

ANNUAL REPORT

OF THE

SECRETARY OF COMMERCE AND LABOR

1906



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DEPARTMENT OF COMMERCE AND LABOR

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OFFICE OF THE SECRETARY

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ANNUAL REPORT

OF THE

SECRETARY OF COMMERCE AND LABOR.

DEPARTMENT OF COMMERCE AND LABOR,
OFFICE OF THE SECRETARY,
Washington, December 1, 1906.

To the PRESIDENT:

I have the honor to submit herewith, for transmission to Congress, in accordance with the provisions of the organic act, the annual report of this Department:

APPROPRIATIONS AND EXPENDITURES.

The itemized statement of expenditures from the contingent fund of the Department of Commerce and Labor will be transmitted to Congress in the usual form.

The following table shows the aggregate amounts of the annual appropriations for the various bureaus and services of the Department of Commerce and Labor for the fiscal year ended June 30, 1906; of the appropriations for public works and balances of appropriations in the Treasury available July 1, 1905; for public works, which under the law, are expended without regard to any particular fiscal year, and of permanent indefinite appropriations:

	Annual appropriations, 1906.	Appropriations for public works.	Permanent indefinite appropriations.	Totals.
Office of the Secretary of Commerce and Labor	\$288,129.84			\$288,129.84
Bureau of Corporations	217,879.40			217,879.40
Bureau of Manufactures	11,867.23			11,867.23
Bureau of Labor	184,020.00			184,020.00
Light-House Board	46,640.00			46,640.00
Light-House Establishment	3,686,000.00			3,686,000.00
Light-houses, beacons, fog signals, etc		\$2,350,664.53		2,350,664.53
Bureau of the Census	1,368,416.63			1,368,416.63
Bureau of Statistics	85,070.00			85,070.00

α Of this amount \$33,703.67 is to be expended without regard to fiscal year.

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	Annual appropriations, 1906.	Appropriations for public works.	Permanent indefinite appropriations.	Totals.
Office of the Supervising Inspector-General, Steamboat-Inspection Service.....	\$11,940.00			\$11,940.00
Steamboat-Inspection Service			\$409,945.13	409,945.13
Bureau of Navigation.....	36,580.00			36,580.00
Salaries, shipping service.....			60,850.90	60,850.90
Services to American vessels.....			16,742.73	16,742.73
Refunding penalties or charges erroneously exacted.....			1,990.80	1,990.80
Bureau of Immigration.....	30,950.00			30,950.00
Enforcement of the Chinese exclusion act.....	600,000.00			600,000.00
Expenses of regulating immigration.....			1,602,796.76	1,602,796.76
Hospital, ferryboat, new island, repairs, etc., at Ellis Island (N. Y.) immigrant station.....		\$476,241.02		476,241.02
San Francisco (Cal.) immigrant station.....		100,000.00		100,000.00
Bureau of Standards.....	154,660.00	12,484.10		167,144.10
Coast and Geodetic Survey.....	975,254.28			975,254.28
Bureau of Fisheries.....	623,920.00			623,920.00
Fish hatcheries, launch, steamer, etc.....		208,370.42		208,370.42
Salaries and traveling expenses of agents at seal fisheries in Alaska.....	12,950.00			12,950.00
Supplies for native inhabitants.....	19,500.00			19,500.00
Totals.....	8,353,777.38	3,147,760.07	2,092,326.32	13,593,863.77

α Of this amount \$287,779.28 is to be expended without regard to fiscal year.

The following table shows the disbursements made by the disbursing clerk of the Department in the fiscal year ended June 30, 1906:

Bureaus and titles of appropriations.	First quarter.	Second quarter.	Third quarter.	Fourth quarter.	Totals.
OFFICE OF THE SECRETARY.					
Salaries, Office of Secretary of Commerce and Labor, 1905.....	\$189.34				\$189.34
Salaries, Office of Secretary of Commerce and Labor, 1906.....	35,087.42	\$25,642.27	\$36,649.27	\$36,372.43	133,751.39
Contingent expenses, Department of Commerce and Labor, 1903-4.....				33.00	33.00
Contingent expenses, Department of Commerce and Labor, 1905.....	8,389.65				8,389.65
Contingent expenses, Department of Commerce and Labor, 1906.....	7,817.54	10,648.87	13,643.57	14,334.47	46,444.45
Rent, Department of Commerce and Labor, 1905.....	2,097.48				2,097.48
Rent, Department of Commerce and Labor, 1906.....	3,911.63	6,367.43	6,167.44	6,067.44	22,513.94
Salaries and traveling expenses of agents at seal fisheries in Alaska, 1904.....	611.70				611.70
Salaries and traveling expenses of agents at seal fisheries in Alaska, 1905.....	4,448.45	2,920.00			7,368.45
Salaries and traveling expenses of agents at seal fisheries in Alaska, 1906.....	992.55	2,189.37	1,642.50	1,172.00	5,996.42
Salaries and expenses, special agents, Department of Commerce and Labor, 1905.....	1,587.13				1,587.13
Salaries and expenses, special agents, Department of Commerce and Labor, 1906.....				5,440.00	5,440.00
Total.....					234,422.95

Bureaus and titles of appropriations.	First quarter.	Second quarter.	Third quarter.	Fourth quarter.	Totals.
BUREAU OF CORPORATIONS.					
Salaries, Bureau of Corporations, 1906....	\$14,133.59	\$9,768.70	\$14,939.29	\$14,896.99	\$53,738.87
Salaries and expenses, special attorneys, examiners, etc., Bureau of Corporations, 1905.....	1,654.69				1,654.69
Salaries and expenses, special attorneys, examiners, etc., Bureau of Corporations, 1906.....	18,542.79	15,449.27	19,875.86	17,561.10	71,429.02
Total					126,822.58
BUREAU OF MANUFACTURES.					
Salaries, Bureau of Manufactures, 1905....	9.17				9.17
Salaries, Bureau of Manufactures, 1906....	2,266.11	1,814.15	3,023.34	3,362.50	10,466.10
Total					10,475.27
BUREAU OF LABOR.					
Salaries, Bureau of Labor, 1905.....	195.02				195.02
Salaries, Bureau of Labor, 1906.....	26,014.77	17,517.07	25,821.87	26,199.98	95,553.69
Miscellaneous expenses, Bureau of Labor, 1906.....	4,894.06				4,894.06
Miscellaneous expenses, Bureau of Labor, 1906.....	13,380.95	13,159.57	15,340.44	15,448.29	57,329.25
Stationery, Bureau of Labor, 1905.....	306.00				306.00
Stationery, Bureau of Labor, 1906.....	1.85	48.30	435.30	144.79	306.24
Library, Bureau of Labor, 1905.....	132.49				132.49
Library, Bureau of Labor, 1906.....	192.05	9.25	46.77	288.02	536.09
Rent, Bureau of Labor, 1905.....	562.50				562.50
Rent, Bureau of Labor, 1906.....	1,125.00	1,687.50	1,687.50	2,250.00	6,750.00
Contingent expenses, Bureau of Labor, 1906.....	583.77				583.77
Contingent expenses, Bureau of Labor, 1906.....	312.64	459.50	595.25	781.45	2,098.84
Postage to postal-union countries, Bureau of Labor, 1906.....			371.46	59.40	430.86
Total					170,002.81
LIGHT-HOUSE BOARD.					
Salaries, Office of Light-House Board, 1906.	10,965.15	8,005.46	11,709.68	11,579.48	42,259.77
BUREAU OF STANDARDS.					
Salaries, Bureau of Standards, 1905.....	213.34				213.34
Salaries, Bureau of Standards, 1906.....	22,978.21	15,775.74	24,446.49	24,334.50	87,534.94
Equipment, Bureau of Standards, 1905.....	7,492.89				7,492.89
Equipment, Bureau of Standards, 1906.....	5,808.92	13,430.43	8,276.84	3,787.37	31,303.56
General expenses, Bureau of Standards, 1905.....	356.24	7.41			363.65
General expenses, Bureau of Standards, 1906.....	1,182.26	4,126.74	2,968.73	2,363.10	10,640.83
Improvement and care of grounds, Bureau of Standards, 1906.....	1,139.87	133.37	196.21	29.92	1,499.37
Outbuilding, Bureau of Standards.....	4,158.00	4,372.50	2,584.50	1,209.50	12,324.50
Total					151,373.08
BUREAU OF STATISTICS.					
Salaries, Bureau of Statistics, 1905.....	98.34				98.34
Salaries, Bureau of Statistics, 1906.....	18,270.59	13,434.89	19,506.51	19,358.74	70,570.73
Collecting statistics relating to commerce, 1905.....	20.00				20.00
Collecting statistics relating to commerce, 1906.....	875.00	1,175.61	870.97	875.00	3,796.58
Collating tariffs of foreign countries, 1906.....	825.00	550.00	822.08	825.00	3,022.08
Total					77,507.73

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Bureaus and titles of appropriations.	First quarter.	Second quarter.	Third quarter.	Fourth quarter.	Totals.
BUREAU OF NAVIGATION.					
Salaries, Bureau of Navigation, 1906	\$6, 778. 06	\$4, 778. 61	\$6, 972. 58	\$6, 948. 39	\$25, 462. 64
Contingent expenses, shipping service, 1905	778. 56				778. 56
Contingent expenses, shipping service, 1906	168. 78	678. 97	1, 465. 75	1, 425. 24	3, 738. 74
Total					29, 974. 94
STEAMBOAT-INSPECTION SERVICE.					
Salaries, office of Supervising Inspector-General, Steamboat-Inspection Service, 1906	2, 985. 00	1, 989. 98	2, 985. 00	2, 985. 00	10, 944. 98
Salaries, Steamboat-Inspection Service	89, 073. 06	59, 817. 25	89, 966. 67	89, 312. 77	328, 169. 75
Contingent expenses, Steamboat-Inspection Service	22, 549. 15	20, 695. 72	16, 331. 83	20, 302. 84	79, 879. 54
Total					418, 994. 27
IMMIGRATION SERVICE.					
Salaries, Bureau of Immigration, 1905	483. 34				483. 34
Salaries, Bureau of Immigration, 1906	7, 669. 45	5, 166. 42	7, 737. 50	7, 689. 50	28, 262. 87
Enforcement of the Chinese-exclusion act, 1905	43, 980. 20	3, 268. 89	275. 92	72. 00	47, 597. 01
Enforcement of the Chinese-exclusion act, 1906	61, 724. 30	97, 559. 77	92, 347. 67	92, 842. 15	344, 473. 89
Expenses of regulating immigration	352, 162. 59	339, 944. 71	379, 991. 88	409, 576. 39	1, 481, 674. 57
Immigrant station, Ellis Island, N. Y.	241. 28	183. 49			424. 77
New Island, near Ellis Island, N. Y.	61, 076. 95	32, 776. 41	17, 068. 23	8, 670. 31	119, 591. 90
Immigrant station, San Francisco, Cal.			100. 00		100. 00
Total					2, 022, 608. 35
Totals	873, 485. 17	735, 548. 62	826, 864. 90	848, 543. 06	3, 284, 441. 75

The disbursements during the fiscal year ended June 30, 1906, from the annual appropriations for that year, from the appropriations for public works, and from the permanent indefinite appropriations during the same fiscal year were as follows:

By the disbursing clerk, Department of Commerce and Labor, on account of salaries and expenses of the Office of the Secretary of Commerce and Labor, the bureaus of Corporations, Manufactures, Labor, Statistics, Navigation, Immigration, and Standards, the Light-House Board, the Office of the Supervising Inspector-General, Steamboat-Inspection Service, expenses of regulating immigration, expenses of enforcing the Chinese-exclusion act, salaries and expenses Steamboat-Inspection Service at large, salaries and expenses of agents at seal fisheries in Alaska (shown in detail in the above table of expenditures)	\$3, 284, 441. 75
By the engineer and naval secretaries of the Light-House Board, engineers and inspectors detailed from the Army and Navy to duty in the Light-House Establishment, and all other officers who disbursed money for the Light-House Establishment	4, 282, 695. 97
By the disbursing clerk, Bureau of the Census, on account of salaries and expenses of the Bureau of the Census	1, 161, 631. 80
By the special disbursing agent, Coast and Geodetic Survey, on account of salaries, expenses, and public works of the Coast and Geodetic Survey	826, 465. 37

By the special disbursing agent, Bureau of Fisheries, on account of salaries, expenses, and public works of the Bureau of Fisheries....	\$682,981.68
By the special disbursing agents of the Immigration Service.....	35,002.56
By the special agents of the Department investigating trade relations abroad, as special disbursing agents.....	17,763.01
By customs officers, on account of witnesses' fees in steamboat investigations.....	1,163.45
By special disbursing agent, Steamboat-Inspection Service.....	720.60
By the Auditor for the State and other Departments on account of all the bureaus, offices, and services, from annual appropriations for the fiscal year ended June 30, 1906, appropriations for public works, and permanent indefinite appropriations.....	215,319.68
Total disbursements during the fiscal year.....	10,508,185.87

The recommendation made in my annual report for the fiscal year ended June 30, 1905—that, so far as practicable, the disbursing offices authorized by law and now existing in some of the subordinate bureaus be consolidated with the disbursing office of the Department of Commerce and Labor—is renewed. Such a consolidation would result in a saving of both time and expense in the examination of accounts and the payment of vouchers. The bookkeeping of the Department would be simplified, and the exact status of accounts and balances of appropriations, including the balances of advances on requisitions, could be ascertained without difficulty, as the ledgers of the Department would show the disbursements from day to day.

