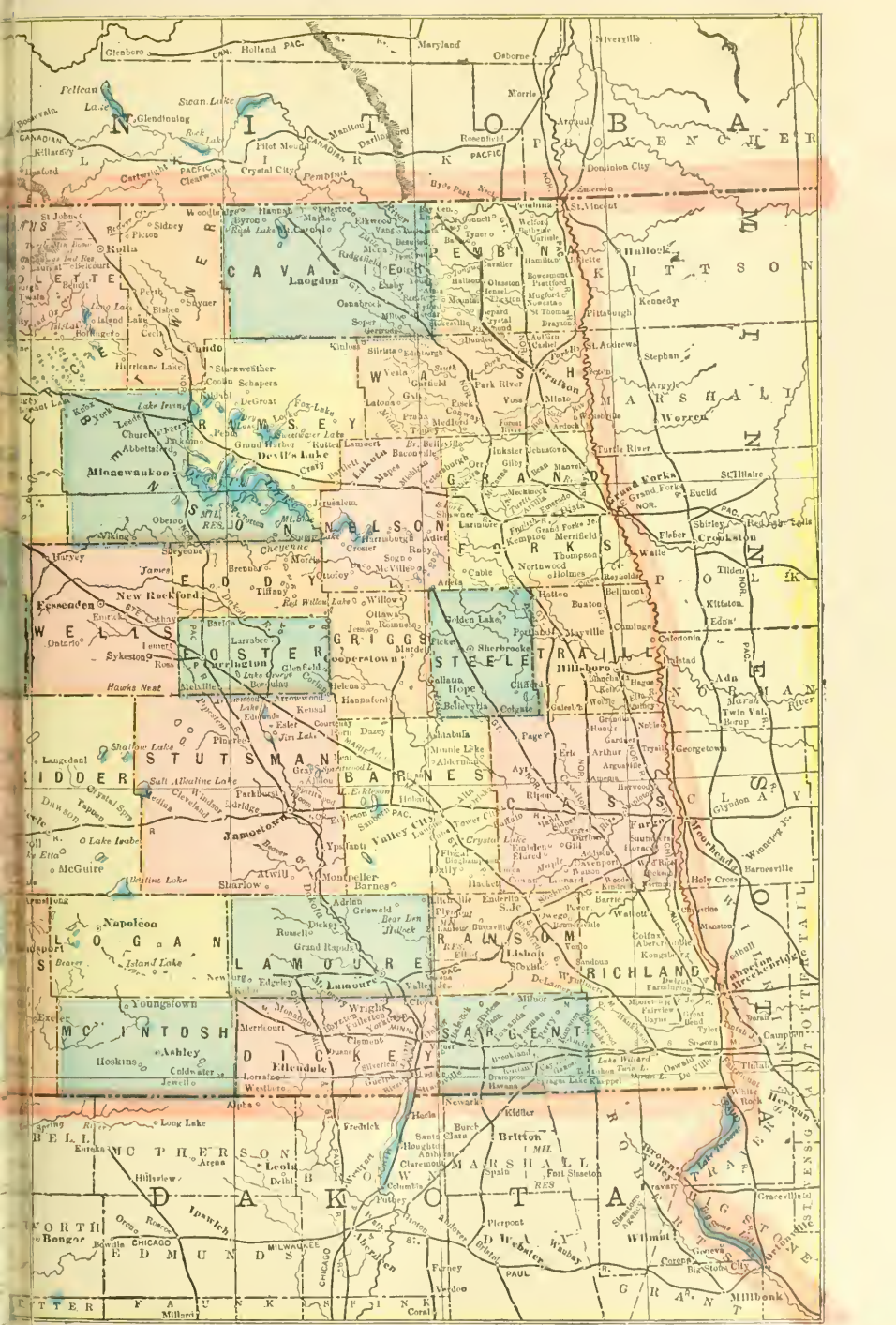
Legislature, 1897.—Republicans, senate 23, house 44, joint ballot 67; Fusionists, senate 6, house 16, joint ballot 22; Democrats, senate 2, house 1, joint ballot 3; Independent, house 1, joint ballot 1; Republican majority, senate 15, house 26, joint ballot 41.

Elections.—In the State elections 1896 there were 46,608 votes cast for governor, of which the Republican candidate (Briggs) received 25,918, and the



NORTH DAKOTA

SCALE OF MILES
0 5 10 20 30 40 50



Fusion candidate (Richardson) 20,690. All the Republican candidates for State offices were elected. The vote for representative-at-large in Congress resulted in the choice of the Republican candidate (Johnson) by a plurality of 4,061. In the presidential election, the Republican candidate received 26,336 votes; the Democratic, 20,686; and the Prohibition, 358.

Farm Products.—Reported Dec. 31, 1897: Corn, 426,020 bush., from 25,060 acres, value \$136,326; wheat, 28,353,552 bush., from 2,752,772 acres, value \$20,981,628; oats, \$11,397,144 bush., from 495,528 acres, value \$2,963,257; rye, 23,898 bush., from 1,648 acres, value \$8,603; barley, 4,663,305 bush., from 207,258 acres, value \$1,259,092; potatoes, 2,955,843 bush., from 29,857 acres, value \$975,428; and hay, 621,061 tons, from 388,163 acres, value \$2,018,448—total value, \$28,342,762.

Farm Animals.—Reported Jan. 1, 1898: Horses, 170,036, value \$6,451,838; mules, 7,008, value \$392,712; cows, 167,719, value \$4,587,115; cattle, 245,282, value \$5,660,008; sheep, 352,668, value \$876,028; and swine, 119,105, value \$633,045—total value \$18,580,746.

Finances.—The treasurer's report for the year ending Dec. 31, 1895, showed: Balance at beginning of the year, \$61,568.16; receipts, \$1,160,225.45; disbursements, \$1,103,676.20; balance at end of the year, \$56,549.25. The debt statement, Feb. 17, 1897, was: Bonded debt, \$843,196; floating debt, \$80,000. The assessed valuations in 1896 were: Real estate, \$64,722,092; personal, \$28,676,886 (including railroad property, \$7,886,030); total, \$93,398,978; and the State tax rate was \$4.30 per \$1,000.

Banks.—On Oct. 31, 1897, there were 27 national banks in operation and 16 in liquidation, the active ones having a combined capital of \$1,985,000, and holding \$555,000 in United States bonds. These banks had outstanding on loans and discounts \$4,321,771; held in coin and coin certificates, \$242,521; had issued for circulation \$2,428,550, redeemed, \$1,900,060, and had outstanding, \$528,490; held deposits, \$5,625,818, and reserve, \$2,261,566; and had ratio of reserve, 40.20 per cent. During the year ending Sept. 30, 1897, the exchanges at the United States clearing house at Fargo aggregated \$6,165,327, an increase of \$573,939 over the total for the previous corresponding period. The State banks, May 14, 1897, numbered 73, and had capital, \$1,068,000; deposits, \$2,598,499; loans and discounts, \$2,767,030; resources, \$4,237,362, and surplus and profits, \$473,344. Combining all these institutions, the State had an aggregate banking capital of \$3,053,000.

Internal Revenue.—The collections and details of taxable manufactures are included in the totals for Nebraska (*v. c.*).

Railroads.—On Jan. 1, 1895, there were 2,517.20 miles of railroad in the State, and there had been no material increase in 2 years. A detailed report at the end of 1894 showed: Capital stock, \$1,000,000; funded debt, \$963,000; total investment, \$1,963,000, all of which had been expended on construction and equipment; and interest paid on bonds, \$57,780. In 1895 the railroads paid State taxes amounting to \$97,223.90.

Commerce.—During the year ending June 30, 1897, the imports of merchandise into North and South Dakota had a value of \$503,999; and the total value of exports, almost wholly domestic, was \$1,987,412.

Publications.—Reported March, 1898: Daily, 7; semi-weekly, 1; weekly, 127; semi-monthly, 1; and monthly, 6.

Post-Offices.—Reported Jan. 1, 1897: Second-class, 2; third-class, 19 (presidential, 21); fourth-class, 525; money-order offices, 156; and limited money-order offices, 10.

Churches.—The Roman Catholic is the strongest denomination in the State, and is followed in their order by the Lutheran, Independent Synods; Methodist Episcopal; Presbyterian; Regular Baptist; Congregational; and Lutheran, General Council. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for North Dakota, 685 evangelical Sunday schools, 4,000 officers and teachers, and 38,350 scholars—total members 42,350, a gain in membership in 3 years of 17,628.

Schools.—At the end of the school year 1895-96 the number of children of school age in the State was estimated at 82,890, of whom 57,088 were enrolled in the public schools, and 38,478 were in average daily attendance. There were 3,027 teachers; public school property valued at \$1,926,893; and total expenditures, \$1,125,893, of which \$586,774 was paid to teachers. The colleges of liberal arts numbered 3, and had a total of 29 professors and instructors; 526 students in all departments (264 males and 262 females); \$208,000 invested in grounds and buildings; \$28,000 in scientific apparatus; \$30,000 in productive funds; 7,300 bound volumes in the libraries; \$42,245 in total income; and \$5,367 receipts from gifts. The State Agricultural and Mechanical College at Fargo had in 1896 an experimental station staff, 11; faculty, 15; students, 178; land under cultivation, 615 acres, valued at \$25,000; and special buildings and equipments valued at \$97,500. The college has the largest creamery in the State, with a capacity of 1,500 lbs. of milk per hour. There were a State University at Bismarck; Red River Valley University at Wahpeton; Fargo College, Fargo; St. Bernard's College, Grand Forks; State Normal Schools, Maryville and Valley City; Normal and Classical Academy, Arvilla; and commercial colleges at Grand Forks and Fargo. For the defective classes there were a State School for the Deaf and Dumb at Devil's Lake, and a State Institution for the Blind at Bathtage.

Libraries.—In 1896 there were reported 6 public libraries of 1,000 volumes each and upward, with a total of 23,682 bound volumes and 3,100 pamphlets.

Population.—In 1890, 182,719, of whom 101,590 were males; 81,129 females; 101,258 natives; 81,461 foreign-born; 182,123 whites; and 596 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 252,000.

NORTH DAKOTA, UNIVERSITY OF, Grand Forks, N. D., non-sectarian; co-educational; had at close of 1897, 14 professors and instructors; 265 students; 6,000 volumes in library; \$750,000 in productive funds; \$35,000 income; president, Webster Merrifield, M.A.

NORTHWESTERN COLLEGE, Naperville, Ill., Evangelical; co-educational; had at close of 1897, 17 professors and instructors; 375 students; 4,000 volumes in library; \$90,000 in productive funds; \$10,000 gifts; \$22,000 income; president, H. J. Kiekhoefer, A.M.

NORTHWESTERN UNIVERSITY, Evanston, Ill., non-sectarian; co-educational; had at close of 1897, 281 professors and instructors; 2,803 students; 33,144 volumes in library; \$2,465,827 in productive funds; \$275,300 income; president, Henry W. Rogers, LL.D.

NORTHWESTERN UNIVERSITY, Watertown, Wis., Lutheran; co-educational; had at close of 1897, 9 professors and instructors; 154 students; 3,299 volumes in library; \$10,000 gifts; \$11,280 income; president, A. F. Ernst.

NORWAY, with Sweden, a co-equal part of the kingdom of Sweden and Norway, area; 124,445 square miles; population (1891), 2,000,917; capital, Kristiania; reigning king, Oscar II., born Jan. 21, 1829; succeeded his brother on

the throne, Sept. 18, 1872. The legislative power is exercised by the Storting or General Court, subject to veto of their acts by the king; but if 3 Storthings chosen by separate and subsequent elections vote for a bill, that bill becomes law, the king's veto notwithstanding. The Storting sits every year; members are elected for 3 years. Every Norwegian male citizen of 25 years or over who pays a certain amount of income tax has the right to vote for members of the Storting, or rather for electors of such members. In 1894 the qualified voters numbered 184,124, or 9.20 per cent. of the population, and 165,999, or 90.16 per cent. of them exercised the franchise. The Storting consists of 114 members. When the Storting assembles it divides itself into two houses, the Lagthing and the Odelsting, the Lagthing composed of one-fourth of the whole number. The initiative is vested in the Odelsting and its acts pass to the Lagthing for approval or rejection; in case of disagreement, the two houses vote in joint assembly and the final decision is given by a two-thirds majority. The king, as head of the executive, exercises his authority through a council of state. The local government of districts or counties and of smaller subdivisions is administered by local councils elected by voters for the Storting. The number of persons engaged in agriculture at the time of the census of 1891 was: Males, 408,365; females, 247,551—total, 655,916; in mines, metal works and other industries, males, 212,560; females, 131,999—total, 347,559; persons depending on charity, males, 20,700; females, 24,987—total, 45,687. Excess of births over deaths (1894), 26,095. Emigration (1895) to the United States, 6,153; to other countries, 54. The towns having over 20,000 inhabitants (1891) were: Kristiania, 151,239; Bergen, 53,684; Frondhjem, 29,162; Stavangir, 23,899; Drammen, 20,687. The national Lutheran church is indorsed by the state; other churches are tolerated; but Jesuits are barred. Among the dissenters from the state church, according to the last census, were 1,004 Roman Catholics, 8,187 Methodists, 4,228 Baptists, 348 Mormons, 231 Friends. Education is compulsory. There were 6,139 public elementary schools with 244,203 pupils in country districts, and 2,613 classes with 56,366 pupils in towns—total pupils, 300,569. In secondary schools there were 11,163 pupils. The University of Kristiania was (1895) attended by 1,142 students. The total revenue of the general government 1895 was \$15,483,950; expenditure, \$15,297,120; the expenditure on account of public works, \$3,102,300; public debt, June 30, 1895, \$38,313,140. The army is raised mainly by conscription, to which all men past 22 years of age are liable. Those who are drafted first enter the school of recruits; thence they are taken into the battalions, which for 3 years have an annual practice of 24 days; then they pass into the first and the second reserve. The troops of the line actually under arms must not exceed 18,000 men, even in time of war, without consent of the Storting. For the naval establishment see NAVIES OF THE WORLD.

About 75 per cent. of the area of Norway is unproductive; 22 per cent. forest; and only 3 per cent. arable. The total value of the produce in 1890 (latest reports) was: For cereals, \$10,330,945; for potatoes, \$6,637,926. The live stock (1891) was: Horses, 159,898; cattle, 1,006,499; sheep, 1,417,524; goats, 272,458; swine, 121,057; reindeer, 170,134. The forest area is about 26,320 square miles, of which 73 per cent. is pine forest. The export of timber and lumber amounts to over \$11,774,900. The mining and metal industry is unimportant. The number of persons engaged in the sea-fisheries 1894 was 125,943; value of the catch, \$6,669,000. Vessels engaged in foreign trade Jan. 1, 1896: Sail, 3,377, of 1,202,497 tons; steam, 515, of 299,106 tons. The commerce of Norway was better during 1896 than during 1895. The imports rose from 89,500,000 kroner to 101,000,-

000 kroner (\$27,068,000), and the exports from 93,000,000 kroner to 102,500,000 kroner (\$27,470,000). The increase in imports was partly due to the introduction of locomotives and machinery of various sorts. The total length of State railways (1895) was 1,014 miles. There were 2 lines owned by private companies, total length 59 miles. The receipts of the state railways were \$2,155,410, and the expenditure \$1,756,782. The total length of telegraph lines, 6,270 miles; wires, 13,129 miles.

Recent Events.—For several years there has been a determined struggle in Norway to secure greater independence for it in the foreign policy of the dual kingdom. A resolution of the Storting favoring independent consulates was vetoed by the king, the act leading to prolonged ministerial complications. The Norwegians next insisted on a separate flag, and in 1896 the Odelsting passed a bill providing for the recognition of such a flag. In October, 1897, the election for members of the Storting resulted in the capture by the Liberals of 15 seats previously held by the Conservatives, thus giving the Liberals the control of the new government and strengthening the opposition to Sweden. The Liberals won on the platform: 1. Separate ministers for foreign affairs; 2. Separate consular service; 3. The "clean" Norwegian flag established by law; 4. Suffrage for every self-supporting man over 25 years of age. See SWEDEN.

NOTTINGHAM, parliamentary, municipal, and county borough in England; population (1891), 213,877; (1896, estimated) 229,775. The borough is widely noted for its manufactures of cotton and silk hosiery and of bobbinet and laces, and it has a large trade with the United States. In the first six months of 1897 the exports declared here for the United States had an aggregate value of \$2,891,857.90, an increase of \$721,376.14 over the total in the corresponding period of 1896. The largest items were lace, sheepskins, hosiery, silk and linen.

NYE, EDGAR WILSON (best known as BILL NYE), humorist, was born in Shirley, Me., Aug. 25, 1850; died in Asheville, N. C., Feb. 22, 1896. His last literary work, *A Comic History of England: From the Druids to the Reign of Henry VIII.*, was published after his death.

OAKLAND, city, capital of Alameda county, Cal.; population (1890), 48,682. In 1896 the assessed valuations aggregated \$45,000,000, and the tax rate was \$10 per \$1,000. The total debt, Jan. 1, 1897, was \$612,000. Including real estate belonging to the school and fire departments and in the public parks, the city owned real estate valued at \$979,150. There were 2 national banks in operation, with combined capital, \$450,000; deposits, \$786,650; and resources, \$1,716,637. The city has gas and electric lights, electric street railroads, 8 public parks, over 140 miles of macadamized streets, waterworks supplied from artesian wells in the neighborhood of Alameda and by gravity from reservoirs and watersheds in the hills back of the city, a good sewerage system, and 3 daily, 10 weekly, and 5 monthly periodicals.

OATS. The oat crop of the United States, in more than 150 varieties, ranks third among the cereal productions. In 1897 the acreage was 25,730,375, and the production 698,767,809 bush., valued at \$147,974,719. The principal oat States, with their yield, were: Iowa, 103,721,100 bush.; Illinois, 92,798,496; Wisconsin, 62,125,310; Nebraska 51,731,095; New York, 45,147,002; Minnesota, 41,147,002; Kansas, 38,680,080; Indiana, 33,706,582; Pennsylvania, 31,842,538; Ohio, 29,907,392; and Michigan, 22,940,450.

OBERLIN COLLEGE, Oberlin, O., non-sectarian; co-educational; had at close of 1896, 88 professors and instructors; 1,411 students; 44,350 volumes in

library; \$958,215 in productive funds; \$600 in grounds and buildings; \$22,000 gifts; \$132,800 income; chairman of faculty, A. A. Wright, M.A.

OHIO, one of the United States of North America; admitted to the Union Nov. 29, 1802; counties, 88; capital, Columbus.

State Officers, 1898-1900.—Governor (elected for 2 years, salary \$8,000 per annum), Asa S. Bushnell; lieutenant-governor, Asahel W. Jones; secretary of state, Charles Kinney; treasurer, Samuel B. Campbell; auditor, Walter D. Gilbert; attorney-general, Frank S. Monett; adjutant-general, H. A. Axline; commissioner of common schools, Lewis D. Bonebrake; commissioner of insurance, W. S. Matthews; secretary state board of agriculture, W. W. Miller; chief justice of the supreme court, Jacob F. Burket; associate justices, Marshall J. Williams, Thaddeus A. Minshall, William T. Spear, John A. Shauck, and Joseph P. Bradbury; clerk, Josiah B. Allen—all Republicans.

Legislature, 1898.—Republicans, senate 17, house 62, joint ballot 79; Democrats, senate 18, house 47, joint ballot 65; Independent Republican, senate 1, joint ballot 1; Republican majority, house 15, joint ballot, 15.

Elections.—In the State elections 1897, there were 851,969 votes cast for governor, of which the Republican candidate (Bushnell, renominated) received 429,915; the Democratic (Chapman), 401,750; the Prohibition (Holliday) 7,558; the Populist (Coxey), 6,254; the Social Labor (Watkins), 4,242; the Liberal (Richardson), 3,106; the National Democratic (Dexter), 1,661; and the Negro Protective (Lewis), 483; Republican plurality, 28,165. The congressional elections in 1896 resulted in the choice of 15 Republican and 6 Democratic candidates. In the presidential election, the Republican candidate received 525,991 votes; the Democratic, 477,497; the Prohibition, 5,068; the National Democratic, 1,857; and the Social Labor, 1,167.

Farm Products.—Reported Dec. 31, 1897: Corn, 92,165,580 bush., from 2,835,864 acres, value \$23,011,395; wheat, 38,049,133 bush., from 2,251,428 acres, value \$33,483,237; oats, 29,907,392 bush., from 934,606 acres, value \$5,981,478; rye, 850,446 bush., from 47,247 acres, value \$374,196; barley, 674,338 bush., from 23,661 acres, value \$276,479; buckwheat, 193,914 bush., from 10,773 acres, value \$96,957; potatoes, 7,310,226 bush., from 174,053 acres, value \$4,532,340; and hay, 2,619,978 tons, from 1,819,429 acres, value \$16,374,862—total value, \$68,406,060.

Farm Animals.—Reported Jan. 1, 1898: Horses, 666,836, value \$27,590,332; mules, 17,761, value \$766,482; cows, 729,441, value \$21,409,093; cattle, 606,127, value \$16,463,012; sheep, 2,416,346, value \$8,274,777; and swine, 2,330,355, value \$12,737,720—total value, \$85,241,716.

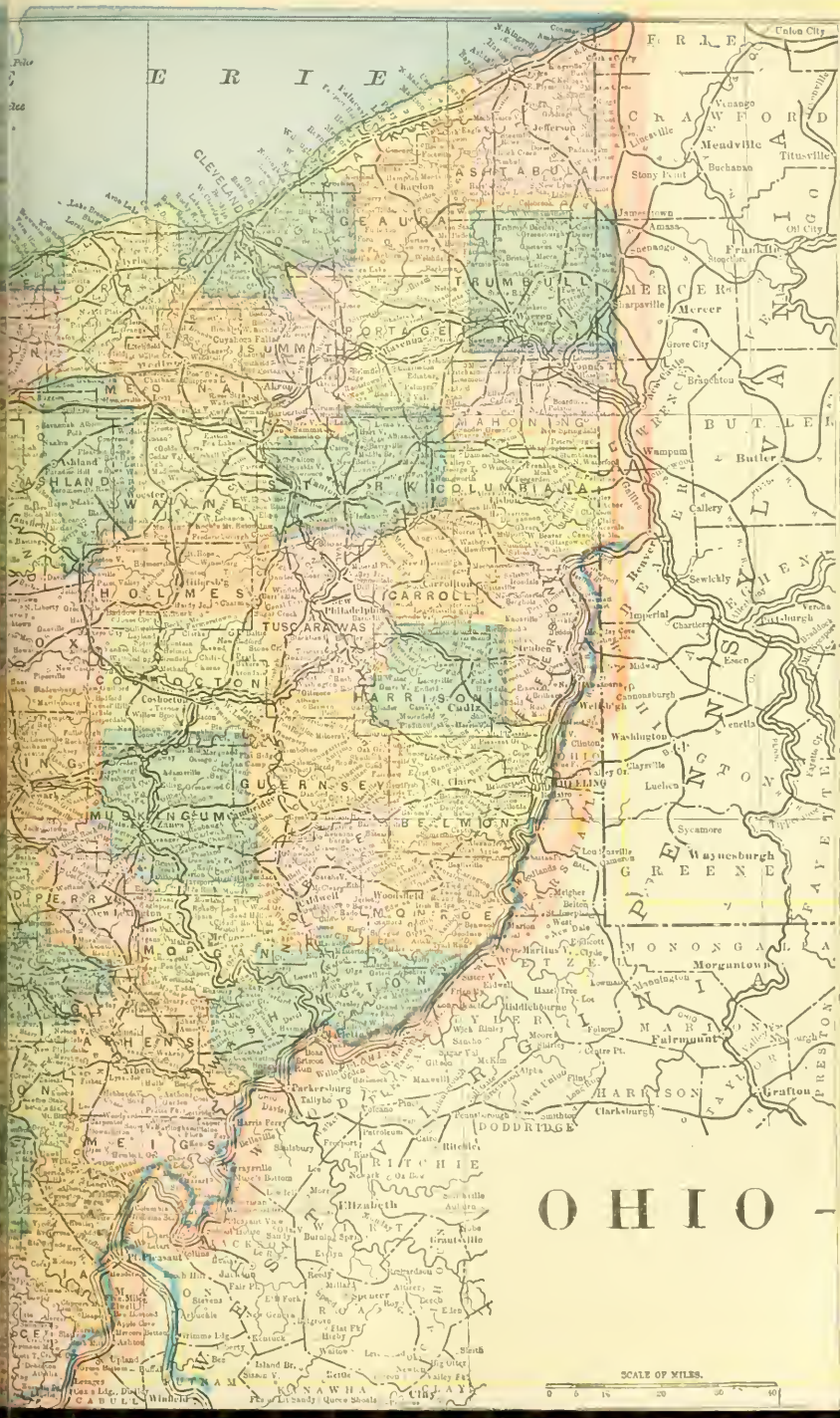
Mineral Products.—The following is a summary of the mineral products for the calendar year 1895: In *coal*, the area worked was between 10,000 and 12,000 square miles; 21,644 persons were employed in the industry; and the average number of days' work was 176. The output was 13,355,806 short tons, value \$10,618,477, an increase in the year of 1,445,950 tons. The best furnace coal was mined in the Mahoning Valley, the best coking in Columbiana county, the best domestic in Jackson county, and the best gas coal in Belmont county. Among the most productive counties were: Perry, 1,711,944 tons; Hocking, 1,587,985; Jackson, 2,005,384; Athens, 1,433,226; Belmont, 846,643; Guernsey, 886,581; and Jefferson, 885,322. Nine concerns with 435 ovens used 42,963 short tons of coal and produced 22,436 short tons of *coke*, valued at \$43,671. In *clay* products, 980 concerns reported, value of common and pressed brick, \$2,405,740; firebrick, \$696,175; vitrified paving brick, \$787,878; drain tile,

\$884,638; other tile, \$797,985; sewer pipe, \$1,746,503; terra cotta work, \$109,278; stoneware, \$563,355; and miscellaneous, \$2,600,063—total, \$10,649,382. *Quarrying* yielded sandstone to the value of \$1,449,659, the greater part in Cuyahoga and Lorain counties, giving the State first rank in output; and limestone, about equally divided between lime and building and road-making, \$1,568,713. Three *cement* works produced 38,060 bbls. of hydraulic, value \$22,836, and four, 136,698 bbls. of Portland, value \$239,221. The *salt* output was 781,033 bbls., value \$326,520, principally common, fine, dairy, and table. Other products were: *Iron ore*, 44,834 long tons, all carbonate, in which the State ranked first, value \$44,834; *pig iron*, 1,463,789 long tons, an increase over the two preceding years; *gypsum*, 21,662 short tons, value, prepared, \$71,204; *petroleum*, 19,545,233 bbls., a steady increase; and *natural gas*, consumption value, \$1,255,700, a steady decrease.

Finances.—The receipts of the year ending Nov. 15, 1896, with balances gave the treasury, \$7,126,385.45; the expenditures were \$6,601,260.36; and the balance was \$525,125.09. The funded State debt, Feb. 1, 1896, was \$1,541,665, and the State had in trust funds an irreducible debt of \$4,649,609. Local debts comprised counties, \$12,587,763; cities, \$72,478,234; incorporated villages, \$6,337,406; townships, \$968,500; and special school districts, \$6,697,309—total, \$99,069,212. The assessed valuations in 1896 were: Real estate, \$1,226,988,666; personal, \$514,039,771—total, \$1,741,028,437. At the rate that payments of the funded debt had been made since 1890 it was expected that this entire obligation would be liquidated by July 1, 1900.

Banks.—On Oct. 31, 1897, there were 249 national banks in operation and 105 in liquidation, the active ones having a combined capital of \$45,630,100, and holding \$18,890,100 in United States bonds. These banks had outstanding on loans and discounts, \$118,820,138; represented by demand paper, with individual or firm names, \$6,280,119; the same secured by stocks, bonds, and other personal securities, \$12,366,357; time paper with two or more individual or firm names, \$65,880,862; time paper with single individual or firm name, \$14,220,136; and the same secured by stocks, bonds, and other personal securities, \$20,072,666. The banks held in coin and coin certificates \$8,695,203, of which \$6,344,408 was in gold coin. The circulation account was: Total issue, \$134,771,910; redeemed, \$116,362,375; outstanding, \$18,409,535. There were deposits, \$117,635,924; reserve required, \$23,092,187; reserve held, \$39,775,396; ratio of reserve, 13 banks in Cincinnati, 32.71 per cent.; 12 in Cleveland, 32.25; and 248 elsewhere in the State, 34.94. During the year ending Sept. 30, 1897, the exchanges at the United States clearing houses at Cincinnati and Cleveland aggregated \$908,337,534, a decrease of \$6,535,081 from the total of the previous corresponding period. The State banks at last biennial report, Oct. 5, 1896, numbered 131, and had capital, \$10,814,300; deposits, \$37,530,377; resources, \$52,222,539; and surplus and profits, \$2,777,102. Four mutual savings banks had depositors, 65,702; deposits, \$26,183,231; resources, \$28,669,668; and surplus and profits, \$2,483,137; and June 30, 1897, 7 stock savings banks had capital, \$1,851,500; depositors, 21,600; check deposits, \$7,642,331; and savings deposits, \$3,767,640; resources, \$15,143,914; and surplus and profits, \$1,817,848. On the last date there were 69 private banks, with capital, \$2,180,922; deposits, \$6,821,236; resources, \$9,897,294; and surplus, \$744,545. Combining all these institutions, the State had an aggregate banking capital of \$60,476,822.

Building and Loan Associations.—The last general report on these associations (1893) showed a total of 721 organizations, of which 718 were local, 3 national,



OHIO

SCALE OF MILES.

0 5 10 20 30 40 50 60

26 serial, 651 permanent, and 44 terminating. There were reported by 719 associations, shareholders, 238,215; by 576, shares issued, 1,585,383; by 721, shares in force, 1,036,184; and by 720, shares free, 741,384, and shares borrowed on, 294,175. The total assets and liabilities were \$67,626,374; loans on real estate, \$62,798,299; and dues and profits, \$52,053,450. During the life of 699 associations, 1,512 mortgages were foreclosed, involving \$2,460,602, on which there was a loss of \$103,230. Of all associations, 656 reported 62,188 homes and 645 reported 6,657 other buildings acquired. A special report in 1897 showed, number of associations, 785; shares outstanding, 1,256,872; installment dues paid in, paid-up and prepaid stock, and profits, \$78,792,664; loans, \$83,309,560; and total assets, \$92,121,651.

Internal Revenue.—During the fiscal year ending June 30, 1897, the collections of internal revenue aggregated \$12,748,788.11, from the following sources: Distilled spirits, \$7,572,868.89; tobacco, \$2,458,532.77; fermented liquors, \$2,473,865.24; oleomargarine, \$122,131.04; miscellaneous, \$118,393.34; and penalties, \$2,859.14. During that year there were 2,243 single-account cigar factories, which used 8,377,353 lbs. of tobacco, and had an output of 449,694,227 cigars and 5,072,020 cigarettes; and 265 other factories, which used 20,898,816 lbs. of materials and had an output of 11,845,551 lbs. of plug tobacco, 342,008 lbs. of fine cut, 5,792,278 lbs. of smoking, and 6,452 lbs. of snuff. There were 66 distilleries of all kinds in operation; 26,703 gals. of fruit brandy produced; 8,676,437.67 gals. of spirits rectified, and 29,865,099 gals. gauged; and 2,631,669 bbls. of fermented liquors produced.

Railroads.—On Jan. 1, 1894, the total main track length of local railroads was 8,558.74 miles, and during that year 12 companies laid a total of 93.90 miles of new track, making the aggregate mileage on Jan. 1, 1895, 8,652.64. The local and through trunk lines aggregated 13,138.43 miles, represented a total investment of \$1,057,706,588, and cost \$1,028,076,063. The local companies had a combined capital of \$463,799,214, funded debt \$480,399,730, and total investment \$995,740,468, and had expended for construction and equipment \$947,740,897. The gross earnings were \$127,064,748; net earnings, \$33,410,850; interest paid on bonds, \$18,386,018; and dividends paid on stocks, \$11,845,630.

Commerce.—During the year ending June 30, 1897, the imports of merchandise at the ports of Cuyahoga, Miami, Sandusky, Cincinnati, and Columbus had a value of \$3,337,143; and the exports at the three first ports only amounted to \$2,262,816.

Publications.—Reported March, 1898: Daily, 163; tri-weekly, 8; semi-weekly, 27; weekly, 811; bi-weekly, 5; semi-monthly, 15; monthly, 146; bi-monthly, 3; and quarterly, 12.

Post-Offices.—Reported Jan. 1, 1897: First-class, 11; second-class, 54; third-class, 134 (presidential, 199); fourth-class, 3,082; money-order offices, 1,099; money-order stations, 39; and limited money-order offices, 57.

Churches.—The Roman Catholic is the strongest denomination in the State, and is followed in their order by the Methodist Episcopal; Presbyterian; Regular Baptist, North; Disciples of Christ; United Brethren; Lutheran, Independent Synods; Reformed; Congregational; German Evangelical Synod; and Christian. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Ohio, 7,468 evangelical Sunday schools, 98,058 officers and teachers, and 695,367 scholars—total members, 793,425, a gain of 56,106 in three years.

Schools.—At the end of the school year 1895-96, the number of children of

school age in the State was estimated at 1,094,000, of whom 820,562 were enrolled in the public schools, and 597,925 were in average daily attendance. There were 25,180 teachers, to whom \$8,317,424 was paid in salaries; 13,072 schoolhouses; public school property valued at \$40,175,975; and expenditures in the year, \$12,326,919. There were 37 universities and colleges of liberal arts, with a total of 877 professors and instructors; 12,129 students in all departments (8,067 males, and 4,062 females); \$1,059,363 in total income; \$7,507,038 invested in grounds and buildings; 404,296 volumes in the libraries; \$7,592,177 in productive funds; and \$282,394 receipts from gifts. Further summaries showed: Number of public high schools, 558, with 167,834 bound volumes in the libraries, and property valued at \$7,025,160; endowed and private secondary schools, 56, with 55,103 bound volumes and property \$933,600; colleges for women, 7, with 23,000 bound volumes and property \$772,000; schools of theology, 13; medicine, 14 (regular 10, homeopathic 2, eclectic 2); law, 5; public normal schools, 6; private, 11; and normal departments and colleges, 14. The Agricultural and Mechanical College, a department of the State University, had 19,307 volumes in its library, 575 students, 200 acres under cultivation valued at \$100,000, and \$470,000 in special buildings and equipments. For the defective classes there were a State institution for the education of the Deaf and Dumb at Columbus; public school for the deaf, and oral school for the deaf, both at Cincinnati; private schools for the deaf at Cincinnati, Cleveland, and Toledo; State Institution for the Education of the Blind at Columbus; State Institution for Feeble-minded Youth at Columbus; and industrial schools at Delaware (girls) and Lancaster (boys).

Libraries.—In 1896 there were reported 202 public libraries of 1,000 volumes each and upward, with a total of 1,587,891 bound volumes and 205,754 pamphlets.

Population.—In 1890, 3,672,316, of whom 1,855,736 were males; 1,816,580 females; 3,213,023 natives; 459,293 foreign-born; 3,584,805 whites; and 87,511 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 4,227,000.

OHIO UNIVERSITY, Athens, O., non-sectarian; co-educational; had at close of 1897, 24 professors and instructors; 368 students; 15,000 volumes in library; \$150,000 in productive funds; \$150,000 in grounds and buildings; \$42,000 income; president, Isaac Crook, D.D., LL.D. Owing to a large reduction of its original endowment fund through adverse legislation the income of the institution from this source is wholly inadequate for the work it has in hand, and for several years the legislature has made annual appropriations to supplement its income.

OHIO UNIVERSITY OF, Columbus, O., non-sectarian; co-educational; had at close of 1897, 88 professors and instructors; 1,019 students; 22,200 volumes in library; \$176,000 income; president, J. H. Canfield, LL.D., M.A. The institution owns and occupies nearly 400 acres of land within the city limits, valued at over \$1,250,000; has a cash endowment of over \$500,000; and estimates the value of its various instruction and other buildings, museums, and laboratory, agricultural and horticultural equipments at nearly \$600,000. Among the latest additions to its departments is a school of industrial arts and manual training.

OHIO WESLEYAN UNIVERSITY, Delaware, O., Methodist Episcopal; co-educational; had at close of 1897, 98 professors and instructors; 1,372 students; 22,000 volumes in library; \$397,309 in productive funds; \$93,000 in gifts; \$60,000 in income; president, J. W. Bashford, PH.D., D.D. It is estimated

that about one-third of its graduates have entered the ministry, and a large number have become missionaries. The university has eight buildings, valued with grounds at about \$500,000. The university campus has two attractions of large interest to the students and friends of the institution, a noteworthy sulphur spring and an arboretum containing over 600 varieties of trees and shrubs.

OKLAHOMA, one of the Territories of the United States of North America; organized May 2, 1890; counties, 23; capital, Guthrie.

Territorial Officers, 1897-1901.—Governor (appointed for 4 years, salary \$2,600 per annum), Cassius M. Barnes; secretary, William M. Jenkins; treasurer, Martin L. Turner; superintendent of public education, A. O. Nichols; attorney-general, H. S. Cunningham; adjutant-general, J. C. Jamison; chief justice of the supreme court, Frank Dale; associate justices, A. G. C. Pierce, John L. McAtee, J. R. Keaton, and John C. Tarsney; clerk, Edgar W. Jones. Territorial government, all Republicans; judiciary, all Democrats, subject to change.

Legislature, 1897.—Fusion, council 10, house 20; Democrats, council 3, house 3; Republicans, house 3.

Farm Products.—Reported Dec. 31, 1897: Wheat, 10,389,542 bush., from 546,818 acres, value \$7,896,052. At present wheat is the principal crop, though in 1897 there was a gratifying yield of corn, hay, and cotton, and a large orchard crop.

Farm Animals.—Reported Jan. 1, 1898: Horses, 42,227, value \$732,177; mules, 7,931, value \$210,967; cows, 35,590, value \$932,458; cattle, 212,814, value \$4,771,600; sheep, 25,536, value \$52,816; and swine, 84,010, value \$396,529.

Finances.—The treasury statement for the year ending June 30, 1895, showed: Balance at beginning of the year, \$129,88; receipts, \$101,973.20; total, \$102,103.08; expenditures, \$80,775.23; balance, \$21,327.85. The net proceeds from leases of public school lands during the year were \$88,627.97. The assessed valuations in 1895 aggregated \$39,275,189; in 1896, \$24,815,711, with tax rate \$4.00 per \$1,000. There was a bonded debt, Feb. 1, 1897, incurred for the erection of the Territorial University, Normal School, and Agricultural and Mechanical College, of \$48,000; and outstanding warrants, \$150,000; assets, \$12,000; net debt, \$186,000.

Banks.—On Oct. 31, 1897, there were 6 national banks in operation and 2 in liquidation, the active ones having a combined capital of \$300,000, and holding \$103,000 in United States bonds. These banks had outstanding on loans and discounts, \$427,513; circulating notes, \$16,910; coin and coin certificates, \$41,271; deposits, \$646,746; and reserve, 301,925, or 46.68 per cent. on the amount required. The territorial and private banks, July 23, 1897, numbered 49, with capital, \$613,329; deposits, \$1,499,149; resources, \$2,294,264; and surplus and profits, \$165,847. Combining these institutions, the Territory had an aggregate banking capital of \$913,329.

Internal Revenue.—The collections and details of taxable manufactures are included in the totals for Kansas (*q. v.*).

Railroads.—On June 30, 1895, there were four lines of railroad in operation, with a total length of 463 miles, of which one line built and equipped about 50 miles in the preceding year. The lack of adequate railroad facilities has greatly retarded the industrial development of remote sections.

Publications.—Reported March, 1898: Daily, 11; semi-weekly, 1; weekly, 85; semi-monthly, 1; and monthly, 10.

Post-Offices.—Reported Jan. 1, 1897: Second-class, 3; third-class, 13 (presidential, 16); fourth-class, 480; money-order offices, 73; and limited money-order offices, 18.

Churches.—Reports from the various denominations, June 30, 1895, showed: Regular Baptist, church organizations 100, church buildings 28, members 3,500, colored churches 50, members 2,000, pastors 100, value of church property \$25,000; Christian, organizations 66, buildings 11, members 4,000, colored churches 2, Sunday schools 25, scholars 2,000, pastors 26, church property \$27,000; Roman Catholic, churches and chapels 28, members 10,000, educational institutions 16, missionaries 15, school and church property \$60,000; Protestant Episcopal, missions and stations 19, churches 8, members 320, clergy 8, church property \$19,000; Methodist Episcopal, South, church buildings 15, members 2,115, Sunday schools 40, scholars, 2,000, missionaries 31, church property including parsonages \$27,065; and Salvation Army, corps 7, officers and soldiers 212, value of barracks property \$1,500. Reports for 1896 showed: Presbyterian, organizations 44, church buildings 24, members 1,480, value of church property \$35,000, ministers 27, Sunday schools 47; Congregational, organizations 91, church buildings 55, members 2,222, value of church property \$50,000, ministers 49, Sunday schools 91; Methodist Episcopal, church buildings 46, members 5,405, parsonages 18, value of church property \$47,700; Methodist Episcopal, South, organizations 90, church buildings 25, members 3,000, value of church property \$25,000, Sunday schools 50; Christian, organizations 70, church buildings 12, members 4,300, value of church property \$27,000, ministers 50, Sunday schools 25; Baptist, church buildings, whites 110, colored 80, members, whites 3,200, colored 3,500, ministers, whites 65, colored 100, Sunday school members 8,000; Protestant Episcopal, church buildings 7, missions and stations 22, value of church property \$20,000, ministers 9, members 350, Sunday school members 130; and Roman Catholic, churches 24, chapels 5, stations 73, priests 18, members 18,000, schools and academies 11, value of church and school property \$60,000. There were in all 700 Sunday schools, with 4,900 officers and teachers, and 28,000 scholars.

Schools.—The number of children of school age in the Territory, June 30, 1896, was 88,033, and the apportionment of the fund from leased school lands was \$53,610.29. There were a university at Norman, with a preparatory department and quarters of the Oklahoma Historical Society; a normal school at Edmond; and an agricultural and mechanical college at Stillwater; all with substantial buildings, good financial support, and encouraging attendance. The Congregational, Presbyterian, Methodist Episcopal, and Roman Catholic churches maintain a number of colleges and schools, and three schools give courses in bookkeeping, telegraphy, shorthand, and typewriting.

Indians.—During 1894-95 the Kickapoo Indian reservation was opened to settlement. The Wichita, Kiowa, Comanche, and Apache remained unopened, and the governor recommended their early opening to homestead settlements, as they contain some of the richest land in the Territory, and only a small portion was in actual use.

Population.—Reported by Territorial auditor, Feb. 1, 1894, 212,635; by the governor, June 30, 1896, 275,587.

OKLAHOMA, UNIVERSITY OF, Norman, Okla., non-sectarian; co-educational; had at close of 1896, 7 professors and instructors; 148 students; 2,000 volumes in library; \$50,000 in grounds and buildings; \$25,000 in income; president, David R. Boyd, A.M.

OLEOMARGARINE. Through the combined influence of Federal taxation, hostile State laws, and dairymen's crusades there was a marked decrease in the

production of oleomargarine during 1894-97. In the fiscal year ending June 30, 1897, the production was 45,534,559 lbs., more than 5,000,000 lbs. less than that of the previous year, and more than 21,000,000 lbs. less than that of 1894. The number of manufactories decreased from 22, in 1896, to 16 in 1897; of wholesale establishments from 157 to 103; of retail houses from 4,380 to 3,539. The quantity exported in 1897, 3,148,407 lbs., was a slight increase over that of 1896. In 1896 the revenue derived from taxes was \$1,219,432; in 1897 it was \$1,034,129. Illinois continues to lead in the manufacture of this product, more than one-half of the total output having been produced in the First District of Illinois. Rhode Island is second, with a total production of 7,112,433 lbs., and Kansas third, with 5,589,363 lbs.

OLIPHANT, MARGARET WILSON, novelist and biographer, was born in Midlothian, Scotland, in 1828; died in London, England, June 25, 1897. Her last work was *Annals of a Publishing House: William Blackwood and His Sons, Their Magazine and Friends*, which was published after her death.

OLIVET COLLEGE, Olivet, Mich., Congregational; co-educational; had at close of 1897, 22 professors and instructors; 250 students; 26,000 volumes in library; \$130,000 in productive funds; \$9,000 gifts; \$30,000 income; president, Willard G. Sperry, D.D.

OMAHA, city, capital of Douglas county, Neb.; population (1890), 110,152. In 1896 the assessed valuations were: Real estate, \$15,002,310; personal property, \$3,094,335—total, \$18,096,645; tax rate, \$41 per \$1,000. The total regular bonded debt, Jan. 1, 1897, was \$3,011,100, and in addition there were assessment bonds aggregating \$1,673,800, and payable by special assessment, and school district bonds amounting to \$585,000. In 1897 there were 8 national banks in operation, with combined capital, \$3,750,000; deposits, \$7,864,990; and resources, \$20,450,565. In the year ending Sept. 30, 1897, the exchanges at the clearing house aggregated \$219,863,718, an increase of \$1,993,769 over those of the previous year. The city has 455 miles of streets, of which 82 miles are paved; 115 miles of sewers; and 179 miles of water mains. The annual cost of maintaining the city government is \$1,055,000; annual expenditure for public education, \$380,000; pupils in public schools, 16,000; and value of public school property, \$1,640,000. A private corporation owns the waterworks, which cost \$2,000,000, and has a capacity of 50,000,000 gals. The police department of 93 men costs annually \$85,700, and the fire department of 110 men costs \$121,100.

Exposition of 1898.—During 1897 arrangements were practically completed for holding in the city from June till November, 1898, a trans-Mississippi and international exposition. The grounds are in the northern part of the city, reached by several lines of steam and electric railroads. The buildings will be principally of "staff" similar to those at the Columbian World's Fair, and the prevailing color will be ivory white. A lagoon has been constructed with a harbor at the east end, an island to break the effect of straight lines, and a trefoil-shaped lake. The lagoon extends from east to west about half a mile, and the main buildings will be erected on the north and south sides of it. Among the principal buildings will be those of the United States government (cost, \$200,000), Administration, Agriculture, Mines and Mining, Machinery and Electricity, Manufactures, Fine Arts, Horticulture, Apiary, Dairy and Education, the latter in charge of two women from each trans-Mississippi State. The amusement section is divided from the main grounds by Sherman Avenue, and will have waterfalls, grottoes, caves, foreign villages, a scenic railroad, Egyptian pyramid, the Sherman Umbrella, which will

be to this exposition what the Ferris Wheel was to Chicago's, and a large area for athletic sports and tournaments.

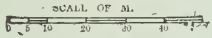
OMAHA, UNIVERSITY OF, Omaha, Neb., Presbyterian; co-educational; had at close of 1897, 50 professors and instructors; 250 students; 5,000 volumes in library; \$200,000 in grounds and buildings; \$4,000 in gifts; \$15,000 in income; president, David R. Kerr, D.D., PH.D.

ONTARIO, a province of the Dominion of Canada; gross area, 219,650 square miles; population (1891), 2,114,321; capital, Toronto; lieutenant-governor, George A. Kirkpatrick, P.C. In 1897 the legislative assembly was composed of 92 members, and the executive council of 8 members. The Bureau of Industries reported for the year 1895 a total area of cleared land of 12,426,992 acres, valued at \$572,938,472. Of the total, 8,321,173 acres were under crop; 2,728,655 under pasture; and 202,614 in orchards and gardens. The total wool clip was 6,214,811 lbs.; cheese product of 1,164 factories, 109,230,340 lbs.; butter product of 135 creameries, 4,600,000 lbs.; value of cheese product, \$8,607,389; of butter product, \$877,220. Live stock returns showed 647,696 horses; 2,150,103 cattle; 2,022,735 sheep; 1,299,072 swine; and 7,752,840 head of poultry. The revenue in the calendar year 1895 was \$3,585,300; expenditure, \$3,758,595; debt, comprising railroad liabilities payable in the future, \$1,699,229; surplus of assets over liabilities presently payable, \$5,078,981; imports, \$41,297,141; exports, \$33,096,181; duties paid, \$7,128,749. There were 5,977 public schools, including 328 Roman Catholic separate schools, with 483,203 pupils enrolled, and 268,334 in average attendance; 8,824 teachers; receipts, \$4,972,507; and expenditures, \$4,248,131; besides many high, model, denominational, and mechanics' schools, universities, etc. The Methodist is the strongest denomination.

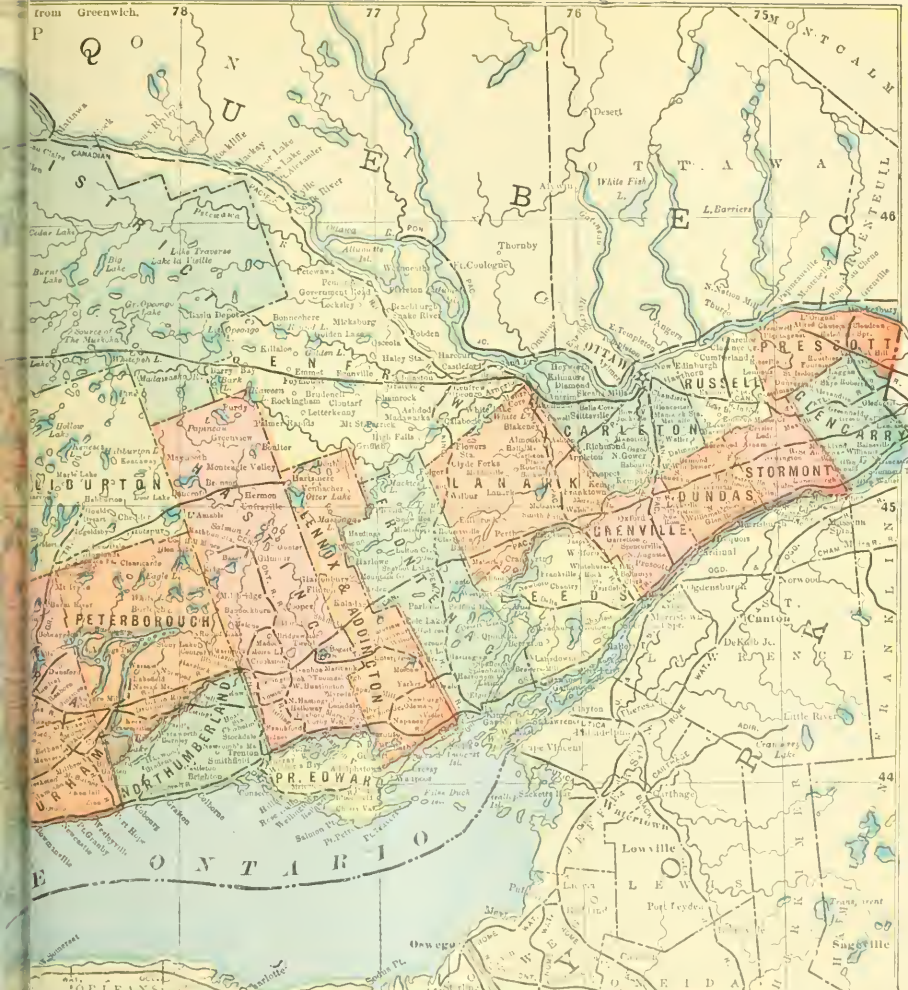
ORDNANCE. Among noteworthy recent devices for increasing the power of heavy ordnance, and at the same time diminishing the risk of bursting the guns, are the Haskell-Lyman multicharge gun and the Brown wire-wound gun. In the multicharge gun a slow-burning powder is fired in the breech of the gun, and a rapid-burning powder in chambers or pockets at points along the barrel. Thus the total energy of the whole charge is developed in shooting the projectile, yet at no one instant is the total pressure brought to bear upon the gun. The power of a gun depends on the amount of powder that can be converted into gases behind the projectile. The inventors claim to have demonstrated the superiority of their system over Krupp and Armstrong guns of the same caliber, *e.g.*, Armstrong gun, caliber 6 inch, weight of shot 69.7 lbs., powder 34 lbs., pressure per square inch 32,704 lbs.—total muzzle energy, 1,937; Haskell gun, same caliber, shot 152 lbs., powder 116 lbs., pressure per square inch 31,300 lbs.—total muzzle energy, 3,421. Specially worthy of note is the fact that the pressure from explosion of 34 lbs. of powder in the Armstrong is actually greater than that produced by explosion of 152 lbs. in the Haskell. The same principle of successive explosions is applied in the double-charge gun invented by H. P. Hurst, of Mississippi. The Brown wire-wound gun has been adopted by the British ordnance bureau; in 1896 Congress made an appropriation for constructing a 10-inch gun of this type. The wire-wound gun consists of a number of segments, of wedge-shaped section, laid side by side round a central core, and held together by wire coiled around them. Tests of this gun made at Sandy Hook proved beyond any question that it will stand higher pressures and have greater endurance than any gun previously constructed. The gun authorized by Congress is to be 37½ ft. long. The steel in the segments will have a tensile strength of 120,000 lbs. to the square inch. The wire will be wound around the segments under a pressure of 98,000 lbs. per square inch; 75 miles of wire, weighing 30,000 lbs., will



ONTARIO



Longitude 5 West from Washington.



be required. The total weight of the gun will be 30 tons, and the cost, estimated, \$37,400. Tests of a 12-inch and a 10-inch gun, mounted on the Crozier-Buffington disappearing carriage, were made at the Sandy Hook proving grounds, July, 1897, with eminent success. The disappearing carriage has in front a counterweight, which, when released from its position, sinks, and, acting on levers connected with the gun, raises it to a height of several feet above its carriage. The recoil of firing restores it to the original position, its muzzle covered by the parapet. In the tests the 10-inch gun was first fired with the full charge of 270 lbs. of powder, and a projectile weighing 575 lbs.; then came the 52-ton 12-inch gun with a powder charge of 475 lbs. and a projectile of 1,000 lbs. The weight of the gun with its carriage is 466,000 lbs. In 1 minute and 50 seconds the great gun was loaded and ready for firing. The discharge was terrific in force; after 18 seconds, at the distance of 6½ miles out at sea was seen a column of water rising 75 ft. in air.

A gun of novel construction was tested at the Sandy Hook proving grounds in July 1895, viz., a cannon consisting of an inner tube of steel wound round with strips of rawhide, and inclosed in a shell of metal. The inventor is Frederick Latulip, of Syracuse, N. Y. The gun was 5 ft. 8 in. long, 2½ in. caliber, and weighed 456 lbs. The inner tube of steel was ¾ in. thick at the muzzle and 1½ in. at the breech. The rawhide coil was 1 in. in thickness at the muzzle and 3 in. at the breech, and was cut in 4-in. strips. Around the whole was wound heavy copper wire in two layers. The principal advantage claimed for this singular type of cannon is that the cost of production is small, and that a gun of this kind is light and easily manageable. For such a gun is claimed the power of resisting the explosive strain not only of the usual charge, but of an unusual one. In the official test the rawhide gun successfully withstood a pressure of 30,369 lbs. to the square inch; but the recoil from that discharge broke the trail of the carriage, and further tests could not be made at the time. Lieut.-Col. W. H. Bell, U. S. A., is the inventor of a shell for which the claim is made that it secures the rotary movement of the projectile through the air without having to be fired from a rifled gun. The projectile is in shape an ordinary conical shot, in the rear end of which is a chamber holding a quantity of slow-burning powder held in position by a plug. Around the edges of this plug is a series of grooves bored at an angle and leading into the powder chamber. The powder becoming ignited on the firing of the gun, and forcing its way out through the grooves, gives a rotary motion to the shell.

In his annual report to the secretary of war for 1897, Gen. John M. Wilson, chief of engineers of the army, made the following estimates for coast defenses for 1898-99:

Gun and mortar batteries.....	\$5,000,000
Purchase of land for fortifications.....	500,000
Protection, preservation, and repair of fortifications.....	100,000
Preparation of plans for fortifications.....	5,000
Sea walls and embankments.....	55,000
Torpedoes for harbor defense; for the purchase of submarine mines and necessary appliances to operate them; for closing the channels leading to our principal seaports; for useful casemates, cable galleries, etc., to render it possible to operate submarine mines.....	150,000
Total.....	\$5,810,000

To this is added \$41,000 for the engineer depot at Willett's Point, N. Y. On the subject of fortifications General Wilson said:

“Under instructions from the chief of engineers dated March 29, 1887, the board of engineers undertook the study and preparation of detailed projects for the artillery and submarine mine defense of the principal sea and lake ports of the United States. Up to the present time projects have been prepared and have received the approval of the secretary of war for the following ports, viz.: Penobscot River, Me.; Kennebec River, Me.; Portland, Me.; Portsmouth, N. H.; Boston, Mass.; New Bedford, Mass.; Narragansett Bay, R. I.; eastern entrance to Long Island Sound, N. Y.; Philadelphia; Baltimore; Washington; Hampton Roads, Va.; Wilmington, N. C.; Charleston, S. C.; Savannah, Ga.; Key West, Fla.; Pensacola, Fla.; Mobile, Ala.; New Orleans, La.; Galveston, Tex.; San Diego, Cal.; San Francisco, Mouth of Columbia River, Wash. and Ore.; Puget Sound, Wash.; Lake Champlain, N. Y. Projects for the defense of other ports are still under consideration. The great range of modern high-power guns compels the establishment of defensive lines at distances from the cities and harbors considerably greater than heretofore deemed necessary. At many harbors the sites of the older-type works are at distances from the objects to be protected insufficient to admit of a proper defense under modern conditions. At other harbors the areas of the older sites, when otherwise suitable, are too small to accommodate the modern defenses. The acquisition of suitable sites has therefore, been a necessary feature of the construction of the modern system of sea-coast defenses. During the past fiscal year title has been obtained to sites at Portland, Me.; eastern entrance to Long Island Sound; Baltimore; Charleston, S. C.; Key West, Fla.; Galveston, Tex.; San Diego, Cal.; and Puget Sound, Wash. Negotiations are in progress for sites at Portland, Me.; Boston; Narragansett Bay, R. I.; eastern entrance to Long Island Sound; Key West, Fla.; Galveston, Tex.; and Puget Sound, Wash. All available funds for the purchase of sites for sea-coast defenses have been pledged. The operations attending the acquisition of sites frequently are attended by tedious and unavoidable delays.

Gen. Nelson A. Miles, commanding the army, in his annual report for 1897 recommended the following appropriations for fortifications:

For the mouth of Penobscot river, Me.....	\$175,000
Mouth of Kennebec river, Me.....	198,500
Portland, Me.....	1,173,000
Portsmouth, N. H.....	377,000
Boston Harbor.....	1,347,000
New Bedford, Mass.....	294,000
Narragansett Bay.....	833,000
Defenses of Long Island Sound.....	1,070,000
Eastern entrance New York.....	480,000
Southern entrance New York.....	1,419,000
Approaches to Philadelphia.....	441,000
Approaches to Baltimore.....	495,000
Approaches to Washington, D. C.....	604,000
Hampton Roads.....	463,000
Approaches to Wilmington, N. C.....	397,000
Charleston Harbor, S. C.....	150,000
Approaches to Savannah, Ga.....	415,000
Key West, Fla.....	50,000
Pensacola Harbor.....	32,000
Approaches to Mobile, Ala.....	397,000
Approaches to New Orleans.....	310,000
Galveston, Tex.....	412,000
San Diego, Cal.....	725,000
San Francisco.....	1,336,000
Columbia river.....	605,000
Puget Sound.....	1,140,000
Lake Champlain.....	40,000

Concerning coast defenses, General Miles reported: "Important changes and improvements have been made along the Atlantic and Gulf coasts, especially in the mounting of modern artillery and the appliances adopted for the defense of the coasts. The progress that has been made on the Pacific coast in the establishment of modern batteries of artillery has made it necessary to occupy new grounds and adopt a new system of defense. The very commanding position known formerly as Lime Point, and now as Fort Baker, has received a portion of its armament, and will soon become a most formidable part of the defense of the harbor of San Francisco. Active and earnest work is being done in putting that important harbor in condition of proper defense. The same work is in progress along the Pacific coast, especially at San Diego, Cal., and will in time be completed at the mouth of Columbia River, Ore., and also the entrance of Puget Sound, Wash. During the last ten years much attention has been given by the government to the subject of coast defenses and most beneficial results are now becoming apparent. Approximately \$26,000,000 has been appropriated by the government, which is nearly one-third of what is required to put the country in a safe condition of defense." In March, April, and May, 1898, several millions of dollars were assigned from the Congressional appropriation of \$50,000,000 for national defense for the purchase and construction of various classes of ordnance for coast defense. All government and private gun factories were set to work day and night on "rush" orders and a large quantity of minor artillery both for fortifications and war vessels was purchased in Europe. The same haste was observed in the manufacture of torpedoes and submarine mines. Every exposed point of importance on the Atlantic, Gulf, and Pacific coasts was put into as effective a state of defense as time would permit, and all the great harbors were planted with submarine electric and contact mines. The House of Representatives appropriated \$36,000,000 for various naval purposes, to which the Senate proposed an addition of several millions more. In the haste of preparation for war at the time of writing details of results were necessarily incomplete. See COAST DEFENSE.

OREGON, one of the United States of North America; admitted to the Union Feb. 14, 1859; counties, 32; capital, Salem.

State Officers, 1895-99.—Governor (elected for 4 years, salary \$1,500 per annum), William P. Lord; secretary of state, Harrison R. Kineaid; treasurer, Philip Melschan; superintendent of public instruction, George M. Irwin; attorney-general, C. M. Idleman; adjutant-general, B. B. Tuttle; chief justice of the supreme court, Frank A. Moore; associate justices, Robert S. Bean and Charles E. Wolverton; clerk, J. J. Murphy—all Republicans.

Legislature, 1897.—Republicans, senate 24, house 39, joint ballot 63; Populists, senate 3, house 17, joint ballot 20; Democrats, senate 3, house 4, joint ballot 7; Republican majority, senate 18, house 18, joint ballot 36.

Elections.—In the State elections 1894 there were 87,265 votes cast for governor, of which the Republican candidate (Lord) received 41,034; the Populist candidate (Pierce), 26,033; the Democratic candidate (Galloway), 17,498; and the Prohibition candidate (Kennedy), 2,700; Republican plurality, 15,001. The elections for Congress the same year resulted in the choice of two Republican candidates by pluralities of 9,644 (1st district) and 8,186 (2d district). In the presidential election 1896, the Republican ticket received 18,711 popular votes; the combined Democratic and Populist tickets 46,739; the National Democratic ticket 974; and the Prohibition 919. In the election for the new Congress, Thomas H. Tongue and W. E. Ellis, both Republicans, were elected.

Farm Products.—Reported Dec. 31, 1897: Corn, 331,450 bush., from 13,258 acres, value \$175,668; wheat, 18,155,031 bush., from 1,067,943 acres, value \$13,071,622; oats, 5,755,776 bush., from 179,868 acres, value \$2,014,522; rye, 82,665 bush., from 5,511 acres, value \$48,772; barley, 955,760 bush., from 29,408 acres, value \$430,092; buckwheat, 4,500 bush., from 250 acres, value \$2,475; potatoes, 2,389,600 bush., from 14,935 acres, value \$955,840; and hay, 1,087,942 tons, from 572,601 acres, value \$8,431,550—total value, \$25,130,541. The State census of 1895 gave acreage of plum, pear and prune crops, 295,431; apple crop, 1,045,919 bush.; hop crop, 15,626,555 lbs.; and butter and cheese output, 5,626,457 lbs.

Farm Animals.—Reported Jan. 1, 1898: Horses, 193,588, value \$3,989,854; mules, 5,782, value \$165,606; cows, 115,427, value \$2,689,449; cattle, 667,030, value \$11,957,188; sheep, 2,682,779, value \$4,451,150; and swine, 220,847, value \$801,896—total value, \$24,048,473. The wool clip of 1896 was 18,440,850 lbs. of washed and unwashed, and 5,716,663 lbs. of scoured.

Mineral Products.—The estimated output of the precious metals in the calendar year 1895 was: Gold, 42,972 fine oz., value \$888,300; silver, 51,000 fine oz., value \$65,930—total value, \$954,230. Coal, mined almost wholly at Marshfield, had an output of 73,685 short tons, valued at the mines at \$247,901. With the exception of 1888 this output was the largest in the history of the State. Quarrying yielded granite to the value of \$1,728 and limestone \$970. In clay products 68 concerns reported value of output of common and pressed brick, \$71,612; fire brick, \$15,486; vitrified paving brick, \$3,800; drain tile, \$4,000; sewer pipe, \$40,500; stoneware, \$500; and miscellaneous, \$3,145—total, \$138,543.

Finances.—There is practically no State debt, though the books show an aggregate of \$1,829 outstanding which has never been presented for payment. The assessed valuations in 1895 included: Railroad lands, \$1,587,518; wagon-road lands, \$702,447; cultivated lands, \$34,046,622; unimproved lands, \$19,913,147; farm and ranch animals, \$8,518,742; telephone and telegraph property, \$152,814; town and city lots, \$38,856,398; improvements thereon, \$16,338,741; improvements on deeded lands, \$6,078,178; money, \$1,551,809; notes and accounts, \$9,057,432; shares of stock, \$1,818,072; household furniture, \$3,743,584; machinery and equipments, \$1,522,565; merchandise and implements, \$8,894,752; and rolling stock of railroads, \$628,174. The total amount as returned was \$158,819,730; as equalized, \$153,967,177; exemptions, \$8,621,751; net taxable, \$144,445,426. The total in 1896 as equalized was \$143,176,971.

Banks.—On Oct. 31, 1897, there were 30 national banks in operation and 12 in liquidation, the active ones having a combined capital of \$3,070,000, and holding \$1,051,050 in United States bonds. These banks had outstanding on loans and discounts, \$6,351,552, represented by demand paper with individual or firm names, \$916,623; the same secured by stocks, bonds, and other personal securities, \$579,412; time paper with two or more individual or firm names, \$1,378,013; time paper with single individual or firm name, \$1,594,847; and the same secured by stocks, bonds, and other personal securities, \$1,882,658. The banks held \$1,770,880 in coin and coin certificates, of which \$1,685,265 was in gold coin. The circulation account was: Total issue, \$3,884,960; redeemed, \$2,870,216; outstanding, \$1,014,744. There were deposits, \$9,682,644; reserve required, \$1,452,396; reserve held, \$3,178,415; ratio of reserve, 32.83 per cent. During the year ending Sept. 30, 1897, the exchanges at the United States clearing house at Portland aggregated \$67,339,017, an increase of \$9,837,711 over the total of the previous corresponding period. The State banks, June 30,

1897, numbered 17 and had capital, \$995,650; deposits, \$917,533; resources, \$2,121,993; and surplus and profits, \$148,823. Combining these institutions, the State had an aggregate banking capital of \$4,065,650. In 1895 the supreme court declared unconstitutional a law passed in 1870 providing for the assessment of bank deposits, which, however, had been inoperative largely through the refusal of bank officers to furnish assessors with lists of depositors and their holdings.

Internal Revenue.—During the fiscal year ending June 30, 1897, the collections of internal revenue aggregated \$275,577.44, from the following sources: Distilled spirits, \$70,038.60; tobacco, \$21,423.13; fermented liquors, \$183,482.61; oleomargarine, \$318; and penalties, \$304.86. These totals include operations in Washington and Alaska. In that year there were 176 single-account cigar factories, which used 136,849 lbs. of tobacco, and had an output of 6,616,416 cigars; and 39 other factories, which used 9,079 lbs. of materials, and had an output of 9,079 lbs. of smoking tobacco. There were 7 distilleries of all kinds in operation; amount of fruit brandy produced, 1,410 gals.; spirits rectified, 131,959.66 gals.; spirits gauged, 256,313 gals.; and fermented liquors produced, 188,274 lbs.

Railroads.—On Jan. 1, 1894, the total railroad mileage was 1,527.19, and during that year 1.79 miles of new road was constructed, making the aggregate mileage on Jan. 1, 1895, 1,528.98. A report at the end of 1894 showed: Capital stock, \$47,623,503; funded debt \$43,151,600; total investment, \$91,924,060; cost of roads and equipments, \$78,783,373; gross earnings, \$3,996,502; net earnings, \$827,831; and interest paid on bonds, \$1,196,202. The new construction in 1896 was 12.50 miles.

Commerce.—During the fiscal year ending June 30, 1897, the imports of merchandise at the ports of Oregon, Southern Oregon, and Willamette had a value of \$1,640,099, and the value of exports was \$7,016,368, principally at Willamette, and mostly wheat.

Salmon Industry.—In 1896 there were 25 salmon-packing plants on the Oregon side of the Columbia River, and 5 other plants connected with them. The fisheries, factories, and allied plants employed 5,335 persons, to whom \$991,811 was paid in wages. Apparatus used in the industry was valued at \$742,015. The amount of capital invested was \$1,429,500; value of lands, buildings, and machinery, \$1,184,750; total pack of the season, 551,537 cases; value \$2,530,206.

Publications.—Reported March, 1898: Daily, 20; semi-weekly, 7; weekly, 115; semi-monthly, 3; monthly, 27; and quarterly, 1.

Post-Offices.—Reported Jan. 1, 1897: First-class, 1; second-class, 3; third-class 20 (presidential, 24); fourth-class, 778; money-order offices, 196; money-order stations, 3; and limited money-order offices, 27.

Churches.—The Roman Catholic is the strongest denomination in the State, and is followed in their order by the Methodist Episcopal; Regular Baptist; Disciples of Christ; Presbyterian; Congregational; Methodist Episcopal, South; Protestant Episcopal; and United Brethren. At the Eight International Sunday School Convention, held in Boston, June 23-26, 1896, there were reported for Oregon 1,223 evangelical Sunday schools, with 11,863 officers and teachers and 80,017 scholars, making a total membership of 91,880, a gain in membership in three years of 60,504.

Schools.—At the end of the school year 1895-96, the number of children of school age in the State was estimated at 102,100, of whom 87,212 were enrolled in the public schools, and 61,721 were in average daily attendance. The school-

houses numbered 1,940, and with grounds were valued at \$2,988,312; teachers, 3,317. There were 8 universities and colleges of liberal arts, with a total of 141 professors and instructors; 2,142 students in all departments (1,105 males, and 1,037 females); 36 scholarships; 25,360 bound volumes in the libraries; \$79,330 in total income; \$634,000 invested in grounds and buildings; \$363,689 in productive funds; and \$24,025 receipts from gifts. There were also 13 public high schools; a private and 2 public normal schools; normal departments in 2 colleges; 15 endowed academies and private secondary schools, with grounds and buildings valued at \$475,000, and 14,760 volumes in their libraries; and 4 commercial colleges. The State Agricultural and Mechanical College, at Corvallis, had experiment staff, 5; faculty, 21; students, 402; land under cultivation, 150 acres, valued at \$18,500; and special buildings and equipments valued at \$39,500. For the defective classes there were State institutions for the deaf, blind, and juvenile delinquents, all at Salem.

Libraries.—In 1896 there were reported 16 public libraries of 1,000 volumes each and upward, with a total of 90,190 bound volumes and 6,628 pamphlets.

Population.—In 1890, 313,767, of whom 181,840 were males; 131,927 females; 256,450 natives; 57,317 foreign-born; 301,758 whites; and 12,009 colored of all races. The State census of 1895 showed a population of 362,762. The most populous counties were Multnomah, 92,950; Marion, 30,041; Clackamas, 21,253; Linn, 18,006; Lane, 17,510; Washington, 15,362; Douglas, 14,559; Yamhill, 14,068; Jackson, 13,017; Umatilla, 12,561; Clatsop, 11,108; Union, 10,865; and Wasco, 10,449. The city of Portland had 81,342, and Salem 10,261. On June 1, 1897, the United States government actuary estimated the population at 433,000.

OREGON, UNIVERSITY OF, Eugene, Ore., non-sectarian; co-educational; had at close of 1896, 32 professors and instructors; 545 students; 8,000 volumes in library; \$160,000 in productive funds; \$140,000 in grounds and buildings; \$41,400 income; president, C. H. Chapman, PH.D.

