

ANNUAL REPORT

OF THE

U.S. Dept.
(SECRETARY) OF COMMERCE AND LABOR

1904



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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, 1904.

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.

The present organization of the Department is practically as presented in the first annual report of the Secretary. The Bureau of Manufactures, authorized under the organic act, was not organized during the past year because of the insufficiency of the appropriation. The complete organization of the Secretary's Office was postponed for a similar reason.

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 objects and amounts of the annual appropriations for the fiscal year ended June 30, 1904, of the balances of appropriations for public works which, under the law, are expended without regard to any particular fiscal year, available July 1, 1903, and of permanent indefinite appropriations:

	Annual appropriations, 1904.	Appropriations for public works.	Permanent indefinite appropriations.	Grand totals.
Office of the Secretary of Commerce and Labor and Bureaus of Corporations and Manufactures	\$315,860.06			\$315,860.06
Bureau of Labor	184,220.00			184,220.00
Light-House Board	44,260.00			44,260.00
Light-House Establishment	3,546,000.00			3,546,000.00
Light-houses, beacons, fog signals, etc.		\$3,329,226.25		3,329,226.25
Bureau of the Census	1,396,749.59			1,396,749.59
Bureau of Statistics	65,570.00			65,570.00

^a The unexpended balance July 1, 1903, of the appropriations for the fiscal years 1903 and 1904, and the deficiency appropriation for the fiscal year 1904.

^b The aggregate of 108 items of appropriations made at different times by Congress for repairs to and the erection of light-houses, beacons, fog signals, light-ships, light-house depots, etc., remaining unexpended July 1, 1903. Contracts have been made, or will be made as soon as plans and specifications can be prepared and approved, that will require the expenditure of the entire sum. Of the amount, \$1,188,100 was appropriated by the act of Congress approved March 3, 1903, entitled "An act making appropriations for sundry civil expenses of the Government for the fiscal year ended June thirtieth, nineteen hundred and four, and for other purposes."

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	Annual appropriations, 1904.	Appropriations for public works.	Permanent indefinite appropriations.	Grand totals.
Office of Supervising Inspector-General, Steamboat-Inspection Service.....	\$11,940.00			\$11,940.00
Steamboat-Inspection Service.....			\$388,359.70	388,359.70
Bureau of Navigation.....	26,480.00			26,480.00
Salaries, shipping service.....			60,905.89	60,905.89
Services to American vessels.....			10,633.37	10,633.37
Refunding penalties or charges erroneously exacted.....			2,988.87	2,988.87
Bureau of Navigation.....	19,426.00			19,426.00
Expenses of regulating immigration.....			1,304,398.81	1,304,398.81
Enforcement of the Chinese-exclusion act.....	500,000.00			500,000.00
Enforcement of alien contract labor laws.....	150,000.00			150,000.00
Ferryboat, New Island, repairs, etc., at Ellis Island, N. Y., immigrant station.....		\$837,546.90		337,546.90
Bureau of Standards.....	195,950.00			195,950.00
Coast and Geodetic Survey.....	918,285.06	119,601.62		1,037,886.68
Bureau of Fisheries.....	587,640.00			537,640.00
Fish hatcheries, launch, steamer, etc.....		162,280.68		162,280.68
Salaries and expenses of agents at seal fisheries in Alaska.....	12,950.00			12,950.00
Supplies for native inhabitants, Alaska.....	15,000.00			15,000.00
Expenses, inspectors of pelagic seal skins.....	100.00			100.00
Protection of salmon fisheries of Alaska.....	7,000.00			7,000.00
Publication of diplomatic, consular, and commercial reports.....	40,000.00			40,000.00
Contingent expenses, bureaus transferred from Treasury Department, including rents; and postage, numbering machines, etc.....	19,052.00			19,052.00
Salaries of positions transferred from State Department.....	5,700.00			5,700.00
Salaries of positions transferred from Treasury Department.....	11,640.00			11,640.00
Miscellaneous items of appropriations transferred from Treasury Department.....	662.00			662.00
Repairs of Butler Building.....	1,000.00			1,000.00
Shelving and transferring records.....	266.40			266.40
Repairs and heating apparatus, Richards Building.....	3,682.00			3,682.00
Total.....	8,029,433.11	3,948,655.45	1,767,286.14	13,745,374.70

a Of this amount \$260,760.06 is to be expended without regard to fiscal year.

The following table shows the disbursements made by the disbursing clerk of the Department for the fiscal year ended June 30, 1904:

Appropriations.	First quarter.	Second quarter.	Third quarter.	Fourth quarter.	Total.
Salaries, Department of Commerce and Labor, 1903 and 1904.....	\$18,441.30	\$22,429.34	\$26,738.77	\$45,203.80	\$112,813.21
Salaries and expenses, special agents, Department of Commerce and Labor, 1903 and 1904.....	7,076.06	11,239.60	13,759.77	21,617.66	53,693.09
Rent, Department of Commerce and Labor, 1903 and 1904.....	3,943.32	2,054.98	3,124.13	3,082.47	12,204.90
Contingent expenses, Department of Commerce and Labor, 1903 and 1904.....	15,738.45	24,519.44	14,650.95	20,918.69	75,827.53
Salaries, Department of Labor, 1904.....	26,483.37	26,119.35	26,595.00	26,263.41	105,461.16
Miscellaneous expenses, Department of Labor, 1904.....	12,325.71	18,640.98	15,863.62	12,788.96	59,619.27
Stationery, Department of Labor, 1904.....	17.10	102.00	456.24		575.34
Library, Department of Labor, 1904.....	124.92	64.31	291.68	417.69	898.60
Rent, Department of Labor, 1904.....	1,125.00	1,687.50	2,250.00	1,687.50	6,750.00
Contingent expenses, Department of Labor, 1904.....	213.39	446.33	553.27	1,257.98	2,470.97
Postage to Postal Union countries, Department of Labor, 1904.....	150.00		150.00	150.00	450.00
Salaries, Bureau of Statistics, 1904.....	16,412.29	16,720.33	16,817.50	16,344.92	66,295.04
Collecting statistics relating to commerce, 1904.....	620.20	838.10	954.46	1,587.24	4,000.00
Publication of diplomatic, consular, and commercial reports, 1904.....	2,214.27	4,475.40	14,110.17	7,012.95	27,812.79
Salaries, Office of Light-House Board, 1904.....	10,382.51	10,686.46	10,811.75	10,716.11	42,596.83
Salaries, Bureau of Navigation, 1904.....	6,544.17	6,225.40	6,202.14	6,385.14	25,356.85
Salaries, National Bureau of Standards, 1904.....	15,715.00	17,522.01	18,075.47	18,442.11	69,754.59
Equipment, National Bureau of Standards, 1904.....	5,662.02	19,057.35	28,288.83	13,677.61	66,685.81

Appropriations.	First quarter.	Second quarter.	Third quarter.	Fourth quarter.	Total.
Improvement and care of grounds, Bureau of Standards, 1904 and 1905.....				\$500.00	\$500.00
General expenses, National Bureau of Standards, 1904.....	\$1,958.86	\$2,220.55	\$2,076.41	3,003.80	9,259.62
Salaries and traveling expenses of agents at seal fisheries of Alaska, 1904.....		2,193.95	2,799.05	1,101.05	6,094.05
Protection of salmon fisheries of Alaska, 1904.....	910.35	1,911.74	1,333.80	1,262.47	5,418.36
Salaries, Bureau of Immigration, 1903 and 1904.....	4,407.90	3,993.08	4,574.88	5,580.45	18,555.81
Salaries, Office of Supervising Inspector-General, Steamboat-Inspection Service, 1904.....	2,887.20	3,079.53	2,985.00	2,985.00	11,936.73
Salaries, Steamboat-Inspection Service.....	75,125.03	76,048.23	76,738.18	76,407.95	304,319.89
Contingent expenses, Steamboat-Inspection Service.....	21,452.58	16,564.00	11,388.49	16,662.26	66,047.33
Enforcement of the Chinese-exclusion act, 1904.....	41,748.31	91,111.33	104,122.14	105,136.97	342,118.75
Expenses of regulating immigration.....	248,028.94	325,461.88	314,016.88	379,389.56	1,266,897.26
Enforcement of the Chinese-exclusion act, 1903.....	11,820.28			148.31	11,968.59
Miscellaneous expenses, Department of Labor, 1903.....	1,093.90				1,093.90
Contingent expenses, Department of Labor, 1903.....	356.51				356.51
Preservation of census records, Census Office, 1904.....	1,470.00	1,436.72	1,410.00	1,200.04	5,516.76
Contingent expenses, Department of Commerce and Labor, 1904 (bureaus transferred):					
Stationery.....	1,313.76	2,331.17	327.31	75	3,972.99
Newspapers and books.....	18.00	30.56	58.43	54.50	156.49
Freight, telegrams, etc.....	2.40	74.30	157.77	47.44	281.91
Ice.....		68.43		21.52	89.95
File holders and cases.....		126.72		55.27	181.99
Gas, etc.....	32.66	59.66	55.91	54.40	202.63
Carpets and repairs.....		4.76	152.16	116.24	273.16
Miscellaneous items.....	63.29	163.31	5.40		232.00
Furniture, etc.....	2.30	716.35		4.00	722.65
Rent.....	3,034.96	1,939.99	3,246.64	3,543.31	11,764.90
Postage.....			205.00		205.00
Numbering, adding, and other machines.....		48.50	397.75	10.00	456.25
Repairs to Butler Building, Washington, D. C. Equipment, National Bureau of Standards, 1903.....	2,541.68	1,068.25	167.00	65.30	232.30
Publication of diplomatic, consular, and commercial reports, 1903.....	951.13	9,600.03			3,609.98
General expenses, National Bureau of Standards, 1903.....	119.50	66.29			10,551.16
Equipment of laboratory, National Bureau of Standards, 1902.....	1,475.25				185.79
Protection of salmon fisheries of Alaska, 1903.....	601.30				1,475.25
Steel twin-screw ferryboat, Ellis Island, N. Y. New Island near Ellis Island, N. Y. Repairs, etc., property at Ellis Island, N. Y. Salaries and traveling expenses of agents at seal fisheries in Alaska, 1903.....		26.85	55,184.03	38,234.10	601.30
Repairs and heating apparatus, Richards Building, Department of Commerce and Labor, 1904.....	20,345.91	13,574.74	1,950.85		93,444.98
		5,471.20			128.12
					35,871.50
					5,471.20
		37.50		105.50	143.00
Total.....	584,951.08	742,386.65	783,021.33	843,244.43	2,968,603.49

The disbursements during the fiscal year ended June 30, 1904, 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, Labor, Statistics, Navigation, Immigration, and Standards, the Light-House Board, the office of the Supervising Inspector-General of the Steamboat-Inspection Service, expenses of regulating immigration, expenses of enforcing the Chinese exclusion act, salaries and expenses,

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Steamboat-Inspection Service at large, salaries and expenses of agents at seal fisheries in Alaska, protection of salmon fisheries of Alaska, publication of diplomatic, consular, and commercial reports, and supplies for native inhabitants of Alaska (shown in detail in the above table of expenditures).....	\$2, 953, 603. 49
By the disbursing clerk, Bureau of the Census, on account of salaries and expenses of the Bureau of the Census.....	1, 189, 411. 90
By the special disbursing agent, Coast and Geodetic Survey, on account of salaries, expenses, and public works of the Coast and Geodetic Survey.....	764, 464. 57
By the special disbursing agent, Bureau of Fisheries, on account of salaries, expenses, and public works of the Bureau of Fisheries...	590, 877. 05
By the special disbursing agents of the Immigration Service at large.	41, 504. 46
By the engineer and naval secretaries of the Light-House Board, inspectors and engineers detailed from the Army and Navy to duty in the Light-House Establishment.....	4, 680, 135. 52
By customs officers, on account of witness' fees in steamboat investigations	346. 46
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, 1904, appropriations for public works, and permanent indefinite appropriations.....	141, 532. 11
Total disbursements during the fiscal year	10, 361, 875. 56

Recommendation is made that, as 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. Such a consolidation will result in a saving of both time and expense in the examination of accounts and the payment of vouchers. The bookkeeping of the Department will be simplified and the exact status of accounts and balances of appropriations, including the balances of advances on requisitions, can be ascertained without difficulty, as the ledgers of the Department will 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 will come under the personal supervision of the Secretary.