Should consolidation be effected, the work of disbursing the appropriations of the Department and the several bureaus and offices thereof would come under the personal supervision of the Secretary.

PERSONNEL OF THE DEPARTMENT.

The regular or permanent positions under the Department are distributed as follows: Office of the Secretary, 145; Bureau of Manufactures, 26; Bureau of Corporations, 70; Bureau of Labor, 97; Light-House Establishment, 5,581; Bureau of the Census, 1,320; Coast and Geodetic Survey, 311; Bureau of Statistics, 53; Steamboat-Inspection Service, 226; Bureau of Fisheries, 305; Bureau of Navigation, 73; Bureau of Immigration, 1,198, and Bureau of Standards, 95, the total number of regular positions in the Department being 9,500.

The change in status of a large number of officers and employees in the Immigration Service stationed along the Canadian and Mexican borders from the excepted to the competitive class, rendering them eligible for transfer to points within the United States where their training and experience might be of advantage, has worked an improvement in the Service. During the past year an exhaustive plan for a readjustment of salaries has been put into operation and efficiency regulations to govern the promotion of employees have been promulgated.

Laborers appointed without examination to statutory positions in

the field service of the Bureau of Fisheries, who have been assigned to fish-cultural duties, were recently classified by Executive order. Regulations to govern appointments, promotions, etc., in the field service of the Bureau are about completed. Perhaps the most important feature of the new regulations will be a provision for the promotion of such laborers as were recently classified.

At first the Department experienced considerable difficulty in making such temporary appointments as were found necessary in the Light-House Service at large conform to the requirements of the civil-service rules, the old regulations having failed to provide specifically for certain conditions, unforeseen when the classification of the Light-House Service was originally under consideration. Cooperative action with the Civil Service Commission led to an amendment to the civil-service rules excepting from the requirements of examination and registration "mechanics and skilled tradesmen or laborers, employed upon construction or repair work in the field services, under such restrictive conditions that, in the opinion of the Commission, they can not, as a class, be appointed from registers of eligibles." This change has been of decided benefit to the Service, as the officers of the Light-House Establishment may now have constantly at their command the services of mechanics, laborers, and others who are trained in the work for which they are employed, and who might not have been available under the former method. A change in the manner of certifying and appointing persons in this Service has been beneficial to the Department, to the Light-House Service, and to the Civil Service Commission; has secured a closer observance of the civil-service rules than was practicable under the earlier systems, and has had the effect, in the inspection branch of the Service, of showing the necessity for a revision of the classes of light-keepers based upon the duties to be performed by them after appointment.

PRINTING.

A material saving has been effected in the expenditures for printing and binding during the year, notwithstanding the expansion in the Department's work. This has been made possible by an extension of the efforts to eliminate unnecessary matter from publications, and to curtail the tendency to multiply the number of blank forms in use.

In accordance with the Executive order of January 20, 1906, I appointed as an advisory committee on printing and publication for the Department, the Assistant Secretary of Commerce and Labor, the chief clerk of the Bureau of the Census, and the chief of the division of printing. This committee effectively performs the various duties imposed upon it by the President's order and has succeeded in reducing the volume of printing without in any way crippling the needs of the service.

At the close of the fiscal year 1905-6, there was covered into the Treasury over \$170,000 of the Department's printing fund, as compared with a balance of \$140,000 in the year 1904-5. There will probably be little or no balance to cover into the Treasury from the Department's printing allotment at the close of the fiscal year ending June 30, 1907, owing to the provisions of public resolution No. 13, approved March 30, 1906. This resolution requires that the cost of publications, the printing of which is specifically provided for by law, shall be paid from the Department's allotment of the appropriation for printing and binding instead of from the Congressional allotment, as heretofore. It is believed that the amount annually expended for printing by the Department, including that hitherto charged against the Congressional allotment, will be materially decreased as a result of the methods adopted to eliminate unnecessary printing.

BUREAU OF MANUFACTURES.

The work of the Bureau of Manufactures has been prosecuted along the lines indicated in my last annual report and in accordance with the law, which requires the Department, thru this Bureau, to promote and develop the various manufacturing industries of the United States and markets for the same at home and abroad by gathering, compiling, publishing, and supplying all available and useful information concerning such industries and markets. During the year a large mass of information has been collected by the Bureau in regard to the manufacturing industries of the country, having special reference to extending the sale of American products in foreign markets. Under the system followed the Bureau is enabled to speedily reach any particular industry and promptly inform its representatives of any particular opportunities that are offered for the promotion of American trade. Commercial reports made by American diplomatic and consular officers are prepared for publication by this Bureau, and thru this means opportunities are frequently offered for the sale of American manufactured products abroad. The possession of a classified list of manufactures enables the Bureau to communicate directly with the parties immediately interested, and in a number of cases during the year information of the character described has been sent in advance to manufacturers, who have profited thereby. The value of this work, which is highly esteemed by manufacturers and exporters, is shown by the fact that it has grown in variety and volume to a degree far beyond the ability of the present inadequate force of the Bureau to properly handle, and it is urgently recommended that provision be made for supplying the necessary clerical assistance to meet the constantly increasing demand for such data. A work of this character will be effective in proportion to its completeness and thoroughness, and the value thereof will be augmented by such intelligent classification as will make it immediately available.

Much valuable information of the most practical character was furnished by special agents of the Department. A number of their reports were presented to Congress at its last session and others will be presented at the coming session. Under direction of the Bureau of Manufactures the special agents sent to the Orient secured samples of every kind of cotton goods sold in the Chinese markets. These samples were prepared by the Bureau for distribution among manufacturers of cotton fabrics. Cards were sent out containing samples of these fabrics, together with information relative to wholesale and retail prices, uses to which put, methods of handling, and other data of value to manufacturers. Nearly 200 complete sets of the samples, embracing several thousand pieces of cloth, were sent to boards of trade and other organized commercial bodies located in centers of the cotton manufacturing industry. Sets were also sent to textile schools.

In addition to cotton fabrics, samples of other manufactured products imported into oriental countries were received and circulated among manufacturers of like products in this country. This practical work met with general commendation from all who were specially interested in the industries directly concerned. It might have been extended to a greater degree had there been at the disposal of the Department facilities for that purpose. In the endeavor which is being made to extend our foreign trade, exigencies will arise that can not be anticipated, and which, in the absence of authority to forestall, are likely to result in embarrassment to the Department and delay and loss to our business interests. In this particular case, the samples of cotton cloth and yarns, which were of the highest importance and value to cotton manufacturers, could be forwarded only with the understanding that the charges of carriage to and fro should be defrayed by such manufacturers. It is recommended that adequate provision be made to enable the Department to meet conditions of this character.

The work performed by the four special agents during the year was of the most comprehensive character, and included investigations into trade conditions in the several countries of Central and South America, Cuba, Mexico, the Dominion of Canada, China, and Japan. Their reports covered commercial, industrial, and climatic conditions in those countries, the tastes and habits of the people, their preferences for particular lines of imported commodities, and other matters having relation to the promotion of trade. These reports, which were made periodically, were published in the Daily Consular and Trade Reports immediately upon their receipt, and thus promptly distributed among business men interested. The full value of this work can not at this time be properly estimated. Its immediate value consists in the vast amount of information that has been furnished those in charge of our great commercial and industrial interests, by which they have been accurately and reliably informed of the character and conditions of

foreign markets and the methods that have been followed and that are now pursued by our commercial competitors who have successfully occupied these fields for many years. Its prospective value will depend upon whether our manufacturers and merchants utilize the information thus supplied and direct their efforts with that zeal and intelligence characterizing all their endeavors in the conduct of trade in home markets. The results of the labors of these special agents attracted wide attention, not only from business men of the United States, but from those of foreign countries, in which their reports obtained considerable publicity by reproduction in newspapers and trade periodicals. That this special work is appreciated by our manufacturers and merchants is apparent from the large volume of correspondence which it has created with the Department.

In addition to the preliminary reports that were given current publication, the special agents who visited the several countries heretofore named prepared final reports, in which the results of their observations were condensed and consolidated, and published in pamphlets that will have permanent value. Those relating to the Dominion of Canada, Mexico, Cuba, Brazil, China, and Japan were transmitted to Congress at its last session. A report on Argentina, Uruguay, and Paraguay, and one on the Pacific coast States of South America and the States of Central America, were not completed until the adjournment of Congress.

In several cases reports were received from special agents and consular officers disclosing facts which were especially important to particular industries if promptly conveyed to those charged with their direction. These reports were printed and mailed to such parties with a circular note calling attention to the opportunities presented for the sale of their products. This method of conveying valuable information to those who were in position to utilize it has been productive of good results and has been highly commended in letters received by the Department.

The work of collating and arranging tariffs of foreign countries in form for distribution was transferred on June 1, 1906, from the Bureau of Statistics to the Bureau of Manufactures. This work logically belongs to the latter Bureau, and can be expeditiously published and distributed in connection with the preparation, publication, and distribution of commercial reports received from diplomatic and consular officers and special agents. To meet frequent requests from business men regarding foreign tariffs and cognate matters, it is imperative that the Department should be equipped with a competent and adequate force to collate and arrange not only tariff schedules, but information regarding proposed changes in tariff laws and covering methods of administration, customs regulations, port and other charges which attach to imported merchandise, and which are elements

that contribute to fixing the cost to the consumer. The amount annually appropriated for this purpose since the work was entered upon is insufficient to fully accomplish the object intended by Congress, and an increase in the amount hitherto appropriated for this work is earnestly recommended.

During the year the Bureau of Manufactures distributed 1,572,600 copies of Daily Consular and Trade Reports, 6,750 copies of special reports, 102,210 copies of the monthly edition of Consular and Trade Reports, and 2,000 copies of Commercial Relations and Review of the World's Commerce, making in all a total of 1,683,560 copies of periodicals distributed.

BUREAU OF CORPORATIONS.

The Bureau of Corporations has continued the work outlined in the annual reports of the Commissioner. A special report on the Transportation of Petroleum was submitted to the President during the past year. Other special reports will be made as investigations are completed.