ORIENTALISTS, INTERNATIONAL CONGRESS OF. The International Congress of Orientalists held its 11th session in Paris, France, in September, 1897, where these congresses had their origin in 1874. The objects are the facilitating of intercourse with Eastern peoples by spreading a real knowledge of their languages, manners, customs, habits, and beliefs, and the tracing of gradual growth and development of human institutions and ideas. M. Ramboud, French minister of education, presided at the formal opening, which was held in the Lycée Louis le Grand. He also welcomed the congress on behalf of the government of France and of the university; and representatives from Austria, Hungary, England, Greece, Italy, Japan, Holland, Russia, and other countries expressed the sympathy of their respective governments with the work of the congress. The president of the congress, M. Shefer, president of the Ecole des Langues Vivantes Orientales of France, in his opening address made a plea for that spirit of tolerance and concord which had marked the achievements of the past. For purposes of convenience and facility, the congress is divided into sections, such as the Arabic, Egyptian, Indian, Iranian, Mohammedan, etc., each one having its separate organization. These various sections held their sessions in the Collège de France and the Sorbonne. The following presidents of sections were elected: Professor Hirschmann, Iranian section; Professor Gubernatis, Linguistic section; Professor de Goeje, Semitic section; Professor Kern, Malay section; and M. Naville, Egyptian section. In the Arabic section, Professor Beavan, of Cambridge, Eng., suggested an Armenian origin of the word Zendik (heretic), which

would make it mean "the just," an appellation which heretics applied to themselves. While Professor Goldziher doubted the correctness of the suggestion, yet it was widely accepted as a probable solution of a difficulty which had baffled philologists. Professor Ehrmann, of Berlin, announced to the Egyptian section that the German government had already projected, at its own expense, the publication of a dictionary of all words found in hieroglyphic or hieratic writing, to be begun about 1908 and completed about 1913. Considerable discussion was indulged in as to the manner in which the work should be carried on, but the announcement was warmly received. In the Indo-Chinese section, M. Aymonier discussed, in the light of discoveries in the ruins found in the jungles of Cambodia, the dates arrived at by a study of the inscriptions of King Yasovarman and others, which he places at the ninth century of the Christian era. In the Indian section, Professor Hardy, of Freiburg, Switzerland, discussed Indian parallels to Schiller's legends. Other parallels were suggested by Professors Ludwig, Kuhn, and Leumann. Professor Oldenberg, of Kiel, called attention to an essay by Taine, giving able exposition of the causes which gave rise to the system of Buddhism, which is of very great value. The essay, however, is almost unknown, being only found in a rare volume of miscellaneous contents. Prof. Paul Haupt, of Philadelphia, Pa., announced the publication in the near future, at the Smithsonian Institution at Washington, of a complete bibliography of Assyriology, now being drawn up by Dr. Cyrus Adbe, of Washington. Dr. Winternitz, speaking on the South Indian MSS. of the Mahabharata, said that some day a new critical edition of the text of the great epic would be brought out, probably by the combined efforts of many scholars. Votes of thanks were tendered to the Indian government for preservation of historic remains in the Swat Valley, to the Bengal government for the establishment of an Asoka Gallery under Sir Charles Elliott, and to the governments of Nepal and India for assistance at excavations at Kapilavastu and Lumbini, at the birthplace of Buddha. M. Senart, of France, and Prof. Serge d'Oldenbourg, of Russia, spoke of what is supposed to be the oldest manuscript yet discovered in India. It is written on leaves of birchbark, in the Kharoshthi writing, which was in use in the northwestern part of India about the beginning of the Christian era. A portion of the leaves arrived in Paris and another portion in St. Petersburg about the same time. The manuscript has been scarcely studied as yet. The characters are different from both Pali and Asoka. The contents are supposed to be similar to those of the Dhammapadam. Much interest is attached to the discovery. Professor d'Oldenbourg announced the inauguration of a series of Sanskrit Buddhist texts, to be issued by the Russian Imperial Academy at government expense, to be edited by himself. Mr. Granville Browne, of England, will publish by private subscription a series of valuable Persian texts. In the Mohammedan section it was announced that a suggestion of the late Prof. Robertson Smith was about to be carried out, a committee to arrange for the publication of an encyclopædia of Mohammedan literature and archaeology having been appointed. The committee consists of Professors De Goeje, Goldziher, Barbier de Meynard, Karabacek, Laudberg, and Socin, Granville Browne, and M. von Stoppelaar, which is a sufficient guarantee of the high class of work that may be expected. At the close of the congress M. Guimet, the founder of the famous museum, had a Buddhist priest celebrate a ceremony of his faith. There were present at the congress about 900 members, about 150 of whom were from England and 100 from Germany. The next congress will be held in Italy in either 1899 or 1900.

OSHKOSH, city, capital of Winnebago county, Wis.; population (1890), 22,836; (1895, State census) 26,947. In 1897 the aggregate assessed valuation

was \$8,978,617; total tax rate, \$28.50 per \$1,000; and total debt, all bonded, \$243,000. There are 3 national banks, with combined capital, \$500,000; deposits, \$1,453,596; and resources, \$2,478,050. The State census report of 1895 showed: Value of real estate and machinery used in manufacturing, \$2,307,351; stock and fixtures, \$1,594,523; men employed, 4,118; wages paid during the year, \$1,315,015; and the following values of leading products: Articles of wood, \$3,316,635; lumber, shingles, and lath, \$1,014,891; articles of iron, \$453,781; wagons, carriages, and sleighs, \$332,650; beer, \$67,000; and drain tile, \$35,000. There are gas and electric lights, electric street railroads, public high school, and State normal school libraries, public school property valued at \$250,000, and 3 daily, 6 weekly, and 3 monthly periodicals.

OSMAN DIGNA, a Dervish leader, concerning whose early life the authorities differ widely. By some it is claimed that he is an Englishman named George Nisbet; by others that he is a Frenchman, born in Rouen; while others again declare that he was born at Suakin in 1836, belonged to a once wealthy family of slave-traders, and for many years carried on the trade himself at Khartoum and Berber. When Mohammed Ahmed, better known as El Mahdi, induced the tribes around Suakin to revolt against the Egyptians, Osman became his military commander and acquired vast influence over the tribesmen. From 1881, when El Mahdi's rebellion broke out on the White Nile, till December, 1888, Osman was constantly in the field, fighting by turns the Egyptians, the Abyssinians, and the English, and defeating and being defeated, till the British under General Grenfell repulsed his movement against Suakin (1888). In the summer of 1897, the Khalifa summoned Osman to Omdurman, the camp near Khartoum, to assist the Dervish forces against the advance of the Anglo-Egyptian expedition up the Nile. See DONGOLA.

OSMAN PASHA, military officer, was born in Tokat, Asia Minor, in 1832; greatly distinguished himself as commander of the 5th army corps of Turkey in the Russo-Turkish war of 1877 by holding Plevna for nearly 4 months against the siege and attacks of the Russians. After the war he reorganized the Turkish army, served several times as minister of war, and became grand marshal of the palace, where a part of his duty was the examination and tasting of all food and drink destined for the sultan's private table. In April, 1897, he was selected by the sultan to succeed Edhem Pasha as commander-in-chief of the Turkish army in Thessaly; but the sudden termination of the Græco-Turkish war left him no opportunity for distinction in that conflict.

OTTAWA, city, capital of the Dominion of Canada and of Carleton county, Ontario; population (1891), 44,154. The city has electric light and street railroad plants; 10 chartered and branch banks; 35 churches; several large saw and flour mills; manufactories of iron castings, mill machinery, agricultural implements, brooms, brick, leather, paper, wooden ware, etc.; and 5 daily, 3 semi-weekly, 6 weekly, and 4 monthly periodicals. Its chief attractions are the magnificent government buildings. The city now returns 2 members to the House of Commons and 2 to the provincial legislature.

OTTAWA UNIVERSITY, Ottawa, Kan., Baptist; co-educational; had at close of 1896, 15 professors and instructors; 401 students; 3,500 volumes in library; \$83,472 in productive funds; \$10,537 income; president, J. D. S. Riggs, A. M., PH. D.

OTTERBEIN UNIVERSITY, Westerville, O., United Brethren; co-educational; had at close of 1896, 18 professors and instructors; 270 students; 7,500 volumes in library; \$7,500 in productive funds; \$7,000 income; president, T. J. Sanders, A. M., PH. D.

OUACHITA BAPTIST COLLEGE, Arkadelphia, Ark., co-educational; had at close of 1896, 17 professors and instructors; 300 students; 3,000 volumes in library; \$9,000 income; president, John W. Conger, A.M.

OXFORD COLLEGE, Oxford, O., Presbyterian; for women only; had at close of 1896, 25 professors and instructors; 210 students; \$35,000 income; president, Faye Walker, D.D.

OXFORD UNIVERSITY, Oxford, England, had in 1896, 23 affiliated colleges; 95 professors and instructors; 3,365 undergraduate students; and about 12,000 students in all. The resident members of the university consist of undergraduates going through a course of instruction and study, and of graduates giving instruction or engaged in research. The affiliated colleges now include institutions in Lampeter, Nottingham, Sheffield, Sydney, Calcutta, Bombay, Adelaide, Madras, Melbourne, Allahabad, Toronto, and in the Cape of Good Hope and New Zealand.

PACIFIC UNIVERSITY, Forest Grove, Ore., Congregational; co-educational; had at close of 1896, 13 professors and instructors; 200 students; 2,500 volumes in the library; \$125,000 in productive funds; \$13,500 gifts; \$20,000 income; president, Thomas McClelland, D.D.

PAGE, THOMAS NELSON, author, was born in Oakland, Va., April 23, 1853. He is a noted delineator of negro character in the United States; has done much to preserve the social traditions and manners of early Virginia life; and among recent works has published *A Plantation Echo* (1895), *In Old Virginia* (1896), and, serially in *Scribner's Magazine*, *Red Rock, a Chronicle of Reconstruction* (1897-98).

PALESTINE. The condition of the Jewish settlements founded in the Holy Land was described as follows by United States Consul Germain in June, 1897: "The settlements founded by Russian and Roumanian Jewish exiles in the last decade were at first confined to Samarin, to-day called Sichrón-Ja'akòb, and Rosch-Pinah, in Galilee. Like all new enterprises, this one was subjected to many drawbacks. The colonists, formerly merchants or artisans, were inexperienced in their new occupation, and had no one to advise them. Mistakes in the selection and cultivation of the soil, and subsequent despondency, were the natural consequences. Charitable gifts from the outside improved the situation. To-day, 22 villages, with an area of about 92,000 acres, have sprung up and flourish. The agricultural school Mikweh-Israel, with an area of 593 acres, which serves as an experimental station and model farm, governs the colonies. The net earnings of this school are already sufficient to support all the teachers, as well as the 100 pupils. The largest settlement is the village Sichrón-Ja'akòb, which, with an area of 4,942 acres, has 1,000 inhabitants, paved streets, a schoolhouse in charge of 5 teachers, 1 synagogue, 1 physician, and a pharmacy. The colonists raise principally vegetables and wine grapes, and at the same time, as a side issue, plant fruit trees and spend their spare time on bee culture. They are also planting mulberry trees, with a view to silkworm culture in the future. The village of Rischol l'Zion, with an area of 22,239 acres, possesses already 1,500,000 vine stalks (which in 1894 produced about 210,000 gals. of wine), 20,000 mulberry trees, 10,000 fruit, almond, walnut, fig, and other trees. Each colonist possesses a stone house, with a vegetable and flower garden adjacent thereto, a horse and wagon, a cow, and an assortment of domestic fowls. In the other villages similar conditions prevail. At Gadrab, a settlement of former Russian students, a distillery for the manufacture of brandy is already in operation. All in all, the prospects are now good and encouraging." See also JERUSALEM AND THE ZIONISTS.

PALGRAVE, FRANCIS TURNER, LL.D., author, poet, and since 1886 professor of poetry at Oxford University, was born in London, England, Sept. 18, 1824; died there, Oct. 24, 1897. Of his numerous works, *The Golden Treasury of English Songs* (1861); *The Treasury of Sacred Song* (1869); and his spiritual romance, *The Passionate Pilgrim, or, Eros and Anteros*, have had wide circulation and popularity.

PALMER, JOHN McAULEY, candidate of the National Democratic (hard-money) party for President of the United States was born in Eagle Creek, Ky., Sept. 13, 1817. He received a common-school education; was admitted to the bar in 1839; member of the Peace Convention in 1861; served through the civil war in the Union army, attaining the rank of major-general of volunteers; elected governor of Illinois in 1868; defeated for the United States Senate in 1877, and for governor in 1888; and in 1890 was elected United States senator on the 154th ballot. In the 54th Congress he was a member of the committees on military affairs, pensions, privileges, and elections, railroads, the improvement of the Mississippi River and its tributaries, and (select) on the construction of the Nicaragua canal. In the election his ticket received 134,731 popular votes.

PALMIERI, LUIGI, noted meteorologist and director of the Vesuvian Observatory, was born in Fieschio, Benevento, Italy, April 27, 1807; died in Rome, Italy, Sept. 10, 1896.

PARAGUAY, a republic in South America; area, about 98,000 square miles; population (1895), estimated 432,000; capital, Asuncion; president, 1894-98, Gen. Juan B. Eguisquiza.

Finances.—The outstanding principal of the public debt in 1896 was \$4,055,670, arrears bonds with cost of concession, \$772,086—total, \$4,827,756. The government owed the Paraguayan Central railway \$1,990,009; Brazil, \$1,580,240; and the Argentine Republic, \$1,982,970. The revenue for 1896-97 was estimated at \$5,771,896, and the expenditure at \$5,453,551.

Commerce.—The commercial movement in 1895 was: Imports, chiefly textiles, wine, and rice, \$2,393,569; exports, chiefly yerbamate, or Paraguay tea, tobacco, hides, skins, and timber, \$2,209,322. Plumes of birds, which abound in number and variety, animal fats, and ornamental plants are also exported.

Communications.—There is a railway which connects the capital (Asuncion) with Pirapo, a river port where a great quantity of wood is shipped. It is intended to complete the road to Encarnacion, on the Parana River, and thus connect with the Argentine Republic. The railway touches Luque, Areguá, Paraguaré, and Villa Rica, which are among the most important commercial centers of the country. But the rivers are the usual means of communication. The Paraguay is navigable throughout the country, and the Parana for a long distance. By the first, the Brazilian State of Matto Grosso and Chaco Argentino can be reached; the second places Paraguay in connection with the Argentine province of Corrientes, and thus with Plata and the Atlantic. There are a number of navigation companies. There is a weekly service of good boats from Montevideo to Asuncion, touching at Humaità, Pilar, Villa Franca, Oliva, and other points. It takes eight days to ascend the rivers, including a day and a half stop at Buenos Ayres. On the return trip, four days are spent between Asuncion and Buenos Ayres, where a stop is made long enough to discharge cargo before proceeding to the capital of Uruguay. Freight boats make frequent trips up and down the rivers; some go as far as Villa Concezione. There is a regular service between the capital and Villa Hayes, between Corrientes, Posadas, and Villa

Encarnacion, and between Posadas and Tacurù Pucù, on the Parana. In 1896 there were three telegraph lines—from Asuncion to Pirapò, from the capital to Paso de la Patria, in the Argentine province of Corrientes (which connects with La Plata, and thus with Europe and America), and from the capital to Villa Hayes. A fourth line, between Asuncion and Villa Concezione, was nearly completed.

Industries.—The principal industries are agriculture, stock-raising, and lumbering. There are rich but unworked deposits of valuable minerals, iron, copper, marble, kaolin, and pyrites. The government encourages immigration, and so far has aided in the establishment of ten agricultural settlements. It has been estimated that there are about 17,000 foreigners resident in Paraguay. The laws are very liberal in regard to strangers. They are not obliged to become citizens, although citizenship is easily acquired. They are allowed all the privileges and civil rights that are granted to natives. There are 1,305 commercial houses in Paraguay, of which 117 are under the management of Italians, with an actual capital, it is calculated, of some \$1,544,000. In this list may be counted manufacturers of furniture, clothing, footwear, hats, matches, alimentary products, ice, etc.

Churches and Schools.—The established religion is the Roman Catholic; all others are tolerated. There is a National College at Asuncion, with 15 professors and over 200 students; over 140 public elementary schools; and over 100 schools subsidized by the Council of Education. There are a public library and several newspapers at the capital.

Army and Navy.—All male citizens 20 to 35 years old are liable to military duty. The actual army, practically a police force, consists of 82 officers and less than 1,500 men. For navy see NAVIES OF THE WORLD.

Recent Events.—In July, 1897, it was announced that the government had taken the aggressive in the boundary dispute with Bolivia; that troops were being hurried to the frontier line to occupy the disputed territory; and that Congress had taken the initiative in the organization of an adequate national guard. It was believed that Bolivia would make no hostile demonstration till after the special commission appointed by its government to investigate the boundary line had reported.

PARIS, city, capital of France; area, 30 square miles; population (1891), 2,447,957; (1896), 2,536,834.

Congresses.—In 1895 a number of important congresses were held in this city, among them the following: The International Metric Congress, which meets every five years, met in September and confirmed the ratio between the official platinum meter and the wave-length of light, established the equations of the Peruvian and Prussian fathom, and had reports showing that the national measures of Japan had been regulated according to the metric unit, and that the metric system had been legalized in Mexico and adopted in Tunis for measures of length and capacity and for weights. The quinquennial World's Penitentiary Congress met in July, adopted a number of measures in the line of penal reform, and adjourned to meet in Brussels. The sixth annual International Miners' Congress met in June and adopted resolutions postponing to the next meeting the question of checking overproduction and favoring a legal 8-hour working day from bank to bank for underground coal miners and also for surface workers, and the principle of holding employers responsible for all accidents occurring in mines.

The Czar's Visit.—The great event of 1896 was the visit of the czar of Russia

in October. His reception was on a magnificent scale and elicited great enthusiasm, over 1,500,000 people from the provinces being attracted to the city by it. The political significance of the visit may be inferred from the declaration of President Faure in toasting the czar, that "his presence had sealed the bonds uniting the two countries in a harmonious activity and in a mutual confidence in their destinies, and that the union of a powerful empire and a hard-working republic had already exercised a beneficent action on the peace of the world." In reply the czar said that "faithful to an unforgettable tradition," he had come to France to greet the head of a nation to which he was united by such precious bonds, and he begged the president to interpret to the whole of France his sentiment that this friendship could not but have the happiest influence. President Faure returned the czar's visit in August, 1897, and was received with equal cordiality and expressions of international friendship.

Metropolitan Railroad System.—The commission appointed by the municipality to examine into the proposed system of metropolitan railroads reported in 1896. Among their conclusions were: The lines that received the most favor were in the first place a circle line, passing around the city; secondly, a cross line, running through the heart of the city in an east-to-west direction; and thirdly, a similar cross line from north to south. The lines will be of the meter gauge, and electric traction is to be employed. The total length of the circle line is 14½ miles, of which 4 will be in tunnel, 5 in cutting, and the rest on viaduct. The cross lines will have an aggregate length of 12 miles, wholly in tunnel, which will be about 22 ft. wide by 18 ft. high. The current requisite will be generated in 3 central stations, where plants of a capacity of 22,000 horse-power will be installed. The total cost of the lines was estimated at \$23,716,800.

New Water Supply.—The last proposal for enlarging the water supply of the city is to tap Lake Leman. The water would have to be brought a distance of 350 miles; the line of conduit would be wholly on French territory; the cost is estimated at \$107,320,000; and the chief objection to the scheme is said to be of a strategetic character.

Charity Bazaar Fire.—A terrible calamity occurred on May 4, 1897, during the progress of a grand charity bazaar, under the management of some of the most distinguished ladies of the city, when, through the carelessness of a workman, the building caught fire, and during the ensuing panic nearly 150 persons were burned or trampled to death. A requiem mass was celebrated in Notre Dame Cathedral, May 8, with great solemnity. The death at the fire of the Duchesse d'Alençon caused the death from shock, on the 7th, of the Duc d'Aumale in Sicily.

Exposition of 1900.—In 1895 the government adopted plans for an international exposition to be held in Paris in 1900, opening April 15 and closing Nov. 5. The government appropriation is \$20,000,000, and that of the Municipal Council of Paris an amount not exceeding \$4,000,000. The site will comprise the public grounds on both sides of the Seine from the Place de la Concorde, in the heart of the city, to a point beyond the Pont d'Jena, embracing the Champs de Mars, the Trocadero Palace and Park (site of the Exposition of 1889), the Esplanade des Invalides, the Quai d'Orsay, the Quai de la Conference, the Cour de la Reine, and a large section of the Champs Elysées, including the site of the Palais de l'Industrie, the great building erected for the Exposition of 1855. The unique palace of the Trocadero will be used, as well as several of the great exposition halls of 1889 in the Champs de Mars, but all of them will undergo more or less modification. The Eiffel Tower will be preserved, but it is probable

that some new and striking features will be added to it. The Palais de l'Industrie, in which the annual salon of the Société des Artistes Français is held, will disappear, however, and on its site will be erected a magnificent edifice to serve as the Fine Arts Hall during the exposition, and to remain as a permanent monument. To the west of the Fine Arts Hall, on the same side of the Champs Elysées, will rise the Hall of Liberal Arts, which is also to be a stately and permanent edifice. Between these great buildings will be constructed a broad avenue extending from the Champs Elysées to the Seine, at the point where a magnificent bridge is being constructed, named after Alexander III., emperor of Russia, by whose son, the present emperor, the cornerstone was laid, with imposing ceremonies, during his visit to Paris in 1896. This bridge will have a pronounced artistic character, and, with the projected avenue, will connect the Champs Elysées and the Esplanade des Invalides, adding a new and impressive vista to the charms of the famous Parisian avenue, with the stately golden dome which crowns the tomb of the great Napoleon in the background. The national and municipal authorities and the management of the exposition are preparing to co-operate in improving the transportation facilities and public conveniences of Paris, and in adding, before 1900, to the already numerous attractions of the city. A number of modern hotels, some of which are already under construction, and several handsome new theaters will be built, and the magnificent Opera Comique, now in course of erection, will be completed. Public parks, gardens, and squares will be created in all parts of the city—for example, at Upper St. Philippe du Roule and in the St. Marguerite quarter. Rows of trees will be placed at the Place de Rennes, and the banks of the Canal St. Martin will be covered with turf. The rows of trees in the Champs Elysées will be doubled and still more trees will be planted in the Avenue du Bois du Boulogne. The roads leading into the Bois from the Auteuil side will be arranged in terraces, covered with flowers, and overlooking the valley of the Seine. The park and gardens on the Butte Montmartre will be finished by that time. At night, the city will be brilliantly illuminated by an extensive system of electric lights as far as the outer boulevards and including the Bois du Boulogne and de Vincennes. It is the avowed purpose to make the exposition surpass all its predecessors, both in France and elsewhere, in its artistic aspects, in the logical, comprehensive, and scientific system of classification and award, and in the uniformity and harmony of the whole. The United States Commissioner-General, Maj. Moses P. Handy (died Jan. 8, 1898) went to Paris in the summer of 1897, and by personal appeals secured an area for United States exhibits much larger than was originally assigned. Even under this arrangement, the principle that will have to govern the matter of United States exhibits will be selection by type and merit rather than quantity.

PARK COLLEGE, Parkville, Mo., non-sectarian; co-educational; had at close of 1896, 19 professors and instructors; 385 students; 9,000 volumes in library; \$145,000 in productive funds; \$12,000 gifts; \$10,000 income; chairman of faculty, L. M. McAfee.

PARKER, GILBERT, novelist and dramatist, was born in Quebec, Canada, in 1862. He became lecturer on English literature in Trinity College, Toronto; traveled extensively in Austria and the South Sea islands; and settled in London, England, where he applied himself principally to fiction. He has made a special study of the romance and life of the Hudson Bay Company, Canada, and the Far West. His latest works include *The Trail of the Sword*; *When Iainmond Came*

to *Pontiac* (1895); *The Seats of the Mighty* and *An Adventure of the North* (1896); *Pomp of the Lavilletes* and *A Romance of the Snows* (1897), etc.

PARSONS, ALFRED WILLIAM, painter, was born in Frome, Somersetshire, England, Dec. 2, 1847. He is one of the best-known of English landscape painters; has exhibited at the Royal Academy since 1871; received medals at the Paris exhibition (1889), Chicago (1893), and Munich (1893); went to Japan in 1892, and subsequently exhibited the results of his work there in New York, Boston, and London; is also an illustrator of high merit, and a leader in black and white work; and was elected an associate of the Royal Academy in 1897.

PARSONS COLLEGE, Fairfield, Ia., Presbyterian; co-educational; had at close of 1896, 12 professors and instructors; 178 students; 25,000 volumes in library; \$160,000 in productive funds; \$4,000 income; president, D. E. Jenkins.

PATENT OFFICE, U. S. The report of the Commissioner of the United States Patent Office for the fiscal year ending June 30, 1897, showed total number of applications, 47,747; receipts, \$1,343,779.44; and expenditures, \$1,026,644.39. Of the total applications, 43,524 were for patents; 2,088 for designs; 80 for reissues; 2,137 for caveats; 1,964 for trademarks; 54 for labels; and 37 for the registration of prints. There were 23,994 patents granted, including reissues and designs; 1,790 trademarks and 32 prints registered. The number of patents which expired was 12,584. The number of allowed applications, which were by operation of law forfeited for non-payment of the final fees, was 5,034. The total net receipts over expenditures standing to the credit of the office on the treasury books amounted to \$5,093,614, and the number of applications awaiting action on the part of the office was 12,241, against 8,943 at the end of the previous year.

PATERSON, city, capital of Passaic county, N. J.; population (1890), 78,347; (1895, State census) 97,344. In 1896 the assessed valuations were: Real estate, \$36,320,148; personal property, \$7,243,536—total, \$43,563,684; tax rate, \$25 per \$1,000. The total debt, July, 1895, was \$2,518,500, and the city owned property and other available assets amounting to nearly \$4,000,000. There are 3 national banks in operation with combined capital, \$850,000; deposits, \$3,374,805; and resources, \$5,430,543; a savings bank with capital, \$100,000; 64 churches; 21 buildings used for public school purposes; public school property valued at about \$700,000; annual expenditure for public education, about \$250,000; electric light and street railroad plants, the last connecting with Newark, Hoboken, and intermediate places; public library; and 5 daily, 7 weekly, and 4 monthly periodicals. A new municipal building, that cost with grounds and furniture \$540,000, was dedicated July 6, 1896. A novel feature is two costly memorial windows to John J. Brown, the first mayor of the city, and John Ryle, the "father" of the silk industry in Paterson as well as in the United States.

PATMORE, COVENTRY KEARSEY DEIGHTON, poet, was born in Woodford, Essex, England, in 1823; died in Lynton, England, Nov. 26, 1896. He will probably be remembered longest by his poem of wedded life, *The Angel in the House*.

PAWTUCKET, city, Providence county, R. I.; population (1890), 27,633; (1895) 32,577. In 1895 the assessed valuations were: Real estate, \$26,148,448; personal property, \$5,700,956—total, \$31,849,404; tax rate, \$15 per \$1,000. The bonded debt, including a water debt of \$1,696,139, was \$3,600,000; floating debt, \$656,621; total debt, \$4,256,621; sinking fund, \$482,736; net debt, \$3,773,884. There are 3 national banks, with combined capital, \$800,000; deposits, \$1,881,126; and resources, \$3,621,811; 3 savings banks with deposits

of over \$3,000,000; 26 buildings used for public school purposes; public school property valued at over \$500,000; annual expenditure for public education, nearly \$125,000; electric light and street railroad plants; and 3 daily and 2 weekly newspapers.

PEACE UNION. The 31st annual meeting of the Universal Peace Union was held at Mystic, Conn., in August, 1897. The treasurer's report showed \$1,500 expended during the year. The property belonging to the union amounts to \$7,000. A numerous signed petition was forwarded to the Parliament of Sweden, to which the late Alfred Nobel, manufacturer of explosives, intrusted the awarding of a large bequest left by him to be given to the person who should have done the most to promote the cause of peace among the nations. The petition named the president of the Universal Peace Union, Alfred H. Love, as the person among living men of the time who has done most for peace. The bequest was awarded to the Russian artist, Verestshagin, the realistic painter of battle-scenes.

PEARSONS, DANIEL KIMBALL, M.D., philanthropist, was born in Bradford, Vt., in 1820; graduated at the Woodstock (Vt.) Medical School; practiced in Vermont and Massachusetts till 1851, when he went West and ultimately settled in Chicago; and there acquired a large fortune in real estate transactions. He is widely known for the number, conditions, and amount of his gifts to educational institutions, which in 1895 aggregated over \$1,500,000—since largely increased. He personally investigates every case, and when satisfied of its worthiness usually offers to give \$50,000 on condition that a similar or other sum be raised by the friends of the institution within a specified time. His largest gifts were to Beloit College, \$250,000, and the Chicago Theological Seminary, \$230,000.

PEARY, ROBERT EDWARD, civil engineer, United States navy, and Polar explorer, was born in Cresson, Pa., May 6, 1856. In October, 1896, he returned from an expedition to Melville Bay, on which he was accompanied by a party of distinguished scientists, who desired to make a topographical survey of a portion of the uncharted north shore of Omanak fiord, on the west coast of Greenland. He brought with him a large quantity of Arctic rarities. In January, 1897, he was presented by the American Geographical Society with the first gold medal provided for under the will of the late Gen. George W. Cullom, in recognition of his discoveries in the Arctic regions, and particularly for his establishment of the insularity of Greenland. In April he was ordered to duty at the Mare Island navy yard, San Francisco; but under strong pressure by scientific and geographical societies throughout the country, the secretary of the navy revoked the order, and gave him leave of absence for five years for further exploration. In July he started on a preliminary voyage, for the purpose of establishing a settlement at a remote northern point in Greenland, to be used as a base of supplies for an expedition in search of the North Pole he planned to undertake in 1898. In September his steamer *Hope* arrived at Brooklyn, N. Y., having on board the 100-ton meteorite, which he had previously discovered in Greenland, and which is believed to be the largest ever found. His last publication was *Northward over the Great Ice* (1898).

PENDER, SIR JOHN, chief promoter of ocean telegraphy, was born in Dumbarshire, Scotland, in 1816; died in London, England, July 7, 1896.

PENN COLLEGE, Oskaloosa, Ia., Friends; co-educational; had at close of 1896, 11 professors and instructors; 213 students; 5,000 volumes in library;

30,000 in productive funds; \$5,000 gifts; \$10,000 income; president, A. Rosenberger, A. B., LL. D.

PENNSYLVANIA, one of the United States of North America; the second of the original thirteen States to ratify the Federal constitution (Dec. 12, 1787); counties, 67; capital, Harrisburg.

State Officers, 1895-99.—Governor (elected for 4 years, salary \$10,000 per annum), Daniel H. Hastings; lieutenant-governor, Walter Lyon; secretary of the commonwealth, David Martin; secretary of internal affairs, James W. Latta; treasurer, B. J. Haywood, succeeded in 1898 by James S. Beacom; auditor-general, Amos H. Mylin, succeeded in 1898 by L. G. Macauley; attorney-general, Henry C. McCormick; adjutant-general, Thomas J. Stewart; insurance commissioner, James H. Lambert; bank commissioner, B. F. Gilkeson; secretary of agriculture, Thomas J. Edge; superintendent of public instruction, N. C. Schaeffer; chief justice of the supreme court, James P. Sterrett; associate justices, Henry Green, Henry W. Williams, James T. Mitchell, J. B. McCullom, John Deau, D. Newlin Fell; prothonotaries, Charles S. Greene (E. Dist.), William Pearson (M. Dist.), George Pearson (W. Dist.)—all Republicans, excepting Judge McCullom (Democrat).

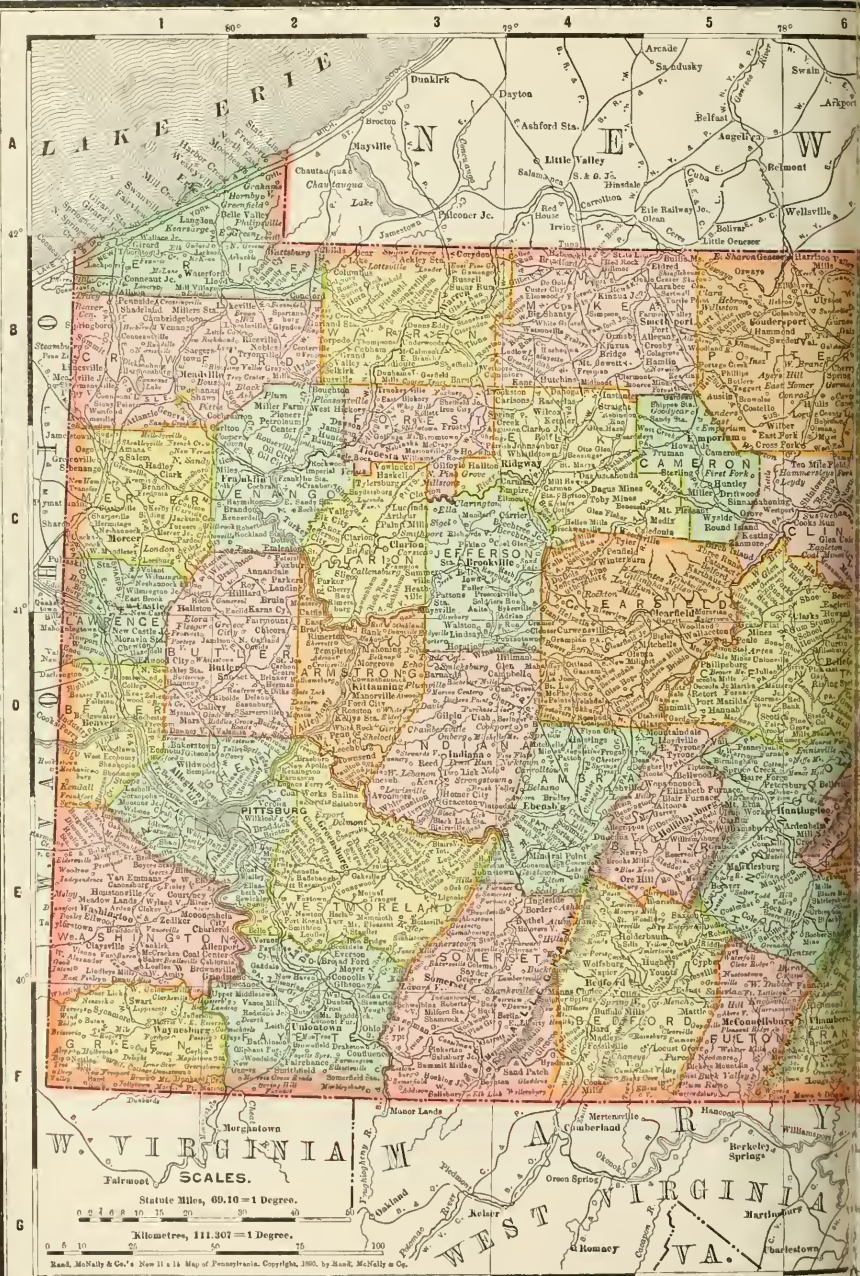
Legislature, 1897.—Republicans, senate 44, house 171, joint ballot, 215; Democrats, senate 17, house 70, joint ballot 87; Republican majority, senate 6, house, 33, joint ballot 39.

Elections.—In the State elections 1894, there were 951,132 votes cast for governor, of which the Republican candidate (Hastings) received 574,801; the Democratic candidate (Singerly), 333,404; the Prohibition candidate (Hawley), 23,443; and the Populist candidate (Ailman), 19,484; Republican plurality, 241,397. The congressional elections in 1896 resulted in the choice of 2 Republican representatives-at-large by votes of 711,246 (Galusha A. Grow), and 708,633 (S. A. Davenport), and 25 Republican and 3 Democratic district candidates. In the presidential election, the Republican candidate received 728,300 votes; the Democratic, 433,228; the Prohibition, 19,274; the National Democratic, 11,000; and the Social Labor, 1,683. In an election for auditor-general, 1897, the Republican candidate (Macauley) received 412,652 votes; the Democratic (Ritter), 268,341; and the Prohibition (Lathrope), 58,876.

Farm Products.—Reported Dec. 31, 1897: Corn, 44,866,116 bush., from 1,246,281 acres, value \$15,254,479; wheat, 28,259,611 bush., from 1,434,498 acres, value \$25,716,246; oats, 31,842,538 bush., from 1,129,168 acres, value \$8,597,485; rye, 5,355,226 bush., from 281,854 acres, value \$2,302,747; barley, 218,491 bush., from 8,918 acres, value \$85,211; buckwheat, 5,038,488 bush., from 239,928 acres, value \$2,116,165; potatoes, 10,650,780 bush., from 169,060 acres, value \$7,029,515; and hay, 3,690,439 tons, from 2,636,028 acres, value \$33,767,517—total value, \$90,475,838.

Farm Animals.—Reported Jan. 1, 1898: Horses, 565,719, value \$27,862,207; mules, 36,686, value \$2,322,825; cows, 928,905, value \$27,495,588; cattle, 550,981, value \$13,025,756; sheep, 782,776, value \$2,669,266; and swine, 1,033,001, value \$6,999,613—total value, \$80,375,255.

Coal.—In 1895 the State produced 56 per cent. of all the coal mined in the country, the output being 96,621,933 long or 108,216,565 short tons, of a spot value of \$117,969,629, an increase over the output of the previous year of 14,627,662 long or 16,382,981 short tons, and an increase in value of \$10,031,746. The increase in anthracite was 5,426,978 long or 6,078,215 short tons, and in bituminous, 9,200,683 long or 10,304,765 short tons. In the period 1880-95 the



Statute Miles, 69.16 = 1 Degree.
Kilometers, 111.307 = 1 Degree.

Scale, McNally & Co.'s New 11 x 14 Map of Pennsylvania, Copyright, 1905, by H. McNally & Co.

total output was 217,283,166 short tons, or 56 per cent. of that of the whole country. The output of anthracite in 1895, practically that of the entire country, was 51,785,122 long tons, spot value \$82,019,272, principally in Schuylkill county (19,239,498 long tons); Carbon (12,664,913); Northumberland (11,941,242); Columbia (4,773,121); and Susquehanna (1,470,595). The bituminous output was 41,836,811 long or 50,217,228 short tons, spot value \$35,980,357, principally in Fayette county (9,655,369 short tons); Westmoreland (9,606,154); Allegheny (6,615,974); Clearfield (5,215,527); Cambria (4,289,257); Jefferson (4,248,329); and Washington (3,577,260).

Coke.—The State has nearly half of the coking plants of the country, more than half of the ovens, and more than half of the product, there being (1895) 99 plants, with 26,042 ovens built and 170 building, which used 14,211,567 short tons of coal, and produced 9,401,215 short tons of coke, valued at \$11,908,162, an increase over the previous year.

Petroleum.—Owing to the opening of wells in other States there was a general increased production throughout the United States in 1895, the local yield being 18,231,412 bbls. (42 gals.), valued at \$24,900,630.

Natural Gas.—On Jan. 1, 1896, there were 1,068 producing wells, operated by 129 concerns or private parties, and supplying 212,834 domestic fires and 656 manufacturing establishments. The value of the coal and wood displaced by this gas was \$3,677,129; and the amount received for gas consumed, \$3,485,315.

Phosphate Rock.—Early in 1896 rocks were discovered near Reed's Gap, Juniata county, which were analyzed by Professor Ihseng, of the Pennsylvania State College, and showed from 12 to 50 per cent. of phosphoric acid. Explorations were undertaken soon afterward, with prospects that the discovery would add largely to the agricultural resources of the State in the line of fertilizers.

Quarries.—The value of the stone output of 1895 was: Granite, \$300,000; sandstone, \$500,000; slate, \$1,647,751; marble, \$59,787; and limestone, \$3,055,913—total, \$5,563,451. The output of granite was about one-half of that of the preceding year, owing to the closing of many quarries. Sandstone showed an increase of \$150,213. The slate product was more than half of the entire output of the country, and of the total value, \$1,437,697 represented 426,687 squares of roofing slate, the remainder being milled stock. In limestone the State held first rank. The value of lime produced was \$1,720,000, stone used for building and road-making, \$796,124; flux, \$539,489.

Clay Products.—Clay-working firms numbering 513 reported on their output for the calendar year 1895 as follows: Common and pressed brick, \$4,589,218; fancy brick, \$48,032; firebrick, \$2,250,790; vitrified paving brick \$305,035; drain tile, \$13,320; other tile, \$95,529; sewer pipe, \$360,475; terra cotta work, \$383,508; stoneware, \$208,130; and miscellaneous, \$553,124—total, \$8,807,161. The State ranked second in this industry.

Iron.—In 1895 the State held fourth rank in total production of iron ore, the output being 628,999 long tons of magnetite; 239,153 of brown hematite; 29,606 of red hematite; and 2,582 of carbonate; total value, \$997,719. The production of pig iron in 1895 was 4,701,163 long tons, and of Bessemer steel, 2,978,924, giving the State first rank in each. On June 30, 1896, there were 79 furnaces in blast and 99 out.

Finances.—The treasury receipts in 1896 were \$12,265,756; disbursements, \$11,004,517; the largest source of receipts was the tax on corporation stock and limited partnerships. The public debt, Dec. 1, 1896, aggregated \$6,815,305; sinking funds, \$5,067,055; net debt, \$1,748,250. Excluding railroad property,

the assessed valuations in 1896 were: Real estate, \$2,499,661,995; personal property, \$831,026,331—total, \$3,330,688,326.

Banks.—On Oct. 31, 1897, there were 427 national banks in operation and 66 in liquidation, the active ones having a combined capital of \$75,345,240, and holding \$32,821,050 in United States bonds. These banks had outstanding on loans and discounts, \$259,902,414; represented by demand paper with individual or firm names, \$5,034,920; the same secured by stocks, bonds, and other personal securities, \$35,752,077; time paper with two or more individual or firm names, \$131,274,573; time paper with single individual or firm name, \$36,026,235; and the same secured by stocks, bonds, and other personal securities, \$51,014,708. The banks held an aggregate of \$26,161,039 in coin and coin certificates, of which \$10,683,332 was in gold coin. The circulation account was: Issued, \$256,548,545; redeemed, \$224,661,466; outstanding, \$31,887,079. There were deposits, \$282,427,017; reserve required, \$58,940,805; reserve held, \$87,249,194; ratio of reserve, 41 banks in Philadelphia, 32.05 per cent., 30 banks in Pittsburg, 31.36, and 356 other banks in the State, 29.53. During the year ending Sept. 30, 1897, the exchanges at the United States clearing houses at Philadelphia and Pittsburg aggregated \$3,888,004,105, a decrease of \$269,349,235 from the total of the previous corresponding period. The State banks, Nov. 17, 1896, numbered 87, and had capital, \$8,790,870; deposits, \$43,091,271; resources, \$60,707,671; and surplus and profits, \$6,806,146. There were 90 loan and trust companies, with capital, \$40,399,990; deposits, \$93,143,839; resources, \$200,313,083; and surplus and profits, \$20,969,070. Mutual savings banks numbered 17, and had depositors 294,852; deposits, \$77,429,348; resources, \$87,617,995; and surplus and profits, \$10,178,109. Of private banks June 29, 1897, there were 30 with combined capital of \$1,327,739; deposits, \$7,854,584; resources, \$10,397,232; and surplus and profits, \$933,131. Combining all these institutions, the State had an aggregate banking capital of \$125,863,839.

Bubbling and Loan Associations.—An official report for 1894, unavoidably incomplete, gave the total number of such organizations as 1,239, with assets estimated at \$103,943,364. There were over 239,000 members, of whom 5,000 were women who owned shares representing \$30,000,000, and it was estimated that at least 150,000 homes had been secured wholly or in part through the associations. A special report in 1897 showed, number of associations, 1,131; shares outstanding, 1,796,311; installment dues paid in, paid-up and prepaid stock, and profits, \$97,077,776; loans, \$90,151,526; and total assets, \$99,519,918.

Internal Revenue.—During the fiscal year ending June 30, 1897, the collections of internal revenue aggregated \$11,446,317.49 from the following sources: Distilled spirits, \$3,785,684.89; tobacco, \$3,965,889.88; fermented liquors, \$3,671,445.49; oleomargarine, \$14,647.30; and penalties, \$7,892.14. During that year there were 6,352 single-account cigar factories, which used 20,626,265 lbs. of tobacco, and had an output of 186,872,627 cigars and 4,187,310 cigarettes; and 319 other factories, which used 7,817,646 lbs. of materials, and had an output of 20,855 lbs. of plug tobacco; 55,284 lbs. of fine cut, 2,988,361 lbs. of smoking, and 3,589,928 lbs. of snuff. There were 79 grain and 11 fruit distilleries in operation; 6,830,153.26 gals. of spirits rectified and 18,138,490 gals. gauged; and 3,902,280 bbls. of fermented liquors produced.

Railroads.—In 1895 the State ranked second in extent of its railroad system, with a total of 9,564.43 miles. The capital stock of all corporations operating in the State was \$1,099,303,383; cost of roads and equipments, \$1,538,501,235; and

bonded debt (1894) \$982,551,341. During 1894-95, the expenditure for improvements and construction was \$16,359,034. The casualties of the year were 1,538 persons (29 passengers) killed and 10,607 injured. The total mileage in 1896 was 9,751.39.

Commerce.—During the fiscal year ending June 30, 1897, the foreign trade in merchandise at the ports of Philadelphia, Pittsburg, and Erie was: Imports, \$49,034,260; exports, \$47,321,146.

Publications.—Reported March, 1898: Daily, 196; tri-weekly, 5; semi-weekly, 34; weekly, 915; bi-weekly, 4; semi-monthly, 22; monthly, 235; bi-monthly, 9; and quarterly, 9.

Post-Officers.—Reported January, 1897: First-class, 12; second, 67; third, 188 (presidential, 267); and fourth, 4,721; money-order offices, 1,569; money-order stations, 81; limited money-order offices, 33.

Churches.—The Roman Catholic is the strongest denomination in the State, and is followed in their order by the Methodist Episcopal; Presbyterian; Lutheran, General Council; Reformed; Regular Baptist; Lutheran, General Synod; Protestant Episcopal; Evangelical Association; United Presbyterian; United Brethren in Christ; and Dunkards, Conservative. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Pennsylvania, 9,243 evangelical Sunday schools, 144,155 officers and teachers, and 1,160,351 scholars—total members, 1,304,506, a gain of 75,353 in three years.

Schools.—In 1895 (June 30) the number of children of school age in the State was estimated at 1,593,000, of whom 1,070,612 were enrolled in the public schools, and about 760,000 were in average daily attendance. The number of public schools was 25,348; teachers, 26,988 (males 8,628, females 17,460). The expenditures were \$18,992,651, including \$9,304,329 for teachers' salaries, and \$924,305 for text books. The value of all public school property was nearly \$50,000,000. There were 30 universities and colleges of liberal arts, with a total of 783 professors and instructors; 9,048 students in all departments (7,858 males, 1,190 females); 450,938 bound volumes in the libraries; \$1,000,735 in total income; \$7,983,141 invested in grounds and buildings; \$6,311,908 in productive funds; and \$792,144 receipts from gifts. The institutions with the largest attendance were the University of Pennsylvania, 2,102; Girard College, 1,918; Lehigh University, 520; Western University of Pennsylvania, 423; Dickinson College, 326; and Lafayette College, 311. The endowed academies, seminaries, and other private secondary schools numbered 93; public high schools, 154; colleges exclusively for women, 8; public normal schools, 13; private, 1; colleges with normal departments, 8; commercial colleges, 2.

Libraries.—In 1896 there were reported 330 public libraries of 1,000 volumes each and upward, with a total of 2,964,761 bound volumes and 355,564 pamphlets.

Population.—In 1890, 5,258,014, of whom 2,666,331 were males; 2,591,683 females; 4,412,294 natives; 845,720 foreign-born; 5,118,257 whites; and 109,757 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 6,009,000.

PENNSYLVANIA COLLEGE, Gettysburg, Pa., Lutheran; co-educational; had at close of 1896, 16 professors and instructors; 236 students; 24,000 volumes in library; \$210,000 in productive funds; \$24,000 income; president, H. W. McKnight, D. D., LL. D.

PENNSYLVANIA STATE COLLEGE, State College Station, Pa., non-sectarian; co-educational; had at close of 1896, 43 professors and instructors; 510 students; 9,212 volumes in library; \$517,000 in productive funds; \$120,248 income; president, Geo. W. Atherton, LL.D.

PENNSYLVANIA, WESTERN UNIVERSITY OF, Pittsburg, Pa., non-sectarian; co-educational; had at close of 1896, 138 professors; 725 students; 15,000 volumes in library; \$300,000 in productive funds; \$11,000 gifts; \$84,000 income; president, W. J. Holland, PH.D., D.D.

PENSION OFFICE, U. S. The commissioner of pensions issued a statement in August, 1897, showing that at the beginning of the fiscal year, 1897-98 the pensioners of the United States numbered 983,528, an increase of 12,850 in a year; that during the fiscal year 1896-97 pensions were granted to 50,101 persons and 3,971 names were restored to the rolls; and that in the last period there was a decrease in the number of pensioners of 31,960 by death, 1,074 by remarriage of widows, 1,845 by orphans reaching their majority, 2,683 by failures to claim pensions, and 3,560 by unrecorded causes. The commissioner estimated that the total payments for 1897-98 would not exceed \$147,500,000, for which there was an appropriation of \$141,263,880. The increased pension payments would be due chiefly to the fact that there are about 200,000 old claims pending which it is the intention of the bureau to adjudicate as rapidly as possible. The claims allowed probably would call for something like \$5,000,000. There has also been a remarkable increase in the number of new pension applications, and these would increase expenditures largely. The government has paid out in pensions since 1865 about \$2,000,000,000, and Colonel Ainsworth, chief of the record and pension office, estimated that the cost of the pension roll of the civil war, from June 30, 1897, till 1945, when the last survivor of the war will have disappeared, will be \$2,110,140,289 more.

PEORIA, city, capital of Peoria county, Ill.; population (1890), 41,024; (1897, estimated) 63,000. In 1896 the assessed valuations were: Real estate, \$7,990,187; personal property, \$1,650,310—total, \$9,640,497; total tax rate, \$88.70 per \$1,000. The bonded debt, Jan. 1, 1897, including a water debt of \$295,000, was \$514,500; floating debt, \$50,000; total debt, \$564,500. The city holds securities against the water debt aggregating \$450,000. There are 6 national banks, with combined capital, \$1,250,000; deposits, \$2,864,711; and resources, \$6,049,274; 15 buildings used for public school purposes; public school property valued at \$600,000; annual expenditure for public education, \$140,000; public and law libraries; electric light and street railroad plants; and 6 daily, 11 weekly, and 3 monthly periodicals.

PERSIA, an Asiatic kingdom lying between Turkey and Afghanistan; area 628,000 square miles; population, 9,000,000; capital, Teheran; sovereign, the Shah Muzafereh-din, who succeeded his father in 1896. Revenue, 1896-97 (estimated on gold basis), \$6,750,000, raised mostly by assessments on towns, villages, and districts. The chief exports are silk, 400,000 lbs.; opium, 13,000 cases; tobacco, 5,500 tons; cotton, 10,000,000 lbs.; wool, 7,714,000 lbs.; carpets about \$750,000; estimated total value of exports and imports, \$37,000,000. The means of intercommunication are very scanty. In 1896 there was only one railroad, 6 miles, and another building, 20 miles; there were but 90 miles of "carriageable" roads; the Karûn River, at the head of the Persian Gulf, is open to steam navigation as far as Ahwaz. There are 4,150 miles of telegraph line, with 99 stations. The father of the reigning shah was assassinated May 1, 1896. His successor was enthroned at Teheran, June 8. The bulk of the population are of

the Shiah faith, 8,000,000; among the remainder are 25,000 Jews, 45,000 Armenians, and 25,000 Nestorians. The American Board of Foreign Missions has four principal mission stations in the shah's dominions, at Teheran, Tabriz, Namadan, and Urumia, their labors in the latter station being directed toward the conversion of the Nestorians, but in the other three toward that of the Armenians. In the field of operation of which Urumia is the center, about 65 native Nestorians, assisted and directed by the missionaries from the United States, preach in about 70 places every Sunday to nearly 4,000 persons. The church which has been built up is Protestant and Evangelic-Presbyterian in principle, but adapted to local needs and customs. The mission center at Urumia comprises Urumia College, 113 pupils; Fiske Seminary for girls, 194 pupils; and 78 village schools, with 1,064 boys and 556 girls.

PERU, a republic on the Pacific coast of South America; area 464,000 square miles; population, 3,000,000; capital, Lima; president, Don Nicolas de Pierola. The constitution is modeled on that of the United States. The chief products are sugar, wool, cotton, silver, coffee, tobacco, guano; total revenue about \$4,000,000; imports, \$5,500,000; exports, \$8,500,000; foreign debt, \$157,000,000, secured by concession for 66 years, beginning 1890, of all the state railways, guano deposits, mines, and lands. The army of the republic numbers 2,875 men, and there is a police force of about 2,500. The foreign commerce is chiefly with England and Germany. The total working length of the railways is 925 miles; the length of telegraph lines is 1,633 miles with 45 offices.

Recent Events.—V. H. McCord, consular agent of the United States, was in 1885 arrested by a Peruvian military officer on suspicion of giving aid and comfort to rebels and was sentenced to be shot, but the penalty was commuted to a fine, which was paid. McCord then made a claim for \$200,000 damages. On Jan. 17, 1897, Secretary of State Olney directed the United States minister at Lima to insist on payment without further delay. In September, 1897, Secretary Sherman addressed a note to the Peruvian government urging that the long and irritating controversy be closed. It was believed that a final adjustment would be reached at an early day. In 1896 much anxiety was felt in Peru owing to the reported purpose of Chile to cede to Bolivia the two Peruvian provinces, Tacna and Arica, occupied by Chile since the Chilo-Peruvian war. But in March, 1897, an understanding was concluded between the two republics that the provinces should be restored to Peru on payment of \$10,000,000. The money was to be advanced to Peru by the Paris banking house of Dreyfus. The existence of petroleum in Peru has long been known. In 1896 E. P. Larkin, an American engineer, estimated the petroleum area at 800 square leagues, and the supply as inexhaustible. On April 9, 1897, the government suspended the coinage of silver at the mint and issued a proclamation forbidding importation of silver coins. A plan for establishing a gold standard was subsequently considered by the president and cabinet, as the only solution of the financial troubles which beset the republic on every side, and after receiving their approval, was sent to the Chamber of Deputies, which adopted it by a majority of one vote on Oct. 6. Later in the month the cabinet resigned on account of a vote of censure, which it was known the Congress proposed to pass, for the failure of the government to promulgate various measures passed at the special session of 1896. The Committee of Deputies, appointed to agree on a plan for the settlement of the affairs of the Peruvian corporation, were unable to reach an agreement. The Peruvian corporation is a London body, which has an agreement with the Peruvian government providing (1) for the payment of £80,000 (\$400,000) annually

to the "Peruvian Corporation of London" for certain work to be done by the latter, and (2) for the construction by the corporation of 160 kilometers of railroad, which, it is understood, has not been accomplished. In September, the minister of finance, as an evidence of the prosperity of the country, reported that the commerce for 1896 showed imports valued at \$8,575,000; exports, \$12,495,000; and customs revenue, nearly \$3,430,000.

PHILADELPHIA, city, co-extensive with Philadelphia county, Pa.; population (1890), 1,046,964; (1897, estimated) 1,300,000.

Finances.—The total bonded debt, Jan. 1, 1897, was \$54,023,120; outstanding warrants, \$1,031,810—total debt, \$55,054,930; sinking funds, \$19,575,350; net debt, \$35,479,580. In addition to the sinking funds, the city held various properties valued at \$8,296,590, besides real estate appraised at \$52,774,894. The total assessed valuations (assessment three-fourths actual value) were \$818,827,549, and the tax rate \$18.50 per \$1,000.

Banking.—There are 41 national banks in operation, with combined capital, \$21,965,000; reserve, \$27,960,637; United States bonds, \$7,927,000; excess beyond legal requirements, \$5,890; loans and discounts, \$102,577,519; deposits, \$104,003,950; resources, \$186,138,713; and surplus, \$14,683,000. In the year ending Sept. 30, 1897, the exchanges at the clearing house aggregated \$3,106,510,779, a decrease of \$277,393,027 from the total of the previous year. There are also nearly 50 trust companies doing a large general banking business; 4 savings banks; 3 State banks; and over 450 building and loan association offices, representing assets of \$40,000,000, and annual receipts of \$5,000,000. These associations take the place of the ordinary savings banks to a large extent.

Commerce.—The commercial movement of merchandise in the fiscal years ending June 30, 1896 and 1897 respectively, was as follows: Imports, \$43,840,836 and \$48,072,672—total, \$91,913,508; exports, \$39,567,376 and \$47,305,273—total, \$86,872,649; total trade, \$83,408,212 and \$95,377,945; grand total for the two years, \$178,786,157. The demand of foreign countries for grain from the United States in the last half of 1897 very largely increased the export trade of the city. In a single week in August, 17 steamships sailed from the port, with cargoes of corn, wheat, and oats, aggregating 1,450,000 bushels. These shipments brought the exports of corn for the year up to 17,018,602 bush., against 4,213,360 bush. for the corresponding period of 1896; and of wheat up to 1,726,588 bush.; and the engagements for deliveries during the following six months were of similar proportions. In the first half of the year the exports of petroleum amounted to 226,655,281 gals., an increase of 38,500,000 gals. over those of the like period in 1896. Another indication of increased shipping activity was the chartering in a single day in August of 20 steamships to carry fruit and other cargoes to and from the West Indies. Among the notable shipments of 1896-97 were 60 locomotive engines and 50 tenders to Russia.

Parks.—The total area of the public parks now exceeds 3,500 acres; the parks number over 50; each ward in the city has at least one park; and the present park-extension movement has resulted in the demolition of entire squares of some of the most disreputable houses in the slums. The largest park is the celebrated Fairmount Park, which is also the largest in the United States, and the smallest is Union, less than a quarter of an acre in extent.

Miscellaneous Statistics.—There are over 1,300 miles of streets, of which about 970 miles are paved; 712 miles of sewers; 1,174 miles of water mains; water-works plant that cost over \$28,000,000, and has a capacity of 380,790,000 gals.; police department of 2,450 officers and men, which costs the city annually over

\$2,350,000; fire department of 734 officers and men, costs annually \$890,000; about 600 churches, of which the largest is the Roman Catholic Cathedral of SS. Peter and Paul; nearly 300 buildings used for public school purposes; public school property valued at over \$11,275,000; electric street lighting plant that costs annually over \$800,000; over 60 social, commercial, political, and miscellaneous clubs; about 20 first-class places of amusement; and 83 libraries of 1,000 volumes each and upward, of which the largest are the Library Company of Philadelphia, 1888,625 volumes, the Mercantile Library, 177,000, the University of Pennsylvania, 140,000, and the Free Library, 105,308. The annual cost of maintaining the city government is over \$31,330,000, and the annual expenditure for public education, \$3,207,000.

Projected Exposition.—In October, 1897, the trustees of the Philadelphia Commercial Museum inaugurated a movement having for its object the establishment of a national exposition of the raw and manufactured products of the United States, to be held in this city in 1898.

PHILANDER SMITH COLLEGE, Little Rock, Ark., Methodist Episcopal; co-educational; had at close of 1896, 11 professors and instructors; 180 students; 600 volumes in library; \$2,500 gifts; \$3,700 income; president, Thomas Mason, A. M., D. D.

PHILATELIC ASSOCIATION. A meeting of the American Philatelic Association was held in Boston, in August, 1897; it was the thirteenth meeting and lasted three days. The membership roll comprised 879 names. F. F. Olney, of Providence, R. I., was chosen president for the ensuing year; Joe F. Beard, of Iowa, secretary. Among the reports of committees was one recommending Pittsburg as the best location for a permanent philatelic library. The meeting was attended by the leading stamp collectors and dealers of the United States, and there were many from foreign countries. Some interesting items of philatelic information were gathered on the occasion of this assemblage; among them, that Francis S. Belden, of Chicago, owns a collection of about 11,000 stamps, among them an exceedingly valuable set of United States revenue stamps; that \$1,400 was paid by W. A. Castle, of Springfield, Mass., for a stamp privately issued by the postmaster of Baltimore between 1842-45; that Fred W. Ayer, of Bangor, Me., recently sold in London a part of his collection for \$250,000, retaining some of the most valuable specimens; and that a pair of Mauritius post stamps in London was held at \$7,500.

PHILIPPINE ISLANDS, a group of over 400 islands, forming part of the Malay Archipelago, and constituting a colony of Spain; gross area, 114,326 square miles; largest islands, Luzon and Mindamo; capital, Manila. The following is a survey of the industrial condition of the colony in 1897: There are about 25,000 Europeans resident in the islands (the total population is 8,000,000), of course, not counting the troops. Some 12,000 are established in the capital. English, Spanish, and German houses are engaged in trade, advancing money to the natives on their crops. Such business methods involve risks and necessitate large capital in the beginning, but the profits are immense. The land is fertile and productive, and lacks only intelligent cultivation. Abaca (manilla hemp) is one of the chief sources of wealth of the country. Sugar cane does not give as satisfactory returns, owing largely to the ignorance of planters. The average production is 178,000,000 kilograms (175,186.96 tons), while that of Cuba is equal to 720,000,000 kilograms. The sugar goes almost entirely to Japan, England, and the United States. It is of poor quality and very cheap. The cultivation of tobacco is one of the most important industries, although it is capable of

much greater development. In 1894, 180,010 piculs (119,977 tons) and 140,080,000 cigars were exported. The native coffee, although not equal to the mocha or bourbon varieties, has a fine aroma. It goes chiefly to Spain. Cocoa trees grow in abundance, and the oil is used for lighting houses and streets. The indigo is famous for its superior qualities. The inhabitants are apathetic to a degree that is noticeable even in these countries, where every one is averse to exertion. The women have long and slender fingers, remarkably fine and sensitive and adapted to their work. The hats and cigarette holders they make and the articles they embroider are models of delicacy. Cotton spinning and work in bamboo are among the chief industries.

In April, 1896, a fire in Manila destroyed over 4,000 habitations, and rendered about 30,000 people homeless. In August, following, a conspiracy was discovered, having for its object the independence of the islands. Prompt measures were taken by the local authorities and the Spanish government to prevent an uprising, but these efforts were futile. Within a few weeks the insurgent forces obtained possession of all the towns in the province of Cavite; a state of siege was proclaimed in Manila and seven other provinces; General Palavieja was appointed governor of the colony, and took from Spain a numerous staff and 1,500 infantry; and the Spanish troops gained a victory over a force of 10,000 insurgents at Novaleta, besides minor victories at Nasugdu and elsewhere. In January, 1897, the government troops gained a signal victory in the province of Bulacan, and captured and shot Eusibio, the commander of the insurgents in that province. General Palavieja, discouraged with his task, resigned in March, and was succeeded by General Primo de Rivera. By August the insurrection had gained such momentum that Gen. Rivera sent a telegram to the Madrid government amounting to an ultimatum. He gave the government three alternatives: Expulsion from the Philippines of the religious orders; failing in this, the immediate dispatch of 4,000 troops from Spain effectually to quell the rebellion; in the event of the refusal of either of the above to accept his resignation. In September, the Spanish cabinet agreed on a schedule of reforms for the islands, which included a modification of the penal code in regard to offenses against property and public order, and the granting of measures designed to secure greater justice to the natives.

When it became evident, in March, 1898, that war between the United States and Spain was inevitable, Com. George Dewey, commander of the United States naval force in Asiatic waters, began to mobilize his vessels in the harbor of Hong Kong, preparatory to striking a blow at the Philippine Islands on the breaking out of hostilities. By April 1 he had gathered there his flagship, the *Olympia*, a steel protected cruiser; the *Boston*, a partially protected steel cruiser; the *Raleigh*, protected steel cruiser; the *Concord*, steel gunboat; and the *Petrel*, steel gunboat. Toward the close of the month, the *Baltimore*, a steel protected cruiser, the *Hugh McCulloch*, revenue cutter, and two newly purchased ships loaded with coal and other supplies, joined the fleet. Lying in Manila Bay, one of the largest and most important in the world, was a Spanish squadron, comprising the *Reina Christina*, steel cruiser; *Castilla*, wood cruiser; *Folasco*, iron cruiser; *Don Antonio de Ulloa*, iron cruiser; *Don Juan de Austria*, iron cruiser; *Isla de Cuba*, steel protected cruiser; *Isla de Luzon*, steel protected cruiser; *General Lezo*, gunboat; *El Cano*, gunboat; *Isla de Mindanao*, auxiliary cruiser; *Marques del Duero*; and two torpedo boats. It was supposed that the harbor had been planted with mines and torpedoes and supplied with numerous searchlights, and that the forts on the shore had been strengthened in anticipation of an attack.

Whether adequate preparations for defense had been made or not was an open question at the time of writing. The United States squadron entered the bay on the night of April 30, and at 5 o'clock on Sunday morning, May 1, opened fire on the Spanish squadron and the forts. Two engagements were fought, and during the brief interval the United States squadron drew off to the east side of the bay presumably to land its wounded and to make repairs. The entire battle lasted less than two hours. The Spanish flagship, *Reina Christina*, was completely burned; the *Castilla* suffered the same fate; the *Don Juan de Austria* was blown up by a shell from one of the United States vessels; one or more ships were burned; and the entire Spanish fleet was destroyed. After his second attack, in which he destroyed the water battery at Cavite, Commodore Dewey demanded the complete surrender of the city, fortifications, munitions, and stores. The Spanish loss was about 2,000 officers and men. The United States squadron did not lose a ship nor a man. Two vessels were damaged in their upper works, and eight men were variously injured. On receipt of reports of the battle, martial law was declared in Madrid; the United States ordered the immediate shipment of supplies and reinforcements to Commodore Dewey; and political Europe found suddenly a new Eastern problem before it. Two results made extraordinary conditions. Spain, it was thought, would be forced to retire permanently from Asiatic waters, and the United States, whose national policy had always been opposed to acquiring territory beyond its own boundaries, would have on its hands a possession of great political, commercial, and strategical importance in the eyes of Europe. It was believed that the results of this battle had changed entirely the plan of operations of both the United States and Spain, and indications pointed to a great and crowning trial of strength on the Atlantic.

PHOTOGRAPHY, ROENTGEN'S, a provisional designation of the process of making pictures by rays produced by immission of a current from an induction coil into a Crookes vacuum tube. Though several physicists before Professor Roentgen, of the University of Würzburg, had developed some of the principles and phenomena concerned in the process, to Roentgen belongs the credit of first producing the "shadow pictures," "skiographs," "radiographs," or whatever the pictures may be called. He was studying the behavior of an electric current in a Crookes tube which he had incased in a covering of black paper impervious to ordinary light; but noticed a luminescence in a sheet of paper lying near by which was sensitized with barium platinocyanide. He inferred that the rays producing the luminescence came from the negative electrode, or cathode of the vacuum tube; but that those rays could permeate bodies impermeable to ordinary light rays was discovered by Prof. Hertz, of Bonn University, in 1891, and was confirmed later by other investigators. Roentgen's researches brought these observations under a general law and utilized the results in the production of shadow-pictures by means of the new kind of rays. He found that nearly all bodies are permeable by these rays, but in widely varying degrees. Paper, for instance, is highly permeable. The fluorescent screen of barium platinocyanide lights up though a book of 1,000 pages be interposed between it and the source of the rays. A single leaf of tinfoil hardly casts a shadow on the screen, but a number of superimposed leaves will intercept the rays. The bones in a person's hand intercept the rays and cast a shadow, while the surrounding tissues offer but slight obstruction. Roentgen also discovered that other bodies besides barium platinocyanide fluoresce under the action of the rays; for example, calcium sulphide, Iceland spar, rocksalt, etc. Most important was the discovery,

early made, that photographic dry plates are sensitive to the rays. Having determined the phenomena of permeation, Roentgen proceeded to study other phenomena presented by the rays and to determine whether the rays are subject to the same laws of refraction and reflection as ordinary light rays; whether the rays produce interference effects; whether they are acted on by electrostatic forces, etc. In taking prints by means of the rays—*e.g.*, a print of the bony skeleton of a hand—the object is placed between the vacuua tube and a highly sensitized photographic plate. As the bones absorb a greater proportion of the rays than do the muscle tissues, their shadows are pictured on the plate.

When, in January, 1896, Professor Roentgen published the results of his studies of the X-rays he had reached no decisive conclusions regarding their reflectibility; but soon other physicists took up that and other questions, and the rays were proved to be subject, at least in some degree, to the same laws of reflection and refraction as ordinary light. The determination of their reflectibility would seem to have been made in the laboratory of the Toronto University, in February, 1896, where an investigation succeeded in focusing them by means of a glass bell-jar held over a Crookes tube. This made it possible to produce shadow-pictures with only a brief exposure—in fact, almost instantaneously. Other developments followed in quick succession. Thus Professor Salvioni, of Perugia, in February, contrived an observation tube closed at one end by a fluorescent screen. When the object to be examined is placed between the screen and the Crookes tube, and the eye applied at the other end of the observation tube, a shadow-picture is produced on the screen. Simultaneously similar devices were invented by other observers. To this class of instruments belongs Edison's fluoroscope. This consists of a pyramidal tube, the smaller end of which is so applied to the eyes as to exclude all light. The larger end is closed by a cardboard on the inner surface of which is pasted a screen coated with fine crystals of calcium tungstate, a body far more sensitive than barium platinocyanide. By means of the fluoroscope the bones of the hand can be clearly seen in shadow-picture when viewed even at the distance of 15 ft. from the Crookes tube. In the summer of 1896, a professor in King's College, London, announced that the X-rays, when focused to a point, do not cross and diverge again beyond the focal point, but continue on in a right line.

The prime utility of Roentgen photography, as so far developed, is in the department of surgery. It locates fractures, dislocations, malformations, etc., of bones. It also determines the presence of foreign bodies in the tissues, as bullets, needles, and of calculi. The first discovery of calculi and like bodies in the internal organs by means of the Roentgen rays seems to have been made by Professor Nensser, of Vienna, who located gallstones and a vesical calculus. As yet, this great discovery gives no aid in the study of such diseased conditions as tumor and cancer nor in that of cerebral conditions. On the other hand, it will undoubtedly find many valuable applications in metallurgy: for example, inasmuch as iron and carbon are differently affected by the rays, it may be possible to detect instantly the quality of specimens of iron and steel. By its aid, too, the homogeneity of alloys or composite metals may be determined. The X-rays instantly decide the genuineness of diamonds. As the diamond is pure carbon and as carbon is almost perfectly transparent to these rays, a genuine diamond will give no shadow-picture, while a paste diamond or an imitation made of any other material leaves its image on the fluorescent screen or the photographic plate. Perhaps the first life-size shadow-picture of a human being was made by

Dr. W. J. Morton, of New York City, in 1897. It was taken on a photographic film 6 ft. long by 3 ft. wide. A specially constructed Crookes tube was used, which had to be stationed $4\frac{1}{2}$ ft. away from the person under experiment.

PICKNELL, WILLIAM LAMB, landscape painter, was born in Windham, Vt., in 1855; died in Marblehead, Mass., Aug. 8, 1897.

PIGEONS, HOMING. At the Portsmouth, N. H., navy yard is a dovecote in which homing pigeons are trained for the naval service. Commander R. B. Impey, U. S. N., has the direction of the work. The number of birds in service, September, 1897, was 51. Homing pigeons will hereafter be used in transmitting official information to the navy department from ships at sea. The first actual transmission of intelligence in this way occurred Sept. 3, 1897, when a message from the flagship *New York*, 65 miles east-northeast of Cape Charles, was carried to the Norfolk yard: time 90 minutes, much of the course against the wind. The 40 miles between Saco, Me., and the Portsmouth navy yard were made by 17 birds, Sept. 10, 1897, between 11:38 a.m. and 1:06 p.m. In April, 1898, the homing pigeon clubs of the United States offered their trained birds to the government, to be used in conveying war messages, and 10,000 rapid flyers were at once put into special training. It was proposed to distribute the speediest birds among the blockading, flying, and mosquito squadrons.

PITMAN, SIR ISAAC, inventor of the Pitman system of stenography, was born in Trowbridge, England, Jan. 4, 1813; died in London, England, Jan. 22, 1897.

PITTSBURG, city, capital of Allegheny county, Pa.; population (1890), 238,617; (1897, estimated) 275,000. In 1896 the assessed valuations (about cash value) were: Real estate, \$286,497,437; personal property, \$1,988,985—total, \$288,486,422; and the total bonded debt, Feb. 1, 1897, was \$14,928,202; sinking funds, \$4,107,138; net debt, \$10,821,064. The city has no floating debt, and the annual additions to the sinking funds aggregate \$100,000 to \$500,000. There are 30 national banks, with combined capital \$12,100,000; holding \$4,960,250 in United States bonds, or an excess of \$3,485,250 beyond the legal requirements; and having a total reserve of \$10,697,935, loans and discounts aggregating \$45,599,629, deposits \$40,492,645, and resources \$79,838,921. In the year ending Sept. 30, 1897, the exchanges at the clearing house were \$781,493,326, an increase of \$8,043,792 over those of the previous year. There are also 24 State banks and a large number of building and loan associations. The city has 350 miles of streets, of which 188 miles are paved; 173 miles of sewers; and a waterworks plant owned by the city, which cost \$3,248,000, has a capacity of 40,000,000 gals., and 263 miles of mains. The annual cost of maintaining the city government is about \$6,225,000; the public school enrollment is 41,000; annual expenditure for public education, \$1,050,000; value of public school property, \$3,276,000; annual cost of police department of 333 officers and men, \$403,000; cost of fire department of 281 officers and men, \$368,000; and cost of street lighting, gas, \$46,218, electricity, \$168,272. There are 282 churches, 10 libraries of all kinds, 9 hospitals, 35 charitable institutions, newsboys' home, deaf and dumb institution, school for the education of the blind, 18 asylums for orphans, public parks comprising 699 acres, 26 blast furnaces, 62 rolling mills, 37 foundries 217,000 coke ovens, 23 flint and lime glass works, 7 bridge-building plants, coal mines and coke works employing 31,000 persons, 7 wrought iron tube works, 2 locomotive works, electric plants having a capital investment of \$27,500,000, works turning out annually over 60,000,000 bottles and 40,000,000 lump chimneys, brick works with annual output of 95,000,000 bricks, and 12 daily, 50 weekly, 3 semi-monthly, and 13 monthly periodicals.

PLATT, THOMAS COLLIER, politician, was born in Owego, N. Y., July 15, 1833. Since resigning his seat in the United State Senate in 1881, he has been officially connected with railroad, express, and other large concerns; delegate to each of the National Republican Conventions; member and president of the board of quarantine commissioners of New York; and member of the National Republican Convention. In January, 1897, he was again elected to the United States Senate, and in the first mayoralty campaign of the Greater New York, in the following autumn, he led the regular Republican forces against those of the Citizens' Union, Tammany Hall, and other organizations. For many years he has been regarded as the Republican leader in the political affairs of New York State and city.

PLEASANTON, ALFRED, military officer, veteran of the Mexican war and distinguished cavalry general in the civil war, was born in Washington, D. C., June 7, 1824; died there Feb. 17, 1897.

PLUNKET, WILLIAM CUNYNGHAM, Lord, Anglican archbishop of Dublin, Ireland, was born in 1828; died in Dublin, April 1, 1897.

