

ANNUAL REPORT

OF THE

SECRETARY OF COMMERCE AND LABOR

1905



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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, 1905.

To the PRESIDENT:

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

APPROPRIATIONS AND EXPENDITURES.

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

The following table shows the aggregate amounts of the annual appropriations for the various bureaus and services of the Department of Commerce and Labor for the fiscal year ended June 30, 1905, of the appropriations for public works and balances of appropriations in the Treasury available July 1, 1904, for public works, which under the law are expended without regard to any particular fiscal year, and of permanent indefinite appropriations:

	Annual appropriations, 1905.	Appropriations for public works.	Permanent indefinite appropriations.	Totals.
Office of Secretary of Commerce and Labor ..	\$232,889.84			\$232,889.84
Bureau of Corporations.....	156,220.00			156,220.00
Bureau of Manufactures.....	15,660.00			15,660.00
Bureau of Labor.....	184,020.00			184,020.00
Light-House Board.....	44,260.00			44,260.00
Light-House Establishment.....	3,637,000.00			3,637,000.00
Light-houses, beacons, fog signals, etc.....		\$2,286,695.50		2,286,695.50
Bureau of the Census.....	61,498,272.40			1,498,272.40

^a This represents the aggregate of 84 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., in Treasury available July 1, 1904. 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, \$862,430 was appropriated by the act of Congress approved April 28, 1904, entitled "An act making appropriations for sundry civil expenses of the Government for the fiscal year ending June 30, 1905, and for other purposes."

^b Includes \$120,627.04 of appropriation "Collecting statistics, Census Office, 1905-6," which was expended during the fiscal year ended June 30, 1905.

	Annual appropriations, 1905.	Appropriations for public works.	Permanent indefinite appropriations.	Totals.
Bureau of Statistics	\$85,070.00			\$85,700.00
Office of the Supervising Inspector-General, Steamboat-Inspection Service	11,940.00			11,940.00
Steamboat-Inspection Service			\$384,223.76	384,223.76
Bureau of Navigation	28,080.00			28,080.00
Salaries, shipping service			59,071.35	59,071.35
Contingent expenses, shipping service	7,000.00			7,000.00
Services to American vessels			20,849.53	20,849.53
Refunding penalties or charges erroneously exactd			2,318.28	2,318.28
Bureau of Immigration	27,210.00			27,210.00
Enforcement of the Chinese-exclusion act	600,000.00			600,000.00
Expenses of regulating immigration			1,482,827.70	1,482,827.70
Ferryboat, New Island, repairs, etc., at Ellis Island (N. Y.) immigrant station		\$273,479.80		273,479.80
Bureau of Standards	178,530.00	12,500.00		191,030.00
Coast and Geodetic Survey	1,020,770.43	98,019.91		1,118,790.34
Bureau of Fisheries	603,660.00			603,660.00
Fish hatcheries, launch, steamers, etc		190,810.93		190,810.93
Salaries and expenses of agents at seal fish- eries in Alaska	12,950.00			12,950.00
Supplies for native inhabitants, Alaska	19,500.00			19,500.00
Totals	8,363,032.67	2,861,506.14	1,949,290.62	13,173,829.43

a Of this amount \$346,700.64 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, 1905:

Bureaus and titles of appropriations.	First quarter.	Second quarter.	Third quarter.	Fourth quarter.	Totals.
OFFICE OF THE SECRETARY.					
Salaries, Office of Secretary of Commerce and Labor, 1905	\$29,728.01	\$29,669.53	\$30,394.66	\$30,517.92	\$120,310.12
Salaries, Department of Commerce and Labor, 1903-4	816.65				816.65
Contingent expenses, Department of Commerce and Labor, 1905	3,095.29	21,035.53	19,577.77	14,178.22	57,886.81
Contingent expenses, Department of Commerce and Labor, 1903-4	13,281.24	5,278.55	84.45		18,644.24
Contingent expenses, Department of Commerce and Labor:					
Furniture, for bureaus transferred, 1904	6.30				6.30
Carpets and repairs for bureaus transferred, 1904	18.21				18.21
Gas, etc., for bureaus transferred, 1904	21.11				21.11
Newspapers and books, for bureaus transferred, 1904	12.37				12.37
Rent, Department of Commerce and Labor, 1905	3,994.97	6,492.45	6,292.44	6,292.45	23,072.31
Rent, Department of Commerce and Labor, 1903-4	985.83				985.83
Salaries and traveling expenses of agents at seal fisheries in Alaska, 1905	365.00	1,798.85	1,163.90	653.15	3,975.90
Salaries and traveling expenses of agents at seal fisheries in Alaska, 1904	4,715.90	136.48			4,852.38
Salaries and traveling expenses of agents at seal fisheries in Alaska, 1903	186.50				186.50
Protection of salmon fisheries of Alaska, 1904	306.60				306.60