The results thus far obtained fully justify the creation of the Bureau. Its investigations have furnished reliable information regarding the conduct and business of corporations engaged in interstate and foreign commerce. The facts presented as to the relation of such corporations to the States and the inability of the States to effectually curb the improper exercise of corporate powers lead inevitably to the conclusion that the Federal Government must directly regulate and control such corporations.

Of the methods suggested for exercising this power the Federal franchise plan seems the most feasible. This plan is simply to require the greater industrial corporations to obtain a license from the Federal Government if they are to engage in interstate and foreign commerce. There would be no interference with the powers of a State over the creation of corporations nor their actions wholly within the State. Under a license the Federal Government should require, as a condition precedent to granting the license, a full disclosure of all facts necessary to show the ownership, properties, financial condition, and management of the corporation; furthermore, the corporation's records should be open to proper inspection; annual reports should be required; and, finally, the Government should have the power to revoke the license and prevent the continuation of engaging in interstate and foreign commerce in the event the corporation fails in its obligations toward the Government or is convicted of violating Federal laws. Ordinarily the imposition of fines does but little to correct corporate abuses, but if the penalty be the denial of the right to continue business a most effective remedy is provided.

The railways have been brought under Federal regulation by the interstate-commerce act. The principle of such regulation has been

adopted in the acts regarding meat inspection and pure food. The next act should extend the license plan over the greater industrial corporations dealing in the staple commodities.

BUREAU OF LABOR.

During the fiscal year ended June 30, 1906, the Bureau of Labor issued its twentieth annual report—that for 1905. This report presents the results of an extensive investigation of the penal and reformatory institutions of the United States. The primary object of the investigation was to determine the number of convicts employed in productive labor, the industries in which they were at work, the systems under which their work was done, the value of their labor, the value of the product turned out by them, and the commercial effect of the competition of convict-made goods.

The report, so far as it relates to productive labor performed by inmates of penal and reformatory institutions in the United States, is nearly exhaustive, as it includes all such institutions except those in which the value of productive labor during the year was less than \$1,000. The chapter on penal and reformatory laws is exhaustive within the scope of the subject treated. In all other respects the figures and other data presented are representative only, as the investigation was not extended to those institutions in which no productive labor was performed or to those institutions in which the value of productive labor during the year was less than \$1,000.

The data for each institution cover a period of one year, being the fiscal year ending at varying dates during the latter part of the year 1903 or during 1904.

Reports were secured from a total of 296 institutions, of which number 257 were penal institutions and 39 juvenile reformatories. In the 296 institutions there was found to be a daily average of 86,036.4 convicts in confinement during the year. Of this number 74,771.7 were in penal institutions and 11,264.7 in juvenile reformatories.

The Bureau during the year published the third report upon the commercial, industrial, social, educational, and sanitary condition of the laboring classes of the Territory of Hawaii. This report was prepared in accordance with the provisions of "An act to provide a government for the Territory of Hawaii," amended April 8, 1904.

During the past year the Bulletin of the Bureau was issued regularly every other month. For the fiscal year the issues were Nos. 59, 60, and 61 of volume 11, and Nos. 62, 63, and 64 of volume 12. The Bulletin has contained, in addition to one or more special articles in each number, digests of recent reports of State bureaus of labor statistics, digests of recent foreign statistical publications, decisions of courts affecting labor, and laws of various States relating to labor.

The special articles included in the foregoing numbers of the Bulletin are as follows:

Bulletin 59 treated of "Wages and hours of labor in manufacturing industries, 1890 to 1904," "Retail prices of food, 1890 to 1904," and "Laws relating to child labor in European countries." The articles on wages and hours of labor and on retail prices of food are the beginning of a regular series of bulletin articles to be published annually, supplementing and continuing, respectively, the nineteenth annual report on wages and hours of labor, 1890 to 1903, and that portion of the eighteenth annual report which relates to retail prices of food, 1890 to 1903.

The work of the Bureau, so far as the preparation of Bulletin 59 was concerned, was limited to collecting data for the year 1904. Data relative to wages and hours of labor in 1904 were secured covering 350 occupations and from a total number of 3,732 establishments engaged in 42 industries. The compilation of retail prices of food included 6,760 schedules or statements of prices from 1,064 firms doing business in the principal industrial localities in 40 States, including the District of Columbia. The third article in this Bulletin is a résumé of the laws regulating child labor in Austria, Belgium, France, Germany, Great Britain, Italy, and Switzerland. In connection with the laws, the statistics of the employment of children are given as far as available.

Bulletin 60 contained articles on "Government industrial arbitration" and "The eight-hour law and enforced labor contracts in the Panama Canal Zone." The first of these articles is a statistical account of laws and their results. Within its scope are included all laws in any land which have been enacted for the purpose of providing means for the settlement of collective industrial disputes. Both the essential features of such laws and the important facts as to their operation are presented.

The article on "The eight-hour law and enforced labor contracts in the Panama Canal Zone" sets forth the conclusion reached by the Attorney-General of the United States when the statutes relating to these two subjects were referred to him for interpretation by the Secretary of War.

Bulletin 61 included articles on "Labor conditions in Porto Rico" and "Early organizations of printers." The first article is a report prepared after an investigation into the labor conditions in Porto Rico and includes a compilation of wages in the principal industries, wholesale and retail prices of various commodities, and laws relating to labor in the island. The second article in this Bulletin is a documentary history of the early organizations of printers.

Bulletin 62 contained reports on "Municipal ownership in Great Britain," "Conciliation in the stove industry," and "Laws relating to the employment of children in the United States." The first article is

a report based on the study of the leading cities in England, Scotland, and Ireland during the summer of 1905. The second article deals with the conference agreements and methods of conciliation which have been in vogue since 1891 between the Iron Molders' Union of North America and the employers' association, known as the Stove Founders' National Defense Association. The third article in this Bulletin comprises a compilation of the laws relating to child labor, and brief statements of the points determined in the judicial decisions by the higher State courts on statutes relating to this subject.

Bulletin 63 related to the "Course of wholesale prices, 1890 to 1905," which brings down to the end of 1905 the results of the study of the subject, publication of which was begun in the Bulletin of March, 1902, and continued in those for the same month during 1903-1905. The study covers 259 series of quotations, representing all classes of staple commodities.

Bulletin 64 referred to "Conditions of living among the poor" and "Benefit features of British trade unions." The first article gives the results of an inquiry into the conditions of living which prevail among the poor of the District of Columbia, and is based upon data contained in the household accounts of 19 families. Every family included in the study was leading a hand-to-mouth existence. The second article in this Bulletin is based on a study of the benefit features of British trade unions.

In addition to the preparation and completion of the foregoing reports and bulletins, which cover the publications of the last fiscal year, the force of the Bureau has been engaged in the collection and preparation of data for a number of future reports and bulletins. The annual report for 1906 will relate to strikes and lockouts. The report will cover strikes and lockouts during the period from 1901 to 1905, inclusive, in continuation of the reports already made covering the period from 1881 to 1900.

LIGHT-HOUSE BOARD.

The establishment, custody, and maintenance of aids to navigation on the Atlantic, Gulf, Lakes, Pacific, and the great river coasts, as well as those in the waters about the Midway Islands, Porto Rico, and Hawaii, and in the neighborhood of the United States naval reservation at Guantanamo, Cuba, together with the aids in Alaskan waters, are assigned to the inspectors and engineers in the 16 districts of the Light-House Establishment. In some cases the headquarters of a district is thousands of miles from the limits of that district, which can only be reached by tenders under the charge of these inspectors and engineers. The Light-House Board has pointed out the great difficulty, if not impossibility, of properly caring for these distant aids to navigation with existing facilities, and has

urgently requested the establishment of three additional districts; one to comprize Hawaii and the Pacific islands, another Porto Rico and Guantanamo, and the third the Alaskan waters, with headquarters at the most convenient points for the distribution of supplies and general work of the respective districts. The increase of American commerce between our insular possessions and our mainland seems to indicate that immediate action should be taken on these lines.

It is a matter of frequent complaint that lights maintained by the United States are obstructed by ships anchoring in such a manner as to prevent such lights being seen by passing vessels. While at the present time there is no Federal law bearing upon the matter, several of the States have enacted statutes making it unlawful to obstruct or interfere with aids to navigation established within their limits. It is recommended that a general law be past by Congress making it unlawful and punishable by fine for any vessel to anchor in any navigable waters of the United States in such a manner as to obstruct or interfere with the range lights or other aids to navigation established therein.

The salaries paid light keepers are insufficient. On October 1 there were 1,580 light keepers in the Service, who received an average yearly pay, counting allowance for fuel, etc., of \$553.79, or a monthly average pay of \$46.16 each. This is insufficient compensation for these keepers. It is estimated that by the end of the next fiscal year the number of light keepers may be increased from 1,580 to 1,750. Section 4673 of the United States Revised Statutes provides in effect that the salaries of light keepers shall not exceed an average of \$600 a year each. It is recommended that this average be increased to \$700 a year each. The pay of light keepers should be increased by an average of 10 per cent, and this can be done if the appropriation recommended for salaries of light keepers is made.

Quite a number of new light stations have been provided for by recent legislation and are now in progress of erection. The maintenance of these stations, in addition to those already established, makes it necessary that the appropriations therefor be increased in proportion to the increase in the number of aids to navigation. Attention is especially invited to the necessity for larger appropriations under the heads of "Repairs of light-houses," "Supplies of light-houses," "Expenses of buoyage," and "Expenses of fog-signals." The recent appropriations for these purposes have been drawn upon so heavily for the maintenance of existing aids to navigation that the reserve stock is reduced to a minimum, and the Board finds it difficult to meet emergencies as they arise. Under these circumstances it is impracticable to increase, as is desirable, the number of aids to navigation which are to be established and maintained from general appropriations, and

there is much complaint by commercial interests concerning the Board's inability to meet the increased needs of the Service in this respect.

While a number of important items have been added to the estimates of the Board for the ensuing fiscal year, others that have repeatedly appeared in former estimates were omitted, the Board entertaining the opinion that even if Congress should provide funds for all of the special works required it would be unable to support the same unless the general appropriations for the maintenance of the establishment are largely increased.

No appropriation has been made to enable the Light-House Board to carry out the various Executive orders imposing upon the Board the duty of maintaining lights and other aids to navigation in the waters of the Midway Islands, Guam, and the American Samoan Islands, and attention is invited to the necessity of providing sufficient funds to render possible a full compliance with the President's orders. The Board has established a beacon light and several buoys at Midway Islands, which were paid for from the general appropriation, but more and better aids to navigation are needed, for which a special appropriation is requested.

BUREAU OF THE CENSUS.

The annual report of the Director of the Census reveals a large number of statistical reports on a variety of subjects completed and published by the Bureau during the year. Computations to obtain the totals for the manufacturing census of 1905 were completed in August; the State bulletins have been published, and many of the special industry bulletins will appear during the fall and winter. This important industrial census covers the year 1904. It was confined to establishments conducted under what is known as the factory system, thus excluding the small shops engaged in neighborhood industries and hand trades. For the period elapsed from the census of 1900, about four and a half years, the gross value of manufactured products increased 29.7 per cent. The actual increase was almost as great as it was for the entire preceding decade. The establishments included numbered 216,262, reporting gross products valued at \$14,802,147,087, and an average of 5,990,072 wage-earners, salaried officials, and clerks.

Measured by the value of products, slaughtering and meat packing is the most important industry of the country; lumber and sawmills and timber camps give employment on the average to the greatest number of wage-earners, and the flour-mill industry shows the greatest increase in the value of products.

New York, Pennsylvania, Illinois, and Massachusetts, in the order named, are the four leading manufacturing States, reporting 39.9 per

cent of all establishments, 45.5 per cent of all wage-earners, and contributing 47.1 per cent of the total value of products.