POLAR RESEARCH. *Arctic*.—S. A. Andrée, the Swedish engineer and aeronaut, attempted a balloon expedition across the north polar region, 1897. He sailed in a Swedish gunboat from Gothenburg, May 18, for Danes Island in northwestern Spitzbergen, distant 700 miles from the pole. His balloon was carried on another vessel. Its capacity was 170,000 cubic ft., and was designed to carry three persons, with all necessary supplies, including scientific instruments and four months' provisions—about 7,000 lbs. weight. With a moderate favorable wind it was expected to traverse the distance, 2,300 miles, in six days. The day of departure was set for July 1, but the journey was actually commenced July 11, with confident hope that success would crown the daring attempt. Andrée took with him homing pigeons to carry back to Sweden the news of his progress. Rumors were shortly afterward current of two pigeons having been shot or taken alive at sea or in the Siberian wilderness, and even the messages the birds bore were reported; but those messages were exceedingly indefinite and not such as were to be expected from Andrée. Again, in the middle of September report came from the village of Antzifirovskoje, in Arctic Siberia, of a great balloon seen floating over that place. All these reports were discredited. At this writing the world still awaits definite intelligence from the explorer. Just before the ascent the balloon was carefully tested as to its impermeability, and it was found gas-tight. The wind was then blowing a few points east by south, but a moment after the start the balloon was seen to tack like a ship and proceed in a course due north. The Jackson-Harmsworth Arctic expedition, after three years in Franz Josef Land, arrived in London, Sept. 3, 1897. The result of the exploration of the coast of Franz Josef Land goes to prove that the much-discussed Gillies Land is non-existent. In the room of what was supposed to be a continental mass is a great number of small islands; instead of lofty mountains the explorers saw only long-ridged hummocks and ice-packs; north of these is open sea. Doubt also is thrown on the existence of Peterman Land and on King Oscar Land.

Antarctic.—A Belgian expedition for the south pole, under command of Lieut. Adrien de Gerlache, sailed from Antwerp toward the end of August, 1897, in the *Belgica*, a steam whaler of 263 tons. The vessel is of timber, strongly built and fortified with an armor of oak planks. The expedition was to touch at the Canaries, Rio, and the mouth of the Rio de la Plata, and a stop was to be made at the Falkland Islands to take on coal for the final journey. The objective point

was then to be Graham's Land, whence the course lay through George IV. Sea as far as possible. When progress became arrested by ice the explorers were to disembark and continue their journey over the ice fields. On the approach of the southern winter, in March, 1898, the *Belgica* was to sail for Melbourne for new supplies. The following October her course was to be laid for Victoria Land. On Sept. 4, 1897, Dr. Frederic A. Cook, of Brooklyn, sailed from New York for Rio, intending there to join the Belgian expedition. He has had experience in polar exploration, having been surgeon in Peary's Greenland expedition, 1891-92.

POLYTECHNIC COLLEGE, Fort Worth, Tex., Methodist Episcopal, South; co-educational; had at close of 1896, 21 professors and instructors; 300 students; 2,000 volumes in library; \$8,000 income; president, W. F. Lloyd, D.D.

POLYTECHNIC INSTITUTE, Brooklyn, N. Y., non-sectarian; had at close of 1896, 52 professors and instructors; 723 students; 10,000 volumes in library; \$100,000 in productive funds; \$25,000 gifts; \$110,187 income; president, D. H. Cochran, Ph.D., LL.D.

PORTER, HORACE, military officer, was born in Huntingdon, Pa., April 15, 1837. Since the close of the civil war, in which he greatly distinguished himself, he has served in the directory of numerous railroad and financial corporations; was president of the Grant Monument Association, and the principal orator at the dedication of the new tomb on Riverside Drive, New York City, on April 27, 1897; organized and led the great sound-money parade in New York, in October, 1896, the greatest civic parade in the history of the country, and probably of the world; and organized and led the parade at the inauguration of President McKinley. Soon after the inauguration he was appointed United States ambassador to France.

PORTLAND, city, capital of Cumberland county, Me.; population (1890), 36,425. In 1896 the assessed valuations were: Real estate, \$25,453,800; personal property, \$12,347,400—total, \$37,801,206; tax rate, \$20 per \$1,000. The total debt, Feb. 1, 1897, was \$2,724,550; sinking fund and other assets, \$1,464,948; net debt, \$1,259,602. The available assets include stock of the Portland and Ogdensburg railroad, \$1,178,055, and gas stock, \$170,000. There are 8 national banks, with combined capital, \$3,650,000; deposits, \$5,859,840; and resources, \$12,857,883; 2 savings banks; 5 building and loan associations; 2 trust companies; 11 public libraries of all kinds; public school property valued at \$330,000; electric light and street railroad plants; and 4 daily, 15 weekly, 6 monthly, and 4 quarterly periodicals. The commerce of the customs district of Portland and Falmouth in the year ending June 30, 1897, was: Imports, \$577,295; exports, \$1,106,200.

PORTLAND, city, capital of Multnomah county, Ore.; population (1890), 46,385; (1891, after the annexation of Albina and East Portland), 62,046; (1895) 81,342. In 1896 the assessed valuations aggregated \$46,475,917; total tax, \$25 per \$1,000. The bonded debt Jan. 1, 1897, including a water debt of \$3,150,000, was \$1,922,070; floating debt, \$173,000; total debt, \$5,095,070. The waterworks plant cost \$1,905,640, and is self-supporting. There are 5 national banks, with combined capital, \$1,600,000; deposits, \$4,102,424; and resources, \$8,571,055; 75 churches; 5 public libraries of various kinds; 31 buildings used for public school purposes; public school property valued at \$765,000; electric light and street railroad plants; and 4 daily, 16 weekly, 3 semi-monthly, and 18 monthly periodicals. The commercial movement in the fiscal years ending June 30, 1896

and 1897, was respectively as follows: Imports, \$1,029,469 and \$1,317,040; exports, \$4,656,001 and \$6,578,896—total trade, \$5,685,470 and \$7,895,936.

PORTLAND UNIVERSITY, Portland, Ore., Methodist Episcopal; co-educational; had at close of 1896, 26 professors and instructors; 339 students; 2,500 volumes in library; \$6,500 income; president, T. Van Scoy, A.M., D.D.

PORTUGAL, a kingdom, which with its immediate dependencies, the Azores and Madeira, has an area of 34,038 square miles, or without those islands 32,528 square miles; the total population (1890), 5,082,247; of Portugal proper, 4,692,113; capital, Lisbon; reigning sovereign, Carlos I., born Sept. 28, 1863; succeeded to the throne on the death of his father, Luiz I., Oct. 19, 1889.

Finances.—The budget estimate of public revenue (1897) was \$54,671,066; expenditure about the same. The largest item in expenditure was interest on the public debt, viz., \$18,150,000; the debt June, 1895, was \$742,450,570.

Commerce.—The total imports during 1896 amounted to \$12,692,400, which was a decrease of \$357,480 as compared with the imports for 1895. The exports were \$28,233,360, or \$884,520 less than during the preceding year. The exports of gold greatly exceed the imports, which is due in part to the excess of imports over exports in the commercial world, and also to the necessity of paying the coupons of the national debt in gold. This occasions financial difficulties, but it was expected that the commercial treaties in course of preparation in 1897 would restore prosperity to the country. Apart from its favorable situation in regard to commerce and navigation Portugal is a rich and fertile country, and is inhabited by a sober and laborious people. The increase in the import of raw materials and of industrial machinery, taken together with the diminution in the consumption of foreign tissues, seems to indicate progress in national industry. It is to be noted that certain raw materials have been found in the country (such as oils for use in the soap trade and olive oil for preserving fish) which it was formerly necessary to import. The cotton industry is developing rapidly. The import of furniture, perfumery, buttons, coverings, and soap has almost entirely ceased, owing to the establishment of these industries in the country, and also on account of the high customs duty.

Communications.—In 1896 there were 1,453 miles of railroad in operation, of which 914 miles belonged to the government and all roads receive subsidies from the government. The post-offices number over 4,000, and handle over 55,000,000 pieces annually; and the telegraph service has upward of 360 offices, 3,985 miles of line, and 8,839 miles of wire. The merchant marine comprises 258 vessels of 88,885 tons, of which 51 vessels of 41,161 tons are steamers.

Army and Navy.—The army is raised partly by conscription and partly by voluntary enlistment. On a peace footing it comprises 35,353 officers and men, with 4,762 horses, and on a war footing, 150,000 men, 23,000 horses, and 264 guns. The colonial forces, chiefly natives, aggregate 9,478 officers and men. For the naval force see NAVIES OF THE WORLD.

Churches and Schools.—The state religion is the Roman Catholic, but all beliefs are tolerated. The head of the church in the kingdom is the Patriarch of Lisbon, a cardinal, with large power, and partially independent of the Holy See. There are also two archbishops, 14 bishops, and 93,979 incumbents of parishes. The Protestants, who number about 500, are mostly foreigners, with chapels in Lisbon and Oporto. Though education is compulsory by law, only a small fraction of children attend school. The last reports show 3,864 public primary schools, with 181,738 pupils; 1,600 private primary schools, with 60,000 pupils; 90,000

children receiving secondary instruction; military, literary, fine arts, medical, technical, and industrial colleges and schools in Lisbon; a university at Coimbra; medical, technical, and industrial schools in Oporto; and many lycées, communal colleges, and agricultural, clerical, municipal, and normal schools.

West African Colonies.—Portugal's African possessions have an area of 735,304 square miles, and an estimated population of 4,431,970. The *Boletim da Sociedade de Geographia*, of Lisbon, in an issue in 1897, said: "The commerce of our African colonies has assumed important proportions in the last few years. Its results have been noticeable during the financial crisis which has oppressed us, the effects of which have not yet wholly disappeared. The market of Lisbon was able to maintain a certain standard and suffered from no serious shocks on account of the colonial commerce. The province of Capo Verde has not yet developed commercially, owing to the long dry seasons. Less attention should be given to agriculture and more to the cultivation of trees. St. Vincente is the principal port. The most important articles exported are coffee, Indian wheat, and, most of all, the castor-oil plant. The commerce of St. Thomé has more than doubled in the last ten years; in 1894, the last available statistics, it amounted to \$2,247,480. The imports consisted to a considerable extent of national products, and the exports were exclusively to Lisbon. Coffee and cacao were the principal exports. Angola is a true Portuguese colony; foreign influences are insignificant, and its commercial condition is encouraging, having tripled in the last ten years. In 1893 the commerce reached \$13,522,683. The railroad has contributed to this prosperity. Mozambique should give equally satisfactory returns; but the condition of this colony is unique. Following the practice so successful in other countries, a colonial company has been formed. The experiment is as yet in its beginning; with perseverance, its results will doubtless be what its promoters have hoped. With tariffs so reduced that the colony will be able to compete with Nyassa and the Transvaal, its future is promising. Its commercial movement in 1894 was \$6,763,610."

Recent Events.—Early in 1896 the expedition to East Africa, which resulted in the capture of Gungunhana, returned with its captive, and was enthusiastically received. Pending the dispute between Great Britain and Germany regarding the South African Republic, the government announced that it would preserve strict neutrality and not permit either nation to land troops at Delagoa Bay nor to march them across Portuguese South African territory. In 1897 the members of the cabinet, finding themselves unable to grapple with the economic and financial situation, tendered their resignations, and the king summoned the Progressist leader, Senhor Luciano de Castro, to form a new cabinet, with Senhor Barros Gomez, a member of the Council of State, as new minister of foreign affairs. The celebration of the fourth centenary of the discovery of the maritime route to India, by Vasco Da Gama, was postponed from July, 1897, the anniversary of his sailing from Lisbon, till May, 1898, the anniversary of his arrival at Calicut.

POSTAL UNION. The Universal Postal Congress met in Washington, D. C., on May 5, 1897, with delegates present from 55 countries, comprising most of those in the Postal Union. Gen. George S. Batchellor, the senior delegate of the United States, called the congress to order, and was subsequently elected its president. The formation of the Universal Postal Union, which now embraces practically the whole of the civilized world and over 271,000 post-offices, is due to the movement for a postal congress suggested in the United States in 1862.

The first international meeting was held in Paris in 1863, and reassembled in Berne in 1874, when the first treaty between the interested countries was signed. Meetings of the Union have since been held in Paris (1878), Lisbon (1885), Vienna (1891), and Washington (1897). From the official reports of the Washington meeting it appears that the Union is composed of the following: The whole of Europe; the whole of America; in Asia—Russia in Asia, Turkey in Asia, Persia, British India (Hindustan), Burmah, Ceylon, and the postal establishments at Aden, Muscat and Guadar; Japan, Siam, the British, French, Dutch, Spanish and Portuguese colonies, and the British, French, German and Japanese postal establishments in China and Korea. In Africa—Egypt, Algeria, Tripoli, Tunis, Liberia, Congo Free State, the Azores, Madeira, the postal establishments of India and France at Zanzibar, the French, Italian, Portuguese and Spanish colonies, the British colonies, the Orange Free State, the Transvaal, or South African Republic, all the territories under the protectorate of Germany, and the French postal establishment at Tamatave, Madagascar. In Australasia and Oceania—the British colonies on the continent, Tasmania, New Zealand, Fiji, British and German New Guinea, Hawaii, the Marshall Islands and the French, Dutch and Spanish colonies. The area of the Union's operations extends over nearly 39,400,600 square miles, inhabited by at least 1,036,000,000 people. At the end of 1896 there were scattered over the various countries of the world more than 271,200 post-offices, of which the largest number in any one country was 71,000 in the United States. Germany came next, with 36,000, and Great Britain 20,300. There were 440,500 letter boxes, from which collections are made, of which more than one-fifth, or 98,000, were in Germany; 63,450 in France and Algeria; 60,000 in the United States, and 27,000 in Great Britain. The total number of persons employed in the operations of the world's postal service was 872,400, of which nearly 185,000 were engaged in the United States, 168,500 in Germany, 139,000 in Great Britain, 67,000 in France, 52,900 in Russia. The smallest number in any country outside of the colonies was 28 in the Congo Free State. The proportion of post-offices to area was greater in Great Britain than in any other country, being one post-office to about every 6 $\frac{3}{4}$ square miles. In a single year 8,514,874,495 letters were distributed in the domestic mails of the various countries in the Union. Of postal cards there were 1,343,528,728, and the entire number of pieces of matter handled, including letters, postal cards, papers, printed matter and merchandise, was 15,066,033,246. The number of domestic money orders issued in a single year amounted at last report to 275,572,921, having a face value of about \$2,805,000,000. Of these, the largest number issued in any single country was 96,037,953, in Germany. Great Britain was next, with 69,753,204, then France, 31,307,921, Austria, 17,411,645, and the United States, 14,304,041. The business in foreign money orders consisted of 8,721,581 orders received, and 10,647,562 sent. The total receipts for a single twelve months amount to the enormous sum of about \$375,120,715. The total expenditures on account of the world's post-office amounts to \$336,322,100, showing a profit on the whole postal business of the world of about \$38,800,000.

POST-OFFICE, U. S. The following table shows the number and character of the post-offices in the United States on Jan. 1, 1897:

States and Territories.	Whole Number of Offices.	Officers of the First-Class.	Officers of the Second-Class.	Officers of the Third-Class.	Whole Number of Presidential Offices.	Officers of the Fourth-Class.	Money-Order Offices.	Money-Order Stations.	Limited Money-Order Offices.
Alabama.....	2,921	3	3	30	36	2,185	311	....	14
Alaska.....	23	1	1	1	1	182	5	....	1
Arizona.....	196	3	3	7	20	186	46	....	29
Arkansas.....	1,732	1	25	32	38	1,704	201	....	38
California.....	1,591	5	23	82	109	1,482	621	....	2
Colorado.....	713	1	16	34	47	644	218	....	3
Connecticut.....	511	5	420	53	78	233	280	....	4
Delaware.....	169	1	1	10	11	158	48	....	....
District of Columbia.....	13	1	1	1	1	12	48	....	2
Florida.....	1,030	1	1	21	28	988	246	....	20
Georgia.....	2,379	4	1	33	44	2,335	373	....	24
Idaho.....	371	1	1	10	11	360	84	....	4
Illinois.....	2,536	10	45	196	251	2,285	1,194	99	41
Indiana.....	2,156	8	33	101	142	2,014	600	1	37
Indian Territory.....	469	1	7	8	401	87	....	6	57
Iowa.....	1,852	8	20	171	205	1,647	882	10	2
Kansas.....	1,674	3	17	104	124	1,550	662	3	45
Kentucky.....	2,611	2	12	43	57	2,554	352	2	16
Louisiana.....	1,030	1	4	17	22	1,008	193	9	37
Maine.....	1,201	3	12	50	65	1,136	388	....	4
Maryland.....	1,158	1	4	21	26	1,132	265	54	1
Massachusetts.....	861	13	55	103	174	687	600	49	2
Michigan.....	2,001	7	39	120	166	1,835	755	16	37
Minnesota.....	1,444	3	13	79	95	1,340	484	14	46
Mississippi.....	1,672	5	39	41	631	267	....	21	7
Missouri.....	2,734	19	114	135	2,588	741	37	....	18
Montana.....	426	2	4	15	21	405	116	1	34
Nebraska.....	1,067	2	9	79	90	977	484	2	24
Nevada.....	174	1	5	6	168	37	....	3	2
New Hampshire.....	590	6	8	39	46	514	257	....	6
New Jersey.....	963	6	39	49	96	807	419	30	1
New Mexico.....	304	2	10	12	282	67	....	2	....
New York.....	3,620	17	84	214	315	3,305	1,715	392	14
North Carolina.....	2,849	9	32	41	2,808	306	....	24	10
North Dakota.....	546	2	19	21	525	156	....	57	18
Ohio.....	3,281	11	54	134	193	3,082	1,093	39	....
Oklahoma.....	406	3	13	16	480	73	....	....	....
Oregon.....	862	1	3	29	21	778	196	3	27
Pennsylvania.....	4,288	12	67	188	267	4,721	1,560	81	33
Rhode Island.....	144	3	4	9	16	128	86	....	....
South Carolina.....	1,372	1	3	25	29	1,343	191	2	6
South Dakota.....	658	7	31	38	630	221	....	....	....
Tennessee.....	2,626	4	5	384	47	2,579	318	6	22
Texas.....	2,778	7	19	111	137	2,621	601	1	80
Utah.....	309	1	1	5	7	302	81	....	3
Vermont.....	528	1	8	28	41	517	254	1	2
Virginia.....	3,207	3	13	43	59	3,148	435	8	9
Washington.....	810	3	3	29	32	778	217	2	25
West Virginia.....	1,754	1	8	22	31	1,723	232	3	8
Wisconsin.....	1,833	4	25	96	125	1,708	568	8	29
Wyoming.....	275	1	2	7	9	266	41	....	....
Totals.....	70,562	160	746	2,736	3,651	60,911	19,889	771	1,013

First-class offices have salaries of \$3,000 and upward per annum; second-class, \$2,000-\$3,000; third-class, \$1,000-\$2,000; and fourth-class have commissions on business done, instead of salaries. First, second, and third-class offices are known as presidential offices, because incumbents are appointed by the President and confirmed by the Senate. They are all in large cities.

POTTER, ELIPHALET NOTT, D.D., LL.D., educator and son of Bishop Alonzo Potter, was born in Schenectady, N. Y., Sept. 20, 1836. He was president of Union College in 1871-84, and of Hobart College in 1884-97; and became president of the Cosmopolitan Educational University Extension in September, 1897.

POWDERLY, TERENCE VINCENT, labor leader and reformer, for many years Grand Master Workman of the Knights of Labor, was born in Carbondale, Pa., Jan. 22, 1849. He was admitted to the bar in 1894, and appointed commissioner-general of immigration by President McKinley in 1897.

PRATT, ENOCH, founder of the Pratt Free Library in Baltimore, was born in North Middleboro, Mass., Sept. 10, 1808; died in Tivoli, Md., Sept. 17, 1896. He bequeathed the greater part of his estate to the Sheppard Asylum on the condition that its name be changed to the Sheppard and Enoch Pratt Hospital.

PRATT INSTITUTE, Brooklyn, N. Y., non-sectarian; co-educational; had at close of 1896, 125 professors and instructors; 2,823 students; 60,023 volumes in library; president, Charles M. Pratt.

PRECIOUS METALS. The production of gold throughout the world in the calendar year 1896 had an estimated value of \$205,000,000, of which the yield of the United States was 2,568,132 ozs. of a coining value of \$53,088,000. The world's production in the calendar year 1897 was expected to reach at least \$240,000,000. The director of the United States mint, reporting on the indications of a large increase in the world's gold product of 1897, gave the following table showing the product of the United States, Australia, South Africa, Russia, Mexico, British India, and Canada for 1896, and the probable output of these countries for 1897:

Countries.	1896.	1897.
United States.....	\$53,088,000	\$60,000,000
Australia.....	46,250,000	52,550,000
South Africa.....	44,000,000	56,000,000
Russia.....	22,000,000	25,000,000
Mexico.....	7,000,000	9,000,000
British India.....	5,800,000	7,000,000
Canada.....	2,800,000	10,000,000
Total.....	\$180,938,000	\$219,550,000

The production of silver in the United States in the calendar year 1896 amounted to 58,834,800 ozs. of a coining value of \$76,069,236. The principal gold-producing States, with their products in ounces, as compared with the official reports for 1895, are as follows:

States.	Total Amount.	Changes.
California.....	721,600	Dec. 571
Colorado.....	708,000	Inc. 64,372
Montana.....	180,000	Dec. 9,339
Arizona.....	125,000	Inc. 30,908
Idaho.....	104,205	Inc. 18,177
Utah.....	97,900	Inc. 31,487
Alaska.....	97,445	Inc. 19,805

The production of silver is given in ounces as follows:

States.	Total Amount.	Changes.
Colorado.....	22,573,000	Dec. 825,500
Montana.....	14,432,900	Dec. 3,137,100
Utah.....	8,103,000	Inc. 632,000
Idaho.....	4,550,000	Inc. 1,430,400
Arizona.....	1,705,000	Inc. 718,100

From 1851, when the first discoveries were made, to Jan. 1, 1897, the gross output from Australasian gold fields amounted to 99,592,305 ozs., as follows:

Victoria.....	61,034,884
New Zealand.....	13,312,887
New South Wales.....	11,710,510
Queensland.....	11,172,073
Western Australia.....	967,676
Tasmania.....	886,822
South Australia.....	567,553
Total.....	99,592,305

Official statistics also show that the output is steadily increasing, viz., in 1894, 2,243,716 ounces; 1895, 2,359,244; and 1896, 2,375,948. See GOLD.

PRESBYTERIAN CHURCH, CUMBERLAND. This church has 16 synods; 127 presbyteries; 1,617 ministers; 2,867 churches; 165,847 church members. What seems an apparent decrease in numbers is explained by a revision of the statistical tables. Contributions were: For education, \$12,560; for foreign missions, \$24,768; for home missions, \$13,894; for various other missions, \$4,593, a total of \$44,256, which, with the amount spent in church erection, makes in all \$85,574. The women of the church raised \$16,546. The Ministerial Relief Board distributed \$11,303, among 107 beneficiaries. The church has 18 seminaries and colleges, with 168 instructors; 3,254 students, 200 of whom are probationers for the ministry; property valued at \$621,500; and endowments valued at \$463,793. The sale of publications was \$12,716; profits, \$7,650; and the bonded indebtedness has been reduced. There are 25,000 members of young people's societies, who are now collecting funds to build a new church at Portland, Ore. The foreign mission work of this church is carried on in Japan, where there are 15 preaching stations, 624 communicants, and property valued at \$4,517.

PRESBYTERIAN CHURCH IN CANADA. This church has 2,412 charges of all kinds, with sitting accommodations for 510,722 persons. There are 188,180 communicants, 12,102 having been added in a year. Sunday schools and Bible classes have 153,064 members. The contributions were: For home missions, \$65,152; for augmentation, \$30,929; for French evangelization, \$23,202; for foreign missions, \$56,033, of which the women raised \$50,546; for ministerial relief, \$3,585; for widows and orphans, \$5,759; for assembly expenses, \$3,980—a total for benevolent work of \$259,494, a decrease of \$15,945 in a year. The amount raised for ministers' salaries was \$906,781; for churches and manses, \$421,820; other congregational objects, \$32,283; raised by Sunday schools and young people's

societies, \$13,720. Since 1882 the Board of Church and Manse Erection has helped erect 269 churches and 56 manses, valued at \$459,000. Home mission work is conducted in 6 different languages, at 670 points, by 174 missionaries. About 7,000 attend the mission Sunday schools. The French Evangelization Board has 92 preaching stations and 25 missions schools, attended by 423 Protestant and 345 Roman Catholic children. About 10,000 families are visited annually by the colporteurs.

PRESBYTERIAN CHURCH IN THE UNITED STATES. This church operates mainly in the Southern States and Territories, and is composed of 13 synods, comprising 76 presbyteries. There are 2,788 churches, 1,349 ministers, 85 licentiates and 402 candidates; 8,656 ruling elders and 7,072 deacons, and 210,539 communicants, 11,874 having been received in a year. The baptisms reported numbered 4,857 adults and 5,304 infants. There are 37,031 baptized non-communicants, and 19,223 Sunday schools, with 138,735 pupils. Contributions for the Assembly's home missions were \$26,648; for local evangelistic purposes, \$104,461; for the Invalid fund, \$13,096; for foreign missions, \$110,737; for education, \$48,764; for publication, \$7,748; for evangelization among colored people, \$10,468; for Bible work, \$4,221; for presbyterial purposes, \$15,935; for pastors' salaries, \$798,106; for congregational purposes, \$607,393; miscellaneous, \$108,938—making a grand total of \$1,856,515. The Foreign Mission Committee received \$142,100, an increase of \$9,667 over the previous year. There is a fund of \$10,393 toward a boat for the Kongo. Nineteen new missionaries were sent out during the year, making a total in the field of 55 ordained missionaries, 86 unordained, 29 native preachers, and 117 other native helpers. There are 35 churches with 2,004 members, and 63 Sunday schools with 1,350 scholars. The mission churches contributed \$3,590. The Executive Committee of Home Missions received for home missions \$33,779; for Invalid fund, \$15,175; for the William A. Moore Loan fund, \$2,504. From the regular loan funds \$6,985 had been loaned to 53 congregations. The gross receipts were \$4,026 more than the previous year. Eighty missionaries and 11 teachers were employed, and 38 aged or infirm ministers, 108 widows, and 4 families of orphans of ministers aided. The amount of sales at publication house was \$28,190, a decrease of \$5,000. Twenty-two new book publications were issued, also a volume of *Practical Sermons* of high merit, by various ministers of the church. The publication department spent \$4,242 in donations. The General Assembly's Home and School at Fredericksburg, Va., has property worth \$42,850. The home has 40 beneficiaries, orphans of ministers and children of missionaries. The Collegiate Institute in connection is self-supporting from pay pupils. A proposition was made at the General Conference of 1896, held at Memphis, Tenn., to enter into contract with the city of Fredericksburg, by which the city was to pay a sum of \$10,000 to the trustees and in return have the privilege of sending 10 day-pupils to the institute. The matter is still unsettled.

PRESBYTERIAN CHURCH IN THE UNITED STATES OF AMERICA. This church has 31 synods, divided into 224 presbyteries, comprising 7,573 local churches, a growth of 65 in a year. There are 6,842 ministers, 455 licentiates, 170 local evangelists, 1,508 candidates, 27,025 elders, and 9,174 deacons. There were 64,826 additions to the churches, making a total membership of 944,716, with 1,096,309 Sunday school scholars. The financial statement shows the following collections: For foreign missions, \$739,103; home missions, \$890,506; education, \$102,367; Sunday school work, \$130,598; church erection, \$155,177; relief fund, \$94,352; Freedmen's aid, \$109,205; synodical

aid, \$73,152; colleges, \$148,651; anniversary reunion, \$352,350; General Assembly, \$92,462; congregational purposes, \$10,413,785; miscellaneous, \$778,728—making a grand total of \$14,150,497. There was also an income of \$300,000 from theological seminaries and \$135,000 interest on permanent funds. Since 1891 there has been a steady decrease in the contributions of the churches, as compared with the total income of the boards, of from 38 to 31 per cent. In 1892 the per capita contribution of members was \$1.20, which has now fallen to 90c. The Board of Church Erection, with its expenditure of \$165,582, stimulated the erection of churches and manse to the value of \$573,280. About \$40,000 is available annually for this work from the loan fund. The Board of Publication operates on a capital of \$332,833. The receipts aggregated \$317,848, and the profits \$31,146, a decrease of \$5,653 in a year. This board maintains 107 missionaries, at a cost of \$124,962. There were 1,030 new Sunday schools organized in the year. The Board of Ministerial Relief had 792 beneficiaries on its books, who were aided in an average amount of \$210, the total expenditure being \$166,735. A debt of \$9,653 was canceled. The Board of Foreign Missions had reduced appropriations by \$100,000; the debt was \$76,770, and the total expenditure \$929,239, of which \$54,310 went for administration. The Board of Home Missions, expended \$858,985, being \$129,552 more than the receipts, and had a debt of \$299,062. The number of missionaries was 1,544, having charge of 1,830 churches, with 99,454 members. Prominent among the doings of the 108th General Assembly, held at Saratoga, N. Y., in May, 1896, was the rejection of the proposition of John S. Kennedy to take over from the Home Mission Board the building lately erected in New York, at its original cost less the amount of his own subscription; the endeavor to bring about a more complete affiliation of young people's societies with the churches in which they exist; a commending of those theological seminaries which had acted upon the previous suggestions of the Assembly in modifying their constitutions, so as to come into closer relations with the Assembly, and an expression of hope that all others would see their way clear to follow; and the appointment of a committee to report on the methods of business of the Board of Home Missions, to devise means for the removal of the large debt, and to formulate methods that will prevent recurring deficits.

PRESBYTERIAN CHURCH, UNITED. This church has 12 synods, made up of 65 presbyteries. There are 869 ministers; 76 licentiates; 115 theological students; 3,763 ruling elders; 801 pastoral charges; 948 congregations; 385 mission stations; 109,408 members in America; and 1,123 Sunday schools, with 11,589 officers and teachers and 107,121 scholars. There are 805 young people's societies, with a membership of 35,146. During the year there were 25 churches and 15 parsonages erected, at a total cost of \$259,831. There were 32 new mission stations and 17 new congregations organized. The contributions were: For ministers' salaries, \$586,948, an average of \$1,054 for each minister; for congregational purposes, \$473,048, for the boards, \$255,366; for general purposes, \$102,736—making a total of \$1,404,090, or an average of \$13.13 per member. The contributions by Sunday schools aggregated \$84,888. For church extension \$30,639 were received, an increase of \$5,493 over the previous year. There are 723 students in academics, 1,142 in colleges, and 143 in theological seminaries. The endowment of colleges amounts to \$352,600 and of seminaries, \$291,800. There was expended on foreign missions \$112,938, of which \$14,582 was raised by the women. There is a strong mission in Egypt, with 45 missionaries, 21 native pastors, 401 native helpers, 190 stations, 5,004 members, and 125 Sunday schools, with 6,222 pupils. The natives contribute annually \$13,552 for religious work, and \$17,244 for all purposes, or an average of \$9.44 per member. There

is a mission in India with 59 missionaries. The receipts for home missions were: From contributions, \$60,272, and legacies, \$2,860, which with results of investments amounted to \$64,016. There is a debt of \$13,018 and a sum of \$20,000 borrowed from the revenue fund. The Freedmen's work is carried on at an expense of \$43,909. There are 73 missionaries with 11 stations; enrollment at Sunday schools 3,079 and at day schools 3,037.

PRINCETON THEOLOGICAL SEMINARY, Princeton, N. J., Presbyterian; had at close of 1896, 11 professors and instructors; 258 students; and 57,000 volumes in library. At the beginning of its 88th year, Sept. 16, 1897, it was reported that the attendance would be as large as in the previous year; that the real estate and endowments aggregated \$1,905,398 in value; that the new dormitory, Blair Hall, to cost \$150,000 was nearly completed; that the building of the new library was progressing favorably; and that a fine pipe organ, the gift of friends, had been placed in Marquand Chapel. Acting president, William Henry Green, D. D.

PRINCETON UNIVERSITY, Princeton, N. J., non-sectarian; had in 1897, 82 professors and instructors; 8 fellows; 115 graduate students in the academic department; and 374 scientific students—in all, 1,045. There were over 185,000 volumes in the libraries. The sesquicentennial of the institution was observed by ceremonies extending over three days in October, 1896, during which (22d) President Patton announced that "from this moment what has heretofore been known as the College of New Jersey shall in all the future be known as Princeton University." In honor of the event, friends of the institution made gifts aggregating \$1,353,291. Among the gifts was the sum of \$600,000 for a new library building, from a friend who desired his name withheld. President, Francis L. Patton, D. D., LL. D.

PROFESSIONAL EDUCATION. Under the titles EDUCATION and PUBLIC EDUCATION is given a detailed survey of recent educational results in the United States. Unfortunately, a similar particularization for the means and results of professional instruction cannot be given. As a rule, medical and law schools constitute departments of universities and large colleges, and many of their interests are officially merged into the current history of the larger bodies. Medical schools in general have meager endowments, but own much valuable property, especially those in large cities. Schools of theology, which, under laws existing in all the States, cannot be parts of larger institutions which receive support from State governments, generally stand by themselves, or are parts of larger bodies deriving endowment and support from private sources. Details of the work and condition of the last class are much more full than those of the two first. The following table is a general summary of statistics of professional and allied schools in the United States, at the end of the school year 1895-96.

Class of Schools.	Schools.	Instructors.	Students.	Graduates.	Per cent. Graduating.
Theological.....	144	869	8,017	1,681	21
LAW.....	73	658	9,780	2,981	30
Medical.....	155	3,936	24,437	4,347	22
Dental.....	46	854	6,399	1,515	24
Pharmaceutical.....	44	354	3,873	1,083	28
Veterinary.....	10	139	382	134	35
Nurse training.....	117	.....	5,094	1,773	35
Total.....	649	6,810	57,982	14,114	.....

All schools of theology that reported had grounds and buildings valued at \$12,648,216; endowment funds, \$17,969,906; benefactions during the school year, \$683,349; and bound volumes in the libraries, 1,204,889. Schools of law reported 197,799 volumes in their libraries. Schools of medicine, dentistry, pharmacy, and for nurses and veterinarians, had grounds and buildings valued at \$9,530,995; endowment funds, \$542,820; and volumes in the libraries, 111,784.

PROTESTANT EPISCOPAL CHURCH IN THE UNITED STATES. There are 58 dioceses, 21 missionary jurisdictions in the United States, and 7 in other lands; 4,723 clergymen, of whom 83 are bishops; and over 500 candidates for ordination. There were in a year over 64,000 baptisms; 45,000 confirmations; 17,500 marriages; and 33,300 burials. There are 45,236 Sunday school teachers and 421,523 scholars. The annual contributions of the church aggregate over \$12,500,000. The Missionary Society has trust funds of the market value of \$995,987, yielding an annual income of \$41,754; and the enrollment fund amounts to \$167,829. The gross receipts of the society were \$756,905, of which \$424,771 came from contributions and \$40,207 from legacies. There was a slight increase in contributions for foreign missions, but a decrease in those for domestic missions. The number of parishes and missions contributing is 3,705, an increase of 199. The Lenten offering from Sunday schools was \$70,333, made by 2,747 schools, the largest number ever contributing. The number of domestic missionaries, clerical, lay, and female, receiving salaries is 860. Assistance was given to 42 dioceses, in addition to 19 jurisdictions which are exclusively missionary. The jurisdiction of Northern Texas was organized into a diocese.

The American Church Building Fund received contributions of \$12,199. Loans were made of \$31,060, distributed in 31 parishes in 17 dioceses, and gifts of \$3,725 were made to 25 churches. The amount of loans returned was \$22,138. There was outstanding in the hands of the churches \$184,132; and the entire fund was valued at \$287,277. The receipts for foreign missions were \$222,700, of which \$109,090 came as contributions from the churches. There are 65 missionary clergy at work among the colored people of the South, who report 146 churches, chapels, and schools, with 7,116 communicants, 5,669 Sunday school scholars, and 4,346 day and boarding school pupils. During the year there were 1,168 baptisms and 838 confirmations. The value of property was \$459,000; the collections amounted to \$21,205; and the expenditures to \$57,920. In Mexico there are 6 priests, 2 deacons, 6 candidates for orders, and 5 readers, with 24 congregations; 10 day schools, 10 teachers, and 300 scholars. The missionary bishop of Cape Palmas deplored rebellions on the part of native tribes, which greatly interfere with the progress of missionary work. He reported 238 baptisms, 69 confirmations, and \$560 contributed. In China a movement was inaugurated for the purpose of uniting all sections of the Anglican communion and forming a national church. In Japan a new prayer book has been issued, and a new hospital building has been completed at Tokio. A new era of prosperity is reported from Hayti. The elementary school has been opened, and the English services, suspended in 1888, have been resumed. There are in this field 8 clergymen, 6 churches, 2 rectories, a house for nurses, 1,000 communicants, and church property valued at \$626,000. In Cuba, except at Havana, all work has been suspended owing to civil war. In Brazil there are 274 communicants, an increase of 82. The women of the church contributed for domestic missions, \$75,485; for foreign missions, \$22,179; for diocesan missions, \$39,107; boxes of clothing sent to missionaries, 3,967, valued at \$174,591—total value of con-

tributions, \$365,011, of which the junior department raised \$36,310. The 25th anniversary of the Auxiliary was celebrated in October, 1896, by a special offering of \$5,458. During the year the Auxiliary sent a deaconess to China, continued its gifts toward the Ladies' House and Training School in Shanghai, and furnished the money to rebuild the Orphan Asylum at Cape Palmas.

PROVIDENCE, city, one of the capitals of Rhode Island, and capital of Providence county; population (1890), 132,146; (1895, city census) 145,472; (1897, estimated) 150,000. In 1896 the assessed valuations were: Real estate, \$133,296,200; personal property, \$40,936,300—total, \$174,232,500; tax rate, \$16.50 per \$1,000; amount of tax, \$2,874,836. The total bonded debt March 1, 1897, including a water debt of \$7,165,000, was \$13,996,000; floating debt, \$2,818,828—total debt, \$16,814,828; sinking funds, \$3,530,979; net debt, \$13,283,849. The water-works cost up to Oct. 1, 1896, a total of \$6,630,743, and the revenue that year showed a surplus of \$89,018 over the annual cost of maintenance and interest on the bonds. There are 24 national banks; 8 savings banks; 4 State banks; 15 mutual fire insurance companies; 3 stock insurance companies; 207 miles of streets, of which 32 miles are paved; 154 miles of sewers; 299 miles of water mains; police department of 275 officers and men, that costs annually \$35,000; fire department of 242 officers and men besides 26 volunteers, that costs \$314,000; 19 public libraries of all kinds; and 5 daily, 15 weekly, 3 bi-weekly, and 8 monthly periodicals. The annual cost of maintaining the city government is about \$3,775,000; expenditure for public education, \$905,000; and value of public school property, \$1,790,000. The commercial movement in the years ending June 30, 1896 and 1897, was respectively as follows: Imports, \$938,251 and \$962,849; exports, \$2,418 and \$4,129—total trade, \$940,669 and \$966,978. The cornerstone of a new capitol, the most costly and most important public building ever planned to be erected within the State, was laid with Masonic ceremonies on Oct. 15, 1896. The building is being built of Georgia marble. It is 333 ft. long, and the dome will be 244 ft. above the ground. In general appearance it will resemble the Capitol at Washington. It will cost at least \$2,000,000. It is situated in a slightly spot not far from the new railroad building and the new State Normal School. It will take the place of a State House which was built in 1762, at a cost equivalent to \$8,750 of current money.

PUBLIC DOMAIN OF THE UNITED STATES. The report of the commissioner of the United States General Land Office for the year ending June 30, 1897, in comparison with that of the previous year, showed a decrease of 3,298 original homestead entries, aggregating 378,625 acres. In the entire disposals of public lands there was a falling off of 5,370,406 acres. The area sold for cash reached 419,052 acres, and miscellaneous entries aggregated 7,334,554 acres. The receipts from disposal of public lands amounted to \$1,595,380, and from disposal of Indian lands to \$438,716. There were 32,087 agricultural patents issued, approximating 5,133,920 acres, and there were patented or certified for the benefit of railroad companies under congressional grants 5,101,969 acres, a decrease of over 10,000,000 acres from the previous year. Lists of lauds selected by the several States and Territories under the grant for educational purposes aggregated 739,417 acres. At the close of the year there were pending railroad selections embracing 11,436,809 acres. An approximate estimate of the number of acres of vacant public lands in the several States and Territories at the close of the year was as follows: Alabama, 532,339; Arizona, 54,400,211; Arkansas, 3,922,042; California, 43,841,044; Colorado, 40,037,204; Florida, 1,797,662; Idaho, 45,962,855; Kansas, 1,046,589; Louisiana, 845,020; Michigan, 522,431; Minnesota,

6,240,809; Mississippi, 441,220; Missouri, 497,764; Montana, 71,432,917; Nebraska, 10,669,353; Nevada, 61,578,586; New Mexico, 56,983,047; North Dakota, 21,385,293; Oklahoma, 8,105,238; Oregon, 35,892,318; South Dakota, 13,250,718; Utah, 44,205,070; Washington, 17,958,536; Wisconsin, 454,107; Wyoming, 49,341,588; Alaska, 369,529,600 acres. The figures above given do not include the vacant land embraced in military, timber, and Indian reservations, reservoir sites, and tracts covered by selections, filings, and railroad grants.

Of mineral and mill-site patents 1,085 were issued, as against 1,476 for the fiscal year ending June 30, 1896, a decrease of 391. Of coal patents 32 were issued, as against 61 for the preceding fiscal year, a decrease of 29, and including an area of 3,606.59 acres, as against an area for the previous fiscal year of 6,885.77 acres, or a decrease of 3,279.08 acres. The mineral and mill-site patents issued, embraced 2,026 mineral and mill-site claims, and an area of 28,756,472 acres.

PUBLIC EDUCATION. The annual report of the United States Commissioner of Education for the year ending June 30, 1896, issued in 1897, shows an encouraging increase in the enrollment, attendance, and support of the public school system. The estimated total population of the United States on June 30, 1896, was 70,595,321; the estimated number of persons from 5 to 18 years of age was 20,865,377; the enrollment in the public schools was 14,379,078; the percentage of the total population enrolled was 20.37; the percentage of persons from 5 to 18 years of age enrolled, 68.93; the average daily attendance of pupils was 9,747,015; and the ratio of attendance to enrollment was 67.8. The total number of teachers employed was 400,325, of whom 130,366 were males and 269,959 were females. Male teachers received an average monthly salary of \$47.37, and female teachers, \$40.21. For salaries of teachers and superintendents the expenditure was \$116,377,778. There were 240,968 schoolhouses, and the total value of all public school property was \$455,948,164. The revenue from all sources aggregated \$181,394,428, and the expenditures for all school purposes, \$184,453,780. The expenditure per capita of population was \$2.61, and per pupil, \$18.92. Grand as the foregoing showing is, it but partly covers the educational field, as it includes only the public schools of elementary (first 8 years of course of study) and secondary (9th to 12th years of course of study) grades, no institutions of higher education being included even though supported by public taxes. During the year under survey there were enrolled in schools and colleges, both public and private, 15,997,197 pupils, an increase in a single year of 308,575. Of the total, 14,465,371 were in public institutions, and 1,531,826 in private ones. Add to this total an aggregate of 118,000 pupils in special schools and institutions, such as business colleges, trade schools, schools of music and art, schools for the defective classes, reform schools, evening schools, Indian schools, and several other classes, and the grand total of pupils becomes 16,415,197.

Returning to the public educational field, it appears that 13,998,585 pupils were receiving elementary instruction in primary and grammar grades; 392,729 were receiving secondary instruction in the high school grade; and of those receiving higher instruction, 26,296 were attending universities and colleges; 7,340, schools of medicine, law, and theology; and 40,421 were in normal schools. It may be noted here that the attendance in private universities, colleges, and professional schools was much more than double that in similar public institutions. The following table, compiled from several reported by the commissioner, gives the principal details of what citizens of the United States take a just pride in calling "our common-school system:"

State or Territory.	Esti- mated Total Popula- tion in 1896.	School Popula- tion.	Enroll- ment.	Teach- ers.	Value of School Property.	Expendi- ture in the Year.	Number of Buildings used as School- houses.	Paid for Teach'rs' and Superinten- dents' Salaries.
United States.....	70,595,321	20,865,377	14,379,078	400,325	\$455,948,164	\$184,453,780	240,968	\$116,577,778
North Atlantic Div.....	19,520,400	4,961,597	3,463,912	97,067	178,586,923	67,688,543	43,258	38,252,632
New Hampshire.....	9,067,000	3,287,670	2,000,274	45,119	19,315,046	11,106,158	35,185	8,565,125
South Atlantic Div.....	12,747,200	4,223,250	2,688,538	59,318	20,588,220	13,294,446	47,366	10,908,412
North Central Div.....	24,827,541	7,374,340	5,510,463	177,922	200,133,730	78,852,265	162,350	49,750,557
Western Division.....	3,833,180	928,520	714,951	20,899	37,323,285	13,512,308	12,519	8,931,582
North Atlantic Div.								
Maine.....	655,000	161,300	134,140	6,786	3,738,506	1,638,598	4,196	1,107,818
New Hampshire (1894).....	380,000	86,700	62,437	3,187	3,086,824	920,803	1,968	622,944
Vermont.....	332,500	81,970	65,411	2,951	1,600,000	1,067,727	2,256	599,069
Massachusetts.....	2,547,000	582,400	424,353	12,275	36,780,727	11,829,191	4,539	6,990,037
Rhode Island.....	393,400	95,060	59,241	1,732	4,147,279	1,628,589	516	884,935
Connecticut.....	1,256,000	312,500	141,485	3,362	8,829,146	2,796,831	1,633	1,748,475
New York.....	6,722,000	1,651,858	1,176,074	33,820	60,333,126	23,173,830	12,627	13,619,228
New Jersey.....	1,716,000	438,969	280,330	5,620	11,928,227	4,971,444	1,733	3,657,890
Pennsylvania.....	5,947,000	1,660,000	1,120,441	26,764	48,143,088	19,661,530	14,620	9,222,236
South Atlantic Div.:								
Delaware (1895).....	173,200	48,830	33,174	840	\$904,426	\$275,000	6497	925,200
Maryland.....	1,150,000	339,230	219,362	4,616	4,900,000	2,534,531	2,389	1,853,045
Dist. of Columbia.....	273,000	69,440	42,464	1,031	3,260,000	1,050,369	114	714,367
Virginia.....	1,697,000	579,700	362,133	8,417	3,070,010	1,819,563	6,077	1,443,774
West Virginia.....	849,300	285,000	215,965	6,454	3,227,141	1,739,649	5,475	1,112,513
North Carolina.....	1,236,000	496,400	323,337	4,447	746,676	529,838	4,140	458,788
Georgia.....	2,015,000	715,300	423,786	8,921	2,476,188	1,086,900	6,732	1,486,232
Florida.....	480,300	159,800	100,373	2,508	628,840	598,927	2,238	505,799
North Central Div.:								
Kentucky.....	1,063,000	652,800	400,126	10,290	4,216,750	2,919,045	8,211	2,372,214
Tennessee (1895).....	1,857,000	635,400	478,125	8,913	3,092,503	1,587,984	7,212	1,321,739
Alabama.....	1,709,000	610,300	319,526	7,181	1,373,000	663,359	7,039	618,698
Mississippi (1895).....	1,431,000	522,500	350,615	7,855	1,636,055	1,372,500	6,294	1,108,013
Louisiana.....	1,234,000	420,100	164,317	3,537	930,000	1,256,586	2,804	803,151
Texas.....	2,973,000	1,046,000	676,528	13,317	7,289,184	3,996,778	10,135	3,404,054
Arkansas.....	1,370,000	453,400	296,575	6,073	1,679,338	1,232,986	4,440	1,054,364
Oklahoma.....	274,200	82,700	63,686	1,733	371,400	365,288	1,180	216,560
North Central Div.:								
Ohio.....	3,855,000	1,094,000	820,562	25,180	40,175,975	12,326,919	19,072	8,317,424
Indiana.....	2,989,000	676,100	543,065	11,884	18,897,494	7,162,874	9,890	4,767,331
Illinois.....	4,594,000	1,274,000	898,619	25,416	43,765,475	16,291,121	12,632	9,958,935
Michigan (1895).....	2,241,641	622,400	476,684	16,013	16,766,882	6,428,003	7,835	3,963,082
Wisconsin.....	2,054,000	613,800	412,514	12,334	11,100,000	6,676,824	6,795	3,394,486
Minnesota.....	1,611,000	474,700	354,657	11,519	14,271,771	5,200,396	6,670	3,270,123
Iowa.....	2,088,000	629,000	443,052	28,121	15,867,425	7,800,024	13,786	5,205,287
Missouri.....	3,005,000	934,800	664,947	14,844	15,032,082	6,694,503	10,076	4,295,122
North Dakota.....	363,600	82,800	57,088	3,027	1,926,420	1,125,893	2,632	586,774
South Dakota (1894).....	401,300	117,500	88,026	4,816	3,134,865	1,687,918	3,524	914,046
Nebraska.....	1,111,000	334,500	272,310	10,068	8,779,769	3,375,785	6,729	2,261,007
Kansas.....	1,329,000	419,750	378,329	11,700	10,145,631	4,133,195	9,418	2,937,340
Western Division:								
Montana.....	260,800	37,800	28,876	956	1,933,395	743,176	591	418,811
Wyoming.....	99,700	21,270	11,582	465	428,796	211,335	396	153,200
Colorado.....	544,200	119,750	94,686	2,921	8,859,477	2,384,183	1,654	1,319,929
New Mexico.....	177,200	49,730	23,359	584	264,439	132,243	62	112,130
Arizona.....	78,390	19,020	12,889	324	428,935	214,009	293	152,438
Utah.....	258,500	83,870	66,710	1,185	2,471,338	849,730	942	515,829
Nevada.....	41,500	9,080	7,267	290	298,414	206,938	225	164,827
Idaho.....	143,400	38,810	32,560	727	712,691	296,357	658	218,728
Washington.....	479,700	108,800	90,113	3,245	4,837,413	1,425,560	1,890	3,760,150
Oregon.....	378,800	102,100	87,212	3,317	2,988,312	1,197,109	1,940	784,908
California.....	1,422,000	337,300	250,697	6,885	17,100,184	5,801,759	3,528	4,291,481

(a) State census.

PUGET SOUND UNIVERSITY, Tacoma, Wash., Methodist Episcopal; co-educational; had at close of 1896, 24 professors and instructors; 257 students; 1,200 volumes in library; \$40,000 in productive funds; \$500 gifts; \$7,000 income; president, C. R. Thoburn, A. M.

PULLMAN, GEORGE MORTIMER, capitalist, palace car manufacturer, and philanthropist, was born in Chautauqua county, N. Y., March 3, 1831; died in Chicago, Ill., Oct. 19, 1897. He bequeathed \$10,000 each to thirteen charitable institutions in Chicago, and \$1,200,000 to his executors for the erection and support of a free school of manual training for the children of persons living and working in Pullman.

PULSZKY, FRANCOIS AURELE, archaeologist and publicist, was born in Eperies, Hungary, Sept. 7, 1814; died in Buda Pesth, Sept. 9, 1897.

PURDUE UNIVERSITY, Lafayette, Ind., non-sectarian; co-educational; had at close of 1896, 60 professors and instructors; 700 students; 7,300 volumes in library; \$340,000 in productive funds; \$176,184 income; president, James H. Smart, A.M., LL.D.

PUTNAM, FREDERICK WARD, anthropologist, was born in Salem, Mass., April 16, 1839. He has been curator of the Peabody Museum of Archaeology and Ethnology at Cambridge since 1875; permanent secretary of the American Association for the Advancement of Science since 1873; and professor of American Archaeology and Ethnology at Harvard University since 1886; and was elected president of the American Association for the Advancement of Science at the meeting in August, 1897. He received the cross of the Legion of Honor from the French government in 1896 in recognition of his achievements in the field of science.

QUAY, MATTHEW STANLEY, lawyer, was born in Dillsburg, Pa., Sept. 3, 1833; graduated at Jefferson College in 1850; admitted to the bar in 1854; military secretary to the governor of Pennsylvania in 1861-65; secretary of the commonwealth of Pennsylvania 1872-78 and 1879-82; elected State treasurer in 1885; chairman of the Republican National and Executive Committees in 1888; elected United States senator in 1887 and 1893, and chairman of the Republican State Convention in 1895. In 1897 he was chairman of the United States Senate Committee on Public Buildings and Grounds, and a member of the committees on Appropriations, Commerce, Public Health, National Quarantine, and Woman Suffrage (select).

QUEBEC, city, capital of the province of Quebec, Canada, and of Quebec City county; population (1891), 63,090; (1897, estimated) 75,000. The city has the head offices of three banks, the Quebec bank, the Banque Nationale, and the Union bank of Lower Canada; agencies of five other banks; two savings banks; 28 churches, of which 16 are Roman Catholic; 6 daily and 6 weekly newspapers; many large boot and shoe factories; and manufactories of iron castings, machinery, cutlery, nails, leather, musical instruments, paper, India rubber, goods, rope, tobacco, steel, etc. The city has a large export trade, in which lumber predominates; is the seat of the see of a Roman Catholic cardinal-archbishop, and of an Anglican lord bishop; and now returns three members to the House of Commons and three to the Provincial legislature.

QUILLER-COUCH, ARTHUR THOMAS, author, was born in Cornwall, England, Nov. 21, 1863; educated in Devonshire and in Trinity College, Oxford; began contributing verse over the signature Q. to the *Orford Magazine* became classical lecturer at Oxford; and wrote his first book, *Dead Man's Rock*, in 1887. He has since been a voluminous writer, and a member of the staff of the *London Speaker*. His last publications include *The Golden Pomp* (1895); *Adventures in Criticism* (1896); *English Sonnets* and *The Splendid Spur* (1897), etc.

QUINCY, city, capital of Adams county, Ill.; population (1890), 31,494; (1897, estimated) 45,000. In 1895 the assessed valuations were: Real estate,

\$3,939,500; personal property, \$1,213,742—total, \$5,153,242; tax rate, \$68.30 per \$1,000. The total funded debt, Feb. 13, 1897, was \$1,344,200; sinking funds, \$50,000; net debt, \$1,294,200. There are three national banks, with combined capital, \$550,000; deposits, \$2,299,271; and resources, \$3,635,573; a State bank, with capital of \$300,000; 25 churches; a public and two college libraries; 12 buildings used for public school purposes; public school property valued at \$257,000; waterworks supplied from the Mississippi River; electric light and street railroad plants; several public parks; and 4 daily, 11 weekly, and 4 monthly periodicals.

RADCLIFFE COLLEGE, Cambridge, Mass., non-sectarian; for women only; had at the close of 1896, 90 professors and instructors; 358 students; 9,734 volumes in library; \$330,000 in productive funds; \$8,160 gifts; \$71,210 income; president, Elizabeth C. Agassiz.

RAILROADS. In the United States there are several authorities on railroad concerns, of which the Interstate Commerce Commission, the *Railway Age*, and *Poor's Railroad Manual* are the best known. Because of differences in fiscal years, in time of publication, and in plan of compilation, the reports of these authorities seldom agree in details, hence any statement, in comparison with others, will appear to be misleading. According to the report of the Interstate Commerce Commission, for the year ending June 30, 1896, there was a total of 182,776.63 miles of steam railroad in operation. The distribution of the total mileage was as follows:

State or Territory.	Total.	State or Territory.	Total.
	Miles.		Miles.
Alabama.....	3,728.61	New York.....	8,127.00
Arkansas.....	2,554.50	North Carolina.....	3,494.80
California.....	5,055.31	North Dakota.....	2,518.56
Colorado.....	4,590.14	Ohio.....	8,726.29
Connecticut.....	1,008.30	Oregon.....	1,513.43
Delaware.....	317.42	Pennsylvania.....	9,919.57
Florida.....	3,125.65	Rhode Island.....	320.61
Georgia.....	5,335.36	South Carolina.....	2,616.35
Idaho.....	1,085.34	South Dakota.....	2,801.41
Illinois.....	10,725.97	Tennessee.....	3,091.15
Indiana.....	6,373.26	Texas.....	9,319.54
Iowa.....	8,521.05	Vermont.....	1,374.55
Kansas.....	8,846.58	Virginia.....	987.62
Kentucky.....	3,025.13	Washington.....	3,640.94
Louisiana.....	2,253.99	West Virginia.....	2,836.70
Maine.....	1,734.87	Wisconsin.....	2,083.70
Maryland.....	1,301.42	Wyoming.....	6,166.18
Massachusetts.....	2,121.46	Alaska.....	1,179.97
Michigan.....	7,818.39	Arizona.....	1,314.57
Minnesota.....	6,155.85	District of Columbia.....	29.75
Mississippi.....	2,526.04	Indian Territory.....	1,182.02
Missouri.....	6,608.47	New Mexico.....	1,486.78
Montana.....	2,845.34	Oklahoma.....	433.57
Nebraska.....	5,557.58	Utah.....	
Nevada.....	915.62		
New Hampshire.....	1,388.71		
New Jersey.....	2,220.21		
		Total.....	182,776.63

The capital stock of all roads aggregated \$5,290,730,567; funded debt, \$5,416,-074,969; floating debt, \$339,502,302; total liabilities, \$11,046,307,838; cost of roads and equipments, per mile, \$61,867; earnings from passengers, \$265,313,258, from freight, \$770,424,013, from all sources, \$1,125,632,025; net earnings, \$332,-333,756; interest paid on bonds, \$250,411,950; and dividends paid on stocks, \$81,364,854.

Railroads in Europe.—The department of railways of the Ministry of Public

Works in France published the statistics of the railways in Europe in operation on Dec. 31, 1895. The following table shows their status as compared with Dec. 31, 1894:

LENGTH IN OPERATION.			
Countries.	Dec. 31, 1894.	Dec. 31, 1895.	Increase.
	Kilom. (a)	Kilom. (a)	Kilom. (a)
Germany.....	45,462	46,451	989
Austria-Hungary.....	30,038	30,899	861
Belgium.....	5,545	5,660	115
Denmark.....	2,257	2,267	10
Spain.....	11,757	12,052	295
France.....	39,979	40,399	420
Great Britain and Ireland.....	33,641	34,058	417
Greece.....	915	930	15
Italy.....	14,026	15,057	431
Holland.....	2,117	2,117	.....
Luxemburg.....	435	435	.....
Portugal.....	2,340	2,340	.....
Roumania.....	2,581	2,741	160
Russia.....	33,311	35,323	2,012
Finland.....	2,249	2,394	145
Servia.....	540	540	.....
Sweden.....	9,234	9,755	521
Norway.....	1,736	1,777	41
Switzerland.....	3,477	3,527	50
Turkey, Bulgaria, and Roumelia.....	2,910	2,199	711
Islands of Malta, Jersey, and Man.....	110	110	.....
Total.....	244,910	251,391	6,481

(a) 1 kilometer = 0.621 mile.

Russia is increasing its net of railways at a tremendous rate, as can be seen. In 1895 it took the lead with an increase of 2,012 kilometers, and more, not included in these statistics; neither are those of the Transcaspian or Siberian railroad. After Russia comes Germany, which increased its lines by 989 kilometers. According to order, the next is Austria, with an increase of 861 kilometers, and Sweden with 521 kilometers. After Sweden, and in the fifth place is Italy, with an increase of 431 kilometers, and England, with 417 kilometers. The seventh is Spain, with an increase of 295 kilometers, and the eighth, France, with 230 kilometers.

Siberian Railroad.—The committee which manages the construction of the great Siberian railroad, in reporting to the czar on the work done in 1896, said that, wishing to build the terminus of the road on the Pacific Ocean in a suitable manner, they had chosen the bay of Gold Horn for the establishment of a commercial port. It was decided to build the port gradually, according to the development of commercial requirements, and in a way to protect at the same time the interests of the Russian war fleet (with all possible additions thereto) which will have, as heretofore, anchorage in the bay of Gold Horn. The committee found it practicable during the year to fix the definite cost of the construction of the Northern Ussuri line at 21,709,930 rubles (\$11,158,904), the second section of the Central Siberian line at 50,197,977 rubles (\$25,801,760), and the branch line to the city of Tomsk at 1,830,765 rubles (\$941,013). The

cost of the rolling stock of the Transbaikal road was determined at 6,643,395 rubles (\$3,414,705), and that of the Perm-Kotlass road at 3,496,095 rubles (\$1,796,993). The Russo-Chinese bank, established for the purpose of developing commercial relations between Russia and China, obtained, in 1896, from the Chinese government a permit for the construction of a railway line through Manchuria, and a special stock company was organized for that purpose. When this great enterprise is realized it will be only necessary to build a branch line about 530 versts (351 miles) in length from the Transbaikal and Ussuri lines to the Chinese border, and thus the distance for the transit of goods will be approximately shortened 514 versts (341 miles). The total length of the route is 4,547 miles from Tscheljabinsk to Vladivostok, on the Sea of Japan. It will be the most extensive railway in existence. More than a third of this gigantic enterprise is now completed; during the year 1895, 918 miles were constructed. At the same rate of progress, the line will be finished within two or three years. Several branch lines are to be constructed later; that from Kiakhta to Peking will have a length of from 600 to 700 miles.

European Electric Roads.—The following comparative table gives a synopsis of the extension and the *modus operandi* of the electric railways in operation on Jan. 1, 1896 and 1897:

Countries.	Total Length of Lines—Miles.		Total Capacity of Power Stations. Kilos (Watt).		Total Number of Motor Cars.	
	1897.	1896.	1897.	1896.	1897.	1896.
Germany.....	386.0	245.0	18,063	7,194	1,631	857
France.....	168.0	79.5	8,736	4,490	432	225
Great Britain.....	77.0	62.5	5,156	4,683	200	168
Italy.....	69.5	24.0	5,970	1,800	289	84
Austria-Hungary.....	50.5	43.0	2,389	1,919	194	157
Switzerland.....	47.5	28.5	2,622	1,559	129	86
Spain.....	28.5	17.5	660	600	40	26
Belgium.....	21.0	15.0	1,229	1,130	73	48
Russia.....	9.0	6.0	870	510	48	32
Servia.....	6.0	6.0	290	200	11	11
Sweden and Norway.....	4.5	4.5	225	225	15	15
Bosnia.....	3.5	3.5	75	75	6	6
Roumania.....	3.0	3.0	140	140	15	15
Netherlands.....	2.0	2.0	330	320	14	14
Portugal.....	2.0	2.0	110	110	3	3
Total.....	878.0	542.0	47,596	25,695	3,100	1,747

On the last date, out of 150 lines, 122 used the overhead wire system; 12 used accumulators; 8 used subterranean conduits; and 8 used center rails. A report in February, 1898, showed a total length of lines of 914.58 miles. Germany still led in number of roads (51) and mileage (398.46), and was followed by France, with 26 roads and 173.2 mileage; Great Britain, with 20 roads and 79 mileage; Italy, with 9 roads and 71.71 mileage; Austria-Hungary, with 11

RANCH AND FARM ANIMALS.

roads and 52 mileage; and Switzerland, with 17 roads and 48.82 mileage. Germany, France, and Switzerland led in number of overhead lines, having 45.19 and 17 respectively; France, in number of roads using accumulators; Great Britain, in number of roads with central rails; and Germany and Austria-Hungary, in roads using underground conduits. Of all roads in Great Britain, 18 were in England and 2 in Ireland. Portugal had the smallest mileage (1.73), and Holland, Rumania, Bosnia, and Sweden-Norway ranked next.

RANCH AND FARM ANIMALS. The following table shows the number and value of horses and mules on the farms and ranches of the United States, on Jan. 1, 1898 as estimated by the United States Department of Agriculture:

States and Territories.	HORSES.			MULES.		
	Number.	Average Price per Head.	Value.	Number.	Average Price per Head.	Total Value.
Maine.....	114,272	\$50.50	\$5,770,896			
New Hampshire.....	54,885	47.50	2,592,160			
Vermont.....	85,669	44.11	3,781,069			
Massachusetts.....	68,162	63.35	4,001,549			
Rhode Island.....	10,230	76.54	782,076			
Connecticut.....	43,405	70.19	3,050,873			
New York.....	68,816	35.48	2,421,467	4,511	\$88.25	\$392,746
New Jersey.....	70,980	64.24	4,537,061	7,342	80.74	595,786
Pennsylvania.....	565,719	49.25	27,862,207	36,683	63.32	2,322,825
Delaware.....	30,577	52.95	1,619,177	5,243	68.91	361,270
Maryland.....	130,072	47.91	6,274,874	12,625	70.95	895,684
Virginia.....	298,714	37.25	8,801,023	36,738	51.54	1,893,280
North Carolina.....	146,991	47.16	6,931,728	112,323	53.64	6,039,220
South Carolina.....	67,115	51.36	3,446,710	98,340	61.27	6,023,880
Georgia.....	111,380	45.59	5,077,374	165,292	64.72	10,691,811
Florida.....	37,309	38.95	1,452,853	8,438	63.55	536,274
Alabama.....	130,915	40.52	5,304,161	131,630	60.15	6,571,322
Mississippi.....	169,182	35.40	5,996,535	71,870	19.43	8,929,625
Louisiana.....	142,879	29.54	4,220,299	90,014	56.28	5,063,747
Texas.....	1,148,500	17.30	19,866,178	265,349	30.96	8,214,550
Arkansas.....	237,927	28.40	6,756,888	146,974	36.52	5,367,264
Tennessee.....	327,124	35.17	11,516,319	100,920	37.67	6,061,550
West Virginia.....	153,281	35.25	5,406,535	71,870	43.37	3,247,273
Kentucky.....	880,835	32.16	28,363,042	113,348	35.80	4,067,779
Ohio.....	666,895	41.37	27,590,332	17,761	43.16	764,482
Michigan.....	418,786	46.44	19,446,741	2,736	46.43	127,569
Indiana.....	613,542	39.13	24,166,072	44,399	40.54	1,796,173
Illinois.....	1,049,777	36.05	37,519,129	85,553	40.99	3,470,397
Wisconsin.....	112,296	43.07	4,857,998	4,862	45.42	219,092
Minnesota.....	464,410	39.35	18,276,398	8,588	44.97	384,251
Iowa.....	1,022,242	31.01	31,770,027	32,861	39.94	1,312,466
Missouri.....	862,878	25.28	20,262,746	190,306	31.08	6,373,207
Kansas.....	749,879	26.12	19,589,832	60,212	34.48	2,075,356
Nebraska.....	592,868	30.52	18,162,548	42,594	37.23	1,583,625
Nebraska.....	287,867	28.07	8,330,267	6,627	39.50	262,304
North Dakota.....	170,636	37.94	6,454,828	7,088	56.04	392,712
Montana.....	171,795	18.23	3,131,388	915	32.77	29,384
Wyoming.....	73,733	14.93	1,090,048	1,511	46.08	69,620
Colorado.....	151,721	22.86	3,469,955	8,753	43.11	377,687
New Mexico.....	83,854	18.18	1,524,176	8,567	32.50	278,078
Arizona.....	51,973	25.28	1,313,020	1,631	24.67	25,494
Utah.....	67,619	17.21	1,163,489	1,615	26.14	42,218
Nevada.....	50,347	12.82	645,294	1,198	21.01	25,843
Idaho.....	190,601	13.69	2,608,862	4,631	21.72	100,892
Idaho.....	173,157	24.05	4,163,817	1,427	44.09	62,910
Washington.....	193,688	20.61	3,980,854	5,782	28.64	165,096
Oregon.....	417,396	28.96	12,085,000	56,898	38.33	2,180,836
California.....	42,227	17.34	732,177	7,031	26.60	210,967
Oklahoma.....						
Totals.....	13,950,911	34.20	\$478,392,407	2,257,065	\$43.86	\$99,032,062

States and Territories.	OXEN.			MILCH COWS.		
	Number.	Average Price per Head.	Value.	Number.	Average Price per Head.	Total Value.
Maine.....	107,294	\$22.03	\$2,366,309	195,919	\$27.55	\$5,397,568
New Hampshire.....	76,327	24.59	1,876,685	132,276	29.05	3,838,706
Vermont.....	135,139	22.07	2,982,522	269,270	27.25	7,356,021
Massachusetts.....	74,134	25.82	1,914,516	174,454	32.90	5,725,371
Rhode Island.....	10,676	30.18	322,233	25,253	34.00	858,772
Connecticut.....	65,282	30.08	1,963,673	138,930	32.75	4,549,958
New York.....	544,735	26.17	14,256,261	1,402,164	32.00	44,869,348
New Jersey.....	42,409	25.14	1,066,254	208,451	36.10	7,523,998
Pennsylvania.....	559,384	29.64	16,325,756	928,905	29.69	27,435,388
Delaware.....	23,953	22.90	548,545	35,554	26.00	924,404
Maryland.....	109,175	22.63	2,470,249	151,982	25.60	3,890,739
Virginia.....	356,369	19.07	6,795,970	252,512	20.55	5,189,122
North Carolina.....	321,228	9.92	3,188,029	268,607	14.70	3,891,323
South Carolina.....	152,164	9.55	1,453,811	130,682	16.25	2,123,382
Georgia.....	563,503	8.92	4,992,300	303,082	21.85	6,629,115
Florida.....	350,205	7.50	2,625,811	117,785	19.59	2,296,808
Alabama.....	442,736	7.02	3,109,998	296,194	12.50	3,702,425
Mississippi.....	370,876	8.31	3,082,348	267,657	14.85	3,974,706
Louisiana.....	220,108	9.91	2,185,346	138,184	16.70	2,297,673
Texas.....	4,823,235	15.27	73,639,656	722,476	20.00	14,440,550
Arkansas.....	305,522	12.03	3,675,886	223,645	16.10	3,600,684
Tennessee.....	379,168	13.41	5,086,344	273,893	18.50	5,177,466
West Virginia.....	253,694	20.79	5,273,083	197,249	25.05	4,989,362
Kentucky.....	302,162	30.65	8,997,348	264,051	22.15	5,848,730
Ohio.....	606,127	27.16	16,468,012	729,441	29.35	21,400,093
Michigan.....	348,505	23.13	8,062,319	454,561	30.85	14,023,207
Indiana.....	675,698	25.25	17,030,685	606,916	29.29	17,692,747
Illinois.....	1,304,192	27.72	36,150,911	1,003,218	32.85	32,955,711
Wisconsin.....	607,541	22.76	13,830,060	571,591	28.70	23,372,821
Minnesota.....	533,922	20.99	12,465,824	633,493	27.50	17,434,898
Iowa.....	2,207,739	28.71	63,365,211	1,214,345	31.95	38,798,323
Missouri.....	1,537,523	24.80	38,129,028	699,530	36.75	17,829,678
Kansas.....	2,035,774	26.38	53,765,755	654,296	29.15	19,027,437
Nebraska.....	1,213,764	26.82	32,548,265	571,591	30.25	17,519,264
South Dakota.....	432,079	25.08	10,836,978	341,579	28.10	9,538,509
North Dakota.....	245,282	23.08	5,660,088	167,719	27.35	4,587,115
Montana.....	1,082,498	22.00	23,814,965	42,713	31.30	1,336,917
Wyoming.....	688,062	23.82	16,390,096	17,969	31.85	572,626
Colorado.....	335,826	26.07	8,752,773	85,669	33.50	2,874,242
New Mexico.....	731,219	16.86	12,329,897	19,126	26.55	507,735
Arizona.....	509,082	15.34	7,807,025	18,222	26.25	478,328
Utah.....	322,464	17.75	5,725,345	55,564	23.95	1,330,758
Nevada.....	241,201	17.04	4,109,350	18,105	27.85	504,224
Idaho.....	349,142	18.61	6,498,282	23,107	25.50	743,758
Washington.....	294,862	18.44	5,436,852	129,297	25.85	3,199,677
Oregon.....	667,030	17.93	11,957,188	115,427	23.30	2,680,449
California.....	810,615	18.91	15,326,334	342,382	28.65	9,869,531
Oklahoma.....	212,814	22.42	4,771,600	35,590	26.20	932,458
Totals.....	29,264,197	\$29.62	\$912,296,634	15,846,886	\$27.45	\$434,813,826

States and Territories.	SHEEP.			SWINE.		
	Number.	Average Price per Head.	Total Value.	Number.	Average Price per Head.	Total Value.
Maine.....	232,608	\$2.84	\$660,196	76,067	\$7.71	\$586,474
New Hampshire.....	76,754	2.96	227,293	55,825	8.15	454,972
Vermont.....	161,107	3.38	543,937	75,463	7.88	594,194
Massachusetts.....	41,202	3.56	146,997	57,131	8.54	488,010
Rhode Island.....	10,769	3.23	34,731	14,146	7.86	111,187
Connecticut.....	30,829	3.52	108,963	54,274	9.83	533,514
New York.....	825,446	4.04	3,337,739	638,849	7.24	4,626,544
New Jersey.....	41,062	3.74	153,185	15,398	9.25	1,420,821
Pennsylvania.....	782,776	3.41	2,669,596	1,033,001	6.78	6,999,613
Delaware.....	12,852	3.59	46,112	50,655	7.16	358,394
Maryland.....	132,179	3.28	433,152	328,597	5.69	1,870,366
Virginia.....	380,956	2.57	980,281	955,781	3.45	3,297,444
North Carolina.....	290,445	1.47	425,662	1,426,774	3.03	4,318,844
South Carolina.....	70,787	1.58	112,197	1,081,150	3.94	4,262,731
Georgia.....	341,233	1.67	569,494	2,073,254	3.66	7,592,255
Florida.....	89,890	1.77	158,925	456,519	2.15	972,386

REFORM CHURCHES.