Bureaus and titles of appropriations.	First quarter.	Second quarter.	Third quarter.	Fourth quarter.	Totals.
OFFICE OF THE SECRETARY—cont'd.					
Shelving and transferring of records, etc., Department of Commerce and Labor, for bureaus transferred, 1904.	\$266.39				\$266.39
Numbering, adding, and other machines, Department of Commerce and Labor, for bureaus transferred, 1904.	124.72				124.72
Repairs and heating apparatus, Richards Building, Department of Commerce and Labor, 1904.	2,896.50				2,896.50
Butler Building, Washington, D. C., Department of Commerce and Labor, for bureaus transferred, 1904.	751.30				751.30
Total					235,129.24
BUREAU OF CORPORATIONS.					
Salaries, Bureau of Corporations, 1905.	14,072.71	\$15,332.26	\$14,915.00	\$15,206.75	59,525.72
Salaries and expenses, special attorneys, examiners, etc., Bureau of Corporations, 1905	5,616.70	6,595.87	9,871.98	6,101.44	27,685.94
Salaries and expenses, special agents, Department of Commerce and Labor, 1905.	8,954.52	6,144.23	2,555.25	10,466.75	28,120.75
Salaries and expenses, special agents, Department of Commerce and Labor, 1903-4.	4,007.00	96.65			4,103.65
Total					119,436.06
BUREAU OF MANUFACTURES.					
Salaries, Bureau of Manufactures, 1905.	1,130.00	1,130.00	1,932.95	2,763.06	6,956.01
BUREAU OF LABOR.					
Salaries, Bureau of Labor, 1905.	26,202.66	26,194.38	26,442.22	26,430.80	105,270.06
Salaries, Department of Labor, 1904.	3.85				3.85
Miscellaneous expenses, Bureau of Labor, 1905	9,979.88	12,793.39	15,149.08	17,340.71	55,263.06
Miscellaneous expenses, Department of Labor, 1904	2,542.31				2,542.31
Stationery, Bureau of Labor, 1905		71.48	434.63	180.93	687.04
Stationery, Department of Labor, 1904	375.87				375.87
Library, Bureau of Labor, 1905.	272.66	184.47	284.07	120.96	862.16
Library, Department of Labor, 1904	84.45		4.87		89.32
Rent, Bureau of Labor, 1905.	1,125.00	1,687.50	1,687.50	1,687.50	6,187.50
Contingent expenses, Bureau of Labor, 1905.	184.87	587.71	601.38	1,424.96	2,798.92
Contingent expenses, Department of Labor, 1904	687.03				687.03
Postage to Postal Union countries, Bureau of Labor, 1905		250.00		200.00	450.00
Total					175,217.12
LIGHT-HOUSE BOARD.					
Salaries, Office of Light-House Board, 1905.	10,796.60	11,096.73	11,056.67	11,065.05	44,015.05
Salaries, Office of Light-House Board, 1904.	283.48				283.48
Total					44,298.53
BUREAU OF STATISTICS.					
Salaries, Bureau of Statistics, 1905.	17,905.23	19,427.77	19,041.42	19,161.99	75,536.41
Salaries, Bureau of Statistics, 1904.	329.60				329.60
Collecting statistics relating to commerce, 1905	378.41	762.00	825.00	862.77	2,828.18

Bureaus and titles of appropriations.	First quarter.	Second quarter.	Third quarter.	Fourth quarter.	Totals.
BUREAU OF STATISTICS—continued.					
Collating tariffs of foreign countries, 1905.....			\$717.83	\$758.15	\$1,475.98
Publication of diplomatic, consular, and commercial reports, 1904.....	\$11,144.36	\$4.83			11,149.19
Total.....					91,319.36
STEAMBOAT-INSPECTION SERVICE.					
Salaries, Office of Supervising Inspector-General, Steamboat-Inspection Service, 1905.....	2,985.00	2,985.00	2,985.00	2,985.00	11,940.00
Salaries, Steamboat-Inspection Service.....	75,666.91	51,673.27	77,885.29	109,683.83	314,409.30
Contingent expenses, Steamboat-Inspection Service.....	25,339.00	20,182.02	15,128.66	18,503.25	79,147.93
Total.....					405,497.23
BUREAU OF NAVIGATION.					
Salaries, Bureau of Navigation, 1905....	6,705.00	7,170.00	7,020.00	6,689.16	27,584.16
Contingent expenses, shipping service, 1905.....			899.09	2,169.43	3,068.52
Total.....					30,652.68
BUREAU OF IMMIGRATION.					
Salaries, Bureau of Immigration, 1905....	6,305.21	7,283.95	6,802.50	6,299.16	26,690.82
Salaries, Bureau of Immigration, 1903-4.....	98.90				98.90
Enforcement of the Chinese-exclusion act, 1905.....	70,005.08	117,708.55	126,912.27	144,378.56	459,004.46
Enforcement of the Chinese-exclusion act, 1904.....	44,546.94	910.45	377.50		45,834.89
Expenses of regulating immigration....	308,617.11	334,641.65	375,196.39	386,577.96	1,405,033.10
Immigrant station, Ellis Island, N. Y....	10,022.79	30.18	26,869.30	36,841.84	73,764.11
Steel twin-screw ferryboat, Ellis Island, N. Y.....	10,693.64	.39	344.99		11,039.02
New Island, near Ellis Island, N. Y.....			24.00		24.00
Total.....					2,021,489.30
BUREAU OF STANDARDS.					
Salaries, Bureau of Standards, 1905....	20,239.54	21,415.11	20,969.77	21,094.68	83,719.10
Equipment, Bureau of Standards, 1905..	2,466.72	16,353.91	31,642.05	17,982.06	68,444.74
Equipment, National Bureau of Standards, 1904.....	15,511.89		991.73		16,503.62
Equipment, National Bureau of Standards, 1903.....	598.50				598.50
General expenses, Bureau of Standards, 1905.....	1,749.76	4,681.33	3,427.72	2,662.12	12,520.93
General expenses, National Bureau of Standards, 1904.....	1,397.74				1,397.74
General expenses, National Bureau of Standards, 1903.....	24.00				24.00
Improvement and care of grounds, Bureau of Standards, 1905.....	1,000.00				1,000.00
Outbuilding, Bureau of Standards.....				15.90	15.90
Total.....					184,224.58
Totals for each quarter.....	781,618.81	751,801.47	859,504.28	921,295.50	
Grand total.....					3,314,220.06

The disbursements during the fiscal year ended June 30, 1905, from the annual appropriations for that year, from the appropriations for public works, and from the permanent indefinite appropriations during the same fiscal year were as follows:

By the disbursing clerk, Department of Commerce and Labor, on account of salaries and expenses of the office of the Secretary of Commerce and Labor, the Bureaus of Corporations, Manufactures, Labor, Statistics, Navigation, Immigration, and Standards, the Light-House Board, the Office of the Supervising Inspector-General, Steamboat-Inspection Service, expenses of regulating immigration, expenses of enforcing the Chinese-exclusion act, salaries and expenses Steamboat-Inspection Service at large, salaries and expenses of agents at seal fisheries in Alaska, and protection of salmon fisheries of Alaska (shown in detail in the above table of expenditures).....	\$3, 314, 220. 06
By the disbursing clerk, Bureau of the Census, on account of salaries and expenses of the Bureau of the Census.....	1, 419, 836. 85
By the special disbursing agent, Coast and Geodetic Survey, on account of salaries, expenses, and public works of the Coast and Geodetic Survey	921, 160. 35
By the special disbursing agent, Bureau of Fisheries, on account of salaries, expenses, and public works of the Bureau of Fisheries....	663, 166. 45
By the special disbursing agents of the Immigration Service at large.	32, 535. 78
By the engineer and naval secretaries of the Light-House Board, engineers and inspectors detailed from the Army and Navy to duty in the Light-House Establishment	4, 681, 052. 26
By customs officers, on account of witnesses' fees in steamboat investigations	382. 16
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, 1905, appropriations for public works, and permanent indefinite appropriations.....	240, 037. 54
Total disbursements during the fiscal year	11, 272, 391. 45

The recommendation made in my annual report for the fiscal year ended June 30, 1904—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—is renewed. 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 submitted for the fiscal year ending June 30, 1907, for the general salary account and contingent and miscellaneous expenses, are \$222,380.13 less than the total amounts appropriated for similar purposes for the fiscal year ending June 30, 1906, and the allotment for printing and binding is estimated at \$360,000, a reduction in that expense of \$140,000. This is a total reduction of \$362,380.13 from the amount appropriated for these purposes in the present fiscal year.