ESTIMATES.

The estimates for the Department, submitted for the fiscal year ending June 30, 1906, have been prepared after a most careful consideration of the actual needs of the Department and its various bureaus, offices, and services. In the aggregate, there was a material reduction from the amounts first submitted by the bureaus, it being my desire to eliminate for the coming year all increases that might, without injury to the proper growth of any service, be postponed to a future time.

One of the items of increase in the estimates is the amount requested

for the proper organization of the Office of the Secretary. The original appropriations were insufficient to furnish the Secretary adequate assistance for the mere routine administration work necessarily connected with the conduct of the Department. The estimates for the Secretary's Office call for only four clerks in addition to those now employed, but of those now employed nine are on detail from various bureaus of the Department and should be returned to the offices to which they belong, where their services are required.

PLAN OF ORGANIZATION.

The organization of the Department has been conducted along lines in harmony with the appropriations authorized by Congress for the current fiscal year. In some instances the work has been hampered by reason of an insufficient force of employees, and it is hoped that Congress will remedy this difficulty.

SPECIAL INVESTIGATIONS.

In the estimates I have included a provision for an appropriation to be expended under the immediate direction of the Secretary for the investigation of trade conditions at home and abroad, with the object of promoting the domestic and foreign commerce of the United States, and for other purposes. A similar request, made in the first annual report, was denied by Congress, but the result of the year's work conclusively demonstrates that the main investigation contemplated will be of great value to the commercial interests of the country. The growth of our foreign trade can be materially and immediately helped by sending skilled and trained men to study and report upon special conditions in the great world markets.

In addition to the main purpose the appropriation is needed also "for other purposes." It is of the utmost importance that a fund be available for expenditure under the immediate direction of the Secretary for the employment of special agents for the inspection and examination of the services of the Department. On account of the limitations which the law very properly imposes with reference to the expenditure of funds, it is impossible, without such a fund, to promptly meet such emergencies as frequently arise.

Money appropriated for contingent expenses, or for a special or general purpose, can not be used for official or clerical compensation, and executive officers are prohibited from employing help beyond provision made by law. Usually the annual appropriations are barely sufficient to enable the bureaus and offices to dispose of routine work, and provision is seldom, if ever, made for emergency work. The situation which arose in connection with the *General Slocum* disaster is in point. In that instance the Department had no funds which could

lawfully be used to provide either for a reinspection of the passenger steamers in the port of New York or for a general investigation of the service. Yet both the inspection and the investigation were necessary.

I am informed that for years a "division of special agents" has been maintained in the Treasury Department. These special agents are available for detail on any subject of investigation or inspection connected with the Department, and in the main are detailed to report on the work of the branches of the public service outside of the District of Columbia. Of the 7,610 employees of the Department of Commerce and Labor outside of the District of Columbia, 6,754 are connected with bureaus and offices formerly under the jurisdiction of the Treasury Department. In order to continue the efficiency of these services, it is imperative that provision be made for special investigations and inspections either as herein recommended or as maintained while the branches of the service referred to were part of the Treasury Department.

PERSONNEL OF THE DEPARTMENT.

On November 10, 1904, there were in the Department 9,210 regular positions. Of these, 1,812 were specifically authorized by law, and 7,398 were provided for under general appropriations that do not create specific positions.

Persons employed temporarily under general appropriations, except 14 persons engaged on the Philippine census, 50 persons paid from the unexpended balance of the twelfth census appropriation, and 650 special agents engaged in the collection of the statistics of cotton production, are not included in these figures. This class of temporary employments is very large in some of the bureaus; for instance, under the law (act of March 3, 1899, sec. 8, amended, 30 Stat. L., 1015) requiring a decennial census of statistics relating to special classes, more than 6,000 special agents have been employed for various periods during the present calendar year in the Bureau of the Census. There are also employed in that Bureau 8 special agents for the collection of the statistics of the quinquennial census authorized in section 9 of the act of March 6, 1902, that are not included in the above total of 9,210.

Temporary laborers and mechanics employed under the engineers of the various light-house districts are also omitted. During the present calendar year 1,174 employments of this character have been authorized. In the Bureau of Fisheries, from January 1 to August 31 of this year, there have been employed for various periods more than 1,500 spawn takers, hatchery attendants, laborers, etc. These have also been omitted. Smaller classes of temporary employees, omitted by reason of payment from a general appropriation, are as follows:

Ten special agents in the Bureau of Corporations, 25 employees in the Immigration Service at large, 6 in the Coast and Geodetic Survey, and 2 in the Bureau of Fisheries.

The accompanying table shows the positions under the Department by bureaus, offices, and services, whether statutory or otherwise, and their distribution within and outside of the District of Columbia. In this table the entire personnel of the Office of the Secretary and of the Bureaus of Corporations, Manufactures, Labor, Statistics, and Standards is treated as within the District of Columbia. In the cases of the Light-House Establishment, the Bureaus of Immigration and Navigation, and the Steamboat-Inspection Service the figures show the persons actually serving within and outside of the District. In the Bureau of Fisheries all station employees, except those at the central station at Washington, employees at large, distribution employees, two local agents in the division of statistics and methods of the fisheries, and employees in the vessel service are treated as outside. In the Coast and Geodetic Survey the crews of vessels, and in the Bureau of the Census the cotton-gin agents, are treated as outside. It will be observed that of the 9,210 positions under the Department 1,600 are in the District of Columbia and 7,610 outside.

Bureau, office, or service.	Statutory positions.	Positions not statutory (lump appropriations).	In the District of Columbia.	Outside the District of Columbia.
Office of the Secretary	125		125	
Bureau of Corporations	47	15	62	
Bureau of Manufactures	12		12	
Bureau of Labor	80	20	100	
Light-House Establishment	36	5,246	36	5,246
Bureau of the Census	664	729	743	650
Coast and Geodetic Survey	220	94	257	57
Bureau of Statistics	61	2	63	
Steamboat-Inspection Service	166	46	7	206
Bureau of Fisheries	290		84	206
Bureau of Navigation	22	53	22	53
Bureau of Immigration	18	1,193	18	1,193
Bureau of Standards	71		71	
Total	1,812	7,398	1,600	7,610
In the District of Columbia				1,600
Outside the District of Columbia				7,610
Grand total				9,210

PURCHASE OF SUPPLIES.

Stationery and supplies for the entire Department in Washington, with the exception of supplies that are purely technical—such as scientific instruments and apparatus—and stationery for the entire service outside of Washington, have been purchased by the Secretary's Office during the past year at the best contract prices of the other Executive Departments, and for the coming year will be purchased under contracts which have already been made. Uniformity in the stationery and supplies used throughout the Department has been

insured and lower prices consequent upon wide competition and contracts for large quantities have been obtained.

Economy in clerical labor has resulted from consolidating in one division of the Department all the work relating to obtaining bids, making contracts, purchasing, issuing, and accounting for stationery and supplies. A further saving in this direction could be effected if the various contingent funds of the bureaus were consolidated into a single fund to be controlled by the Secretary's Office, thus doing away with the clerical work necessitated by the present cumbersome process of reimbursing the Department appropriation for contingent expenses from similar appropriations for those bureaus heretofore separately appropriated for.

PRINTING.

During the past year the Department has assumed the conduct of the relations of its bureaus (with the single exception of the Bureau of the Census) with the Government Printing Office, for the purpose of promoting promptness and uniformity in its printing and of securing accuracy and completeness of its records. A central editorial force has been organized, which, in cooperation with the editorial forces already employed in a number of the bureaus, will endeavor to secure more uniform excellence of form and expression in the Department publications.

In addition to its many other publications the Department has issued series of circulars and of decisions on appealed cases, which have been printed immediately upon their preparation so as to place them as promptly as possible in the hands of persons interested.

A history of the Department and its various bureaus and offices, including the acts under which they were organized and are conducted, has been published.

BOOKS AND BLANKS.

The transfer of certain bureaus from the Treasury Department to this Department necessitated the division between the two departments of a great number of blank forms formerly used in the Treasury Department. This division involved the settlement of a number of difficult questions of departmental jurisdiction, and a joint commission was appointed by the Secretary of the Treasury and the Secretary of Commerce and Labor to determine the proper assignment and use of the forms in doubt. The work of this commission is now nearly completed.

The transfer of these bureaus also necessitated the preparation of a number of new forms. Many forms have been consolidated, thereby eliminating unnecessary ones and reducing the cost of printing.

A new catalogue of the numerous forms now used in the Department is being prepared. In the course of its compilation the forms are being revised in the interest of uniformity and simplicity, making possible a more systematic classification. All these forms are now distributed by a single division of the Department, and thus the work is greatly simplified.

During the past year there have been printed and sent out to the various services of the Department over four and one-quarter million blanks and 75,000 books and pamphlets.

TELEGRAPH AND TELEPHONE SERVICE.

The Department has installed an efficient telegraph and telephone service. The question of reducing the cost of this service is being carefully considered in connection with the service in the other Departments, to the end that there may be obtained the greatest degree of efficiency with the least possible expense.

BUREAU OF MANUFACTURES.

The Bureau of Manufactures, authorized under the organic act, was not organized during the fiscal year covered by this report because of the insufficiency of the appropriations.

BUREAU OF CORPORATIONS.

The work of the Bureau of Corporations has proceeded along the lines indicated in the first annual report of the Department.

The Bureau has made exhaustive examination of judicial decisions for the purpose of ascertaining fully those constitutional powers and restrictions on which present conditions are based, and also those which must be necessarily involved in any future legislation for the improvement of present legal corporate conditions.

For the purpose of ascertaining and presenting in available form the legal conditions under which corporate business is being carried on in the various States material obtained from thirty States has been compiled and tabulated. In each of these States, with regard to all the more important corporations organized in the State and engaged in interstate or foreign commerce, typical either of the State's industries or of its laws, every paper or document filed or recorded concerning each corporation was examined separately, and all information relating to each corporation disclosed by the official records has been collected and compiled. There have been thus far examined and abstracted the records of over 1,500 corporations, which include the larger part of the more important industrial and commercial corporations, joint-stock companies, and corporate combinations in the United States.