There were 24,180 establishments reporting a product of \$100,000 and over, and while they formed only 11.2 per cent of the total number they controlled 81.5 per cent of the capital invested, gave employment to 71.6 per cent of the wage-earners, and manufactured 79.3 per cent of the total value of products. Of this number of establishments, 1,889 reported a product of \$1,000,000 and over, employing a total of 1,379,120 wage-earners, or 25.2 per cent of all wage-earners enumerated, and contributing a gross value of products of \$5,627,243,120, or 38 per cent of all.

The average number of wage-earners employed during the busiest months, September, October, and November, amounted to 5,625,542, exceeding the average number for the entire year by 155,221. Of the total number of wage-earners 77.6 per cent were men, 19.5 per cent were women, and 2.9 per cent children. The average number of children employed in manufactures decreased from 161,275 in 1900 to 159,899 in 1905. A decrease in the employment of children is shown for 25 States and Territories and an increase in 26. The greatest number were employed in the manufacture of cotton goods. Pennsylvania ranks first and Massachusetts second in the employment of children in manufactures. The greatest number of women and children are employed in the cities having a population of 8,000 and over, and the greatest increase in their employment is shown for the same cities.

The Director makes the gratifying announcement that in five additional States of the Union—California, Colorado, Maryland, Pennsylvania, and South Dakota—the laws for the registration of deaths have been so perfected and are so thoroly enforced that they have been added to the registration area covered by the annual mortality reports of the Census Bureau. Eleven States, including the District of Columbia, and 123 municipalities outside of registration States have hitherto comprized the areas so included. The important step now taken increases by nearly one-fifth the area covered by the census mortality reports, and will correspondingly increase their value. When the census of 1900 was taken the registration area included but 40.5 per cent of the total population, but this percentage has now advanced to 48.5 per cent (according to the census of 1900), or a total of 36,846,981. This gratifying progress is very largely due to the earnest and systematic propaganda which has been made possible by the establishment of a permanent Census Bureau, and indicates the approach of the time when our vital statistics, hitherto more deficient than those of any other country of like civilization, will take rank with the most trustworthy. Results of the greatest medical, sanitary, and scientific value are certain to follow. Attention is called to the fact that there is no strictly Southern

State in which efficient State registration laws exist. Because of the presence of a large negro population, and by reason of climatic differences, it is highly important that registration should be undertaken in this section of the Union; and it is earnestly hoped that the movement for proper legislation now under way in several of the Southern States may bear fruit before the Thirteenth Census.

Attention is called to the wide interest aroused by the annual reports of the Bureau of the Census upon municipal financial statistics. In February last a second conference of municipal comptrollers, auditors, and treasurers, was held in Washington, to further consider the methods of the Bureau of the Census in compiling uniform municipal statistics and standardizing the classification of municipal expenditures. This second conference was largely attended, and among its gratifying results was an approval of the classification and definitions of municipal finance in use in the Census Bureau, and the permanent organization of the fiscal officers of the cities throuout the country for the purpose of bringing "into closer relationship with each other the finance departments of the American municipalities thru the interchange of experience in the solution of administrative problems, and to more efficiently cooperate with the Bureau of the Census in its great work of compiling uniform municipal statistics."

The increasing value of these annual municipal reports of the Bureau may be inferred from the fact that the indebtedness of the 130 American cities containing 30,000 inhabitants or over had reached the enormous total of \$1,228,216,933 in 1904, an increase of \$110,083,797 over the previous year. Adding to this sum the indebtedness of cities containing a population between 8,000 and 30,000, which was \$173,718,313 in 1903, it appears probable that the total municipal indebtedness is to-day in excess of \$1,600,000,000—a sum greater than the combined indebtedness of the National, State, and county governments. These figures emphasize the importance of the movement now under full headway, and centering around and inspired by these annual municipal reports of the Bureau, to standardize the debt statements and the expense accounts of all our cities, so that exact comparisons can be made from year to year of the relative cost of municipal government, in cities of like size in each item of expenditure. The use that has been made of these publications in many parts of the country to check and correct undue extravagance or economy, for school, fire, police, pavement, and other municipal expenditures, indicates very plainly that they are destined to become, as perfected and extended, the most important agency we have for bringing about efficient, effective, and economical municipal government. Already over 33 per cent of the American people reside in cities, and the proportion is rapidly increasing. As in many other directions, it is a problem where publicity is the most effective method of developing and correcting abuses; and

from this point of view, I regard the annual municipal statistics of the Bureau of the Census as of great value in the future progress of the nation.

Recent legislation has authorized the Bureau of the Census to undertake a number of important investigations not contemplated in the original census act, which will keep its clerical force fully occupied until the Thirteenth Census. It has already begun field work on several of these investigations. Among them is the report on marriage and divorce, authorized by the act of February 9, 1905, which will be a continuation of the twenty-year report on these subjects compiled by the Bureau of Labor in 1887. Two hundred clerks, sent into the field during the past summer, have abstracted the divorce records in the courts of the principal cities. A portion of these clerks will continue their work in each of the 2,800 counties of the United States. They will also examine the court records to abstract the data required for the report on criminal judicial statistics, authorized by the act of Congress approved June 5, 1905. This will be the first report of its kind ever compiled in this country, and it will elicit statistics of the highest sociological value and importance.

Other reports upon which the Bureau has already entered, or is about to enter, are the census of religious bodies, the data for which will be chiefly collected by correspondence; and the decennial census of transportation by water, which will be taken as of the year 1906. A decennial census of the express business is also required by law, and arrangements have been perfected whereby this report will be made in collaboration and cooperation with the Interstate Commerce Commission, which is given jurisdiction over the express companies by the railroad rate law of the last session of Congress. By such an arrangement the duplication of statistical reports on this subject will be avoided. Another field in which cooperation between bureaus becomes possible is that of the census of the fisheries industries, authorized by the last session of Congress, "in cooperation with the Bureau of Fisheries." Plans have been perfected whereby the Bureau of the Census and the Bureau of Fisheries will join forces in compiling this report, the technical knowledge of the one bureau being utilized in connection with the trained statistical force of the other. It is planned to cover the statistics of the year 1907 in this census of the fisheries.

By an arrangement with the Forest Service of the Department of Agriculture, and at its suggestion, the Bureau of the Census will hereafter compile the annual statistics of the cut of lumber required by that Service, utilizing for such purpose the data and machinery acquired in connection with the five-year censuses of the lumber manufacture. Here again duplication of statistical work will be avoided and unity and harmony in the Government figures secured.

These are concrete examples of the practicability of the plan of Congress to gradually concentrate the statistical work of the Government. There have been practicable difficulties in the way of such a concentration, which have prevented rapid progress in that direction, but successive steps may be looked for until the evolution is finally effected.

The Director calls attention to the semimonthly cotton-ginning reports of the census, to the efforts to improve their accuracy, and to their value to the growers. But he indicates that the ginning statistics of production for the last crop year, when tested by the statistics of consumption, are found to be considerably short of the actual crop. While some portion of this error may be due to inefficient agents, the bulk of it must come from the failure of individual ginners to make a true return of their output. The value of these ginning statistics depends altogether upon their accuracy. When the public ceases to have confidence in them, it will no longer be worth while to spend money for their collection and compilation. As an additional safeguard the Director recommends that the law be amended so as to make these reports compulsory, with penalties for refusal to supply correct information. I commend this recommendation to the attention of Congress.

The Director's report indicates that the Bureau has been able to keep well abreast of its work, notwithstanding that its clerical force has been gradually reduced, the pay roll for the present fiscal year being \$717,020, as compared with an appropriation of \$745,760 for last year and \$818,924.90 in 1903, the first year of the establishment of the permanent office, showing a total reduction in the annual salary roll in five years of something more than \$100,000. But attention is called to the fact that Congress is constantly increasing the work of the Bureau, thus making it impossible to reduce the force to the extent that appeared probable when the Bureau was established. The total cost of additional work assigned the permanent Bureau, of a kind that never fell to the office when it was temporarily organized for the taking of the decennial censuses, has been approximately \$2,000,000, the semimonthly cotton-ginning reports alone having cost \$489,728.18 to date.

COAST AND GEODETIC SURVEY.

The amount appropriated for the Coast and Geodetic Survey for the fiscal year 1906 was \$876,975, of which \$210,245 was for manning and equipping the vessels of the Survey, \$54,600 for repairs and maintenance of vessels, and \$50,000 for office expenses. The remainder of the appropriation was about equally divided between expenses of parties in the field and salaries of field and office forces.

In addition to the above sums the appropriations for marking the boundary between the United States and Canada west of the Rocky Mountains and for locating and marking the Alaska boundary, made to be expended under the direction of the Secretary of State, are disbursed, under the direction of the Superintendent as commissioner, by the disbursing agent of the Coast and Geodetic Survey as special disbursing officer for the State Department.

The Superintendent reports that hydrographic work was done in 12 States and Territories and topographic work in 4; that triangulation was done in 6 and leveling in 6.

The triangulation along the ninety-eighth meridian was completed to the Mexican boundary on the south, and was connected with the triangulation of the Great Lakes on the north. The triangulation along the Pacific coast was extended southward from Tacoma, Wash., and was in progress at the close of the year.

Astronomic observations were made to determine latitude and azimuth in Florida, Georgia, Minnesota, Missouri, and Texas, and to determine longitude, by the telegraphic method, in Alaska, California, and Texas.

The standard levels were extended in Texas, Minnesota, and California on lines forming a portion of the precise level net of the United States in process of completion.

The rapid economic development which is taking place in widely separated localities of the Alaska coast has necessitated special efforts on the part of the Survey to meet the immediate demands for information for the benefit of an increasing commerce. Surveys were made in Prince William Sound, Resurrection Bay, Kassa Inlet, McKenzie Inlet, Hollis Anchorage, and Lake Bay. The longitudes of Valdez, Seward, and Eagle (Fort Egbert) were determined by the telegraphic method.

The charting of harbors and waters of the Philippine Archipelago was continued in cooperation with the insular government, and good progress was made. Eighteen new charts, published at the office in Washington, and three volumes of Sailing Directions were prepared. A catalog of charts and one volume of Sailing Directions (revised edition of Section I) were published. Attention is called to the recommendation of the Philippine Commission, made in its report for 1905, that the total expense of the national work of charting the waters of the archipelago should be paid hereafter from the National Treasury, thus relieving the insular revenue from the charge now imposed by the joint agreement under which the survey of the islands is being made. This recommendation received the approval of the Secretary of War, and an estimate of the appropriation necessary for this purpose was sent to Congress, as suggested by him.

The magnetic survey was continued and observations were made in 42 States and Territories, including Alaska, Hawaii, and the Philippine Islands.

Magnetic observations were also made at sea in the Atlantic and Pacific oceans and in the Gulf of Mexico. The work at the magnetic observatories in Maryland, Kansas, Alaska, Hawaii, and Porto Rico was continued.

Continuous records of tidal fluctuations were obtained by means of self-registering gages at 10 stations, including stations in Hawaii and the Philippine Islands and an additional station was established at San Diego, Cal.

That part of the field work of the joint demarcation of the northwest boundary undertaken by the United States, with the Superintendent of the Coast and Geodetic Survey and the Director of the United States Geological Survey as commissioners, in connection with reestablishing and monumenting the international boundary between the United States and Canada west of the Rocky Mountains, was practically completed.

The work of the United States in the demarcation of the boundary between southeastern Alaska and Canada, with the Superintendent of the Coast and Geodetic Survey as commissioner, was continued and satisfactory progress was made.

An examination of the boundary between Vermont, New Hampshire, Maine, and Canada was completed from Richford, Vt., to St. Croix River. This international boundary work was done at the request of the Department of State.

Work at the latitude observatories at Gaithersburg, Md., and Ukiah, Cal., maintained by the International Geodetic Association under the direction of the Superintendent, was continued during the year.

The Survey maintained an exhibit as a part of the Departmental exhibit at the Lewis and Clark Centennial Exposition, Portland, Oreg., until its close.

An officer of the Survey continued on duty as a member of the Mississippi River Commission, as required by law, and other officers served on the boundary surveys mentioned above.