These decreases have been made possible by the consolidation and organization of work done by the Office of the Secretary and some of the bureaus, and by reducing the estimates for the work of the Bureau of the Census and Immigration Service.

The estimate for the Office of the Secretary is increased \$70,000 for additional special agents to examine trade relations abroad and to inquire into the methods of work and the efficiency of the Department's employees scattered throughout the United States and contiguous foreign countries, but as a reduction of \$3,540 is made in the estimate for the Office of the Secretary relating to annual salaries, the net increase for that Office is \$66,460.

An increased appropriation has been asked for the Light-House Establishment and for the new bureaus authorized by the act creating the Department. The largest item of increase is for the Light-House Establishment, and my investigation convinces me that the needs of navigation and the protection of life and property require a large increase in the expenditures for those purposes. This is especially true of our possessions in the Pacific Ocean other than the Philippine Islands, and of Porto Rico, where at present, due to lack of appropriations, there are practically no aids to navigation.

In determining the final estimates for each of the services under this Department it has been my purpose to exercise such economy as is consistent with the highest degree of efficiency in doing the work imposed upon the Department—work touching, as it does, not only the great and diversified business interests of the country, but affecting directly through the Bureau of Immigration the citizenship of our people. On the other hand, it is my desire to cut off things that have outlived their usefulness and do not seem to justify any further expenditure of money. I have not hesitated to keep vacant positions authorized by Congress when it has been demonstrated to me that the work could be done by a less number of clerks with a little added diligence. I shall continue to follow this course wherever and whenever economies can be effected without detriment to the work of the Department.

PERSONNEL OF THE DEPARTMENT.

The Division of Appointments was organized on February 1, 1904, by the transfer of the clerks and other employees who had been

engaged on appointment and bonding work in the disbursing office, and by the assignment of a special agent in the Bureau of Corporations to act as chief of the division. The acting chief was appointed chief by the Secretary under a provision in the act making appropriations for the legislative, executive, and judicial expenses of the Government approved February 3, 1905.

STATISTICS RELATING TO THE PERSONNEL.

The following table shows the number of regular or permanent positions in the Department on July 1, 1905. These positions are classified by bureaus into those that are statutory, those not statutory, those in the District of Columbia, and those outside of the District of Columbia. In giving the number of positions which are outside of the District of Columbia care has been taken to include only those filled by persons who are permanently employed entirely outside of the District. Temporary employees in the Light-House Establishment and in the field service of the Bureau of Fisheries, also enlisted men on vessels of the Coast and Geodetic Survey, are not included in this compilation.

TABLE SHOWING, BY BUREAUS, THE NUMBER OF STATUTORY POSITIONS UNDER THE DEPARTMENT, THE NUMBER OF NONSTATUTORY POSITIONS, THE NUMBER IN THE DISTRICT OF COLUMBIA, AND THE NUMBER OUTSIDE OF THE DISTRICT OF COLUMBIA.

Bureau, office, or service.	Statutory.	Nonstatutory.	In the District of Columbia.	Outside of District of Columbia.	Total.
Office of the Secretary.....	151	4	147	8	a 155
Bureau of Manufactures.....	17		17		b 17
Bureau of Corporations.....	46	21	67		c 67
Bureau of Labor.....	80	21	79	22	101
Light-House Establishment.....	39	5,281	46	5,274	d 5,320
Bureau of the Census.....	691	800	691	800	e 1,491
Coast and Geodetic Survey.....	223	93	286	80	f 316
Bureau of Statistics.....	51	4	55		g 55
Steamboat-Inspection Service.....	105	h 108	7	206	213
Bureau of Fisheries.....	297	15	93	i 219	312
Bureau of Navigation.....	22	49	22	49	71
Immigration Service.....	22	1,187	29	1,180	1,209
Bureau of Standards.....	87		87		j 87
Total.....	1,831	7,583	1,576	7,838	9,413

a Includes 4 Alaskan seal fisheries employees.

b Includes 10 positions transferred from Bureau of Statistics July 1, 1905.

c Exclusive of 8 temporary special agents, etc.

d Includes 1,413 keepers of post lights.

e Exclusive of special agents, special classes.

f Exclusive of enlisted men on vessels.

g Exclusive of 10 positions transferred to Bureau of Manufactures July 1, 1905.

h Includes assistant inspectors and clerks to local boards.

i Includes station employees except those at Washington, employees at large, distribution employees, 2 local agents, 2 salmon agents, and employees in the vessel service.

j Exclusive of 5 members of visiting committee serving without compensation.

IMPROVEMENT IN THE GENERAL STATUS OF THE PERSONNEL.

Considerable improvement relating to the general status of the personnel of the Department and looking toward the betterment of the service has been made during the past fiscal year. A large number of employees in the immigration service along the Canadian and Mexican borders, who had been employed under an exception to the civil-service rules, were brought within the competitive service by an Executive order, effective April 15, 1905, and thus made eligible for transfer to points within the United States where their experience may be of advantage. Recently immigrant inspector and Chinese inspector positions were, by authority of the Civil Service Commission, made interchangeable for purposes of examination and transfer.

This change allows greater freedom in the matter of advantageous assignment of officers connected with the enforcement of the immigration laws and the Chinese-exclusion act. The matter of temporary employment and the appointment of mechanics and laborers in connection with the field operations of the Bureau of Fisheries is now being given attention, and regulations governing this branch of the personnel of the Department are being considered, with a view to establishing tests suited to the requirements of the various positions, in order that such persons may be permanently appointed instead of temporarily employed.

SHIPPING COMMISSIONERS.