At the same time there has been collected the fullest possible information concerning the various systems of corporate taxation in use; whenever possible, there have been obtained statements, reports, or returns of the more important corporations; and, in addition, there has been obtained a complete list of the foreign corporations admitted to do business in the particular State, this record showing the name, capital stock, and home State of each corporation. This record furnishes a convenient clew to corporations engaged in interstate commerce. The material now collected from twenty-five States on this subject is as follows:

- First. Abstracts of the records of specific domestic corporations.
- Second. Abstracts of the records of specific foreign corporations.
- Third. List of foreign corporations admitted to the State to do business.
- Fourth. Official forms of all corporate documents required or permitted to be filed.
- Fifth. Transcripts of all records or returns used in connection with corporate taxation, taken from typical originals.

There is now ready for publication a compilation of the Federal and State statutes dealing with illegal industrial combinations—the so-called antitrust laws. This will afford complete information of such laws, showing in tabular and condensed form, so as to be readily available and easily comparable, their provisions, including the decisions thereunder and a digest and discussion of cases involving the common-law principles as to combinations in restraint of trade.

The compilation on a uniform outline of insurance laws has been undertaken and completed in ten States. The Bureau has been in communication with the insurance officials of all the States, and its agents have conferred with representatives of a large number of insurance companies, officers of boards of underwriters, and insurance agents, for the purpose of obtaining the best information possible upon both the legal and the business side of insurance.

Federal control or regulation of insurance raises at the outset the question whether insurance in any of its forms is interstate commerce. The decisions of the Supreme Court of the United States have established the legal proposition that fire, life, and marine insurance, in the forms presented to the court, are not interstate commerce. If this proposition be irrevocably settled, the powers of the Commissioner of Corporations in reference to insurance are merely to collect and compile such statistics and information as may be voluntarily furnished to him. It would be useless to simply duplicate the statistics already obtained by various State insurance officers.

The rapid development of insurance business, its extent, the enormous amount of money and the diversity of interests involved, and the present business methods suggest that under existing conditions insurance is commerce, and may be subjected to Federal regulation through

affirmative action by Congress. The whole question is receiving the most careful consideration upon both legal and economic grounds.

For the purpose of laying the foundation upon which direct investigations of special corporations can be intelligently conducted, the Bureau has compiled, from sources other than the corporations themselves, all available information regarding certain leading combinations. From a careful analysis of this material it has been possible to form preliminary judgments regarding the economic and financial practices and effects of combinations in general, and to determine the lines of further special inquiry. On the basis of this general study preliminary outlines of inquiries to be addressed directly to the companies are being prepared.

The results of the investigation of the beef industry, authorized by resolution of Congress, will be made the subject of a special report.

The increase in appropriations requested for the Bureau is based upon the actual cost of work hitherto done and the work now in hand or contemplated. It is most strongly urged that the appropriations be granted in the form requested, for the reason that the special character of the work makes it quite impossible to now determine accurately the kind and quality of services that may be required during the coming year. Much greater economy can be exercised in the work of this Bureau if the major portion of its appropriations is in a lump sum; and greater efficiency is possible, as specially qualified men can be temporarily employed for particular investigations.

BUREAU OF LABOR.

In the organic act establishing this Bureau it is stated that its general design and duties "shall be to acquire and diffuse among the people of the United States useful information on subjects connected with labor, in the most general and comprehensive sense of that word, and especially upon its relation to capital, the hours of labor, the earnings of laboring men and women, and the means of promoting their material, social, intellectual, and moral prosperity."

In accordance with the general design and duties referred to, the Commissioner of Labor is specially charged to gather information with reference to the cost of producing various articles, including the wages paid in the different industries, the hours of labor, and the comparative cost of living and kind of living. It is also made his duty to ascertain what articles are controlled by trusts or other combinations of capital, business operations, or labor, and what effect such trusts or other combinations of capital, business operations, or labor have on production and prices. Among other subjects, he is further charged to investigate the causes of and facts relating to all controversies and disputes between employers and employees which may tend to inter-

fare with the welfare of the people of the different States. He is also authorized to make special reports on particular subjects whenever required to do so or when he shall think the subjects in his charge require it.

The Commissioner of Labor reports that under these provisions of the law the Bureau has been engaged during the past year in the collection of data for its nineteenth annual report (for 1904) and in the preparation of that report. The annual report for 1903 related to the cost of living of workingmen's families and the retail prices of staple articles of food used by such families. The report for the present year relates to a subject closely allied—that of rates of wages and hours of labor—and is the result of an extensive investigation among the leading manufacturing and mechanical industries of the United States covering the period from 1890 to 1903, inclusive.

The investigation relating to this subject was designed to cover thoroughly the principal distinctive occupations in the leading industries belonging to this large industrial group in all sections of the country, with a view to securing data which should be entirely representative of conditions and show the trend of wages and hours of labor during the period covered. The force available for the prosecution of the work did not permit of the extension of the investigation to cover transportation, mining, agriculture, and the other great industrial groups. It was possible, however, with the force available to cover practically all of the leading manufacturing and mechanical industries, the number of industries covered being 67, while the data were secured from a total of 519 distinctive occupations in 3,429 establishments.

In addition to the preparation of the nineteenth annual report the Bureau has been engaged in the collection of material with reference to convict labor, which will form the basis of its twentieth annual report (the report for 1905). The collection of data for this report has been almost completed, and it is expected that the report itself will be submitted early in the coming year. This report will relate specially to the economic features of convict labor as employed in the penitentiaries, prisons, and jails of the United States.

Work will shortly be begun on the collection of data relative to strikes and lockouts in the United States, which will form the basis of the annual report for 1906. The sixteenth annual report, published in 1901, brought the facts relating to strikes and lockouts down to and including the year 1900. It is expected that the report for 1906 will cover the period from 1901 to 1905.

In addition to work on the annual reports of the Bureau, a portion of its force has been engaged, pursuant to resolution of the Committee on Labor of the House of Representatives, in the collection of data

which will form the basis of a report upon the bill (H. R. 4064) now pending in the House of Representatives entitled "A bill limiting the hours of daily service of laborers and mechanics employed upon work done for the United States or for any Territory or for the District of Columbia, and for other purposes."

The bimonthly Bulletin has been issued regularly every other month during the past year, and each number has contained, in addition to one or more special articles, timely data relative to agreements between employers and employees, 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. Among the special articles published during the past year in the Bulletin are the following:

Labor Unions and British Industry.

The Annual Index of Wholesale Prices, Covering the Period from 1890 to 1903.

The Union Movement among Coal Mine Workers.

Child Labor in the United States.

Wages and Cost of Living (a summary of the eighteenth and nineteenth annual reports of the Bureau).

Building and Loan Associations in the United States.

The bulletin for September (No. 54) is devoted to a description of the exhibit of the Bureau at the Louisiana Purchase Exposition, and contains reproductions of the principal charts and photographs presented in that exhibit, together with the following series of papers relating more or less closely to the various features covered by the exhibit:

The Working of the United States Bureau of Labor.

Bureaus of Statistics of Labor in the United States.

Bureaus of Statistics of Labor in Foreign Countries.

The Value and Influence of Labor Statistics.

Strikes and Lockouts in the United States, 1881 to 1900.

Wages in the United States and Europe, 1890 to 1903.

Cost of Living and Retail Prices in the United States, 1890 to 1903.

Wholesale Prices in the United States, 1890 to 1903.

Housing of the Working People in the United States by Employers.

Public Baths in the United States.

Trade and Technical Education in the United States.

Hand and Machine Labor in the United States.

Labor Legislation in the United States.

Labor Conditions in Hawaii.

A special report entitled "Labor laws of the United States," which revises and brings down to date the second special report of the Bureau, published in 1896, is now going through the press and will shortly be available for distribution. The eleventh special report, relating to restriction of output in the United States and Europe, is now in the hands of the printer. As the result of investigations in progress or

completed, reports on the following subjects will appear during the coming year, either in the Bulletin or in the form of special reports:

Coal Mine Labor in Europe.

Street-Railway Labor in the United States.

Benefit Features of Trade Unions in the United States and Europe.

Labor Conditions in Australia.

Labor Conditions in the Philippine Islands.

LIGHT-HOUSE BOARD.

The insular possessions and dependencies of the United States are insistent in their demands either to have their light-house services taken over and administered by the Federal Government, or to have more and better aids to navigation in the form of light-houses, light-vessels, fog signals, and buoys. Provision has been made by which the Alaskan waters will be well supplied with necessary aids to navigation, except the small and inexpensive post lights, many of which are needed, but which can only be supplied by legislative sanction. These requirements are fully set forth in the annual report of the Light-House Board. The needs of Porto Rico are fairly cared for so far as is possible without a light-house tender built specially for those waters, for which an appropriation has been asked of Congress.

The Hawaiian waters have a mere skeleton of a light-house service, simply a frame to build upon, and the Light-House Board is, for lack of funds and legislative authority, scarcely able to maintain what it took over under Executive order. The needs of Hawaii in this respect, as stated by the Light-House Board in its annual report, are commended to the consideration of Congress. The needs of American shipping in the waters of Navassa, Guam, and the Midway Islands are beginning to assert themselves, and the Department is prepared to take up such burdens as Congress may devolve upon it for the safeguarding of commerce in those waters.

The Department respectfully calls attention to the fact that owing to the want of sufficient appropriations it was unable to make needed repairs, to retain its full force of keepers, or to man and put into operation certain of its newly-built light-houses. The following statement made in its annual report of last year is renewed:

The Department invites attention to the need of meeting the estimates for the maintenance of the Light-House Establishment with full appropriations. The amounts asked are urgently required. Any diminution of them will retard the operations of the establishment to just that extent. The increase in the number of aids to navigation since the last appropriations occasions the increase in the requirements of the establishment. The estimates have been carefully framed, and are based on an aggregate of items. Hence the reduction of the estimates will require the abandonment of items to the extent of the reduction.

The Department repeats its recommendations of last year as to light-house tenders and the establishment of two additional light-house districts, as follows:

Especial attention is invited to the several estimates for the cost of building light-house tenders. These vessels are the eyes and hands of the establishment. By and with them the quarterly inspections are made, the personnel of the establishment is kept up to its standard, the 1,550 light keepers are paid quarterly, supplies of oil, fuel, and other necessities are delivered at the light stations, and repairs of old stations and the construction of new ones are made. The lack of sufficient light-house tenders has made it necessary to do certain work by contract which otherwise would have been done by employees of the Department with greater promptitude and at less expense. Attention is invited to the estimate for a light-house tender to be used in Porto Rican waters, especially as it will be necessary to use her in connection with the aids to navigation in Guantanamo Bay, Cuba, where the naval coal station has just been established.

The Light-House Establishment is now limited by law to 16 districts. The Light-House Board in its annual report has set out the need for two more districts, one to embrace Alaskan waters and the other to embrace Porto Rican waters, as well as the aids to navigation now in Guantanamo Bay, Cuba, and to be hereafter established there. The aids to navigation in Alaskan waters are now looked after by the inspector and engineer of the thirteenth light-house district, who have their headquarters at Portland, Oreg., or about 1,800 miles away from some portions of their work. This great distance makes it very difficult, and in some instances impossible, to give that careful supervision to the work which the interests of commerce and navigation require.