BUREAU OF STATISTICS.

The work of the Bureau of Statistics increases with the expansion of the foreign and internal commerce of the country and the growing public interest in this subject. The imports and exports and the trade with noncontiguous territories show, in each case, a larger total in the fiscal year 1906 than in any preceding year, and the movements

of internal commerce which the Bureau is now able to measure also show larger totals than in any previous year.

The Bureau has increased the number of cities from which it obtains statistics of the concentration and redistribution of the great articles forming the bulk of the internal commerce; has prepared tables which show the movements of commerce at every port on the Great Lakes compared with corresponding movements of earlier years, and is now presenting, for the first time in the history of the country, a monthly and annual record of the movements of commerce thru the Detroit River. The statements of the concentration of principal products at the interior primary markets, the movements on the Great Lakes, and the movements by other routes of transportation are presented monthly and compared with corresponding months of preceding years.

The collection and monthly publication of statistics of the coastwise commerce on the Great Lakes has resulted in many calls for similar information regarding the commercial movements along the Atlantic, Pacific, and Gulf coasts, and it is earnestly recommended that provision be made for the collection and monthly publication of such information of this character as may be available.

The record of the foreign commerce has been enlarged and readjusted to meet present conditions of the increasing import and export trade. New classifications of the grouping of articles imported and exported have been prepared in a form which renders the figures of imports and exports comparable with each other and with the imports and exports of the leading commercial countries of the world. This new grouping has been adjusted with especial reference to the census classification of manufactures, for the purpose of affording facilities for conveniently determining the exportation of all articles classed as manufactures by the Census. An application of this new grouping to the domestic exports of the calendar year 1904, covered by the census of manufactures taken in 1905, shows that the exports in that year of all articles classed by the Census as manufactures equaled in the aggregate 5.76 per cent of the stated gross value of manufactures.

The work upon the Statistical Abstract of the World has been continued, and a third section, including the trade of principal articles of each country for a long term of years, will be issued during the present fiscal year.

The increase in the work of the Bureau and the improved forms of presenting the statistics of the foreign and internal commerce have been facilitated by the use of adding and calculating devices. The steady growth of internal and foreign commerce and the constant increase in demands upon the Bureau for information will render necessary an increase in its clerical force.

The foreign commerce of the year was greater in both imports and exports than in any preceding year, as was also the trade with the

noncontiguous territories. Imports, which had never reached the billion-dollar mark until 1903, amounted to \$1,226,562,446, or an average of more than 100 millions per month. Of the increase of 109 millions in imports, 25 millions was in manufacturers' crude materials, 42 millions in manufactures for further use in manufacturing, and 55 millions in finished manufactures, while the food-stuffs groups show a decrease of over 16 millions, due chiefly to a reduction in the quantity of coffee imported and a fall in the price of sugar, of which the importations increased about 300 million pounds in quantity, but decreased over 12 million dollars in value.

The exports, which first touched the billion-dollar mark in 1892, and exceeded 1½ billions in 1905, were in 1906 \$1,743,864,500, an increase of 225 millions over 1905. This increase was distributed among all the great groups, the increase in foodstuffs being 123 million dollars, crude material for manufacturing 28 millions, and manufactures 74 millions. Manufactures formed 40 per cent of the exports and manufacturers' crude materials 34 per cent of the imports.

The increase in imports during the year occurred chiefly in the trade with Europe, North America, and Asia; the increase in imports from Europe being 93 millions, from North America 8 millions, and from Asia 18 millions, while imports from South America showed a decrease of 10 millions, due mainly to a reduction in the quantity of coffee imported from Brazil. The exports to Europe increased 179 millions, due chiefly to an increase in the quantity of breadstuffs and provisions available for foreign markets, to North America 48 million dollars, and to South America 18½ millions. The exports to Asia show a decrease of 23 million dollars, occurring chiefly in the trade with Japan and China. The exports to Japan during the year were 13 millions less than those of 1905, and those to China 10 millions less. The decrease in exports to Japan occurred chiefly in meats, leather, cotton cloths, and manufactures of iron and steel, of which her purchases during the war period were unusually large, and in cotton in which her purchases from the United States are comparatively small in years of high prices. The fall in exports to China occurred chiefly in copper, for which the demand in China for coining purposes has greatly decreased, and in mineral oil, of which the exports to China in 1905 were abnormally large by reason of short supplies from Russian oil fields. Cotton cloths exported to China also show a marked decrease in the closing months of the past fiscal year, owing to the fact that the unusually large imports of the preceding year had proved to be in excess of the demands of the local market.

Trade with the noncontiguous territories of the United States shows a marked increase in nearly all cases. Shipments of merchandise to Porto Rico increased more than 5 million dollars over the preceding year, and receipts of merchandise from that island show an increase

of 3½ millions. The shipments to the Hawaiian Islands show a slight increase, but the value of merchandise received from those islands shows a decrease of about 9 million dollars, due to a fall in the price of sugar, the chief article sent from Hawaii to the United States. Shipments to Alaska show an increase of about 3 million dollars, while merchandise received from Alaska shows a decrease of about 1 million dollars, due to a reduction in the quantity of canned salmon marketed. Shipments to the Philippine Islands show a decrease of \$739,517, due apparently to a partial suspension of orders during the pendency of legislation relating to rates of duty on merchandise entering the islands from the United States, while the merchandise received from the Philippine Islands shows a decrease of \$319,977, the slight decrease being due to a fall in the price of hemp, of which the quantity brought from the islands was greater than in the preceding year.

STEAMBOAT-INSPECTION SERVICE.

The personnel of this Service at the close of the fiscal year ended June 30, 1906, consisted of 223 officers and clerks and 1 messenger.

The total expenses of the Service were \$450,242.20, an increase over the previous fiscal year of \$44,512.91, and were divided as follows: Salaries, \$371,488.77, an increase over the previous fiscal year of \$46,298.61; contingent expenses, including traveling and miscellaneous expenses other than salaries, \$78,753.99, a decrease from the previous fiscal year of \$1,785.70. The increase of expenditures under the item of salaries is due to the increase in the salaries of many of the local inspectors by authority of the act of Congress effective July 1, 1905, and a slight increase in the salaries of some of the assistant inspectors. The decrease in contingent expenses is due mainly to the decreased travel of inspectors from that of the previous year, when they were almost constantly engaged in reinspections and other extra duty.

The number of vessels inspected and certificated was 8,705, with a total of 6,505,245 tons, showing exactly the same number of vessels inspected as in the previous fiscal year, but with an increase in tonnage of 594,421. Of this total number and tonnage of vessels inspected and certificated 421 were foreign passenger steamers, with a total of 2,436,766 tons, an increase over the previous fiscal year of 93 in number and an increase in tonnage of 756,390. There were inspected and certificated 7,903 domestic steamers, with a tonnage of 4,011,160, an increase over the previous fiscal year of 282 in number and 402,459 in tonnage; 320 motor vessels, with a tonnage of 16,126, an increase of 71 in number and 5,952 in tonnage over the previous year, and 61 sail vessels and barges, with a tonnage of 41,193, a decrease from the previous year of 446 in number and 569,680 in tonnage. The

decrease in this latter item is due to the act of Congress exempting freight sail vessels from inspection.

There were licensed during the fiscal year 7,886 officers of all grades, an increase over the previous year of 550. There were 1,504 applicants examined for color-blindness, an increase of 38 over the previous year. Of this number 39 were found color-blind and rejected as unfit for license, and 1,465 were past, an increase of 56 over the previous year.

Under the authority of the act of Congress approved January 22, 1894, there were inspected at the various mills by the United States assistant inspectors of boilers 6,007 steel plates for the construction of marine boilers, an increase over the previous year of 1,801. Of the total number of plates inspected, 1,279 were rejected and 4,728 were accepted. In addition to this there were inspected a large number of steel bars and braces and stay bolts in marine boilers and also several hundred plates inspected at the mills for stock and repairs. There were many requests from other branches and departments of the Government for tests of material at the mills, which tests were completed and reports rendered to the proper officials.

There were examined at the different manufactories during the year 210,131 life preservers, of which number 1,943, or about nine-tenths of 1 per cent, were rejected.

The total number of accidents of all kinds resulting in loss of life on vessels subject to the jurisdiction of the Service during the year was 65, an increase over the previous year of 21, and the total number of lives lost was 500, an increase over the previous year of 249. Of the 500 fatalities recorded 54 were from suicides and other causes which could not be averted, and 123 were from accidental drowning.

During the calendar year ended December 31, 1905, 330,235,959 passengers were carried on steamers required by law to make report of the number of passengers carried, a decrease of 12,024,391 from the previous calendar year. Estimating that 250,000,000 passengers were carried on steamers not required by law to make such report, it is safe to calculate that about 580,000,000 passengers were carried by vessels under the jurisdiction of this Service. Of this number 500 lives were lost, or an average of 1 life for every 1,116,000 passengers carried.

BUREAU OF FISHERIES.

The propagation and distribution of food fishes in 1906 reached a magnitude never before attained, the aggregate number of fish and lobsters hatched and distributed being 1,931,834,609. Species cultivated and planted in especially noteworthy numbers were whitefish, chinook salmon, blueback salmon, black-spotted trout, brook trout, lake trout, pike perch, yellow perch, white perch, cod, flatfish, and lobster. The Pacific salmon, lake trout, yellow perch, and white

perch were handled in larger quantities than ever before. The other staple food and game fishes were produced and distributed in about the same numbers as in recent years, with the exception of the shad, the output of which, as in 1905, was abnormally small.

A noteworthy feature of the year's operations was the inception of Government salmon culture in Alaska, the newly established hatchery at Yes Bay having been completed in time for the taking of salmon eggs in the summer of 1905. Sufficient money has been saved from the special appropriation to permit the construction of another salmon hatchery in Alaska.

The scientific work conducted in the interests of the commercial fisheries and fish culture has covered the usual wide range, much of it being in continuation of work in progress. Special field investigations have been address to certain fresh waters of Maine and Alaska, to the oyster grounds of Louisiana, and to the fishery resources of the Alaskan coast and other parts of the north Pacific Ocean; large collections of fishes from the coast of tropical America and the Philippine Islands have been studied; and, the Fisheries steamer *Albatross* has been dispatched on an extended cruise of exploration to the shores of Japan and Siberia.

Experiments having a highly important economic bearing have been address to the oyster, the lobster, the diamond-back terrapin, the commercial sponges, and various food fishes.

Numerous cases of disease among both wild and domesticated fishes have arisen, and required attention. The fishery authorities of various States have appealed to the Bureau for the investigation of fish epidemics and the recommendation of remedies.

Statistical canvasses of the entire fishing industry of the Middle Atlantic and the Pacific States, as well as of Alaska, have been completed, a canvass of the New England States has been instituted, and a number of special statistical inquiries have been made in response to local needs or in the interest of fish culture. The collection and publication in monthly bulletins of statistics showing the quantities and values of fishery products landed at Boston and Gloucester were continued, and this information has been of special value in connection with the question of the dependence of the New England fisheries on the fishing grounds off the British provinces.

In conjunction with the international inquiries on the treaty coast of Newfoundland, a thoro investigation has been made into the history, methods, and relations of the United States herring, cod, and other fisheries off the shores of Newfoundland and Labrador.

ALASKA SALMON FISHERIES.

The annual inspection of the Alaska salmon fisheries during the past year showed a generally favorable condition of the vast interests dependent on the salmon supply. The number of canneries in opera-

tion was 47, tho there were 55 in the previous year; the salteries numbered 22, an increase of 4.

Notwithstanding the closing of a number of important canneries, the product was somewhat greater than during the previous year, owing to an increase in the output of salted and dry-cured fish. The cases of canned salmon prepared numbered 1,889,015, and the barrels of salted salmon numbered 18,881, the total pack being equivalent to 2,059,119 cases (of 48 one-pound cans), as against 2,012,928 cases in the preceding year. The number of individual salmon entering into the product was more than 26½ millions, of which more than three-fourths were red salmon. The aggregate market value of the Alaska salmon output was \$6,563,655, a decrease of upward of \$1,000,000 compared with the prior year, owing to lower average prices for the better grades of canned fish.