The law relating to the appointment of shipping commissioners should be amended by the repeal or modification of section 4502 of the Revised Statutes. The section provides that every shipping commissioner shall give bond to the United States for the sum, *in the discretion of the circuit judge*, of not less than \$5,000. This section also provides a special form of oath to be taken, which oath is to be indorsed on the commission or certificate of appointment. The same reasons that were urged in favor of the repeal of the section of the Revised Statutes requiring supervising and local inspectors of steam vessels to give bond apply in the case of shipping commissioners. The act of Congress of June 19, 1886 (24 Stat. L., 80), which abolished the collection of fees by local inspectors of steam vessels, also abolished the collection of fees by shipping commissioners.

In the event that the repeal of section 4502 is not deemed desirable, the section should at least be amended to provide that the bond shall be in the discretion of and approved by the Secretary of Commerce and Labor instead of the circuit judge. This duty on the part of the circuit judge evidently exists only by virtue of the fact that prior to the act of June 26, 1884 (23 Stat. L., 59), shipping commissioners were appointed by the circuit courts, and when the law was changed

to vest their appointment in the Secretary of the Treasury it may possibly have been an oversight that section 4502, relating to their bonds, was not amended in like manner. That part of section 4502 relating to the oath of office of shipping commissioners should likewise be amended. There is no apparent reason why shipping commissioners should execute a particular form of oath, and the indorsement of the oath on the commission or certificate of appointment is cumbersome and inconvenient. This requirement of law should be repealed and shipping commissioners placed on the same basis in this respect as other public officers.

THE NEED OF SPECIAL AGENTS IN THE OFFICE OF THE SECRETARY.

The Department necessarily maintains a large number of offices throughout the United States, Porto Rico, Hawaii, and in several foreign countries adjacent to the United States for the transaction of the business relating to immigration, the inspection of steamboats, the shipping service, the maintenance of the Light-House Establishment, the propagation of food fishes, and the work of the Coast and Geodetic Survey, in which services there are regularly employed at the present time outside of the District of Columbia 7,008 persons. In maintaining these offices it is necessary to purchase a large amount of office supplies, under contract and otherwise, as required by section 3709 of the Revised Statutes. The work of administering these offices must frequently be intrusted to persons who have only a limited knowledge of the laws relating to the administration of Government work, the making of contracts on behalf of the United States, and the incurrance of obligations to be discharged by the Department.

It is my desire to be able to employ a number of special agents with expert knowledge of the administration of Government business, the laws and system relating to making contracts on behalf of the Government, and the submission of vouchers and accounts for obligations incurred by the Department, in order that they may inspect the offices and records and inquire into the efficiency of the employees of the Department outside of Washington, with a view to recommending better administration where necessary, and determining whether the work of the Government can be more economically performed.

Frequently charges are preferred against subordinate officers and employees of the Department outside of Washington and, for the want of assistants who are entirely disinterested in the questions at issue in the charges, I am compelled to take action on the recommendations of immediate superiors, who are frequently more or less biased in preparing the report upon which my decision must be based, on account of associations with the person by whom or against whom the charges are made.

PRINTING.

The work of issuing the Department's publications has progressed satisfactorily during the year. As in the preceding year, the Office of the Secretary has conducted the relations between the Government Printing Office and all of the bureaus, except the Bureau of the Census, preparing the requisitions on the Public Printer and keeping record of them and of the cost of the work. The Secretary is thus enabled to maintain close supervision over the Department's expenditures for printing and binding (with the exception noted), and to have all publications examined before their issue, with a view to their revision, when necessary, in the interests of uniformity, brevity, and economy.

As a result of this supervision it is notable that despite the growth of the Department, and the fact that the annual publications of the bureaus transferred to it July 1, 1903, first appeared as a charge against its appropriation in the past fiscal year, the expenditure for printing and binding increased but 62 per cent, and about 43 per cent of the sum appropriated by Congress for these purposes (exclusive of the appropriation for the Bureau of the Census) will be covered into the Treasury. As the number of books and pamphlets printed in the fiscal year 1905 was over 300 per cent greater than in the preceding year, owing to the causes above noted the reduction of the cost of each volume is seen to be considerable. A part of this reduction is due to the elimination of unnecessary text and illustrations, and in future it is hoped to effect much larger economy in this way. The saving effected in the past year was chiefly in the cost of the relatively few publications which were carefully read by the newly organized editorial force, and it is believed that the value of these publications was also considerably enhanced.

The limitations contained in section 89 of the printing act as to the number of reports, publications, or documents which may be printed seriously handicapped the Department on several occasions during the past year. The province and duty of the Department—"to foster, promote, and develop the foreign and domestic commerce, the mining, manufacturing, shipping, and fishery industries, the labor interests, and the transportation facilities of the United States"—is discharged largely through the dissemination of information and data collected at great care and expense. The prompt and wide circulation of reports and publications on these subjects is not only of primary importance, but is absolutely necessary to enable the Department to attain the end for which it was created. It is obvious that reports and publications of this character should not be classed with reports of purely administrative work which have but a limited circulation among officers of the Government. I therefore recommend that the Secretary of Commerce and Labor be authorized to have printed an edition of not to

exceed 10,000 copies of any publication issued by the Department whenever there is a demand and necessity for such an edition.

PURCHASE OF SUPPLIES.

With the exception of purely technical supplies—such as scientific instruments and apparatus—all the stationery and supplies used by the Department in Washington and by its various services outside of Washington have been purchased through the Division of Supplies of the Secretary's Office during the past year. In the fiscal year past the Department has made its own contracts for the purchase of stationery and supplies for the first time, and in consequence a uniform and much higher standard of quality has been obtained.

The consolidation of the contingent funds of the various bureaus with the general contingent fund of the Department is again urged, in order that the present cumbersome and expensive system of reimbursement may be avoided and that a uniform standard and greater economy in the purchase and distribution of supplies for the whole Department may be procured.

BUREAU OF MANUFACTURES.

The Bureau of Manufactures, although authorized under the act creating the Department of Commerce and Labor, was not organized until February, 1905, and has made satisfactory progress. In April circular letters were sent to commercial and trade organizations requesting suggestions regarding the best means of promoting the foreign trade of the United States. The answers received show that very general interest was felt in the accomplishment of the objects for which the Bureau was created, and all of the writers expressed a readiness to cooperate with the Bureau in this work.