States and Territories.	SHEEP.			SWINE.		
	Number.	Average Price per Head.	Total Value.	Number.	Average Price per Head.	Total Value.
Alabama.....	219,350	\$1.20	\$272,808	1,818,158	2.51	\$4,618,117
Mississippi.....	296,556	1.10	327,808	1,919,019	2.83	5,432,741
Louisiana.....	136,769	1.41	178,808	751,413	2.91	2,186,011
Texas.....	2,649,914	1.67	4,409,457	2,826,302	3.11	8,871,588
Arkansas.....	196,969	1.40	274,888	1,333,051	2.17	2,865,389
Tennessee.....	828,948	1.75	1,450,907	1,688,338	3.23	5,449,050
West Virginia.....	418,994	2.88	1,202,204	352,737	3.93	1,389,217
Kentucky.....	649,612	2.46	1,599,065	1,475,831	3.36	4,963,219
Ohio.....	2,116,346	3.42	7,237,777	2,330,355	5.17	12,737,720
Michigan.....	1,333,391	3.46	4,605,073	727,557	5.70	4,148,913
Indiana.....	967,853	3.54	3,391,863	1,596,967	5.17	8,257,733
Illinois.....	691,108	3.44	2,365,914	2,159,435	5.57	12,019,390
Wisconsin.....	715,809	3.20	2,287,725	920,557	6.18	5,689,042
Minnesota.....	706,929	3.36	2,364,631	433,013	5.39	2,331,722
Iowa.....	373,218	3.56	1,328,665	3,623,831	5.99	21,704,225
Missouri.....	553,428	2.63	1,467,578	3,105,072	3.98	12,359,188
Kansas.....	226,659	2.78	631,586	1,692,916	5.10	8,641,489
Nebraska.....	266,163	2.85	759,362	1,327,128	5.38	7,116,582
North Dakota.....	340,769	2.65	902,629	142,617	5.55	791,521
South Dakota.....	352,698	2.48	874,628	119,105	5.32	633,015
Montana.....	3,247,611	2.10	7,814,181	46,951	7.29	340,925
Wyoming.....	1,910,021	2.95	5,714,332	22,345	5.84	139,572
Colorado.....	1,023,089	2.38	2,399,445	22,635	5.10	112,379
New Mexico.....	2,741,267	1.89	5,164,284	29,905	6.07	181,521
Arizona.....	845,233	2.10	1,773,734	21,772	8.49	28,181
Utah.....	1,978,457	2.10	4,154,808	47,335	6.31	298,474
Nevada.....	549,348	2.20	1,209,167	11,349	3.91	44,716
Idaho.....	1,531,343	2.19	3,352,313	71,432	4.04	289,553
Washington.....	744,925	2.18	1,622,146	168,546	4.06	685,989
Oregon.....	2,282,779	1.66	3,788,417	220,847	3.03	669,896
California.....	2,592,853	2.23	5,782,915	467,676	4.08	1,908,247
Oklahoma.....	25,536	3.07	78,316	84,010	3.72	309,529
Totals.....	37,056,969	\$2.46	\$92,721,133	39,759,963	\$1.30	\$174,351,460

RANDOLPH MACON COLLEGE, Ashland, Va., Methodist Episcopal; had at close of 1896, 41 professors and instructors; 489 students; 12,500 volumes in library; \$293,500 in productive funds; \$10,000 gifts; \$89,700 income; president, William W. Smith, A.M., LL.D.

READING, city, capital of Berks county, Pa.; population (1890), 58,661; (1896, city directory), 84,735. In 1896 the assessed valuations were: Real estate, \$41,558,940; personal property, \$205,545—total, \$41,764,485; poll tax, \$17,337; total tax, \$267,923. The total bonded debt was \$962,500, of which \$523,500 was the outstanding water debt. The city owns the waterworks plant, valued at \$1,250,000; real estate, \$225,000; other property, \$101,194—total, \$1,576,194. There are 77 miles of streets, of which 52 miles are paved; 10 miles of sewers; 70 miles of water mains; 56 miles of gas mains; 11 miles of electric railroad and 9 miles of gravity and inclined road; 2 public parks, 7 national and 2 State banks and 2 trust companies; 3 opera houses; 60 churches, of which the Reformed predominates; 3 hospitals, 3 dispensaries, 3 homes for orphans, and 3 other charitable institutions; 37 public school buildings; public school property valued at \$680,000; 13 private schools and institutes; and 7 daily, 13 weekly, and 2 monthly periodicals. The annual cost of maintaining the city government exceeds \$400,000.

REFORMED CHURCHES. *Reformed Church in America.*—Official reports show: Number of churches 692, ministers 652, families connected with the church 57,705, communicants 104,704, additions to the church on confession 5,888; contributions for denominational purposes, \$228,357; for other objects, \$111,886; and for congregational purposes, \$1,005,503. There are 886 Sunday

schools, with an enrollment of 118,070, of whom 34,688 are also catechumens. The contributions of schools for foreign missions were \$10,457, for home missions \$5,204. There are 510 Christian Endeavor societies, 348 of which contributed \$5,237 for foreign missions, and \$2,926 for home missions, and \$4,232 to the Board of Education. The board holds in trust \$73,165, and the General Synod \$146,607, making a total of \$222,772, the interest of which together with \$7,000 contributed by the churches, was used for educational work. The receipts for domestic missions were \$71,917, which was sufficient to meet all appropriations. The board had 153 missionary pastors employed, with 214 churches and missions. They reported 8,587 families; 18,153 members; 964 additions; 17,304 Sunday school scholars; 9 new churches; 10 church buildings erected; and 7 homes for missionaries purchased or built. Receipts for foreign missions were \$154,139, of which \$6,983 were for the Arabian missions, and \$37,738 for the debt, which was reduced to about \$8,000. There are 19 missionaries in China; 23 in India; 30 in Japan; and 4 in Arabia, making a total of 75. There are also 33 native ordained ministers; 331 native helpers; 47 churches; 6,040 communicants; 8 boys' seminaries, with 423 pupils; 11 girls' seminaries, with 482 pupils; 4 theological schools, with 65 students; 155 Sunday schools, with 5,627 scholars; 142 day schools, with 5,155 pupils; and 3 hospitals at which 725 patients were treated. The contributions by natives were \$9,911. The figures show a gain of 50 per cent. in ten years. The Board of Publications issued 23 new publications and reprinted several others, and made donations of 47,000 copies, all met by the profits in the sales department, except \$1,600 contributed by the churches. The Disabled Ministers' fund has \$62,923 invested. The principal of the Widows' fund is \$88,000. The Woman's Board of Foreign Missions reported total receipts \$28,198. The board has 4 stations and 37 out stations in China, and 1,206 communicants. Ferris Seminary in Japan has 82 pupils. A Gospel extension society has been established in India. The Woman's Executive Committee of Domestic Missions reported receipts of \$17,468. At the General Synod held at Catskill, N. Y., in June, 1896, a report on the "Amsterdam Correspondence" was of special interest. There are about 1,200 letters which have been in the possession of the Assembly for fifty years. They are of special historical value. The Assembly tried to get possession of a large number of other letters now in possession of the Classis of Amsterdam, but failed.

Reformed Church in the United States.—The statistics of this church show 56 classes; 961 ministers; 1,639 congregations; 226,572 members; and 1,644 Sunday schools, with 20,096 officers and teachers and 172,458 scholars. The benevolent contributions of the year were \$676,271; contributions for congregational purposes, \$3,067,780. There has been an increase during three years of 56 congregations; 76 ministers; 13,742 members; 6,777 Sunday school officers and teachers, and 23,435 scholars; \$26,435 in benevolent contributions, and \$45,608 for congregational purposes. The mission Sunday schools raised in three years \$13,767 for benevolence and \$144,323 for congregational purposes. During the three years covered by the report, 17 missions of the General Board and 6 German missions became self-supporting. Four new Hungarian missions were undertaken. The Harbor mission in New York is maintained with a full force of workers. The Foreign Mission Board has 12 churches, 5 of which are self-supporting; 41 preaching stations; 1,960 members; 27 Sunday schools, with 1,063 scholars; 34 missionaries and workers; one girls' school with 134 pupils; one boys' school with 58; and one theological seminary with 26 students. The meeting of the General Synod, held at Dayton, O., in May, 1896, authorized the board

to raise \$100,000 for church extension apart from the regular contributions for that purpose. During 1897 sesquicentennial services were held throughout the denomination.

REPUBLIC, GRAND ARMY OF THE. The 31st annual National Encampment was held in Buffalo, N. Y., in August, 1897. The official reports showed: The total number of posts in the country is 7,106, with a combined membership in good standing of 319,456. The greatest strength of the Grand Army of the Republic was in 1890, when the number was 109,189, showing a loss in eight years of 90,033 members. Of these death claimed 51,306. From June 30, 1887, to June 30, 1897, the Grand Army expended in charity \$2,100,617.67.

Members in good standing June 30, 1896.....	340,610
Additional by errors.....	100
Gained by muster-in.....	10,334
Gained by transfer.....	4,381
Gained by reinstatement.....	11,307
Gained by delinquent reports.....	6,807
Total gain.....	33,929
Aggregate.....	373,639
Loss by death.....	7,515
Loss by honorable discharge.....	1,257
Loss by transfer.....	4,632
Loss by suspension.....	30,774
Loss by dishonorable discharge.....	411
Loss by delinquent report.....	8,981
Loss by surrender of charter.....	606
Total loss.....	54,183
Members in good standing June 30, 1897.....	319,456
Members remaining suspended June 30, 1897.....	43,360
Total on the rolls.....	362,816

In the table of membership for the year ending June 30, 1897, New York headed the list for members. The five States with the largest membership were: New York, 36,218; Pennsylvania, 34,352; Ohio, 30,236; Illinois, 25,054; Massachusetts, 21,617.

RHODE ISLAND, one of the United States of North America; the last of the original thirteen States to ratify the Federal constitution (May 29, 1790); counties, 5; capitals, Providence and Newport.

State Officers, 1897-98.—Governor (elected for one year, salary \$3,000 per annum), Elisha Dyer; lieutenant-governor, Aram J. Pothier; secretary of state, Charles P. Bennett; treasurer, Samuel Clark; attorney-general, W. B. Tamm; adjutant-general, Frederick M. Sackett; auditor, A. C. Landers; superintendent of education, Thomas B. Stockwell; railroad commissioner, E. G. Freeman; chief justice of the supreme court, Charles Matteson; associate justices, John H. Stines, Pardon E. Tillinghast, George A. Wilbur, Horatio Rogers, William W. Douglas, and Benjamin M. Bosworth; clerk, B. S. Blaisdell—all Republicans.

Legislature, 1898.—Republican, senate 33, house 55, joint ballot, 88; Democrats, senate 4, house 17, joint ballot, 21; Republican majority, senate 29, house 38, joint ballot, 67.

Elections.—In the State elections 1897 there were 41,823 votes cast for governor, of which the Republican candidate (Dyer) received 24,309; the Demo-

cratic (Church), 13,675; the Prohibition (Peabody), 2,096; the Social Labor, (Burton), 1,386; and the Liberal (Larry), 357; Republican plurality, 10,634. The congressional elections in 1896 resulted in the choice of the Republican candidate in both districts. In the presidential election, the Republican candidate received 37,437 votes; the Democratic, 14,459; the National Democratic, 1,166; the Prohibition, 1,160; and the Social Labor, 558.

Farm Products.—Reported Dec. 31, 1897: Corn, 263,314 bush., from 8,494 acres, value \$142,190; oats, 118,080 bush., from 3,690 acres, value \$40,147; potatoes, 681,120 bush., from 6,192 acres, value \$660,686; and hay, 84,035 tons, from 73,074 acres, value \$1,218,508.

Farm Animals.—Reported Jan. 1, 1898: Horses, 10,230, value \$782,976; cows, 25,258, value \$858,772; cattle, 10,676, value \$322,233; sheep, 10,769, value \$34,731; and swine, 14,146, value \$111,187.

Mineral Products.—The State ranks fourth in ornamental and monumental granite stock, the output in 1895 being valued at \$968,473, a decrease of nearly \$300,000, which reduced the State from first rank. The value of the various clay products was \$297,000.

Finances.—The bonded debt, Jan. 1, 1895, was \$1,517,000; sinking funds, \$118,667; net debt, \$1,398,333. The valuations of ratable property in the towns and cities for 1894-95 were: Real estate, \$283,427,125; personal property, \$85,938,543—total, \$369,365,668, an increase of \$12,808,956 over that of the preceding year; and the total valuation on which the State tax is collected was \$359,549,451. The debts of the towns (1894) aggregated \$23,617,805, and town sinking funds held \$4,369,427.

Banks.—On Oct. 31, 1897, there were 57 national banks in operation and 7 in liquidation; the active ones having a combined capital of \$19,337,050, and holding \$7,819,000 in United States bonds. These banks had outstanding on loans and discounts \$34,589,410; held an aggregate of \$1,143,588 in coin and coin certificates; had outstanding circulation, \$7,755,883; deposits, \$21,208,767; reserve, \$5,812,351; and ratio of reserve, 27.41 per cent. The State banks, Nov. 17, 1896, numbered 6, and had capital, \$916,675; deposits, \$747,047; resources, \$1,872,056; and surplus and profits, 151,185. There were 8 loan and trust companies, with capital, \$2,826,487; deposits, \$19,734,939; resources, \$24,616,758; and surplus and profits, \$1,209,969; and 35 mutual savings banks with depositors 136,148; deposits, \$68,683,698; resources, \$72,591,434; and surplus, \$3,843,115. The total banking capital of the State in 1896-97 was \$23,080,162.

Internal Revenue.—The collections and details of taxable manufactures are included in the totals for Connecticut (*q. v.*).

Railroads.—In 1895 there were reported in the State 467.36 miles of steam railroad track and 129.03 miles of electric and other street and suburban railroads—total, 596.39 miles. Of the total steam railroad mileage, more than one-half was controlled by a single corporation, the New York, New Haven and Hartford. The capital stock of the steam roads was \$85,377,375, and of the street roads, \$3,444,500; and the net earnings of all roads, \$3,815,131.

Commerce.—During the fiscal year ending June 30, 1895, the foreign trade in merchandise at the ports of Bristol and Warren, Newport, and Providence was: Imports, \$996,505; exports, \$4,129.

Publications.—Reported March, 1898: Daily, 16; semi-weekly, 3; weekly, 36; bi-weekly, 3; and monthly, 11.

Post-Offices.—Reported January, 1897: First-class, 3; second, 4; third, 9 (presidential, 16); and fourth, 128; money-order offices, 86.

Churches.—The Roman Catholic is the strongest denomination in the State, and is followed in their order by the Regular Baptist; Protestant Episcopal; Congregational; Methodist Episcopal; Free Will Baptist; Unitarian; and African Methodist. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Rhode Island 351 evangelical Sunday schools, 6,102 officers and teachers, and 48,268 scholars—total members, 54,370.

Schools.—At the end of the school year 1895-96 the number of children of school age in the State was estimated at 95,900, of whom 59,241 were enrolled in the public schools, and 41,691 were in average daily attendance. There were 1,219 public schools; 1,702 teachers; public school property valued at \$4,147,279; and expenditures, \$1,628,589. The permanent school fund held \$273,330, and the legislative appropriations 1895 included: Public schools, \$120,000; Normal School, \$18,000; State School of Design, \$3,000; public school apparatus, \$3,000; for education of blind and imbecile children, \$12,000; and the State Home and School, \$20,000. For advanced instruction there were 6 denominational secondary schools; 4 commercial colleges; State College of Agriculture and Mechanical Arts at Kingston; and Brown University (*q. v.*).

Libraries.—In 1896 there were reported 74 public libraries of 1,000 volumes each and upward, with a total of 580,305 bound volumes and 95,950 pamphlets. The legislature 1895 appropriated \$5,500 to 44 free public libraries and \$4,250 to the State and Law libraries and the State and Newport Historical Societies, both of which have libraries.

Population.—In 1890, 345,506, of whom 168,025 were males; 177,481 females; 239,201 natives; 106,305 foreign-born; 337,859 whites; and 7,647 colored. The State census 1895 showed a total of 384,758, making Rhode Island the most thickly populated State in the Union. On June 1, 1897, the United States government actuary estimated the population at 399,000.

RICHMOND, city, capital of Virginia and of Henrico county; population (1890), 81,388. In 1896 the assessed valuations were: Real estate, \$44,715,822; personal property, \$21,981,131—total, \$66,696,956; tax rate, \$14 per \$1,000. The total bonded debt was \$7,202,682; sinking funds, \$105,280; not bonded debt, \$7,097,402; floating debt, \$287,000. The city owned property valued at \$5,264,161, including the waterworks, \$1,500,000; gas works, \$1,000,000; and markets, \$202,000. In 1896 the city had 889 manufacturing plants, employing \$16,163,000 capital and 18,133 persons, and having sales aggregating \$32,026,000. The largest manufactures were chewing and smoking tobacco (\$6,725,000); cigars, cigarettes, and cheroots (\$3,125,000); iron, foundry and machine products (\$2,850,000); fertilizers and chemicals (\$2,320,000); boots and shoes (\$1,530,000); drugs and medicines (\$1,447,500); and flour and corn meal (\$1,250,000). There were 4 national, 10 State, 7 savings, and 5 private banks. The banks of issue had capital, \$3,141,750; loans and discounts, \$11,897,590; and resources, \$16,978,867; and the national, State, and savings banks had total deposits, \$8,918,818. In the year ending Sept. 30, 1897, the exchanges at the clearing house aggregated \$84,193,807, an increase of \$360,078 in a year. The churches numbered 89, with 42,934 members, 8321,448 contributions, 2,411 Sunday school officers and teachers, and 21,716 scholars. There are 116 miles of streets, of which 20 miles are paved; 59 miles of sewers; and 86 miles of water mains. The annual cost of maintaining the city government is about \$1,350,000; public schools, \$155,000; and there is public school property valued at \$450,000. The commercial movement in the years ending June 30, 1896 and 1897, was

respectively as follows: Imports, \$99,966 and \$89,529; exports (1896), \$382,637; (1897) not reported at time of writing. On Feb. 22, 1896, the Confederate Museum in the Jefferson Davis mansion was formally opened with orations by Gen. Bradley T. Johnson.

RICHMOND COLLEGE, Richmond, Va., Baptist; had at close of 1896, 15 professors and instructors; 225 students; 13,225 volumes in library; \$265,000 in productive funds; \$2,000 gifts; \$18,000 income; president, F. W. Boatwright, M.A.

RIPON COLLEGE, Ripon, Wis., non-sectarian; co-educational; had at close of 1896, 16 professors and instructors; 160 students; 8,000 volumes in library; \$250,000 in productive funds; \$50 gifts; \$18,050 income; president, Rufus C. Flagg, D.D.

ROANOKE COLLEGE, Salem, Va., non-sectarian; had at close of 1896, 12 professors and instructors; 175 students; 20,000 volumes in library; \$50,000 in productive funds; \$5,000 gifts; \$12,000 income; president, J. D. Dreher, A.M., Ph.D.

ROBESON, GEORGE MAXWELL, lawyer and ex-secretary of the United States Navy, was born in Belvidere, N. J., in 1827; died in Trenton, N. J., Sept. 27, 1897.

ROCHESTER, city, capital of Monroe county, N. Y.; population (1890), 133,896. In 1896 the assessed valuations were: Real estate, \$100,054,350; personal property, \$5,692,304—total, \$105,746,654; tax rate, \$20.37 per \$1,000. The total bonded debt, Jan. 1, 1897, including a water debt of \$5,342,000, was \$8,424,000; sinking fund, \$178,790; net debt, \$8,245,210. The city has 317 miles of streets, of which 105 miles are paved; 200 miles of sewers; waterworks plant that cost \$6,918,108, and has a capacity of 32,000,000 gals., and 270 miles of mains; police department, with 175 officers and men and annual cost \$170,000; fire department of 170 men, with annual cost \$228,000; 21,263 pupils enrolled in the public schools; public school property valued at \$1,300,000; 12 public libraries of all kinds; 97 churches; and 7 daily, 13 weekly, a semi-monthly, 16 monthly, and 2 quarterly periodicals. There are two national banks with combined capital, \$550,000; deposits, \$3,218,522; and resources, \$5,887,485; 8 State banks; 4 savings banks; and 2 trust companies. The lake commercial movement in the years ending June 30, 1896 and 1897, was respectively as follows: Imports, \$679,666 and \$655,968; exports, \$684,714 and \$810,000—total trade, \$1,364,380 and \$1,465,968.

ROCHESTER UNIVERSITY OF, Rochester, N. Y., Baptist; had at close of 1897, 14 professors and instructors; 206 students; 33,000 volumes in library; \$689,067 in productive funds; \$404,453 in grounds and buildings; \$72,306 income; acting president, S. A. Lattimore.

ROCK HILL COLLEGE, Ellicott City, Md., Roman Catholic; had at close of 1896, 21 professors and instructors; 175 students; 20,000 volumes in library; \$34,000 income; president, Brother Maurice.

ROGER WILLIAMS UNIVERSITY, Nashville, Tenn., Baptist; co-educational; for colored people; had at close of 1896, 16 professors and instructors; 227 students; 4,500 volumes in library; \$1,500 in productive funds; \$8,200 gifts; \$17,060 income; president, Owen James, D.D.

ROLLINS COLLEGE, Winter Park, Fla., non-sectarian; co-educational; had at close of 1896, 15 professors and instructors; 195 students; 3,500 volumes in library; president, G. M. Ward, A.M., LL.B.

ROMAN CATHOLIC CHURCH. The total number of Roman Catholics in

the world was estimated in reports covering 1896 at 240,000,000. The superior hierarchy consisted of a pope, Leo XIII.; 58 cardinals; 14 patriarchates; 191 archbishops; 766 bishops; 17 abbas; 8 apostolic delegations; 128 apostolic vicariates; and 43 apostolic prefectures. See **ROME**. In comparing the statistics of members or communicants of the various religious denominations, it should be borne in mind that the Roman Catholic church reports of membership include all persons, even children, subject to the discipline of that church; thus differing from Protestant churches generally, which count as members only those persons who have been received on profession of faith, baptism, or other prescribed ceremonies. The following table, summarizing the Roman Catholic church in the United States, is condensed from *Hoffman's Catholic Directory* for 1897. Cities in large type are seats of arch-dioceses.

Archdioceses, Dioceses, Vicariates-Apostolic.	Archbishops.	Bishops.	Clergy.	Churches.	Sit tions and Chapels.	Univer- sities.	Secular Summaries.	Regu- lar Summaries.	Orphan Asylums.	Charitable Institutions.	Catholic Population.
BALTIMORE.....	1	413	168	100	3	3	11	10	30	240,000	
Charleston.....	1	15	25	80	.....	.....	.....	2	3	8,000
Richmond.....	1	40	50	33	.....	.....	.....	4	9	22,000
St. Augustine.....	1	26	38	83	.....	.....	1	1	1	7,000
Savannah.....	1	47	27	50	.....	.....	.....	1	3	20,000
Wheeling.....	1	42	72	37	.....	.....	.....	3	4	24,000
Wilmington.....	1	31	38	17	.....	.....	.....	3	4	20,000
North Carolina.....	1	24	35	30	.....	.....	.....	1	1	3,500
BOSTON.....	1	434	193	65	.....	1	1	8	23	600,000
Burlington.....	2	65	87	19	.....	.....	.....	1	4	55,000
Hartford.....	1	232	186	96	.....	.....	2	3	4	250,000
Manchester.....	1	88	72	59	.....	.....	.....	5	17	100,000
Portland.....	1	92	79	101	.....	.....	.....	3	11	34,730
Providence.....	1	175	96	44	.....	.....	.....	4	10	225,000
Springfield.....	1	221	141	12	.....	.....	.....	4	8	200,000
CHICAGO.....	1	418	262	65	.....	2	4	22	.....	635,000
Alton.....	1	42	136	17	.....	2	2	12	.....	75,000
Belleville.....	1	91	101	21	.....	.....	.....	1	5	50,000
Peoria.....	1	146	230	60	.....	.....	.....	1	10	110,000
CINCINNATI.....	1	258	177	72	.....	.....	6	4	18	192,500
Cleveland.....	1	241	246	85	.....	1	1	7	16	275,000
Columbus.....	1	95	102	36	.....	1	1	2	7	55,000
Covington.....	1	67	73	67	.....	.....	.....	3	9	50,000
Detroit.....	1	181	186	51	.....	1	1	5	13	153,875
FL. WAYNE.....	1	150	143	62	.....	.....	2	2	9	70,000
Grand Rapids.....	1	81	139	47	.....	.....	.....	2	8	90,000
Louisville.....	1	195	157	130	.....	.....	3	3	15	90,000
Nashville.....	1	92	48	83	.....	.....	.....	2	6	28,000
Vincennes.....	1	175	175	38	.....	1	2	2	10	54,880
DUBUQUE.....	1	255	259	114	.....	.....	.....	1	10	150,000
Cheyenne.....	1	8	9	46	.....	.....	.....	.....	2	3,000
Davenport.....	1	106	136	70	.....	.....	.....	1	10	56,000
Lincoln.....	1	60	98	44	.....	.....	.....	.....	1	22,150
Omaha.....	1	107	147	49	.....	.....	.....	.....	1	54,880
MILWAUKEE.....	1	283	283	33	.....	.....	1	3	7	200,000
Green Bay.....	1	137	180	19	.....	.....	.....	3	10	125,000
La Crosse.....	1	126	203	49	.....	.....	1	2	11	70,000
Marquette.....	1	62	80	67	.....	.....	.....	2	8	70,000
NEW ORLEANS.....	1	267	161	69	.....	.....	2	11	23	225,000
Dallas.....	1	41	49	44	1	11	20,000
Galveston.....	1	48	52	38	2	7	34,000
Little Rock.....	1	41	48	42	.....	.....	.....	1	1	11,500
Mobile.....	1	48	51	62	.....	.....	.....	.....	4	17,000
Natchez.....	1	30	65	43	.....	.....	.....	.....	2	15,378
Natchitoches.....	1	21	37	31	.....	.....	.....	.....	2	30,000
San Antonio.....	1	61	73	94	.....	1	.....	3	7	70,000
Brownsville.....	1	21	22	243	.....	.....	.....	.....	1	54,000
Indian Territory.....	1	35	47	110	.....	.....	1	.....	9	14,733

Archdioceses, Dioceses, Vicariates-Apostolic.	Archbishops.	Bishops.	Clergy.	Churches.	Stations and Chapels.	Universities.	Secular Seminaries.	Regular Seminaries.	Orphan Asylums.	Charity Institutions.	Catholic Population.	
NEW YORK.....	1	1	637	235	128	1	1	7	52		800,000	
Albany.....			134	139	41		1	5	13		130,000	
Brooklyn.....			284	140	24		1	12	27		500,000	
Buffalo.....			208	137	18	1	2	3	5	17	150,000	
Newark.....			238	137	85		1	3	6	24	240,000	
Ogdensburg.....			103	152	87			2	2	6	75,000	
Rochester.....			139	130	13		1		6	10	90,000	
Syracuse.....			95	90	61				5	10	70,000	
Trenton.....			110	108	67			1	1	3	68,000	
OREGON.....	1		63	62	77		1	1	2	9	32,000	
Boles.....			17	32	58				1	4	9,000	
Helena.....			32	53	102				1	28	30,000	
Nesqually.....			60	90	240				1	5	42,000	
Alaska Territory.....			12	10					1	2	1,000	
PHILADELPHIA.....	1		380	198	114		2	2	11	25	415,000	
Erie.....			97	123	44			1	1	4	65,000	
Harrisburg.....			66	64	40				2	4	42,000	
Pittsburgh.....			327	230	83				1	3	13	270,000
Scranton.....			143	121	33					1	3	135,000
ST. LOUIS.....	1		355	234	85	1	1	5	6	30	200,000	
Concordia.....			22	55	13						12,000	
Kansas City, Kans.....			139	178	32		2	2	5	5	45,000	
Kansas City, Mo.....			85	68	40			1	2	9	42,000	
St. Joseph.....			46	58	40				1	2	20,000	
Wichita.....			19	49	9						6,500	
ST. PAUL.....	1		197	197	41		1		3	14	210,000	
Duluth.....			35	59	45				1	4	23,000	
Jamestown.....			47	86	90						22,000	
St. Cloud.....			80	85	12	1	1		1	6	40,000	
Sioux Falls.....			64	119	50				1	8	35,000	
Winona.....			64	97	19				2	4	40,000	
SAN FRANCISCO.....	1		208	121	53		2	5	18	25	225,000	
Montevideo-Angel's.....			77	75	31			2	7	15	50,000	
Sacramento.....			40	82	64				2	3	25,000	
Salt Lake.....			14	15	21						7,000	
SANTA FE.....	1		58	282	150				1	7	123,000	
Denver.....			83	121	100				2	18	60,000	
Arizona.....			20	45	95				1	6	38,000	
Total.....	14	674	10,752	9,070	5,189	9	25	82	249	888	9,596,427	

(a) Delegate Apostolic, 1 Titular Archbishop and 4 Titular Bishops not included; 3 newly appointed Bishops included.

The reports further showed 2,236 secular seminarians; 1,728 regular seminarians; 201 high schools for boys and 651 for girls; 812,611 children attending parish schools; 33,903 inmates of orphan asylums; and 947,940 children in all institutions. There are 251 Roman Catholic newspapers published, of which 9 are dailies, 145 weeklies, 60 monthlies, and 13 quarterlies. Of this number 146 are printed in English, 41 in German, 19 in French, 7 in Polish, 6 in Bohemian, 5 in German and English, 2 each in Slavonic and Hollandish, and one each in Spanish and Indian. The following totals are given concerning Indian mission work: Total number of Indians in the United States, 280,450; number of Roman Catholic Indians, 114,294; Indian churches, 163; priests, 108; baptisms of children, 5,887; of adults, 257; number of schools, 77; of pupils, 5,276. The report on negro mission work gives negro population, 5,093,000; Roman Catholic negroes, 148,307; churches, 42; priests, 42; baptisms of children, 4,940; of adults, 972; schools, 110; pupils, 8,342.

ROME, city, capital of Italy, and seat of the Roman Catholic Church; population (1895), 463,800. The Roman pontiff has for coadjutors the Sacred College of Cardinals, consisting, when complete, of 6 cardinal-archbishops, 50 cardinal-priests, and 14 cardinal-deacons, in all, 70. In January, 1897, the college had 5 cardinal-bishops, 49 cardinal-priests, and 4 cardinal-deacons, in all, 58. Besides the pope and the Sacred College of Cardinals, the upper hierarchy throughout the world comprised 8 patriarchates of the Latin and 6 of the Oriental Rite; 173 archbishoprics of the Latin and 18 of the Oriental Rite; and 713 bishoprics of the Latin and 53 of the Oriental Rite. The Sacred Congregations, composed of cardinals, with consultors and officials, numbered 20, viz., Inquisition or Holy Office, Consistorial, Apostolic Visitation, Bishops and Regulars, Council, Residence of Bishops, State of Regulars, Ecclesiastical Immunity, Propaganda, Propaganda for Eastern Rite, Index, Sacred Rites, Ceremonial, Regular Discipline, Indulgences and Sacred Relics, Examination of Bishops, Fabric of St. Peter's, Laetana, Extraordinary Ecclesiastical Affairs, and Studies. Excepting 7 apostolic vicariates in South America, the apostolic delegations, vicariates and prefectures in the world stand under the "Congregatio de Propaganda Fide." Almost all public interest in the city clusters about the Quirinal and the Vatican, and the governments of the kingdom and the church. The University of Rome, founded in 1303, had in 1895, 84 professors and instructors and 2,238 students. Citizens of the United States are warmly interested in several churches and schools in the city, built and supported with contributions from the United States, the latest of which is a theological school connected with the Methodist Episcopal church, which was opened in 1895. In September, 1895, there was a series of celebrations commemorative of the entry of the Italian troops into Rome. Only the embassies of the United States and Great Britain were decorated. On the 29th a monument to the memory of Garibaldi, on Janiculum Hill, was unveiled in the presence of the royal family, court dignitaries, cabinet ministers, and 50,000 persons. The oration was delivered by Premier Crispi. See ITALY.

ROUMANIA, an independent kingdom erected in 1877 out of the former Turkish provinces Moldavia and Wallachia; area, 48,307 square miles; population, about 5,800,000; capital, Bucharest; reigning sovereign, Carol I., of the house of Hohenzollern-Sigmaringen, who was proclaimed king April 2, 1866.

Government.—The legislature consists of a senate and a chamber of deputies; the senators are elected for a term of 8 years, the deputies for 4 years. All citizens of full age paying taxes are electors qualified to vote either directly or indirectly in the election of deputies. A property qualification is required in electors of senators. The king has the suspensive veto over all laws passed by the legislature.

Population.—Included in the population are about 300,000 Jews, 200,000 gypsies, 50,000 Bulgarians, 37,000 Austrians, 20,000 each Germans and Greeks. The capital has about 235,000 inhabitants; other towns are Jassy, 67,000; Galatz, 59,143; Braila, 46,775.

Religion.—The state church is of the orthodox Greek communion. Its adherents are estimated at about 5,000,000, and the Roman Catholics at 150,000. The state pays the salaries of the ministers of the orthodox church.

Education is gratuitous and compulsory where that is practicable, but the schools are inefficient. In 1893 there were 3,659 primary schools, with 221,000 pupils, or 3.97 per cent. of the population.

Finances.—The state revenue is derived from taxes, direct and indirect, and from the large public domains. A capitation tax is levied on all persons over 21

years of age, with certain exceptions—about \$1 a year. In 1895 the revenue was about \$20,000,000, and the expenditure about \$22,000,000. The public debt April 1, 1896, was \$232,900,000, more than one-half of it contracted for railroads and other public works.

Army.—Every male citizen between 21 and 45 years of age is liable to military service. He must enter (as decided by lot) either the permanent army for 3 years of active service, the territorial infantry for 5 years' active service, or the territorial cavalry for 4 years' active service. The strength of the permanent army in peace is 3,080 officers, 44,000 men, 366 guns; of the territorial army 81,843 men. For the kingdom's naval strength in vessels see NAVIES OF THE WORLD.

Industries and Production.—Of the population, 70 per cent. are employed in agriculture; about 700,000 families are freeholders. Of the area of the kingdom, 68 per cent. is productive. One-third of the area is under cereals, chiefly wheat and maize. Oil-seeds and vines are largely grown. The average annual production of cereals is about 12,000,000 quarters, of which more than half is exported. The country is rich in minerals. The principal manufactures are paper, cement, sugar, salt, woolen goods, hides, and timber.

Commerce.—In 1897 the commerce of the kingdom during 1895 was reported as follows: Imports, \$58,782,881; exports, \$49,417,343. The principal imports and their values were:

Alimentary products.....	\$7,825,967
Medical and chemical products.....	5,121,448
Animals (including horses).....	353,383
Oils and fats.....	1,162,475
Skins and leather.....	2,142,300
Textiles and manufactures of.....	21,599,402
Paper and articles of.....	2,212,745
Wood and articles of.....	1,005,530
Combustibles, mineral and bituminous.....	1,818,353
Earthenware and glassware.....	2,097,910
Metals, crude and worked.....	11,364,226

The leading exports were:

Alimentary products.....	\$45,274,712
Living animals (including horses).....	1,637,991
Skins and leather.....	694,414
Textiles and manufactures of.....	1,038,340
Wood and articles of.....	935,664
Metals, crude and worked.....	573,596

The export of grain and flour, included under the heading "alimentary products," amounted to \$37,607,401, and was the largest single article exported. The imports amounted to something over \$965,000.

Communications.—The merchant navy numbers 299 vessels of 61,078 tons. Roumania, with Austria, Bulgaria and Servia, sends one delegate to the mixed commission which has superintendence of the navigation of the Danube. The length of railways is 1,831 miles; there were in 1895, 3,216 post-offices; 4,240 miles of telegraph lines; 10,670 miles of wires; number of offices, 476.

RULES OF THE ROAD AT SEA, name applied to regulations by national or international authorities for the management of vessels at sea in storms, fogs,

or other danger. Under act of the United States Congress in 1896, the rules already established were considerably changed to comport with the schedule to be observed by vessels of all civilized nations on and after July 1, 1897. These rules apply also to inland waters, excepting the Great Lakes, for which a special set has been devised. The following is a synopsis of the new rules: "Vessels are in the first place cautioned against showing any other lights than their distinguishing ones in such a way as to permit any possibility of confusion. An additional white light is, however, given to a steam vessel under way to be carried at least 15 ft. lower than the one now provided for, and forward of its vertical line. A vessel which is towing another vessel or barge is also allowed a small white light to be carried aft, and in such a position that it shall not be visible forward of the beam, which may be used for the towing vessel to steer by. The following regulations are also provided for small vessels: First—Steam vessels of less than forty tons shall carry—(a) In the fore part of the vessel, or on or in front of the funnel, where it can best be seen, and at a height above the gunwale of not less than 9 ft., a bright white light constructed and fixed as prescribed in article two (a), and of such a character as to be visible at a distance of at least two miles. (b) Green and red side lights constructed and fixed as prescribed in article two (b) and (c), and of such a character as to be visible at a distance of at least one mile, or a combined lantern showing a green light and a red light from right ahead to two points abaft the beam on their respective sides. Such lanterns shall be carried not less than 3 ft. below the white light. Second—Small steamboats, such as are carried by seagoing vessels, may carry the white light at a less height than 9 ft. above the gunwale, but it shall be carried above the combined lantern mentioned in subdivision one (b). Third—Vessels under oars or sails of less than 20 tons shall have ready at hand a lantern with a green glass on one side and a red glass on the other, which, on the approach of or to other vessels, shall be exhibited in sufficient time to prevent collision, so that the green light shall not be seen on the port side nor the red light on the starboard side. Fourth—Rowing boats, whether under oars or sail, shall have ready at hand a lantern showing a white light which shall be temporarily exhibited in sufficient time to prevent collision. Additional regulations are provided for pilot vessels on duty at their stations as follows: On the near approach of or to other vessels they shall have their side lights lighted, ready for use, and shall flash or show them at short intervals, to indicate the direction in which they are heading, but the green light shall not be shown on the port side, nor the red light on the starboard side. A pilot vessel of such a class as to be obliged to go alongside of a vessel to put a pilot on board may show the white light instead of carrying it at the masthead, and may, instead of the colored lights above mentioned, have at hand, ready for use, a lantern with a green glass on the one side and a red glass on the other, to be used as prescribed above. A vessel in or near a fair-way, when aground, is required to carry in addition to it, the two red lights which signify a vessel not under control, but not desiring assistance. A steam vessel under sail only, but having her funnel up, shall carry forward where it can best be seen, one black ball or shape, not two feet in diameter. The manner of fog signaling is also more definitely fixed as follows: Article 15. All signals prescribed by this article for vessels under way shall be given: First—By 'steam vessels' on the whistle or siren. Second—By 'sailing vessels' and 'vessels towed' on the fog horn. The words 'prolonged blast' used in this article shall mean a blast of from four to six seconds' duration. (a) A steam vessel having way upon her shall sound, at intervals of not more than two minutes, a prolonged blast. (b) A

steam vessel under way, but stopped, and having no way upon her, shall sound, at intervals of not more than two minutes, two prolonged blasts, with an interval of about one second between. (c) A sailing vessel under way shall sound at intervals of not more than one minute, when on the starboard tack, one blast; when on the port tack, two blasts in succession, and when with the wind abaft the beam, three blasts in succession. (d) A vessel when at anchor shall, at intervals of not more than one minute, ring the bell rapidly for above five seconds. (e) A vessel when towing a vessel employed in laying or in picking up a telegraph cable, and a vessel under way, which is unable to get out of the way of an approaching vessel through being not under command, or unable to maneuver as required by the rules, shall instead of the signals prescribed in subdivisions (a) and (c) of this article, at intervals of not more than two minutes, sound three blasts in succession, namely, one prolonged blast followed by two short blasts. A vessel towed may give this signal and she shall not give any other. Sailing vessels and boats of less than twenty tons gross tonnage shall not be obliged to give the above-mentioned signals, but, if they do not, they shall make some other efficient sound signal at intervals of not more than one minute."

RUSSIA, an absolute monarchy with dominions extending over a great part of eastern Europe and northern and central Asia; area, European, 2,095,504 square miles; Asiatic, 8,644,100 square miles; total population (1897), 129,211,113; capital, St. Petersburg; population (1897), 1,267,023. The reigning emperor of all the Russias, Nicholas II., born May 18, 1868, son of the preceding emperor, Alexander III., succeeded to the throne Nov. 26, 1894. His personal income is derived from the revenue of the crown domains, which consist of more than a million square miles of cultivated land and forests besides gold and other mines in Siberia.

Population.—The first general census of the population of the empire was made in 1897. According to this, the population of the whole Russian empire is 129,211,113, of which there are 64,616,280 males and 64,594,833 females. The following table shows the population by separate territories of the empire:

Territories.	Males.	Females.	Total.	Inhabitants per Sq. Verst. (a)
In 50 governments of European Russia.	46,433,636	47,755,114	94,188,750	22.2
In 10 governments of the Kingdom of Poland.....	4,733,679	4,688,711	9,442,590	84.6
In 11 governments and regions of Caucasus.....	5,129,931	4,593,622	9,723,553	23.6
In 3 regions of Turkestan and Transcaspian region.....	2,959,557	2,772,175	5,731,732	60.5
.....	2,281,340	1,899,761	4,175,101	3.9
In 5 regions of steppes.....	1,802,560	1,611,614	3,415,174	1.6
In the Grand Duchy of Finland.....	1,350,426	1,277,375	2,627,801	8.8
Russian subjects in Buvara and Khiva.	3,951	2,461	6,412	.....
Total.....	64,616,280	64,594,833	129,211,113	6.8

(a) 1 square verst = 0.43916 square mile.
 (b) The whole of Asiatic Russia, if the transural districts of Perm and Orenburg governments are added thereto, contains 15,300,000 inhabitants.

This census shows 19 cities containing over 100,000 inhabitants each; 35 cities

from 50,000 to 100,000; 69 cities from 25,000 to 50,000; 13 cities from 10,000 to 25,000; and 3 cities from 5,000 to 10,000.

The following table shows all the cities containing above 50,000 inhabitants:

Cities.	Popula- tion.	Cities.	Popula- tion.
St. Petersburg.....	1,267,023	Jaroslav.....	70,610
Moscow.....	988,610	Kherson.....	69,219
Warsaw.....	614,752	Orel.....	68,558
Odessa.....	404,651	Vitebsk.....	66,143
Lodz.....	314,780	Ekaterinodar.....	65,697
Riga.....	292,943	Zhitomir.....	65,452
Kiev.....	248,750	Rovell.....	64,578
Kharkov.....	170,682	Libau.....	64,500
Tiflis.....	159,862	Belostok.....	63,327
Vilna.....	159,568	Samangan.....	61,006
Tashkent.....	156,546	Blissvetgrad.....	61,841
Saratov.....	133,116	Cronstadt.....	59,330
Kazan.....	131,508	Kremenchug.....	57,879
Ekaterinoslav.....	121,216	Tsaritsine.....	55,914
Rostoff-on-Don.....	119,889	Penza.....	55,080
Astrakhan.....	113,075	Samarcand.....	54,900
Baku.....	112,353	Kokand.....	54,452
Tula.....	111,048	Sebastopol.....	54,442
Kishinev.....	108,596	Berdichev.....	53,728
Nijni-Novgorod.....	98,503	Tver.....	53,477
Nikoluev (govt. of Kherson).....	92,064	Poltava.....	53,060
Samarkand.....	91,659	Russk.....	52,908
Minsk.....	91,113	Tomsk.....	52,430
Voronezh.....	84,015	Novocherkask.....	52,005
Kovna.....	73,543	Taganrog.....	51,748
Orenburg.....	72,710	Irgutsk.....	51,184
Dvinsk.....	72,331	Ufa.....	50,576

Religion.—The State religion is that of the Græco-Russian, or as it is officially styled, the Orthodox-Catholic faith. The Russian church is autonomous, but maintains fraternal relations with the four Oriental patriarchates of Constantinople, Jerusalem, Antioch, and Alexandria. The supreme head of the church is the reigning emperor. He appoints to all offices in the church, but the prelates may propose candidates. There are in the empire 62 bishoprics; of the bishops, 3 are metropolitans and 17 archbishops; 63,191 churches, of which 708 are cathedrals; 52,333 priests and deacons; and 43,615 clergy in the minor orders. There are 507 monasteries, with 7,164 monks; 228 nunneries, with 7,566 nuns. The Holy Synod has a productive capital of \$30,000,000 at its disposal; the income of the orthodox churches amounts to about \$13,000,000.

Education.—Most of the schools are under the ministry of public instruction, and the empire is divided into 14 educational districts. In 1894 the total contribution of the government for education was \$28,000,000, of which about \$5,500,000 was for universities, \$13,000,000 for middle-class schools, and the remainder for primary schools. The latest official data of education give 9 universities, with a teaching staff of 923, and 13,944 students; 17 high schools, with 190 instructors, and 2,096 students; 2 ladies' universities with 983 students; 7 theological schools, with 126 instructors, and 887 students; 2 medical schools, 1,277 students; 5 military academies, 1,277 students; 3 agricultural academies, 412 students; 7 engineering and mining schools, 507 students. The foregoing

are the high-grade schools. Of middle-class schools for boys there are 629, with 136,219 students, viz.: Normal schools and practical schools, 78, instructors, 822, students 5,586; gymnasia and progymnasia, 235, instructors, 2,815, students, 68,682; realschulen, 104, students, 18,827; technical and professional schools, 44, students, 4,769; theological seminaries, 55, instructors, 1,054, students, 17,246; military and naval schools, 113, students, 21,109. The schools for primary education number over 46,800, and the pupils 1,451,000 boys and 383,200 girls. The estimate in 1896 of the number of pupils in all grades of schools was, for European Russia (Finland not included), 2,874,000; Poland, 257,300; Caucasus, 148,800; Siberia, 80,000. On this estimate, only 3 per cent. of the population is in the schools. Of recruits to the army only 20 per cent. can read and write. The polyglot of the empire is shown in the languages of the newspapers. In 1892, in European Russia (exclusive of Finland), there were published 743 periodicals; of these 589 were in Russian, 69 in Polish, 44 in German, 11 in Esthonian, 7 in Lettish, 9 in French, 5 in Armenian, 2 in Jewish, 3 in Georgian, 1 in Finnish, 2 in Russian, German, and Polish, 1 in Russian, German, and Lettish, 1 in Tartar and Russian, 1 in Russian and Turkish, 1 in Russian and French. In 1894 there were published in the empire (exclusive of Finland) 10,651 books, aggregating 32,208,372 copies. Of the works 8,082 (25,000,000 copies) were in Russian; in Polish, 723 (1,836,000); in Hebrew, 474 (1,132,000); in German, 377 (744,000); in Lettish, 203 (767,000); in Esthonian, 115 (544,000).

Finances.—In the budget for 1897 the revenues of the empire were estimated at \$706,980,000 in gold; expenditures the same. The estimate includes both the ordinary and the extraordinary expenditure, e.g., the cost of constructing railways and ports. Jan. 1, 1895, the public debt amounted to about \$2,500,000,000, of which about 75 per cent. paid 4 per cent. interest. In a memoir which accompanied the budget estimates for 1897 the minister of finance stated that the amount of gold accumulated in the treasury and in the state bank was 804,000,000 rubles (\$600,000,000), equal to 1,206,000,000 rubles in paper, and so exceeds by 85,000,000 rubles the amount of figure money in circulation.

Army and Navy.—Military service is obligatory on all men from their 21st year. Yearly about 870,000 young men reach the military age; of these, about 275,000 are taken into the active army, while the rest are inscribed in the reserve. The period of service in European Russia is 5 years in the active army, 13 years in the reserve, 5 in the second reserve. The men in the reserve are called together for drill for 6 weeks twice a year. The Russian army on the peace footing comprises, of field troops: First, 193 infantry regiments, forming 772 battalions, having a total of 351,074 combatants, 13,510 officers, and musicians; 30 regiments of riflemen having 30,780 combatants, 728 officers; 8 battalions of riflemen, 3,584 combatants, 152 officers; 6½ battalions of Cossacks, 4,770 combatants; 37 line battalions in Asia, 3,552 combatants—total of infantry regiments and battalions, 390,176 combatants. Second, cavalry: 58 regiments of cuirassiers, dragons, uhlanes, 71,468 combatants; Finnish dragons, 870 men; 37½ Cossack regiments, 34,790 combatants; Crim-Tartars, 1,424 combatants—total cavalry, 88,078 combatants. Third, artillery: 48 field brigades; 98 heavy, 184 light, 15 mountain batteries; 30 brigades are kept on a war footing of 8 guns each, and 275 have horses for 4 guns each; 1,240 guns, 63,143 combatants; besides these, there are 6 light and 1 mountain battery in Turkestan; 8 light, 2 mountain, and 2 mortar batteries in East Siberia; 21 batteries attached to rifle-men's battalions, 55 mounted batteries, 318 guns, 8,714 men; 28 field mortar batteries in 7 regiments, 8 guns in each battery—total mortars, 224. A few other

batteries added to the above bring the grand total up to 418 field batteries, 1,790 guns, 236 mortars, and over 100,000 men. Fourth, the engineer corps: which has a total of 43½ battalions (8 brigades), 25,894 men. Fifth, the train: comprising 35,130 men. Grand total of field troops of the European army on the peace footing, about 700,000 combatants, 28,200 officers. In the Asiatic dominions there is further an active army of 74,260 men, and in Finland, 9,939 men. Total of men in European and Asiatic Russia (peace footing), 835,143; officers, 33,529; horses, 155,478. The strength of the armies on the war footing is: combatants, 2,532,496; horses, 577,796; guns, 5,264. For Russia's naval strength in ships see NAVIES OF THE WORLD. The commander-in-chief of the navy is the general admiral. Under him are 11 admirals, 24 vice-admirals, 24 rear-admirals, 63 captains of the first-class, 193 second-class, 541 lieutenants, 390 midshipmen. Officers in the engineering branch, 326.

Agriculture.—The whole territory of European Russia proper, exclusive of the Arkhangelsk islands and the pasture grounds of the Kalmucks and Kirghizes, comprises 1,098,507,780 acres and is distributed among different owners as follows:

Owners.	Area.	Unfit for culture, Roads, etc.
	Aeres.	Aeres.
The State.....	410,801,867	130,367,498
Imperial family.....	19,890,835	.....
Peasants.....	373,310,406	35,445,735
Private owners.....	294,504,582	35,115,557

The total arable is 287,969,552 acres; orchards, meadows, grazing, etc., 174,958,734 acres; forest, etc., 425,520,714; roads, waste, etc., 210,058,770. There are in European Russia, 3,175,000 acres under flax, and the annual product of flax fiber is 584,000 tons; of linseed, 561,500 cwt.; 1,510,000 acres under hemp, product of fiber, 236,300 tons, hempseed, 272,782 tons; about 650,000 cwt. of hops are harvested yearly. About 128,480 acres are under tobacco. The production of cotton in Turkestan is growing rapidly: acreage in 1895, 469,800. In Khiva, Bokhara, and Transcaucasia, cotton culture has attained considerable proportions. Nearly one-third of the area of European Russia is under forest; the total forest area of European Russia, Poland, Finland, and Caucasia is 498,177,000 acres.

Mines.—Gold is obtained chiefly in Siberia, product (1893), 72,532 lbs.; and in the Ural Mountains, product 26,352 lbs. In the same year the total product of silver in several districts was 27,088 lbs. The copper product in the Urals was 2,789 tons, and in the Caucasus, 2,064 tons. In South Russia mercury was extracted in 1895 to the amount of 954,000 lbs. The province of Ekaterinoslav is an important iron-mining center. The yield in 1894 was: Pig, 350,000 tons; iron, 32,500; steel, 160,000 tons. The manufacture of agricultural machinery is a rising industry in Russia; product, \$7,500,000. The product of coal in the Don region in 1894 was 3,684,000 tons. Poland produces about the same amount.

Manufactures.—According to estimates of the department of trade and manufacture, which takes no account of mining industries nor of those which pay excise duties (spirits, sugar, tobacco), manufactories of the empire producing

over \$750 worth a year are in number 22,483, employing 1,094,972 men, 311,803 women, 380,057 horse-power; and the yearly production is valued at \$1,312,740,000. The chief articles of manufacture are articles of food, textiles, paper, wood, chemicals, tallow candles, leather, china and glass, iron and steel, machinery, etc. Russia and Poland have over 3,799,416 spindles and 191,290 looms. The product of pig iron in 1894 was 1,272,235 tons, and of steel, 450,000 tons. The product of naphtha, crude and refined, was 120,000 tons.

Commerce.—The exports from European Russia and North Caucasia in 1895 were: Food materials, \$299,235,100; timber, flax, tallow, wool, naphtha, and other raw and half-manufactured goods, \$195,033,000; metallic goods, textiles, miscellaneous, \$22,650,000. The imports from Europe in the same year were: Articles of food, \$49,000,000; raw and half-manufactured materials, \$211,779,600; animals, \$2,162,250; manufactured goods, \$102,369,000.

Communications.—The river fleet of European Russia and Poland comprises over 2,185 steamers (115,140 horse-power); over 102 steamers navigate the rivers of West Siberia, and the traffic aggregates 322,000 tons; over 60 steamers are engaged on the rivers of East Siberia. The total length of navigable rivers in Russia and Poland is 46,277 miles; there are also 499 miles of canals and 648 miles of canalized rivers. In 1896 there were in Russia, Poland, Siberia, and Caucasia, state railways, 14,028 miles; private, 8,033 miles; in Finland, 1,488 miles; in Transcaucasia and Turkestan, 890 miles; total, 24,439 miles; lines under construction, 7,939 miles.

Posts and Telegraphs.—The number of post-offices exceeds 7,084. The length of state telegraph lines, Jan. 1, 1895, was 76,857 miles; length of wire, 152,959 miles; offices, 2,133; length of telephone lines, 14,000 miles. The income of posts and telegraphs is over \$26,707,437 per annum; expenditures, \$19,608,081.

RUSSELL, LORD CHARLES, of Killowen, Lord Chief Justice of England, was born in Newry, Ireland, in 1833. He was educated at Trinity College, Dublin; called to the English bar in 1859; Liberal member of Parliament in 1880-89; made attorney-general and knighted in 1886; counsel for Great Britain before the Bering Sea Arbitration Tribunal in 1893; and received a life peerage and was appointed lord chief justice of England in 1894. He visited the United States in August, 1896, and delivered an address at the annual meeting of the American Bar Association.

RUTGERS COLLEGE, New Brunswick, N. J., non-sectarian; had at close of 1896, 27 professors and instructors; 165 students; 33,559 volumes in library; president, Austin Scott, PH.D., LL.D.

SACRAMENTO, city, capital of California and of Sacramento county; population (1890), 26,386. Electricity, generated by the falls of the American River at Folsom, 24 miles distant, was turned on in July, 1895, and since then there has been a marked revival in public improvements and private enterprise. Hereafter the waters of the river will be utilized for lighting the streets, propelling street cars, operating factories, and for other purposes. The city owns the water-works, which are supplied from the Sacramento River; is improving its streets with bitumen; and has 26 churches, a national and 4 State banks, 17 buildings used for public school purposes, public school property valued at \$275,000, State and public libraries, and 2 daily, 4 weekly and 2 monthly periodicals.

SAGASTA, PRAXEDES MATEO, statesman, was born in Torrecilla de Cameros, Spain, July 21, 1827. He was educated for an engineer; was for a short time engaged in his profession in Valladolid and Zamora; entered political life and

was elected to the Cortes in 1854; took part in the revolution of 1856; and, after the proclamation of amnesty, returned to Spain, and became a professor in the School of Engineers in Madrid. In 1866 he again joined the revolutionary party, and, as before, sought safety in flight to France, this time with a sentence to death for treason against him. Under General Prim he was appointed minister of the interior; in January, 1870, he became minister of state; and he held both of these offices during the brief reign of King Amadeus. In January, 1874, he was appointed minister for foreign affairs; in May, became minister of the interior; and in August, premier. On the accession of Alfonso XII., Sagasta withdrew from political life for awhile, subsequently espousing the cause of the young king and becoming a recognized leader of the Liberal party. He again became premier, on the death of Alfonso in 1885, and by several reconstructions of his ministry held the place till July, 1890, when he was forced to give way to Canovas del Castillo. The latter remained at the head of the government till March, 1893, when he in turn gave way to Sagasta, who was again succeeded by Canovas in March, 1895. Señor Canovas was assassinated Aug. 8, 1897, and Sagasta was again called to the office of premier. By virtue of this office he had charge of the negotiations between Spain and the United States in the early part of 1898.

SAGE, HENRY WILLIAM, philanthropist, was born in Middletown, Conn., Jan. 31, 1814; died in Ithaca, N. Y., Sept. 17, 1897. He acquired a large fortune in the lumber trade, and will be remembered best for his benefactions to Cornell University. He was elected one of the trustees in 1870, and since 1875 had been president of the board. His gifts to Cornell include the Sage College for Women, cost \$266,000; the Sage School of Philosophy, \$200,000; University Library Building, \$260,000; and endowment, \$300,000; the Susan E. Linn Sage chair of philosophy and home for the Sage professors of philosophy, \$61,000; the Sage Chapel; and the Museum of Classical Archaeology. His various gifts aggregated about \$1,250,000 in value. After his death his sons, Dean Sage, of Albany, and William H. Sage, of Ithaca, presented the university, for a student's hospital, the Sage mansion, valued at \$80,000, a full equipment, and an endowment of \$100,000.

SAGINAW, city, capital of Saginaw county, Mich.; population (1890), 46,322; (1894, State census) 14,641. In 1896 the assessed valuations were: Real estate, \$13,024,675; personal property, \$2,712,395—total, \$15,737,070; tax rate, \$27.18 per \$1,000. The bonded debt, March 1, 1897, including a water debt of \$539,000, was \$1,230,000; sinking fund, \$40,000; net debt, \$1,190,000. There are 3 national banks, with capital, \$400,000; deposits, \$2,080,130; and resources, \$3,255,329; 8 State and savings banks; 1 building and loan associations; over 200 manufactories, employing 10,500 persons, paying \$4,500,000 in wages, and yielding products valued at over \$20,000,000; 12 lines of railroad entering the city; 10 miles of river front; 40 miles of paved streets, 50 miles of sewers, and 80 miles of water mains; 45 churches; 22 public and 15 private schools; 32 lumber-sorting yards; and 4 daily and 8 weekly newspapers.

ST. BENEDICT'S COLLEGE, Atchison, Kan., Roman Catholic; had at close of 1896, 25 professors and instructors; 170 students; 13,600 volumes in library; president, I. Wolf, D.D.

ST. CHARLES COLLEGE, Ellicott City, Md., Roman Catholic; had at close of 1896, 17 professors and instructors; 225 students; 15,000 volumes in library; president, C. B. Schrantz, A.M.

ST. FRANCIS XAVIER COLLEGE, New York City, Roman Catholic; had at close of 1896, 40 professors and instructors 761 students; 28,000 volumes in library; president, T. E. Murphy, s.j.

ST. JOHN'S COLLEGE, Annapolis, Md., non-sectarian; had at close of 1896, 13 professors and instructors; 175 students; 8,500 volumes in library; \$1,000 in productive funds; \$14,200 gifts; \$22,200 income; president, Thomas Fell, PH.D., LL.D.

ST. JOHN'S COLLEGE, Fordham, New York City, Roman Catholic; had at close of 1896, 20 professors and instructors; 217 students; 37,000 volumes in library; \$12,000 income; president, T. J. Campbell, s.j.

ST. JOHN'S UNIVERSITY, Collegeville, Minn., Roman Catholic; had at close of 1896, 27 professors and instructors; 200 students; 12,000 volumes in library; \$20,000 income; president, Peter Engel, PH.D.

ST. JOSEPH, city, capital of Buchanan county, Mo.; population (1890), 52,324. In 1896 the assessed valuations were: Real estate, \$16,000,000; personal property, \$7,500,000—total, \$23,500,000; total tax rate, \$28 per \$1,000. The bonded debt, Jan. 1, 1897, was \$1,253,500; sinking fund, \$20,000; net debt, \$1,233,000. The city pays annually \$30,000 for its water supply. There are 2 national banks, with combined capital, \$350,000; deposits, \$1,984,505; and resources, \$3,884,692; public school property valued at \$600,000; gas and electric light plants; electric street railroads; 8 important railroads entering the city; and 5 daily, 9 weekly, and 7 monthly periodicals.

ST. LOUIS, city, port of entry, co-extensive with St. Louis county, Mo.; population (1890), 451,770. In 1896 the total assessed valuation (about three-fifths actual) was \$341,087,650; and the total bonded debt, Feb. 1, 1897, including a water debt of \$5,808,000, was \$20,352,278. The city owns the waterworks plant, which cost \$25,000,000, has a capacity of 65,000,000 gals., supplies through 462 miles of mains, and yields a revenue of over \$1,250,000 per annum, with operating expenses of about \$500,000. There are 865 miles of streets, of which 369 miles are paved, and 400 miles of sewers. The total cost of maintaining the city government exceeds \$6,700,000 per annum; the public schools, \$1,640,000; the police department of 867 officers and men, \$950,000; and the fire department of 470 officers and men, \$650,000. There are 6 national banks, with combined capital, \$8,400,000; deposits, \$22,222,820; loans and discounts, \$32,060,316; resources, \$57,454,641; and surplus, \$1,706,000; and 18 State and savings banks. In the year ending Sept. 30, 1897, the exchanges at the clearing house aggregated \$1,293,701,962, an increase of \$111,686,391 in a year. The public libraries of all kinds number 25; the public parks, of which Forest Park is the largest, embrace an area of over 2,100 acres; the public school property has a value of over \$4,250,000; and the periodicals number 13 daily, 68 weekly, 3 bi-weekly, 2 semi-monthly, 64 monthly and 8 quarterly issues. The city and vicinity was visited by a tornado on May 27, 1896, which with the accompaniments of flood and fire cost a loss of over 500 lives, the partial destruction of the great Eads bridge, and damage to property estimated at many millions of dollars. St. Louis maintained its reputation as a convention city the same year, when on June 16 the Republican National Convention, which nominated William McKinley, was held here.

ST. LOUIS UNIVERSITY, St. Louis, Mo., Roman Catholic; had at close of 1896, 20 professors and instructors; 319 students; 43,500 volumes in library; president, J. Grimmelman, s.j.

ST. MARY'S COLLEGE, St. Mary's, Kan., Roman Catholic; had at close of 1896, 24 professors and instructors; 241 students; 7,600 volumes in library; president, E. A. Higgins, s.j.

ST. PAUL, city, capital of Minnesota and of Ramsay county; population (1890), 133,156; (1895, State census) 140,292. In 1896 the assessed valuations were: Real estate, \$79,065,041; personal property, \$14,042,700—total, \$93,107,741; tax rate, \$21.40 per \$1,000. The bonded debt, Jan. 1, 1897, including a water debt of \$2,460,000, was \$8,332,100; floating debt, \$1,055,000; sinking funds, \$373,400; net debt, \$9,013,700. There are 383 miles of streets, 234 miles of water mains, and 147 miles of sewers. The annual cost of maintaining the city government exceeds \$1,500,000; public schools, \$500,000; police department of 181 officers and men, \$185,000; fire department of 192 officers and men, \$200,000; and of street lighting by gas and electricity, \$75,000. There are 5 national banks, with capital, \$3,800,000; individual deposits, \$9,506,325; and resources, \$21,014,157; 12 public libraries of all kinds; public school property valued at nearly \$2,500,000; and 4 daily, 24 weekly, 4 semi-monthly, and 12 monthly periodicals. Designs for a new State capitol, to cost \$1,500,000, were accepted in 1895.

SALEM, city, capital of Essex county, Mass.; population (1890), 30,801; (1895, State census) 31,473. In 1896 the assessed valuations were: Real estate, \$17,542,700; personal property, \$11,120,200—total, \$28,662,900; tax rate, \$16 per \$1,000. The total debt, including a water debt of \$711,500, was \$1,167,500; assets, \$192,767; net debt, \$974,733. There are 7 national banks; 2 savings banks; 2 co-operative banks; 9 public libraries of all kinds; electric street railroads connecting with Lynn, Beverly, Danvers, Peabody, and Marblehead; public school property valued at over \$450,000; and 2 daily, 3 weekly, and 3 monthly periodicals.

SALT LAKE CITY, city, capital of Utah and of Salt Lake county; population (1890), 41,843. In 1896 the actual valuations reported were: Real estate, \$28,254,118; personal property, \$9,300,878—total, \$37,554,996; tax rate, \$23 per \$1,000. The total debt, Jan. 1, 1896, including a water debt of \$518,000, was \$2,518,000; and the city owned the waterworks plant and other property valued at \$3,500,000. There are 127 miles of streets, 30 miles of sewers, and 125 miles of water mains; 4 national banks, with capital, \$1,300,000; deposits, \$1,508,403; and resources, \$4,078,954; and 4 daily, 3 semi-weekly, 11 weekly, 2 semi-monthly, and 7 monthly periodicals. The annual cost of maintaining the city government is about \$500,000; public schools, \$250,000; police department, \$36,000; fire department, \$34,000; and street lighting by electricity, \$30,000. A special census in 1895 showed 303 industrial establishments, employing 2,530 persons, paying \$1,230,603 in wages, using plants valued at \$2,150,482, and total capital of \$3,321,723, and having a combined output valued at \$3,389,072.

SALVATION ARMY, a missionary society with a military organization; founded by the Rev. William Booth, in London, England, in 1865, under the name of the Christian Mission; present name adopted in 1878. The Army has been established in 12 countries; issues 44 periodicals in the local vernacular; proclaims the Gospel in 29 languages and dialects; has 13,015 officers and 30,550 other members; owns property valued at over \$4,000,000; and has an annual income of over \$3,500,000. The force in the United States, Jan. 1, 1898, comprised 749 corps and 2,111 officers; having been considerably reduced in 1896, when the VOLUNTEERS OF AMERICA (*q. v.*) was organized. See BOOTH, BALLINGTON; BOOTH, WILLIAM.

SAMOA ISLANDS, a group of 14 volcanic islands in the South Pacific Ocean, of which Savaii, Upolu, and Tutuila are the chief; area, about 1,700 square miles; population, about 34,000; capital, Apia; reigning king, Malietoa Laupepa. The independence and neutrality of the islands are guaranteed jointly by the United States, Great Britain, and Germany. The natives are Polynesians and Christians (Protestant and Roman Catholic). Trade is principally in the hands of German and British merchants. In 1895 the imports aggregated in value \$407,112, and the exports \$249,565; chief imports, clothing, kerosene, lumber, canned provisions, and salt beef; sole export, copra. In December, 1897, United States Consul-General Churchill reported the political situation as being far better than for many years. The whole of the family of Mataafa, the former king and for some years an exile, had made its submission to the government of Malietoa Laupepa, and the three Powers controlling the islands had been asked to permit Mataafa and eleven other chiefs to return. Financially the government was far from prosperous. The total income, derived from customs duties and licenses, amounts to only \$30,000 per annum. A capitation tax of \$1 is authorized, but is not collected through fear of causing a revolution. The royal civil list has been reduced one-third, and each member receives only about \$48 monthly. Mail steamers plying between Sidney, Auckland, and San Francisco call at Apia each way every four weeks, and two other steamers from Sidney and Auckland call monthly. It was near the port of Apia that Robert Louis Stevenson, the delightful author, in his quest of health, established the home in which he died.

SAMPSON, WILLIAM T., naval officer, was born in Palmyra, N. Y., Feb. 9, 1840. He was appointed an acting midshipman in the United States navy in 1857; was commissioned a midshipman in 1861, lieutenant in 1862, lieutenant-commander in 1866, commander in 1874, and captain in 1889; and became chief of the Naval Bureau of Ordnance in 1893. Immediately after the destruction of the United States battleship *Maine*, in the harbor of Havana, Feb. 15, 1898, Captain Sampson was appointed a member of the Board of Inquiry on the catastrophe. (See HAVANA.) In March following he was appointed commander-in-chief of the North Atlantic Squadron, with the rank of Acting Rear-Admiral; succeeding Rear-Admiral MontgomerySicard, who had been retired on account of impaired health. This post gave Captain Sampson command of the great fleet organized immediately after the *Maine* disaster. Captain Sampson, while executive officer of the iron-clad *Patapsco*, engaged in blockading duty off Charleston, S. C., in January, 1865, had his vessel blown to pieces under him by a torpedo. From that day he made a special study of explosives and modern ordnance, and became a high authority on each.

SAN FRANCISCO, city, co-extensive with San Francisco county, Cal.; population (1890), 298,997. For the year 1896-97 the assessed valuations were: Real estate, \$275,334,295; personal property, \$82,251,831—total, \$357,586,126; tax rate, \$13.98 per \$1,000. The total bonded debt, March 1, 1897, was \$544,000; sinking funds, \$394,000; net debt, \$150,000. The total amount of taxes levied in 1896-97 for State, and city and county purposes was \$5,901,378, and the estimated revenue of the city and county from other sources was \$1,630,513. There are 2 national banks, with combined capital, \$2,500,000; individual deposits, \$6,773,951; and resources, \$13,416,663; 15 State banks, with capital, \$18,237,973; deposits, \$29,081,469; and resources, \$68,339,000; and 10 savings banks, with deposits, \$100,851,481; and resources, \$112,877,677. The exchanges

in the year ending Sept. 30, 1897, aggregated \$717,181,089, an increase of \$24,374,602 in a year. The commercial movement in merchandise in the years ending June 30, 1896 and 1897, was respectively as follows: Imports, \$41,400,317 and \$34,375,945; exports, \$31,582,910 and \$39,647,606; and of gold and silver coin and bullion: Imports, \$3,082,549 and \$11,710,625; exports, \$12,618,003 and \$10,543,078—total trade, \$98,683,779 and \$96,277,254. The city has 145 miles of streets, 260 miles of sewers, and a waterworks plant belonging to a private corporation, which cost \$21,650,000, has a capacity of 30,000,000 gals., and is supplied by gravity from Spring Valley. The annual cost of maintaining the city government exceeds \$5,500,000. There is public school property valued at over \$5,000,000. The public libraries of all kinds number 38, and the periodicals comprise 18 daily, 88 weekly, 4 semi-monthly, and 58 monthly issues.

SANTO DOMINGO, a mulatto republic in the eastern part of the island of Haiti; area, 18,015 square miles; population (1893, estimated), 550,000; capital, Santo Domingo; president, 1897-1900, Gen. Ulisses Heureaux. In 1896 the revenue was \$1,545,450; expenditures (1895), \$1,351,250; total debt, \$14,425,000; total imports (1894), \$2,896,653 (Mexican silver dollars); exports, \$5,383,430; imports from the United States (1895-96), \$2,895,069; exports to the United States, \$1,961,116. The religion officially recognized is the Roman Catholic; other religions are tolerated under conditions. Education is gratuitous and obligatory. The public schools are supported by the communes and by the general government; the number of schools is estimated at 300, and the number of pupils at 10,000. Of the total area, 15,500 square miles is cultivable. The tobacco culture is in decline, but the production of coffee, cocoa, bananas, and sugar cane is growing; cattle raising and dairying are coming into favor. Tobacco is still the most considerable article of export; after that come coffee, cocoa, sugar, mahogany, logwood, hides, goatskins, and honey. In 1894 a $4\frac{1}{2}$ per cent. consolidated gold debt for £2,035,000 was created, of which £1,610,000 was intended to be applied to the conversion of the loans of 1888 and 1890, with arrears of interest, and the balance to railroad construction. The loan was guaranteed by the customs dues and by a first mortgage on the Central Dominican Railway. The amount of this loan outstanding at the end of 1897 was £2,014,000. In 1895 an issue of 4 per cent. French American Reclamation consols, amounting to £850,000, was authorized, secured by post dues and other revenues. The total authorized debt thus amounted to £2,861,000.

SAVANNAH, city, port of entry capital of Chatham county, Ga.; population (1890), 43,189. In 1896 the assessed valuations were: Real estate, \$25,053,080; personal property, \$10,446,432—total, \$35,499,512; tax rate, \$15 per \$1,000. The total debt, all bonded, Jan. 1, 1897, was \$3,363,600. The city has 115 miles of streets, of which 20 miles are paved; 16 miles of sewers; and a waterworks plant that has cost over \$1,000,000, has a capacity of 12,000,000 gals., and is distributed by 47 miles of mains. The annual cost of maintaining the city government exceeds \$725,000; public education, \$105,000; police department, \$100,000; fire department \$55,000; and street lighting, by electricity, \$27,000. There are 2 national banks, with capital, \$750,000; deposits, \$510,733; and resources, \$2,152,263; over 20 State banks and loan and trust companies; 23 churches for white people and 36 for colored; State Historical Society library; public school property valued at \$400,000; and 2 daily and 6 weekly newspapers. The commercial movement in the years ending June 30, 1896 and 1897, was respectively as follows: Imports, \$273,555 and \$415,906; exports, \$21,409,027 and \$23,142,727—total trade, \$21,682,582 and \$23,858,633.