The establishment of a new district, with headquarters for the inspector and engineer near its center, will do much for the increased convenience and safety of the growing commerce in these waters. The aids to navigation in Porto Rican waters are now, and those in Guantanamo Bay will be, under the supervision of the inspector and engineer of the third light-house district, whose offices are on Staten Island New York, some 1,500 miles away from this work. The establishment of a new district will enable the Board to place an inspector and engineer, say, at San Juan, P. R., where they would be within about 100 miles of their work in Porto Rican waters, and much nearer Guantanamo Bay than is now the case.

The estimates made for such special structures as are needed for the exhibition of lights required to make useful at night channels cut by legislative order seem to require special Congressional attention.

The Department urgently invites attention to the estimates for light-house structures for which authorized contracts have been made, and for the completion of which additional appropriations are required.

The estimates made for new light-houses, new light-vessels, new fog signals, and other proposed structures have in some instances been repeated from year to year. In every case the necessity for such work has been determined by careful examination after repeated demands therefor by commercial interests. The estimates, so I am informed, have been carefully made by the light-house inspectors and engineers, and thoroughly verified by the Light-House Board in its committees and by its executive officers. It remains for Congress to

decide whether the needs of commerce require immediate action upon these estimates.

BUREAU OF THE CENSUS.

The Director of the Census reports gratifying progress in the three main lines of work upon which the Bureau was engaged during the past fiscal year. These were special reports authorized by Congress, the tabulation of the Philippine census, and work assigned to the Bureau by the Department.

SPECIAL REPORTS.

The special reports in progress comprised inquiries concerning wealth, debt, and taxation, including statistics of municipal finance; defective, dependent, and delinquent classes; annual mortality; blind, deaf, and dumb; social and financial conditions in cities; electrical industries, and cotton statistics. Preparation has been made for the manufacturing census of 1905.

The report upon wealth, debt, and taxation is one of the most difficult and important which the Bureau is called upon to prepare. No previous inquiry upon these subjects has been entirely successful, due largely to the pressure of work in connection with the main inquiries of the census. The postponement of this report until after the completion of the census proper was one of the wisest provisions of the act for taking the Twelfth Census; it has given the Bureau ample time for a most complete presentation of the financial operations of the nation. The task of securing comparable statistics was exceedingly difficult, and in order to complete satisfactorily the decennial inquiry authorized by Congress it was necessary for the Bureau to take the lead in a movement looking to greater uniformity in the accounting methods of municipalities. Several cities have made changes in their systems of accounting in order to conform wholly or in part to the classification adopted by the Bureau.

The representatives of the Bureau have met everywhere with the hearty cooperation of local officials. It is probable that the annual census reports upon municipal finance for cities of 30,000 population and over will prove the most influential factor in securing the adoption of uniform classification, thus materially lessening the cost of compiling census statistics upon this subject, increasing the accuracy of the returns, making comparisons possible, and encouraging reforms in the public service.

Two special reports have been undertaken as essential to a full valuation of property. One of these, relating to the valuation of railroad properties, properly apportioned to the several States and Territories, has been undertaken in cooperation with the Interstate Com-

merce Commission. The other relates to the par and market values of the negotiable securities of the country. This report will cover an entirely new field of Federal statistical investigation.

Satisfactory progress has been made upon the inquiry concerning defective, dependent, and delinquent classes, and reports are now being received from 5,441 special agents, who are the bookkeepers or wardens of the institutions under review, and who furnish transcripts of their records for a nominal compensation. The report will cover the movement of population in all these institutions for the calendar year 1904; its completion can therefore hardly be looked for during the fiscal year 1905.

The annual reports on mortality in registration areas, authorized by section 7 of the census act, have been delayed in compilation owing to the fact that the statute fixed the compensation to be paid for the transcription of registration records at so low a figure that it proved impossible to secure complete and satisfactory performance of the service. Congress was accordingly asked at its last session to amend the law, but the amendment did not become effective until April 27 last.

Four reports relating to electrical industries have been completed. These cover electric railways, electric light and power plants, municipal electric fire-alarm and police-patrol systems, and telegraphs and telephones. Advance bulletins concerning all of these subjects have been issued, and it is planned to publish them in permanent form in the near future. Together they present a complete account of the remarkable development of the electrical industry in its application to public utilities.

The annual canvass of the cotton ginneries of the southern States, taken for the purpose of ascertaining the size of the crop during the progress of the picking, was made last year with results highly gratifying from the point of view both of accuracy and of the promptness with which the information was given to the public. There will be six canvasses during the coming year showing the amounts of cotton ginned to September 1, October 18, November 14, December 13, 1904 January 16, 1905, and the end of the season.

The Bureau has been actively engaged in the preparation necessary for the census of manufactures for 1905; authorized by section 8 of the census act. It is planned to collect a considerable percentage of the schedules by correspondence, and a copy of the schedule will be mailed to every manufacturer in the United States whose existence is known, in advance of the actual canvass by districts. In the field work it is proposed to utilize the clerical force of the Bureau, so far as possible, thus avoiding the necessity of appointing untried and untrained special agents to superintend the canvass. In accordance with the authorization contained in the act of Congress approved

March 1, 1904, the Director of the Census cooperated with the State of Michigan in taking the census of manufactures of that State, to be utilized in the Federal census of manufactures in 1905. This cooperation with State officials in statistical work resulted most satisfactorily. Arrangements have been made for similar cooperation with State officials in a number of States, in taking the census of manufactures.

PHILIPPINE CENSUS.

The most important work performed during the past year, in addition to work on the special reports, has been the tabulation of the census of the Philippine Islands. The schedules were received by the Bureau September 25, 1903, and the completed tables for population, agriculture, manufactures, vital statistics, and much other data were placed in the hands of the Director of the Philippine Census at intervals during the first six months of the present calendar year; the last of the tables will be completed and delivered in October. The greater part of the tables and text of the Philippine Census reports are now in press. It is expected that they will make four volumes of approximately 700 pages each. The regular clerical force of the Bureau was utilized upon this work, but during a period of three months, while the work was at its height, about 150 temporary clerks were employed to expedite the punching of cards.

MISCELLANEOUS WORK.

The Bureau has lately completed the tabulation of statistics concerning the executive civil service of the United States, and has published this information as Census Bulletin 12. The information presented in this bulletin is important and interesting. Accurate information regarding the personnel of the executive civil service can be secured only by compilations of this character, and there will undoubtedly be a demand for it at stated intervals. The Bureau of the Census should be authorized to compile a similar bulletin at intervals of two, four, or six years.

In the preparation of the decennial census tables showing the birthplace of the foreign-born population, the Bureau of the Census cooperated with the Bureau of Immigration and tabulated immigration statistics upon punched cards, thus bringing within the reach of the latter Bureau much information from the alien manifests hitherto untabulated. It is highly desirable to secure legislation by which the alien emigration as well as immigration can be statistically measured.

The original schedules of the twelve decennial censuses of the United States from 1790 to 1900 are now in possession of the Bureau of the Census, having been transferred from the Department of the Interior to the Census building in June last, under the act of Congress approved January 12, 1903. The population schedules of the Twelfth Census

have been bound in 2,812 volumes. Thus, all the population schedules of all the censuses except the Eleventh are in condition for permanent preservation. The Eleventh Census was taken by family schedules, and there were thus nearly 13,000,000 schedules. Their bulk precludes binding them, as it is estimated that they would form 30,000 volumes. The vaults of the Census building have been made fire-proof, and contain the population schedules for all the censuses except the Eleventh.

The Director of the Census recommends that the Government shall compile and publish the names of the heads of families in the original thirteen States as returned at the census of 1790, and expresses the opinion that this material would occupy about 2,500 printed pages, or two volumes, of which an edition of 5,000 copies would not exceed \$35,000 in cost. He believes that much of this expenditure would be repaid to the Treasury by sale of this work, which is much in demand by patriotic organizations and individuals.

During the past year the Bureau of the Census has published, or prepared for publication, ten bound volumes and twenty-three bulletins and pamphlets.

Sufficient time has now elapsed to justify the conclusion that the establishment of a permanent Census Bureau was wise legislation, not only for the main reasons advanced in the debates which led to the enactment of the law, but for other reasons which have developed as the work of the permanent office has progressed. During the past year it has been made clear that cooperation with State and municipal authorities in connection with the secondary inquiries, in securing population statistics for intercensal periods, and particularly in securing greater uniformity in statistical work, has opened so many new opportunities for usefulness that the existence of the Bureau of the Census is more than justified.

The Director of the Census states that the experience and efficiency of the clerical force of the Bureau have steadily improved. He has established the policy of transferring clerks in large numbers from one division to another, as the pressure of work demands. Incidentally this has greatly increased the familiarity of the clerks with different classes of work, and fits them for valuable service in connection with the next census. The lack of expert assistance in training and directing clerks was recognized by Congress at the last session, and the number of chiefs of division was increased from four to eight. The total number of employees in the clerical and field force of the Bureau is now 712.

TABULATING APPLIANCES.

During the year a new contract has been negotiated, with my approval, by the Director of the Census, for the use of the electrical tabulating apparatus successfully employed in the Eleventh and

Twelfth censuses. It is intended to utilize this apparatus in the tabulation of the annual vital statistics, the annual immigration statistics, and in other current work of the Bureau. It has been definitely demonstrated that the application of mechanical appliances in large statistical undertakings enables work to be completed in at least one-tenth of the time required to do it by hand at about one-third the cost and with a marked increase in accuracy.

Indeed, it may fairly be said that the work of compiling a decennial census has grown to such enormous proportions, owing to the rapid growth of the country, that it is no longer possible to accomplish it within a period of time that will satisfy the country without the aid of mechanical appliances. The law under which the Twelfth Census was taken required the four main reports—on population, vital statistics, agriculture, and manufactures—to be completed and published within two years from the date of the enumeration. The Director of the Census informs me that it would have been physically impossible to complete the compilation of the first three of these branches in less than four years without the aid of the mechanical appliances that were employed.

For the rental of these patented appliances, and for the cards, punches, and other necessary accessories, there was paid the sum of \$428,239.61, in connection with the Twelfth Census proper. This sum represents nearly 4 per cent of the total cost of that census, and while it also represents a very large saving, as compared with the cost of doing the same work by hand, I am nevertheless convinced that the Government ought to take the steps necessary to a material reduction in the cost.

Something has already been accomplished in that direction by the Director of the Census, whose new contract for the rental of these machines has been negotiated on the basis of a reduction of approximately 25 per cent from the rentals paid at the Twelfth Census. But even at this reduced rate, he estimates that the use of the tabulating machinery at the Thirteenth Census will cost the Government not less than \$720,000.

It is plain that some system of mechanical tabulation is permanently required in connection with census work, and I deem it equally plain that it would be greatly to the advantage of the Government to own a system, instead of depending upon a private company for the use of patented machinery. It is my belief that the way is open for the development of a new system, and that there is ample time to perfect it before the Thirteenth Census is under way. Experimental work in that direction can be carried on in the Bureau of the Census in connection with its current work and at comparatively small expense. The success of such experimental work will mean in the end a large

saving of money to the Government. It is therefore hoped that Congress will grant the appropriation for this experimental work which is asked for in the annual estimates.