In July circular letters were addressed to manufacturers and exporters calling attention to the purpose of Congress in establishing the Bureau of Manufactures and soliciting their cooperation. In reply many responses were received and information furnished that will be useful in prosecuting the work of the Bureau and which has been made the basis of what is intended to be a comprehensive card index of our manufacturing and commercial concerns, and especially those engaged in making and handling goods for foreign markets.

On July 1 the Division of Consular Reports, which upon the organization of the Department was attached to the Bureau of Statistics, was transferred to the Bureau of Manufactures. The publication of the reports received from consuls is in charge of this division. Upon the transfer the publication heretofore known as "Consular Reports" was given new form and direction. Its title was amended to cover the publication of information deemed useful to our manufacturing

and commercial interests other than that contained in consular reports. It is now known as "Consular and Trade Reports." The change has added to the usefulness and popularity of the publication, and has received the commendation of all whose interests it is intended to promote.

The work of the Bureau has largely outgrown the provision made by Congress for discharging the duties which are assigned to it, and this work is constantly increasing. In the legislative, executive, and judicial appropriation act for 1905 provision was made for clerical assistance, which was considerably reduced by the same appropriation act for the current fiscal year. Under the latter act five clerks and one assistant messenger are authorized. This force is entirely too small to do the current work of the Bureau, and its increase is recommended. Additional assistance is also urgently needed in the work of preparing the consular reports for publication.

BUREAU OF CORPORATIONS.

The work of the Bureau of Corporations has developed along the lines indicated in the first annual report of the Commissioner. Its most important work of a legal nature has been the further study of the plan proposed in the first report for the supervision and regulation, by "Federal license," of corporations engaged in interstate and foreign commerce. The inadequacy of State legislation to regulate or control in any proper measure the corporations engaged in interstate commerce has been most clearly demonstrated. The great railway systems and the greater industrial corporations extending their operations through many States, some throughout the entire United States, are but nominally supervised or controlled by the States from which their charters were obtained. Some of these corporations have shown not only a disregard for State laws, but have become potent factors in directing the political policies of the State.

The Federal-license plan recognizes that real supervision, real regulation, can only be enforced by a government whose jurisdiction and power are great enough to cope with the corporations to be supervised or regulated.

If the principle underlying such a plan be accepted, it will not be difficult to suggest the detailed provisions for carrying it out. The objection that it would apply to too many corporations and would unnecessarily interfere with small business transactions is not well taken. Such supervision should be extended first over the greater corporations—those which are clearly engaged in interstate and foreign commerce, which by their size and diverse activities tend to monopolize any of the great staples, or which have been shown to be in fact outside the control of State authority. The time is ripe for

Congress, by means of appropriate affirmative legislation, to assume such supervision or control.

Other legal work of the Bureau has been a comparative study of all State corporation laws, the Federal and State antitrust laws, and the consideration, at the request of committees of Congress and of the Department, of questions relating to railways, wireless telegraphy, and the corporation law of the District of Columbia.

The question of Federal supervision over insurance companies has been carefully considered. The recent investigations under State authority of certain insurance companies show the need of careful supervision, but it is clear that the Commissioner of Corporations, under the present act, and in view of the decisions of the Supreme Court, has no jurisdiction over insurance companies. Whether the Federal Government can supervise and regulate insurance companies can be determined only after further legislation and judicial decision.

A special report dealing with certain features of the beef industry was, by direction of the President, transmitted to Congress March 3, 1905. That investigation was conducted in pursuance of a resolution of the House of Representatives. The published report dealt only with that portion of the resolution having to do with prices and the margin of profit between the price of cattle and dressed beef; the other portion of the resolution regarding combination was not reported upon, for the reason that questions relating thereto were then pending in court and being considered by the Department of Justice. A duty of the Bureau of Corporations is to obtain facts upon which Congressional action may be based; a duty of the Department of Justice is to prosecute for violations of law. While these duties are entirely distinct, there are instances where the Bureau of Corporations must necessarily obtain facts with which the Department of Justice is concerned. Such facts are treated as other information—reported to the President for such action as he may deem proper and necessary.

In pursuance of resolutions of the House of Representatives, special investigations of the oil and steel industries are being conducted. In both of these industries general inquiries had theretofore been begun by the Bureau.

The other investigations now in progress deal with sugar, tobacco, coal, and lumber. In all of these subjects the inquiry extends from the production of the raw material to the finished product, covering the questions of transportation and distribution as well as manufacture. It is necessary to study the foreign conditions of the great staples, for the reason that our trade conditions are affected directly by the world's markets. If the results of these investigations are to be of real value, they must be based upon the broadest possible knowledge of all conditions, both at home and abroad, affecting a special industry.

Each investigation will be completed as rapidly as is consistent with thoroughness.

These investigations have brought the Bureau into close touch with the representatives of many of the leading industries of the country. The policy of the Department and the Bureau in dealing frankly and fairly with such representatives has generally resulted in obtaining their hearty and active cooperation. They appreciate that wise, helpful legislation on industrial questions can only be obtained by affording to the Federal Government the fullest information regarding their methods of business and needs.

The work of the Bureau will not meet the approval of those who think that industrial conditions can be changed by hasty legislation, nor of those who demand the conviction, in advance of proof, of persons charged with unfair business methods or wrongdoing, but the Department and Bureau do expect to gain the confidence and support of all men who believe in fair dealing and who recognize that permanent improvement in our industrial conditions can only be obtained when the truth regarding those conditions has been found by unprejudiced, painstaking investigations, and that the evils arising out of ill-considered legislation are quite as great as those which such legislation seeks to destroy.

BUREAU OF LABOR.

During the fiscal year ended June 30, 1905, the Bureau of Labor issued its nineteenth annual report—that for 1904. This report presents the results of an extensive investigation into the wages and hours of labor in the leading manufacturing and mechanical industries of the United States during the period from 1890 to 1903, inclusive. This investigation 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 would be representative of conditions and show the trend of wages and hours of labor during the period covered. It is to be regretted that the force available for the prosecution of the work did not admit of the extension of the investigation to some of the other great industrial groups, such as transportation, mining, and agriculture.

It is believed, however, that the data embodied in the report are more comprehensive and representative, so far as the manufacturing and mechanical industries are concerned, than any that have been published heretofore. The number of industries covered by the report is 67, including 519 distinctive occupations in 3,475 establishments. The data which form the basis of this report were secured in all cases by personal visits of the special agents of the Bureau to the several establishments represented, and were taken directly from the pay rolls and other records in existence and available for reference. The pres-

ervation of records of this character for any considerable period of years is not usual, and great difficulty was experienced in some industries in finding establishments which had been in existence since 1890 and had preserved their pay rolls and other records of transactions with their employees.