SAVINGS BANKS. The following is an abstract of reports of condition of the mutual and stock savings banks in the United States, chiefly on June 30, 1897:

STATES, ETC.	Number of Banks.	Total Resources.	LIABILITIES.			Number of Depositors.	
			Capital Stock.	Surplus Fund.	Deposits Subject to Check		Savings Deposits.
<i>Mutual Savings Banks.</i>							
Maine.....	52	\$90,719,380		\$2,086,640	\$57,476,896	163,115	
New Hampshire.....	52	55,458,146		2,892,659	49,493,166	129,593	
Vermont.....	42	35,529,021		1,977,153	32,499,627	106,169	
Massachusetts.....	187	481,995,826		19,044,522	453,230,257	1,340,668	
Rhode Island.....	35	72,591,434		3,843,115	68,683,698	136,148	
Connecticut.....	89	159,426,134		6,159,416	149,496,556	356,445	
Total New England States.....	457	865,716,941		36,002,905	810,971,000	2,229,108	
New York.....	128	812,173,682		93,653,297	718,176,880	1,736,968	
New Jersey.....	25	47,874,873		4,513,114	43,271,047	161,710	
Pennsylvania.....	17	87,617,995		7,620,249	77,429,348	294,852	
Delaware.....	2	4,719,414		661,027	4,039,153	19,326	
Maryland.....	28	54,931,190		1,735,333	\$994,545	161,058	
Total Eastern States.....	200	1,007,317,104		108,182,951	694,545	894,718,314	2,373,914
West Virginia (total Southern States)....	1	255,028		4,350		249,333	3,737
Ohio.....	4	28,669,698		1,926,000		26,183,221	65,702
Indiana.....	5	4,635,824		469,638		4,082,359	17,437
Wisconsin.....	1	215,884				201,498	1,546
Total Middle States.....	10	33,521,376		2,395,638		30,466,088	84,685
Total mutual savings banks.....	666	1,906,810,449		146,585,844	694,545	1,736,404,825	4,691,141
<i>Stock Savings Banks.</i>							
District of Columbia.....	1	105,057	\$92,500	4,205	24,328	14,000	1,195
North Carolina.....	6	1,373,491	280,000	13,503	126,746	965,477	18,743
South Carolina.....	11	5,905,430	590,000	312,614	178,895	4,533,459	10,759
Georgia.....	6	2,483,897	655,000	48,689	1,081,794	288,010	5,384
Louisiana.....	4	3,218,479	400,000	282,653		2,519,333	9,822
Texas.....	1	824,908	100,000	150,000		353,521	2,040
Tennessee.....	6	2,814,420	480,000	143,535	483,401	1,627,877	12,426
Total Southern States.....	34	16,620,625	2,505,000	956,994	1,927,319	10,222,747	65,134
Ohio.....	7	15,143,914	1,851,500	1,566,027	7,642,331	3,767,649	21,600
Illinois.....	26	63,350,394	5,497,000	3,406,483	26,051,107	26,583,141	101,710
Minnesota.....	13	10,929,757	290,000	145,104	6,865,069	543,006	4,142
Iowa.....	166	37,396,693	7,151,500	784,161		2,59,655	78,967
Total Middle States.....	212	127,611,770	14,700,000	5,901,771	40,560,498	62,487,444	246,920
Montana.....	2	1,803,678	200,000	55,000	357,382	1,423,481	5,169
California.....	56	143,437,179	8,701,360	6,974,250		127,929,281	186,028
Utah.....	7	2,415,716	600,000	76,792	473,457	1,187,357	4,942
Total Western and Pacific States.....	65	147,676,573	8,961,360	6,505,942	830,839	130,240,919	196,430
Total stock savings banks.....	312	292,014,025	26,199,430	13,368,912	43,342,984	202,971,210	569,688
Total all savings banks.....	980	2,198,824,474	26,199,430	159,954,756	44,037,529	1,938,376,035	5,261,132

See also BANKS AND BANKING.

SCHLEY, WINFIELD SCOTT, naval officer, was born in Frederick county, Md., Oct. 9, 1839. He was appointed an acting midshipman in the United States

navy in 1856; was promoted midshipman in 1860, master in 1861, lieutenant in 1862, lieutenant-commander in 1866, commander in 1874, captain in 1888, and commodore on Feb. 6, 1898; and was appointed commander of the hastily organized "flying squadron" of the North Atlantic fleet in March, 1898. In 1884 he commanded the successful expedition sent to the North Polar regions, to rescue Lieut. A. W. Greely and his companions, for which he received the thanks of Congress. He commanded the *Baltimore* in 1889-90, and the flagship *New York* in 1893-98. In conjunction with Prof. J. R. Soley he is author of *The Rescue of Greely* (1886).

SCHOOLS OF TECHNOLOGY. Excluding universities and colleges having technological departments, there are 51 purely technological schools in the United States, of which 31 are colleges of agriculture and the mechanic arts endowed by the acts of Congress of 1862 and 1890. The professors and instructors in all institutions number 1,217; students, 13,896 (1,865 women); degrees conferred, (1894-95), 1,093 (105 on women); value of all property, \$29,132,205, including \$13,609,529 in productive funds; total income, \$3,965,593, of which \$1,671,828 was from the Federal government, and \$880,198 from State, territorial, and municipal governments. The most prominent of the independent schools, usually handsomely endowed, are the Storrs Agricultural College, Storrs Station, Conn.; Bliss School of Electricity, Washington, D.C.; Armour Institute of Technology, Chicago, Ill.; Rose Polytechnic Institute, Terre Haute, Ind.; Massachusetts Institute of Technology, Boston; Worcester Polytechnic Institute, Worcester, Mass.; Stevens Institute of Technology, Hoboken, N. J.; Rensselaer Polytechnic Institute, Troy, N. Y.; Webb School of Shipbuilding, New York City; Case School of Applied Science, Cleveland, O.; Friends' Polytechnic Institute, Salem, Ore.; and the State Schools of Mines in Golden, Col., Rapid City, S. D., and Houghton, Mich.

SCIENCE, AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF. The annual meeting of the association in 1897 was held in Detroit, Mich., in August. In the absence through illness of Dr. Wolcott Gibbs, the president, Prof. W. J. Magee, of the Bureau of Ethnology in Washington, D. C., was selected by the council for presiding officer. There was a large attendance of members and visitors, among the latter some of the leading members of the British Association. Prof. Frederick W. Putnam (*p. v.*) was elected president for the 1898 meeting, which will be the 50th anniversary and jubilee of the association; Prof. L. O. Howard, of the Department of Agriculture, at Washington, succeeded Professor Putnam as permanent secretary; Prof. D. S. Kellicott, of the Ohio State University, was elected general secretary to succeed Professor Hall; Prof. Frederick Bedell, of Cornell University, became secretary of the council; and the usual vice-presidents and secretaries of the various sections were chosen. It was decided to hold the anniversary meeting in Boston.

SCIENCE, BRITISH ASSOCIATION FOR THE ADVANCEMENT OF. The 67th annual meeting of the association was held in Toronto, Canada, in August, 1897. The American Association having concluded its sessions, many of its members went to the Toronto meeting. The officers were: President, Sir John Evans, LL.D.; vice-president, Lord Kelvin, D.C.L. (*p. v.*); and general secretary, Prof. A. G. Vernon-Harcourt, D.C.L. There were about 400 members and visitors present: Lord Kelvin; Lord Lister; Lord Aberdeen, the governor-general of Canada, and Lady Aberdeen; Sir John Evans; Prof. James Bryce; F. C. Selous, the well-known African traveler; Dr. Scott Keltie, secretary of the Royal Geographical

Society; Sir George Scott Robertson, the defender of the fort at Chitral; Prof. William Ramsay; and Dr. Roberts-Austen, the chemist of the royal mint, received a large share of the attention of the scientists. The British Association has ten sections, and each held its regular session during the meeting.

SCIO COLLEGE, Scio, O., Methodist Episcopal; co-educational; had at close of 1896, 14 professors and instructors; 479 students; 2,500 volumes in library; \$8,000 income; vice-president, W. G. Compher, A.M.

SCOTIA SEMINARY, Concord, N. C., Presbyterian; co-educational; for colored people; had at close of 1896, 15 professors and instructors; 287 students; 1,200 volumes in library; \$4,700 in productive funds; \$10,300 gifts; \$16,700 income; president, D. J. Satterfield, D.D.

SCOTLAND, a part of the United Kingdom of Great Britain and Ireland; area, 29,785 square miles; population (1891), 4,025,647. It is now represented in the House of Lords of the British Parliament by 16 peers; in the British cabinet by the secretary for Scotland; and in the House of Commons by 72 members. In 1896 the population of the principal towns was as follows: Glasgow, 705,052; Edinburgh, 276,514; Dundee, 161,620; Aberdeen, 135,941; Leith, 74,110; Paisley, 72,902; Greenock, 61,781; and Perth, 30,427. In these towns and Kilmarnock live nearly two-fifths of the entire population. Of the total area 25 per cent. is under cultivation or in pasture. In 1896 the live stock was: Horses, 206,504; cattle, 1,207,000; sheep, 7,466,419; swine, 144,615. The value of the sea-fisheries was \$6,845,690; number of men employed, 50,589. The number of persons employed in textile factories exceeded 154,500, and the railroad mileage, 3,350.

Churches and Schools.—The entire endowment of the established church of Scotland is about \$1,500,000 per annum, and gifts aggregate \$1,700,000. The members number 626,770, in 1,363 parishes. The Free Kirk has 283,659 members, 1,049 churches, and income from all sources, over \$3,251,500. The United Presbyterian church has 191,881 members, and income of \$2,050,450. The Episcopal church has 80,000 members, and the Roman Catholic church 365,000. There are 4 universities: Aberdeen, 691 students; Edinburgh, 2,825; Glasgow, 1,866; and St. Andrews, 220; there are 3,113 elementary schools with 587,931 pupils and 10,934 teachers.

SEAL CLAIMS COMMISSION, an international commission appointed by the United States and Great Britain to determine the question whether or not the Canadian sealers whose vessels were seized in Bering Sea and the North Atlantic in 1886-90, or who were prevented from pursuing their occupation, are entitled to compensation, and if so to what extent. The Canadian claim for damage and loss amounts to \$542,169, and the payment of that sum was recommended in President Cleveland's message to Congress in December, 1894. Congress refused to appropriate the money, on the ground that the real owners of the vessels were American citizens, not Canadians; also because the offending sealers were violating the stipulations of the *modus vivendi* between the United States and Great Britain. The first meeting of the commission was held at Vancouver, B. C., November, 1896. The commissioners were Judge King, of the Supreme Court of Canada, and Judge Putnam, of the United States, and the counsel for the United States were Don M. Dickinson, Robert Lansing, and Charles B. Warren. On Jan. 14, 1898, President McKinley submitted to Congress the report and awards of the Commission, the aggregate award to Great Britain being \$473,151.26. The Commission made awards on account of each of the following vessels: *Caro-*

line, Thornton, Onward, Favorite, Sayward, Anna Beck, Alfred Adams, Grace, Dolphin, Ada, Triumph, Juanita, Pathfinder, Black Diamond, Lily, Ariel, Kate, Minnie, Winifred, Henrietta, and Oscar and Hattie. There were also allowed fourteen personal claims to the following persons: Munroe Margotich, Guttormsen, Norman, Ogilvie, Blake, Warren, Reilly, Fesey, Laing, Olsen, Keefe, Petit and Lundberg. The principal of the claims for vessels allowed amounts to \$264,188.91, and interest on this sum is allowed to the amount of \$149,790.36, making the total allowed \$413,979.27. The personal claims with interest swell this total to \$463,454.27. A further allowance was made on account of the *Black Diamond*, and on the claim of James Gaudin, mate of the *Ada*, two claims which had been originally thrown out by the commissioners on the ground of lack of jurisdiction, but which were afterward admitted to the consideration on the joint application of Secretary Olney and Sir Julian Pauncefote. The admission of these two claims raised the total of the claims and interest allowed to the sum mentioned above.

SEAL CONFERENCE, INTERNATIONAL. In June, 1896, President Cleveland appointed a commission, consisting of President David Starr Jordan, of Leland Stanford Jr. University, Dr. Leonard Stejneger, and Frederick A. Lucas, to visit the waters of Alaska and make an exhaustive study of the fur seal question. This commission reported in 1897, and President McKinley, in April, appointed John W. Foster, ex-secretary of state, and Charles S. Hamlin, ex-assistant secretary of the treasury department, a commission to consider the question how best to protect the seals in Bering Sea. Later, it was decided to invite the powers interested in the preservation of the seals to send representatives or commissioners to attend a conference on the subject, to be held in Washington. The proposition was formally accepted by England, July 30, in a note to Ambassador Hay. But the Canadian government protested strongly against the presence of representatives of Russia and Japan in the conference. This was a point on which the United States government had strongly insisted, on the ground that both Russia and Japan were as much interested as the United States and Great Britain in the seal fisheries. The United States government had invited Russia and Japan to send experts to the proposed conference, and could not without discourtesy withdraw the invitations. While negotiations with Great Britain were pending, President Jordan, of the United States expert commission, submitted a report showing a shrinkage of about 15 per cent. in the herd over the conditions of the previous season, and on the hunting grounds a shrinkage of 33 per cent. The primary cause of shrinkage of females on the breeding grounds was ascribed to the pelagic catch of the previous fall and spring, added to the loss due to starving of pups in 1894. The decline of the herd, he said, is everywhere more distinctly marked in 1897 than in 1896, owing to the resumption of pelagic killing in Bering Sea. For 1898 the shrinkage will be greater still, through the destruction in 1894 of unborn pups with impregnated females killed. Thus the evil effects of pelagic sealing in any particular year are still more clearly felt three and four years afterward.

Failing to secure a conference with Great Britain and Canada, in which Russia and Japan should be represented, the United States invited all nations interested to separate conferences at Washington. The first one convened on Oct. 23, and comprised the following delegates: Russia, the Hon. Pierre Botkine, M. de Boutkowsky, M. de Wollant, chargé d'affaires, Russian Legation; Japan, Shiro Fujita, Prof. Kakichi Mitsukuri; United States, John W. Foster, Charles Hamlin, President David S. Jordan. This conference resulted in an agreement, Oct.

28, between the three nations, for the complete suspension of pelagic sealing for one year, and a treaty to that effect was signed in Washington, Nov. 7. On Nov. 10 a second conference, this one by sealing experts of the United States, Great Britain, and Canada, was opened in Washington. The United States was represented by President David S. Jordan, as expert, with John W. Foster and Charles S. Hamlin in attendance; Great Britain by Prof. D'Arcy Thompson, as expert, with Sir Julian Pauncefote in attendance; and Canada by James Macoun as expert, with Sir Louis Davies in attendance. Mr. Hamlin was elected chairman of the conference, which afterward held its sessions in secret. At the close of the month it was announced that the Canadian government had declined the proposition of the United States to suspend pelagic sealing for a year, on the ground that consent to such an agreement could be given only by the British Parliament. During the conference the statistics of the catch of seals in 1897, compiled by United States authorities, were produced, showing that the catch had fallen off about one-half during the season, and that the catch from the American Islands in Bering Sea was about fifteen to one as between the Canadian sealers under the British flag and American sealers. The same proportion was shown to exist throughout the waters of the North Pacific. In detail the figures are as follows: Total catch of seals in the North Pacific for the season, 38,700, against 73,000 in 1896. The total catch in 1897 was divided as follows: Taken by British vessels, 30,800; by American vessels, 4,100; by Japanese vessels, 3,800. The catch in Bering Sea was 16,650 for 1897, against 29,500 in 1896, a reduction of about one-half. Of the catch in Bering Sea, British vessels took 15,600 and American vessels 1,050. The figures make no distinction between British and Canadian vessels, as practically all the sealing is done by Canadian vessels, which, however, are nominally classed as British. In December, 1897, Great Britain on behalf of Canada declined to enter into an agreement with the United States, Russia, and Japan to suspend sealing; and in January, 1898, in response to a request from the United States for a reopening of the question, regretted that it did not see its way to consent.

On Dec. 30, 1897, the secretary of the United States treasury, with the approval of the President, issued regulations under the act of Congress prohibiting the taking of sealskins by American citizens, except on the Pribilof Islands, and inhibiting the importation into this country of pelagic sealskins. The regulations provide that no sealskins, raw, dressed, dyed, or otherwise manufactured, shall be admitted to entry in the United States, except there be attached to the invoice a certificate signed by the United States consul at the place of exportation that said skins were not taken from seals killed within the waters mentioned in said act, specifying in detail the locality of such taking, whether on land or at sea, and also the person from whom said skins were purchased in their raw and dressed state, the date of such purchase, and lot number. Consuls shall require satisfactory evidence of the truth of such facts by oath or otherwise before giving any such certificate. It is further provided that no fur sealskins, raw, dressed, dyed, or otherwise manufactured shall be admitted to entry as part of a passenger's personal effects unless accompanied by an invoice certified by the United States consul. All fur sealskins, whether raw, dressed, dyed, or otherwise manufactured, the invoices of which are not accompanied by the certificate above prescribed, are directed to be seized by the collector of customs and destroyed. Every article manufactured, in whole or in part, from fur sealskins, to be imported into the United States, is required to have legibly stamped thereon the name of the manufacturer and the place of manufacture, and shall be accompanied

by a statement in writing, under oath, of the manufacturer, that the skins used in said article were taken from seals not killed at sea within the proscribed waters mentioned, specifying the locality in detail, and also the person from whom said skins were purchased in their raw and dressed state, the date of said purchase, and the lot number. It is also provided that when an application is made to a consul for a certificate under these regulations the invoice and proofs of origin presented by the exporter shall be submitted to the treasury agent designated for the purpose of investigation. All articles manufactured from sealskins and imported into the United States shall have the linings so arranged that the pelt of the skin or skins underneath shall be exposed for examination, and all such skins or articles, whether imported as merchandise or as part of a passenger's effects, are required to be sent to the public stores for careful examination and inspection to prevent evasion of the law. All garments of this character taken from this country may be re-entered on presentation of a certificate of ownership from the collector of customs of the port of departure, which certificate shall have been obtained by the owner of the garment by offering the same to the collector for inspection before leaving this country.

SEWALL, ARTHUR, candidate of the Democratic party for vice-president of the United States in 1896, was born in Bath, Me., Nov. 25, 1835. He received a public school education; learned the ship-building business with his father; and since 1854 has been engaged in that industry in Bath. Excepting a considerable service on the National Democratic Committee his career has been strictly that of a business man.

SHAW UNIVERSITY, Raleigh, N. C., Baptist; co-educational; for colored people; had at close of 1896, 24 professors and instructors; 327 students; 1,500 volumes in library; \$30,000 in productive funds; \$21,866 income; president, Charles F. Meserve, M.A.

SHURTLEFF COLLEGE, Upper Alton, Ill., Baptist; co-educational; had at close of 1896, 20 professors and instructors; 222 students; 8,000 volumes in library; \$220,000 in productive funds; \$13,000 gifts; \$25,000 income; president, Austen K. de Blois, M.D.

SICARD MONTGOMERY, naval officer, was born in New York, Sept. 30, 1836. He was appointed to the United States Naval Academy in 1851; was commissioned midshipman in 1855, passed midshipman and master in 1858, lieutenant in 1860; lieutenant-commander in 1862, commander in 1870, captain in 1881, commodore in 1894, and rear-admiral in 1897; and under his last commission became commander of the North Atlantic Squadron. Shortly before the destruction of the battleship *Maine* in the harbor of Havana, he was forced by ill-health to go on sick leave, but within a few days he returned to duty and was in command at the time of the disaster. He at once appointed a Board of Inquiry, and during the anxious days that ensued he was on duty at the scene of the disaster. When the relations between the United States and Spain looked too strained to be settled without hostilities, the Navy Department recognized the necessity for having a robust officer in command of the squadron, and the commander was placed on the retired list, otherwise with official reluctance. Admiral Sicard had achieved an excellent record in the service.

SIGSBEE, CHARLES DWIGHT, naval officer, was born in Albany county, N. Y., in 1845. He was appointed an acting midshipman in the United States navy in 1859; was promoted midshipman in 1862, acting ensign in 1863, master in 1866, lieutenant in 1867, lieutenant-commander in 1868, commander in 1882, and cap-

tain in 1897; was chief of the hydrographic office in the bureau of navigation at Washington, D. C., in 1893-97; and had been commander of the United States battleship *Maine* but a few weeks when she was blown up in the harbor of Havana, Feb. 15, 1898. His dispatch announcing the catastrophe asked for a suspension of judgment till the cause was legally ascertained, and this request together with his great personal coolness did much to allay for a time the popular excitement. After the Naval Court of Inquiry and the United States Senate Committee on Foreign Relations made their reports, Captain Sigsbee was temporarily detailed as aide and adviser to the Secretary of the Navy, and in April was appointed commander of the steamship *St. Paul*, converted into an auxiliary cruiser. For details of the *Maine* explosion, see HAVANA.

SILVER. See BIMETALLISM: MINERAL PRODUCTIONS: MONETARY CONFERENCE, INTERNATIONAL.

SIMPSON COLLEGE, Indianola, Ia., Methodist Episcopal; co-educational; had at close of 1896, 17 professors and instructors; 480 students; 3,000 volumes in library; \$64,967 in productive funds; \$2,725 gifts; \$14,494 income; president, F. Brown, A. M., B. D.

SMITH COLLEGE, Northampton, Mass., non-sectarian; for women only; had at close of 1896, 60 professors and instructors; 850 students; 6,000 volumes in library; \$586,000 in productive funds; \$40,000 gifts; president, L. Clark Seelye, D. D., LL. D.

SOCIAL DEMOCRACY OF AMERICA, THE, a society instituted in 1897 for the purpose of realizing the Socialist idea of co-operation in the political commonwealth. The Social Democracy succeeds to the American Railway Union, and its first president is Eugene V. Debs, formerly president of the American Railway Union. It purposes to acquire in one of the less densely inhabited States or Territories a considerable area of wild land by purchase or by gift, and on that land to plant a colony of workmen and their families. The necessary funds are to come from the small monthly contributions of the members of the society throughout the country. From this source it was confidently expected that at least \$25,000 a month would be received. When a sufficient sum had been received to warrant the beginning of operations in the land, a force of picked men was to be sent to the site to prepare the soil for cultivation. Then men were to be sent to organize herds of cattle, and with them an army of lumbermen, sawmill workers, and carpenters and builders, to erect dwellings for the colonists, also flour mills, factories, creameries, etc. Among the settlers in the colony would be men of every trade and calling—shoemakers, weavers, tailors, blacksmiths, machinists, railroad men; and all would find employment in supplying the wants of all. The land would belong to the community; so would the machinery of manufacture, as also the system of transportation, railways, and common highways, together with the telegraph and telephone systems. In short, whatever is naturally a monopoly or can be made a monopoly will belong to the community and be managed in the interest of the community. The intention of the Social Democracy is to establish, not one, but many colonies or communities, each of about 500 adult men; this is to be the unit of political organization; and the limit of 500 is set in order to prevent the growth of enough power in any one place to cause trouble. When a number of such communities have been established in a State or Territory, they will be organized centrally; when the members are sufficiently numerous they will aim to get possession, by lawful and constitutional means, *i. e.*, by the use of the ballot, of the political powers of the

State or Territory, and to organize that according to the principles of the Social Democracy, so far as the constitution of the United States may permit. Immediately after the publication of the Social Democracy's plan, the governor of the State of Washington, J. R. Rogers, invited the society to take into consideration the advantages possessed by that State for such colonies. But in October it was announced from Washington that Col. Richard J. Hinton, chairman of the Social Democracy's Colonization Commission, had signed papers by which title to 350,000 acres of land in Cumberland and Fentress counties, Tenn., was transferred to the society. Colonel Hinton said that the Tennessee colony would be the first organized, and that colonies would be settled in Idaho and Washington in 1898. The Tennessee lands cost \$1,750,000; the Kentucky Trust Co. supplied the commission with the money, accepting the commission's bonds for \$2,000,000; this leaves a margin of \$250,000 with which to begin work.

SOUTH AFRICAN REPUBLIC (also known as the **TRANSVAAL**), a republic originally formed by Boers from Cape Colony and Natal; area, 119,139 square miles; population (1896, estimated), whites, 180,000; natives, 609,879; capital, Pretoria; president, 1893-1902, Paul Krüger (*q. v.*). The estimated revenue in 1896, derived principally from the famous Witwatersrand gold fields, was \$18,770,257; expenditure, including several extraordinary appropriations and nearly \$5,000,000 for war material and ammunition, \$20,492,953. The public debt, 1896, was \$13,076,213, which was more than offset by the value of lands owned by the government, including the Barberton gold fields. About one-third of the population are engaged in agriculture, but the aggregate produce is insufficient for domestic needs. There are 12,245 registered farms, and about 50,000 acres under cultivation. The most important industries are gold and coal mining. The number of gold mines in which operations were carried on during the whole or a part of 1896 was 185, including 22 deep levels. Of this number, 119 produced gold ore; the others were only in the first stages of development. Seventy-five mines, including 3 deep levels, produced gold. There were 15 companies for mining coal. The total product in 1896 was 1,500,000 tons, worth \$2,955,312. The gold mines consumed most of this product. At the end of the year all the gold and coal mines in the Republic represented a nominal capital of over \$276,569,000. The production of gold amounted in 1896 to \$41,521,506—a figure approaching that of Australia. Dividends approximating \$8,743,750 were paid by 25 gold and 2 coal mines. The treasury received from the gold-bearing districts, in 1896, \$11,001,000. Over one-third of this amount came directly from the mines in licenses, taxes, etc. Mining of silver, copper, and lead was suspended in 1894.

The commerce of the republic has steadily increased since the beginning of gold mining. In 1896 the imports had an aggregate value of \$67,936,000, an increase in a year of over \$21,000,000. The largest items were machinery, cereals and flour, clothing, iron and articles of iron, animals, and railroad materials, and most of the imports came through Cape Colony. No official details of exports are made public; but the principal items are gold, coal, ostrich feathers, ivory, wool, cattle, hides, grain, and butter. The republic is in railroad and telegraphic communication with the principal cities in the surrounding states and colonies, and at the beginning of 1896 had 421 miles of railroad in operation on its territory, with 384 miles under construction and 381 miles projected, and about 2,000 miles of telegraph line. The state church is the United Dutch Reformed, members (1895), 30,000; other Dutch churches, 32,700; Anglican church, 30,000; Wesleyan, 10,000; Roman Catholic, 5,000; Presby-

terian, 8,000; other Christian Churches, 5,000; and Jews, 10,000. In 1895 there were 55 village schools, 367 ward schools, a model school, gymnasium, girls' school, and many denominational schools in the cities and towns. For recent events, see **CAPE COLONY: CHAMBERLAIN, JOSEPH: JAMESON, LEANDER STAR: KRUGER, PAUL.**

SOUTH CAROLINA, one of the United States of North America; the eighth of the original thirteen States to ratify the Federal constitution (May 23, 1788); seceded Dec. 20, 1860; readmitted July 13, 1868; counties, 35; capital, Columbia.

State Officers, 1896-98.—Governor (elected for 2 years, salary \$3,000 per annum), W. H. Ellerbe; lieutenant-governor, M. B. McSweeney; secretary of state, D. H. Tompkins; treasurer, W. H. Timmerman; attorney-general, W. A. Barber; comptroller, L. P. Epton; superintendent of education, W. D. Mayfield; adjutant-general, J. G. Watts; superintendent of agriculture, T. H. P. Allison; chief justice of the supreme court, Henry McIver; associate justices, Eugene B. Gary, Ira B. Jones, and Y. J. Pope; clerk, U. R. Brooks—all Democrats.

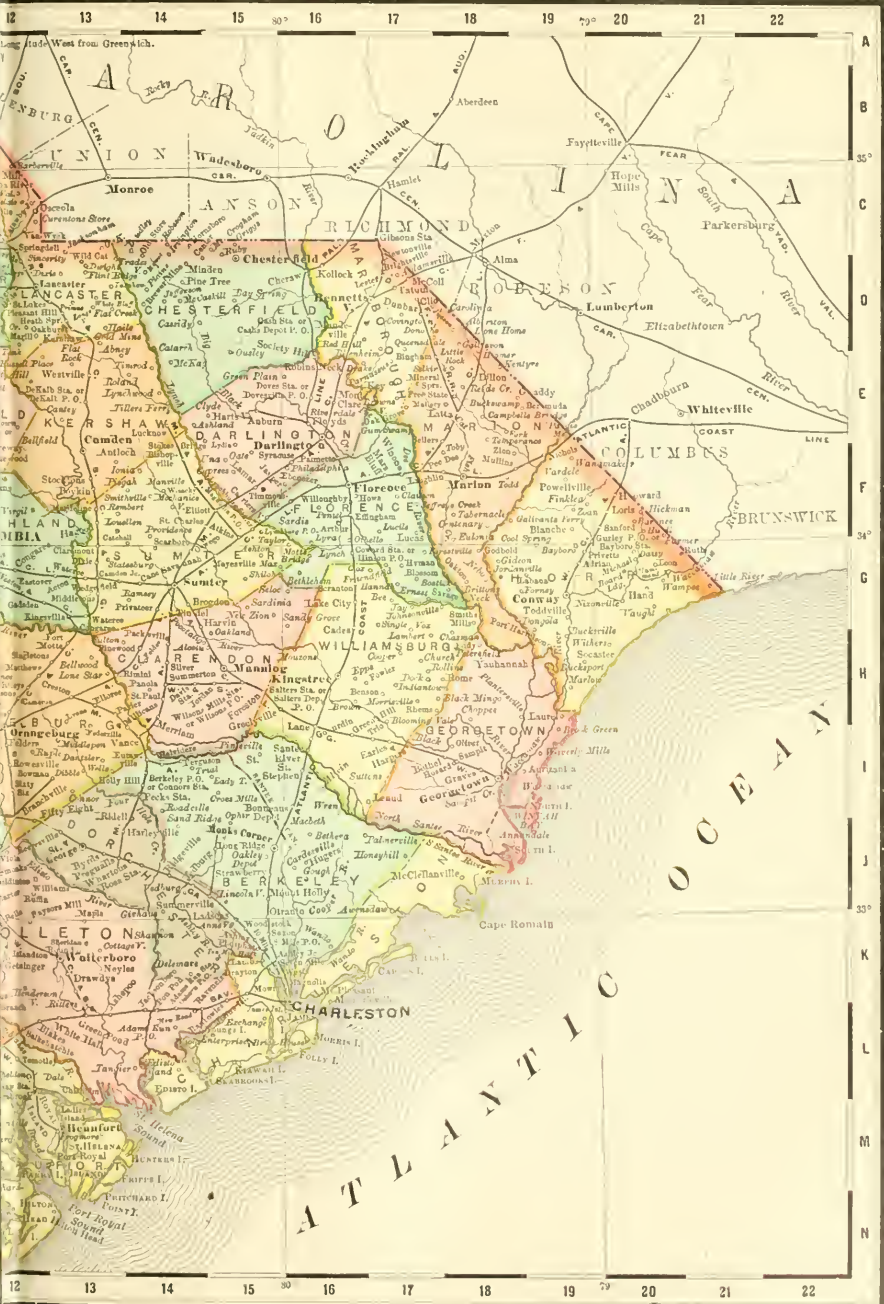
Legislature, 1897.—Democrats, senate 36, house 123, joint ballot 159; Republican, house 1, joint ballot 1; Democratic majority, senate, 36, house 122, joint ballot 158.

Elections.—In the State election 1896 there were 66,636 votes cast for governor, of which the Democratic candidate (Ellerbe) received 59,424; the Reorganized Republican (Pope), 4,432; and the Regular Republican (Wallace), 2,780; Democratic plurality, 54,992. The congressional elections resulted in the choice of 1 Democratic and National Democratic, and 6 Democratic candidates. In the presidential election, the Democratic candidate received 58,801 votes; the Republican, 9,320; and the National Democratic, 824. The large decrease in the popular vote was caused by the practical disfranchisement of colored citizens. At the State election in 1895 the vote on proposed constitutional convention was: For, 31,402; against, 29,523. In accordance with this vote a constitutional convention assembled on Sept. 10, 1895, and on Dec. 4 ratified a new constitution, which became operative on Jan. 1, 1896. Provision for acquiring and exercising the right of suffrage forms its most striking feature.

Farm Products.—Reported Dec. 31, 1897: Corn, 13,307,929 bush., from 1,700,-881 acres, value \$7,500,885; wheat, 757,726 bush., from 87,095 acres, value \$894,117; oats, 3,830,500 bush., from 247,129 acres, value \$1,723,725; rye, 26,829 bush., from 4,065 acres, value \$23,073; potatoes, 263,835 bush., from 4,059 acres, value \$277,027; and hay, 137,795 tons, from 137,795 acres, value \$1,584,642—total value, \$12,003,469.

Farm Animals.—Reported Jan. 1, 1898: Horses, 67,115, value \$3,446,710; mules, 98,340, value \$6,024,889; cows, 130,682, value \$2,123,582; cattle, 152,-160, value \$1,453,811; sheep, 70,787, value \$112,197; and swine, 1,031,150, value \$4,062,731—total value, \$17,223,920.

Cotton Industry.—In 1894 the area in cotton was 2,160,391 acres; production, 818,330 bales; value, \$22,544,992. In 1895 the crop was about the same, and in the season of 1896-97 it was 936,463 bales. The number of cotton and woolen mills 1895 was reported at 62, with 838,036 spindles and 21,573 looms, an increase in 5 years of 505,252 spindles and 12,727 looms. All excepting 7 mills reported an aggregate capital of \$14,922,000; 2 had \$1,000,000 each; one, \$800,000; 3, \$700,000; one, \$650,000; 2, \$600,000; 4, \$500,000; and 33, from \$400,000 to \$160,000 each. The number of spindles ranged from 107,000, 53,000, and 50,848 in the 3 largest mills, to 120, and the looms from 3,100 in 2 mills each to 3. The 3 largest sets of cards were 332, 200, and 150.



Map showing counties and cities in the Eastern United States, including Union, Anson, Richmond, Robeson, and others. Major cities like Charleston, Columbia, and Fayetteville are marked. The Atlantic Ocean is labeled at the bottom.



Mineral Products.—The gold production in 1895 was estimated at 6,212 fine oz., value \$128,400; and silver, 400 oz., value \$520. In quarrying, granite showed a large decline, with an output valued at \$22,083. The various clay products, principally common and pressed brick, with some firebrick and drain tile, as reported by 47 concerns, had a total value of \$276,918. The phosphate industry showed a decreased output, the production being 270,560 long tons of land rock, value \$898,787, and 161,415 tons of river rock, value \$512,245—total value, \$1,411,032.

Finances.—In his message to the legislature, Jan. 15, 1898, Governor Ellerbe said: "The finances of the State are in a very unsatisfactory condition. During the session of the General Assembly for 1896 a levy of 4½ mills was laid to meet the current expenses of the fiscal year ending Dec. 31, 1897. The sum raised by this levy proved insufficient to meet the expenses, and we have, therefore, a deficit of \$100,000 to be provided for." Under the constitution of 1895, the State fiscal year will be the calendar year, and hereafter \$75,000 from the State royalty of \$1 per ton on all phosphate rock mined will be set apart annually for a sinking fund for the reduction of the State debt. The total recognized debt of the State, Jan. 1, 1897, was \$6,470,799; the assessed valuations, 1896, were, real estate, \$100,976,705; personal property, \$45,838,607; and railroad property, \$23,940,112—total, \$170,755,474; total taxes, \$2,317,889.

Banks.—On Oct. 31, 1897, there were 16 national banks in operation and 5 in liquidation, the active ones having a combined capital of \$1,890,100, and holding \$537,250 in United States bonds. These banks had outstanding on loans and discounts, \$5,943,368; held an aggregate of \$266,871 in coin and coin certificates; had outstanding circulation, \$533,798; deposits, \$4,007,577; reserve, \$942,794; and ratio of reserve 23.53 per cent. The State banks, June 30, 1897, numbered 17 and had capital, \$917,700; deposits, \$1,257,709; loans and discounts, \$2,216,254; resources, \$2,728,160; and surplus and profits, \$187,706. There were 11 stock savings banks with capital \$590,000; depositors, 16,759; check deposits, \$178,865; savings deposits, \$4,533,459; resources, \$5,905,430; and surplus and profits, \$508,458.

Internal Revenue.—During the fiscal year ending June 30, 1897, the collections of internal revenue aggregated \$93,350.47, from the following sources: Distilled spirits, \$77,239.65; tobacco, \$6,306.12; fermented liquors, \$8,443.57; oleomargarine, \$796; and penalties, \$555.83. During that year there were 24 tobacco factories which used 110,028 lbs. of materials and had an output of 839,192 cigars; 25,200 cigarettes; 37,831 lbs. of plug tobacco and 21,585 lbs. of smoking. There were 33 grain and 13 fruit distilleries in operation; 112,419 gals. of spirits gauged; and 8,400 bbls. of fermented liquors produced.

State Liquors.—On July 1, 1893, the State began to control the entire liquor traffic under the famous Dispensary Act of the previous year. During 1895, local dispensaries sold liquor to the value of \$1,076,963, on which the towns and counties netted a profit of \$106,131. On sales to local dispensaries aggregating \$903,055, the State made a profit of \$133,467; and the State profits on sales from July 1, 1893, to Jan. 1, 1896, amounted to \$243,816. On Jan. 18, 1897, the United States Supreme Court decided that, so far as it prevented a citizen of the State from importing into it liquors for his own use, the Dispensary Act violated the Federal constitution, and was therefore null and void. In August following, Judge Simonton, at Columbia, S. C., filed an order recognizing bottles of liquor loosely packed in cars as original packages, the entrance and sale of which in the State were lawful under the Interstate Commerce Act of Congress. The State

authorities then attempted to induce the railroads to refuse to handle liquor in this form; but succeeded only partially; and the doom of the Dispensary Act seemed sealed when, later in the year, "original package" dealers began offering their goods at prices far below those fixed by the State authorities.

Railroads.—In 1895 there was a total of 2,833.55 miles of railroad track, and the entire mileage was owned or controlled by three corporations, the Southern, the Seaboard Air, and the Atlantic Coast lines. Reports at the close of 1894 showed: Capital stock, \$28,617,800; funded debt, \$36,715,993; total investment, \$69,586,070; cost of roads and equipments, \$68,642,266; gross earnings, \$5,261,152; net earnings, \$847,365; interest paid on bonds, \$679,133; and dividends paid on stock, \$150,965.

Commerce.—During the fiscal year ending June 30, 1897, the foreign trade in merchandise at the ports of Beaufort, Charleston, and Georgetown was: Imports, \$1,101,723; exports, \$14,141,640.

Publications.—Reported March, 1898: Daily, 9; tri-weekly, 1; semi-weekly, 11; weekly, 96; semi-monthly, 2; monthly, 5; and bi-monthly, 1.

Post-Offices.—Reported January, 1897: First-class, 1; second-class, 3; third-class, 25 (presidential, 29); and fourth-class, 1,243; money-order offices, 191; money-order stations, 2; and limited money-order offices, 6.

Churches.—The African Methodist is the strongest denomination in the State, and is followed in their order by the Regular Baptist, Colored; Regular Baptist, South; Methodist Episcopal, South; Methodist Episcopal; Presbyterian, South; Lutheran, United Synod; Protestant Episcopal; Presbyterian, North; Roman Catholic; Disciples of Christ; Associate Presbyterian; and Methodist Protestant. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for South Carolina, 2,417 evangelical Sunday schools, 24,175 officers and teachers, and 217,566 scholars—total members, 241,741, a gain of 11,513 in three years.

Schools.—At the end of the school year 1895-96, the number of children of school age in the State was estimated at 466,400, of whom 232,337 were enrolled in the public schools, and 170,201 were in average daily attendance. There were 4,447 teachers (2,028 males and 2,419 females); public school property valued at \$746,676; 4,140 public schoolhouses; and total expenditures, \$529,828. Of the total enrollment, 109,159 were white pupils and 123,178 colored; of average attendance, 78,391 were white and 91,810 colored; and of total teachers, 2,688 were white and 1,759 colored. There were 9 universities and colleges of liberal arts, with a total of 76 professors and instructors; 1,260 students in all departments (1,015 males and 245 females); 18 scholarships; 69,800 bound volumes in the libraries; \$109,826 in total income; \$852,000 invested in grounds and buildings; \$547,700 in productive funds; and \$7,700 receipts from gifts. Under the constitution of 1895, the Claffin Agricultural College and Mechanical Institute, previously a branch of Claffin University, became a separate institution under the name of the Colored Normal, Industrial, Agricultural and Mechanical College. The State University comprised South Carolina College, South Carolina Military Academy, Clemson Agricultural and Mechanical College (for males), and the Winthrop Normal and Industrial College (for females), and the first was made co-educational in 1895. For intermediate instruction there were 61 public high schools; 38 endowed denominational and private secondary schools; and a public, 5 private, and 6 collegiate normal schools. There were also 9 colleges exclusively for women. The State Institution for the Education of the Deaf and Blind, at Cedar Spring, gave instruction

in shoemaking and printing to the deaf, and in broom and mattress-making and chair-caning to the blind. The Clemson Agricultural College, at Fort Hill, had (1894-95) an experimental staff of 9; faculty, 24; students, preparatory 225, collegiate 295; area under cultivation, 400 acres; farm lands valued at \$26,280; and special buildings and equipments valued at \$45,000; and the Cladin Agricultural College, at Orangeburg, had faculty, 20; students, preparatory 375, collegiate 23; area under cultivation, 120 acres; farm lands valued at \$15,000; and special buildings and equipments valued at \$58,000.

Libraries.—In 1896 there were reported 32 public libraries of 1,000 volumes each and upward, with a total of 232,418 bound volumes and 9,372 pamphlets.

Population.—In 1890, 1,151,149, of whom 572,337 were males; 578,812 females; 1,144,879 natives; 6,270 foreign-born; 162,008 whites; and 689,141 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 1,280,000.

SOUTH CAROLINA COLLEGE, Columbia, S. C. non-sectarian; co-educational; had at close of 1897, 13 professors and instructors; 190 students; 30,000 volumes in library; \$300,000 in grounds and buildings; \$60,000 in scientific apparatus and library; \$33,289 income; president, F. C. Woodward, A.M.

SOUTH DAKOTA, one of the United States of North America; admitted to the Union Nov. 2, 1889; counties, 52; capital, Pierre.

State Officers, 1897-99.—Governor (elected for 2 years, salary \$2,500 per annum), Andrew E. Lee; lieutenant-governor, D. T. Hindman; secretary of state, W. H. Roddle; treasurer, Kirk G. Phillips; auditor, H. E. Mayhew; attorney-general, Melvin Grigsby; adjutant-general, George A. Silsby; superintendent of public instruction, Frank Crane; chief justice of the supreme court, Dighton Corson; associate justices, Dick Haney and Howard G. Fuller; clerk, Jessie Fuller; State government all Republicans excepting governor and attorney-general, Populists; judiciary, all Republicans.

Legislature, 1897.—Fusionists, senate 26, house 46, joint ballot 72; Republicans, senate 18, house 38, joint ballot 56; Fusion majority, senate 8, house 8, joint ballot 16.

Elections.—In the State election 1896 there were 82,777 votes cast for governor, of which the Fusion candidate (Lee) received 41,189; the Republican (Ringsrud), 40,868; and the Prohibition (Hanson), 720; Fusion plurality, 321. The congressional elections resulted in the choice of both Fusion candidates. In the presidential election the Democratic candidate received 11,225 votes; the Republican, 41,042; and the National Democratic, 661.

Farm Products.—Reported Dec. 31, 1897: Corn, 23,855,688 bush., from 993,987 acres, value \$5,009,691; wheat, 21,441,248 bush., from 2,680,156 acres, value \$14,791,461; oats, 13,647,656 bush., from 620,318 acres, value \$2,156,578; rye, 44,996 bush., from 2,727 acres, value \$15,749; potatoes, 5,093,202 bush., from 54,183 acres, value \$1,629,825; and hay, 2,358,388 tons, from 1,886,740 acres, value \$6,957,245—total value, \$30,863,552.

Farm Animals.—Reported Jan. 1, 1898: Horses, 287,867, value \$8,339,207; mules, 6,627, value \$262,394; cows, 341,579, value \$9,598,370; cattle, 432,079; value \$10,836,978; sheep, 319,709, value \$926,029; and swine, 112,617, value \$791,524—total value, \$30,921,187.

Mineral Products.—The following is a summary of the mineral productions in the calendar year 1895: Precious metals, gold, 187,187 fine oz., value \$3,869,500; silver, 159,300 fine oz., coined value \$205,960—total, \$1,075,460 (total in 1894, \$3,375,348). In quarrying, granite, with an output valued at \$33,279,

showed an increase in the year, and sandstone and limestone, both comparatively new products, had values of \$26,100 and \$4,000 respectively. The value of the clay products, principally common and pressed brick, was \$10,740, and gypsum yielded 6,400 tons, worth when commercially prepared \$20,600.

Finances.—The State treasury suffered a loss of \$367,020.59, the amount of cash on hand, by the defalcation of the treasurer, W. W. Taylor, in January, 1895. Subsequently it recovered from him \$197,552.24, in cash and property. The net loss left the treasury without means to meet current obligations, and the legislature authorized the issue of funding warrants based upon future revenues, and also State bonds to make good the deficiency in the school fund. The total of these, with previous obligations, made a bonded State indebtedness, Jan. 1, 1897, of \$1,138,000; floating debt, \$100,000; total debt, \$1,238,000; sinking funds, \$220,079; net debt, \$1,017,920. The assessed valuations, 1896, aggregated \$119,391,156, comprising real estate, \$89,590,658, personal property, \$20,434,837, and railroad, telegraph, and expressage property, \$9,365,661.

Banks.—On Oct. 31, 1897, there were 27 national banks in operation and 26 in liquidation, the active ones having a combined capital of \$1,745,000, and holding \$523,750 in United States bonds. These banks had outstanding on loans and discounts, \$3,080,171; held an aggregate of \$346,452 in coin and coin certificates; had outstanding circulation, \$514,055; deposits, \$4,314,737; reserve, \$1,711,524; and ratio of reserve, 39.67 per cent. The State banks, July 10, 1897, numbered 157, and had capital, \$2,085,235; deposits, \$4,137,066; loans and discounts, \$3,586,060; resources, \$7,068,361; and surplus and profits, \$495,719. Combining all these institutions, the State had a banking capital of \$3,830,235.

Railroads.—In 1896 there was a total of 2,860 miles of railroad track in the State, controlled by 14 corporations, and the railroad property was valued for State taxation at \$9,193,247. Four great trunk lines traversed the State. The purely local roads reported (for 1894) mileage, 151.71; capital stock, \$1,630,000; funded debt, \$1,375,000; total investment, \$3,365,158; cost of roads and equipments, \$3,179,996; gross earnings, \$244,383; net earnings, \$81,380; and interest paid on bonds, \$82,500. The casualties of 1895 were 8 persons killed and 49 injured. On all roads 5,046 persons were employed, to whom \$2,950,507 was paid in wages.

Publications.—Reported March, 1898: Daily, 20; semi-weekly, 2; weekly, 223; bi-weekly, 1; semi-monthly, 2; and monthly, 13.

Post-Offices.—Reported January, 1897: Second-class, 7; third-class, 31 (pre-idential, 38); fourth-class, 630; money-order offices, 221; limited money-order offices, 19.

Churches.—The Roman Catholic is the strongest denomination in the State, and is followed in their order by the Lutheran, Independent Synods; Methodist Episcopal; Congregational; Lutheran, General Synod; Presbyterian; Regular Baptist; Lutheran, Synodical Conference; Protestant Episcopal; Reformed; and Evangelical Association. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for South Dakota 790 evangelical Sunday schools, 6,195 officers and teachers, and 38,475 scholars—total members, 44,670, a gain of 6,945 in three years.

Schools.—At the end of the school year 1893-94, the number of children of school age in the State was estimated at 117,500, of whom 88,026 were enrolled in the public schools, and about 54,400 were in average daily attendance. There were 4,816 teachers, public school property valued at \$3,000,000, and total expenditures of nearly \$1,700,000. The universities and colleges of liberal arts



numbered 6, and had a total of 70 professors and instructors; 1,032 students in all departments (520 males and 512 females); 9,277 bound volumes in the libraries; \$64,027 in total income; \$439,000 invested in grounds and buildings; \$63,400 in productive funds; and \$101,757 receipts from gifts. There were a State University, at Vermilion; State Agricultural and Mechanical College and Experiment Station, both at Brookings; State School of Mines, at Rapid City; State Normal Schools, at Madison, Spearfish, and Springfield; 4 denominational colleges, Augustana (Luth.), Canton, All Saints' School (Prot. Episc.), Sioux Falls, University, of Sioux Falls (Bapt.), and the Benedictine Convent of the Sacred Heart (Rom. Cath.), Yankton; 9 public high schools; State School for the Deaf at Sioux Falls; and State Industrial School at Plankinton.

Libraries.—In 1896 there were reported 14 public libraries of 1,000 volumes each and upward, with 34,863 bound volumes and 10,564 pamphlets.

Population.—In 1890, 328,808, of whom 180,250 were males; 148,558 females; 237,753 natives; 91,055 foreign-born; 327,290 whites; and 1,518 colored of all races. The State census of 1895 gave the population as 330,975, a net gain in five years of 2,167. On June 1, 1897, the United States government actuary estimated the population at 387,000.

SOUTH DAKOTA UNIVERSITY, Mitchell, S. D., Methodist Episcopal; co-educational; had at close of 1896, 14 professors and instructors; 295 students; 15,000 volumes in library; \$120,000 in grounds and buildings; \$2,161 income; president, W. I. Graham, A.M., D.D.

SOUTH DAKOTA UNIVERSITY OF, Vermilion, S. D., non-sectarian; co-educational; had at close of 1896, 16 professors and instructors; 295 students; 3,200 volumes in library; \$22,000 income; president, Joseph W. Mauck, LL.D.

SOUTHERN BAPTIST THEOLOGICAL SEMINARY, Louisville, Ky., Baptist; had at close of 1896, 12 professors and instructors; 300 students; 25,000 volumes in library; \$450,000 in productive funds; \$15,000 gifts; \$21,000 income; president, Wm. H. Whitsitt, D.D., LL.D.

SOUTHERN KENTUCKY COLLEGE, Hopkinsville, Ky., Disciples; co-educational; had at close of 1895, 12 professors and instructors; 170 students; 800 volumes in library; \$6,000 income; president, J. W. Hardy.

SOUTHERN UNIVERSITY, Greensboro, Ala., Methodist Episcopal, South; co-educational; had at close of 1896, 8 professors and instructors; 165 students; 10,000 volumes in library; \$33,000 in productive funds; \$3,000 gifts; \$15,000 income; president, J. O. Keener, A.M., D.D.

SOUTHWEST BAPTIST COLLEGE, Bolivar, Mo., Baptist; co-educational; had at close of 1896, 7 professors and instructors; 172 students; 1,000 volumes in library; \$5,000 in productive funds; \$5,000 gifts; \$2,692 income; president, Asa B. Bush, A.M.

SOUTHWESTERN BAPTIST UNIVERSITY, Jackson, Tenn., Baptist; co-educational; had at close of 1895, 10 professors and instructors; 210 students; president, G. M. Savage, A.M., LL.D.

SOUTHWEST KANSAS COLLEGE, Winfield, Kan., Methodist Episcopal; co-educational; had at close of 1896, 16 professors and instructors; 248 students; 3,000 volumes in library; \$4,200 income; president, Chester A. Place, A.M., D.D.

SPAIN, a limited monarchy occupying, with Portugal, the great southwestern peninsula of Europe; area, including the Balearic and Canary Islands, 197,670

square miles; population (1889), 17,552,346; capital, Madrid, population, 470,000; sovereign, Alfonso XIII., born May 17, 1886; posthumous son of Alfonso XII.; queen-regent during his minority, his mother, Maria Christina, daughter of the Archduke Karl Ferdinand of Austria.

Churches and Schools.—The national church of Spain is the Roman Catholic. The latest official reports estimated the entire population as Roman Catholic, with the exception of 6,654 Protestants; 402 Jews; 9,645 Rationalists; 510 of other religions; and 13,175 of religion not stated. There are over 1,600 monks or friars, residing in 161 establishments; 14,600 nuns in 1,027 convents; 18,564 churches; and 11,200 monasteries, sanctuaries, etc. Protestants are permitted to hold religious assemblies in private, but public announcement of their meetings for worship are strictly forbidden. Statistics of illiteracy show in a population of 17,552,346, 5,004,460 persons, or 28.5 per cent., able to read and write; 608,005, or 3.4 per cent., able to read only; 11,945,871, or 68.1 per cent., unable either to read or write. Government maintains various special schools, as of engineering, agriculture, architecture, music, fine arts. But the total sum set apart for education is comparatively small. Most of the teachers in the primary schools receive salaries of \$50 to \$100 per year.

Finances.—The revenues of 1894 amounted to \$153,902,500, and the expenditures to \$154,727,145. The estimates for 1896-97 were: Revenue, \$154,753,250; expenditure, \$151,553,131. But that expenditure was "ordinary;" the "extraordinary" expenditure was estimated at \$47,288,156. In that budget the ministry of war called for \$28,045,076. The external debt amounted, June 20, 1896, to \$394,230,000, and the internal debt to \$794,061,700; total debt, \$1,188,291,700; for the fiscal year 1896-97 the amount required for the service of the total debt was \$62,998,300.

Army and Navy.—The regular or standing army has 50 active and 50 reserve regiments; chasseurs, 5 brigades, 10 regiments reserve; cavalry, 28 regiments, 14 regiments reserve; artillery, 17 regiments field artillery, 1 regiment mountain artillery, 2 batteries horse artillery, 5 battalions fortress artillery; sappers, 4 regiments. The whole force of the permanent army on the peace footing is 9,315 officers, 70,829 men; on the war footing, 183,972 men. The Spanish force in Cuba, October, 1896, numbered 121,236 men, including 40 generals and 562 staff officers. For the strength of the navy see NAVIES OF THE WORLD.

Commerce.—The export of wines in 1895 amounted to \$19,394,000, of which about 63 per cent. went to France; but this was a great decline from the export of 1892, which amounted to \$28,567,000. The total imports of all kinds in 1895 were \$137,340,000; exports, \$132,175,000. The merchant marine of the kingdom comprised 427 steamers and 1,041 sailing vessels.

Communications.—At the beginning of 1895 there were 7,543 miles of railroad in operation; post-offices, 2,942; length of telegraph lines, 23,636 miles; telegraph wire, 59,217 miles; telegraph offices, 1,421.

Recent Events.—The political situation in Spain has been much confused for several years. In 1893 the Liberal party came into power with Sagasta as prime minister and had a strong majority in the Chamber of Deputies or the Congress. That party remained in power two years. In 1895 the Conservatives, aided by the minor dissentient factions, gained the mastery, and Señor Canovas del Castillo became premier. Though in 1892 the Liberals had 322 deputies, the Conservatives in the general election of April, 1896, returned about 300 members, against 100 Liberals, 10 Carlists, 10 Independents, 8 Dissident Conservatives, and 3 Republicans. The insurrections in Cuba and in the Philippines effaced to a

large extent the distinctions of party, and Canovas del Castillo and his party seemed to be assured of the tenure of power and office at least until the rebellions should have been put down. The unshaken confidence of the people in the government was demonstrated in November, 1896, when the government loan of about \$80,000,000 was all taken up in two days by a popular subscription. The cabinet as constituted by Señor Canovas del Castillo was: President of the Council, Señor Canovas del Castillo; foreign affairs, Duke of Tetuan; justice, Tejada de Valdosera; finance, J. Navarro Reverter; interior, F. Cos-Gayon; war, General Marcelo de Azcarraga; marine, Admiral Beranger; agriculture, commerce and public works, Linares Rivas; colonies, T. Castellano. On Aug. 8, 1897, Señor Canovas del Castillo, the premier, was assassinated by an anarchist at Santa Agueda. General Azcarraga, the minister of war, was appointed president of the council, and the other members of the cabinet were retained in office. This cabinet, however, resigned on Sept. 29, and on Oct. 3 a new ministry was constituted as follows: President of the council of ministers, Señor Sagasta; minister for foreign affairs, Señor Guillou; minister of justice, Señor Groizard; minister of war, General Correa; minister of marine, Admiral Bermejo; minister of finance, Señor Puigecerver; minister of the interior, Señor Capdepon; minister of public works, Count Xiguena; minister of the colonies, Señor Moret. One of the earliest acts of the new ministry was the recall of Lieutenant-General Weyler from Cuba, and the appointment of Captain-General Blanco in his stead. A more conciliatory policy toward Cuba was adopted, and the relations with the United States assumed a more promising aspect. See CUBA, HAVANA.

After the destruction of the United States battleship *Maine* in the harbor of Havana, on Feb. 15, 1898, however, the relations of the two countries became more acute. The United States began mobilizing its North Atlantic naval squadron at Key West, Fla., and speculation as to the cause of the *Maine's* destruction created in Spain marked ill-will toward the United States. This feeling was greatly accentuated by the report of the naval court of inquiry and the message of President McKinley transmitting the report to Congress. For the report and message, see HAVANA. About the middle of March Spain practically began preparing for hostilities by negotiations for foreign warships, and the United States undertook extensive defensive measures. Unsuccessful efforts were made to induce the Cuban insurgents to accept the Spanish scheme of autonomy (see CUBA). As the war clouds thickened the queen regent sought the good offices of Pope Leo XIII., the emperor of Austria-Hungary, and several of the large European nations to avert war. General Weyler's decree of reconcentration in Cuba was annulled, and April 9, as a result of a visit of the foreign ambassadors to the Spanish minister of foreign affairs, the cabinet decided to grant an armistice to the insurgents. On April 20, after a copy of President McKinley's ultimatum had been delivered to him, Señor Polo de Bernabe, the Spanish minister to the United States, demanded his passports, placed the embassy in charge of the French ambassador and Austrian minister, and left Washington. On the following day, before General Woodford, the United States minister to Spain, had an opportunity for presenting the government with a copy of the ultimatum, the Spanish government sent him his passports, declaring that it considered the ultimatum as a declaration of war. Immediately the United States squadron at Key West was ordered to blockade Havana and the Cuban coast, and the government actively pushed its preparations for intervention. The United States Pacific squadron at Hong Kong was ordered in haste to the PHILIPPINE ISLANDS (*q. v.*). On April 24 Spain issued a decree recognizing a state of war with the

United States, and reserving to herself the right of privateering. Within a few days after the establishment of the blockade of the principal ports of Cuba, the vessels of the United States squadron had captured a dozen valuable prizes. Spain mobilized a squadron, strong in torpedo boats, at the Cape Verde Islands, where it remained till April 29, when Portugal declared its neutrality, and the fleet was obliged to leave, steaming away under sealed orders. A second squadron was organized at Cadiz, but at the time of writing it had not left that port. In anticipation of a sudden dash upon the Atlantic coast by the Spanish fleet mobilized at the Cape Verde Islands, the United States government organized flying, patrol and mosquito squadrons to co-operate with the North Atlantic fleet on blockading duty in protecting the entire Atlantic and Gulf coasts. The destruction of the Spanish fleet at the Philippine Islands on May 1 rendered the Pacific coast of the United States immune against hostile attack. During the latter part of April, the United States blockading fleet destroyed several defensive works along the coast, especially at Matanzas and Cienfuegos, but otherwise maintained a peaceful blockade. In Madrid, the reports from Spanish sources of the loss of the fleet in Manila Bay greatly enraged the people. Riots were so imminent that the city was placed under martial law.

STEVENS INSTITUTE OF TECHNOLOGY, Hoboken, N. J., non-sectarian; had at close of 1897, 25 professors and instructors; 254 students; 9,000 volumes in library; \$500,000 in productive funds; \$250,000 in grounds and buildings; \$55,000 in scientific apparatus and library; \$30,000 in gifts; \$66,000 in income; president, Henry Morton, PH. D., LL. D.

STOWE, HARRIET BEECHER, author, was born in Litchfield, Conn., June 14, 1812; died in Hartford, Conn., July 1, 1896.

SUEZ CANAL. Official reports show that the year 1896 was the most remunerative ever experienced by this great waterway, the traffic aggregating nearly \$16,000,000. The statistics of the traffic are given in detail in the following table:

Nationality.	Steam-ers.	Net Tons.	Traffic Receipts.
Austrian.....	71	158,751.38	\$289,857
Belgian.....	1	1,891.22	3,431
British.....	2,166	5,834,100.13	10,649,130
Dutch.....	199	382,286.7	699,900
Egyptian.....	1	2,274.18	7,336
French.....	218	558,163.96	1,032,010
German.....	320	773,405.20	1,434,499
Italian.....	229	369,758.72	806,825
Japanese.....	10	80,553.79	51,548
Norwegian.....	38	72,948.76	128,880
Portuguese.....	7	7,963.74	13,404
Russian.....	47	129,127.8	288,844
Spanish.....	63	182,361.79	383,751
Turkish.....	37	41,289.87	141,221
Total.....	3,407	8,594,307.33	15,930,425
Total for 1895.....	3,434	8,448,245.83	15,631,743

SUNDAY SCHOOLS.—The eighth international triennial Sunday school convention for the United States and British America was held in Boston, Mass., June 23-26, 1896. The following is a summary of the various State and provincial reports:

SUNDAY SCHOOLS.

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UNITED STATES AND CANADA.	Sunday Schools.	MEMBERSHIP.				COUNTY ORGANIZATION.		HOME CLASS DEPT.	
		Officers and Teachers.	Scholars.	Totals.	Gain in Membership.	Number of Counties.	Organized.	Number of Dep'ts.	Members.
Alabama.....	3,850	23,725	295,240	228,065	2,254	66	43	1	41
Alaska Territory.....	14	52	1,100	1,152					
Arizona Territory.....	50	378	2,670	3,048		5	1		
Arkansas.....	2,050	13,962	151,000	161,962	52,115	75	16		
California.....	1,810	18,448	137,890	154,317	76,775	53	8	50	2,500
Colorado.....	485	4,439	37,220	41,919		60	22		
Connecticut.....	1,082	15,429	122,948	138,377	970	8	8	251	8,000
Delaware.....	422	5,888	43,631	49,522	1,781	3	3	2	80
District of Columbia.....	207	1,485	42,613	47,128		1	1	15	500
Florida.....	2,100	12,119	94,870	106,989	302	45	32		
Georgia.....	6,880	59,885	310,612	370,497		137	123		
Iaho.....	100	750	3,350	4,100		1	21		
Illinois.....	7,816	91,739	682,396	771,105	79,593	102	102	500	10,000
Indian Territory.....	387	2,042	16,383	19,335					
Indiana.....	5,718	65,416	428,798	491,214	68,062	92	92	278	8,000
Iowa.....	6,286	50,288	414,132	464,410	70,332	96	93	87	3,000
Kansas.....	4,811	41,000	281,499	326,498	41,820	105	105	50	2,500
Kentucky.....	3,376	22,894	224,856	247,750	27,435	119	101	65	2,700
Louisiana.....	700	6,000	40,000	46,000	3,918	60	13	43	2,544
Maine.....	2,030	13,500	96,425	109,925	3,895	16	16	156	8,000
Maryland.....	2,578	34,942	261,041	295,983	25,686	23	16	6	250
Massachusetts.....	1,915	39,162	277,013	326,175	29,433	14	14	200	9,000
Michigan.....	4,20	47,000	324,000	371,000	40,000	84	75	50	2,500
Minnesota.....	1,550	18,250	150,500	168,750	11,062	81	34	50	2,500
Mississippi.....	1,051	11,967	94,533	106,501	10,056	74	25		
Missouri.....	7,137	68,937	636,898	695,835	157,000	114	114	100	5,000
Montana.....	827	1,740	14,500	16,240		5	184	23	
Nebraska.....	3,430	27,838	183,944	211,782		90	70	50	2,000
Nevada.....	59	868	3,342	4,210					
New Hampshire.....	2,623	6,550	54,171	60,721	4,740	10	10	50	2,500
New Jersey.....	2,275	38,939	301,417	340,356		21	21	175	8,000
New Mexico.....	90	562	4,300	5,062					
New York.....	9,092	121,777	1,209,244	1,331,021	160,969	60	60	1,010	34,000
North Carolina.....	5,965	46,897	392,796	439,693		96	16		
North Dakota.....	685	4,000	38,320	42,320	17,628	16	16		
Ohio.....	7,408	98,058	695,397	793,455	56,106	88	88	128	2,188
Oklahoma Territory.....	710	4,900	28,000	32,900	30,200	23	15	12	500
Oregon.....	1,222	11,823	80,017	91,880	60,504	32	16		
Pennsylvania.....	9,243	144,155	1,169,351	1,304,506	75,353	67	65	25	3,900
Rhode Island.....	351	6,102	48,298	54,370		16	16	25	2,600
South Carolina.....	2,117	24,175	217,596	241,771	11,513	36	20	8	200
South Dakota.....	710	6,193	38,475	44,670	9,945	78	25		
Tennessee.....	1,876	43,969	317,117	361,086	17,192	96	16		
Texas.....	3,872	29,796	210,993	270,789		250	10	5	200
Utah.....	120	767	7,930	8,697	1,399	23	9		
Vermont.....	769	8,690	56,338	64,969	1,110	14	14	50	2,500
Virginia.....	3,677	43,531	281,336	325,867		100	15		
Washington.....	1,110	7,000	48,450	55,450		34	15		
West Virginia.....	2,024	20,545	132,400	152,945	397	55	13		
Wisconsin.....	2,500	20,000	230,000	250,000	110,913	70	15	50	2,500
Wyoming.....	95	455	8,480	8,935	4,460	12	8		
Totals for United States.....	132,430	1,396,598	10,888,662	12,288,600	1,275,931	2,882	1,718	3,590	128,752
Ontario.....	5,019	49,610	423,646	473,256	43,963	1	1		
Quebec.....	5,532	45,687	510,210	559,897					
New Scotia.....	1,376	9,619	72,915	82,534	860	25	15		
Nova Brunswick.....	971	6,999	49,259	56,258	11,925	15	15	20	700
Prince Edward Island.....	202	1,078	10,196	11,274		18	17		
Manitoba.....	503	3,569	29,305	32,874	6,019	30	11	88	2,000
British Columbia.....	143	1,089	9,989	11,078	8,085	3		1	40
Alberta.....	70	300	3,000	3,300		62	20	41	1,000
Totals for Canada.....	9,097	77,487	648,948	721,435	78,080	174	100	100	4,340
Newfoundland and Labrador.....	353	2,374	22,766	25,140				1	40
Totals for the United States and British American Provinces.....	142,089	1,476,360	11,556,896	13,033,175	1,354,011	3,096	1,827	3,670	133,132

SWARTHMORE COLLEGE, Swarthmore, Pa., Friends; co-educational; had at close of 1897, 22 professors and instructors; 162 students; 18,000 volumes in library; \$500,000 in grounds and buildings; \$400,000 in productive funds; \$10,000 in gifts; president, Charles de Garmo, PH.D., succeeded in 1898 by Prof. William W. Birdsall.

SWEDEN, with Norway a co-equal part of the kingdom of Sweden and Norway; area, 172,876 square miles; population (1896), 4,919,260; capital, Stockholm. Of the land area, 8.3 per cent. is under cultivation; 3 per cent. under natural meadow; 45 per cent. under forest. Value of all cereal crops (1895), \$58,320,000; number of horses, 501,157; cattle, 2,515,536; sheep, 1,319,289; swine, 769,192. Mining is one of the most important industries: Iron ore product (1894), 1,926,523 tons; pig iron, 456,272 tons; bar iron, 267,049 tons. There are considerable veins of coal in the southern districts, and the product (1894) was 213,634 tons. The number of persons employed in all kinds of mining was 25,452. The budget for 1897 estimated the revenue of the kingdom at \$30,167,370, and the expenditure at the same. The value of the taxed land and house property (1895) was \$1,140,850,000. The total imports (1894) amounted in value to \$91,304,981; exports, \$77,642,560. The largest item of export was timber, \$37,376,883. The imports from the United States amounted (1894) to \$3,107,295; exports to the United States, \$2,257. The vessels in the commercial service (1894) numbered 4,162. Of these 2,914, of an aggregate tonnage of 371,097, were sailing vessels, and 1,248, of 179,253 tons, steamers. The railroad mileage at the end of 1895 was 6,058 miles, of which 2,030 miles belonged to the state. The telegraphs, except those erected by railway companies, belong to the state; length of lines 8,058 miles, wires, 24,982 miles. The number of post-offices was 2,491. The Post-office Savings Bank had in the beginning of 1895, 367,337 depositors, and deposits amounting to \$8,014,000; the regular savings banks had 1,119,887 depositors and \$89,931,000 deposits. The peace strength of the army is 1,953 officers; 1,781 non-commissioned officers; 1,644 musicians; 32,842 men, 634 civilian employees—total, 38,854; field guns, 240; horses, 6,871. For the naval force see NAVIES OF THE WORLD. Lutheranism is the prevailing religion and is recognized officially by the state; and the adherents number over 4,735,000; Protestant Dissenters, 44,000; Roman Catholics, 1,390. Of the two universities, that of Upsala had (1896) 1,411 students, and that of Lund, 613. In 75 public high schools there were 15,150 pupils; in 12 normal schools, 1,187 pupils; in 10 navigation schools, 379 pupils. There are over 11,000 elementary schools, with 14,500 teachers and 717,800 pupils.

Recent Events.—The 25th anniversary of the accession of King Oscar II. to the throne was celebrated in Stockholm, with exercises extending over five days, in September, 1897. At the same time and place there was an exhibition of arts and industries, noteworthy for an ethnological annex designed to show in houses, cabins and huts, in beasts of burden, and in men, women, and children, the peculiarities of life in the high latitudes this side of the polar circle. See also NORWAY.

SWITZERLAND, a federal republic of 19 cantons and 6 demi-cantons; area, 15,976 square miles; population (1895), 2,986,848; capital, Berne. The federal public debt Jan. 1, 1896, was \$18,377,882; but against that is set the value of federal property, viz.: Realty, \$7,020,580; stock, etc., \$7,846,237; public works producing interest, \$4,144,372; various debts due the government, \$106,734; inventory, \$6,171,133; alcohol administration, \$46,426; cash, \$352,164—total \$25,687,-

646. The revenue for 1897 was estimated in the budget at \$16,994,000 and the expenditure at \$16,781,000. In the budget the expenditure on account of the posts was set down as \$5,433,050 and the income as \$5,745,060; the income and expenditure on account of telegraphs balance at \$1,590,480; on account of the army (232,995 men actually incorporated) the expenditure was \$4,637,564. The debts of the several cantons amount to \$51,896,600; but that is more than covered by the property of the cantons. The total value of importations in 1896 was \$191,814,822, an increase in a year of over \$15,000,000; and the value of exportations was \$132,834,379, an increase of nearly \$5,000,000. The principal imports were articles of food and drink and tobacco, \$53,037,975; silk, \$23,259,179; precious metals and minerals, \$22,102,113; iron, \$11,579,478; cotton, \$11,223,961; and wool, \$10,169,519; and exports, silk and silk goods, \$38,218,981; cotton goods, \$26,055,659; watches and clocks, \$19,370,151; and articles of food and drink and tobacco, \$15,507,417. In January, 1896, there were 2,304 miles of railroad in operation, and the cost of construction, rolling stock, etc., to the end of 1894, was \$221,677,600. The telegraph service in December, 1896, had 5,498 miles of line, with 19,991 miles of wire, 1,936 officers, and 3,026 employees. The greater part of this service was in connection with the state railroads. The latest educational reports (1893) showed 679 infant schools, with 29,432 pupils; 8,391 primary schools, 469,820 pupils; 485 secondary schools, 31,871 pupils; 30 superior schools, 8,531 pupils; 38 normal schools, 2,230 pupils; 174 professional and industrial schools, 7,049 pupils—total, 548,933 pupils; the number of teachers was 12,838. In 1894, 16 agricultural schools, including those of viticulture and dairying, received federal subsidies; their pupils numbered 400. There are also 5 universities, one, that of Basel, founded in 1460; the others, those of Berne, Zürich, Geneva, and Lausanne. At Zürich is a polytechnic school maintained by the federal government; it had (1895) 757 pupils. The academies of Fribourg and Neuchâtel have faculties answering to those of universities. The students in these 7 institutions numbered (1895) 3,108, and the professors, 431.

Recent Events.—Two important amendments to the federal constitution were adopted by popular vote, July 11, 1897. The first relates to forestry and gives the federal government control over and power to enact uniform laws to regulate Swiss forests. The second amendment puts the manufacture, sale, and importation of food products under federal control. These two amendments will relieve the cantons from vexatious legislation, heretofore differing in each of the 20 cantons and 4 half cantons, and give the whole of Switzerland uniform laws on forestry and the manufacture, sale, and importation of food products. During the meeting of the federal assembly in June and July, 1897, a resolution was passed by the Staende Council, recommending the purchase by the government of the five principal railroads and the establishment of a national insurance scheme. A special session of the federal assembly was called for Sept. 20, to consider the purchase of the railroads, and on Oct. 7 a bill was adopted in the National Council for the purchase of the roads. The length of the roads included in the bill is 1,579.8 miles and the government's estimate of total value was \$186,126,257, about \$19,300,000 less than the companies' estimate. The general plan of the government is to purchase the railways at 25 times the average net annual earnings for the past 10 years, providing this is not less than the actual cost. The companies have the privilege of deducting surplus capital, but must turn over the roads in first-class condition. The adopted bill also projected a loan for the purchase money. The option of the government extended to April 30, 1898. Adrien Lachenal was elected president of the republic for 1896, Dr.

Adolphe Deucher for 1897, and Eugene Ruffy for 1898. A national exposition, of the trade and industry of the republic, was opened at Geneva, May 1, 1896.

SYRACUSE, city, capital of Onondaga county, N. Y.; population (1890), 88,143; (1892, State census), 91,944; (1896, estimated) 120,000. In 1896 the assessed valuations were: Real estate, \$63,324,520; personal property, \$3,391,845—total, \$66,716,365; tax rate, \$19.90 per \$1,000. The total bonded debt, Feb. 1, 1897, including a water debt of \$3,800,000, was \$5,987,186. There are 128 churches; 12 banks; 255 miles of streets, of which 64 miles are paved; 61 miles of sewers; waterworks plant that cost \$4,000,000, has a capacity of 400,000,000 gals., and distributes through 128 miles of mains; gas and electric light plants; 6 public libraries of various kinds; and 5 daily, 12 weekly, and 9 monthly periodicals. The annual cost of maintaining the city government exceeds \$1,000,000. The semi-centennial of the city was appropriately observed in October, 1897.