COAST AND GEODETIC SURVEY.

The amount appropriated for the Coast and Geodetic Survey for the fiscal year 1904, exclusive of the allotment for printing and binding, was \$968,025, of which \$210,245 was for manning and equipping the vessels of the Survey, \$120,000 for building a new vessel, \$38,100 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 the field and office forces.

The Superintendent of the Coast and Geodetic Survey reports that hydrographic surveys were made in 16 States and Territories, and topographic surveys in 9, that triangulation was done in 14, and leveling in 6. The field work necessary for a revision of the two volumes of the United States Coast Pilot covering the coast from Point Judith, R. I., to Chesapeake Bay entrance, was completed.

The primary triangulation along the ninety-eighth meridian and along the Pacific coast north of San Francisco was continued.

The determination of the difference of longitude between San Francisco, Honolulu (Hawaii), Midway Island, Guam Island, and Manila (Philippine Islands), by the telegraphic method, using the Commercial Pacific cable, was completed, making a most satisfactory closure of the longitude circuit around the globe.

In Alaska a survey was made of Davidson Inlet, work was continued in Prince William Sound, and the survey of Kiska Harbor was begun.

The director of coast surveys in the Philippine Islands, an officer of the Coast and Geodetic Survey (with a detail of assistants), in cooperation with the insular government, has continued the important work of charting the imperfectly known waters of the archipelago. The largest vessel belonging to the Survey was engaged on this duty during the past fiscal year. Detached surveys based on astronomic determinations and including base measurement, triangulation, topography, hydrography, and tide observations were made at various points, and a connected triangulation already extends over the greater portion of the west coast of Luzon Island north of Manila Bay. A few additional telegraphic longitudes were determined; magnetic and tide observations were continued. Fifteen new charts were prepared and published at the Manila suboffice, and two volumes of sailing directions were published (revised editions of Sections I and II).

Good progress was made in the general magnetic survey. Observations were made at 345 stations, in 23 States and Territories, including Alaska, Guam, Hawaii, Philippine Islands, and Porto Rico.

Magnetic observations were also made at sea while the vessels of the Survey were en route to their various stations. Magnetic observatories were maintained at Cheltenham, Md.; at Baldwin, Kans.; at Sitka, Alaska; at Honolulu, Hawaii; and in Porto Rico. Special observations were made at the observatories during the year on the 1st and 15th of each month, in order to cooperate with foreign observatories in international magnetic work in connection with the observations made by the expeditions to the Antarctic regions.

Continuous tide observations with self-registering gauges were made at 8 stations, including 1 station in Hawaii and 1 in the Philippine Islands.

The Superintendent attended the Fourteenth General Conference of the International Geodetic Association at Copenhagen, Denmark, as the delegate of the United States. He continued the work of re-marking the boundary line between the United States and Canada, from the Rocky Mountains westward, as commissioner of the United States, and two officers of the Survey were detailed for fieldwork in this connection. The Superintendent and one officer were detailed to report to the United States' agent at London, England, for duty in connection with the presentation of the case of the United States to the Alaska Boundary Tribunal, and performed that duty. He also, as the commissioner of the United States on the International Delimitation Commission, inaugurated the work of marking the boundary between Alaska and Canada as laid down by the Alaska Boundary Tribunal, and one officer was detailed for field duty on this work. One officer continued on duty as a member of the Mississippi River Commission.

BUREAU OF STATISTICS.

The foreign commerce of the United States as reported by the Bureau of Statistics shows a larger total than in any earlier year. While the exports were surpassed by those of a single year, 1901, and the imports were also surpassed by those of a single year, 1903, the aggregate of imports and exports for the year is greater than that of any preceding year in the history of our commerce. The imports of the year were \$991,087,371 and the exports \$1,460,827,271, making the total foreign commerce of the year \$2,451,914,642, which exceeded by \$6,053,726 the high record established by the year 1903. The imports showed a reduction of \$34,631,866 as compared with 1903, but exceeded those of any other year, and the exports were \$26,937,720 below those of 1901, but exceeded those of any other year. Of the \$1,460,827,271 of exports, \$1,435,179,017 were of domestic production, the exports of products of agriculture being \$853,643,073 and of manufactures, \$452,415,921.

The total of agricultural products exported fell \$19,679,809 below that of the preceding year and formed a smaller percentage of the total domestic exports than in any preceding year, while exports of manufactures were the largest ever recorded, exceeding by \$41,889,762 those of the preceding year and surpassing by \$18,564,165 the high record established in the year 1900. Manufactures formed, in 1904, 31.52 per cent of the domestic exports of the country, against 21.14 per cent of those of 1894, 18.81 per cent of those of 1884, and 14.58 per cent of those of 1874. The reduction in exports of agricultural products already noted was chiefly due to the small exportations of breadstuffs, which amounted during the year to \$149,050,378, against \$221,242,285 in the year 1903. This reduction, which occurred in all classes of breadstuffs, but especially in wheat, was due in part to a shortage in the wheat crop of the United States in 1903 as compared with that of the immediately preceding year, in part to unusually large crops in other wheat-producing countries, and in part to the growing home demand.

The imports of the year were characterized by the maintenance of the high record of manufacturers' materials in a crude condition brought into the country for domestic use. They aggregated \$306,524,755 in value, against \$126,643,273 in 1894, \$138,496,741 in 1884, and \$85,095,889 in 1874.

Our commerce with all of the various parts of the world shows a steady and satisfactory growth. To Europe the total exports amounted to \$1,057,930,131, exceeding by \$28,673,474 those of 1903, and by \$49,896,150 those of 1902. To North America the total exports amounted to \$234,909,959, exceeding by \$19,427,190 those of 1903, and being much larger than those of any earlier year. To South America the total exports were \$50,755,027 in value and exceeded those of 1903 by \$6,617,155, and were also greater than those of any other year. To Asia and Oceania the total exports of the year were \$93,202,028, a reduction of \$2,625,500 as compared with 1903, due apparently to the temporary disturbance in trade conditions incident to the hostilities in Asia. The chief reduction occurs in the exports to China, which amounted to but \$12,862,432 in the year 1904, against \$18,898,163 in 1903 and \$24,722,906 in 1902.

The value of the commerce of the United States with its noncontiguous territories—Porto Rico, the Hawaiian Islands, the Philippine Islands, Guam, Midway, Tutuila, and Alaska—was \$103,562,804 in the year 1904, including in that statement \$6,328,524 of gold received in the United States from the mines of Alaska. The value of the total shipments of merchandise from the United States to all of these noncontiguous territories was \$38,096,528, and of the merchandise received from them \$59,137,752. The sales to these territories consisted

chiefly of manufactures, breadstuffs, and provisions, and the merchandise received from them, sugar, tobacco, hemp, and other tropical products from the islands, and furs, canned salmon, and other products of the fisheries from Alaska.

The value of merchandise shipped to the United States from Porto Rico in 1904 was \$11,722,826, against \$2,181,024 in 1897; and the shipments from the United States to Porto Rico, \$11,210,060 in 1904, against \$1,988,888 in 1897. The value of merchandise shipped from Hawaii to the United States in 1904 was \$25,157,255, against \$13,687,799 in 1897; and that of the shipments from the United States to the Hawaiian Islands in 1904, \$11,683,393, against \$4,690,075 in 1897. The value of merchandise received from the Philippine Islands was \$12,066,934 in 1904, against \$4,383,740 in 1897; and the value of merchandise shipped from the United States to the Philippines was \$4,832,900 in 1904, against \$94,597 in 1897.

The Bureau of Statistics, which presents the record of the foreign commerce of the United States, reports a remarkable increase in public interest in the foreign and internal commerce of the country and in the trade opportunities offered by the markets of the world. The transfer to the Bureau of Statistics, by the act creating the Department of Commerce and Labor, of the duty of publishing the commercial reports of the consular officers of the United States, and the privilege of calling for information especially relating to the foreign and domestic commerce which it records, has largely increased the field of its operations.

In addition to the monthly statements of imports and exports formerly issued, the Bureau now publishes a daily bulletin containing reports from the consular officers of the United States, a semi-weekly statement of commercial information for distribution to the press, and monthly as well as annual statements of imports and exports by articles and countries. A monthly statement relating to the internal commerce of the United States is also prepared and published, comparing movements in the leading products forming the internal and foreign commerce of the country with those of earlier years, and much valuable information is thus given to those interested in the production, transportation, and domestic consumption of the country, as well as to those interested in its foreign trade.

These studies of the internal commerce of the country include details of the movements upon the Great Lakes by articles and ports, the concentration at the great interior ports of the leading articles of domestic commerce and their redistribution from those centers, and certain data regarding the coastwise commerce of the United States. It is the desire of the Department, however, to enlarge this work, especially that relating to the coastwise commerce on both the Atlantic and the Pacific coasts.

In place of establishing a Division of Foreign Tariffs, as proposed in the first annual report, Congress made an appropriation of \$3,500 for use during the fiscal year 1905, to enable the Bureau of Statistics, under the direction of the Secretary of Commerce and Labor, to collate and arrange the tariffs of foreign countries in form for distribution. These tariffs will be printed in the English language accompanied by a statement showing the equivalent in currency, weights, and measures of the United States of all foreign terms of currency, weights, and measures used in such tariffs. The reports of the International Bureau for the Publication of Customs Tariffs will be utilized so far as practicable. The Bureau has entered upon this work and it is believed the publication of this information will prove valuable to those engaged in foreign commerce.

The Bureau has also published preliminary editions of the Statistical Abstract of the World, authorized by Congress, showing the imports and exports of each country of the world and the countries from which their respective imports are drawn and to which their exports are sent.

A special report on manufactures in the foreign commerce of the United States has also been published, showing the share which manufactures have formed of the imports and exports, respectively, in each year from 1800 to 1904, the value of each principal class of manufactures exported, and all countries to which each class or group of manufactures was sent during the decennial period; also the importation of materials for use in manufacturing, by classes, and the countries from which each class is drawn.

STEAMBOAT-INSPECTION SERVICE.

It is the duty of the Steamboat-Inspection Service to inspect hulls, boilers, machinery, and appliances, and examine the qualifications of officers, engineers, and pilots of certain classes of vessels, for the general purpose of protecting the safety of life and property concerned in traffic upon the public waters of the United States. The details of the regular work of this Service for the fiscal year ended June 30, 1904, as reported by the head of the Service, are as follows:

EXPENSES.

The expenses of the Steamboat-Inspection Service during the fiscal year ended June 30, 1904, were, for salaries, \$316,379.16, an increase over the previous year of \$10,452.46; for contingent expenses, \$68,647.65, an increase over the previous year of \$4,830.55.

The increase in salaries was due in part to the appointment during the year of two additional inspectors at the port of New York, and two additional inspectors at the port of Philadelphia, Pa., and to the appointment near the close of the last fiscal year of two additional inspectors at the port of Norfolk, Va. These appointments were made

necessary by the exigencies of the service. The increase was also caused to some extent by an increase in the salaries of four clerks, made on the recommendation of their superior officers, on the ground of increase of work and meritorious service.

There was an increase of \$6,389.14 in the amount paid for rent of offices, due to the necessity of the Service in New York vacating its offices in the post-office building and securing offices in the Whitehall Building at No. 17 Battery place.