During the year the Bureau also completed its twelfth special report, and it was transmitted to Congress. The report relates to coal-mine labor in the five leading coal and lignite producing countries of Europe—namely, Austria, Belgium, France, Germany, and Great Britain—and is an exhaustive compilation from official and other authoritative publications of the statistical and descriptive matter covering the subject. All the information, so far as the material would permit, has been presented in such form as to render possible a comparison between the various countries. The subject as presented in the report covers output, value, and distribution of product, employees, wages, accidents, systems of relief, mine workers' unions, labor disputes, and mine-labor legislation.

Another report completed and printed during the year relates to labor disturbances in the State of Colorado. The report comprehends an exhaustive history of labor disturbances in that State during the period of twenty-five years—from 1880 to 1904, inclusive. The accounts of the strikes previous to 1903, as given in this report, are based upon local histories, official reports of State officers, and records contained in the State library of Colorado. To ascertain the facts regarding the strikes of 1903 and 1904, an agent of the Bureau visited the various localities involved and obtained statements from the mine managers and labor-union officials. He also interviewed officials of the State, of the Mine Owners' Association at various places, and of the Citizens' Alliance, and citizens generally. The report is believed to present complete information in regard to the questions at issue in the various strikes.

The Bureau also completed during the year, pursuant to a resolution of the Committee on Labor of the House of Representatives, an investigation and a report upon House bill No. 4064, 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 report deals with the attitude of Government contractors toward the proposed legislation; the results under the eight-hour workday at the Brooklyn Navy-Yard compared with results under the ten-hour day at Newport News, Va., in battle-ship construction; actual results of production under reduced hours of work in various manufacturing establishments; attitude of labor organizations; laws relating to hours of labor in the United States, and recent changes in hours of labor in the United States.

During the past year the Bulletin of the Bureau was issued regularly every other month. For the fiscal year the issues were Nos. 53, 54, and 55 of volume 9, and Nos. 56, 57, and 58 of volume 10. The Bulletin has contained, in addition to one or more special articles in each number, digests of recent reports of State bureaus of labor statistics, digests of recent foreign statistical publications, decisions of courts affecting labor, and laws of various States relating to labor. The special articles included in the foregoing numbers of the bulletin are as follows:

Bulletin 53 contained summaries of the eighteenth and nineteenth annual reports, relating, respectively, to cost of living and retail prices of food, and wages and hours of labor, for the period 1890 to 1903, inclusive.

Bulletin 54 was devoted to a description of the exhibit of the Bureau at the Louisiana Purchase Exposition, with reproductions of the principal charts and photographs contained in that exhibit. The description is presented in connection with a special series of papers. These papers were specially prepared as descriptive and supplementary to the exhibit of charts and photographs. The subjects chosen are representative of the regular work of the Bureau, although several of them involved a large amount of special investigation and preparation. The work of preparation of the extensive exhibit of the Bureau at St. Louis, as well as the preparation of this number of the Bulletin, was carried on in connection with the regular work of the Bureau, and the greater part of it was done by the regular office force.

The titles of this series of special papers, representing also the subjects of exhibit at the exposition, are as follows:

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.
 Value and Influence of Labor Statistics.
 Strikes and Lockouts in the United States, 1881 to 1900.
 Wages in the United States and in 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.

Bulletin 55 contained "Building and loan associations in the United States" and "Revival of handicrafts in America." The first article is a comprehensive discussion of building and loan associations based upon material contained in the Ninth Annual Report of the Commissioner of Labor, which was supplemented by a special investigation,

bringing the statistical information down to the end of the year 1903. The second article is the result of a study of the recent revival of domestic weaving and rug making and of the growth of the arts and crafts movement.

Bulletin 56 contained the "Influence of trade unions on immigrants" and "Labor conditions in Australia." The first article is a report prepared after an investigation into the influence of trade unions on immigrants, especially among those employed in the packing business in Chicago. The second article in this Bulletin and the two by the same author in Bulletin 58 are the result of months of travel and a thorough study of industrial conditions in the countries covered, with the special object of presenting an authoritative statement in regard to conditions there.

Bulletin 57 contained the "Course of wholesale prices, 1890 to 1904," and "Street railway employment in the United States." The article on wholesale prices brings down to the end of 1904 the results of the study of the subject, publication of which was begun in the Bulletin of March, 1902, and continued in those of March, 1903, and March, 1904. The study covers 259 series of quotations, representing all classes of staple commodities. The second article is the result of an original study of the conditions surrounding street-railway employment which have grown up with the development of electric traction.

Bulletin 58 contained "Labor conditions in the Philippines" and "Labor conditions in Java."

In addition to the preparation and completion of the foregoing reports and bulletins, which cover the publications of the last fiscal year, the force of the Bureau has been engaged in the collection and preparation of data for future reports and bulletins. The annual report for 1905 will relate to convict labor. It will cover all penal and reformatory institutions in the United States in which productive labor to the value of \$1,000 a year is performed. The report will deal specially with the important economic features of convict labor, such as value of product, value of labor of convicts, amount of free labor displaced by convict labor, various systems employed, etc. The laws of the various States relating to convict labor will also be given.

During the year work has been carried forward in the collection of data relative to strikes and lockouts in the United States, which will form the subject of the twenty-first annual report—that for the year 1906. The report will cover strikes and lockouts during the period from 1901 to 1905, inclusive, in continuation of the reports already made covering the period 1881 to 1900.

The Bureau has also been engaged in the preparation of a report upon the economic condition of the laboring classes of the Territory of Hawaii. This report, which will shortly be ready for transmittal to Congress, will be the third report of the Bureau relating to this

subject, the first having been made February 4, 1902, and the second February 26, 1903.

A number of articles, as noted below, for publication in the Bulletin of the Bureau are now ready or in course of preparation, and a considerable amount of material to be used in future numbers of the Bulletin has already been prepared.

The July number of the Bulletin (No. 59) contained articles on "Wages and hours of labor, 1890 to 1904," and "Retail prices of food, 1890 to 1904," in continuation of the article published in the number for July, 1904. It is the intention to continue these investigations from year to year, making the results a feature of the July Bulletin each year.