The salmon inspectors report that illegal fishing has become so exceptional as to exert but slight influence on the perpetuity of the salmon supply, and that only one noteworthy infraction was discovered during the year. The recommendations of the inspectors have in the main been embodied in the newly enacted law for the protection of the salmon.

NEWFOUNDLAND FISHERY RELATIONS.

A representative of the Bureau visited the so-called "treaty coast" of Newfoundland for the purpose of observing the conditions under which the American fishermen were conducting the herring fishery and of advising the Government as to the developments under the new regulations prescribed by the local authorities, this service being in conjunction with an inquiry regarding the movements of mackerel on the shores of the British provinces. The number of American vessels that visited the west and south coasts of Newfoundland to engage in the herring fishery under the rights conveyed by the treaty of 1818 was 42; these brought home 44,805 barrels of salt herring and 24,305 barrels of frozen herring, having an approximate value of \$208,500. The season, which closed in December without having produced any special complications, was financially very successful to American fishermen.

FISHERY LEGISLATION.

A number of important measures affecting the fishing industry, enacted by the Fifty-ninth Congress at its first session, will be administered or enforced by the Department. Chief among these is a new law for the protection and regulation of the fisheries of Alaska which reenacts the salient parts of previous legislation and embodies various new features. The measure is comprehensive but not especially restrictive, and should prove very beneficial to the vast fishing interests of the Territory. Other fishery laws past by the last Congress were an act to prohibit aliens from fishing in the waters of Alaska;

an act to regulate the landing, delivery, cure, and sale of sponges; and an act providing for the cooperation of the Department with the shellfish commissioners of Maryland in surveying the natural oyster grounds in Chesapeake Bay and tributaries.

Failure of the States to make adequate provision for protecting the food-fish supply within their limits, more particularly the migratory species like the shad, salmon, and whitefish, appears more urgently to demand some action on the part of Congress. The Federal Government should either assume jurisdiction over migratory fishes that can not be regarded as the property of any one State, or should suspend fish-cultural operations in waters where its efforts are completely counteracted by the indifference of the States.

ALASKAN FUR-SEAL SERVICE.

Notwithstanding the efforts of this Government to put a stop, thru international agreement, to the indiscriminate slaughter of seals by pelagic sealers under the flags of foreign nations, the Pribilof seal herd without doubt suffered more severely from this cause during the past season than at any previous time in its history.

Authentic reports show that the Canadian and Japanese fleets engaged in pelagic sealing during the past season numbered, approximately, 30 vessels each. During a greater portion of the season numerous vessels of the Japanese fleets conducted pelagic operations within sight of the Pribilof Islands, the special Government reservation. On several occasions the crews of these vessels killed seals within the 3-mile limit. On July 16 and 17 some of the crews of 4 schooners acting in concert landed on the islands and raided the rookeries. The poachers succeeded in killing about 185 female seals on the breeding rookeries, and escaped with about 120 skins.

In repulsing these raids 5 of the poachers who refused to surrender were killed, while 12 were taken prisoners, 2 having been wounded. The agents also captured three small boats with equipment, arms, and ammunition. In making these arrests the agents and native guard were under rifle fire from the deck of a schooner lying close to shore. The 12 prisoners were taken to Valdez, Alaska, and as the result of subsequent legal proceedings were each sentenced to three months in the jail at that place.

The tribunal of arbitration at Paris established a 60-mile zone around the Pribilof Islands, inside of which citizens of both Great Britain and the United States are forbidden to kill seals at any time. While this regulation is effective as regards only the nations mentioned, yet citizens and vessels of all other nations are clearly liable to seizure when found taking seals within the territorial 3-mile limit surrounding the islands, as such killing is forbidden by our laws.

During the past summer I detailed the Solicitor of this Department, Mr. E. W. Sims, to visit the Pribilof Islands for the purpose of investigating the conditions there and reporting thereon. His report has been received from the printer and will be transmitted to Congress. In his report, Solicitor Sims states that the present laws for the protection of the fur-seal fisheries are inadequate, and recommends that they be revised and amplified. I desire to indorse Solicitor Sims's recommendations and to submit them to Congress for its favorable consideration.

I again renew the statement and recommendation contained in my last annual report to the effect that "the decrease in seal life on the Pribilof Islands is directly attributable to pelagic sealing, and a strong effort should be made to secure international regulations which will stop it." Reports made to the Department clearly show that the Pribilof fur-seal herd is rapidly disappearing as the result of pelagic sealing. In my judgment the destructive effect of this method of taking seals has not been fully realized. The fur-seal herd has been reduced in numbers from about 4,000,000, at the time of the Alaskan purchase, to less than 180,000.

The importance of the Alaskan fur-seal fisheries should not be overlooked. Since the purchase of Alaska, in 1867, the United States has received as revenue from the lease of the sealing privilege on the Pribilof Islands over \$9,000,000, or \$2,000,000 more than was paid for the entire Territory of Alaska. In addition to this, the Government annually collects a large sum as duty on manufactured sealskins imported from London, where they are sent in their raw state for treatment. The trade in skins taken on the Pribilofs by citizens of the United States since the purchase of Alaska exceeds \$50,000,000 in value.

During the season ended July 31, 1906, the lessee of the sealing right on the Pribilof Islands took 14,643 fur-seal skins, including 281 skins taken during the previous season, out of a maximum quota of 15,000 allowed by this Department. Of the number taken 12,643 were secured on St. Paul and 2,000 on St. George. The lessee shipped from the islands at the close of the season 14,476 skins—12,536 from St. Paul and 1,940 from St. George. Choice young male seals to the number of 2,238 were dismissed from the drives after being branded to insure their immunity from future killing. Of the total of 18,411 animals appearing in the drives on St. Paul 10,942, or 59 per cent, were killed, while of 3,260 animals in the drives on St. George 1,685, or 51 per cent, were killed.

In addition to the branded males reserved for breeding purposes, 4,724 small and 1,944 large seals were dismissed from the drives as being ineligible for killing under the Department's regulations.

The large increase for 1906 in the catch of blue foxes on St. George shows that the efforts of the agents of the Department to increase the herd of foxes on that island have met with signal success. There were taken on St. George Island during the winter 456 blue and 11 white foxes, as against 258 blue and 10 white foxes for the previous year.

Reports showing the complete catches of either the British Columbian or the Japanese pelagic fleets for the past season have not been received. Incomplete reports indicate that the total catch last spring on the northwest coast by Canadian vessels was 1,439, and that the total catch of the Japanese sealing fleet for the season of 1906 was 10,015, of which about 7,000 were taken in Bering Sea from the Pribilof herd during the past summer by a fleet of 31 vessels.

BUREAU OF NAVIGATION.

On June 30, 1906, the total documented merchant shipping of the United States comprised 25,006 vessels, of 6,674,969 gross tons, the largest tonnage in our history, and a satisfactory increase over last year. The encouraging forecast for shipbuilding in my last report has been made good by the construction of vessels aggregating 418,745 gross tons. One hundred steel steamers, of 289,094 gross tons, were built, and this output is due almost wholly to the activity of the shipyards of the Great Lakes, where for the first time steamers of over 7,000 gross tons have been constructed. The only large ocean steamers commissioned were two for the trade with Cuba and Mexico under the ocean mail act of 1891.

The outlook for the current fiscal year is gratifying. Unless unforeseen obstacles arise, the output of vessels for the year ending June 30, 1907, will probably exceed the output of any year during the past half century. At the beginning of the fiscal year the prospect favored uninterrupted activity in shipyards of the Great Lakes. On the seaboard 32 ocean steel steamers—the largest number in our history—were under construction or under contract to be built. Two of these are for the foreign trade, and they will be operated under the ocean mail act of 1891 in trade with Cuba and Mexico. The partial reconstruction of some of the fleets of coastwise companies has stimulated shipbuilding.

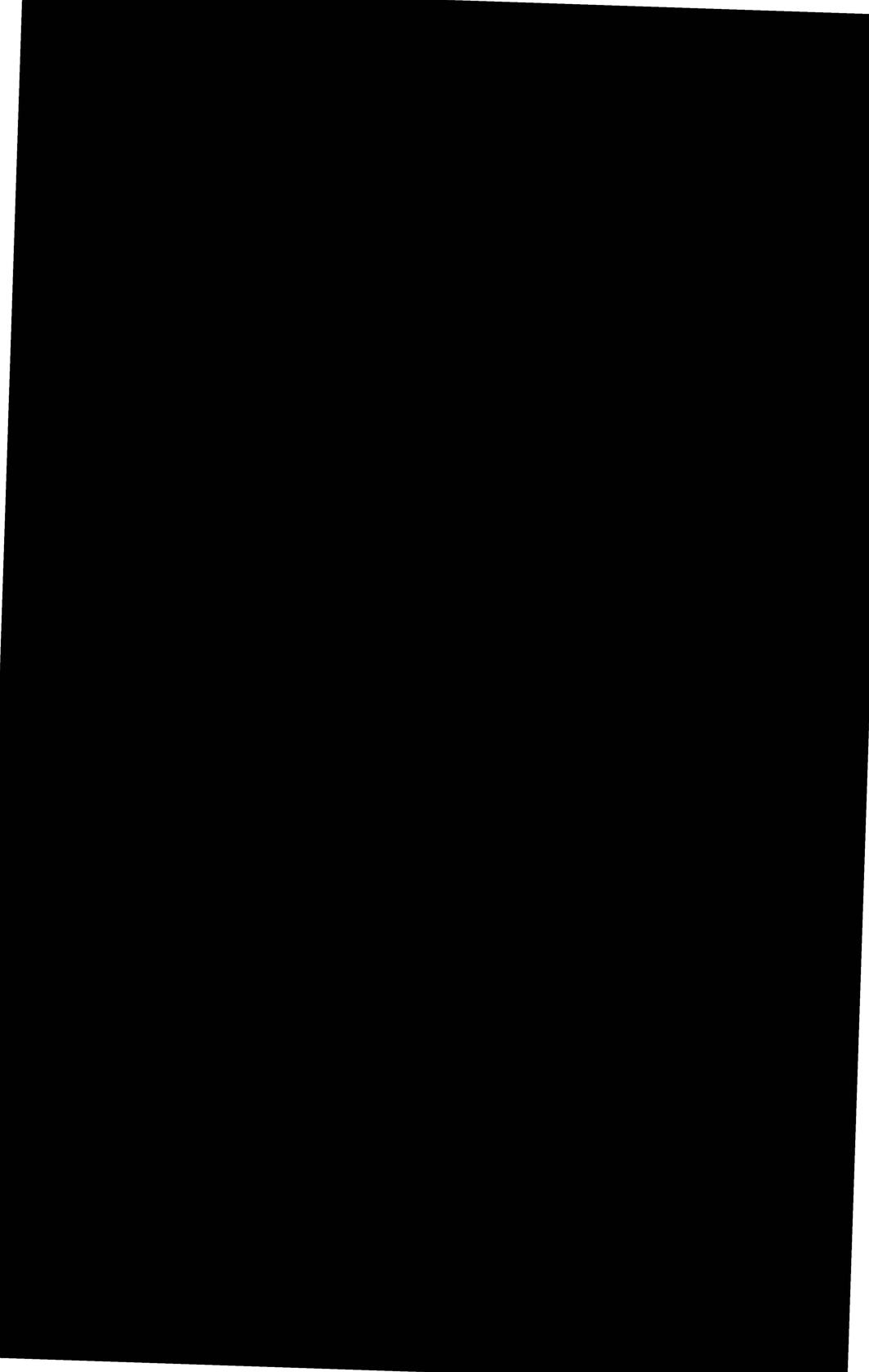
The time is propitious for the entry again of the United States into the foreign carrying trade—a branch of commerce in which we formerly excelled, but which we have long neglected in our absorption in internal development. That development has reached a point when we must look to an extension of our foreign markets if we wish to utilize to their full extent our productive powers. At present an exceptional demand for coasting steamers and an extensive program of naval construction have brought together large bodies of skilled

workmen and given full employment to our shipyards. A considerable reduction in either kind of work will mean at least temporary dissolution of a great industry essential to the national defense, unless by vigorous legislation to promote American shipping in foreign trade we use the assembled forces of labor and capital in building ships to carry our mails, to reenforce our sea power, and to promote our trade. Such legislation has past the Senate and awaits the action of the House of Representatives.