The net increase in expenditures of the contingent expenses, including rents, etc., was only \$1,830.55, and except for the large increase in the amount paid for rent, there would have been a decrease of over \$1,500 in the contingent expenses of this year.

INSPECTION OF VESSELS.

There were inspected during the fiscal year ended June 30, 1904, 375 foreign passenger steamers, aggregating 1,821,880 tons; 8,196 domestic steamers, aggregating 3,545,526 tons; 206 gasoline and other motor vessels, aggregating 9,391 tons; and 524 sail vessels and barges, aggregating 607,926 tons.

The total number of vessels inspected was 9,301, aggregating 5,984,723 tons. Thirty-two of these vessels, with 12,389 gross tonnage, were inspected in Hawaiian waters, and 10 steamers, with 3,555 gross tonnage, were inspected in Porto Rican waters. Inspection of vessels in Hawaii and Porto Rico is made by inspectors detailed, under the authority of the Secretary, from various local districts.

There was a decrease of 25 in the number of vessels inspected during the fiscal year ended June 30, 1904, from that of the previous fiscal year, but there was an increase of 447,920 in the gross tonnage.

OFFICERS LICENSED.

There were 7,939 officers of all grades licensed during the fiscal year. The act of Congress approved May 28, 1896, extended the term of license to officers of steam vessels from one to five years, and the number licensed during the intervening years of the five-year period (1897-1902) are new licenses or licenses in raise of grade.

Of 1,694 applicants examined for color blindness 40 were rejected.

INSPECTION OF STEEL PLATES.

Under the act of Congress approved January 22, 1894, 3,765 steel plates for use in construction of marine boilers were inspected at the various mills by United States assistant inspectors detailed for that purpose. Of this number 386 were rejected for various defects. In addition to the inspection of these plates, there were inspected a large number of bars for stay and brace bolts of marine boilers, and many

tests were made at the request of various Departments of the Government service of material for boilers of Government vessels and for public buildings.

CASUALTIES.

The number of lives lost from various causes during the fiscal year was 1,303, the largest perhaps in the history of the Service, but the number of accidents was fewer; the great loss of life being due principally to six disasters, namely, the stranding of the steamer *South Portland*, on Cape Blanco, Oregon, on October 19, 1903, by which 19 lives were lost; the foundering of the steamer *Discovery* off the southeastern coast of Alaska, about November 1, 1903, with a loss of 30 lives; the foundering of the steamer *Clallam* in the Straits of San Juan de Fuca, on January 8, 1904, by which 50 lives were lost; the fire on board the steamer *Queen* off the coast of Oregon, on February 27, 1904, when the lives of 14, who embarked in the lifeboats, were lost by the staving and capsizing of the boats; the explosion of the boilers in the steamer *Fred Wilson* at Louisville, Ky., on May 26, 1904, with a loss of 11 lives; and the burning of the steamer *General Slocum* in East River, New York, on June 15, 1904, by which disaster 957 persons perished.

DISASTER TO THE STEAMER GENERAL SLOCUM.

On June 15, 1904, the passenger excursion steamer *General Slocum* was burned in the harbor of New York, with a loss of 957 lives. The appalling nature of this disaster, together with certain features attendant thereon, called for immediate and special action by the Department, and on June 23, 1904, there was appointed the United States Commission of Investigation upon the Disaster to the *General Slocum*. This Commission was made up as follows: Lawrence O. Murray, Assistant Secretary of Commerce and Labor, chairman; John M. Wilson, brigadier-general, U. S. Army, retired; Cameron McR. Winslow, commander, U. S. Navy; Herbert Knox Smith, Deputy Commissioner of Corporations, Department of Commerce and Labor, secretary; and George Uhler, Supervising Inspector-General, Steamboat-Inspection Service, Department of Commerce and Labor.

The Commission was instructed to make a thorough investigation into the disaster, to consider such other matters bearing upon the safety of passenger traffic upon the navigable waters of the United States as might be brought to its attention by such investigation, and to make a report thereon, accompanied by recommendations for such departmental or legislative action as it might deem necessary. On July 19, 1904, the Commission began its formal hearings in New York City. Twenty-three days were devoted to the taking of testimony in that city, and forty-two days to the preparation and digesting of the

same and the completion of the report. On October 11 the report was submitted to the President, and was published on October 17, together with a letter of the President thereon and the report of the Department of Justice showing the status of the criminal proceedings taken in connection with the disaster.

This investigation by the Commission revealed a very unsatisfactory condition of the Steamboat-Inspection Service in the port of New York and resulted in the removal of the supervising inspector for the second district and the local board of inspectors for the port of New York. The report of the Commission found that the methods of inspection in the port of New York and of the officials since removed were largely responsible for the disaster. The report also called attention to a number of defects and recommends changes in existing statutes and regulations relating to the Service. There is urgent need that the laws relating to the Service be strengthened and improved in accordance with the recommendations. In view of this fact attention is respectfully directed to the report and recommendations of the Commission and the accompanying letter of the President.

By order of the Secretary, there was also carried on during the months of July, August, September, and October, 1904, a reinspection of the passenger steamers in the port of New York by inspectors from other ports detailed for that purpose. This reinspection was had both for the immediate object of securing proper conditions in that port and also as a part of the work of the Commission in ascertaining the conditions existing there at the time of the disaster. The results of the reinspection were incorporated in the report of the Commission.

In pursuance of the letter of the President, the Board of Supervising Inspectors of the Steamboat-Inspection Service was convened in Washington on October 25, 1904, in special session, for the purpose of revising the rules and regulations of that Service. This work is not yet completed. Also, in pursuance of that part of the letter of the President which directs a further investigation of the Service in continuation of the investigation by the Commission, officers of the Navy have been detailed to make investigation in respective districts, as follows:

First district, Rear-Admiral Louis Kempff.
 Third district, Commander Z. L. Tanner.
 Fourth district, Rear-Admiral John R. Bartlett.
 Eighth district, Rear-Admiral Wells L. Field.
 Ninth district, Rear-Admiral F. M. Symonds.
 Tenth district, Rear-Admiral W. C. Wise.

I very much regret to say that while on duty in this work Rear-Admiral John R. Bartlett died at St. Louis on the morning of

November 22, 1904. Request will be made that another naval officer be detailed to take his place in this investigation.

Upon completion of the work in the said districts, the remaining districts, to wit, the fifth, sixth, seventh, and that part of the second not included in the port of New York (which has already been considered by the Commission) will also be investigated.

These officers are now engaged upon the work assigned to them and upon completion of their work, a report will be made summarizing the conditions as found in the entire Steamboat-Inspection Service.

In closing this branch of the report I desire to express my appreciation of the work of the Commission. While the report shows that sixty-five days were consumed in the taking of evidence, the digesting of the same, and the preparation of the report, it does not show the time actually consumed in the conduct of the investigation. Some of the members of the Commission during the investigation worked on an average fifteen hours a day. Three of the members were officers of the Department of Commerce and Labor, one a retired army officer, and one an officer of the Navy on the active list. No extra compensation was paid them for their services. The clerical force detailed to assist in the carrying on of the investigation, especially the stenographers, at times worked all night in order to have the evidence ready the next day for the consideration of the Commission. This work was also done without extra compensation. The total cost of the investigation, including rent of rooms in New York, subsistence, and traveling expenses of the Commission and clerical force, was only \$1,044.61.

BUREAU OF FISHERIES.

The Commissioner of Fisheries reports that the year 1904 was one of the most successful in the history of the Bureau, considered with reference to the operations of the hatcheries. The results attained in all branches have been satisfactory, and the outlook for greatly augmented work is very favorable.

The efforts of the Bureau on behalf of the fisheries are yearly becoming more generally appreciated, and a desire to actively cooperate with the Bureau has been manifested throughout the country by all persons directly or indirectly interested in the promotion of fishing as a business or as a pastime. The sums voted annually for expenditure through this channel represent only about 1 per cent of the annual value of our fisheries; the preservation of some of the most important of these is now largely dependent on the Bureau's operations, and it is easily demonstrable that in pursuing a liberal policy for the promotion of the fishing industry Congress is simply making an investment that yields returns far greater than those which attend private business enterprises.

FISH PROPAGATION.

The total number of fish distributed in fresh and salt waters of the country exceeded one and one-quarter millions, an output which has been equaled by that of only a single previous season (1902). The conditions attending the hatching of such a large number of fishes necessitate the planting of most of them in the form of fry, but increased attention has been given to the rearing of important species, and the output of adult, yearling, and fingerling fish was nearly 50 per cent larger than in any previous year.

The importance of the Bureau's fish-cultural operations, however, must not be gauged by the results during any one year, but by the average for a series of years, as peculiar seasonal conditions often materially modify the work of particular stations, sometimes favorably, more often unfavorably, and give an erroneous impression as to its extent. It usually happens that a year which is characterized by a greatly diminished yield of certain fishes is also signalized by an augmented output of others, so that the aggregate distributions remain normal. This point, which has frequently been commented on, was exemplified anew in 1904, when an exceedingly poor season for shad and whitefish was offset by the largest collections of eggs of Pacific salmon and flatfish ever known.

An important feature of the work of artificial propagation, which has often been referred to but can not be too strongly emphasized, is that an exceedingly large percentage of the young fish hatched annually are from eggs taken from fish that have been caught for market, and hence would be totally lost were it not for the efforts of the Bureau. To the many hundred millions of young food and game fishes thus produced must be added many more millions resulting from the superiority of artificial propagation over natural propagation in the matters of fertilizing and incubating eggs and of safety of the young.

The aggregate output in 1904 of 1,267,343,025 was divided as follows: Fertilized eggs, 263,123,354; fry, 994,503,040; fingerlings, yearlings, and adults, 9,716,631. The eggs shown were for the most part donated to various States to be incubated in their own hatcheries, the resulting fry being planted under the direction of the State fishery authorities. It is worthy of remark, that while the Bureau makes ample provision for maintaining the supply of fishes caught chiefly by anglers, nearly 99 per cent of the fish handled are those which are the objects of commercial fisheries.

The demand and the local facilities determine the proportion of effort directed toward the cultivation of particular species. During the year salmon were propagated at 11 stations, whitefish at 7, lake trout at 5, shad at 4, pike perch at 3, cod at 2, flatfish at 2, striped bass, white perch, and yellow perch at 1 each, and the lobster at 2.

INVESTIGATIONS CONNECTED WITH THE FISHERIES.

Attention is invited to the important branch of the Bureau's work which deals with the biological questions that arise in connection with the economic fisheries and fish culture. It is particularly concerned with the exploration of lakes, streams, and salt waters; the study of the habits, growth, and distribution of fishes and other aquatic animals; the experimental cultivation of desirable products not now the objects of cultivation, with a view to developing methods that may be applied on a wholesale basis; the investigation of the diseases of fishes under cultivation and in a wild state, and the pollution of waters in its effect on fish life, and the encouragement of biological research in the Bureau's laboratories and field operations.