In later numbers of the Bulletin during the coming year there will appear special articles upon the following subjects:

- Government Industrial Arbitration in Various Countries.
- Benefit Features of Trade Unions in Great Britain.
- Cost of Industrial Life Insurance in the District of Columbia.
- Labor Conditions in Porto Rico.
- A Documentary History of the Early Organization of Printers.
- Conditions of Entrance to the Principal Trades in the United States.
- Municipal Ownership in Great Britain.
- Economic Conditions of the Russian Jews.
- Conciliation in the Stove Industry.

LIGHT-HOUSE BOARD.

The establishment, custody, and maintenance of aids to navigation in the waters of Hawaii, the Midway Islands, Guam, the American Samoan Islands, Porto Rico, and the United States naval reservation at Guantanamo, Cuba, have been taken over by the Light-House Board, through the Department, under Executive order. Prior thereto the Board had been directed to take the proper measures to place aids to navigation about the island of Navassa. The number of light-house districts was limited by law before the Light-House Board was required to care for the aids to navigation in the insular waters now under its charge, and under the limitations of the law the Board finds it difficult to do the additional work devolved upon it, and asks that Congress increase the number of light-house districts, in which request the Department cordially concurs. Attention is invited to the statements in the annual report of the Light-House Board regarding the legislation needed, and especially to the needs of Hawaiian waters, not only to protect Hawaiian interests, but those of the many American vessels having business there.

The Department's attention has recently been called to the fact that vessels are frequently anchored in our harbors and other public navi-

gable waters so as to obstruct the range lights established therein by the Department in aid of navigation. At the present time there is no Federal law prohibiting this; a number of the States have, however, enacted statutes making it unlawful to obstruct or interfere with aids to navigation established within their limits, but in some of these statutes no provision has been made to prevent the obstructing of range lights. Federal instead of State legislation on this subject is urgently needed, and it is recommended that a general law be passed by Congress making it unlawful and punishable by fine for any vessel to anchor in any navigable waters of the United States in such a manner as to obstruct or interfere with the range lights or other aids to navigation established therein.

The Department renews the statement made last year, that the insufficiency of the current appropriation for salaries of light-keepers has prevented the operation of several light-houses built from specific appropriations, when ready for use, and attention is invited to the statement in the annual report of the Light-House Board on the subject.

The Board states that the Light-House Establishment is in danger of deterioration because of the limited appropriations made for its maintenance, and the Department respectfully urges the necessity of Congress providing sufficient funds to keep the service in the highest state of efficiency, and asks special consideration of the Board's recommendations as set forth in its annual report.

The Light-House Board has omitted from its list of estimates fourteen of the estimates made for light-house structures last year, and has added some, the necessity for which has become apparent, and the Department submits them with the statement that the urgent necessity for these structures was made evident to the Board before it would permit itself to adopt and present the estimates.

BUREAU OF THE CENSUS.

During the year the Bureau of the Census has made satisfactory progress in the important work before it, and a number of interesting reports have been published or are on the eve of publication. Eight volumes have been published and twelve special reports in bulletin form. The field work of the quinquennial census of manufactures, begun early in the present calendar year, has been completed in all save a few isolated localities, and the publication of the results by States, by municipalities, and by industries will now follow with celerity. These results will show an industrial progress in many important branches of manufacturing which far exceeds public expectation.

From the preliminary reports thus far published of the Manufacturing Census of 1905, it is evident that the completed tabulation will

show that satisfactory progress has been made during the five-year period, both in quantity and value of goods manufactured and in practically all sections of the country. The true condition of the industries of the United States during the last five years is more accurately and definitely determined by this census of manufactures than by any other agency at the command of the Government. When the results are fully tabulated and published they will be accepted as the convincing evidence of the wisdom of Congress in legislating for a five-year census of manufactures, and they will form a strong argument for the further widening of the field of census inquiry during the intercensal periods.

ADDITIONAL INQUIRIES RECOMMENDED.

The annual report of the Director calls attention to the fact that the Bureau of the Census has nearly completed the special reports authorized by the permanent census law, and that the time is opportune for taking up certain other investigations of great interest and importance, some of which have been entirely neglected heretofore, probably because of the lack of a permanent statistical office with resources sufficient for the work, while others have been undertaken at an earlier period by the Census and ought now to be brought up to date. If these investigations are authorized by Congress at this session they can be carried on with advantage and will keep the Bureau profitably employed during the interval of three years yet to elapse before the time arrives when preparations must be made for the Thirteenth Census. The Director recommends that authority be given to take up the following subjects, and in these recommendations I concur:

1. A five-year report on the electrical services, street railways, public-power stations, telephones and telegraphs, etc., in lieu of the ten-year reports now authorized.
2. A report on savings banks, cooperative savings institutions, home-building associations, and similar fiduciary organizations for the promotion of individual thrift.
3. A report on life, fire, and marine insurance.
4. A report on the fisheries industry, in cooperation with the Bureau of Fisheries.
5. A compilation of the results of the several State censuses of population taken in 1905.
6. A report covering the judicial statistics of the several States, covering the indictable offenses recorded in the court dockets, and the disposal of these cases.

The Director also calls attention to the popular desire for a continuation of the Eleventh Census report on mortgage indebtedness, but he hesitates to recommend it on account of the large expense for field work. He refers also to the demand of the agricultural interests for a five-year census of live stock, a report which is urgently recommended by the Secretary of Agriculture. This report also, if authorized, will involve a large increase in the regular appropriation for the continuance of census work.

TABULATING APPLIANCES.

In accordance with the recommendation of my last annual report, the last Congress authorized the Director of the Census to undertake experimental work for the development of an independent system of mechanical tabulation for handling the current work of the Bureau and the returns of future censuses. The time was especially opportune for such an undertaking. The details of a decennial census have grown to be so enormous in volume and so complicated in character that it is no longer possible to successfully and expeditiously handle them by hand methods. The original patents on the apparatus for handling census returns mechanically were about to expire, and the Government was at liberty to make use of the fundamental idea of these patents as a basis for mechanisms which will render them more complete without infringing the later patents of the inventor. Experiments in this direction were promptly undertaken by the Director of the Census under the general supervision of the Director of the Bureau of Standards. In the conduct of these experiments the splendid mechanical facilities of the Bureau of Standards have been placed at the service of the Bureau of the Census; and the progress already made justifies the expectation of a successful outcome. I recommend the continuance of this appropriation in the hope that before the time for the tabulation of the Thirteenth Census arrives the Government will be the owner of the most effective mechanism yet devised for this work.