Without here discussing details on which there may be differences of opinion, and without extended argument, I recommend the passage of Senate bill No. 529, the Merchant Marine Commission bill, as a practical measure of support to a national industry, plainly in need of it, and as a means of extending American commercial influence on the oceans.

I wish to lay stress upon the desirability of more intimate trade relations with the great republics of South America. In my opinion the most effective means of promoting such relations is the establishment of improved steamship communication between the continents. Fast and regular mails are a necessity of modern commerce, yet it is a matter of record that at times we must send our mails for Brazil, Argentina, and Uruguay by way of the ports of Europe and its superior subsidized mail steamships. The transmission of the mails, however, is within the province of another Department and is mentioned here only as an incident. It is equally necessary to commerce that there shall be comfortable, regular, and quick passenger transit for the citizens of countries which desire to trade with one another. The inadequacy of our present means of communication with South America from these points of view is shown in the report of the Commissioner of Navigation, which gives a statement in detail of the vessels of all descriptions engaged in trade between the United States and South America during the first six months of 1906.

The nature of our possible interchange of products with South America confirms the conclusion already stated. Argentina exports products of farming and grazing indigenous to the Temperate Zone, all of which, with the exception of wool and hides, we produce in superabundance. Accordingly return cargoes from that country to the United States would be inconsiderable. In this respect Uruguay closely resembles Argentina. The principal exports of Brazil are coffee and rubber, for which there is a large demand in the United States. The coffee States of Brazil, which lie along the south Atlantic coast on the line of vessels en route to the River Plata, will furnish to an extent the return cargoes which Argentina can not supply. Our exports to the three republics mentioned must consist principally of manufactured articles of considerable value in relatively small bulk. For the increase of trade in such articles regularity and dispatch in delivery are most



reshipped, 37,676 were native-born and 23,456 naturalized Americans. It is thus apparent that more than half of those who man our seagoing merchant vessels are aliens.

Even more significant of the lack of interest of young Americans in the sea is the fact that out of a total of 348 mates of sailing vessels shipped and discharged in August by shipping commissioners 149, or approximately 43 per cent, were naturalized Americans, leaving only 199 native-born citizens. Watch officers are required by law to be citizens of the United States, and the vessels covered by the returns just cited are mainly schooners in the coasting trade in which the sons of owners formerly began a sea career.

Three years have elapsed since a square-rigged ship has been built in the United States. The number of those afloat, of course, steadily decreases. While the fact is of relatively small commercial import, it does bear upon the future of our merchant marine. The need of training on a sailing ship to qualify a man for duty as deck officer of a steamer is recognized in our Navy. This training is provided by some of the great foreign steamship corporations which maintain such ships as schools for their future officers. The three school-ships now provided and assisted by the Federal Government, tho excellent, do not suffice. Unless the seaboard States make more general use of the act of June 20, 1874, Congress should soon provide for the construction and operation of several square-rigged ships as nautical schools for the instruction of men to officer the merchant marine, or extend substantial aid under suitable conditions to such ships as American steamship companies may undertake to build and operate for this purpose.

Tonnage duties during the year reached \$967,322.48, the largest amount received during any year since the method of levy was changed in 1884. Of this total American vessels paid \$84,902.67 and foreign vessels \$882,419.81, of which amount British vessels contributed \$560,127.80. The figures show that in any reciprocal arrangement for the abolition of tonnage duties and corresponding charges abroad on shipping this country would give much more than it would get in return, and such must be the case so long as American vessels carry only 12 per cent of our exports and imports, as for the past year. In any broad project of reciprocity, based on maximum and minimum tariffs, tonnage duties would naturally be included, but a reciprocity in tonnage duties alone is reciprocity only in name. These duties are levied impartially on American and foreign vessels; the rates charged in the United States are moderate compared with corresponding rates in the ports of continental Europe and are practically the same as the rates now imposed by Great Britain. Any rational ground for criticism of these taxes has been removed by Congress, which has provided that, with the beginning of the current fiscal year, these duties, which, since 1884 have been set apart as a permanent appropriation for maintaining the

Marine-Hospital Service, shall be covered into the Treasury for general purposes.

In 1882 the twin screw was not in commercial use, and few hulls of ocean steamers were constructed of steel. The *Baltic* of that day was of 3,707 gross tons; of to-day, 23,876 gross tons. These facts indicate that the law now governing steerage accommodations on ocean steamers, known as "the passenger act of 1882," is behind the development of steamship building and below the reasonable requirements of the steerage passenger. Some of its hard and fast prescriptions are unnecessary, while other and proper regulations are lacking. The penalty on the master of \$5 a passenger for a variety of violations of such prescriptions, some grave and some inconsequential, when 2,000 or more steerage passengers are carried, in my judgment would not now be approved by Congress. In view of improvements in shipbuilding this law should be carefully revised to meet more fully the needs of hundreds of thousands who come to or leave our shores in the steerage and to serve the purposes of steamship companies and shipbuilders. Nearly all transoceanic passenger steamers are under the flags of the maritime powers of Europe or of Japan, and subject to the laws of their respective countries regulating the steerage. Comity suggests that in recasting our own laws these laws should be consulted. Conditions on the Pacific, too, differ from those of trans-Atlantic trade. At the coming short session the Department does not expect to be able to submit a matured revision of "the passenger act of 1882" on which work has begun.

During the past fiscal year steerage passengers were carried to or from the United States by 90 British steamers, 75 German, 32 American, 18 French, 18 Italian, 10 Japanese, 8 Dutch, 7 Austrian, 5 Danish, 5 Spanish, 5 Belgian, 3 Norwegian, and 2 Portuguese steamers, 278 in all, compared with 270 for the previous year. The principal steamship companies which conduct this trade and the number of vessels operated by each were shown in my last annual report. The changes this year are not significant. We are entitled to a larger share in this business, and in legislating to secure it for American steamers Congress would be strengthening the sea power of the United States.

The revised international rule prescribing lights and signals for fishing vessels, referred to in my last report, was put into force by Great Britain on May 1. The principal maritime powers of the world, with merchant fleets aggregating over 80 per cent of the world's seagoing tonnage and with all the powerful navies, except the American, have assented to it. The new rule thus becomes part of modern international law for preventing collisions at sea. This fact and the intrinsic merits of the rule suggest that it be adopted by Congress and put into force on January 1, 1907.

The drafts of treaties in respect to division of damages in cases of

collision and salvage, prepared ad referendum by the Brussels conference at which the United States was represented, have been received. So far as the Department is advised very few powers have yet adhered to them. The promotion of international uniformity in maritime legal conditions, aimed at in these treaties, is commendable. At the present time, however, the United States is not a maritime power, tho an enormous exporter in foreign ships. Our national interest accordingly is greater in the question as to the part cargoes are to bear in the adjustment of damages than in the part to be borne, respectively, by ships in collision.

In round numbers 30,000 registers, enrollments, and licenses are issued annually to vessels of the United States. Under the act which will take effect January 1, 1907, the number of such documents to be issued annually will be greatly reduced, and all necessary purposes will be served by indorsements on enrollments and licenses.

BUREAU OF IMMIGRATION.

During the year ended June 30, 1906, there applied for admission at ports of the United States 1,178,785 aliens, 12,432 of whom were refused admission, for causes which will appear in detail. Of those admitted 1,100,735 were new arrivals and 65,618 returned to this country after a temporary absence or were reported as aliens in transit, or tourists. This total of 1,178,785 represents an excess over the arrivals for the next preceding year of 152,286.

It is interesting to note the sources from which this large immigration comes. It has followed somewhat along the lines of the increase during recent years, which has been derived principally from southern and eastern Europe. To the total of 1,100,735 aliens admitted to the United States during the past fiscal year three countries have contributed, approximately, 69 per cent. Russia furnished 215,665, Austria-Hungary 265,138, and Italy (including Sicily and Sardinia) 273,120. Those composing the remaining 31 per cent were distributed among the various other foreign countries, ranging from 49,491 from England to 51 from the Pacific Islands.

Notwithstanding the large numbers from Italy and Russia shown last year, the increase from these two countries for the year under consideration was 51,641 and 30,768, respectively. On the other hand, those countries whose people are more nearly allied in race and social standards to the people of the United States have furnished fewer immigrants. Thus during the year 1905, as compared with the next preceding year, the number of aliens applying for admission from Ireland decreased 17,950; England, 15,218; Sweden, 3,281; Germany, 3,010; Denmark, 1,229, and Scotland, 1,111.

There were excluded from admission during the year a total of 12,432 aliens. The principal grounds of exclusion and the numbers, respectively, were: Paupers 7,069, contract laborers 2,314, diseased aliens 2,273,

insane persons and idiots 231, convicts 205, and the remaining 340, including 122 Chinese, were rejected for minor causes. The significant feature of this statement is that notwithstanding the penal provisions of the law in regard to bringing diseased aliens to ports of the United States and the responsibility for the return of all inadmissible aliens, the steamship companies engaged in this business have brought a large number of those who manifestly could not be permitted to land. The natural conclusion as suggested by the Commissioner-General of Immigration is that more severe penalties should be imposed, or that a medical inspection should be made at the foreign ports of embarkation. It is not inconsistent with a measure of good faith on the part of such carriers that in the enormous number of those seeking transportation to the United States some, who are obviously of the excluded classes, should succeed in escaping observation. The more efficacious means of preventing violations of the law, especially with reference to the diseased classes, would be the location of medical officers at foreign ports for the purpose of making examination in advance of the purchase by aliens of their transportation as recommended a year ago.

For the above reasons, as well as for those stated in my last annual report, I again desire to urge upon Congress the importance of making provision for an inspection both by physicians and immigrant inspectors at foreign ports of embarkation. Such a measure can not fail to accomplish important results in the way of preventing the embarkation of inadmissible aliens, as well as in avoiding the distressing incidents connected with the deportation of members of families who have expended their means to reach this country.

In addition to the number excluded from admission, there have been arrested and expelled from the United States 676 aliens who were shown, after a hearing in accordance with the principle of due process of law, to have unlawfully gained admission during previous years.

As stated in my last annual report, the enormous immigration of the past year suggests the advisability of adopting more adequate means of restricting the number in order to lessen the risk involved by such large and growing additions to our alien population. Among the suggestions of suitable means to accomplish this purpose the one mentioned a year ago appears to be the most effective. It was then stated that if the number of aliens brought on any vessel is so limited as to bear a fixed ratio to the tonnage of each vessel, by making the ratio sufficiently large, not only will there be an actual diminution in the total of arrivals, but many of the incidents of suffering and discomfort attendant upon steerage travel can be obviated.

There are other recommendations made in the annual report of the Commissioner-General of Immigration based upon experience during the past year, as well as during prior years, to which attention is invited.

CHINESE EXCLUSION.

A marked improvement as compared with the conditions existing in previous years has been apparent as the result of efforts made to exclude laborers from admission to the United States. This is due to the steps taken to secure such an effective visé of the certificates of the members of the exempt classes as would prevent laborers from impersonating those who are entitled under the laws and treaties to admission.