The special commission for the investigation of the salmon fisheries of Alaska concluded its labors in the fall of 1903, and shortly thereafter a preliminary report was submitted embodying the general results of the investigation and making recommendations for the protection and promotion of the fisheries. This report was presented to the President on January 21, 1904, and by the President transmitted to Congress on January 27, 1904. The most important recommendations of the special commission are the establishment of Government salmon hatcheries under the control of the Bureau of Fisheries, and the placing of all matters relating to the fisheries of Alaska under the direction of the Commissioner of Fisheries. ✓

Among the numerous special subjects the Bureau has had under consideration with reference to economic questions are the oyster, sponges, the blue crab, the diamond-back terrapin, the green turtle, and various fishes. The experiments in the artificial fattening of oysters and the cultivation of sponges from cuttings have continued with satisfactory results. The raising of the diamond-back terrapin and the green turtle from the egg is receiving attention at points in Chesapeake Bay and on the coast of Florida. States in which inquiries have been made as to the fishery resources of particular waters are Maine, North Carolina, Indiana, California, and Arizona.

The collection of information with reference to the extent and condition of the fisheries, with a study of the methods, affords the only basis for determining the condition and trend of the commercial fisheries of the country; it forms an invaluable criterion of the necessity for and the results of fish-cultural operations of the Government and States and is indispensable in furnishing a basis for legislation.

General canvasses have been conducted in the New England, South Atlantic, and Gulf States, and the Hawaiian Islands. Special inquiries have been made into the condition of the vessel fisheries centering at Boston and Gloucester, Mass.; the Pacific cod and halibut fisheries, and the whale fishery centering at San Francisco; the fisheries of the

interior waters of Florida and the interior lakes and streams of New York and Vermont. Very complete canvasses have been made of the statistics and methods of the salmon industry of Washington, Oregon, California, and Alaska in conjunction with the work of the special salmon commission.

ALASKAN SALMON FISHERIES.

During the past year there has been a marked decrease in the salmon pack of Alaska in all grades. In 1902 the season's catch was 2,631,320 cases, in 1903, 2,631,782, and in the present year it will probably not exceed 1,935,000, a falling off in two years of 696,320 cases. Throughout the entire world there has been a large reduction of the pack of salmon, which, approximately, is only 2,810,000 cases for 1904 against 4,317,000 cases for 1902, a loss of 1,507,000 cases. These figures are not exact, as the detailed statistical reports required of the packers are not yet at hand.

Notwithstanding this decrease in the volume of the pack, there has been a marked increase in its aggregate market value, the receipts for 1903 having been about 30 per cent more than those of the preceding year, and from present indications a further increase will be shown this year.

The steady decrease in the salmon pack of Alaska is due to constantly enlarging operations of the packers beyond the natural resources of the streams, and to unfavorable conditions under which the propagation of salmon is carried on. The regulations promulgated by this Department under the law require that persons engaged in taking salmon shall maintain suitable artificial propagating plants or hatcheries, and shall produce yearly and plant in the natural spawning waters of each fishery so operated red salmon fry in such numbers as shall be equal to at least ten times the number of salmon of all varieties taken from the said fishery during the preceding year. Despite the safeguards which have thus been thrown about the salmon industry by the law and the regulations, and by the personal inspection given by the agents of the Government, the supply of fish, as has been noted, is apparently steadily decreasing. It has been found impracticable to enforce adequate artificial propagation by private parties. I therefore urge the favorable consideration by Congress of the estimates which have been submitted for the establishment of salmon hatcheries under the direct supervision of the Department.

This need for artificial propagation was touched upon in the Department's last annual report, and the condition which has been presented would seem to strongly commend to the Congress the wisdom and necessity of immediate action. Very much more than the amount which has been asked for in the estimate has been paid into the Treas-

ury through the operation of the law taxing salmon canners and salters. The sum collected from this source will not be less, probably, than \$75,000 for the current year, and in the past has exceeded \$100,000 in a single year.

ALASKAN FUR-SEAL SERVICE.

The agents who, under the law, are charged with the management of the seal fisheries and with certain duties in connection with the care of the native inhabitants of the Pribilof Islands have furnished the Department with interesting details of the work done during the past year.

Last spring, in view of the steady diminution of the seals on the rookeries, and with the object of keeping an ample reserve of breeding bulls, the Department adopted measures for exempting from the killing 2,000 of the young male seals of killable age. These measures were carried out in an effective manner during the past season. The quota of skins to be taken by the lessee company was also reduced from 30,000, allowed in the preceding year, to 15,000 for the current year.

Especial care was also observed by the Government agents in collecting information respecting the seal life, more especially that bearing upon the diminution of the herd.

SEAL CATCH OF 1904.

As a result of the sealing operations for the year ending with August, 1904, 13,128 skins were taken and shipped, of which number 11,132 were obtained on St. Paul Island and 1,996 on St. George Island, as against a total of 19,292 skins taken in 1903. The decrease in the number of skins taken, 6,164, was due largely to the reservation of young male seals, referred to above, and other restrictions upon the killing deemed necessary to preserve the life of the seal herd.

FOX RAISING.

An industry pursued incidentally with that of sealing on the Pribilof Islands is that of raising the blue fox for its pelt. These animals, under the system in use, are fed and cared for as if domesticated. The foxing industry is carried on under a lease with the sealing company. Last winter 471 skins were taken on St. George Island. The proceeds of the skins are applied to the support of the native inhabitants, whose services are availed of in the taking and curing of the pelts.

CARE OF NATIVES.

The reports further indicate that the physical comfort of the natives, as well as their education and general welfare, have been carefully looked after by the agents in charge. The schools for native children

have been conducted on each island; places of worship have been kept up, and the observance of good order maintained generally.

BUREAU OF NAVIGATION.

The Commissioner of Navigation reports that the documented merchant shipping of the United States at the end of the fiscal year comprised 24,558 vessels of 6,291,535 gross tons, the largest tonnage in our history. Less than one-sixth of this tonnage is registered for foreign trade. During the past four years, however, our registered steam tonnage has increased 212,314 gross tons, while our registered sail tonnage has decreased 140,740 gross tons. American shipping in foreign trade has thus become more efficient, and in the past fiscal year American ships carried 10.3 per cent of our exports and imports, compared with 9.3 per cent in the year ended June 30, 1900. The upward tonnage movement of the last four years now seems to have been checked.

For the first time since 1812 a fiscal year has passed without the completion of a single square-rigged vessel in the United States. The United States shares in the general decline of sailing vessels, and the opportunities for their employment in the foreign trade grow steadily less. The completion of the Panama Canal will greatly curtail even present opportunities.

Training on sailing vessels, so I am informed, is regarded as an almost indispensable qualification of the deck officer of a steamer. If we are to have a merchant marine the lack of officers will be felt as soon as steam tonnage in foreign trade increases. The subject is mentioned now for the consideration of Congress in the future.

Contracts made several years ago have been performed, and our principal steel shipyards on the seaboard are building very few sea-going steel steamers except warships for the Navy. Indeed, were it not for Government work under appropriations by Congress some of them would now be closed for want of work and others soon would be. The stoppage of these large plants and the scattering of their trained workmen would be more than an ordinary industrial misfortune. These plants are a necessary part of the system of national defense, and when they shut down and their men are dispersed the cost of warships is accordingly enhanced.

The Government program of naval construction, if executed through further appropriations by Congress, will help to keep the yards busy, but it will not alone suffice. The situation reinforces all the arguments which of late years have been advanced in support of a definite and durable legislative policy for the promotion of the American merchant marine. I have not deemed it necessary or wise to consider this subject at length in this report, however, for the

reason that its importance has already been recognized by executive and legislative action. The Commission appointed by Congress at its last session, on the recommendation of the President, has doubtless given the subject the fullest consideration, and will report at the coming session of Congress.

TONNAGE TAX.

Tonnage taxes during the year amounted to \$826,023.01, a decrease of \$59,818.32 compared with the previous year. The reasons for the decrease are shown in the report of the Commissioner of Navigation, to which the attention of Congress is invited. That report also furnishes detailed information on the matters just considered and suggests changes in the laws and in methods of their enforcement.

REMISSION OF PENALTIES.

One of the duties transferred from the Secretary of the Treasury to the Secretary of Commerce and Labor by the act of February 14, 1903, is the consideration of applications for the remission of fines, penalties, and forfeitures incurred for violating any provision of law relating to vessels or seamen. The power of remission was first bestowed upon the Secretary of the Treasury by the act of May 26, 1790, after the first acts of Congress in imposing penalties on vessels, their owners, and masters had been in operation less than a year.

From time to time the power has been extended as statutory obligations upon shipping have increased. Acts authorizing remission or mitigation and acts imposing penalties must be read together in executing the will of Congress. During the past fiscal year 706 applications for remission or mitigation of penalties, incurred for the violation of 64 sections of the Revised Statutes, or of acts passed since the revisions, have been acted upon by the head of the Department, after review by the Bureau of Navigation.

The report of the Commissioner of Navigation shows the ports from which these violations have been reported, the statute alleged to have been violated, and in many cases the nature of the offense. The papers in these cases would fill a volume of about 1,200 printed pages or more. As each case involves the exercise of a discretionary power on facts and conditions differing from nearly all other cases, the action taken can be fully understood only by the publication of all the papers in each case. The summaries in his report give a fair idea of the scope of the exercise of the remission power during the first year of its bestowal upon the Secretary of Commerce and Labor.

UNITED STATES SHIPPING COMMISSIONERS.

United States shipping commissioners stationed at 20 seaports during the past year superintended the shipment, reshipment, and discharge of 201,273 seamen for American vessels. The offices of

these commissioners should be inspected at least once a year. Such inspection was formerly made from time to time by special agents of the Treasury Department at the request of the Bureau of Navigation. These inspections could be made at the time customs-house inspections were made without extra cost. It is not clear how the inspection can be made and paid for at present in the absence of an appropriation which can be used for that purpose. During the year efforts to suppress crimping, especially at southern seaports, have been more successful than usual.

BUREAU OF IMMIGRATION.

The important work of this Bureau is fully and ably considered by the Commissioner-General of Immigration in his report for the fiscal year ended June 30, 1904. The statements, tables, and statistics submitted by him show that for the year the total arrivals of aliens at ports of the United States was 812,870, exclusive of 27,844 admitted for the purpose of passing through the United States to foreign territory. Of these arrivals 30,374 entered through ports of Canada, 10,742 entered ports of the insular possessions of the United States other than those of the Philippine Islands, and 771,754 were admitted at seaports of the United States. More than one-half of the entire immigration was composed of the Italian, Hebrew, Polish, Slovak, and Magyar races. There were decreases in arrivals of 37,326 from Italy, 28,885 from Austria-Hungary, and 5,704 from Japan. There was an increase of 18,643 from Great Britain, and approximately of 100 per cent from China. Of the total arrivals 549,100 were males and 263,770 were females. As to age, 109,150 were 14 years old or under, 657,155 were between 14 and 45, and 46,565 were 45 or over. The records show 3,953 as able to read but not to write, and 168,903 as illiterate, leaving a remainder of 640,014 who, it is assumed, could both read and write. The total amount of money shown by the arrivals was \$20,894,383, or about four and one-half millions more than the aggregate amount brought by the larger number of alien arrivals of the preceding year. There were denied admission at seaports of the United States as members of the various classes excluded by law 7,994 aliens, and 779 previously admitted were deported upon the ground that they were in the country in violation of law.