SYRACUSE UNIVERSITY, Syracuse, N. Y., Methodist Episcopal; co-educational; had at close of 1896, 121 professors and instructors; 1,174 students; 46,543 volumes in library; \$650,800 in productive funds; \$27,385 gifts; \$126,553 income; president, J. R. Day, S. J. D., LL. D.

TABOR COLLEGE, Tabor, Ia., Congregational; co-educational; had at close of 1896, 16 professors and instructors; 200 students; 8,000 volumes in library; \$89,000 in productive funds; \$3,100 gifts; \$12,300 income; president, Richard C. Hughes, A. M.

TARKIO COLLEGE, Tarkio, Mo., United Presbyterian; co-educational; had at close of 1896, 17 professors and instructors; 254 students; 1,036 volumes in library; \$65,000 in productive funds; \$2,347 gifts; \$11,612 income; president, J. A. Thompson, D. D.

TAYLOR UNIVERSITY, Upland, Ind., Methodist Episcopal; co-educational had at close of 1896, 10 professors and instructors; 207 students; 1,500 volumes in library; \$5,000 gifts; \$6,500 income; president, T. C. Reade, A. M., D. D.

TEACHERS' COLLEGE, New York City, non-sectarian; co-educational; had at close of 1896, 60 professors and instructors; 417 students; 7,000 volumes in library; \$64,000 gifts; \$143,635 income; president, Walter L. Hervey, PH. D. In 1898 the college was merged into Columbia University.

TELEGRAPHY. The year 1897 marked the diamond jubilee of telegraphy. On June 10, 1837, Cooke and Wheatstone's first patent for electric telegraphs was signed by William IV., and the first telegraph wire was laid in London on July 4 of that year. A German authority in 1897 estimated the total length of the world's telegraph system at 4,908,823 miles, exclusive of 181,440 miles of submarine cables. This mileage is apportioned as follows: Europe, 1,764,790 miles; Asia, 310,685; Africa, 99,419; Australia, 217,479; America, 2,516,548. It will be seen from the above that, notwithstanding the steady increase in the building of telegraph lines all over Europe, America leads and has almost double the mileage of Europe.

TENNESSEE, one of the United States of North America; admitted to the Union June 1, 1796; seceded June 8, 1861; readmitted July, 1866; counties, 96; capital, Nashville.

State Officers, 1897-99.—Governor (elected for 2 years, salary \$4,000 per annum), Robert L. Taylor; secretary of state, William S. Morgan; treasurer, Edward B. Craig; comptroller, James A. Harris; attorney-general, G. W. Pickle;

adjutant-general, Charles Sykes; superintendent of public instruction, Price Thomas; commissioner of agriculture, etc., John T. Essary; commissioner of labor, F. P. Clute; State geologist, J. M. Safford; chief justice of the supreme court, David L. Snodgrass; associate justices, W. C. Caldwell, John S. Wilkes, W. K. McAllister and W. D. Beard; judges of court of chancery, M. M. Neil, S. F. Wilson, R. M. Baxton, Jr.; clerk, A. W. McMillan—all Democrats.

Legislature, 1897.—Democrats, senate 25, house 63, joint ballot 88; Republicans, senate 8, house 32, joint ballot 40; Populists, house 4, joint ballot 4; Democratic majority, senate 17, house 27, joint ballot 41.

Elections.—In the State elections 1896 there was a total of 319,509 votes cast for governor, according to the official canvass, of which the Democratic candidate (Taylor) received 156,228; the Republican candidate (Tillman), 149,374; the Populist candidate (Mines), 11,076; and the Prohibition candidate (Hopwood), 2,831; Democratic plurality, 6,854. The Republican candidate undertook a contest on the ground of gross frauds, but the legislature passed a special act requiring such a contestant to file a bond for \$25,000 to cover the costs of a recount, and Tillman abandoned the contest. The congressional elections resulted in the choice of 8 Democratic and 2 Republican candidates. In the presidential election the Democratic candidate received 166,268 votes; the Republican, 148,773; the Prohibition, 3,098; and the National Democratic, 1,951.

Farm Products.—Reported Dec. 31, 1897: Corn, 63,672,588 bush., from 3,032,028 acres, value \$22,922,132; wheat, 10,052,448 bush., from 897,540 acres, value \$9,549,826; oats, 3,842,890 bush., from 381,289 acres, value \$1,076,009; rye, 148,460 bush., from 14,816 acres, value \$86,107; buckwheat, 22,680 bush., from 1,260 acres, value \$12,328; barley, 35,514 bush., from 1,975 acres, value \$20,953; potatoes, 1,168,200 bush., from 29,205 acres, value \$852,786; and hay, 409,154 tons, from 282,175 acres, value \$4,398,406—total value, \$38,989,147.

Farm Animals.—Reported Jan. 1, 1898: Horses, 327,424, value \$11,516,319; mules, 160,920, value \$6,061,550; cows, 279,863, value \$5,177,466; cattle, 379,168, value \$5,086,344; sheep, 328,808, value \$575,907; and swine, 1,688,338; value \$5,449,956—total value, \$33,787,542.

Mineral Products.—The following is a summary of the mineral products for the calendar year 1895: The coal industry had 41 mines in operation, which employed 5,120 persons an average of 221 days, and yielded 2,535,641 short tons, spot value \$2,349,032. *Coking* was carried on by 11 plants with 1,942 ovens, which used 449,511 short tons of coal, and had an output of 265,777 short tons of coke, value \$491,523. *Quarrying* was confined to marble and limestone, values \$362,277 (increase) and \$156,898 (decrease) respectively. The discovery of *phosphate rock* in Hickman and Lewis counties has given birth to a new industry, which yielded 38,515 long tons, value \$82,160. In *clay* products, 90 concerns reported, value of common and pressed brick, \$380,772; fancy brick, \$356; fire-brick, \$24,956; drain tile, \$6,850; sewer pipe, \$80,300; terra cotta work, \$5,000, and stoneware, \$24,300—total, \$522,534. In *iron* the State ranked 7th in general production, 5th in red hematite, and 3d in brown hematite and carbonate, with an output of 257,502 long tons of red hematite, 255,583 of brown, and 6,711 of carbonate; total value, \$519,796. The production of pig iron in 1895 was 248,129 long tons. In 1895 *petroleum* oil was struck in Fentress county, and within six months nearly \$8,000,000 of capital was invested, eight counties in the up-Cumberland country were in excitement over local finds, 404 wells were in operation, and 41 corporations or individuals were in control. The oil area was said to be 30 miles wider than the Pennsylvania field, and the richest in the country.

Finances.—During the biennial term ending Dec. 19, 1896, the receipts of the treasury were \$3,214,863.97; expenditures, \$3,696,830.07. With a balance of \$753,217.61 at the beginning of the term, there was a balance of \$271,251.54 at the end. In May, 1894, the comptroller called in the entire amount of outstanding 5s and 6s bonds, aggregating \$1,011,900, paying for them from the proceeds of the sale of the new \$1,000,000 redemption bonds and from the surplus in the treasury, which then amounted to \$1,043,372. In 1896 all taxable property in the State was assessed at \$312,472,633; the tax rate was \$2 per \$1,000; and Jan. 1, 1897, the interest-bearing debt was \$15,702,800, and the estimated amount of bonds still to be funded, \$940,000.

Banks.—On Oct. 6, 1897, there were 49 national banks in operation and 29 in liquidation, the active ones having a combined capital of \$8,760,000, and holding \$1,785,250 in United States bonds. These banks had outstanding on loans and discounts, \$21,148,631, represented by demand paper with individual or firm names, \$949,877; the same secured by stocks, bonds, and other personal securities, \$1,278,693; time paper with two or more individual or firm names, \$8,788,336; time paper with single individual or firm name, \$4,222,758; and the same secured by stocks, bonds, and other personal securities, \$5,908,968. The banks held an aggregate of \$1,933,883 in coin and coin certificates. The circulation account was: Issued, \$14,627,590; redeemed, \$13,010,418; outstanding, \$1,617,172. There were deposits, \$18,058,371; reserve required, \$2,708,755; reserve held, \$5,665,252; and ratio of reserve, 31.37 per cent. During the year ending Sept. 30, 1897, the exchanges at the United States clearing houses at Memphis, Nashville and Chattanooga aggregated \$160,958,450, a net decrease of \$5,339,111 over the total of the previous corresponding period. The State banks, June 30, 1897, numbered 51, and had capital, \$2,585,697; deposits, \$5,439,235; resources, \$8,747,437; and surplus and profits, \$521,793. There were 6 stock-savings banks, with capital, \$480,000; check deposits, \$483,401, and savings deposits \$1,627,877; resources, \$2,814,420; and surplus, \$149,535. Combining all these institutions, the State had an aggregate banking capital of \$11,825,697.

Internal Revenue.—During the fiscal year ending June 30, 1897, the collections of internal revenue aggregated \$1,068,621.27, from the following sources: Distilled spirits, \$670,728.68; tobacco, \$279,675.54; fermented liquors, \$105,087.13; oleomargarine, \$1,976; and penalties, \$11,045.97. In that year there were 60 single-account cigar factories, which used 104,687 lbs. of tobacco, and had an output of 5,247,896 cigars; and 67 other factories, which used 5,833,524 lbs. of materials, and had an output of 1,590,974 lbs. of plug tobacco, 233,355 lbs. of smoking, and 1,872,281 lbs. of snuff. There were 74 grain and 84 fruit distilleries in operation; 345,983.29 gals. of spirits rectified and 1,901,037 gals. gauged; and 111,590 bbls. of fermented liquors produced.

Railroads.—In 1895 there were 4,059.43 miles of railroad track in the State, and official reports for the previous years showed: Capital stock, \$96,836,893; funded debt, \$112,335,000; total investment, \$213,406,722; cost of roads and equipments, \$202,395,927; gross earnings, \$15,042,801; net earnings, \$318,161; interest paid on bonds, \$429,772; and dividends paid on stock, \$4,000.

Commerce.—The foreign trade, wholly imports of merchandise, at the ports of Memphis and Nashville, in the fiscal years ending June 30, 1896 and 1897, amounted to \$150,701 and \$131,869 respectively.

Publications.—Reported March, 1898: Daily, 19; semi-weekly, 8; weekly, 218; bi-weekly, 2; semi-monthly, 4; monthly, 41; and bi-monthly, 3.

Post-Offices.—Reported Jan. 1, 1897: First-class, 4; second-class, 5; third-

class, 38 (presidential, 47); fourth-class, 2,579; money-order offices, 318; money-order stations, 6; and limited money-order offices, 22.

Churches.—The Methodist Episcopal, South, is the strongest denomination in the State, and is followed in their order by the Regular Baptist, South; African Methodist; Regular Baptist, colored; Cumberland Presbyterian; Methodist Episcopal; Disciples of Christ; Roman Catholic; Presbyterian, South; Primitive Baptist; Protestant Episcopal; and Presbyterian, North. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Tennessee 4,876 evangelical Sunday schools, 43,909 officers and teachers, and 317,117 scholars—total members, 361,026, a gain of 17,192 in three years.

Schools.—At the end of the school year 1894-95, the number of children of school age in the State was estimated at 635,400, of whom 478,125 were enrolled in the public schools, and 338,330 were in average daily attendance. There were 8,913 teachers, public school property valued at \$3,092,503, and total expenditures, excluding payments on debt, \$1,240,176. Of the total enrollment, 377,626 were white pupils and 100,499 colored; of average attendance, 270,982 were white and 67,348 colored; and of total teachers, 7,048 were white and 1,865 colored. There were 24 universities and colleges of liberal arts, with a total of 558 professors and instructors; 7,312 students in all departments (5,989 males and 2,223 females); 14 fellowships; 364 scholarships; 150,550 bound volumes in the libraries; \$434,143 in total income; \$3,352,000 invested in grounds and buildings; \$2,290,335 in productive funds; and \$50,565 receipts from gifts. In all there were 7,212 public school buildings; 93 public high schools, with 190 teachers and 4,363 students; 114 private secondary schools, with 290 teachers and 5,128 students; and 3 public and 10 private normal schools. The State Agricultural and Mechanical College, a department of the State University, had an experimental staff of 8, faculty 23, volumes in the library 14,048, area under cultivation 118 acres, value of farm lands \$106,370, and special buildings and equipments valued at \$170,645. For the defective classes the State had a School for the Deaf and Dumb at Knoxville, in which shoemaking and printing were taught, and one for the blind at Nashville, with classes in typewriting, broom-making, mattress-making, and chair-caning. The legislature in 1895 passed acts to establish a system of reformatory institutions for youth, and to authorize municipal corporations of 2,000 inhabitants to establish and maintain high-grade schools.

Libraries.—In 1896 there were reported 62 public libraries of 1,000 volumes each and upward, with a total of 318,572 bound volumes and 29,436 pamphlets.

Population.—In 1890, 1,767,518, of whom 891,585 were males; 875,933 females; 1,747,489 natives; 29,029 foreign-born; 1,336,637 whites; and 430,881 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 1,924,000.

TENNESSEE, UNIVERSITY OF, Knoxville, Tenn., non-sectarian; co-educational; without racial restrictions; had at the close of 1897, 53 professors and instructors; 527 students; 5 scholarships; 14,000 volumes in the library; \$586,000 in grounds and buildings; \$425,000 in productive funds; \$74,675 in scientific apparatus and library; \$68,231 in income; president, C. W. Dabney, LL.D.

TEXAS, one of the United States of North America; admitted to the Union Dec. 29, 1845; seceded Feb. 23, 1861; readmitted March 30, 1870; counties, organized, 226; unorganized, 21; capital, Austin.

State Officers, 1897-99.—Governor (elected for 2 years, salary \$4,000 per annum), Charles A. Culberson; lieutenant-governor, George T. Jester; secretary of state, J. W. Madden; treasurer, William B. Wortham; comptroller, R. W. Finley; superintendent of public instruction, James M. Carlisle; attorney-general, Martin M. Crane; adjutant-general, W. H. Mabry; commissioner of agriculture, A. J. Rose; commissioner of general land office, Andrew J. Baker; chief justice of the supreme court, Reuben R. Gaines; associate justices, Leroy G. Denman and Thomas J. Brown; clerk, Charles S. Morse—all Democrats.

Legislature, 1895-97.—Democrats, senate 29, house 103, joint ballot 133; Populists, senate 2, house 22, joint ballot 24; Republicans, house 3, joint ballot 3; Democratic majority, senate 27, house 78, joint ballot 105.

Elections.—In the State elections 1896 all the Democratic candidates were elected. The congressional elections resulted in the choice of one Republican and 12 Democratic candidates. In the presidential election 1896, the Democratic-Populist candidate received 361,224 votes; the Republican candidate 158,889; the National Democratic candidate 4,853; and the Prohibition candidate 1,722, showing a Democratic-Populist plurality of 202,335.

Farm Products.—Reported Dec. 31, 1897: Corn, 72,175,142 bush., from 3,901,359 acres, value \$29,591,808; wheat, 7,028,251 bush., from 444,826 acres, value \$6,255,143; oats, 16,311,150 bush., from 652,446 acres, value \$4,104,010; barley, 51,325 bush., from 2,053 acres, value \$22,070; rye, 46,332 bush., from 3,861 acres, value \$33,359; potatoes, 789,720 bush., from 13,162 acres, value \$730,234; and hay, 427,203 tons, from 305,145 acres, value \$3,097,222—total value, \$44,133,846.

Farm Animals.—Reported Jan. 1, 1898: Horses, 1,148,500, value \$19,866,178; mules, 265,349, value \$8,214,550; cows, 722,476, value \$14,449,520; cattle, 4,823,295, value \$73,639,656; sheep, 2,649,914, value \$4,409,457; and swine, 2,826,302, value, 8,874,588—total value, \$129,453,949.

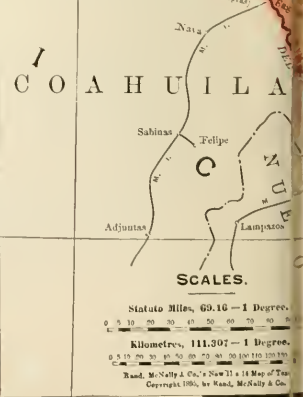
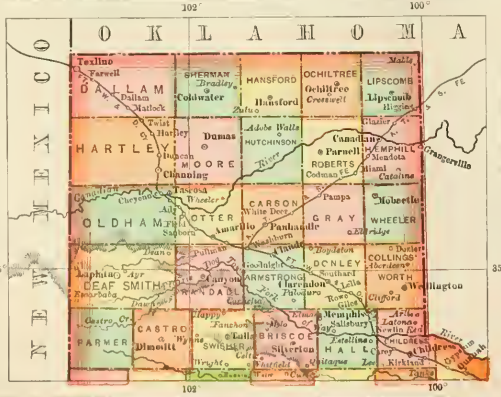
Mineral Products.—The following is a summary of the mineral products for the calendar year 1895: Coal, 484,959 short tons, value \$913,138; petroleum, all in Bexar county, and a valuable lubricant, 50 bbls.; asphaltum, all from Walde county, 1,058 short tons, \$29,900; sandstone, from 7 counties, 97,336; limestone, from 10 counties, and used chiefly for building and road-making, \$62,526; cement, 10,000 bbls. of Portland, value \$30,000, and 10,000 bbls. of hydraulic, value \$17,000; salt, mostly common fine, 125,000 bbls., value \$55,000; and mineral waters, 1,479,570 gals., value \$72,100. In the clay industry, 136 concerns reported their output as follows: Common and pressed brick, \$909,027; fancy brick, \$1,024; firebrick, \$7,060; vitrified paving brick, \$12,466; tile, not drain, \$519; sewer pipe, \$4,450; terra cotta work, \$5,300; stoneware, \$46,600; and miscellaneous articles, \$44,000—total, \$1,030,446.

Finances.—On Jan. 1, 1897, the State had a total bonded debt of \$3,992,030, of which all excepting \$747,490 was held in State educational and charitable funds. The assessed valuations, 1896, were: Real estate, \$587,560,471; personal property, \$262,748,775—total, \$850,309,246; and the tax rate was \$3.80 per \$1,000. The receipts of the treasury in the year ending Aug. 31, 1896, were \$2,843,433.86; expenditures, \$2,901,982.89; balance at beginning of the fiscal year, \$133,479.38; balance at end, \$73,060.35.

Banks.—On Oct. 31, 1897, there were 202 national banks in operation and 64 in liquidation, the active ones having a combined capital of \$20,106,200, and holding \$1,993,700 in United States bonds. These banks had outstanding on loans and discounts \$39,361,543; represented by demand paper with individual or firm



The PANHANDLE of TEXAS, on Same Scale.



SCALES.
 Statute Miles, 69.16 — 1 Degree.
 Kilometers, 111.307 — 1 Degree.
 Road, McNeely & Co., New York, 14 Day of the Century, 1900, No. 100, 100, 100, 100.

names, \$1,487,907; the same secured by stocks, bonds and other personal securities, \$1,001,386; time paper with two or more individual or firm names, \$13,917,101; time paper with single individual or firm name, \$10,149,811; and the same secured by stocks, bonds, and other personal securities, \$12,805,339. The banks held an aggregate of \$3,917,753 in coin and coin certificates, of which \$2,021,874 was in gold coin. The circulation account was: Issued, \$18,901,650; redeemed, \$14,000,546; outstanding, \$4,901,104. There were deposits, \$35,014,885; reserve required, \$5,594,696; reserve held, \$13,666,386; and ratio of reserve, 34.84 per cent. During the year ending Sept. 30, 1897, the exchanges at the United States clearing houses at Galveston, Houston, Dallas, Fort Worth, and Waco, aggregated \$367,953,082, a net increase of \$19,052,377 over the total of the previous corresponding period. The State banks, June 30, 1897, numbered 4, and had capital, \$450,000; deposits, \$751,233; resources, \$1,114,576; and surplus and profits, \$178,234. There were also 17 private banking establishments, with combined capital, \$959,818; deposits; \$1,855,222; loans and discounts, \$1,997,143; resources, \$3,261,521; and surplus and profits, \$219,674.

Insurance.—During the calendar year 1895, 10 companies of other States were admitted to local business, 4 were refused admission, and 10 retired, leaving 40 fire companies of other States and 29 fire and marine of foreign countries, 3 guaranty, 36 life and health, 7 accident, 1 steam boiler, and 2 plate-glass companies—in all, 118. The fire and marine companies wrote risks, \$216,154,591; received premiums, \$3,669,892; and paid losses, \$1,902,016; the life companies wrote risks, \$47,575,686; received premiums, \$3,680,819; and paid losses, \$1,209,099; and the accident companies wrote risks, \$48,066,110; received premiums, \$294,340; and paid claims, \$208,036. The various companies paid the State taxes aggregating \$75,953.

Building and Loan Associations.—The last general report on these associations (1893) showed a total of 41 organizations, of which 39 were local, 2 national, 19 serial, 2 permanent, and 20 terminating. There were reported by all associations, shareholders, 6,439; by 39, shares issued, 66,639, and shares matured, 2,067; and by 40, shares free, 34,654, and shares borrowed on, 17,863. The total assets and liabilities were \$2,184,399; loans on real estate, \$1,848,729; and dues and profits, \$2,074,446. During the life of all associations, 15 mortgages were foreclosed, involving \$17,127, on which there was a loss of \$209. Of all associations, 36 reported 1,526 homes and 148 other buildings acquired.

Internal Revenue.—During the fiscal year ending June 30, 1897, the collections of internal revenue aggregated \$441,848.38, from the following sources: Distilled spirits, \$100,789.06; tobacco, \$37,625.42; fermented liquors, \$295,339.30; oleo-margarine, \$7,286; and penalties, \$698.64. During that year there were 164 single-account cigar factories, which used 246,209 lbs. of tobacco, and had an output of 11,627,283 cigars, and 117,060 cigarettes; and 22 other factories, which used 62,905 lbs. of materials, and had an output of 493 lbs. of plug tobacco and 55,528 lbs. of smoking. There were 19 grain and fruit distilleries in operation, 214,039 gals. of spirits rectified, and 440,237 gals. gauged; and 265,568 bbls of fermented liquors produced.

Railroads.—On June 30, 1895, a total of 9,290.70 miles of railroad track was reported, of which 4,669.50 were in 41 counties, and an average of 36 miles in each of 125 counties, the remaining 81 counties having none. Reports of the operating corporations for 1894 showed: Capital stock, \$138,673,202; funded debt, \$196,490,846; total investment, \$346,705,876; cost of roads and equipments, \$327,348,557; gross earnings, \$17,903,765; net earnings, \$8,170,209; and interest

paid on bonds, \$6,513,684. In 1895 the corporation value of all railroad property was reported at \$375,000,000, and the valuation assessed by the State, \$75,000,000. The total mileage in 1896 was 9,519.54.

Commerce.—During the fiscal year ending June 30, 1897, the foreign trade in merchandise at the ports of Brazos de Santiago, Corpus Christi, Galveston, Paso del Norte, and Saluria was: Imports, \$4,145,888; exports, \$71,169,198. The movement of gold and silver coin and bullion at all the above ports excepting Galveston was: Imports, \$7,377,759; exports, \$105,187. The value of the total trade in 1895 was \$58,004,441; in 1896, \$59,910,724; in 1897, \$82,798,032.

Publications.—Reported March, 1898: Daily, 62; semi-weekly, 11; weekly, 622; bi-weekly, 1; semi-monthly, 8; monthly, 48; and quarterly, 1.

Post-Offices.—Reported January, 1897: First-class, 7; second-class, 19; third-class, 111 (presidential, 137); fourth-class, 2,621; money-order offices, 691; and limited money-order offices, 80.

Churches.—The Methodist Episcopal, South, is the strongest denomination in the State, and is followed in their order by the Regular Baptist, South; Regular Baptist, Colored; Roman Catholic; African Methodist; Disciples of Christ; Methodist Episcopal; Cumberland Presbyterian; Presbyterian, South; Lutheran, General Council; Protestant Episcopal; and Primitive Baptist. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Texas, 3,852 evangelical Sunday schools, 29,796 officers and teachers, and 240,993 scholars—total members, 270,789.

Schools.—The public school system has a large endowment, consisting at the close of the school year 1894-95 of \$7,484,598 in interest-bearing bonds, more than \$14,000,000 in interest-bearing land notes, and about 23,000,000 acres of land, of which 20,000,000 acres were leased. In addition to the State endowment, each county had an independent endowment of four leagues of land. The total State and county permanent fund was \$73,454,869; the apportionment of the year was \$2,836,363; receipts by local treasurers, with balances, \$3,962,637; disbursements, \$3,675,501; balance, \$287,135. There were district schools in 191 counties; community schools in 35; and independent district schools in 200 cities and towns. At the end of the school year 1895-96, the number of children of school age in the State was estimated at 1,046,000, of whom 616,568 were enrolled in the public schools, and 440,249 were in average daily attendance. There were 13,217 teachers; public school property valued at \$7,289,184; and expenditures, excluding payments on debt, \$3,996,778. The universities and colleges of liberal arts numbered 14, with a total of 230 professors and instructors; 3,531 students in all departments (2,581 males and 950 females); 3 fellowships; 32 scholarships; 45,738 bound volumes in the libraries; \$265,974 in total income; \$1,725,000 invested in grounds and buildings; \$676,000 in productive funds; and \$38,732 receipts from gifts. There were 166 public high schools, with 450 teachers and 9,741 pupils; 79 denominational and private secondary schools, with 281 teachers, and 4,814 students; 2 colleges exclusively for women, with 24 teachers, 365 students, and grounds and buildings valued at \$145,000; a public and 7 private normal schools; normal departments in 6 colleges; and 15 commercial colleges. For the defective classes there were a State Deaf, Dumb and Blind Institution for Colored Youth, Austin; a State Deaf and Dumb Asylum, Austin; and a State House of Correction, at Gatesville.

Libraries.—In 1896 there were reported 39 public libraries of 1,000 volumes each and upward, with a total of 131,222 bound volumes and 13,804 pamphlets.

Population.—In 1890, 2,235,523, of whom 1,172,553 were males; 1,062,970

females; 2,082,567 natives; 152,956 foreign-born; 1,745,935 whites; and 489,588 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 2,733,000.

TEXAS, UNIVERSITY OF, Austin, Tex., non-sectarian; co-educational; had at close of 1897, 59 professors and instructors; 751 students; 35,000 volumes in library; \$578,000 in productive funds; \$300,000 in grounds and buildings; \$75,000 in scientific apparatus, \$89,413 in income; president, George T. Winston, LL.D.

THAYER, ALEXANDER WHELLOCK, biographer, was born in South Natick, Mass., Oct. 22, 1817; died in Trieste, Austria, in July, 1897. His most enduring work was a great biography of Beethoven, on which he spent the greater part of his life, and of which three volumes have been issued.

THIEL COLLEGE, Greenville, Pa., Lutheran; co-educational; had at close of 1896, 10 professors and instructors; 160 students; 5,000 volumes in library; \$70,000 in productive funds; \$9,000 income; president, Theophilus B. Roth, D.D.

THOMAS, CHARLES LOUIS AMERISE, musical composer, was born in Metz, Lorraine, Aug. 5, 1811; died in Paris, France, Feb. 12, 1896.

THOMPSON, DANIEL GREENLEAF, lawyer and author, was born in Montpelier, Vt., Feb. 9, 1850; died in New York City, July 10, 1897. He was a voluminous writer on metaphysical subjects.

TORONTO, city, capital of province of Ontario, Canada; population (1891), 181,220; (1896) 178,185. It is the most prosperous city in the dominion; the financial, commercial and industrial center of the largest and wealthiest province; the chief live stock, lumber, dairy, wool, and grain market of Ontario; and the center of the great educational and charitable institutions of the province. The city has an exceptionally fine harbor, is entered by 9 railroads, and contains 14 banks, 178 churches, 44 newspapers and periodicals, excellent water supply, gas and electric light plants, and real and personal property valued at over \$155,000,000. It returns three members to the Dominion House of Commons, and four to the Provincial Legislature.

TRACT SOCIETY, AMERICAN. The annual meeting of the American Tract Society was held in New York City, May 12, 1897. The report of the field secretary showed that the society publishes evangelical truth in 153 languages and dialects; the total number of volumes in all languages published in New York reaches 31,500,000, the total number of books and tracts nearly 500,000,000, and the total periodicals over 200,000,000. The whole number of family visits since the society began its house-to-house work is over 14,500,000, and the number of families prayed with or conversed with on religious subjects amounts to nearly 8,500,000. The financial report showed that the society had received \$189,756.34 from sales during the year, \$22,005.86 from donations, \$19,029.13 from legacies, and \$5,921.45 from interest on trust funds. The rent receipts from the new building amounted to \$111,642.65. Including temporary loans of \$208,850, and some new trust funds, and a balance from the previous year of over \$18,000, the total receipts foot up \$594,362.81. The operating expenses of the new building, including taxes, were \$74,547.67, but there were payments on account of construction amounting to \$72,546.14. There was, therefore, no net revenue from the building. For publishing and manufacturing the society expended \$134,214.10; for sales department, \$47,911.86; salaries and general expenses in New York, \$24,880.15, and for colportage, \$25,251.38. The old Board of Managers, thirty-six in number, were re-elected, except that the Rev. Dr. F. R. Schenck, of New York, was chosen in place of Peter L. Neefus, of Flatbush, resigned.

TREITSCHKE, HEINRICH GOTTHARD VON, noted publicist, was born in Dresden, Sept. 15, 1834; died in Berlin, April 28, 1896.

TRICOUPIS, CHARILAOS, prime minister of Greece, was born in Nauplia, Greece, July 23, 1832; died in Cannes, France, April 11, 1896.

TRINITY COLLEGE, Durham, N. C., Methodist Episcopal, South; had at close of 1896, 12 professors and instructors; 150 students; 10,000 volumes in library; \$7,500 gifts; \$20,554 income; president, John C. Kilgo, D.D.

TRINITY UNIVERSITY, Tehuacana, Tex., Cumberland Presbyterian; co-educational; had at close of 1896, 15 professors and instructors; 250 students; 3,000 volumes in library; chairman of faculty, L. A. Johnson.

TROCHU, LOUIS JULES, defender of Paris during its siege by the German army in 1870-71, was born in Bretagne, France, March 12, 1815; died in Paris, France, Oct. 7, 1896.

TRUMBULL, JAMES HAMMOND, author, librarian, and expert in American Indian languages, was born in Stonington, Conn., Dec. 20, 1821; died in Hartford, Conn., Aug. 5, 1897. He was said to be the only person living who could read the Eliot Indian Bible.

TUFTS COLLEGE, Tufts College, Mass., Universalist; co-educational; had at close of 1896, 80 professors and instructors; 500 students; 33,000 volumes in library; \$1,684,647 in productive funds; \$25,000 gifts; \$95,000 income; president, Elmer Hewitt Copen, D.D.

TULANE UNIVERSITY, New Orleans, La., non-sectarian; co-educational; had at close of 1896, 72 professors and instructors; 952 students; 20,000 volumes in library; \$1,090,602 in productive funds; \$149,764 gifts; \$136,583 income; president, Wm. P. Johnston, LL.D.

TURKEY, also known as the OTTOMAN EMPIRE, an empire with vast possessions in Europe, Asia, and Africa; area of immediate possessions, 1,147,578 square miles; population (1896, known and estimated), 27,688,000; gross area with tributary states, 1,609,240 square miles; population 39,212,131; capital, Constantinople; reigning sultan, Abdul Hamid II.

Finances.—The average annual revenue in the period 1892-95 was \$82,292,078; average annual expenditure, \$89,103,200; the official estimate of revenue for the year ending Feb. 28, 1898, was \$81,449,816, and of expenditure, \$81,089,408. The Turkish debt in bonds and loans aggregated \$639,158,642 in 1896, and the debts not in loans or bonds, but including the outstanding balance of the Russian war indemnity, amounted to \$138,828,615, making a total of \$777,987,257.

Commerce.—The latest returns are for 1892-93 and show, value of imports, \$107,654,734; value of exports, \$68,516,984; revenue of the various custom houses, \$8,583,942. Of the total import trade, 39 per cent. is with Great Britain, and of the export trade, 45 per cent. France is second in volume of general trade. The mercantile navy in 1895 consisted of 78 steamers and 786 sailing vessels, and the entrances and clearances at all the ports aggregated 192,269 vessels of 37,618,549 tons.

Communications.—The lines of railroad in the Turkish possessions in Europe and Asia in operation in August, 1896, had a total length of 2,423 miles; the length of telegraph lines was 20,750 miles, and of wire, 33,040 miles; the number of telegraph offices in Europe and Asia was 680; and the number of post-offices in the whole empire was 1,556.

Industries.—It is estimated that 44,000,000 acres of the empire in Europe and Asia are under cultivation; about 21,000,000 acres are under forest, of which

3,500,000 acres are in European Turkey. With a very primitive system of agriculture, the empire produces large quantities of tobacco, wine, cereals of all kinds, cotton, figs, olives, coffee, opium, silkworms, madder, gums, etc. The greater part of the silk product is exported. The empire is rich in minerals, and those of the most general use, especially coal, are abundant; but restrictive mining laws retard development. The principal manufactures are carpets, on hand-loom, glass, paper, textiles, and light dress materials. The empire has valuable fisheries, especially on the Bosphorus, sponge fisheries on the Mediterranean, mother-of-pearl fisheries on the Red Sea, and pearl fisheries on the Persian Gulf.

Army.—The whole empire is divided into 7 military districts, each with a *corps d'armée*, with headquarters at Constantinople, Adrianople, Monastir, Erzingen, Damascus, Bagdad, and Sanaa. The effective combatant services of the army are: Infantry, 648 battalions, 583,200 men; cavalry, 202 squadrons, 55,300 men, artillery, 1,356 guns, 54,720 men; and engineers, 39 companies, 7,400 men—total men, 700,620. The army is divided into three branches, the *mizam*, or regular army, and its reserves; the *redif*, or *landwehr*; and the *mustabfuz*, or *landsturm*. There are also 12 battalions of Tripolitan militia for local service, and 117 battalions of *gendarmerie*, under civil control in time of peace.

Navy.—See NAVIES OF THE WORLD.

Religion.—The two great religious bodies in the empire are Mahometans and Christians, the former predominating in Asia, but forming only half of the population in Europe. The government recognizes seven non-Mahometan bodies, the Latin, Greek, Armenian, Syrian, and United Chaldean, Maronite, Protestant, and Jewish. In the whole empire are 2,120 mosques, 11,600 clergy, and 1,780 elementary schools, connected with the mosques, in which education is free. The private revenue of the *Evkof* (or church) is now about \$800,000 per annum, and the expenditures about \$625,000. The principal revenues of the *Evkof* are derived from the sale of landed property it has acquired by bequests, and it is said that three-fourths of the urban property of the empire really belongs to the church. The Mahometans are believed to number about 16,000,000, and the Christians about 5,000,000.

Recent Events.—Much of the recent history of Turkey has been narrated in preceding pages, and the reader is referred particularly to the titles: ARMENIANS; CRETE; DONKOLA; EGYPT; GREECE; and HARFOOT. The principal events of 1896 were the continuation of the massacres in Armenia and elsewhere; the persistence of the ambassadors of the great powers in demanding a cessation of the outrages and the immediate adoption of reformatory measures; and the evasions, promises, protests, and complaints of the sultan. Repeated threats of coercion and interference by the great powers seemed to have no practical effect, and it was plainly evident that the great powers could not be brought to act in concert—a situation that the Turks utilized fully to promote their policy of delay. In 1897 the war with Greece was continued, to the steady disadvantage of the latter, till May 18, when, after the Turks had occupied Donoko, the sultan agreed to an armistice for a fortnight from May 20, pending negotiations for peace, in response to a telegraphic request from the czar of Russia. The sultan had previously declined an armistice till the Greeks would agree to the annexation to Turkey of Thessaly, to the payment of a war indemnity aggregating \$45,000,000, and to the abolition of the capitulations. A sea armistice went into effect June 5. The Greek government protested to the powers against the indemnity demanded by Turkey and the proposed rectification of the frontier.

On June 29 the Turkish government demanded the cession of all the northern portion of Thessaly down to the river Penejos and to a point 12 kilometers beyond the Penejos in the district of Larissa. The powers, which had interferred to secure peace, refused to consider this demand, and proposed another frontier line. The negotiations between the six mediating powers and the Turkish government were prolonged till Sept. 18, when the latter, finding it could delay no longer, nor gain the consent of the powers to its full demands, agreed to the terms of the treaty of peace. The principal points in the treaty are as follows:

Article VI. provides that an international commission of the mediating powers, composed of six members, shall be empowered to make the necessary arrangements to secure the rapid payment of the indemnity and to prevent any injury from being done to the rights of former creditors. Under its terms the Greek government will submit to the Boule a law, to be previously approved by the powers, defining the duties of the commission. According to this law, the collection and employment of revenues sufficient for the service of the new and old loans will be subjected to the absolute control of the commission. Article VI., after providing that the state of war shall cease as soon as the preliminary treaty of peace is signed (a condition fulfilled on Sept. 18), further provides that the evacuation of Thessaly shall take place within a month, beginning from the date when the powers shall have recognized the provisions of Article II. as fulfilled, and when the time for the emission of the indemnity loan has been fixed by the International Commission in accordance with the arrangements provided by Article II. The mode of evacuation of Thessaly and the restoration of the Greek authorities will be fixed by the delegates of the two interested parties, with the aid of the delegates of the great powers.

UNION CHRISTIAN COLLEGE, Merom, Ind., Christian; co-educational; had at close of 1896, 13 professors and instructors; 235 students; 3,250 volumes in library; \$90,500 in productive funds; \$30,000 gifts; \$40,700 income; president, L. J. Aldrich, A.M., D.D.

UNION COLLEGE, Schenectady, N. Y., non-sectarian; had at close of 1896, 27 professors and instructors; 216 students; 30,736 volumes in library; \$393,602 in productive funds; \$80,000 income; president, A. V. V. Raymond, D.D.

UNION THEOLOGICAL SEMINARY, New York City, Presbyterian; had at close of 1897, 13 professors and instructors; 152 students; 72,504 volumes in library; \$1,400,000 in productive funds; \$500,000 in grounds and buildings; \$27,000 income; president, Charles Cuthbert Hall, D.D.

UNITED STATES OF AMERICA, a federal republic in North America, comprising (1897) 45 States, 3 organized and 2 unorganized Territories, and a federal district; gross area, 3,595,600 square miles; land surface (excluding Alaska, which has a gross area of 570,000 square miles), 2,970,000 square miles; water surface, 55,600 square miles; population (1890), 62,622,250; (Oct. 1, 1897, estimated by the treasury department), 73,300,000; capital, Washington; president, 1897-1901, William McKinley. All important national statistics are given in preceding pages under appropriate titles; the material interests of the States and Territories will be found in detail under their respective titles; and a vast amount of information of a national, political, social, and general character, compiled from the latest attainable reports, is given under titles that the subjects readily suggest. To bring official information as close in time to the completion of this work, a number of subjects are given under more than one title, as the

agricultural industry, first detailed under the title AGRICULTURE and afterward under that of INDUSTRY, AGRICULTURAL; foreign trade, under the titles of COMMERCE and of IMPORTS AND EXPORTS; education, under its own title as well as under a number of cognate titles; mineral resources in group under that title, and the principal productions under their own titles, etc. The broad subject of national finances is explicitly set forth under the titles BANKS AND BANKING; CURRENCY; GOLD; NATIONAL BANKS; and in the biographies of Presidents Cleveland and McKinley, and Secretary Carlisle. The most striking features of recent national legislation will be found in the biographies of the two presidents and under the titles of persons or subjects most intimately associated with the legislation. Separate treatment is given to the leading religious organizations and to the largest educational institutions, each under its own title. Events of large public interest, not national in character, are noted with adequate fullness under suggestive titles. In a word, the movement of the country, in the period covered by this work and in all its essential parts, is portrayed with a particularity comporting with the purpose of this work under titles so suggestive of the subjects that there need be no difficulty in finding any desired information. This elementary treatment renders superfluous such a consideration of the UNITED STATES OF AMERICA as is given to other countries.

The War with Spain.—The principal events in the opening months of 1898, which form a part of the history of the war, have been narrated under the titles CUBA; HAVANA; PHILIPPINE ISLANDS; and SPAIN. The following *resumé* is a continuation of the narrative under HAVANA. On April 7 the representatives of Great Britain, France, Germany, Russia, Italy and Austria-Hungary, called upon President McKinley in a body. Sir Julian Pauncefote, Ambassador Extraordinary and Plenipotentiary of Great Britain to the United States, as the representative of the Powers, presented the following:

"The undersigned representatives of Germany, Austria-Hungary, France, Great Britain, Italy and Russia, duly authorized in that behalf, address in the name of their respective governments a pressing appeal to the feelings of humanity and moderation of the President and of the American people in their existing differences with Spain.

"They earnestly hope that further negotiations will lead to an agreement which, while securing the maintenance of peace, will afford all necessary guarantees for the re-establishment of order in Cuba.

"The Powers do not doubt that the humanitarian and purely disinterested character of this representation will be fully recognized and appreciated by the American nation."

President McKinley's reply to the Powers was:

"The government of the United States recognizes the good will which has prompted the friendly communication of the representatives of Germany, Austria-Hungary, France, Great Britain, Italy, and Russia, as set forth in the address of your excellencies, and shares the hope therein expressed that the outcome of the situation in Cuba may be the maintenance of peace between the United States and Spain by affording the necessary guarantee for the re-establishment of order in the island, so terminating the chronic condition of disturbance there which so deeply injures the interests and menaces the tranquillity of the American nation by the character and consequences of the struggle thus kept up at our doors, besides shocking its sentiment of humanity.

"The government of the United States appreciates the humanitarian and disinterested character of the communication now made, on behalf of the Powers

named, and for its part is confident that equal appreciation will be shown for its own earnest and unselfish endeavors to fulfill a duty to humanity by ending a situation the indefinite prolongation of which has become insufferable."

On April 11 the special message of the President on the situation, which had been delayed for reasons already given, was sent to Congress. It was a lengthy document, reviewing the history of the revolution in Cuba since 1895; reciting numerous precedents bearing on the questions of recognition, intervention, and independence; and declaring reasons which he claimed justified the United States in intervening. The message concluded as follows:

"In view of these facts and of these considerations, I ask Congress to authorize and empower the President to take measures to secure a full and final termination of hostilities between the government of Spain and the people of Cuba, and to secure in the island the establishment of a stable government, capable of maintaining order and observing its international obligations, insuring peace and tranquillity and the security of its citizens, as well as our own, and to use the military and naval forces of the United States as may be necessary.

"And in the interest of humanity and to aid in preserving the lives of the starving people of the island, I recommend that the distribution of food and supplies be continued, and that an appropriation be made out of the public treasury to supplement the charity of our citizens.

"The issue is now with the Congress. It is a solemn responsibility. I have exhausted every effort to relieve the intolerable condition of affairs which is at our doors. Prepared to execute every obligation imposed upon me by the Constitution and the law, I await your action."

Events now moved quickly. On April 13 the House of Representatives adopted the following resolution by a vote of 322 to 19:

"*Whereas*, The government of Spain for three years past has been waging war on the island of Cuba against a revolution by the inhabitants thereof without making any substantial progress toward the suppression of said revolution, and has conducted the warfare in a manner contrary to the laws of nations by methods inhuman and uncivilized, causing the death by starvation of more than 200,000 innocent non-combatants, the victims being for the most part helpless women and children, inflicting intolerable injury to the commercial interests of the United States, involving the destruction of the lives and property of many of our citizens, entailing the expenditure of millions of money in patrolling our coasts and policing the high seas in order to maintain our neutrality; and,

Whereas, This long series of losses, injuries, and murders for which Spain is responsible has culminated in the destruction of the United States battleship *Maine* in the harbor of Havana and in the death of 260 of our seamen;

Resolved, By the Senate and House of Representatives of the United States of America in Congress assembled, that the President is hereby authorized and directed to intervene at once to stop the war in Cuba, to the end and with the purpose of securing permanent peace and order there and establishing by the free action of the people thereof a stable and independent government of their own in the island of Cuba; and the President is hereby authorized and empowered to use the land and naval forces of the United States to execute the purpose of this resolution."

The Senate on the 16th adopted the following resolutions by a vote of 67 to 21, the recognition amendment passing by a vote of 51 to 37:

"Joint resolutions for the recognition of the independence of the people and Republic of Cuba, demanding that the government of Spain relinquish its author-

ity and government in the island of Cuba, and withdraw its land and naval forces from Cuba and Cuban waters, and directing the President of the United States to use the land and naval forces of the United States to carry these resolutions into effect.

Whereas, The abhorrent conditions which have existed for more than three years in the island of Cuba, so near our own borders, have shocked the moral sense of the people of the United States, have been a disgrace to Christian civilization, culminating, as they have, in the destruction of a United States battleship, with 266 of its officers and crew, while on a friendly visit in the harbor of Havana, and cannot longer be endured, as has been set forth by the President of the United States in his message to Congress of April 11, 1898, upon which the action of Congress was invited; therefore,

Resolved, By the Senate and House of Representatives of the United States of America, in Congress assembled,

"1. That the people of the island of Cuba are, and of right ought to be, free and independent, and that the government of the United States hereby recognizes the Republic of Cuba as the true and lawful government of that island.

"2. That it is the duty of the United States to demand, and the government of the United States does hereby demand, that the government of Spain at once relinquish its authority and government in the island of Cuba and withdraw its land and naval forces from Cuba and Cuban waters.

"3. That the President of the United States be and he hereby is directed and empowered to use the entire land and naval forces of the United States and to call into the actual service of the United States the militia of the several States to such extent as may be necessary to carry these resolutions into effect.

"4. That the United States hereby disclaims any disposition or intention to exercise sovereignty, jurisdiction or control over said island except for the pacification thereof; and asserts its determination, when that is accomplished, to leave the government and control of the island to its people."

It will be noticed that the House directed the President to intervene, which was the authority he sought, and that the Senate in addition to directing intervention recognized the Republic of Cuba, an act foreign to the President's policy. Both houses of Congress held an all-night session; the resolutions of each were sent to a conference committee; mutual concessions were made; and early in the morning of the 19th the Senate resolutions, with the part in the first recognizing the Republic of Cuba stricken out, were adopted. The vote in the Senate was 42 to 35, and in the House, 310 to 6.

On the 25th the President sent the following message to Congress:

"To the Senate and House of Representatives of the United States of America:

"I transmit to the Congress for its consideration and appropriate action copies of correspondence recently had with the representative of Spain in the United States, with the United States minister at Madrid, and, through the latter, with the government of Spain, showing the action taken under the joint resolution approved April 20, 1898, "for the recognition of the independence of the people of Cuba, demanding that the government of Spain relinquish its authority and government in the island of Cuba and withdraw its land and naval forces from Cuba and Cuban waters, and directing the President of the United States to use the land and naval forces of the United States to carry these resolutions into effect.

"Upon communicating to the Spanish minister in Washington the demand which it became the duty of the executive to address to the government of Spain

in obedience to said resolution, the minister asked for his passports and withdrew. The United States minister at Madrid was in turn notified by the Spanish minister for foreign affairs that the withdrawal of the Spanish representative from the United States had terminated diplomatic relations between the two countries and that all official communications between their respective representatives ceased therewith.

"I commend to your special attention the note addressed to the United States minister at Madrid by the Spanish minister for foreign affairs on the 21st inst., whereby the foregoing notification was conveyed. It will be perceived therefrom that the government of Spain, having cognizance of the joint resolution of the United States Congress, and in view of the things which the President is thereby required and authorized to do, responds by treating the reasonable demands of this government as measures of hostility, following with that instant and complete severance of relations by its action, which by the usage of nations accompanies an existent state of war between sovereign powers.

"The position of Spain being thus made known, and the demands of the United States being denied with a complete rupture of intercourse by the act of Spain, I have been constrained in exercise of the power and authority conferred upon me by the joint resolution aforesaid, to proclaim under date of April 22, 1898, a blockade of certain ports of the north coast of Cuba lying between Cardenas and Bahia Honda, and of the port of Cienfuegos on the south coast of Cuba, and further in exercise of my Constitutional powers, and using the authority conferred upon me by the act of Congress approved April 22, 1898, to issue my proclamation dated April 23, 1898, calling for volunteers in order to carry into effect the said resolution of April 20, 1898. Copies of these proclamations are hereto appended.

"In view of the measures so taken, and with a view to the adoption of such other measures as may be necessary to enable me to carry out the expressed will of the Congress of the United States in the premises, I now recommend to your honorable body, the adoption of a joint resolution declaring that a state of war exists between the United States of America and the Kingdom of Spain, and I urge speedy action thereon to the end that the definition of the international status of the United States as a belligerent power may be made known, and the assertion of all its rights and the maintenance of all its duties in the conduct of a public war may be assured."

In response to this Congress immediately made a formal declaration of war in the following terms:

"1. That war be, and the same is, hereby declared to exist, and that war has existed since the 21st day of April A. D. 1898, including said day, between the United States of America and the Kingdom of Spain.

"2. That the President of the United States be and he is hereby directed and empowered to use the entire land and naval forces of the United States and to call into the actual service of the United States the militia of the several States to such extent as may be necessary to carry this act into effect."

This was succeeded on the following day by the executive proclamation:

"By the President of the United States of America.

"Whereas, By an act of Congress approved April 25, 1898, it is declared that war exists and that war has existed since the 21st day of April, A. D., 1898, including said day, between the United States of America and the Kingdom of Spain, and,

"Whereas, It being desirable that such war should be conducted upon princi-

ples in harmony with the present views of nations and sanctioned by recent practice, it has already been announced that the policy of this government will be not to resort to privateering, but to adhere to the rules of the declaration of Paris.

"Now, therefore I, William McKinley, President of the United States of America, by virtue of the power vested in me by the Constitution and the laws, do hereby declare and proclaim:

"1. The neutral flag covers enemy's goods excepting contraband of war

"2. Neutral goods not contraband of war are not liable to confiscation under the enemy's flag.

"3. Blockades, in order to be binding, must be effective.

"4. Spanish merchant vessels in any ports or places within the United States shall be allowed until May 21, 1898, inclusive, for loading their cargoes and departing from such ports or places, and such Spanish merchant vessels if met at sea by any United States ship, shall be permitted to continue their voyage if on examination of their papers it shall appear that their cargoes were taken on board before the expiration of the above terms, provided that nothing herein contained shall apply to Spanish vessels having on board any officers in the military or naval service of the enemy, or any coal (except such as may be necessary for their voyage), or any other article prohibited or contraband of war, or any dispatch of or to the Spanish government.

"5. Any Spanish merchant vessel which, prior to April 21, 1898, shall have sailed from any foreign port bound for any port or place in the United States, shall be permitted to enter such port or place, and to discharge her cargo and afterward forthwith to depart without molestation, and any such vessel, if met at sea by any United States ship, shall be permitted to continue her voyage to any port not blockaded.

"6. The right of search is to be exercised with strict regard for the right of neutrals and the voyages of mail steamers are not to be interfered with except on the clearest ground of suspicion of a violation of law in respect to contraband or blockade."

This concludes the United States documentary narrative up to May 1.

On April 22 both houses of Congress adopted a conference report on the Volunteer Army bill, under which the president, on the following day, issued a call for 125,000 volunteers to serve for two years unless sooner discharged. A similar report on a bill to reorganize the regular army, which increased its strength to 61,010 officers and men, was adopted on the 26th. The same day a war revenue bill was favorably reported from the Ways and Means Committee of the House. This provided for internal taxation similar to the law in force during the civil war, which it was believed would yield about \$100,000,000 additional revenue, and also for the issue of \$500,000,000 in 3 per cent. bonds. Under this bill the secretary of the treasury was authorized to borrow at any time not to exceed \$100,000,000, to be represented by certificates of indebtedness payable within a year from date of issue. The bill was passed in the House on April 29, by a vote of 181 to 131. Recruiting for both the regular and the volunteer army was actively begun, and within a week over 600,000 men volunteered their services. The greater part of the volunteers selected represented the militia of the various States. On May 2 the Senate adopted a war emergency appropriation bill of \$35,000,000 without debate. Up to the night of May 8 the United States blockading squadron at Cuba had captured 27 vessels of all kinds, and Spanish war ships had captured an American bark and a schooner.

UNIVERSITY OF SOUTHERN CALIFORNIA, Los Angeles, Cal., Methodist Episcopal; co-educational; had at close of 1895, 54 professors and instructors; 400 students; 4,000 volumes in library; \$150,000 in productive funds; \$25,000 income; president, J. P. Widney, A.M., M.D.

UNIVERSITY OF THE SOUTH, Sewanee, Tenn., Protestant Episcopal; co-educational; had at close of 1895, 29 professors and instructors; 296 students; 36,000 volumes in library; \$127,845 in productive funds; \$457 gifts; \$30,304 income; president, B. Lawton Wiggins, M.A.

URUGUAY, a republic in South America; area, 72,110 square miles; population (1895), 824,515; president, J. Idiarte Borda, elected for the term 1894-98; assassinated at Montevideo, Aug. 25, 1897; succeeded, pending the presidential election, by Señor Cuestas, president of the senate.

Finances.—The revenue in 1894-95, was \$15,347,062 (the dollar or peso being equal to \$1.03 in United States gold); expenditure, \$15,982,150; and receipts from customs, \$10,106,806; and the estimated revenue in 1896-97 was \$15,924,820; expenditure, \$15,885,605. The public debt in 1896 was \$118,479,725, and the total value of real property (1895) was \$275,806,015, of which the department of Montevideo was credited with \$128,503,716.

Commerce.—In 1896 the total imports and exports amounted to \$55,933,257. The exports were 4,872,899 more than the imports. In 1895 there was a difference of over \$7,000,000 in favor of the exports. The total customs receipts in 1896 were \$10,261,829—\$8,726,975 for import duties and \$1,534,854 for export duties. These returns were some \$360,000 less than during the preceding year.

Industries.—The chief industry is the breeding of cattle and sheep. In 1895 there were 5,247,871 head of cattle, 388,348 horses, 14,087 mules, and 14,333,626 sheep, and the total value of all herds and flocks was estimated at \$73,038,000. The agricultural population comprises 10,853 land owners, 10,192 tenants of farms, and 10,963 persons working for wages; 36,497 plows and 113,160 oxen are employed. Over 6,000 acres are devoted to viticulture and 15,695,319 vines have been planted. The production of wheat in 1894-95 amounted to 230,000,000 kilograms (226,383 tons), of which 11,000,000 kilograms were used for home consumption and for sowing, 80,000,000 kilograms were exported in grain, and 25,000,000 kilograms in flour. The surplus stock was 25,000,000 kilograms. The production of maize during 1894-95 was estimated at 180,000,000 kilograms (177,155 $\frac{1}{2}$ tons), of which 80,000,000 kilograms were exported. The total value of the production was about 1,530,000 gold piasters (\$1,582,120). There are several gold mines in operation in the northern departments, and throughout the country are valuable deposits of silver, copper, lead, magnesium, and lignite coal. The yield of gold in 1895 was 61,126 grammes.

Army and Navy.—The permanent army consists of 233 officers and 3,222 men; the national guard of 20,000 men; and the armed police of 3,200 men. For naval strength see NAVIES OF THE WORLD.

Communications.—In 1895 there were 995 miles of railroad in operation and 190 miles under construction; 4,380 miles of telegraph lines, of which 982 miles belonged to the railroads, with 97 offices; and 617 post-offices. The merchant marine comprised 19 steamers and 45 sailing vessels.

Churches and Schools.—The State religion is the Roman Catholic, but all beliefs are tolerated. Primary education is compulsory, and for it the State appropriates annually about \$650,000. In 1895 there were 523 public elementary schools, with 1,013 teachers, and 50,012 enrolled pupils; and 369 private schools, with 922 teachers and 21,909 pupils. For higher and special instruction there are

a university at Montevideo, separate normal schools for males and females, a State school of arts and trades, a military college, and many high-grade denominational schools. The State also maintains a national library and a national museum.

Recent Events.—The insurrection that broke out early in 1897 spread rapidly into the interior, gained a strength of over 9,000 men, and proved superior to the government troops in engagements at San José, Tacuarembó, and elsewhere, was terminated by a treaty between the government and the insurgents in September. This act was followed by a reconstruction of the cabinet, Oct. 7, with the following ministers: Government, Eduardo Maccachen; public works, Dr. Jacob A. Varela; finance, Dr. Juan Campisteguy; navy and war, Lieut.-Gen. Luis E. Perez; and foreign relations, M. Ferreira. After the assassination of President Borda, just as he was leaving the cathedral, where a *Te Deum* had been sung, Aug. 25, Señor Cuestas, who assumed the presidency *ad interim*, issued a declaration of policy, promising to conduct the administration with strict economy, to purge the public departments, and to pay the interest on the public debt. In November several prominent men were exiled for political reasons.

U. S. GRANT UNIVERSITY, Chattanooga, Tenn., Methodist Episcopal; co-educational; had at close of 1895, 59 professors and instructors; 612 students; 6,000 volumes in library; \$6,221 income; president, I. W. Joyce, LL.D.

U. S. MILITARY ACADEMY, West Point, N. Y., had at close of 1897, 56 professors and instructors; 337 students; \$2,000,000 invested in grounds and buildings; \$500,000 in scientific apparatus; 40,098 volumes in the library; income, fluctuating congressional appropriation (in 1896, \$453,140); commandant, Col. O. H. Ernst, U. S. A.

U. S. NAVAL ACADEMY, Annapolis, Md., had at close of 1897, 67 professors and instructors; 262 students; \$415,800 invested in grounds and buildings, besides practice vessels; 37,000 volumes in the library; income, fluctuating congressional appropriation (in 1896, \$361,000); commandant, Capt. Philip H. Cooper, U. S. N.

UTAH, one of the United States of North America; admitted to the Union Jan. 4, 1896; counties, 27; capital, Salt Lake City.

State Officers, 1896-1901.—Governor (first elected for 5 years, his successors for 4, salary \$2,000 per annum), Heber M. Wells; secretary of state, J. T. Hammond; treasurer, James H. Chapman; auditor, Morgan Richards, Jr.; attorney-general, A. C. Bishop; adjutant-general, John Q. Cannon; coal-mine inspector, Thomas Lloyd; superintendent of public instruction, John R. Park; chief justice of the supreme court, Charles S. Zane; associate justices, George W. Bartsch, and J. A. Miner—all Republicans.

Elections.—In the elections for the first State officers 1895 there was a total of 41,403 votes cast for governor, of which the Republican candidate (Wells) received 20,833; the Democratic candidate (Caine), 18,519; and the Populist candidate (Lawrence), 2,051; Republican plurality, 2,314. On adoption of the State constitution, the vote was: For, 31,385; against, 7,687; not voting, 2,670. In the presidential election 1896, the Democratic-Populist candidate received 67,431 votes, and the Republican candidate 13,418.

Legislature, 1897.—Republicans, house 3, joint ballot 3; Democrats, senate 18, house 42, joint ballot 60; Democratic majority, senate 18, house 39, joint ballot 57.

Farm Products.—Reported Dec. 31, 1897: Corn, 186,494 bush., from 8,477 acres, value \$102,572; wheat, 3,190,740 bush., from 151,940 acres, value \$2,169,-

703; oats, 838,355 bush., from 23,953 acres, value \$276,657; barley, 183,520 bush., from 5,920 acres, value \$82,584; rye, 42,698 bush., from 3,558 acres, value \$25,618; potatoes, 783,364 bush., from 5,293 acres, value \$235,009; and hay, 540,396 tons, from 183,185 acres, value \$2,566,881.

Farm Animals.—Reported Jan. 1, 1898: Horses, 67,619, value \$1,163,489; mules, 1,615, value \$42,218; cows, 55,564, value \$1,330,758; cattle, 322,464, value \$5,725,345; sheep, 1,978,457, value \$4,144,868; and swine, 47,335, value \$298,471—total value, \$12,505,149.

Mineral Products.—The following is a summary of the output of 1894: Gold, 56,427 fine oz., value \$1,128,540; silver, 6,659,798 fine oz., value \$4,193,674.80; unrefined lead, 55,551,663 lbs., value \$888,826.60; refined lead, 202,500 lbs., value \$62,977.50; and copper, 1,066,160 lbs., value \$53,308—total export value, \$6,327,326.90, equal to a mint and seaboard valuation of \$11,631,402.72. The gold output of 1895 was estimated at 66,419 fine oz., value \$1,373,000; silver, 7,468,100 fine oz., coining value \$9,655,720—total value, \$11,028,720.

Manufactures.—In 1894 there were 880 industrial establishments, having a combined capital of \$5,476,246 and plants valued at \$5,986,215; employing 11,280 horse-power and 5,054 persons; paying \$2,027,118 for wages and \$2,610,038 for materials; and having an output valued at \$6,678,118.

Commercial Interests.—The whole number of commercial establishments 1894 was 1,974, operated on a capital of \$14,551,345; employing 5,023 persons; paying \$2,685,794 in wages; and having sales of \$32,865,611.

Finances.—On Jan. 1, 1897, the total debt was \$900,000. The total assessed valuation 1896 was \$107,000,000; estimated real value, \$250,000,000.

Banks.—On Oct. 31, 1897, there were 11 national banks in operation and 6 in liquidation, the active ones having a combined capital of \$1,750,000, and holding \$812,500 in United States bonds. These banks had outstanding on loans and discounts, \$2,461,804; held an aggregate of \$751,497 in coin and coin certificates; had outstanding circulation, \$772,229; deposits, \$3,836,420; reserve, \$1,654,446; and ratio of reserve, 43.12 per cent. The State banks, June 30, 1897, numbered 8, and had capital, \$696,800; deposits, \$701,986; resources, \$1,557,060; and surplus and profits, \$88,318. There were 7 stock savings banks, with capital \$600,000; check deposits, \$473,457; and savings deposits, \$1,187,257; resources, \$2,415,716; and surplus, \$76,722.

Internal Revenue.—The collections and details of taxable manufactures in Utah and Idaho are included in the totals for Montana (*q. v.*).

Railroads.—On June 30, 1895, there was a total of 1,376.09 miles of steam railroad track, and 90 miles of electric and steam street and suburban railway. Reports of the operating corporations at the end of 1894 showed: Capital stock, \$17,670,000; funded debt, \$17,143,000; total investment, \$32,182,765; cost of roads and equipments, \$31,590,272; gross earnings, \$2,278,968; net earnings, \$713,074; and interest paid on bonds, \$614,888.

Publications.—Reported March, 1898: Daily, 7; tri-weekly, 2; semi-weekly, 6; weekly, 49; semi-monthly, 2; and monthly, 8.

Post-Offices.—Reported January, 1897: First-class, 1; second-class, 1; third-class, 5 (presidential, 7); fourth-class, 302; money-order offices, 81; and limited money-order offices, 3.

Churches.—The Church of Jesus Christ of Latter-Day Saints is the strongest denomination in the State, and is followed in their order by the Roman Catholic; Methodist Episcopal; Protestant Episcopal; Presbyterian, North; and Congregational. The new Mormon temple at Salt Lake City, completed 1893, represents 40 years of irregular work, and cost \$1,000,000. At the Eighth International

Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Utah, 120 evangelical Sunday schools, 767 officers and teachers, and 7,920 scholars—total members, 8,687, a gain of 1,366 in three years.

Schools.—The constitution provides for a public school system which shall include kindergarten schools; common schools with primary and grammar grades; high schools; an agricultural college; a State university; and such other schools as may be deemed necessary. At the end of the school year 1895-96 the number of children of school age in the State was estimated at 83,870, of whom 66,710 were enrolled in the public schools, and 45,658 were in average daily attendance. There were 1,185 teachers; public school property valued at over \$2,471,338; and expenditures, excluding payments on debt, \$849,730. There were 2 public high schools; a private normal college; 14 denominational and private secondary schools, with 47 teachers, 1,203 pupils, 13,652 volumes in the libraries, grounds and buildings valued at \$391,200, and income from all sources of \$68,448; an Agricultural College, at Logan; and a State School for the Deaf at Salt Lake City. The agricultural college 1896 had an experimental staff, 7; faculty, 21; students, 489; volumes in the library, 2,899; acres under cultivation 103; value of farm lands, \$26,800; and special buildings and equipments valued at \$190,000. The receipts included \$23,500 from the State; \$21,000 from the Federal government under the law of 1890, and \$15,000 for support of the experiment station; and the expenditures included \$17,152 for the college and \$16,468 for the experiment station.

Libraries.—In 1896 there were reported 11 public libraries of 1,000 volumes and upward each, with a total of 49,582 bound volumes and 18,002 pamphlets.

Constitution.—The new constitution prohibits polygamous or plural marriages; guarantees absolute freedom of conscience; prohibits the domination of any church in State matters and the appropriation of any kind of property for sectarian purposes; extends to male and female citizens alike all civil, political, and religious rights and privileges; declares for the preservation of secrecy in voting; and forbids the legislature to authorize the State or any political subdivision of it to lend its credit in any manner to any private individual or corporate enterprise. The supreme court will consist of three judges till 1905, when the legislature may increase the number to five. The State is divided temporarily into 7 judicial, 18 senatorial, and 45 representative districts. Arthur Brown and Frank J. Cannon were elected the first United States senators, for the short and long terms respectively, and Clarence E. Allen, representative for the State at large in the House—all Republicans.

Population.—In 1890, 207,905, of whom 110,463 were males; 97,442 females; 151,841 natives; 53,064 foreign-born; 205,899 whites; and 2,006 colored of all races. The territorial census of 1895 showed a total of 247,324, of whom 126,803 were males; 120,521 females; 194,825 natives; 52,499 foreign-born; 245,985 whites; 571 colored; and 768 Chinese. The most populous counties were: Salt Lake, 68,182; Utah, 29,229; Weber, 25,015; Cache, 18,286; Sanpete, 15,538; Summit, 9,631; Boxelder, 8,331; Sevier, 7,893; Davis, 7,480; Juab, 6,466; Millard, 5,375; all others, below 5,000. On June 1, 1897, the United States government actuary estimated the population at 272,000.

UTAH, UNIVERSITY OF, Salt Lake City, Utah, non-sectarian; co-educational; had at close of 1897, 32 professors and instructors; 567 students; 100 scholarships; 16,000 volumes in library; \$700,000 in grounds and buildings; \$30,000 in scientific apparatus and library; \$2,470 gifts; \$42,000 income; president, Joseph T. Kingsbury, Ph.D.

UTICA, city, capital of Oneida county, N. Y.; population (1890), 44,007. In 1896 the assessed valuations were: Real estate, \$16,437,262; personal property, \$2,613,826—total, \$19,051,088; tax rate, \$22.02 per \$1,000. The total debt, Feb. 1, 1897, was \$486,237. The city has 100 miles of streets, of which 32 are paved; 70 miles of sewers; waterworks plant operated by a private company, with 70 miles of mains; 4 national banks, with capital, \$1,700,000; deposits, \$3,239,092; and resources, \$6,861,167; 3 State banks; 47 churches; 20 buildings used for public school purposes; public school property valued at \$500,000; 8 public libraries of all kinds; and 4 daily, 2 semi-weekly, 9 weekly, and 5 monthly periodicals. The annual cost of maintaining the city government is about \$420,000; the public schools, \$150,000; the police department, \$28,000; the fire department, \$42,000; and electric street lighting, \$52,000.

VANDERBILT UNIVERSITY, Nashville, Tenn., Methodist Episcopal Church, South; co-educational; had at close of 1897, 90 professors and instructors; 725 students; 13 fellowships; 27 scholarships; 18,000 volumes in library; \$1,100,000 in productive funds; \$557,000 in grounds and buildings; \$155,000 in scientific apparatus and library; \$100,000 income; president, J. H. Kirkland, LL.D., PH.D.

VAN DYKE, HENRY, D.D., clergyman and author, was born in Germantown, Pa., Nov. 10, 1852. He was Lyman Beecher lecturer at Yale Seminary in 1895-96, and among his late publications are: *The Story of the Other Wise Man*; *Little Reveries*; *Responsive Readings*; *The Gospel for an Age of Doubt* (1896); and *The Builders and Other Poems* (1897).

VAN DYKE, JOHN CHARLES, L.H.D. art critic, was born in New Brunswick, N. J., April 21, 1856. Among his recent publications are *Modern French Masters* (1896) and *Old Dutch and Flemish Masters* (1897).

VASSAR COLLEGE, Poughkeepsie, N. Y., non-sectarian; for women only; had at close of 1897, 59 professors and instructors; 600 students, 30,000 volumes in library; \$823,917 in grounds and buildings; \$163,709 in scientific apparatus and library; \$1,031,223 in productive funds; \$10,000 gifts; \$269,099 income; president, James M. Taylor, D.D., LL.D.

VAUX, CALVERT, architect, landscape gardener, and in association with Frederick Law Olmsted, designer of the landscape features of Central Park, New York City, was born in London, England, Dec. 20, 1824; died in Bensonhurst, Long Island, N. Y., Nov. 19, 1895. At the time of his death he was landscape architect of the Department of Parks, New York City.

VAUX, RICHARD, lawyer and penologist, was born in Philadelphia, Pa., Dec. 19, 1816; died there, March 22, 1895.

VEDDER, ELIHU, painter, was born in New York City, Feb. 26, 1836. In 1896 he completed a series of five mural paintings for the new Congressional Library at Washington, typifying *Government*; *Good Administration*; *Anarchy*; *Peace and Prosperity*; and *Corrupt Legislation*.

VENEZUELA, a republic in South America; area, as claimed by the government, 593,943 square miles; population (1891), 2,323,527; capital, Caracas; president, for 1894-98, Joaquin Crespo; for 1898-1902, Ignacio Andrade.

Finances.—The revenue in the fiscal year 1894-95 was \$9,731,359; expenditure, \$8,778,305; estimated revenue and expenditure for 1896-97, each about \$8,060,000. The outstanding foreign debt in 1896 was \$12,863,448, and arrears, \$165,173; outstanding internal debt, \$12,162,866. The issue of \$13,000,000 in bonds of a new debt, for the purpose of unifying the internal debt, was authorized in April, 1896. Later in the year the government hypothecated 54 per cent. of the customs revenue to the service of the external and internal debt.

Commerce.—In the fiscal year 1893-94 the imports were valued at about \$13,580,000, and the exports at \$21,731,018. The principal imports are articles of food and drink, coal, manufactured articles, and hardware; principal exports, coffee, cocoa, cattle, hides, and skins. Among the exports were gold in bars valued at \$826,523, and gold and silver coin, \$569,885. The merchant marine comprised 8 steamers and 14 sailing vessels.

Industries.—The country is rich in metals and other minerals, gold abounding in the Yuruari territory, and silver in the states of Bermudez, Lara, and Los Andes. A fifth of the population is engaged in agriculture, and of the total area 134,862 square miles are agricultural, 156,330 pastoral, and 302,973 forest. The number of cattle was estimated in 1895 at from 4,000,000 to 5,000,000.

Army and Navy.—The standing army consists of 11 battalions, with a total of about 4,000 men, which are dispersed over the country. There is also a national militia in which every male citizen 18 to 45 years old must be enrolled. In times of emergency this branch has mustered 60,000 men, and under the law the government can draw upon it for 250,000 men. The navy consists of 3 steamers and 2 sailing vessels.

Communications.—In 1896 there were over 400 miles of railroads in operation, and 1,000 miles under construction; 200 post-offices; 3,882 miles of telegraph lines, with 113 officers; and 2 telephone companies in operation.

Churches and Schools.—The state religion is the Roman Catholic; all other denominations are tolerated under restrictions. Education is both free and compulsory. The latest official reports show totals of 1,415 federal and 151 state schools for primary instruction, with over 100,000 pupils; an expenditure for the federal schools of \$500,759; 2 universities, 22 federal colleges, 11 national colleges for girls, 8 barrack schools, 4 normal schools, college of arts and trades, school for fine arts, polytechnic school, colleges for music, and a nautical school; and an expenditure for federal schools of \$669,124. There were also 26 private colleges. A national library and a national museum are at Caracas.

Recent Events.—Much of the story of the complications arising from the controversy between Venezuela and Great Britain over the boundary between Venezuela and British Guiana has been narrated under the title of *BOUNDARY LINES (q. v.)*. The commission appointed by President Cleveland invited the government of Venezuela and Great Britain to formulate and present to it their respective cases in support of their claims. The invitation was complied with by both governments. Independently of these cases the commission gathered a great mass of evidence bearing on the claims, and continued its sittings till Feb. 27, 1897, when, Venezuela and Great Britain having signed a treaty providing for the submission of the claims to arbitration, the commission considered its work at an end, made its report to the President, and terminated its existence. The treaty between Venezuela and Great Britain was signed in Washington, D. C., on Feb. 2, 1897, and provided for the appointment of an arbitral tribunal, to determine the boundary line, consisting of five jurists, the two on the part of Venezuela being Chief Justice Fuller and Associate Justice Brewer, of the United States Supreme Court; the two on the part of Great Britain being the Rt. Hon. Baron Herschell and the Hon. Sir Richard Henn Collins; and the fifth to be selected by the four jurists nominated in the treaty, or, in the event of their failure to agree, by the King of Norway and Sweden, the fifth jurist to be the president of the tribunal. The treaty provided that the tribunal should sit in Paris, France, at a period that will be reached in 1898. In October, 1897, the tribunal was completed by the selection of Professor Maertens, a distinguished Russian jurist, professor of international law in the University of St. Petersburg, and legal writer, as the fifth member and president.

VERDI, GIUSEPPE, composer, was born in Roncole, Italy, Oct. 9, 1813. In 1897 he was spending his time and a considerable sum of money in erecting an asylum for superannuated musicians in Milan. The building will cost 500,000 francs, and the composer has promised to bequeath a fund that will yield an annual income of 70,000 francs for its support.