With respect to the classes of applicants, it appears that there has been a large increase in those claiming to be natives of the United States and of profest minor children of domiciled merchants, while a considerable reduction has been noted in the number of returning laborers and merchants. The total number of the exempt classes who sought admission is less than one-half the number of such classes who applied for the same privilege during the year 1905.

Chinese of the exempt classes seeking admission for the first time numbered 328, a large proportion of whom (135) were officials. Of the total number mentioned, 19 were deported, not in every instance, however, because fraud was shown, but owing to the fact that in a number of cases the applicants, under section 2 of the immigration act approved March 3, 1903, were found to be afflicted with a dangerous contagious disease. As to domiciled merchants, 145 were admitted after making temporary visits abroad, and 14 were rejected because it was found upon investigation that they were laborers endeavoring to pose as merchants formerly resident in this country. Favorable action was taken upon all but 18 of the 450 cases of laborers returning to resume residence in this country; and 911 persons of the Chinese race were permitted to enter on the claim that they were American citizens by birth. The total number of Chinese admitted at the ports during the past year was 2,732, and the total number debarred was 205. Of those admitted 1,985 were residents returning to the United States and 747 were new arrivals. Of the number deported 149 claimed to be residents and 56 were new arrivals.

During the year 503 arrests were made, consisting principally of Chinese who had surreptitiously cross the Mexican or Canadian borders, very few having been arrested in the interior of the United States upon the charge of unlawful entry.

A number of recommendations have been made by the Commissioner-General for the purpose of securing a more efficient administration of the Chinese exclusion laws, and removing, as far as practicable, such hardships as have occasioned complaint both on the part of the Chinese and of those who are interested in extending to Chinese aliens every consideration not inconsistent with the fixt policy of excluding the laboring classes from this country. Among these recommendations it is urged that Congress remove all restrictions upon the return of registered laborers, except the identification of such laborers at the

time of their application for readmission. The reasons in detail for this recommendation were stated in my last annual report, and have lost none of their force in the time that has since elapsed.

I repeat my recommendations of last year that inspection officers should be stationed in China to conduct the investigations there rather than at ports of arrival in this country, and that the consular officers of the United States, in those countries in which the Empire of China has failed to authorize representatives to issue section 6 certificates, should perform such duty.

BUREAU OF STANDARDS.

The low-temperature laboratory, the construction of which was begun in 1904, was finished during the year, and the installation of the machinery for the liquefaction of gases has been nearly completed. This structure is of small dimensions and harmonizes with the general exterior design of the other buildings. The facilities thus to be afforded for extending the range of temperature will be of great value in establishing the standard scale of temperature for the verification of low-temperature apparatus, and also will permit important research in other kinds of measurement at temperatures hitherto not available. Satisfactory progress has been made in the installation of special piping, wiring, and plumbing in the several laboratories.

More than 16,000 standards, instruments, lamps, and thermometers, sugar samples, and other articles were tested at the Bureau during the year. The increase in the personnel enabled the Bureau to develop its work more rapidly and to investigate problems of great importance in connection with standards and methods of measurement. Two bulletins containing results of important scientific investigations were published during the year and two more are now in press.

The electrical work of the Bureau is divided into five principal groups or sections. The first has to do with resistance and electro-motive force, the second with inductance and capacity, the third with magnetism, the fourth with a wide range of electrical measuring instruments, and the fifth with photometry.

The permanent installation of the equipment of the first section, intended for facilitating the routine testing work, has been completed, and the special apparatus found entirely satisfactory. The standards of several manufacturers of electrical apparatus and of copper wire have been verified and testing done for educational institutions and others. Considerable progress has been made on the problems relating to the standard cell. A large number of such cells, set up with materials prepared in various ways, have been under observation for a considerable period, the result thereof indicating that they may be reproduced with a high order of accuracy.

Several important improvements have been made during the year in the methods of measuring inductance and capacity, and the standards

of the Bureau fixt with great precision. The investigation, which has for its object the determination of the ratio of the electromagnetic and electrostatic units, has been continued thru the year, and results of greater accuracy than ever before obtained have justified the large amount of work that has been expended upon this fundamental problem. Condensers and inductances have been tested for educational institutions, wireless-telegraph companies, and the Government.

The equipment for testing electrical instruments has been enlarged and a considerable number of instruments of various kinds tested. Methods of measurements have been investigated, and some important new apparatus devised. The harmonic alternator, especially designed and built for this work, has been received, and will soon be installed.

During the past year much progress has been made in the photometric work of the Bureau, both in testing and investigation. Lamps to be used as standards have been tested for lamp manufacturers, laboratories, and the Government, and many lamps tested as to life and candlepower for different departments of the Government. A comparison of the photometric standards of this country was made with the standards of England, France, and Germany, and preparations made for a study of primary photometric standards. An important investigation of the rotating sectored disk was completed during the year and this valuable adjunct of a photometric laboratory may now be used in the most accurate measurements.

The 50-meter comparator for testing geodetic measuring apparatus was sufficiently completed early in March to be tested, and its operation was thoroly successful. The Bureau has a better equipped laboratory for such work than any other institution in the world, and in addition to serving the Coast and Geodetic Survey and the several State surveys, requests have already been received from Chile and Mexico for comparisons of their apparatus. It is believed that the international uniformity in the geodetic standards thus made possible will be of great value in geodetic work.

A special balance of unusual speed and reliability has been acquired by the Bureau.

The regulations of the Bureau in regard to weights and glass volumetric apparatus have resulted in a considerable improvement in the roduct of American manufacture, and it is confidently expected that there will soon be little if any necessity for importing such apparatus.

In the division of thermometry and pyrometry there were tested during the year 11,660 thermometers of various kinds; also a number of resistance, thermometric, and radiation pyrometers for use in metallurgical laboratories and for controlling temperatures of industrial processes, such as hardening of steel, burning of porcelain, etc. These tests included standards used by manufacturers of thermometers and pyrometers for the control of their products.

Tests were also made of the physical properties of 57 samples of illuminating and lubricating oils and of the calorific values of samples of coal, as a basis for the award of contracts and to determine the fulfilment of specifications for materials furnished to the several Departments of the Government.

During the year there has been completed an investigation of methods of annealing high temperature industrial thermometers. As a result of this work it is expected that serious defects, now present in a large percentage of these thermometers submitted to the Bureau for test, will be corrected. The work on methods of measuring the very high temperature now required in industrial and pyro-chemical operations has been continued. Considerable work has also been accomplished toward fixing the temperature standards with the highest precision thruout the range of measurable temperatures.

The optical work has included examination of imported sugars for the customs service. In connection with the polariscopic work several problems have been investigated, including a determination of a suitable light source as the standard for such work and the elimination of errors due to the clarifying reagent used in testing. The work of this section also included investigations of different types of instruments for measuring radiant energy, including the bolometer, radiometer, radiomicrometer, and thermocouple, and the application of optical methods to length-measuring apparatus.

During the past year samples of standardized irons were carefully analyzed at the Bureau, and distributed as standardized samples to the technical interests concerned for use in checking the accuracy of methods of analysis. A new determination of the exact quantitative relation between hydrogen and oxygen in water is in progress. Standard samples of zinc ore, a sulphide ore, and a sample of bearing metal have been carefully analyzed in connection with steps now being taken by different societies for the improvement of technical analyses. The Bureau has undertaken a study of the standards of purity for chemical reagents and of the methods to be used for the quantitative determination of small amounts of impurities in such reagents. Samples of materials have been tested for the Department in connection with the purchase of supplies and also for certain investigations now in progress.

BUILDING FOR THE DEPARTMENT.

I strongly recommend that Congress provide a suitable public building for this Department, large enough to permit of the concentration under one roof of all its scattered Bureaus, with the exception of the Bureau of Standards. Such action as was contemplated by the provision in the sundry civil bill of last session (H. R. 19844) would be thoroly acceptable to the Department. The locations of the rented

quarters of the Department and the amounts paid in rentals at present are shown by the following table:

Location.	Occupied by—	Annual rental.
Willard Building, 513-515 Fourteenth street NW.	Department (main building)	\$11,830.00
Emery Building, northwest corner First and B streets NW.	Bureau of the Census.....	21,000.00
204-206 Fourteenth street NW.....	Bureau of the Census (storage purposes)	1,080.00
National Safe Deposit Building, corner New York avenue and Fifteenth street NW.	Bureau of Labor.....	6,750.00
Do	Bureau of Labor (rooms for storage) ...	750.00
Builders' Exchange Building, 719-721 Thirteenth street NW. (in part).	Light-House Board, Steamboat-Inspection Service, and Bureau of Navigation.	7,600.00
Adams Building, 1333-1335 F street NW. (in part).	Bureau of Statistics	4,039.80
1187-1139 Seventeenth street NW	Department (stables)	1,200.00
Basement, 920-922 E street NW	Light-House Board and Bureau of Statistics (storage of records and documents).	1,500.00
Munsey Building, rooms 404-408.....	Division of Naturalization	4,000.00
Total.....		59,749.80

During the past year the rented quarters have become wholly inadequate to properly accommodate the Department. In the endeavor to make present quarters meet the growing needs, the Department library has been abolished and the books stored in the space used by the library of the Bureau of the Census; all slightly used books have been eliminated from the library of the Bureau of Labor; files and records not needed for current use have been put into storage; all records and papers of no further use or historic value have been destroyed by permission of Congress; cumbersome furniture has been replaced by the most compact; hallways have been utilized for file cases, for copying machines and the like, and even for desks for clerks; but the growth of the Department has forced the hiring of additional quarters for the Division of Naturalization and will compel the removal, within a few months at latest, of one or more bureaus to new quarters.

The crowded condition of some of the rooms in the main Department building has been commented on by the Sanitary Commission appointed by the President to examine the condition of the rented quarters occupied by the Government Departments. As illustrations, a room having 233 square feet of floor space is occupied by 5 clerks with their desks, typewriters, and file cases; a room of 470 square feet by 14 typewriter operators at times; a room of 380 square feet by 8 clerks, including an official who must dictate a voluminous correspondence amid the distraction of 7 typewriters. The condition in the main building is rendered still more unsatisfactory by the fact that a 12-story hotel is about to be erected close to the south side of the building, which will cut off the present abundant supply of light and will reduce to the darkness of inside rooms nearly one-third of the present naturally lighted rooms.

The building on Thirteenth street, occupied by the Light-House Board, the Bureau of Navigation, and the Steamboat-Inspection Service, besides being very crowded, is old and unsuited to the requirements of the bureaus, and the valuable records are exposed to destruction by fire—a contingency that is not lessened by the fact that an automobile garage has been established in an adjoining building.

It will be seen that the buildings occupied by the Department cover an area about $1\frac{1}{2}$ miles long, east and west, and about one-half mile wide from north to south. The loss of time to officials and employees and the inconvenience and extra expense incident to the transaction of the daily business by so scattered an organization are self-evident.

The assembling of the bureaus and offices of the Department in one public building would result in an annual saving in rent of \$60,000, and also in a saving in administration, on a very conservative estimate, of at least \$66,000 a year, or a total at the present time of over \$125,000 a year. This amount would pay the interest, at 2 per cent, on \$6,250,000 of United States bonds. The saving in administration would result from a reduction in clerical force, made possible by consolidation of the libraries and the disbursing and appointment work of outlying bureaus and offices, from a reduction in the subclerical force, including watchmen, engineers, charwomen, laborers, elevator conductors, mechanics, and the like, and thru economy of time and service, and a saving in fuel, electric lights and power, horses, wagons, and telephones.

Every consideration of economy and good administration supports the recommendation made above, and the rapidly enhancing values of property in this section of the city make more urgent the prompt acquirement of a site for a building for this Department. The enhancement of real estate values will also have a marked effect on the rental outlay of the Department within the next few years.

In conclusion I desire to express my appreciation of the faithful and efficient services of the officials and employees of the Department, who have taken a deep interest in the work assigned to them and shown an unselfish devotion to duty.

V. H. METCALF,
Secretary.

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