There are confined in public and private charitable, penal and reformatory institutions in this country a total of 44,985 aliens; of these, 20,485 are in insane asylums, 9,825 are confined for the commission of crimes, and 14,675 are dependents—upward of 25,000 of these aliens will be confined for life. The burden of maintenance in this connection is distributed in accordance with the ratio of alien residents in the different sections of the United States, the State of New York alone caring for

nearly 6,000 insane aliens. During the year the Department considered 1,178 appeals from decisions of boards of special inquiry at the various ports. Of these 517 were sustained, 660 dismissed, and 1 withdrawn.

Attempts are frequently made to introduce into the United States a large number of aliens under what is known as the *padrone* system. During the year there arrived at the port of Boston several shiploads of Greek lads, amounting to 898, many of whom were mere children. In accordance with the provisions of law, 127 of them were returned. Officers of the service detailed to make investigations in foreign countries report widespread solicitation and encouragement of aliens to emigrate to the United States. Persistent efforts have also been made to import alien miners and skilled workmen in other lines.

Notwithstanding the fact that during the year fines aggregating \$28,400 have been paid by the transportation companies, they continue to disregard the provisions of the law aimed to prevent the bringing of diseased aliens to ports of this country. In this connection it is important to note that the medical inspection conducted at Yokohama and Nagasaki, Japan, from September 22 to the end of the year, through the offices of the Public Health and Marine-Hospital Service, resulted in the detection of nearly 1,300 aliens afflicted with dangerous contagious diseases who were attempting to embark from those ports.

As the result of the adoption of suitable regulations the violations of the immigration law by alien seamen have practically ceased. Seamen who are discharged or desert from their vessels are now examined as other aliens.

The structures maintained at the different ports of entry for the accommodation of aliens detained pending examination have been materially improved, but it will be necessary to make further improvements and build new structures. This is especially true at the port of San Francisco, where, in addition to aliens generally, the bulk of Chinese immigrants apply for admission.

THE CHINESE EXCLUSION LAWS.

Signal success has marked the administration of the Chinese exclusion laws during the year. This is especially true in relation to the enforcement of the law along the Canadian boundary. An agreement has been reached whereby the transportation lines deliver directly into the hands of the United States officers for examination Chinese brought by them through Canada to the United States. If rejected they are returned to China at the expense of the companies.

During the year the Supreme Court decided that applicants who claim the right of admission as American citizens on the ground of alleged birth in the United States are required to first submit the evidence upon which they base their claims to administrative officers in

accordance with the regulations of the Department. As a result of this decision, 321 out of a total of 412 applicants have been returned to China at the expense of the transportation companies.

The issuance of duplicate certificates of residence has been requested in 476 cases by Chinese laborers who profess to have lost the originals. The Department is in possession of information that 340 certificates of residence have been pledged to pawnbrokers.

During the year 792 registered laborers departed from and 1,392 returned to the United States; of 2,106 seeking the privilege of transit all except 26 were admitted for that purpose; and of 1,721 Chinese persons arrested for being unlawfully in the United States, 783 were deported. The Department considered 282 cases of appeal from the excluding decision of officers at ports of arrival, of which 101 were sustained and the remainder dismissed.

By authority of the act of April 29, 1902, the Department promulgated regulations admitting Chinese to take part in the Louisiana Purchase Exposition, their departure at the close of the exposition being assured under bonds in the penalty of \$500 in each case. These regulations of the Department have been improperly charged with excluding merchant exhibitors or visitors. Attention is called to the fact that the regulations relate to laborers only, and do not exclude merchant exhibitors or visitors. The law and the treaty secures to visitors and merchants the right to enter at all times.

COST OF THE IMMIGRATION SERVICE.

The cost of the immigration service during the year was \$1,296,808.85, exclusive of the sum of \$239,743.01 expended in the construction of new buildings, improvements, alterations, the enlargement of Ellis Island, the building of the ferryboat, etc. The balance of \$1,389,403.08 on hand at the close of the fiscal year is \$112,920.39 in excess of the balance on hand at the corresponding period last year. There was also expended \$75,536.10 for deporting Chinese, an average cost of \$112.24 for each deportation. Of the total appropriation of \$500,000 for the enforcement of the Chinese exclusion acts, \$432,220.96 was expended for salaries and expenses, including the cost of deportation, and for miscellaneous items, leaving on hand at the close of the fiscal year a net balance of \$67,779.04.

LEGISLATION RECOMMENDED.

New legislation is again recommended. Provision should be made for the distribution of aliens in accordance with views heretofore expressed by this Department; for the physical inspection of aliens by officers of the Public Health and Marine-Hospital Service stationed at the ports of foreign embarkation; for the establishment of a moral and manual standard for admissible aliens; for the compilation of data

in regard to the annual departures of aliens from the United States; for the registration of all Chinese lawfully resident in the United States at this time, thus furnishing them with certificates which will afford them immunity from arrest, and for placing restrictions on the right of judicial officers to release Chinese persons on bail.

It is also recommended that a treaty arrangement be made which will authorize the location in China of Department officers to discharge duties now performed by American consular officers. The effect of this would be to transfer the investigation, now conducted in part at ports of arrival, to the homes of Chinese applicants in China, where it should be possible to make such examination as would establish conclusively the status of any applicant. This would leave for determination upon arrival at a port of the United States only the identity of any examined Chinaman with the person described in the certificate presented by him.

BUREAU OF STANDARDS.

The Director of the Bureau of Standards reports that the work of the Bureau has been rapidly developing during the fiscal year just closed. Notwithstanding the fact that the work is still carried on in temporary quarters in several buildings, a large amount of testing and research has been completed. The Mechanical Laboratory has been occupied for several months, and the increased space thus made available has enabled the Bureau to extend the range of its work. The Physical Laboratory will probably be ready for occupancy during the month of October.

During the year many new lines of testing have been organized and are well under way. The volume of testing has greatly increased. The standards and measuring instruments tested during the year aggregated 7,756, being 400 per cent greater than during the previous fiscal year. Work has been done for practically all departments of the Government, for State sealers, scientific institutions, electrical companies, manufacturers of mechanical standards, thermometers, weights and measures, and for the general public. The scientific staff has also given much attention to the designing of apparatus and standards for the various kinds of testing. Much of this apparatus has been constructed in the instrument shop of the Bureau, under the personal supervision of the specialists concerned.

The exhibit of the Bureau of Standards at the Louisiana Purchase Exposition is an educational and historical presentation of the general subject of standard weights, measures, and measuring instruments; in several cases the work of testing is shown. An increasingly important service rendered by the Bureau has been the dissemination of accurate knowledge concerning weights and measures and the various kinds of

measurement. The large number of inquiries indicates a widespread demand for such information. Seven circulars descriptive of the lines of testing which the Bureau is prepared to undertake have been issued during the year. The publication of a series of bulletins which will embody the results of the investigations, researches, and other work of the Bureau of importance to the scientific, technical, and manufacturing interests of the country will soon be inaugurated. A considerable amount of research concerning fundamental problems connected with fixing the standards and determining methods of measurement has already been completed and prepared for early publication.

In the important branch of the Bureau's work which is devoted to standards of length, mass, and capacity, the work of testing has grown steadily. More than 1,600 instruments were tested by this section during the year. The United States prototype meter was compared with the international meter at Paris by the associate physicist in charge of this work. A convention of State sealers has been planned, and methods of calibrating volumetric apparatus decided upon. Plans were also developed for standardizing time-measuring instruments, a work which will soon be inaugurated.

Under the supervision of the Bureau an examination of the weights and measures and methods of measurement used in the various custom-houses has been made. The results of this work have added to the efficiency and accuracy of that branch of the service. Weights and measuring instruments have been tested at the Bureau and distributed to the various custom-houses, provisional limits of tolerance have been fixed, and a plan for systematic inspection is being developed.

In the measurement of temperature the Bureau is rendering important service to thermometer and pyrometer makers and to the various industries which require such apparatus. The hearty cooperation and active interest accorded this work have done much to facilitate the efforts of the Bureau to establish a uniform scale of temperature. More than 5,300 thermometers and other temperature measuring instruments have been tested during the year. A laboratory for pyrometer testing has been equipped with the necessary apparatus for this work, and an investigation of the various types of high temperature measuring instruments has just been completed.

The optical work has included a study of polariscopic methods of sugar analysis for the Customs Service, and some important experimental and theoretical work in connection with the conduction of electrical discharges through gases, the results of which will soon appear.

The testing of engineering instruments, organized during the year, has made satisfactory progress. An investigation of the screw threads of fire-hose couplings now in progress reveals a chaotic condition of the standards used in the important cities and a great need for the adoption of standard couplings.

Work has been done by the chemical staff in the preparation of standard specifications for the purity of chemical reagents, a subject of vital importance to the chemical interests of the country, and in the planning of the equipment of the laboratory; valuable assistance has been rendered to the other sections of the Bureau.

The electrical work of the Bureau was transferred during the year to the new Mechanical Laboratory. This work has included the calibration of resistance and standard cells, the determination of inductances and capacities, the testing of electrical instruments, and photometric work. Although this work has but recently been organized, 167 electrical standards and measuring instruments and 589 incandescent standard lamps have been tested. Researches have been conducted especially with reference to the development of more refined methods of electrical testing. Some of the results of these investigations have been presented at the International Electrical Congress, and details will soon be published by the Bureau. The laboratory of the Bureau in the Electricity Building of the Louisiana Purchase Exposition was a working exhibit of the process of standardizing electrical instruments and standards as conducted at the Bureau.

WIRELESS TELEGRAPHY.

The Inter-Departmental Board appointed by the President to consider the entire question of wireless telegraphy in the service of the National Government has recommended that the Department of Commerce and Labor should have the duty of issuing licenses for wireless telegraphic marine stations in special cases, under such regulations as will prevent interference with stations necessary to the national defense. It has also recommended that all private stations in the interior of the country should be under the supervision of the Department of Commerce and Labor. To prevent the control of wireless telegraphy by monopolies or trusts, the Board deems it essential that any legislation on this subject should place the supervision of it in the Department of Commerce and Labor.

The proposed Federal control of telegraph stations using wireless apparatus must, of course, be within constitutional limits. The recommendations of the Inter-Departmental Board, in so far as they concern this Department, have been referred to a board of the Department's officers. Should that board submit a legislative project on the subject which meets the approval of the Department it will be transmitted to Congress.

CONCLUSION.

The foregoing report deals with the work of the fiscal year 1903-4, during which time the Department was presided over by my predecessor in office. None of the matters referred to or discussed in the

report came under my personal supervision, and for that reason I have had to rely almost entirely, in the preparation of the report, upon the heads of bureaus and chiefs of divisions of the Department.

I find that the work of organizing the Department has been as thorough and complete as was possible under the available appropriations, and that the men who have been selected to fill the important staff positions are especially efficient and in every way qualified for the performance of the important duties of their offices. The credit for the organization of the Department is due, in my judgment, to the first Secretary, the Hon. George B. Cortelyou, whose great executive ability and thorough familiarity with governmental matters enabled him in so short a time to organize and equip a Department of the Government which promises so much for the future development of the commercial and industrial interests of the country.

V. H. METCALF,
Secretary.

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