VERLAINE, PAUL, poet, was born in Metz, Lorraine, March 30, 1844; died in Paris, France, Jan. 8, 1896.

VERMONT, one of the United States of North America; admitted to the Union March 4, 1791; counties, 14; capital, Montpelier.

State Officers, 1896-98.—Governor (elected for 2 years, salary \$1,500 per annum), Josiah Grout; lieutenant-governor, Nelson W. Fisk; secretary of state, Chauncey W. Brownell; treasurer, Henry F. Field; auditor, Franklin D. Hale; superintendent of education, Mason S. Stone; adjutant-general, T. S. Peck; chief justice of the supreme court, Jonathan Ross; associate justices, Loveland Munson, John W. Rowell, Russell S. Taft, Henry R. Start, L. H. Thompson, and James M. Tyler; clerk, M. E. Smilie—all Republicans.

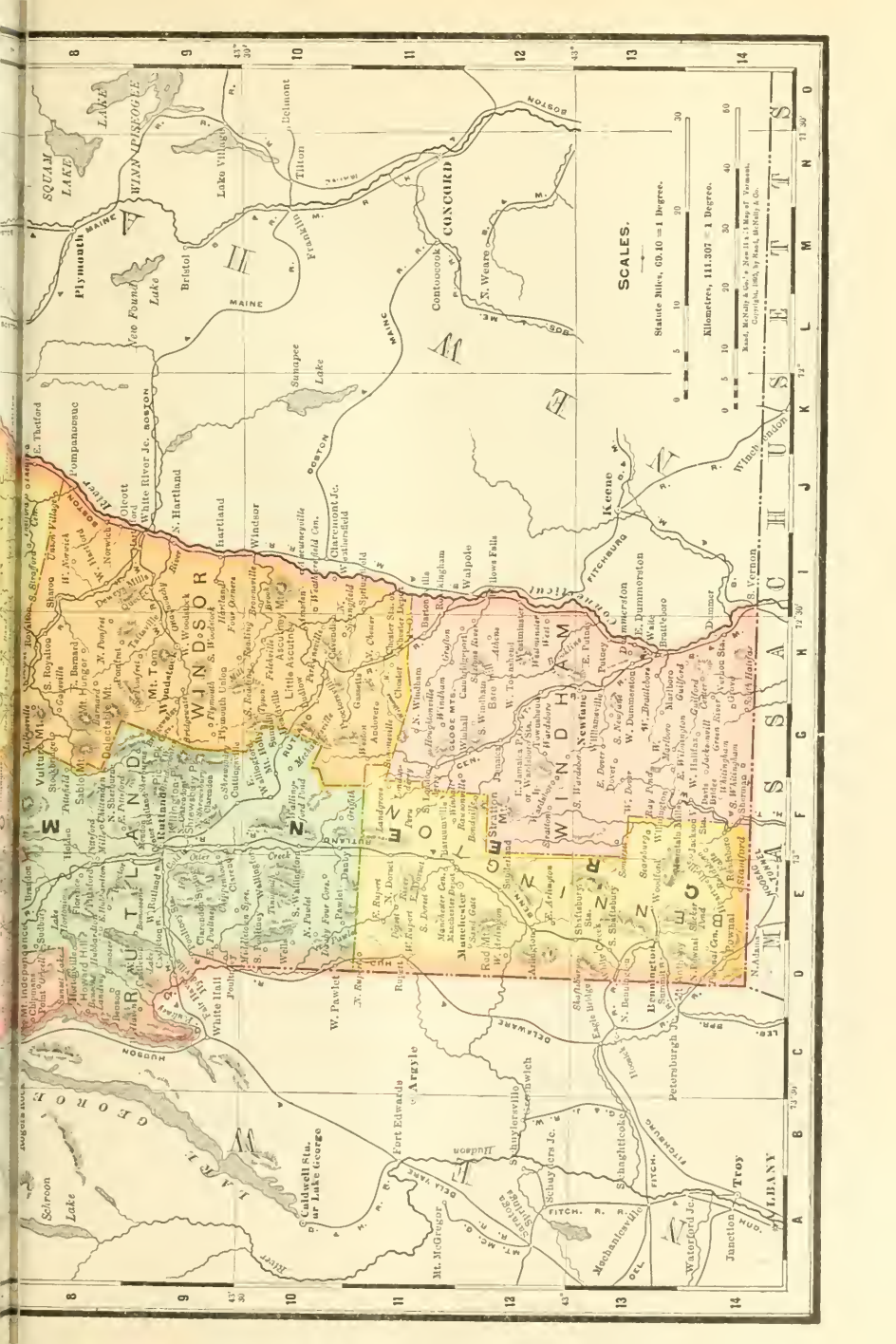
Legislature, 1897.—Republicans, senate 30, house 228, joint ballot 258; Democrats, house 17, joint ballot 17; Republican majority, senate 30, house 211, joint ballot 241.

Elections.—Vermont was the first of the Northern States to hold a State election after the presidential campaign of 1896 had opened, and though strongly Republican much significance was attached to the result because of the greatly increased Republican plurality, with four tickets in the field. The total vote for governor, as officially announced was 69,922, of which the Republican candidate (Grout) received 53,246; the Democratic candidate (Jackson), 14,855; the Prohibition candidate (Whittemore), 729; the Populist candidate (Battell), 687; and scattering, 55; Republican plurality, 38,391, and majority over all, 36,930. This was the largest plurality the State had ever given a Republican candidate, and an increase of 16,724 over that of 1892 and 9,870 over that of 1894. The Congressional elections resulted in the choice of the Republican candidates in both districts. On Oct. 20, the legislature re-elected Justin S. Morrill to the United States Senate, giving him the total vote of the senate, 30, all Republican, and 217 votes in the house to 17 for Herbert F. Brigham, Democrat. In the presidential election the Republican candidate received 51,127 votes; the Democratic, 10,640; the National Democratic, 1,331; and the Prohibition, 731.

Farm Products.—Reported Dec. 31, 1897: Corn, 1,583,295 bush., from 45,237 acres, value \$680,817; wheat, 59,806 bush., from 3,518 acres, value \$62,198; oats, 3,497,043 bush., from 105,971 acres, value \$1,119,054; barley, 500,000 bush., from 17,563 acres, value \$230,251; buckwheat, 248,856 bush., from 10,369 acres, value \$114,474; rye, 51,296 bush., from 3,206 acres, value \$30,778; potatoes, 1,664,810 bush., from 23,783 acres, value \$1,165,367; hay, 1,107,950 tons, from 852,269 acres, value \$10,248,538—total value, \$13,651,477.

Farm Animals.—Reported Jan. 1, 1898: Horses, 85,669, value \$3,761,069; cows, 266,276, value \$7,256,021; cattle, 135,139, value \$2,982,522; sheep, 151,107, value \$543,897; and swine, 75,453, value \$594,194—total value, \$15,137,703.

Mineral Products.—The principal mineral productions of commercial value are those connected with the *quarrying* industry, and the value of the various outputs in the calendar year 1895 was as follows: Granite, \$1,007,718, a steady increase and the largest production ever reached in the State; slate, \$625,331, green and purple shades, and second largest output in the country; marble, \$1,321,598, a decrease, but yet nearly one-half of the total product of the coun-



try; and limestone, \$300,000, a decrease and about one-half burned into lime. Twenty clay-working plants had an aggregate output of \$132,544, principally common and pressed brick.

Finances.—On July 1, 1896, the total resources of the State were \$573,938. The assessed valuations in 1896 were: Real estate, \$113,700,464; personal, \$60,996,759—total \$174,697,223; and the State tax rate was \$1 per \$1,000. The total debt, Jan. 1, 1897, was \$258,443. Gov. Woodbury, in his retiring message to the legislature, Oct. 8, 1896, showed that the per centage of total annual expenses in the last biennial period was 3.4 of the assessed valuation, and of the ordinary annual expenses, 2.8.

Banks.—On Oct. 31, 1897, there were 49 national banks in operation and 19 in liquidation, the active ones having a combined capital of \$6,985,000, and holding \$4,275,500 in United States bonds. These banks had outstanding on loans and discounts \$12,292,381; represented by demand paper with individual or firm names, \$1,599,213; the same secured by stocks, bonds, and other personal securities, \$842,088; time paper with two or more individual or firm names, \$6,700,094; time paper with single individual or firm name, \$1,278,101; and the same secured by stocks, bonds, and other personal securities, \$1,872,885. The banks held in coin and coin certificates \$638,412, of which \$499,402 was in gold coin. The circulation account was: Total issue, \$41,034,290; redeemed, \$37,169,129; outstanding, \$3,865,161. There were deposits \$9,423,903; reserve required, \$1,413,585; reserve held, \$2,999,590; ratio of reserve, 31.83 per cent. The mutual savings banks, June 30, 1897, numbered 42 and had depositors, \$106,169; deposits for savings, \$32,600,627; resources, \$35,526,021; and surplus, \$1,977,153.

Insurance.—The annual report of the insurance commissioners, covering the year 1895, showed that there were 39 fire companies from other States and countries and 3 home companies authorized to do business in the State; that there was an excessive fire loss in the State, \$1,265,254, and insurance loss, \$805,729; and that the premium receipts were \$799,071. Life companies numbered 25, of which only two were domestic; premium receipts were \$989,820, on policies aggregating \$5,413,230; and death losses paid, \$347,267. The assessment life companies issued policies to the amount of \$1,577,500; had premium receipts \$123,949, and paid losses, \$108,567. There were also 25 casualty and miscellaneous insurance companies, which received in premiums \$66,040.

Internal Revenue.—The collections and details of taxable manufactures are included in the totals for New Hampshire (*q. v.*).

Railroads.—On Jan. 1, 1896, the total main track mileage was 986; with secondary tracks, 1,064. There had been no material new construction in three years. A detailed report at the close of 1895 showed: Capital stock, \$19,745,323; funded debt, \$9,784,000; total investment, \$31,364,949; cost of roads and equipments, \$25,635,527; gross earnings, \$6,131,177; net earnings, \$1,573,572; interest paid on bonds, \$932,969; and dividends paid on stocks, \$134,636.

Commerce.—During the calendar year 1895 the imports of merchandise aggregated in value \$7,551,196; exports, \$7,959,577; in 1896 the imports were, \$5,999,137, and exports \$8,652,762; and in 1897 the imports were \$5,279,296, and exports, \$8,585,650.

Publications.—Reported March, 1898: Daily, 5; semi-weekly 1; weekly, 65; tri-monthly, 2; semi-monthly, 1; and monthly, 10.

Post-Offices.—Reported Jan. 1, 1897: First-class, 1; second-class, 8; third-class, 32 (presidential, 41); fourth-class, 517; money-order offices, 254; money-order stations, 1; and limited money-order offices, 2.

Churches.—The Roman Catholic is the strongest denomination in the State, and is followed in their order by the Congregational; Methodist Episcopal; Regular Baptist, North; Protestant Episcopal; Universalist; Free-will Baptist; Spiritualist; and Presbyterian. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Vermont 769 evangelical Sunday schools, 8,030 officers and teachers, and 56,339 scholars; total members, 64,369—gain in membership in three years, 1,110.

Schools.—At the end of the school year 1895-96, the number of children of school age in the State was estimated at 81,970, of whom 65,411 were enrolled in the public schools, and 46,261 were in average daily attendance. The public school system had 2,256 schoolhouses; 2,951 teachers; property valued at \$1,600,000; and total expenditures, \$1,067,727 of which \$599,069 was for salaries. Included in the system were 51 high schools, with 132 instructors, and 2,987 pupils. Of these schools 40 reported grounds, buildings, and apparatus valued at \$502,300, and 43 had 15,099 volumes in their libraries. The private secondary schools numbered 26, and had 140 instructors and 3,275 pupils; 18 reported grounds and buildings valued at \$617,550, and 20 had 21,504 volumes in their libraries. There were 3 public normal schools with 18 teachers and 367 students. The institutions of liberal arts were the University of Vermont and Middlebury College, which together had 57 professors and instructors; 521 students in all departments (442 males, 79 females); 115 scholarships; 66,695 volumes in the libraries; grounds and buildings valued at \$642,000; scientific apparatus and libraries valued at \$205,000; productive funds, \$783,890; and income, \$81,969. The agricultural and mechanical college, connected with the State University, had an experimental staff of 11; faculty, 21; students, 82; volumes in library, 49,695; acres under cultivation, 120, valued at \$23,000; and special buildings and equipments, valued at \$57,000. The Norwich University, at Northfield, an institute of technology, had 7 instructors, 60 students, 31 scholarships, and 5,000 volumes in the library; and the Mary Fletcher Hospital Training School for nurses, at Burlington, had 27 students. There were also a medical school, with 13 instructors and 190 students; 2 commercial and business colleges; and a State reform school at Vergennes.

Charitable Institutions.—A State hospital for the insane, to cost \$90,000, exclusive of ground, was nearing completion in 1896 at Waterbury, and there was a State soldiers' home at Bennington.

Libraries.—In 1896 there were reported 67 public libraries of 1,000 volumes each and upward, with a total of 359,213 bound volumes and 13,827 pamphlets.

Population.—In 1890, 332,422, of whom 169,327 were males; 163,095 females; 288,334 natives; 44,088 foreign-born; 331,418 whites; and 1,004 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 334,000.

VERMONT, UNIVERSITY OF, Burlington, Vt., non-sectarian; co-educational; had at close of 1897, 54 professors and instructors; 539 students; 75 scholarships; 50,077 volumes in library; \$600,000 in grounds and buildings; \$175,000 in scientific apparatus and library; \$406,000 in productive funds; \$70,582 income; president, Matthew H. Buckham, D.D.

VIAUD, JULIEN (better known as PIERRE LOTI), naval officer, member of the French Academy, and author, was born in Rochefort, France, Jan. 14, 1850. He published *Le Desert* in 1895, and in 1897 completed a prose drama in four acts and six scenes, with the title of the heroine, *Judith Renaudin*, the action being at the time of the revocation of the edict of Nantes.

VIENNA, city, capital of the dual kingdom of Austria-Hungary; population (1890), 1,364,548. The municipal crisis, which had existed for more than a year, and which is partly detailed under the title AUSTRIA-HUNGARY, was ended in May, 1896. Dr. Lüger, the anti-Semitic leader, was elected burgomaster of Vienna for the third time on April 18, and again the emperor rejected the choice. On May 6 the municipal council held another election and chose Herr Strohbach, a merchant, as burgomaster and Dr. Lüger as first vice-burgomaster. This action, while on its face terminating the struggle between the imperial government and the municipal government, in reality was tentative only, as Herr Strohbach in accepting the office declared that he would vacate it the moment Dr. Lüger should demand it. In November, 1897, the lower house of the Reichsrath was the scene of disgraceful and riotous demonstrations. The sittings were closed by Dr. Abrahamovics, the president, on the 24th and 25th, and on the 26th the rioting was so furious that the police were called in to protect the president and Premier Badini, and several of the most disorderly members were ejected. On the 28th Premier Badini and his ministry resigned, and Baron Von Gautsch was called on to form a new cabinet. The new ministry was announced Nov. 30, and it was understood that it would enter into negotiations with the Germans and Czechs, to secure a modification of the language ordinances, which were the primary cause of the rioting in the Reichsrath.

VIRGINIA, one of the United States of North America; the tenth of the original thirteen States to ratify the Federal Constitution (June 26, 1788); counties, 118; capital, Richmond.

State Officers, 1898-1902.—Governor (elected for 4 years, salary \$5,000 per annum), J. Hoge Tyler; lieutenant-governor, Edward Echols; secretary of state, James T. Lawless; treasurer, A. W. Harman; first auditor, Morton Marye; second auditor, Josiah Ryland; superintendent of free schools, J. W. Sutthall; attorney-general, A. J. Montague; adjutant-general, Charles J. Anderson; commissioner of agriculture, Thomas Whitehead; president of the supreme court of appeals, James Keith; justices, John W. Riely, John A. Buchanan, George M. Harrison, Richard H. Cardwell; clerk, G. K. Taylor—all Democrats.

Legislature, 1898.—Democrats, senate 35, house 95, joint ballot 130; Republicans, senate, 4, house 4, joint ballot 8; Populist, senate 1, joint ballot 1; Independent, house 1, joint ballot 1; Democratic majority, senate 30, house 90, joint ballot 120.

Elections.—In the State elections 1897 there were 170,184 votes cast for governor, of which the Democratic candidate (Tyler), received 109,655; the Republican (McCull), 56,840; the Social Labor (Quantz), 528; and the Independent (Cowden), 114; Democratic plurality, 52,815. The congressional elections 1896 resulted in the choice of 2 Republican and 8 Democratic candidates. In the presidential election the Democratic candidate received 154,985 votes; the Republican, 135,388; the Prohibition, 2,351; the National Democratic, 2,127; and the Social Labor, 115.

Farm Products.—Reported Dec. 31, 1897: Corn, 31,552,164 bush., from 1,752,-898 acres, value \$11,989,822; wheat, 8,451,864 bush., from 704,322 acres, value \$7,775,715; oats 5,236,092 bush., from 436,091 acres, value \$1,517,597; rye, 438,702 bush., from 39,882 acres, value \$219,351; potatoes, 2,120,116 bush., from 31,756 acres, value \$1,484,081; hay, 592,114 tons, from 548,254 acres, value \$6,069,168; and buckwheat, 67,298 bush., from 4,807 acres, value, \$33,649—total value, \$29,089,383.

Farm Animals.—Reported Jan. 1, 1898: Horses, 238,714, value \$8,891,021;

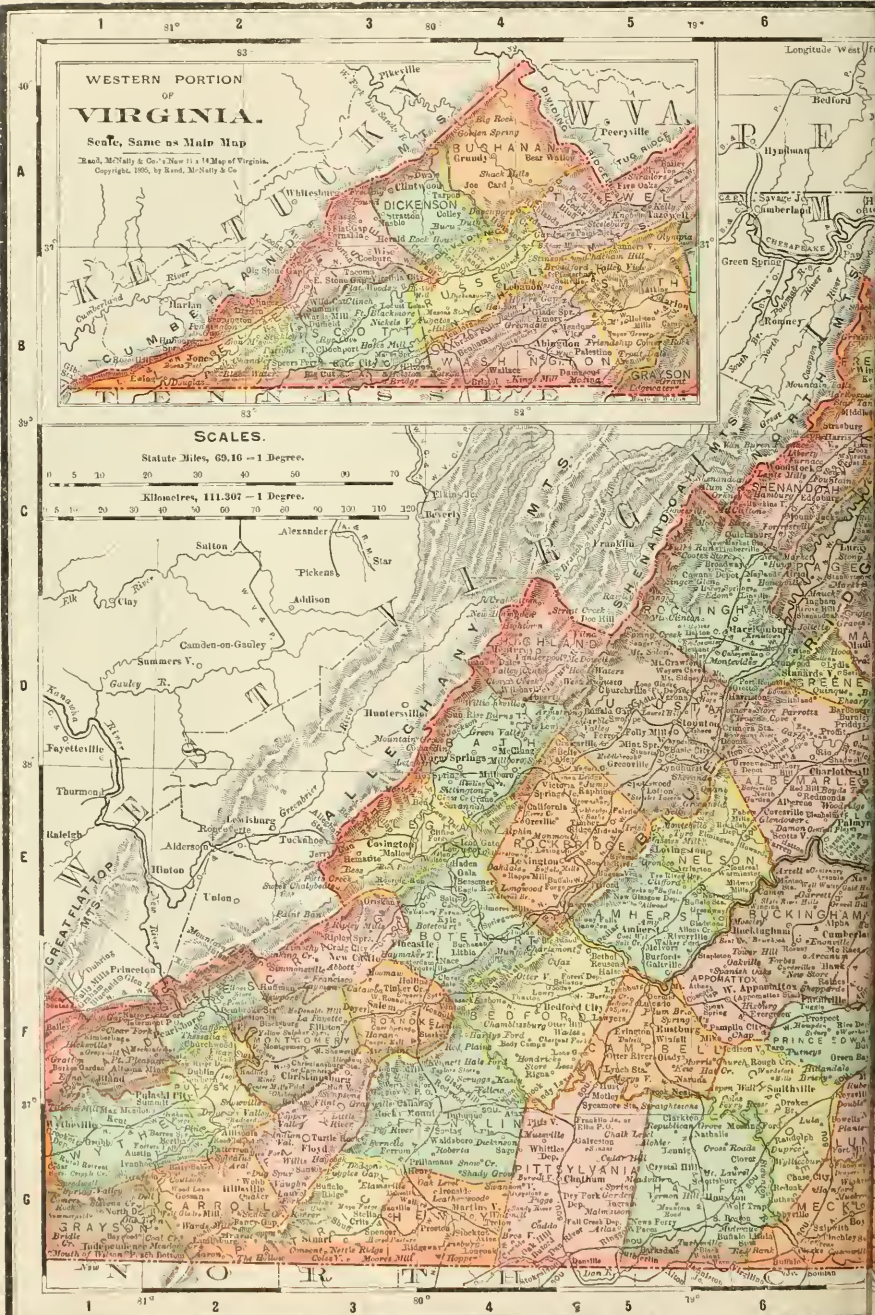
mules, 36,733, value \$1,893,280; cows, 252,512, value \$5,189,122; cattle, 356,360, value \$6,795,970; sheep, 380,956, value 980,581; and swine, 955,781, value \$3,297,444—total value, \$27,047,418.

Cotton Industry.—The estimated production of raw cotton in 1895-96 was 8,399 bales, and the purchases for local mills, 16,084 bales. In 1895 there were nine mills in operation, seven of which reported an aggregate capital of \$2,821,700, and eight reported 127,108 spindles and 4,155 looms. A single mill, at Danville, had a capital of \$1,800,000, and 65,000 spindles and 2,200 looms. Some of these mills produce both cotton and woolen goods, and one has had for several years a contract with the United States government to furnish cloth for the navy department.

Mineral Products.—The following is a summary of the mineral products for the calendar year 1895: In *coal* there was an increased production, the largest on record for the State, but a decrease in value, the output being 1,368,324 short tons, spot value \$869,873. Operations were carried on in 22 mines, and of the total output, 1,024,200 tons were loaded at the mines for shipment. The most productive counties were Tazewell 962,269 tons; Wise, 336,593; Chesterfield and Henrico, 57,782; and Pulaski, 10,379. Five *coking* plants had 832 ovens built and 350 building; used 410,737 short tons of coal; and produced 244,738 short tons of coke, valued at \$322,564, a large increase. The *iron* mines yielded 712,241 long tons of ore, valued at \$987,077, an increase over the two preceding years, and giving the State fifth rank in this industry. The output comprised 36,815 tons of red hematite; 674,926 of brown hematite; and 500 of magnetite. On Jan. 1, 1896, there were 28 blast furnaces in operation, with a total annual capacity of 831,250 long tons. The output of pig iron in 1895 was 346,589 tons, and in the first half of 1896, 231,685 tons; and the rolled iron and steel product in 1895 was 27,504 long tons. In some respects the State is the most important producer of *manganese* in the country, and it has yielded more than any other State, though in 1895 it fell to third rank, with an output of 1,715 long tons, valued at \$15,656, the smallest in its history. The value of the various *clay* products was reported by 111 concerns as follows: Common and pressed brick, \$764,394; vitrified paving brick, \$30,000; fancy brick, \$36,919; firebrick, 1,750; drain tile, \$4,980; other tile, \$700; sewer pipe, \$1,000; stoneware, \$3,025; and miscellaneous, \$13,000—total \$855,768. *Quarrying* yielded granite, \$70,426 a steady decrease; slate, \$111,357, from Buckingham county, a decrease; and limestone, \$268,892, a slight increase, of which \$186,506 represented the quantity burned into lime, \$77,520 that used for flux, and \$4,866 that used for building and road-making—total value, \$450,675. Of 34 *mineral springs*, 29 reported commercial sales of 579,187 gals., value \$214,209. The *salt* output was 65,000 bbls., value \$40,000, of which 52,000 bbls. were common fine, 9,000 common coarse, and 4,000 table. Other productions were 5,800 short tons of *gypsum*, valued when commercially prepared at \$17,369; 13,050 bbls. of hydraulic cement, value \$7,830; and 9,000 short tons of *barytes*, in which the State ranked first.

Finances.—Official reports for the year ending Sept. 30, 1896, showed: Balance on Oct. 1, 1895, \$161,395.64; receipts in 1896, \$3,499,201.58; expenditures, \$3,347,399.17; balance, \$213,298.05. The debt statement, March 1, 1897, showed: Amount of 1882 bonds and certificates outstanding, \$6,329,554; of 1892 bonds and certificates, \$17,919,719; cancelled, \$1,551—total, \$24,247,722. Of the first amount the State literary fund held \$1,430,327.28, and of the second the literary and sinking funds held \$368,500, leaving the aggregate amount held by the public, \$22,207,661.82. The assessed valuations in 1896 were: Real estate, \$304,204,590; personal, 94,341,046—total, \$398,545,636; tax rate, \$4 per \$1,000.

[Virginia.]



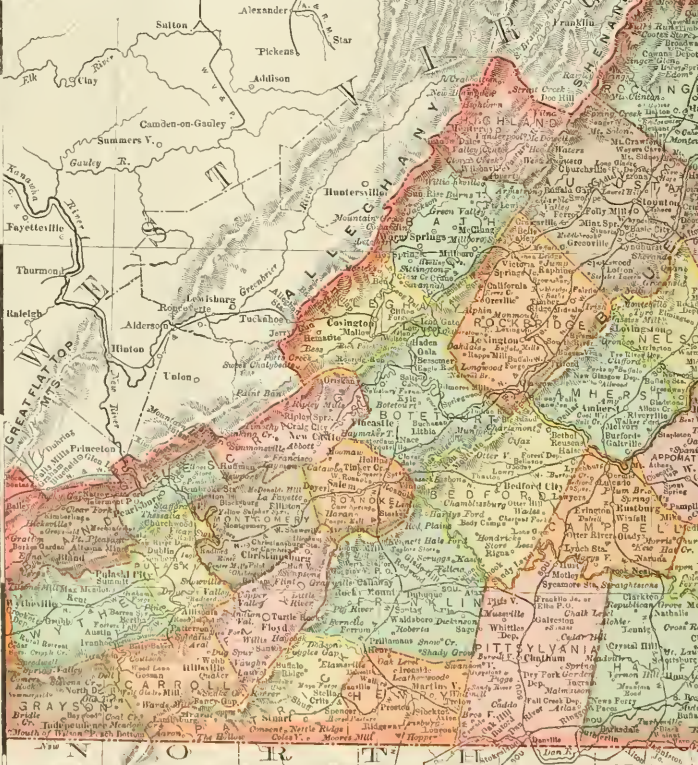
WESTERN PORTION OF VIRGINIA.

Scale, Same as Main Map.
Each 2 1/2 Miles & One 1/2 Mile in 1/4 Degree.
Copyright, 1895, by Rand, McNally & Co.

SCALES.

Statute Miles, 69.16 = 1 Degree.

Kilometres, 111.307 = 1 Degree.





Banks.—On Oct. 31, 1897, there were 35 national banks in operation and 19 in liquidation, the active ones having a combined capital of \$4,646,300, and holding \$2,252,250 in United States bonds. These banks had outstanding on loans and discounts \$15,268,381; represented by demand paper with individual or firm names \$845,539; the same secured by stocks, bonds, and other personal securities \$1,075,055; time paper with two or more individual or firm names, \$8,791,415; time paper with single individual or firm name \$1,082,395; and the same secured by stocks, bonds, and other personal securities, \$3,473,980. The banks held in coin and coin certificates \$937,839, of which \$583,760 was in gold coin. The circulation account was: Total issue, \$16,599,430; redeemed, \$14,485,279; outstanding, \$2,114,151. There were deposits \$15,813,769; reserve required, \$2,372,065; reserve held, \$4,834,123; ratio of reserve, 30.57 per cent. During the year ending Sept. 30, 1897, the exchanges at the United States clearing house at Richmond aggregated \$84,193,807, an increase of \$360,078 over the total of the previous corresponding period. The State banks, July 23, 1897, numbered 85, and had capital \$5,817,164; deposits, \$15,296,989; resources, \$24,600,960; and surplus and profits, \$2,562,768.

Building and Loan Associations.—The last general report on these associations (1893) showed a total of 83 organizations, of which 76 were local, 7 national, 14 serial, 36 permanent, and 33 terminating. There were reported by 81 associations, shareholders, 27,483; by all, shares in force, 202,941, and shares free, 136,156; and by 80, shares borrowed on, 66,785. The total assets and liabilities were \$7,474,408; loans on real estate, \$6,412,876; and dues and profits, \$5,404,171. During the life of 81 associations, 125 mortgages were foreclosed, involving \$146,790, on which there was a loss of \$2,823. Of all associations, 71 reported 4,911 homes and 73 reported 263 other buildings acquired.

Internal Revenue.—During the fiscal year ending June 30, 1897, the collections of internal revenue aggregated \$2,653,746.53, principally from tobacco. In that year there were 228 single-account cigar factories, which used 5,463,198 lbs. of tobacco, and had an output of 95,842,569 cigars and 1,072,320,420 cigarettes; and 112 other factories which used 35,071,199 lbs. of leaf, 310,957 lbs. of scraps, 38,539 lbs. of stems, 2,040,736 lbs. of licorice, 1,506,368 lbs. of sugar, and 1,600,641 lbs. of other materials, and had an output of 25,941,506 lbs. of plug tobacco, 5,305,904 lbs. of smoking, and 823,444 lbs. of snuff. There were 60 grain and 458 fruit distilleries in operation; 16,293 gals. of fruit brandy produced; 776,054 gals. of spirits rectified and 1,717,351 gals. gauged; and 102,254 bbls. of fermented liquors produced.

Railroads.—On Jan. 1, 1895, the total main-track mileage was 4,223; with secondard tracks, 7,288. A detailed report at the end of 1895 showed: Capital stock, \$322,452,580; funded debt, \$246,324,967; total investment, \$578,806,844; cost of roads and equipments, \$571,017,034; gross earnings, \$40,825,363; net earnings, \$11,484,608; interest paid on bonds, \$10,182,257; and dividends paid on stocks, \$450,158.

Commerce.—During the calendar year 1896, the imports of merchandise at the ports of Alexandria, Newport News, Norfolk and Portsmouth, and Richmond aggregated in value \$1,144,752, and exports \$33,421,942; in 1897 the imports were \$1,588,973, and exports, \$41,328,361.

Publications.—Reported March, 1898: Daily, 30; tri-weekly, 3; semi-weekly, 4; weekly, 184; semi-monthly, 4; monthly, 43; bi-monthly, 2; and quarterly, 2.

Post-Offices.—Reported Jan. 1, 1897: First-class, 3; second-class, 13; third-class, 43 (presidential, 59); fourth-class, 3,118; money-order offices, 435; money-order stations, 8; and limited money-order offices, 9.

Churches.—The Regular Baptist, Colored, is the strongest denomination in the State, and is followed in their order by the Methodist Episcopal, South; Regular Baptist, South; African Methodist; Presbyterian, South; Protestant Episcopal; Methodist Episcopal; Disciples of Christ; Roman Catholic; Lutheran, United Synod; Primitive Baptist; Dunkard; and Christian. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Virginia, 3,907 evangelical Sunday schools, 43,531 officers and teachers, and 283,336 scholars—total members, 326,867.

Schools.—According to the school census of 1895 there were 665,533 children of school age in the State, of whom 355,986 were enrolled in the public schools, and 202,530 were in average daily attendance. The public schools numbered 8,278, and the teachers 8,292. Of the total children, 397,030 were whites and 268,503 colored; of enrollment, 235,533 were whites and 120,453 colored; of attendance, 137,830 were whites and 64,700 colored; of schools, 6,035 were for whites and 2,243 for colored; and of teachers 6,211 were white and 2,081 colored. The public school property was valued at \$2,982,828; the receipts were \$1,824,287; and the expenditures, \$1,807,592. At the end of the school year 1894-95 there were 93 private secondary schools, with 260 instructors and 2,638 elementary and 3,660 secondary pupils. Of these schools, 65 were non-sectarian; 9 Baptist; 3 Protestant Episcopal; 2 Lutheran; 2 Methodist Episcopal; 1 Methodist Episcopal, South; 9 Presbyterian; 1 Roman Catholic; and 1 United Brethren. The public high schools numbered 83, and had 173 teachers and 11,086 elementary and 3,812 secondary pupils; the public normal schools 3, with 31 teachers and 641 students; and the private normal schools 7, with 126 teachers and 2,119 students. There were 10 universities and colleges of liberal arts, with 152 professors and instructors; 2,235 students in all departments (1,991 males, 244 females); 3 fellowships; 106 scholarships; 151,975 volumes in the libraries; grounds and buildings valued at \$2,283,634; scientific apparatus and libraries, \$444,568; productive funds, \$1,927,354; income, \$323,294; and benefactions, \$17,995. For the higher education of women there were 16 colleges, with 203 professors and instructors; 1,803 students; 22,600 volumes in the libraries; grounds and buildings valued at \$940,000; scientific apparatus, \$9,600; and income, \$151,781. Agricultural and mechanical colleges were maintained at Hampton (for Indians and negroes) and at Blacksburg (for whites). For the defective classes there were a State Institution for the Deaf, Dumb, and Blind at Staunton, and a State Industrial school at Glen Allen.

Libraries.—In 1896 there were reported 59 public libraries of 1,000 volumes each and upward, with a total of 341,225 bound volumes and 31,550 pamphlets.

Population.—In 1890, 1,655,980, of whom 824,278 were males; 831,702 females; 1,637,606 natives; 18,374 foreign-born; 1,020,122 whites; and 635,858 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 1,768,000.

VIRGINIA, UNIVERSITY OF, Charlottesville, Va., non-sectarian; had at close of 1896, 48 professors and instructors; 528 students; 40,000 volumes in library; \$262,000 in productive funds; chairman of faculty, P. B. Barringer.

VOLK, LEONARD WELLS, sculptor, was born in Wells, N. Y., Nov. 7, 1828; died in Osceola, Wis., Aug. 19, 1895. He was noted for his portrait busts, and as the sculptor of the Douglas monument, and the life-size statues of Douglas and Lincoln in Chicago.

VOORHEES, DANIEL WOLSEY, lawyer, was born in Liberty, O., Sept. 26, 1827; died in Washington, D.C., April 10, 1897. He served four terms as a Democratic

representative in Congress from Indiana; and from 1877, when he succeeded the late Oliver P. Morton, till March 4, 1897, he represented that State in the United States Senate.

WABASH COLLEGE, Crawfordsville, Ind., non-sectarian; had at close of 1896, 18 professors and instructors; 240 students; 34,000 volumes in library; \$401,000 in productive funds; \$32,000 income; president, G. S. Burroughs, LL.D.

WAKE FOREST COLLEGE, Wake Forest, N. C., Baptist; had at close of 1896, 14 professors and instructors; 261 students; 11,200 volumes in library; \$194,628 in productive funds; \$4,000 gifts; \$24,299 income; president, C. E. Taylor, D.D., LL.D.

WALKER, WILLIAM DAVID, clergyman, was born in New York City, June 29, 1839. He graduated at Columbia College in 1859 and at the General Theological Seminary in 1862; was ordained in the Protestant Episcopal Church, June 29, 1865; was elected bishop of North Dakota in 1883; and on Oct. 7, 1896, was elected bishop of Western New York, succeeding Arthur C. Coxe (*q.v.*). He received the degree of D.D. from Racine College in 1884 and Oxford University in 1894, and LL.D. from Griswold College in 1888 and Trinity College Dublin, in 1894.

WASHBURN COLLEGE, Topeka, Kan., Congregational; co-educational; had at close of 1896, 15 professors and instructors; 220 students; 6,500 volumes in library; \$80,880 in productive funds; \$2,397 gifts; \$13,785 income; president, Geo. M. Herrick, A.M.

WASHINGTON, one of the United States of North America; admitted to the Union Nov. 11, 1889; counties, 34; capital, Olympia.

State Officers, 1897-1901.—Governor (elected for 4 years, salary \$1,000 per annum), John H. Rogers; lieutenant-governor, Thurston Daniels; secretary of state, W. D. Jenkins; treasurer, C. W. Young; auditor, Neal Cheatham; attorney-general, P. H. Winston; adjutant-general, J. E. Bellaire; superintendent of public education, F. J. Browne; chief justice of the supreme court, Flmore Scott; associate justices, R. O. Dunbar, T. J. Anders, M. J. Gordon, and J. B. Reavis; clerk, C. S. Reinhart; all State officers Populist, excepting attorney-general, Silver Republican, and all of the judiciary Republican, excepting Reavis, Democrat.

Legislature, 1897.—Republican, senate 13, house 13, joint ballot 26; Democrat, senate 5, house 10, joint ballot 15; Populist, senate 13, house 43, joint ballot 56; Silver Republican, senate 3, house 11, joint ballot 14.

Elections.—The congressional elections 1896 resulted in the choice of both Democrat-Populist candidates, by majorities of 14,364 and 12,941 with two tickets in the field. The vote for governor was 50,949 for the Democrat-Populist candidate (Rogers) and 38,119 for the Republican candidate (Sullivan). In the presidential election the Democratic candidate received 51,646 votes; the Republican, 39,153; the National Democrat, 1,668; and the Prohibitionist, 968.

Farm Products.—Reported Dec. 31, 1897: Corn, 116,586 bush., from 6,477 acres, value \$64,122; wheat, 20,124,648 bush., from 856,368 acres, value \$13,684,761; oats, 3,822,528 bush., from 79,636 acres, value \$1,337,885; rye, 48,028 bush., from 2,463 acres, value \$29,777; potatoes, 2,354,670 bush., from 14,535 acres, value \$659,308; hay, 657,056 tons, from 292,025 acres, value \$5,913,504; and barley, 1,695,960 bush., from 37,686 acres, value \$729,263—total value \$22,418,620.

Farm Animals.—Reported Jan. 1, 1898: Horses, 173,157, value \$4,163,817;

mules, 1,427, value \$62,910; cows, 120,297, value \$3,109,677; cattle, 294,862, value \$5,436,952; sheep, 744,925, value \$1,622,446; and swine, 168,546, value, \$835,989—total value, \$15,231,791.

Mineral Products.—The principal mineral product of commercial value is *coal*, and in 1895 the output was 1,191,410 short tons, spot value \$2,577,958, an increase over the previous year. There were 22 mines worked, and 2,840 men were employed an average of 224 days. The producing counties were Pierce, 437,029 short tons; King, 435,971; Kittitas, 281,534; Skagit, 20,236; and Thurston and Whatcom, 16,550. In June, 1895, a large area of valuable coal measures was discovered at Gate City, and surveys in Lewis county in the following month showed a coal area of 187 acres on the northeast side of the ravine and 452½ acres on the southwest side of the cañon, with veins averaging 42 ft. in thickness. The *clay* industry had 52 plants and the following output: Common and pressed brick, \$103,405; vitrified paving brick, \$32,965; firebrick, \$12,500; drain tile, \$3,175; other tile, \$2,500; sewer pipe, \$85,700; terra cotta work, \$24,000; and miscellaneous, \$1,200—total, \$265,145. There were 3 coking plants, with 110 ovens, which used 22,973 short tons of coal, and yielded 15,129 short tons of coke, value \$64,632, a steady increase.

Colville Reservation.—In February, 1896, the northern half of the Colville Indian reservation in Washington was thrown open to mineral locations by act of Congress. The mineral lands are northwest of Spokane and directly south of the Rock Creek mining district of British Columbia. Within two weeks over 200 locations were filed, the notices claiming gold, silver, cinnabar, copper, iron, mica, galena, coal, and other minerals.

Cariboo Gold Fields.—This tract is partly in Washington and partly in British Columbia, and was formerly owned by the British Northwestern Mining Company. In September, 1896, it was announced that a syndicate, headed by J. Edward Addicks of Delaware had expended \$5,000,000 in the purchase of mining properties here and would carry on operations on a large scale and with the most approved hydraulic machinery, with headquarters at Seattle.

Finances.—The total bonded debt, Feb. 1, 1897, was \$300,000, subject to call at any time, and the floating debt was \$1,832,473. The assessed valuations in 1896 as equalized (about 60 per cent. of actual value) were: Real estate, \$166,985,405; personal, \$24,782,087; railroads, \$12,910,176—total, \$204,677,668. The State owned property, principally public institutions, valued at \$2,453,988.

Banks.—On Oct. 31, 1897, there were 35 national banks in operation and 42 in liquidation, the active ones having a combined capital of \$4,738,000, and holding \$1,004,800 in United States bonds. These banks had outstanding on loans and discounts \$6,795,943; represented by demand paper with individual or firm names, \$941,255; the same, secured by stocks, bonds, and other personal securities, \$1,443,372; time paper, with two or more individual or firm names, \$1,653,977; time paper, with single individual or firm name, \$696,843; and the same, secured by stocks, bonds, and other personal securities, \$2,060,496. The banks held in coin and coin certificates \$1,620,236, of which \$1,441,156 was in gold coin. The circulation account was: Total issue, \$5,133,980; redeemed \$3,994,085; outstanding, \$1,139,895. There were deposits, \$10,010,792; reserve required, \$1,501,618; reserve held, \$3,582,022; ratio of reserve, 35.78 per cent. During the year ending Sept. 30, 1897, the exchanges at the United States clearing houses at Seattle, Spokane, and Tacoma aggregated \$84,601,924 an increase of \$6,053,056 over the total of the previous corresponding period. The State banks May 31, 1897, numbered 32, and had capital, \$1,862,690; deposits, \$2,603,260;

resources, \$5,809,272; and surplus and profits, \$373,637. Combining these institutions, the State had a banking capital of \$6,600,690.

Internal Revenue.—The collections and details of taxable manufactures are included in the totals for Oregon (*q. v.*).

Railroads.—On Jan. 1, 1896, the total mileage was about 2,900. A detailed report at the end of 1895 showed: Capital stock, \$21,262,706; funded debt, \$18,314,875; total investment, \$40,385,212; cost of roads and equipments, \$42,141,245; gross earnings, \$1,161,472; net earnings, \$385,155; and interest paid on bonds, \$326,495.

Commerce.—During the calendar year 1895 the imports of merchandise aggregated in value, in the Puget Sound district, \$5,318,126; exports, \$5,728,125; imports of gold and silver coin and bullion, \$92,474; exports, \$23,000; in 1896, the imports of merchandise were \$3,715,502; exports, \$10,549,137; imports of coin and bullion, \$103,124; exports, \$130,913; in 1897, imports of merchandise \$7,705,009; exports, \$14,561,743; imports of coin and bullion, \$5,242,036; exports, \$160,406.

Publications.—Reported March, 1898: Daily 13; tri-weekly, 3; semi-weekly, 1; weekly, 170; bi-weekly, 1; semi-monthly, 1; monthly, 23; and quarterly, 1.

Post-Offices.—Reported Jan. 1, 1897: First-class, 3; second-class, 3; third-class, 26 (presidential, 32); fourth-class, 778; money-order offices, 217; limited money-order offices, 25; and money-order stations, 2.

Churches.—The Roman Catholic is the strongest denomination in the State, and is followed in their order by the Methodist Episcopal; Disciples of Christ; Regular Baptist; Presbyterian; Congregational; Protestant Episcopal; Lutheran, Independent Synods; and United Brethren. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Washington 1,100 evangelical Sunday schools, 7,000 officers and teachers, and 58,450 scholars—total members, 65,450.

Schools.—At the end of the school year 1895-96, the number of children of school age in the State was estimated at 108,800 of whom 90,113 were enrolled in the public schools, and 63,212 were in average daily attendance. The public school system had 1,890 schoolhouses; 3,245 teachers; property valued at \$4,837,413; revenue, \$828,191; and expenditures, \$1,425,509, including \$769,150 for salaries. The public high schools numbered 31, and had 93 instructors and 2,340 pupils. Besides normal classes in three colleges, with 93 students, there were two public normal schools, with 19 teachers and 396 students. Fourteen private secondary schools had 44 instructors and 532 students. There were 9 universities and colleges of liberal arts, with 102 professors and instructors; 1,326 students in all departments (797 males, 529 females); grounds and buildings valued at \$862,000; scientific apparatus and libraries valued at \$11,610; income, \$126,305; and benefactions, \$46,300. The State Agricultural College and School of Science, at Pullman had experimental staff, 8; faculty 19; students, 325; acres under cultivation, 236, valued at \$15,000; and special buildings and equipments valued at \$78,400. Manual training schools were maintained at Seattle and Spokane. For the defective classes there were a State School for Defective Youth (deaf, dumb, blind, and feeble-minded) at Vancouver, and a State Reform School at Chehalis.

Charitable Institutions.—Other public institutions were the penitentiary at Walla Walla, with property valued at \$501,213; hospitals for the insane at Fort Steilacoom, \$293,154, and Medical Lake, \$237,386; and a State Soldiers' Home at Orting, \$53,155.

Internal Improvements.—The work on the projected ship canal to connect Puget Sound with Lakes Washington and Union, designed by the federal government to improve the new naval station and yard at Port Orchard, as well as to promote internal communication, has so far been confined to securing rights of way. The great dry-dock at Port Orchard was completed and accepted by the government in the summer of 1896. Under congressional appropriations the harbor at Olympia has been deepened to 12 ft., but extensive work remains to be done there. The Northern Pacific Railroad Company, the largest owner of land in the Yakima Valley, is carrying out a great irrigation scheme by which a vast area will be brought under cultivation. The head of the canal is below the first gap near old Yakima City. The main ditch is 65 miles long, 30 ft. wide at the bottom, 62 ft. wide at the top, and 8 ft. deep, and is reduced in dimensions at every 10-mile block, as the supply of water required decreases. Siphons discharge the water from the main canal into distributing ditches.

Libraries.—In 1896 there were reported 20 public libraries of 1,000 volumes each and upward, with a total of 76,646 bound volumes and 19,380 pamphlets.

Population.—In 1890, 349,390, of whom 217,562 were males; 131,828 females; 259,385 natives; 90,005 foreign-born; 340,513 whites; and 8,877 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 468,000.

WASHINGTON, city, capital of the United States of America; co-extensive with the District of Columbia; population (1890), 230,392; (1897, estimated) 280,000.

Finances.—In 1897 the assessed valuations were: Real estate, \$180,376,908; personal property, \$9,532,851—total, \$189,909,759; tax rate, \$15 per \$1,000. The debt on June 30, 1896, was \$17,311,489; the appropriations for the year then ended, excluding those for the water department, which was more than self-supporting, were \$5,887,494; receipts from all sources, with balance, \$6,732,830. Of the total receipts the city revenue proper was \$3,510,254, and the appropriations by the United States government \$5,538,472.50, of which one-half was payable from the general revenue, and \$349,022 was wholly payable therefrom. The largest appropriations included those for public education, \$1,070,299; for the improvement of streets, avenues, and roads, \$622,975; for charitable and correctional institutions, \$570,880; police department, \$558,791; care and lighting of streets, avenues, parks, etc., \$457,146; care and extension of sewers, \$373,602; and fire department, \$205,582. The receipts from the various sources of city revenue for the year ending June 30, 1898, exclusive of the water department, were estimated at 3,359,858. The total value of United States property is estimated at \$198,058,139, about equally divided between grounds (excluding streets, etc.) and buildings and other improvements.

Banking and Insurance.—In 1897 there were 12 national banks in operation with a combined capital of \$2,875,000, individual deposits \$13,837,279, and reserve \$5,494,901; 3 loan and trust companies; and 2 private savings banks; and the total capital was \$6,125,000, deposits \$20,243,895, and surplus and undivided profits \$2,080,735. In the year ending Sept. 30, the exchanges at the clearing house aggregated \$95,031,020 a decrease of \$4,027,436 in a year. Of the various insurance companies doing business in the city there were 104 foreign fire companies, 53 foreign life, 20 foreign life, casualty, and accident, 2 live-stock, and 13 fire, 10 life, and 1 accident, belonging to the District.

Churches.—In 1897 there were 236 churches and chapels, divided denominationally as follows: Baptist, 65 (15 for white, 50 for colored people); Methodist

Episcopal, 52 (23 white, 29 colored); Protestant Episcopal, 31 (27 white, 4 colored); Presbyterian, 21 (20 white, 1 colored); Roman Catholic, 17 (16 white, 1 colored); Lutheran, 13; Congregational, 6 (3 white, 3 colored); Methodist Protestant, 6; Methodist Episcopal, South, 5; Hebrew 3; Disciples of Christ, Friends, and Reformed, 2 each; Christadelphian, Swedenborgian, Unitarian, United Brethren in Christ, Universalist, and non-sectarian, 1 each; and miscellaneous, 5.

Schools and Colleges.—The public school enrollment in 1896 was 42,464; number of public school teachers, 1,031; buildings occupied for public school purposes, 114; value of public school property, \$3,260,027. There are the Central, Eastern, Western, and Business high schools; 16 private secondary schools; a private and 2 public normal schools; 6 colleges and universities, with 145 professors and instructors and 1,118 students in all departments; and 3 theological, 5 law, and 5 medical schools.

Libraries.—In 1896 there were 55 public libraries of 1,000 volumes and upward each, with a total of 1,793,910 bound volumes and 735,231 pamphlets. The principal ones were those belonging to the United States government, and of these the most noteworthy are the Congressional, with over 740,000 volumes and 250,000 pamphlets; House of Representatives library, 100,000 volumes; Scientific library of the Patent office, 67,881; Senate library, 82,000; Bureau of Education library, 68,000; Army Medical library, containing the most complete collection of medical works in the United States; library of the United States Geological Survey, 40,000 volumes; library of the Department of State, 60,000; the Riggs Memorial library in Georgetown College, 71,450; and the libraries of the Catholic University of America, 16,600, Howard University, 10,619, and Columbian University, 9,000. John Russell Young was appointed librarian of the library of Congress in place of the veteran, Ainsworth R. Spofford, made first assistant librarian; the library was removed from the old to the magnificent new building; and the entire staff and methods of administration were reorganized, all in 1897.

Public Improvements.—The city owns the water works plant, which has cost for construction and maintenance \$8,703,525, has a capacity of 346,400,000 gals., and distributes through 332 miles of mains. There are 244½ miles of streets paved with various materials; 348 miles of sewers; gas and electric light plants; a thorough system of electric street railroads, connecting with the suburbs; and 23 public parks and circles, many containing statues of distinguished officers of the army and navy and men eminent in the national life, in addition to the zoological park of 167 acres and the new Rock Creek park of 1,606 acres. See also DISTRICT OF COLUMBIA.

WASHINGTON AND JEFFERSON COLLEGE, Washington, Pa., non-sectarian; had at close of 1896, 15 professors and instructors; 306 students; 12,000 volumes in library; \$270,000 in productive funds; \$221 gifts; \$30,511 income; president, James D. Moffat, D.D.

WASHINGTON AND LEE UNIVERSITY, Lexington, Va., non-sectarian; had at close of 1896, 18 professors and instructors; 223 students; 30,000 volumes in library; \$641,000 in productive funds; \$45,000 revenue; president, G. W. C. Lee, LL.D.

WASHINGTON COLLEGE, Washington College Station, Tenn., non-sectarian; co-educational; had at close of 1896, 8 professors and teachers; 197 students; 2,500 volumes in library; \$5,000 in productive funds; \$1,800 gifts; \$3,400 income; president, Jas. T. Cooper, A.M.

WASHINGTON UNIVERSITY, St. Louis, Mo., non-sectarian; co-educational; had at close of 1896, 175 professors and instructors; 1,823 students; 5,500 volumes in library; \$675,000 in productive funds; \$200,000 gifts; \$160,000 income; president, Winfield S. Chaplin, LL.D.

WASHINGTON, UNIVERSITY OF, Seattle, Wash., non-sectarian; co-educational; had at close of 1896, 23 professors and instructors; 310 students; 7,500 volumes in library; \$3,500 gifts; president, Mark W. Harrington, LL.D.

WATSON, JOHN MACLAREN (IAN MACLAREN), clergyman and author, was born in Edinburgh, Scotland, in 1851. He was educated at Edinburgh and Tübingen Universities, and since 1880 has been minister of the Sefton Park Presbyterian church in Liverpool. In 1896 the University of St. Andrews conferred on him the degree of D.D., and in September of that year he arrived at New York to deliver the course of Lyman Beecher Lectures at Yale University and an independent course on literary subjects. His publications include *Beside the Bonnie Brier Bush* and *The Days of Auld Lang Syne* (1895); *The Upper Room*, *The Mind of the Master*, and *Kate Carnegie* (1896), etc.

WATSON, THOMAS EDWARD, candidate of the Populist party for vice-president of the United States, was born in Columbia county, Ga., Sept. 5, 1856. He received a common school and partial university education; was admitted to the bar in 1876; elected to the legislature in 1882; elected to Congress as a Democrat in 1890; and was defeated for re-election as a Populist in 1892 and 1894. While in Congress he abandoned his party, made sensational charges against his fellow representatives, and was author of the query "Where am I at?"

WELLESLEY COLLEGE, Wellesley, Mass., non-sectarian; for women only; had at close of 1896, 73 professors and instructors; 718 students; 46,789 volumes in library; \$216,470 income; president, Julia J. Irvine, Litt.D.

WESLEYAN UNIVERSITY, Middletown, Conn., Methodist Episcopal; co-educational; had at close of 1896, 33 professors and instructors; 306 students; 46,000 volumes in library; \$1,128,300 in productive funds; \$30,889 gifts; \$91,000 income; president, B. P. Raymond, D.D., LL.D.

WESTERN COLLEGE, Toledo, Ia., United Brethren; co-educational; had at close of 1896, 12 professors and instructors; 235 students; 3,000 volumes in library; \$5,000 gifts; \$12,000 income; president, L. Bookwalter, A.M., D.D.

WESTERN MARYLAND COLLEGE, Westminster, Md., Methodist Protestant; co-educational; had at close of 1896, 18 professors and instructors; 275 students; president, T. H. Lewis, D.D., A.M.

WESTERN RESERVE UNIVERSITY, Cleveland, O., non-sectarian; co-educational; had at close of 1896, 152 professors and instructors; 920 students; 130,000 volumes in library; \$2,200,000 in productive funds; \$150,000 gifts; \$310,000 income; president, Charles F. Thwing, D.D.

WESTMINSTER COLLEGE, North Wilmington, Pa., United Presbyterian; co-educational; had at close of 1896, 10 professors and instructors; 279 students; 6,000 volumes in library; \$100,000 in productive funds; \$18,500 income; president, R. G. Ferguson, D.D.

WEST VIRGINIA, one of the United States of North America; admitted to the Union June 19, 1863; counties, 54; capital, Charleston.

State Officers, 1897-1901.—Governor (elected for 4 years, salary \$2,700 per annum), George W. Atkinson; secretary of state, William M. O. Dawson; treasurer, M. H. Kendall; auditor, J. M. Lafollette; attorney-general, E. P.

Rucker; adjutant-general, J. W. M. Appleton; superintendent of public schools, J. R. Trotter; supreme court of appeals: president, John W. English; judges, Marmaduke H. Dent, H. C. McWhorter, and Henry Brannon; clerk, O. S. Long—all State officers Republican, all judiciary Democrats except McWhorter, Republican.

Legislature, 1897.—Republican, senate 20, house 38, joint ballot 58; Democrat, senate 5, house 31, joint ballot 36; Populist, senate 1, joint ballot 1; Republican majority, senate 14, house 7, joint ballot 21.

Elections.—The congressional elections 1896 resulted in the choice of all four Republican candidates by majorities ranging from 3,767 (3d district) to 1,176 (4th district). The vote for governor was 105,477 for the Republican candidate (Atkinson); 93,974 for the Democratic candidate (Watts); and 1,054 for the Prohibition candidate (Fitzgerald); Republican plurality, 11,503. In the presidential election the Republican candidate received 105,379 votes; the Democratic, 94,488; the Prohibition, 1,223; and the National Democratic, 679.

Farm Products.—Reported Dec. 31, 1897: Corn, 17,004,298 bush., from 694,053 acres, value 6,801,719; wheat, 5,883,431 bush., from 439,062 acres, value \$5,236,254; oats, 3,142,420 bush., from 157,121 acres, value \$942,726; rye, 163,472 bush., from 14,215 acres, value \$83,371; potatoes, 2,058,672 bush., from 36,762 acres, value \$1,338,137; hay, 680,590 tons, from 504,141 acres, value \$6,023,222; and buckwheat, 288,933 bush., from 15,207 acres, value 141,577—total value, \$20,567,006.

Farm Animals.—Reported Jan. 1, 1898: Horses, 153,381, value \$5,406,535; mules, 74,870, value \$3,247,273; cows, 167,240, value \$4,189,362; cattle, 253,604, value \$5,273,085; sheep, 448,994, value \$1,292,201; and swine, 352,727, value \$1,386,217—total value, \$20,794,676.

Mineral Products.—The following is a summary of the mineral products for the calendar year 1895: In the *coal* industry, despite a costly strike, 190 mines were operated; 19,159 persons were employed; and there was an output of 11,387,961 short tons, spot value \$7,710,575, a decrease from that of 1894, which was the largest on record. The most productive counties were Fayette, 2,264,825 tons; McDowell, 2,395,365; Marion, 1,257,563; Kanawha, 1,134,798; Mercer, 687,364; Mineral, 675,610; Tucker, 449,991; Harrison, 292,693; Marshall, 194,077; and Ohio, 169,834. In the five *cooking* districts there were 78 plants, with 7,831 ovens, which used 2,087,816 short tons of coal, and yielded 1,285,206 short tons of coke, valued at \$1,721,239, an increase that gave the State third rank in this industry. There was a decrease in *petroleum* operations, the output being 8,120,125 bbls. valued at \$11,038,770. No accurate statement of the output of *natural gas* can be made because large quantities are piped directly into Ohio and Pennsylvania; but the amount consumed in the State in the year was estimated at \$100,000 less than one-third that of 1894. In the *clay* industry, 46 concerns reported outputs as follows: Common and pressed brick, \$226,737; vitrified paving brick, \$419,388; fancy brick, \$4,262; firebrick, \$4,000; sewer pipe, \$196,000; stoneware, \$3,000; and miscellaneous, \$12,390—total, \$895,777. The *iron and steel* industry, Jan. 1, 1896, had 4 bituminous furnaces in operation, 7 rolling mills, 7 iron and steel rolling mills, 2 Bessemer steel works, and 2 tin-plate works. The production of pig iron in 1895 was 141,968 long tons, nearly double that of 1894, and of rolled iron and steel 167,531 tons, an increase of over 64,000 tons. *Quarrying* showed decreased results because of small demand and low prices, the output being sandstone, \$40,000, and limestone,

\$42,892. The only other product of commercial value was *salt*, which yielded 176,720 bbls., mostly common fine, value \$63,041.

Finances.—The treasurer's report for the year ending Sept. 30, 1896, showed: Balance, \$883,683.74; receipts, \$1,524,879.45; disbursements, \$1,581,233.76; balance, \$827,329.43. The State claims to have no bonded debt. In the settlement of the debt of Virginia, one-third of the amount was set apart as the portion that should be paid by West Virginia; but the latter has never recognized this claim. All attempts to arrange a settlement between the two States have failed. On Jan. 15, 1895, the legislature of West Virginia passed unanimously a joint resolution declining to enter into negotiations with Virginia on the basis proposed by Governor O'Ferrall. The assessed valuations in 1896 were: Real estate, \$141,925,633; personal property, \$51,307,197; and railroad property, \$22,437,102—total, \$215,669,932.

Banks.—On Oct. 31, 1897, there were 33 national banks in operation and 8 in liquidation, the active ones having a combined capital of \$3,451,000, and holding \$1,422,650 in United States bonds. These banks had outstanding on loans and discounts \$8,570,845; represented by demand paper with individual or firm names, \$216,849; the same secured by stocks, bonds, and other personal securities, \$136,892; time paper with two or more individual or firm names, \$6,866,035; time paper with single individual or firm name, \$343,589; and the same secured by stocks, bonds, and other personal securities, \$1,007,482. The circulation account was: Total issue \$10,069,320, redeemed \$8,713,740; outstanding \$1,355,580. There were deposits, \$8,422,639; reserve required, \$1,263,395; reserve held \$2,613,714; ratio of reserve, 31.03 per cent. The State banks, Oct. 1, 1897, numbered 66, and had capital \$3,397,210; deposits, \$10,743,444; loans and discounts, \$10,439,991; resources, \$16,079,674; and surplus and profits, \$1,254,002.

Building and Loan Associations.—The last general report on these associations (1893) showed a total of 56 organizations, of which 54 were local, 2 national, 25 serial, 6 permanent, and 25 terminating. There were reported by all associations, shareholders, 10,342; shares in force, 68,587; shares free, 35,278; and shares borrowed on 19,717. The total assets and liabilities were \$3,401,088; loans on real estate, \$2,968,222; and dues and profits, \$3,070,744. During the life of all associations, 64 mortgages were foreclosed, involving \$47,796, on which there was a loss of \$494. Members had acquired 3,898 homes and other buildings.

Internal Revenue.—During the fiscal year ending June 30, 1897, the collections of internal revenue aggregated \$706,874. During that year there were 141 single-account cigar factories which used 1,030,914 lbs., of tobacco, and had an output of 62,584,068 cigars; and 39 other factories, which used 3,448,727 lbs. of materials, and had an output of 3,098,719 lbs. of smoking tobacco. There were 17 fruit and grain distilleries in operation; 140,487 gals. of spirits were rectified and 449,706 gals. gauged; and 123,125 bbls. of fermented liquors produced.

Railroads.—On Jan. 1, 1895, the total railroad mileage was 2,075, and the State was crossed by three great trunk lines. A detailed report at the end of 1895 showed for the local companies: Capital stock, \$45,363,936; funded debt, \$26,913,090; total investment, \$76,805,009; cost of roads and equipments, \$69,583,130; gross earnings, \$4,007,133; net earnings, \$1,285,561; interest paid on bonds, \$1,166,892; and dividends paid on stocks, \$149,887.

Publications.—Reported March, 1898: Daily, 15; semi-weekly, 3; weekly, 143; bi-weekly, 1; and monthly, 13.

Post-Offices.—Reported Jan. 1, 1897: First-class 1; second-class, 8; third-class, 22 (presidential, 31); fourth-class, 1,723; money-order offices, 232; money-order stations, 3; and limited money-order offices, 8.

Churches.—The Methodist Episcopal is the strongest denomination in the State, and is followed in their order by the Regular Baptist, North; Methodist Episcopal, South; Roman Catholic; United Brethren; Methodist Protestant; Presbyterian, South; Disciples of Christ; Presbyterian, North; Regular Baptist, Colored; and Dunkard. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for West Virginia, 2,024 evangelical Sunday schools, 2,545 officers and teachers, and 132,400 scholars; total members, 152,945.

Schools.—At the end of the school year 1895-96, the number of children of school age in the State was estimated at 285,600, of whom 215,665 were enrolled in the public schools, and 141,081 were in average daily attendance. The public schoolhouses numbered 5,475 and the teachers, 6,454. Of the total enrollment 208,435 were white children and 7,230 colored; of attendance, 136,614 were white and 4,467 colored; and of teachers, 6,219 were white and 235 colored. The public school property was valued at \$3,227,141, and the expenditures, \$1,793,649, of which \$1,112,513 was for teachers' salaries. There were 22 public high schools, with 46 teachers and 1,036 secondary pupils; 5 public normal schools, with 27 teachers, 829 students, and grounds and buildings valued at \$246,000; 4 private normal schools, with 23 teachers, 587 students, and grounds and buildings, \$17,000; and 18 private secondary schools, with 62 teachers and 940 secondary pupils. The three universities and colleges of liberal arts had 75 professors and instructors; 614 students in all departments (500 males, 114 females); 14,465 volumes in the libraries; grounds and buildings valued at \$495,000; scientific apparatus and libraries, \$79,000; productive funds, \$114,750; and income \$82,598. The agricultural and mechanical college, a department of the State University, had experimental staff, 6; faculty, 13; volumes in the library, 10,965; acres under cultivation, 3; and special buildings and equipments valued at \$50,000. For the defective classes there were a State School for the Deaf, Dumb, and Blind at Romney, and a State Reform School at Pruntytown.

Libraries.—In 1896 there were reported 10 public libraries of 1,000 volumes each and upward, with a total of 46,137 bound volumes, and 7,548 pamphlets.

Population.—In 1890, 762,794, of whom 390,285 were males; 372,509 females; 743,911 natives; 18,883 foreign-born; 730,077 whites; and 32,717 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 884,000.

WEST VIRGINIA UNIVERSITY, Morgantown, W. Va., non-sectarian; co-educational; had at close of 1897, 40 professors and instructors; 437 students; 20,000 volumes in library, \$300,000 in grounds and buildings; \$75,000 in scientific apparatus and library; \$114,750 in productive funds; \$66,568 income; president, Jerome H. Raymond, Ph.D.

WHEATON COLLEGE, Wheaton, Ill., Congregational, co-educational; had at close of 1896, 15 professors and instructors; 302 students; 2,500 volumes in library; \$50,000 in productive funds; \$40,000 gifts; \$52,000 income; president, Charles A. Blanchard.

WHITMAN COLLEGE, Walla Walla, Wash., non-sectarian; co-educational; had at close of 1896, 12 professors and instructors; 150 students; 5,000 volumes in library; president, S. B. L. Penrose.

WILBERFORCE UNIVERSITY, Wilberforce, O., Methodist Episcopal; co-educational; for colored people; had at close of 1896, 20 professors and instructors; 334 students; 5,500 volumes in library; \$20,518 in productive funds; \$13,502 gifts; \$16,582 revenue; president, S. T. Mitchell, A.M., LL.D.

WILEY UNIVERSITY, Marshall, Tex., Methodist Episcopal; co-educational; had at close of 1896, 14 professors and instructors; 302 students; 2,500 volumes in library; \$1,500 in productive funds; \$8,647 revenue; president, M. W. Dogan, A.M.

WILLIAM JEWELL COLLEGE, Liberty, Mo., Baptist; had at close of 1896, 19 professors and instructors; 344 students; 9,000 volumes in library; \$225,000 in productive funds; \$16,000 gifts; \$36,500 income; president, John P. Greene, D.D., LL.D.

WILLIAMS COLLEGE, Williamstown, Mass., non-sectarian; had at close of 1896, 29 professors and instructors; 385 students; 40,000 volumes in library; \$23,800 gifts; \$82,887 income; president, Franklin Carter, PH.D., LL.D.

WILSON COLLEGE, Chambersburg, Pa., Presbyterian; co-educational; had at close of 1896, 29 professors and instructors; 277 students; 2,900 volumes in library; \$100,000 in productive funds; \$79,000 revenue; president, S. A. Martin, D.D.

WISCONSIN, one of the United States of North America; admitted to the Union May 29, 1848; counties, 70; capital, Madison.

State Officers, 1897-99.—Governor (elected for 2 years, salary \$5,000 per annum), Edward Schofield; lieutenant-governor, Emil Baeusch; secretary of state, Henry Carson; treasurer, S. A. Peterson; attorney-general, W. H. Mylrea; superintendent of education, J. Q. Emery; insurance commissioner, W. A. Fricke; railroad commissioner, D. J. McKenzie; chief justice of the Supreme Court, John B. Cassoday; associate justices, Silas V. Pinney, John B. Winslow, A. W. Newman, and R. D. Marshall; clerk, Clarence Kellogg—State officers, all Republicans; judiciary, all Republicans excepting Pinney and Winslow, Democrats.

Legislature, 1897.—Republican, senate, 29, house 81, joint ballot 110; Democrat, senate 4, house 9, joint ballot 13; Republican majority, senate 25, house 72, joint ballot 97.

Elections.—In the State elections 1896, all the Republican candidates for State officers were elected, and excepting the governor all the State officers were candidates for re-election. The congressional elections resulted in the choice of the full Republican delegation (10) by majorities and pluralities ranging from 13,512 (1st district) to 4,467 (4th district). In the presidential election, the republican candidate received 268,135 votes; the Democrat, 165,523; the National Democrat, 4,584; the Prohibition, 7,507; the Social Labor, 1,314; and the Free Silver Prohibition, 346.

Farm Products.—Reported Dec. 31, 1897: Corn, 33,645,183 bush., from 1,019,551 acres, value \$8,411,296; wheat, 7,690,775 bush., from 615,262 acres, value \$6,460,251; oats, 62,125,310 bush., from 1,827,215 acres, value \$11,803,809; rye, 3,638,576 bush., from 227,411 acres, value \$1,491,816; potatoes 14,731,992 bush., from 148,808 acres, value \$5,598,157; hay, 1,972,420 tons, from 1,461,052 acres, value \$12,327,625; barley, 7,860,328 bush., from 280,726 acres, value \$2,515,305; and buckwheat, 735,804 bush., from 40,878 acres, value \$279,606—total value, \$48,887,565.

Farm Animals.—Reported Jan. 1, 1898: Horses, 412,296, value \$17,757,998; mules, 4,802, value \$218,092; cows, 814,381, value \$23,372,821; cattle, 607,541, value \$13,830,060; sheep, 715,809, value \$2,287,725; and swine, 920,557, value \$5,689,042; total value, \$63,155,738.

Farm Miscellany.—According to the State census of 1895, the State had 9,446,410 acres of improved farm land; 3,835,991 acres of woodland; and 5,083,443 acres of unimproved land. The farm lands had a value of \$488,754,021, and farm implements \$12,115,237. There were 1,337 cheese factories, value \$974,811, and 753 creameries, value \$1,557,807. Dairy products comprised butter 74,653,730 lbs., value \$12,310,373, and cheese, 52,480,815 lbs., value \$3,984,103. The wool clip was 5,719,980 lbs., value \$735,906.

Mineral Products.—The following is a summary of the mineral products for the calendar year, 1895: In *quarrying*, granite, \$80,761; sandstone, \$78,000; limestone, \$750,000—total, \$908,761. The value of the various *clay* products was reported by 146 concerns as follows: Common and pressed brick, \$906,057; fancy brick, \$3,425; firebrick, \$1,200; drain tile, \$32,311; and miscellaneous, \$1,200—total, \$944,196. The output of iron ore, mostly red hematite, was 649,351 long tons, value \$633,165; pig iron, 148,400 long tons; rolled iron and steel, 85,006 long tons. On Jan. 1, 1896, there were 4 bituminous and 2 charcoal furnaces in operation, with an annual capacity of 267,500 long tons; 5 rolling mills and steel works; 3 iron and steel rolling mills; a Bessemer steel plant; and 2 crucible steel works. Other products were *coke*, 4,972 short tons, value \$26,103; *hydraulic cement*, 476,511 bbls., value \$190,604; *mineral paint*, 3,486 short tons, value \$44,476; and *mineral waters*, 3,150,960 gals., value \$395,018.

Finances.—The treasury statement for the year ending Sept. 30, 1896, showed: Receipts, \$2,124,567; disbursements, \$2,111,370. There was no State debt excepting the following trust funds: School fund, \$1,563,700; university fund, \$111,000; agricultural college fund, \$60,600; and normal school fund, \$515,700—total \$2,251,000. The assessed valuations in 1895 were: Real estate, \$482,799,128; personal, \$120,674,398—total, \$603,473,526; amount of tax raised, \$1,372,713.

Banks.—On Oct. 31, 1897, there were 79 national banks in operation and 14 in liquidation, the active ones having a combined capital of \$10,310,000, and holding \$3,107,750 in United States bonds. These banks had outstanding on loans and discounts \$35,067,807; represented by demand paper with individual or firm names \$2,941,836; the same secured by stocks, bonds, and other securities \$2,543,590; time paper with two or more individual or firm names, \$16,853,191; time paper with single individual or firm name, \$6,272,493; and the same secured by stocks, bonds, and other personal securities \$6,166,766. The banks held in coin and coin certificates \$3,740,969 of which \$3,241,418 was in gold coin. The circulation account was: Total issue, \$18,995,950; redeemed, \$15,882,135; outstanding, \$3,113,815. There were deposits, \$44,924,927; reserve required, \$9,115,012; reserve held, \$17,787,072; ratio of reserve, 5 banks in Milwaukee, 43.63 per cent., 74 other banks in the State, 35.06. During the year ending Sept. 30, 1897, the exchanges at the United States clearing-house at Milwaukee aggregated \$176,268,392, an increase of \$1,438,252, over the total of the previous corresponding period. The State banks April 2, 1897, numbered 130, and had capital \$6,855,700; deposits \$26,024,605; and resources, \$36,017,358. There was one mutual savings bank, with 1,546 depositors, \$200,498 deposits and 215,884 resources. Private banking establishments numbered 107, and had capital, \$1,125,989; deposits, \$1,865,058; loans and discounts, \$3,882,825; and resources, \$6,828,897; and surplus, 365,660.

Combining all these institutions, the State had an aggregate banking capital of \$18,291,689.

Building and Loan Associations.—The last general report on these associations (1893) showed a total of 42 organizations, of which 39 were local, 3 national, 32 serial, 7 permanent, and 3 terminating. There were reported by all associations, shareholders, 13,610; and by 40, shares in force, 88,288, shares free, 61,490, and shares borrowed on 25,053. The total assets and liabilities were \$3,197,142; loans on real estate, \$2,935,343; and dues and profits, \$2,810,710. During the life of all associations, 34 mortgages were foreclosed, involving \$39,180, on which there was a loss of \$1,200; and the members acquired 2,658 homes and 344 other buildings.

Internal Revenue.—During the fiscal year ending June 30, 1897, the collections of internal revenue aggregated \$4,598,553, from the following sources: Distilled spirits, \$1,520,365; tobacco, \$574,291; fermented liquors, \$2,498,341; oleomargarine, \$3,252; and penalties, \$2,235. During that year there were 1,001 single-account cigar factories in operation, which used 1,467,393 lbs. of tobacco, and had an output of 76,208,158 cigars and 489,610 cigarettes; and 97 other factories, which used 6,017,190 lbs. of materials, and had an output of 2,713 lbs. of plug tobacco, 540,700 lbs. of fine cut, 5,096,141 lbs. of smoking, and 3,584 lbs. of snuff. There were 4 grain distilleries in operation; 1,179,823 gals. of spirits rectified and 4,629,227 gals. gauged; and 2,662,019 bbls. of fermented liquors produced.

Manufactures.—The following is a summary from the State census of 1895: Value of real estate and machinery of manufacturing plants, \$103,228,603; value of stock and fixtures, \$49,559,570; persons employed, 118,117; wages paid, \$42,882,886; value of lumber, lath, and shingle product, \$34,437,142; articles of iron, \$22,944,465; flour, \$23,682,185; articles of wood, \$19,234,052; articles of leather, \$18,753,957; beer, \$17,178,562; paper, \$6,249,651; wagons, carriages, and sleighs, \$5,301,125; woolen goods, \$2,550,711; cigars and cigarettes, \$2,644,709; other manufactured tobacco, \$1,359,733; vinegar, \$323,484; cotton goods, \$963,171; whisky, \$865,921; drain tile, \$390,050; earthenware, \$84,845; wine, \$111,057; linseed oil, \$323,988; articles of lead, \$72,712; and all other articles, \$60,661,453.

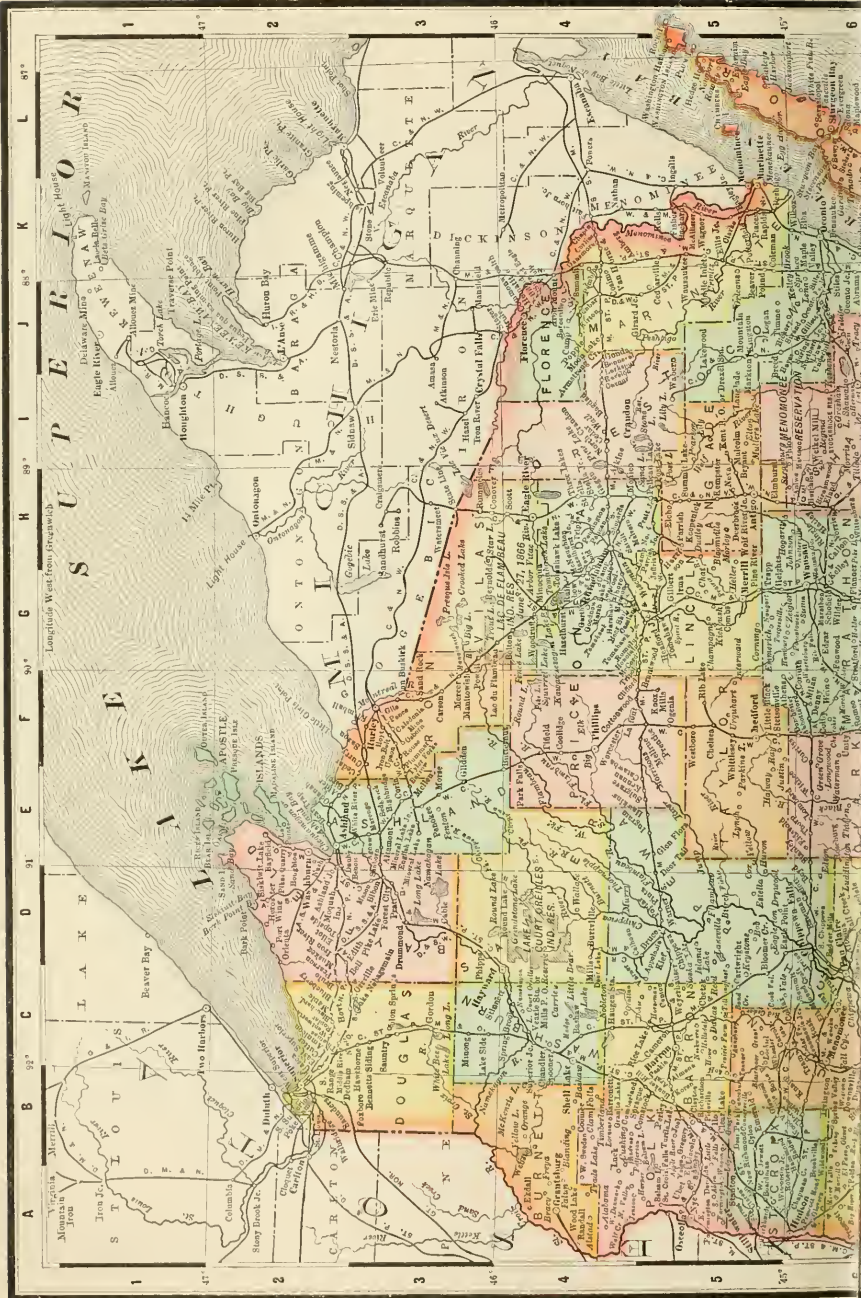
Railroads.—In 1895, the total railroad mileage was 7,504.56. A detailed report at the end of 1895 showed: Capital stock, \$106,311,611; funded debt, \$183,100,119; total investment, \$291,450,337; cost of roads and equipments, \$283,528,891; gross earnings, \$32,047,177; net earnings, \$11,532,972; interest paid on bonds, \$8,325,626; and dividends paid on stocks, \$1,393,389. The companies paid State taxes amounting to \$1,295,999 in 1894, and \$1,175,752 in 1895.

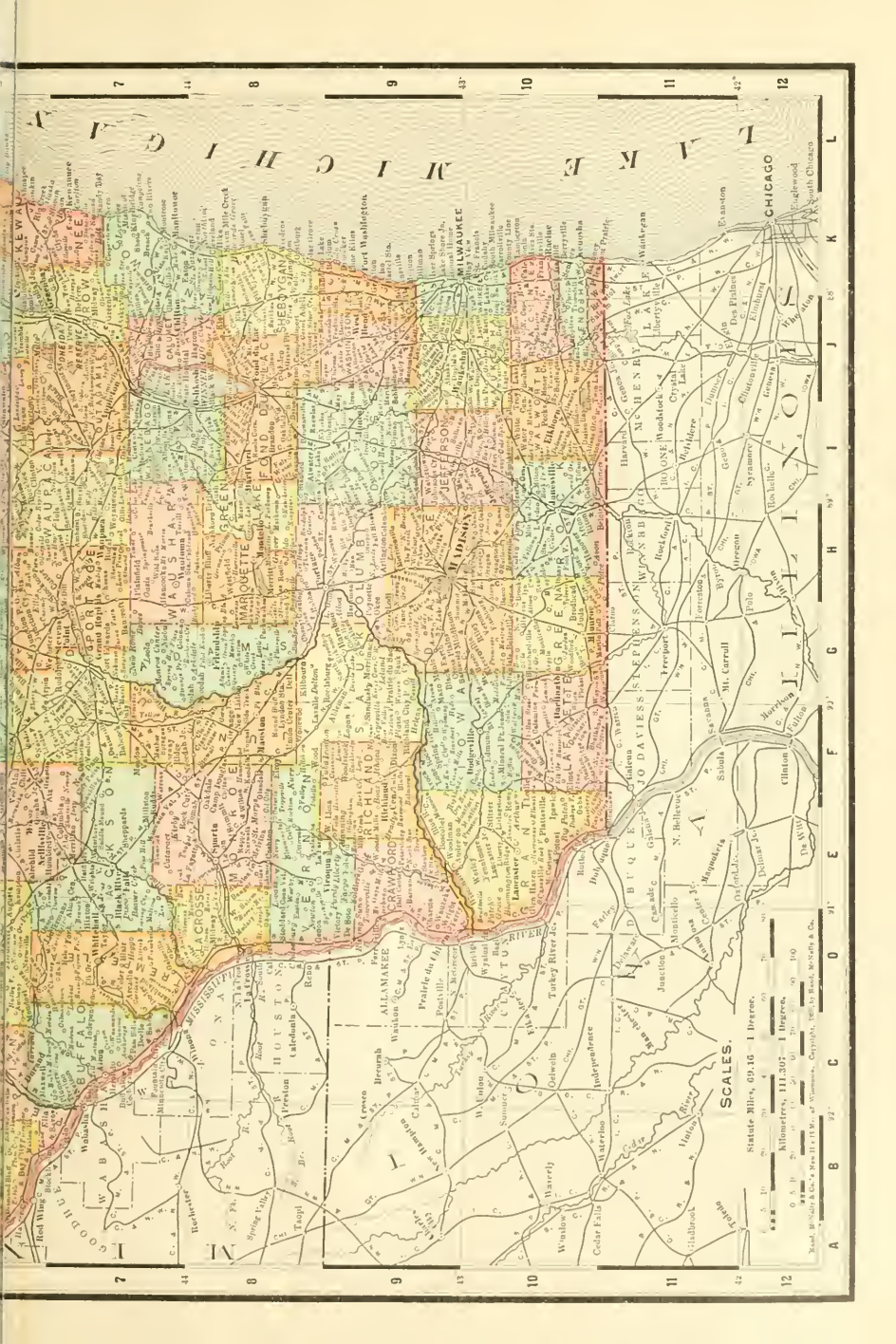
Commerce.—During the calendar year 1895, the imports of merchandise at the port of Milwaukee aggregated in value \$917,554; exports, \$1,664; in 1896, the imports were \$613,663 and exports, \$2,761; in 1897, imports, \$536,386; exports, none.

Publications.—Reported March, 1898: Daily, 61; semi-weekly, 5; weekly, 514; bi-weekly, 2; semi-monthly, 5; monthly, 40; and quarterly, 2.

Post-Offices.—Reported Jan. 1, 1897: First class, 4; second-class, 25; third-class, 96 (presidential, 125); fourth-class, 1,708; money-order offices, 568; money-order stations, 8; and limited money-order offices, 29.

Churches.—The Roman Catholic is the strongest denomination in the State, and is followed in their order by the Lutheran, Synod. Conference; Lutheran, Ind. Synod.; Methodist Episcopal; Congregational; Regular Baptist; Evang.





M I C H I G A N

SCALES.
 State of Illinois, 69.15 - 1 Degree,
 0 10 20 30 40 50 60 70 80 90 100
 Kilometers, 111.302 - 1 Degree,
 0 10 20 30 40 50 60 70 80 90 100
 Feet, 3280.84 - 1 Mile, 1609.344 - 1 Degree,
 0 10 20 30 40 50 60 70 80 90 100
 Miles, 1.609344 - 1 Degree, 0 10 20 30 40 50 60 70 80 90 100

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Association; German Evang. Synod; and Presbyterian. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Wisconsin, 2,500 evangelical Sunday schools, 20,000 officers and teachers, and 230,000 scholars—total members, 250,000, a gain in three years of 110,913 members.

Schools.—At the end of the school year, 1895-96, the number of children of school age in the State was estimated at 613,800, of whom 412,514 were enrolled in the public schools and 50,164 in private schools, and 271,000 were in average daily attendance at public schools. The public school system had 6,795 school-houses; 12,334 teachers; property valued at \$11,100,000; receipts (1893-94), \$4,734,813; and expenditures, \$6,676,824, of which \$3,394,486 was for salaries. Included in the system were 185 high schools, with 564 teachers and 14,299 secondary pupils, and (in 179) 100,203 volumes in the libraries, and 6 public and 2 private normal schools. The private secondary schools numbered 24 and had 138 instructors, and 1,480 secondary pupils; 21 reported 34,822 volumes in the libraries; 20 grounds and buildings valued at \$1,182,000, and 17 total income, \$222,193. Of these schools 8 were non-sectarian; 1 Congregational; 5 Protestant Episcopal; 1 Baptist; 3 Lutheran; 1 Methodist Episcopal; 2 Presbyterian; and 7 Roman Catholic. There were 9 universities and colleges of liberal arts, with a total of 238 professors and instructors; 3,524 students in all departments (2,662 males and 862 females); 12 fellowships; 65 scholarships; 116,146 volumes in the libraries; grounds and buildings valued at \$2,276,000; scientific apparatus and libraries, \$654,200; productive funds, \$1,422,862; income, \$525,660; and benefactions, \$103,289. A college exclusively for women had 13 instructors, 178 students, grounds and buildings valued at \$75,000; productive funds, \$150,000; and income \$32,000. The agricultural and mechanical college, a department of the State university, had experiment staff, 9; faculty, 40; students, 387; volumes in the library, 44,000, and pamphlets, 12,000; acres under cultivation 70, valued at \$7,500, and special buildings and equipments valued at \$200,000. There were also 16 commercial and business colleges, with 52 teachers and 1,183 day and 384 evening students. For the defective classes there were a State School for the Deaf at Delevan; State School for the Blind at Janesville; State House for the Feeble-minded at Chippewa Falls, opened in 1895; State reform schools at Milwaukee, Sparta, and Waukesha; public day schools for the deaf at La Crosse, Milwaukee, Manitowac, Sheboygan, and Wausau; and St. John's Catholic Deaf mute Institute at St. Francis.

Libraries.—In 1896 there were reported 102 public libraries of 1,000 volumes each and upward, with a total of 626,442 bound volumes and 132,224 pamphlets. Under the stimulus of State legislation, there had been established over 560 township libraries with upward of 75,000 volumes, and 7,819 district libraries with more than 60,000 volumes. In 1895 the legislature passed an act to promote the establishment and efficiency of free public libraries.

Population.—In 1890, 1,686,880, of whom 874,951 were males; 811,929 females; 1,167,681 natives; 519,199 foreign-born; 1,680,473 whites; and 6,407 colored of all races. The State census of 1895 showed a total population of 1,937,915. The counties with 30,000 population and upward were: Milwaukee, 287,922; Dane, 65,669; Winnebago, 57,627; Rock, 48,414; Sheboygan, 48,396; Dodge, 47,851; Fond du Lac, 47,436; Brown, 45,623; Outagamie, 44,401; La Crosse, 43,610; Racine, 41,110; Manitowac, 40,802; Grant, 38,372; Marathon, 36,598; Waukesha, 36,562; Jefferson, 36,317; Eau Claire, 33,172; Sauk, 32,919; Columbia, 30,868; and Waupaca, 30,793. The cities of 10,000 each and upward were: Milwaukee, 249,290; La

Crosse, 28,769; Oshkosh, 26,947; Superior, 26,168; Racine, 24,889; Sheboygan, 21,130; Eau Claire, 18,637; Green Bay 18,290; Madison, 15,950; Marinette, 15,286; Appleton, 14,641; Fond du Lac, 13,051; Janesville, 12,971; Ashland, 12,310; and Wausau, 11,013. On June 1, 1897, the United States government actuary estimated the population at 2,054,000.

WISCONSIN, UNIVERSITY OF, Madison, Wis., non-sectarian; co-educational; had at close of 1897, 115 professors and instructors; 1,650 students; 48,500 volumes in library; 12 fellowships; 12 scholarships; \$1,250,000 in grounds and buildings; \$500,000 in scientific apparatus and library; \$450,000 in productive funds; \$400,000 income; president, Charles K. Adams, LL.D.

WOFFORD COLLEGE, Spartanburg, S. C., Methodist Episcopal Church, South; had at close of 1896, 8 professors and instructors; 150 students; 10,000 volumes in library; \$6,000 in productive funds; \$13,000 income; president, James H. Carlisle, LL.D.

WOOSTER, UNIVERSITY OF, Wooster, O., Presbyterian; co-educational; had at close of 1895, 25 professors and instructors; 450 students; 17,000 volumes in library; \$350,000 in productive funds; \$3,000 gifts; \$34,000 income; president, Sylvester F. Scovel.

WORCESTER, city, capital of Worcester county, Mass.; population (1890), 84,655; (1895, State census) 98,767. In 1896 the assessed valuations were: Real estate, \$74,986,450; personal property, \$15,703,250—total, \$90,689,700; tax rate, \$15.60 per 1,000. The total bonded debt, Jan. 1, 1897, was \$5,315,000; sinking fund, \$2,383,735; net debt, \$2,931,265, which included the outstanding water and park debts, \$2,175,000. Besides the water works, which cost \$2,797,561, the city owned property valued at \$3,328,822. There are 7 national banks; 5 savings banks; 3 co-operative banks; a safe deposit and trust company; electric street railroad connecting with Millbury, Leicester, and Spencer; 16 public libraries of various kinds; and 228 miles of streets, 100 miles of sewers, and 144 miles of water mains. The annual cost of maintaining the city government exceeds \$1,800,000.

WORCESTER POLYTECHNIC INSTITUTE, Worcester, Mass., non-sectarian; had at close of 1896, 32 professors and instructors; 219 students; 4,800 volumes in library; \$600,000 in productive funds; \$3,000 gifts; \$63,000 income; president, T. C. Mendenhall, LL.D.

WORLD'S COLUMBIAN EXPOSITION, an international exhibition held in Chicago, Ill., from May 1 till Oct. 30, 1893, in commemoration of the 400th anniversary of the discovery of America. It was held under the authority of the United States Congress, and the immediate direction of a local commission; a national commission of two delegates from each State and Territory, two from the District of Columbia, and eight from the country at large; a Board of Lady Managers; and a World's Congress Auxiliary. The executive officers were Thomas W. Potter, president of the national commission; Harlow N. Higginbotham, president of the local commission; George R. Davis, director-general; Mrs. Potter Palmer, president of the Board of Lady Managers; and Charles C. Bonney, president of the Congress Auxiliary. The site was Jackson Park, of 533 acres, extending a mile and a half along Lake Michigan, to which was added a tract of 80 acres known during the exposition as the Midway Plaisance. The buildings were planned and erected and the grounds laid out under the direction of Daniel H. Burnham, John Root, Frederick L. Olmsted, and Henry S. Codman, with Charles B. Atwood as designer-in-chief, and Augustus St. Gaudens as direc-

tor of sculptures. There were in all about 150 noteworthy buildings, of which the principal were the Manufactures and Liberal Arts; Administration; Machinery Hall; Transportation; Woman's; Agricultural; Electricity; Fine Arts; Mining; Horticultural; Fisheries; Forestry; United States Government; and a natural size and completely equipped model, chiefly of brick, of a modern United States battleship. The States, Territories, and foreign countries also erected costly and interesting buildings. The Midway Plaisance was devoted to illustrating the types of life in all the nations of the world, and of the countless attractions the Ferris wheel had a large share. Including direct government aid and local and other subscriptions, the total cost of the exposition to the managers was \$25,500,000, and in addition the United States government appropriated \$2,250,000 for its exhibits; foreign governments, \$6,000,000; and the States and Territories, \$7,000,000, the grand total cost exceeding \$40,000,000. During the exposition the attendance was over 27,500,000, and the largest of any single day—Chicago Day—was 716,881. The construction expenditures were \$18,322,622; operating expenses, \$7,127,240; gate receipts, \$10,626,330; and net profits, about \$1,850,000. Interesting features of the exposition were the large number of international congresses, the World's Parliament of Religions, and the State days. There was but one incident to mar the pleasure of the affair, the assassination of Carter Harrison, mayor of the city, on Oct. 28, which caused a strictly informal closing of the exposition two days afterward.

WYOMING, one of the United States of North America; admitted to the Union July 11, 1890; counties, 13; capital, Cheyenne.

State Officers, 1895-99.—Governor (elected for 4 years, salary \$2,500 per annum), William A. Richards; secretary of state, Charles W. Burdick; treasurer, Henry G. Hay; auditor, William O. Owen; attorney-general, B. F. Fowler; adjutant-general, Frank A. Stitzer; superintendent of public instruction, Estella Reed; chief justice of the supreme court, A. B. Conway; associate justices, Samuel T. Corn and C. N. Potter; clerk, R. H. Redpath—all Republicans excepting Judge Corn, Democrat.

Legislature, 1897.—Republican, senate 13, house 23, joint ballot 36; Democrat, senate 6, house 11, joint ballot 17; Populist, house 4, joint ballot 4; Rep. majority, senate 7, house 8, joint ballot 15.

Elections.—In the State elections 1894, there were 19,290 votes cast for governor, of which the Republican candidate (Richards) received 10,119; the Democrat candidate (Holliday), 6,965; and the Populist candidate (Tidball), 2,176; Republican plurality, 3,184. The election for representative in Congress in 1896 resulted in the choice of the Democratic candidate (Osborne) by a plurality of 266 over the Republican (Mondell) and the Populist (Brown) candidates. In the presidential election the Democratic candidate received 10,861 votes, the Republican candidate, 10,072, and the Prohibition candidate, 159.

Farm Products.—Reported Dec. 31, 1897: Corn, 28,308 bush., from 2,359 acres, value \$14,154; wheat, 477,075 bush., from 19,083 acres, value \$333,952; oats, 479,255 bush., from 13,693 acres, value \$167,739; potatoes, 455,100 bush., from 3,034 acres, value \$250,305; and hay, 377,725 tons, from 228,923 acres, value \$2,266,338—total value, \$3,032,488.

Farm Animals.—Reported Jan. 1, 1898: Horses, 73,733, value \$1,100,948; mules, 1,511, value \$69,620; cows, 17,960, value \$572,026; cattle, 688,092, value \$16,390,696; sheep, 1,940,021, value \$5,714,332; and swine, 22,345, value \$130,572—total value, \$23,978,194. The wool clip of 1897 was 11,885,555 lbs., washed and unwashed, and 4,159,941 lbs. of scoured wool.

Mineral Products.—The following is a summary of the mineral products of commercial value in the calendar year 1895. The principal product was *coal*, taken from 25 mines, and aggregating 2,246,911 short tons, spot value \$2,977,901, of which 2,106,937 tons were loaded at the mines for shipment. During the year 3,449 men were employed, who worked an average of 184 days. The productive counties were: Sweetwater, 1,158,125 short tons; Fremont and Weston counties, 352,611; Carbon, 250,504; Uinta, 230,684; Sheridan, 75,489; Converse, 65,090; Crook, 9,650; and Johnson, 4,758. There was a decrease in Carbon and Sweetwater counties and a general increase elsewhere, making a net decrease of 170,552 tons. One *coking* plant, with 74 ovens, used 10,240 short tons of coal, and had an output of 4,895 short tons of coke, value \$17,133. *Quarrying* yielded sandstone to the value of \$10,000, and limestone, \$650; and 5 clay-working concerns produced common brick valued at \$8,525. There were 18 *petroleum* districts or basins, mostly in the central part of the State, and the infant industry yielded 3,455 bbls., nearly all of a fine lubricating quality. Valuable *asbestos* deposits have been found on the North Laramie river, the veins running in all directions and showing numerous pockets. The product is similar to the best Canadian. On Jan. 1, 1896, there were two iron and steel rolling mills and works, which in 1895 had an output of 4,185 long tons.

Finances.—The treasurer's report for the two years ending Sept. 30, 1896, showed: Balance, \$148,333; receipts, \$461,371; disbursements, \$544,628; balance, \$65,076. The total debt, Feb. 1, 1897, was \$320,000, all bonded, and comprising capitol building bonds, \$150,000; public building bonds, \$90,000; university building bonds, \$50,000; and insane asylum bonds, \$30,000. In 1896 the assessed valuations aggregated \$30,028,694. The State tax assessment was \$185,000.

Banks.—On Oct. 31, 1897, there were 11 national banks in operation and 4 in liquidation, the active ones having a combined capital of \$860,000, and holding \$215,000 in United States bonds. These banks had outstanding on loans and discounts \$1,827,242, and held in coin and coin certificates \$200,037. The circulation account was: Total issue, \$1,212,350; redeemed, \$1,027,878; outstanding, \$184,472. There were deposits, \$2,636,380; reserve required, \$395,457; reserve held, \$1,129,148; ratio of reserve, 42.83 per cent. The State banks, May 14, 1897, numbered 5, and had capital, \$72,000; deposits, \$196,839; resources, \$310,398; and surplus and profits, \$41,559. Combining these institutions, the State had an aggregate banking capital of \$932,000.

Insurance.—At the beginning of 1895 there were 45 fire insurance companies authorized to carry on business in the State. These in the previous year wrote insurance amounting to \$6,779,634, received in premiums \$131,848, and paid in losses \$53,966. Old line life companies had \$5,303,866 insurance in force and assessment life companies, \$2,439,900.

Internal Revenue.—The collections and details of taxable manufactures are included in the totals for Colorado (*q.v.*).

Railroads.—On Jan. 1, 1896, the total main track mileage was 1,460. A detailed report at the end of 1895 showed: Capital stock, \$26,591,353; funded debt, \$49,832,000; total investment, \$80,487,202; cost of roads and equipments, \$61,180,747; gross earnings, \$5,438,091; net earnings, \$2,248,559; and interest paid on bonds, \$2,786,800.

Publications.—Reported March, 1898: Daily, 4; semi-weekly, 1; and weekly, 36.

Post-Offices.—Reported Jan. 1, 1897: Second-class, 2; third-class, 7 (preidential, 9); fourth-class, 266; money-order offices, 41, and limited money-order offices, 2.

Churches.—The Roman Catholic is the strongest denomination in the State, and is followed in their order by the Mormon; Methodist Episcopal; Lutheran, General Council; Protestant Episcopal; Presbyterian; Congregational; and Regular Baptist. At the Eighth International Sunday School Convention, held in Boston, Mass., June 23-26, 1896, there were reported for Wyoming, 95 evangelical Sunday schools, 455 officers and teachers, and 8,480 scholars, total members, 8,935—gain in membership in three years, 4,460.

Schools.—At the end of the school year 1895-96 the number of children of school age in the State was estimated at 21,270, of whom 11,582 were enrolled in the public schools, and (1894) 7,700 were in average daily attendance. The public school system had 306 schoolhouses; 465 teachers; property valued at \$428,706, and expenditures, \$211,335, of which \$153,269 was for salaries. There were 5 public high schools, with 14 teachers and 273 secondary pupils. The only endowed private secondary institutions were the Academy of the Holy Child Jesus (Roman Catholic), at Cheyenne, which had 3 teachers, 85 pupils, and grounds and buildings valued at \$40,000, and the Wyoming Collegiate Institute (Congregational), at Big Horn, which had 3 teachers, 44 students, and grounds and buildings valued at \$11,600. The agricultural and mechanical college, a department of the State University, had experiment staff, 7; faculty, 11; students, 86; books and pamphlets in library, 5,400; acres under cultivation, 180, value \$9,540; special buildings and equipments, valued at \$20,000; receipts, \$40,183; and expenditures, \$38,397. Experimental farms were maintained at Laramie, Lander, Saratoga, Sheridan, Sundance, and Wheatland. The few defective youth were being educated at the expense of the State in Colorado institutions, and the State building erected for a deaf, dumb, and blind asylum was being prepared for the newly authorized Soldiers' Home.

State Seal.—A State seal was adopted in 1896, representing a pedestal, showing on the front an eagle resting on a shield, which bears a star and the figures "41," the number of the State in the order of admission into the Union. On the pedestal is the draped figure of a woman holding a staff floating a banner with the legend, "Equal Rights," indicating woman's political status in Wyoming. At the base of the pedestal in front are the figures "1869" and "1890," signifying the organization of the territory and the admission to statehood.

Internal Improvements.—Under the Carey act of Congress, which gave to several of the arid States a large part of the public domain within them on the condition that the States should undertake the reclamation of the land for agricultural purposes, Wyoming is engaged in a scheme of irrigation by which about 650,000 acres of useless land in the Big Horn basin will be rendered productive. The legislature formally accepted the offer of Congress, and in the summer of 1895 the State made a contract with a corporation chartered for the purpose, ceding to it the unappropriated waters of the Shoshone river. Work on the main ditch was begun in September, and by the time winter set in the first section, 12 miles in length, had been finished. The estimated cost of the entire work is \$1,000,000, and the State has already offered for sale the lands now reclaimed at 50 cents per acre, with certain restrictions. The scheme involves the construction of a main ditch 158 miles long and lateral ditches that will have an aggregate length of 1,500 miles, and many small supply ditches. In the initial construction the main ditch is 8 ft. deep and 25 ft. wide on the bottom, but it is intended eventually to enlarge this to a depth of 10 ft. and a bottom width of 60 ft., thus securing a canal that can be used also for transportation. The State has fixed the outside limit of charge for a perpetual supply of water at \$18 per acre, and

to prevent syndicates and speculators from getting control of large tracts, the amount of land that will be sold to one person has been restricted to 160 acres. The area of the tract thus being reclaimed is about equal to that of the State of Massachusetts. Cody City has already been laid out within a short distance from the Great Sulphur Springs, where the water of the ditch drops 110 ft.

Libraries.—In 1896 there were reported 4 public libraries of 1,000 volumes each and upward, with a total of 23,785 bound volumes and 3,200 pamphlets.

Population.—In 1890, 60,705, of whom 39,343 were males; 21,362 females; 45,792 natives; 14,913 foreign-born; 59,275 whites; and 1,430 colored of all races. On June 1, 1897, the United States government actuary estimated the population at 86,000.

WYOMING, UNIVERSITY OF, Laramie, Wyo., non-sectarian; co-educational; had at close of 1897, 14 professors and instructors; 160 students; \$150,000 in grounds and buildings; \$50,000 in scientific apparatus; \$47,000 in income; 5,000 volumes in library; president, Frank P. Graves, A.M., PH.D.

YALE UNIVERSITY, New Haven, Conn., Congregational; had at close of 1897, 245 professors and instructors; 2,500 students; 12 fellowships; 52 scholarships; 275,000 volumes in the various libraries; \$5,250,000 in grounds and buildings; \$500,000 in scientific apparatus and libraries; \$3,979,762 in productive funds; \$445,055 in gifts; \$755,090 income; president, Timothy Dwight, D.D., LL.D. The academic registration for 1897-98 was 1,241, and the scientific 475; a decrease of two in the former and of ten in the latter from the previous year. The decrease in the scientific department was occasioned by the increased severity of the newly-established entrance requirements.

YAMAGATA, MARQUIS ARITONO, senior marshal of Japan, was born in 1839. He was practically the commander of Japan's war forces in the short struggle with China; planned the campaigns of Korea and Manchuria; and was at the front during the greater part of the war. Prior to the war he was minister of the interior, minister of war, prime minister, and president of the privy council. In 1896 he visited the United States on a special mission.

YANKTON COLLEGE, Yankton, S. Dak., Congregational; co-educational; had at close of 1896, 13 professors and instructors; 231 students; 5,000 volumes in library; \$40,000 in productive funds; \$12,000 gifts; \$14,000 income; president, Henry K. Warren, A.M.

YOUNG MEN'S CHRISTIAN ASSOCIATIONS. Reports covering the world show a total of 5,764 associations, of which 1,363 are in the United States; 1,180 in Germany; 834 in England, Ireland, and Wales; 817 in the Netherlands; and 399 in Switzerland. In all America there are 1,466 associations, with over 263,000 members, property valued at \$16,760,000, 670 libraries containing 480,000 volumes, and over 300 buildings of their own.

YOUNG WOMEN'S CHRISTIAN ASSOCIATIONS. Including over 340 associations in America, there are about 1,600 in the world, Great Britain having over 1,350, the continent of Europe 20, India 20, Australia 25, and China, Japan, and all other countries 200. The membership in America, principally in the United States and Canada, exceeds 40,000.

A POPULAR WAR GLOSSARY.

ARBITRATION, INTERNATIONAL, a method of settling disputes between nations without recourse to hostilities, under which all subject matter is referred to one or more nations having no interest in the dispute, and the decision or award of a majority or of a mutually acceptable umpire is regarded by each party to the dispute as a final settlement. The provisions for arbitration, particularly in cases of extraordinary importance, are arranged in treaties between the nations in the dispute. The chief executive of the arbitrating nations selects a citizen of large acquaintance with international law, and these representatives constitute the court of arbitration. A failure of the original arbitrators to agree throws the responsibility of making an award on an additional member of the court, who, in this emergency, may be selected by the other members, or be designated in the treaty providing for the arbitration. The court sits in a city in a neutral nation, and its entire expenses are paid in equal share by the nations directly concerned in the dispute.

Frederic R. Coudert, a noted international lawyer, is emphatic in the declaration that there is no question between two nations which cannot be settled by arbitration. He holds that it is cheaper to hire lawyers than to build battleships and buy big guns. "It does not cost nearly half as much; it does not mean bloodshed, sorrow, and misery." Theodore S. Woolsey, another authority of high repute, reviewing the substitutes for war that have been suggested, says that all tribunals or courts of arbitration, to be effective, need a code of law recognized by the powers; a body of arbitrators to apply this code; and the military power of Europe to enforce their decision. There is now no international code. Notable attempts were made by Bluntschli and Field to compile a provisional code, but their work has not been accepted by a single nation. Woolsey looks to the changed spirit of our age, rather than to a mechanical device, for the maintenance of perpetual peace.

Coudert pronounces the United States the arbitrating nation of the world. In the last hundred years it has settled disputes with other powers by arbitration more than forty times, and no nation has equaled it in this respect. The following cases are cited in which the United States won its contention: 1794, boundary dispute with Great Britain, the United States claiming that the Schoodiæ River, forming the boundary between the United States and New Brunswick was really the St. Croix River; 1794, a group of 217 claims against Great Britain; 1814, Northeastern and other boundary disputes with Great Britain; 1818, claims against Great Britain for slaves carried away by British soldiers after the Revolutionary war, on which \$1,264,960 was awarded; 1839, claims against Mexico, aggregating \$671,798; 1853, claims against Great Britain for \$55,000; 1857, claims against New Grenada for \$315,307; 1858, Chili claims, \$42,000; 1860, Costa Rica claims, \$25,704; 1862; Ecuador claims, \$94,799;

1863, Peru claims, \$31,250; Colombia claims, \$345,307; 1866, Venezuela claims, \$1,253,310; 1868, Mexico claims, \$4,000,000; 1868, Peru claims, \$150,000; 1870, Brazil claims, \$100,740; 1871, Spain claims, \$1,588,683; 1871, dispute with Great Britain over the San Juan territory; 1871, claims against Great Britain for depredations by the *Alabama* and other Confederate vessels fitted out in Great Britain, on which \$15,500,000 was awarded; 1874, Colombia claims, \$23,401; 1885, Spain claims, \$46,034; 1892, Venezuela claims, \$141,500; and 1893, Ecuador claims, \$40,000. In seven instances the United States has lost its claims, viz.: 1794, with Great Britain, for royalist losses during the Revolutionary war, \$3,000,000; 1851, with Portugal, for loss of the United States privateer *General Armstrong*, destroyed at Fayal; 1871, with Great Britain, for British losses during the Civil war, \$1,929,810; 1871, with Great Britain, for Halifax fisheries, \$5,500,000; 1880, with France, for French losses during the Civil war, \$612,000; 1888, with Denmark, the Butterfield claims; and 1893, with Great Britain, for Bering Sea damages to Canadian sealers, on which a commission awarded Great Britain \$473,151 in 1897.

ARMISTICE, a suspension of hostilities between people at war. It may be sought by either party for the purpose of burying the dead after a battle, and is usually asked for by the weaker party to afford an opportunity for setting on foot negotiations for peace. It is optional with one party to grant or refuse a request for an armistice from another. When granted the strictest respect for its terms must be observed by the party receiving it. The grant declares the object and duration. While it is in force both parties must remain stationary; no new movement must be undertaken; no strengthening of offensive or defensive works is permissible; no secret smuggling of food, munitions, or reinforcements into either camp can be tolerated. It must end as it began, without an added advantage because of it to either party. A violation of an armistice has always been considered one of the gravest infractions of the law of nations. In practice, there have been deviations from the strict ethics of an armistice, and as long as there were no fighting, no construction of important works, or no material strengthening of either party, no protests have been made. It is generally considered better to decline an armistice than to grant an advantage for which there can be no equivalent.

ARMY, IN WAR, organization of the military forces of a nation on a larger and more thorough scale than is required in peace. Prior to the beginning of the war between the United States and Spain, the United States army was limited by law to 27,532 officers and men. Under acts of Congress in 1898 the regular army was reorganized and enlarged to a maximum of 60,010 officers and men, and the organization of a volunteer army was authorized. Under the second act the president called for 200,000 volunteers, and this number was apportioned among the States on the basis of population. In the States the nucleus of the quota was taken from the organized militia. Each man, despite his connection with the State militia, had to be sworn into the volunteer service of the country, the Federal government, not the State, having the sole right of enlistment. The act of Congress providing for a volunteer army in time of war considers the regular and the volunteer armies as two branches of the United States army and places them on equal footing with each other in all respects. The President appoints all the officers in the regular branch and the principal ones in the volunteer branch, the remainder in the latter being appointed by the governors.

The process of organizing this combined army of men into an effective body was simple yet necessarily slow. In each State the volunteers, whether members of

the local militia or others, were congregated at a convenient rendezvous, where they underwent a medical examination, were mustered into the Federal service, and were gradually subjected to the hardships of warfare. The first regiments raised in each State which were mustered in and found ready for field service were sent to the central mobilizing camp at Chickamauga, where they were further inured to active campaigning, pending orders to move to Mobile, Tampa, New Orleans, Key West, and other points convenient for embarking for Cuba. A reserve camp was established at Falls Church, Va., and the troops designated for service in the Philippine Islands were mobilized at San Francisco and Seattle. The organization of the new army was completed on May 16, 1898, three months and a day after the destruction of the *Maine*. For the first time in the history of the country a military organization beyond its boundaries was recognized in the new department of the Pacific, including the Philippine Islands, thus treated as American territory. The combined army was divided into seven corps, and the following assignments of general officers were made by the President:

Major-General Wesley Merritt, Department of the Pacific; Major-General John R. Brooke, First Corps, Department of the Gulf; Major-General William M. Graham, Second Corps, with headquarters at Falls Church, Va.; Major-General James F. Wade, Third Corps, report to Major-General Brooke, Chickamauga; Major-General John J. Coppinger, Fourth Corps, Mobile; Major-General William R. Shafter, Fifth Corps, Tampa; Major-General Elwell S. Otis, report to General Merritt for duty with troops in the Department of the Pacific; Major-General James H. Wilson, Sixth Corps, report to General Brooke, Chickamauga; Major-General Fitzhugh Lee, Seventh Corps, Tampa; Major-General Joseph Wheeler, United States Volunteers, Cavalry Division, Tampa, Fla.

BLOCKADE, the closing of the ports of an enemy so that all neutral commerce and other means of relief are shut out. It is somewhat synonymous with the siege of an inland city or fortification, and its object is to hasten surrender through possible starvation. Unlike many procedures in warfare there is an established principle governing a blockade. "The Treaty of Paris" of 1856, to which the principal nations of Europe subscribed and to a part of which the United States declared its adhesion early in 1898, declares that "blockades, in order to be binding, must be effective; that is to say, maintained by a force sufficient really to prevent access to the coast of the enemy." The strong point in the declaration is "effective," and in defining an "effective blockade" Theodore D. Woolsey says that "it does not mean that occasional evasions of a blockade will vitiate it. It is enough if there is so great risk of capture as to make blockade running very dangerous." The nation about to establish a blockade of its enemy's ports or coast line must give timely notice of its intention to all nations having commercial relations with the enemy. This notice, under a recognized rule, must be of a twofold character, diplomatic announcement to all neutral nations, and a warning at the blockaded port inscribed on the register of the first vessel seeking an entrance.

War gives the belligerents the right to distress and weaken the power of each other, and as blockading is a belligerent right neutral nations are bound to respect it. Methods of maintaining a blockaded differ according to local condition. One plan is to draw an arc about the blockaded port and to keep ships patrolling up and down along it. In some cases a single ship could effectually blockade a hundred-mile stretch of coast; in others many ships would be required to close a single port. Whatever the contour or length of coast under blockade may be, if one or more stationary or shifting vessels are able to prevent a neutral

vessel from gaining an entrance, the blockade is legally effective. Although a blockade-runner may occasionally slip into port, even under a strict patrolling of the approach, the risk of capture is so great that the effectiveness of the blockade is not deemed lessened by the act.

When an effective blockade has been established and due notice given, the attempt of a neutral vessel to violate it, either by trying to get in or out of the port, renders it liable to capture and, after trial and condemnation, confiscation. The vessel itself is the offender, and the conviction of the vessel brings upon both vessel and cargo the recognized penalty. See NEUTRALITY and PRIZE OF WAR. In the war between the United States and Spain and after the former had established a blockade of the principal ports of Cuba, the commander of the blockading squadron was directed to permit several neutral vessels to enter the port of Havana. This permission was granted by the government on application and as an act of international comity. The principal purpose was to exchange mail, and in each instance a pledge was given that no contraband of war would be landed nor any act committed in violation of the obligations of neutrality.

CLASSIFICATION OF WAR VESSELS, the division of the vessels in a navy according to rating and type. In the United States navy the basis of rating is the displacement of a vessel, or, practically, its weight. All vessels having a displacement of 5,000 tons and upward are classed as first rates; those between 5,000 and 3,000 tons as second rates; those between 3,000 and 1,000 tons as third rates; and those below 1,000 tons as fourth rates. The classification by type is first and second-class battleships; armored, protected, partially protected, and unarmored cruisers; barbette, single and double-turret monitors; auxiliary cruisers, consisting of large and swift mercantile steamships, partially protected and armed; gunboats; torpedo boats; tugs; patrol boats, adapted from ocean-going tugs and swift steam yachts; and a variety of special vessels such as the dynamite gun vessel *Vesucius*, the harbor defense ram *Katahdin*, and the torpedo ram *Alarm*. The special vessels provided for the war with Spain include large hospital and ambulance ships; a vessel equipped as a mammoth machine shop, with a large force of skilled workmen to make instant repairs to disabled fighting ships; and vessels fitted up to carry coal, food, ice, and water. The classification by rating differs from that by type. All the battleships are first rates; one double-turret monitor, the *Purdan*, is a first rates; all other double-turret monitors are second rates; the cruisers are distributed among the four rates; and the gunboats are third and fourth rates.

In general, first-rate ships are named after the States of the Union; second rates after cities in the United States; third rate after important events or names connected with the naval history of the United States; fourth rates after lakes and rivers in the United States; and special vessels for the distinct service for which they are designed, as the hospital ship *Solace*. The monitors as a class are named after rivers and American Indians. All the first-class battleships in service or under construction have a displacement of more than 10,000 tons; five are of 11,525 tons each, three of 10,288 tons, and one of 11,410. The *Maine* was a second-class battleship and had a displacement of 6,682 tons, and her only sister ship, the *Texas*, has a displacement of 6,315 tons. Between the time of the destruction of the *Maine*, Feb. 15, 1898, and June 1, the United States acquired by purchase and lease over 100 vessels of all kinds.

CONTRABAND, any article that will enable one party to maintain hostilities against another. Just what articles constitute contraband of war has never been formulated. In some instances a nation about to engage in war has announced

that it would regard certain specified articles as contraband. The other party in the conflict might not adopt the list and might put forward one of its own. The interest in these declarations would be keenest among neutral nations, because they could not risk the seizure of their commercial vessels by permitting them to carry anything of a contraband character. Whatever articles may be regarded by belligerents as contraband, a formal declaration of war is necessary to justify their seizure. In general, it may be said that war vessels, ammunition, implements of war either complete or capable of being assembled after delivery, explosives and their components, torpedoes, submarine electric and contact mines, and, conditionally, food and fuel are among the articles that are justly contraband of war. Every war develops new articles of this character.

In the early part of the war with Spain the United States forbade the shipment to Cuba of a large number of mules for use by the Spanish troops there, thus virtually declaring a mule contraband in that particular instance. It also laid an embargo against the shipment of coal on Spanish account. General Butler, in 1861, added a novel article to the list, when he refused to surrender to their masters a number of fugitive slaves, on the ground that they were contraband of war. A free or a captive balloon, to be used for military observation and signaling; one of the modern scientific kites, by which photographs of the earth may be taken at high altitudes above it; and a homing pigeon, trained to carry messages long distances, may become contraband of war when about to be used by one belligerent to the disadvantage of the other. Coal and liquid fuel as well as food are contraband under some circumstances and free articles under other, as explained under NEUTRALITY (*q. v.*).

EXCHANGE OF PRISONERS, a delivery by each belligerent to the other of prisoners of war. As each party is anxious to recover the use of the troops it has lost by capture, and also anxious to be relieved from the cost of caring for hostile prisoners, exchanges are mutually advantageous. In former times a money value was set on soldiers, from the highest officer to the humblest combatant, and exchanges were made on the basis of an equivalent of such values. Afterward a service or rank value was fixed. At one time a marshal of France was considered equal in service value to 10,000 soldiers. When exchanges were made on the basis of individual money values, they constituted ransoms. This form practically ceased during the great wars of the early French Republic, when the principles of equality then dominant caused the rejection of every estimate of a man by a money value. In modern times exchanges are often made *en masse*, excepting in the case of officers who have a greater importance on account of their rank. Then exchange may be officer for officer of similar grades, a superior officer for several subordinates ones; or an officer for a certain number of privates. The entire matter of exchange is arranged by the belligerent governments themselves and is placed under control of commissioners.

FLAG OF TRUCE, a white flag displayed in war to indicate that the party presenting it wishes to communicate with the opposing party. The bearer of the flag is usually accompanied by a bugler who sounds a call to attract the attention of the other party. In field operations the flag is generally carried to a point midway between the works or lines of the opposing armies, where its bearer is met by an officer or guard of the opponent to whom the object of displaying the flag is explained. This may be to arrange for an exchange of prisoners, ask for an armistice for time to bury the dead, seek terms of surrender, or other purpose. The flag bearer may be halted where he is met while his message is being delivered to the opposing commander, or he may be escorted directly to that

officer. Where a flag bearer is permitted to enter the lines of the enemy he is previously blindfolded that he may not acquire information concerning the strength or disposition of the enemy. The white flag is an emblem of peace, and both the flag and its bearing or supporting party are entitled to the highest protection. The flag guarantees the safe passage of its bearer between the opposing armies and the truce or cessation of hostilities cannot be resumed till the flag has returned to its own army. To fire on a flag of truce or the man or boat displaying it would be universally condemned as an infamous act.

MARTIAL LAW, the code under which a city or district is governed when circumstances render a civil government insufficient to preserve order. It follows the exhaustion of all civil methods, supersedes the civil authority, and places the city or district under the harsher domination of the military power. It was declared in Madrid as the only method of overcoming the riots and danger of revolution after the destruction of the Spanish fleet at Manila, and is a powerful weapon in dealing with an insurrection. During its operation the city or district is under the absolute government of the military commander. He has the right to destroy property and take life, to perform any act that will terminate the conditions for which martial law was declared and enable him to restore the place to its civil authorities. He must, however, neither authorize nor permit to be committed any barbarous or inhuman act. Probably, the greatest value of a declaration of martial law lies in the awe and fear inspired by a knowledge of the possibilities liable to follow long resistance. When a soldier shoots he shoots to kill.

A place under martial law and one under military government are under separate conditions, though there is a similarity between them. Martial law is a temporary expedient that may do its work simply by the effect of its declaration. On the other hand, military government is the control of a conquered country by the commander of an invading army. The duration of both conditions depends wholly on local questions. In the United States martial law is invoked when civil authorities are unable to preserve order. Military government was established in many of the Southern States after the civil war, and pending reconstruction. As soon as the requirements of Congress were complied with, the States were restored to civil government and the military government terminated. Concerning the use of martial law in the United States, F. Sturges Allen says: "This power of the Federal authorities to aid in suppressing local uprisings has become of great importance in quelling lawlessness and destruction of life and property in labor riots in the States where the State authorities were unable to put down the insurrection."

NEUTRALITY, an abstention from war, imposing on nations that formally declare it a prohibition against taking any part in hostilities between other nations. Under it belligerents have a right to expect a strict observance of the principles of blockade and contraband of war. A neutral nation is virtually restricted in what it may do during hostilities to a friendly attempt to bring war to a close. It may tender either belligerent its good offices to this end; but it is not becoming for it to undertake friendly intervention without a request to do so from one of the belligerents and an assurance from the other that its act will be acceptable. Extreme cases, however, such as a departure from the modern usages of war, may justify a forcible intervention. Neutrality to be effective must be formally declared. Where it is not declared the nation may aid either belligerent; but it then becomes an ally of it, and it not only violates the ethics of international comity but it renders itself liable to heavy future penalty.

Where it is declared it places the nation in a position of strict impartiality. Nothing that will enable either belligerent to maintain hostilities against the other can emanate from it.

Probably the best, and certainly the latest, definition of neutrality is that contained in Article VII. of the Treaty of Washington of 1871, between the United States and Great Britain. The article consists of three rules which the contracting parties agreed to observe as between themselves in the future and to invite other maritime powers to accede to them. These rules are:

“First. That a neutral government is bound, first, to use due diligence to prevent the fitting out, arming, or equipping, within its jurisdiction, of any vessel of which it has reason to believe is intended to cruise or carry on war against a power with which it is at peace; and also to use like diligence to prevent the departure from its jurisdiction of any vessel intended to cruise or carry on war as above, such vessel having been specially adapted in whole or in part within such jurisdiction to warlike use.

“Second. Not to permit or suffer either belligerent to make use of its ports or waters as the base of naval operations against the other, or for the purpose of the renewal or augmentation of military supplies or arms, or the recruitment of men.

“Third. To exercise due diligence in its own ports or waters, and, as to all persons within its jurisdiction, to prevent any violation of the foregoing obligations and duties; it being a condition of this undertaking that these obligations should in future be held to be binding internationally between the two countries.”

A further rule was laid down by the Alabama Claims tribunal, in making its award as follows: “Due diligence should be exercised by neutral governments in exact proportion to the risks to which either one of the belligerents may be exposed by failure to fulfill the obligations of neutrality on their part.”

Under CONTRABAND (*q. v.*) it was said that fuel and food were contraband of war under some circumstances and free articles under others. A war vessel of a belligerent may put into a neutral port to repair damages to machinery, and to take on coal and food necessary for its own immediate use. But a neutral nation could not allow it to take a supply of those articles sufficient to supply a fleet, for that would be aiding one party to maintain hostilities against the other. Should a belligerent vessel put into a neutral port in distress it would be permitted to remain there long enough to relieve the distress and no longer. Should a vessel of the other belligerent make the same port, either to relieve its distress or to capture or destroy the vessel already there, the second vessel would not be allowed to depart till the expiration of twenty-four hours after the first one has left. No attack by either vessel can be made within a distance of three miles from the shore of the neutral nation, for the waters within that limit are considered the territory of the nation.

In addition to the foregoing are three declarations in the Treaty of Paris of 1856, which are now generally observed by maritime nations, viz: *First.* Privateering is now and forever abolished. The United States in 1898 announced its determination to prohibit privateering, and Spain declared she would do as she thought best about it. *Second.* A neutral flag covers enemy's goods, excepting contraband of war. *Third.* Neutral goods, excepting contraband of war, shall not be seized under the enemy's flag.

PAROLE, a word or promise; in military usage, a declaration by a prisoner of war that he will observe the conditions imposed by his captor for his restricted or full liberty. It is based solely on personal honor, and there is nothing but

the prisoner's regard for his pledged word to restrain him from breaking it. Universally, it is accounted an infamous act for a prisoner to break his parole, and should he be captured a second time he would not be entitled to the consideration or treatment accorded an honorable man. Paroles are permitted in many instances. A prisoner may be released from confinement on condition that he will not go beyond specified limits without permission of his captor, and he may be allowed to return to his home on his pledge that he will not again take part in the existing war. It frequently happens that a large force of men is captured whose care would entail great expense and serious embarrassment to the captors. In such a case it is deemed best to release the entire body, and the officer in command gives his parole to the conditions exacted. Sometimes the parole prohibits further service during the war; at others it makes the prisoners non-combatants till after exchange for prisoners of the opposing army. During the American civil war, of 212,608 Federal troops captured 16,431 were paroled on the field, and of 476,169 Confederate troops captured 248,599 were similarly paroled.

PRISONERS OF WAR, in general persons captured from the enemy during military or naval operations. In former times the entire people of a vanquished city, state, or nation became the absolute property of the victors; the men were either put to death or with the women and children became slaves. By later usage the combatants or fighting force are the ones commonly considered and treated as prisoners of war. The young, the sick, the aged; Sisters of Charity, physicians, nurses, and others regularly engaged in attending the sick and wounded; clergymen, representatives of the Red Cross and other recognized humane organizations; musicians with an army; and a variety of other people are considered non-combatants, and are exempted from the treatment accorded to captured combatants. The status of prisoners of war, as far as laws, rules, and customs go, is exceedingly complicated. Where it is desired to weaken an enemy by depriving it of its fighting material, a nation may hold its prisoners of war till after peace is declared. In such a case it will place them in more or less large bodies in or near cities where they can be kept under surveillance. During the time they are held they are entitled to food, medical attendance, and necessary clothing. As long as they do not disturb the quiet of the place nor plot mutiny or resistance to their guard, they must be treated without violence or harshness.

A French decree of 1811 says: "Any prisoner of war, having the rank of an officer, and any hostage, who, after having given his parole, violates it, shall, if recaptured, be regarded and treated like a soldier, as to pay and rations, and confined in a citadel, fort, or castle." The theory of modern usage is well stated by Montesquieu, viz.: "To slay an enemy after the battle, or to reduce him to slavery is no longer permitted by international law; to make him lay down his arms, and to hold him as prisoner of war until the re-establishment of peace (unless a free retreat be granted him, either at once or at a stated time), are what the laws of modern warfare prescribe." A prisoner of war can no longer be forced to serve in the army of the nation which has taken him. For reasons stated under EXCHANGE OF PRISONERS and PAROLE it is often the best immediate policy for a nation to speedily relieve itself of its prisoners of war by exchange or freeing them on parole. A prisoner of more than usual importance in a military or a political sense however, may be held with advantage to the close of the war.

PRIVATEER, a vessel owned, armed, equipped, and manned by private persons, acting under a letter of marque or commission is sued by a belligerent, and

thus authorized to capture or destroy the property of the enemy on the high seas and in the enemy's territory, but not within the three-mile limit of the territory of neutrals. A private armed vessel acting without a commission is a pirate. Privateering is principally plundering. Owners of privateers are obliged to give heavy bonds that they will conform to the usages of war, obey the instructions of the nation issuing the commissions, observe the rights of neutrals, and bring into port, except in cases of overwhelming necessity, all captures for adjudication by a prize court. The bonds include security from which the belligerent may reimburse itself for any indemnities it may have to pay for unauthorized and illegal acts by the privateers. The grand days of privateering are passed. Generally the richest cargoes are now carried by steamships, and a privateer to be sufficiently successful to make its employment profitable must be the equal in speed, strength, and coal-carrying capacity of the fleetest ocean steamship. These conditions render privateering in the present day an exceedingly expensive occupation. Then, too, international agreements oppose it. Coal is a great factor in the life of a privateer, and the supply that can be carried and that may be taken aboard in a neutral port is too limited to permit extended operations. The Treaty of Paris abolished privateering as between the nations signing it and those which afterward gave their adhesion to the rule, and the principal nations now impose severe penalties on their citizens or residents who accept commissions, equip privateers, or enlist men for service in any foreign war.

The *United States Statutes* (1864), regulating the distribution of prize-money, says that all of the net proceeds of property condemned as prize shall be decreed to the captors in the case of privateers, unless otherwise provided in the commissions issued to such vessels; that in case of vessels not of the navy, and not controlled by any department of the government, the amounts decreed to the captors are to be divided between the owners of the vessel and the vessel's company; and that in case of vessels not of the navy, but controlled by either executive department, the whole amount decreed to the captor is to be divided among the ship's company. All this, however, was annulled by President McKinley's proclamation of April 26, 1898, in which he announced that the United States would not resort to privateering but would adhere to the rules of the Treaty of Paris.

The Spanish decree of April 24, declaring that a state of war existed between Spain and the United States and defining the rules which Spain proposed to observe during the war, contained the following clauses concerning privateering and the right of search:

"The Spanish Government upholding its right to grant letters of marque, will at present confine itself to organizing the vessels of the mercantile marine, which will co-operate with the navy, according to the needs of the campaign, and will be under naval control.

"In order to capture the enemy's ships and confiscate the enemy's merchandise and contraband of war under whatever form, the auxiliary cruisers will exercise the right of search on the high seas and in the waters under the enemy's jurisdiction, in accordance with international law and the regulations which will be published."

On May 23 following a declaration was made in the Spanish Senate that "Spain must immediately decree privateering, in order to utterly destroy American shipping," to which the Minister of the Interior replied that the government had deliberated upon the matter, "and had even taken certain decisions which would

shortly be known." At the time of writing it appeared unlikely that European nations having large commercial relations with the United States would permit privateering, now condemned by all maritime nations excepting Spain.

PRIZE OF WAR, property captured from an enemy, or an enemy's property captured from a neutral in time of war. If the property is captured in naval operations it is known as prize; if in military operations, it is booty. The entire subject of prize and prize-money as considered by the United States government is defined in the statute of 1864. In the articles on BLOCKADE, CONTRABAND, and NEUTRALITY will be found accounts of what articles constitute prizes and how they may be seized. The statute providing for their disposal is in brief as follows: It is the first duty of the commanding officer of a vessel which has made a capture to send the prize, in charge of a prize-master and prize-crew, into the nearest convenient port for adjudication. The prize-master takes with him all documents found on the vessel. On reaching port the prize-master reports to the district-attorney of the district in which the port is located, and the attorney files in the United States District Court of the district a libel against the prize property, and a marshal is placed in charge of it. The court appoints a prize-commission of three members, who treat the property as an individual under charges and proceed to try it, examining all papers and taking the depositions of the prize-master, crew, owners or representatives of the property, and other witnesses. The report or findings of the commission is submitted to the court, which condemns or releases the property according to the testimony. If the property is condemned, the court orders its sale at public auction, and decides how the proceeds shall be distributed.

In case the captured vessel is not in a condition to be sent to a port for adjudication, an appraisal is made, the property is sold, and the proceeds are deposited with the nearest assistant treasurer of the United States pending disposal according to law. In military operations the booty really belongs to the sovereign or head of the nation whose army has taken it, and consists of personal property. It has been common for the nation to award a portion or even all of the booty to the army that captured it. Possession of the property for twenty-four hours usually confirms its title to the captor. Public monuments, works of art, libraries, and paraphernalia of religious worship are excluded from property now considered as booty. Movable property belonging to private persons not taking part in hostilities, is not accounted booty by the laws of war, and cannot be taken from the owners. The exception to this rule comprises merchant ships and their cargoes, which may become naval prizes of war.

PRIZES, DISTRIBUTION OF VALUE OF, the judicial apportionment of the proceeds of sale of condemned prizes of war. If a captured vessel of an enemy or a neutral contains munitions of war all such property is confiscated and passes to the government of the capturing vessel. Where the prize vessel is of superior or equal force to the captor vessel the net proceeds of the sale of vessel and cargo is awarded under the statute to the captors; and where the prize is of inferior force, one-half of the net proceeds goes to the government, and the other half to the captors. All vessels of the navy which aid a captor in securing a prize share with it in the proceeds. The distribution of prize-money among the men taking part in the capture is substantially on the following basis: To the commanding officer of a fleet or squadron, one-twentieth part of all prize-money awarded to any vessel or vessels under his immediate command. To the commanding officer of a division of a fleet or squadron, on duty under the orders of the commander-in-chief of such fleet or squadron, one-fiftieth part of any prize-money awarded

to a vessel of such division for a capture made while under his command; but such part shall not be in addition to the share he would be entitled to as commander of the vessel making or aiding the capture. To the fleet captain, one-hundredth part of all money awarded to any vessel or vessels of the fleet or squadron in which he is serving; but if the capture is made by the vessel on which he is serving at the time, he will share in the award with all the officers and men on the vessel in proportion to his annual pay. To the commander of a single vessel, one-tenth part of all awards to his vessel, when the vessel at the time of the capture is under the orders of a superior officer, and three-twentieths when the vessel is independent of such other officer. After this apportionment, the residue of prize-money is distributed among all others on duty on the capturing or assisting vessel or vessels at the time of the capture, in proportion to their rates of pay in the service.

The law also provides a special bounty where an enemy's vessel is sunk or otherwise destroyed in an engagement, and the officers and crew thus lose the opportunity for acquiring prize-money. This bounty is \$100 for each person on board an enemy's ship or vessel of war at the beginning of an engagement resulting in its destruction, and is distributed among the officers and crew of the vessel or vessels taking part in the destruction in proportion to their regular pay. Under this law it was estimated that the officers and men in Admiral Dewey's squadron would receive an aggregate of \$185,000 for the destruction of the Spanish fleet at Manila.

RANK IN THE ARMY AND NAVY, grade of various officers established by law, each one carrying distinct rights, privileges, and emoluments. Official etiquette often prescribes that certain functions shall be performed by officers of certain grades, and that an officer is entitled to have an officer of equal rank to treat with. In order to facilitate communications between officers of the United States army and navy in accordance with the principle of equality in rank, as well as to enable them to communicate with similar officers of foreign countries, a correspondence has been established between military and naval ranks. Before the abolition of the four offices the general of the army ranked equal with the admiral of the navy, and the lieutenant-general with the vice-admiral. Since then the officers have ranked as follows: Major-generals with rear-admirals; brigadier-generals with commodores; colonels with captains; lieutenant-colonels with commanders; majors with lieutenant-commanders; captains with lieutenants; first lieutenants with masters; and second lieutenants with ensigns. Chiefs of naval bureaus, usually captains, rank as commodores while holding bureau assignments, and after vacating them resume their lineal rank.

If a naval officer is assigned to a duty or command that would ordinarily be given to an officer of a higher rank he is advanced to that rank, either full or acting, for the period of the assignment. Thus a commodore may become an acting rear-admiral in an emergency, and at its termination go back to his regular rank of commodore pending promotion to the full higher rank. A chaplain ranks as a captain of cavalry in the army, and as a captain in the navy. The superintendent of the United States Military Academy ranks as a colonel in the army, but the superintendent of the Naval Academy is not restricted to high rank; he may be a commander, captain, commodore, or rear-admiral. A flag-officer is a naval officer of sufficiently high rank to entitle him to command a fleet or a subdivision of one. During the American civil war there were three grades of flag-officer, admiral, vice-admiral, and rear-admiral. The ship from which he directs operations by means of signals is called the flagship, and is immediately

commanded by a captain. Captains command ships of high rating; commodores, squadrons of not less than four ships. In the army brigadier-generals command brigades, and major-generals, divisions and corps, the last being the largest body in the army as constituted for the war with Spain.

RECONCENTRADO, a person affected by the bando or decree of concentration in Cuba. This decree was issued by Captain-General Weyler on Oct. 21, 1896, and resulted within a few weeks in the starvation of fifty per cent. of the population in the districts affected by it. It was at first applied to the province of Pinar del Rio, and subsequently was extended so as to cover every part of the island under immediate control of the Spanish troops. The decree was an order that the peasantry and the people in the agricultural districts should at once remove to the garrison towns or isolated places held by the troops, and that the raising and transportation of provisions of all kinds should cease. As soon as the unfortunate people were concentrated at the places indicated, their fields, homes, mills, factories, and other property were laid waste or destroyed. It was estimated that 300,000 or more of the agricultural population were concentrated in or near towns, and there deprived of the means of support, and left destitute of food, clothing, and shelter. The depopulation and devastation of the productive districts produced a great scarcity of food, and the reconcentrados were the first to suffer therefrom.

General Weyler defended his decree as a justifiable act of military necessity, calculated to bring the insurrection to a speedy termination by depriving the insurgents of the means of subsistence. In his message to Congress in December, 1897, President McKinley denounced the decree as an act of extermination, not one of civilized warfare, and declared that the only peace it could beget was that of the wilderness and the grave. In the meantime the American people through Congress took steps to relieve the suffering in Cuba, first of citizens of the United States, and afterward under act of May 24, 1897, of the starving people in general. Ready assent to the scheme for the general relief was given by the Spanish authorities. The President issued an appeal to the people of the United States for contributions of food, clothing, medicines, and other articles, and on Jan. 8, 1898 appointed a Central Cuban Relief Committee to take charge of the humane movement of the people. Large quantities of supplies of all kinds were contributed in all parts of the United States, free transportation was given by railroad and steamship companies, and representatives of the Central Relief Committee and the American Red Cross Society went to Cuba and co-operated with the United States consular and Spanish local officers in distributing the supplies and otherwise caring for the sufferers.

The destruction of the battleship *Maine* was not allowed to interfere with this grand impulse of humanity. On March 27, the President submitted a number of propositions to the Spanish government having in view the early re-establishment of peace in Cuba, and with them asked for the immediate revocation of the order of reconcentration so far as to permit the people to return to their farms and the needy to be relieved with provisions from the United States. It was not until after it became known that the President intended to ask of Congress authority to stop the war in Cuba "in the name of humanity, in the name of civilization, in behalf of endangered American interests," that the Spanish government revoked General Weyler's decree.

SEARCH, RIGHT OF, the right claimed by belligerents to search a neutral vessel to ascertain whether or not it is carrying articles that are contraband of war. It has already been shown that the neutral flag covers enemy's goods, with the

exception of contraband of war, and that neutral goods not contraband are not liable to confiscation under the enemy's flag. At the beginning of the war with Spain the United States announced its adherence to the foregoing rules of the Treaty of Paris, and the President added another rule, viz: "The right of search is to be exercised with strict regard for the rights of neutrals, and the voyages of mail steamers are not to be interfered with except on the clearest grounds of suspicion of a violation of law in respect of contraband or blockade." Spain declared her purpose to exercise the right of search of neutral ships on the high seas. While the object of a search is clear, the detection of contraband of war, the circumstances under which it is permissible vary, as authorities differ widely. A search may be necessary to determine, first, if the vessel has a right to sail under the flag it displays, for the flag is not always a proof of the nationality of a vessel.

It is taken for granted that a merchant vessel which refuses to allow itself to be searched is a suspect, and runs a risk of being declared a legal prize. M. Cauchy has called attention to three degrees of verification: (1) the production of a naval passport which shows the nationality, the port from which the vessel sailed, and its destination; (2) the representation of the charter parties or freighting, in which are found the nature and the quantity of the merchandise on board; and (3) the visit of the vessel, or the direct search of its contents. The ship's papers should be sufficient. Actual search should only be made when there are strong suspicions of fraud. Thus a search of the Spanish steamer *Argonauta*, captured by one of the blockading vessels off the coast of Cuba, revealed the presence on board of a considerable party of Spanish military officers and guns and ammunition for the Spanish army in Cuba. The vessel was therefore a legal prize and was condemned as such. The war material was confiscated and the Spanish officers were held as prisoners of war.

Lord Stowell said: "The right to capture carries the right to search with it;" and Theodore D. Woolsey wrote: "Being, however, an acknowledged right, it must be submitted to, and resistance would authorize force on the part of the cruiser; the search, however, must not be made annoying. If the vessel is on an innocent, lawful voyage, she is to pursue her way; if otherwise she may be seized." While the right of search is primarily a war right, from which vessels of war are exempt, it may also be exercised in time of peace as a method of detecting fraud against the revenues of a nation.

SPY, in warfare a person who (1) betrays his own country to an enemy and is thereby accounted a traitor, or (2) who being an enemy secretly obtains information concerning the strength of an opponent for the advantage of his own side. The traitor is a most infamous creature; the spy of the second class may be a high-minded, patriotic man or woman. Extreme personal courage is required of a spy, for failure usually means an ignominious death. It is considered perfectly honorable and often is a great advantage for a commanding officer to employ spies; but because of the great personal risk it would not be deemed honorable for a commander to order a person to become a spy. The quality of a spy must be that of a volunteer, willing to risk his life for an advantage to his country. The determination of what constitutes a spy is yet to be made in terms that will be universally accepted. Probably the clearest definition of the word is found in Articles 45 and 46 of the *Articles of War* of the United States, and in Section 1,343 of the *Revised Statutes of the United States*. The *Articles* declare that whosoever relieves the enemy with money, victuals, or ammunition, or knowingly harbors or protects an enemy, shall suffer death or such other punishment as a

court-martial may direct; and whosoever holds correspondence with or gives intelligence to the enemy, either directly or indirectly, shall suffer death, etc. The *Revised Statutes* says: "All persons, who in time of war or of rebellion against the supreme authority of the United States, shall be found lurking or acting as spies in or about any of the fortifications, posts, quarters, or encampments of any of the armies of the United States, or elsewhere, shall be triable by a general court-martial, or by a military commission, and shall, on conviction thereof, suffer death." *General Orders No. 100*, in the instructions for the government of the armies of the United States in the field, declares that the spy is punishable with death by hanging by the neck, whether or not he succeed in obtaining the information or in conveying it to the enemy. The *Naval Discipline Act* of Great Britain provides that spies can be tried by a naval court martial, and shall suffer death or other punishment. All nations recognize the legitimacy of employing spies; each one has its own conception of what constitutes a spy; and all are united on the principle that the spy is punishable with death, although another sentence may be awarded on conviction.

STRATEGY BOARD, a body of expert officers who plan operations for an army or navy. Under several strictly military governments there are bodies of officers of large experience in the various branches of military science that constitute what is known as the general staff. These experts gather and digest all possible information concerning their profession, and in time of war exercise a large influence on field operations. In the United States the army and navy have their separate bureaus of information, and after the beginning of the war with Spain the usual work of a general staff was performed by army and navy strategy boards, under the immediate direction of the secretaries of the departments. With large, detailed maps covering every inch of land or water likely to be involved in any way in the war, the boards first locate with markers the initial positions of armies, squadrons, and minor forces, both American and Spanish, and the moment the slightest change in any of these locations is made the change is indicated by the shifting of the markers. Hence the boards can determine at any time the positive or approximate location of any force. If the change by the enemy is one of vital moment, warnings or fresh instructions, are hastened to the commanding officer directly concerned.

The strategy board can see at a glance the condition of the entire field of operations; the local admiral or general is restricted to his immediate environment. A close touch between the boards and a distant army or fleet enables the latter to operate more intelligently and to grasp quickly the meaning of sudden changes in instructions. There are times, however, when an admiral or a general feels that his judgment and authority are injured by instructions from a distant center. Some of the most loyal and experienced commanders have not hesitated to cut cables and telegraph lines behind them, that they might not be hampered by instructions based on an inadequate knowledge of local conditions. A time, too, comes quickly when a commander must be left to his own judgment and resources. In the American civil war many excellent commanders were hindered and thwarted by the multiplicity of orders from Washington and elsewhere, and others wrought marvels by first cutting off outside communications.

WAR, RULES OF, a code of instructions for the government of armies during hostilities. The instructions for the armies of the United States are contained in *General Orders No. 100*, issued April 24, 1863, and reissued in May, 1898. These instructions, originally prepared for the United States armies alone and in the midst of the civil war, were found to be so comprehensive that they were

adopted by both France and Prussia in the war between them, and were the bases on which a general European conference afterward acted in drawing up an agreement on this subject. They cover almost every conceivable feature of military conduct and usage in time of war, and define many technical terms. The instructions embrace ten sections, viz:

Section 1.—Martial law, military jurisdiction; military necessity, retaliation. Section 2.—Public and private property of the enemy, protection of persons, and especially of women; of religion, the arts and sciences, punishment of crimes against the inhabitants of hostile countries. Section 3.—Deserters, prisoners of war, hostages, booty on the battlefield. Section 4.—Partisans, armed enemies not belonging to the hostile army, scouts, armed prowlers, war rebels.

Section 5.—Safe conduct spies, war traitors, captured messengers, abuse of the flag of truce. Section 6.—Exchange of prisoners, flags of truce, flags of protection. Section 7.—The parole. Section 8.—Armistic, capitulation. Section 9.—Assassination. Section 10.—Insurrection, civil war, rebellion.

The following is a summary of the most important instructions:

Military necessity admits of all direct destruction of life or limb of "armed" enemies and of other persons whose destruction is incidentally "unavoidable" in the armed contests of the war. Military necessity does not admit of cruelty—that is, the infliction of suffering for the sake of suffering or for revenge, nor of maiming or wounding, except in fight, nor of torture to extort confessions. It admits of deception, but disclaims acts of perfidy. It is lawful to starve the hostile belligerents, armed or unarmed, so that it leads to the speedier subjection of the enemy. When a commander of a besieged place expels the noncombatants, in order to lessen the number of those who consume his stock of provisions, it is lawful, though an extreme measure, to drive them back, so as to hasten on the surrender. Commanders, whenever admissible, inform the enemy of their intention to bombard a place, but it is no infraction of the common law of war to omit thus to inform them. Surprise may be a necessity.

Retaliation will never be resorted to as a measure of mere revenge, but only as a means of protective retribution, and, moreover, cautiously and unavoidably—that is to say, retaliation shall only be resorted to after careful inquiry into the real occurrence and the character of the misdeeds that may demand retribution. The more vigorously war is pursued, the better it is for humanity. Sharp wars are brief.

A victorious army appropriates all public money, seizes all public movable property until further directed by its government, and sequesters for its own benefit or that of its government all the revenues of real property belonging to the hostile government or nation. The title to such real property remains in abeyance during military occupation, and until the conquest is made complete. The United States acknowledges and protects, in hostile countries occupied by them, religion and morality, strictly private property, the persons of the inhabitants, especially those of women, and the sacredness of domestic relations.

Deserters from the American army, having entered the service of the enemy, suffer death if they fall into the hands of the United States. It is against the usage of modern war to resolve in hatred and revenge to give no quarter. Outposts, sentinels, or pickets are not to be fired upon except to drive them in, or when a positive order, special or general, has been issued to that effect. Whoever intentionally inflicts additional wounds on an enemy already wholly disabled, or kills him, or orders that this shall be done, shall suffer death if convicted.

Martial law is explained as simply military authority exercised in accordance with the laws and usages of war. A place, district, or country occupied by an enemy stands, in consequence of the occupation, under the martial law of the invading or occupying army. It extends to property and to persons, whether they are subjects of the enemy or aliens to that government. Whenever feasible, martial law is carried out in cases of individual offenders by military courts, but sentence of death shall be executed only with the approval of the chief executive, provided the urgency of the case does not require a speedier execution, and then only with the approval of the chief commander. Martial law should be less stringent in places in countries fully occupied and fairly conquered.

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