COAST AND GEODETIC SURVEY.

The amount appropriated for the Coast and Geodetic Survey for the fiscal year 1905, exclusive of the allotment for printing and binding, was \$863,569.79, of which \$210,245 was for manning and equipping the vessels of the Survey, \$43,544.79 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.

In addition to the above sums the appropriations of \$50,000 for marking the boundary between the United States and Canada west of the Rocky Mountains and of \$65,000 for locating and marking the Alaska boundary are disbursed by the disbursing agent of the Coast and Geodetic Survey, under the direction of the Superintendent as Commissioner.

The Superintendent reports that hydrographic surveys were made in 13 States and Territories and topographic surveys in 4; that triangulation was done in 17 and leveling in 8. The field work for the revision of one volume of the United States Coast Pilot, covering the coast from Chesapeake Bay entrance to Key West, Fla., was completed.

The primary triangulation along the ninety-eighth meridian was

extended to Alice, Tex., on the south, and is now completed from that point to Wahpeton, N. Dak., on the north. A branch triangulation extends from the vicinity of Wahpeton to Aitkin, Minn. The triangulation along the Pacific coast north of San Francisco was completed to the Columbia River.

A transcontinental line of levels was completed, giving a connection between the Atlantic and Pacific oceans and the Gulf of Mexico by the leveling done under the direction of the Survey.

In Alaska the survey of Kiska Harbor was completed and surveys were made in Iphigenia Bay, Sea Otter Sound, Resurrection Bay, and Prince William Sound. Hydrographic examinations were made at the request of the War Department along the route selected by the Chief Signal Officer, United States Army, for a cable. The longitude of Sitka was determined by the telegraphic method, and during the progress of the work signals were exchanged with a Canadian observer at Vancouver, British Columbia, which determined the longitude of that place. The work of determining other points by the same method was in progress at the close of the year. Surveys were also in progress in various localities.

The charting of the harbors and waters of the Philippine Archipelago was continued in cooperation with the insular government, and good progress was made. Twenty-six new charts, largely compiled from existing sources, and two volumes of Sailing Directions (revised editions of Sections III and IV) were published.

The magnetic survey was continued and observations were made at 300 stations in 41 States and Territories, including Alaska, Hawaii, the Philippine Islands, and Porto Rico. Valuable results were obtained from observations made at sea during the voyages of the surveying vessels to and from their fields of work in the Atlantic and Pacific oceans.

Magnetic observatories, where a continuous record of the variations in the magnetic forces is obtained by photographic means, were maintained in Maryland, Kansas, Alaska, Hawaii, and Porto Rico.

Continuous records of tidal fluctuations were obtained by means of self-registering gauges at ten stations, including one station in Hawaii and two in the Philippine Islands.

The work of reestablishing and monumenting the international boundary between the United States and Canada west of the Rocky Mountains was continued under the direction of the Superintendent and the Director of the Geological Survey as Commissioners, with an officer of the Survey detailed to the immediate charge of operations in the field.

The demarcation of the boundary between Alaska and Canada and the erection of boundary monuments were continued, and such prog-

ress was made as the extremely unfavorable climatic conditions in that region permitted.

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

An examination of the international boundary between Vermont and Canada was begun in cooperation with the Canadian authorities at the request of the State Department, for the purpose of meeting certain requirements of the Treasury Department.

In response to a request from the Isthmian Canal Commission, a survey was made of the Bay of Limon and approaches to Colon, in the Canal Zone.

The Survey maintained an exhibit as a part of the departmental exhibit at the Louisiana Purchase Exposition at St. Louis, Mo., until its close, and had a similar exhibit at the Lewis and Clark Centennial Exposition, Portland, Oreg., at the close of the year.

An officer of the Survey continued on duty as a member of the Mississippi River Commission, as required by law. Another officer was granted a furlough without pay to take command of the expedition which is in preparation for the magnetic survey of the Pacific Ocean under the auspices of the Carnegie Institution.

BUREAU OF STATISTICS.

The Bureau of Statistics, which is charged with the duty of recording our foreign commerce, reports a gratifying condition in our trade and trade relations during the year just ended.

The foreign commerce of the United States in the fiscal year 1905 exceeded, both in imports and exports, that of any preceding year. The imports were \$1,117,513,071 in value, exceeding by \$91,793,834 those of 1903, the highest record of any preceding year; and the exports were \$1,518,561,666, exceeding by \$57,734,395 those of 1904, and by \$30,796,675 the highest record of any earlier year. The growth in imports occurs chiefly in materials for use in manufacturing, and the growth in exports occurs chiefly in manufactures. The value of manufacturers' materials imported increased from \$458,098,799 in 1904 to \$529,611,457 in 1905, and formed in 1905 47.39 per cent of the total imports. The value of manufactures exported increased from \$452,415,921 in 1904 to \$543,607,975 in 1905, and formed in the latter year 36.44 per cent of the total exports of domestic products.

IMPORT RECORD OF THE YEAR.

The growth in imports, which for the second time in our history exceeded one billion dollars in value, occurs almost exclusively in manufacturers' materials and food-stuffs of tropical production. The imports

of articles in a crude condition which enter into the various processes of domestic industry amounted to \$386,459,421, and of articles wholly or partially manufactured for use as materials in the manufactures and mechanic arts amounted to \$143,152,036, making a total of manufacturers' materials imported during the fiscal year 1905 of \$529,611,457, against \$271,251,221 in 1895, \$192,066,294 in 1885, and \$141,233,551 in 1875. The percentage which manufacturers' materials formed of the total imports was, in 1905, 47.39; in 1895, 37.10; in 1885, 33.14, and in 1875, 26.50. Food-stuffs and live animals imported in 1905 amounted to \$273,629,853, against \$226,422,171 in 1895, \$194,266,360 in 1885, and \$196,311,459 in 1875; the percentage which this class formed of the total having been 24.49 in 1905, 30.97 in 1895, 33.52 in 1885, and 36.84 in 1875.

The imports of finished manufactures (in which term are included the group, "Articles manufactured ready for consumption," and all of the group, "Articles of voluntary use, luxuries, etc.," except uncut diamonds, and other precious stones, and unmanufactured tobacco), amounted to \$285,562,942 in 1905, against \$218,180,088 in 1895, \$186,562,207 in 1885, and \$191,371,446 in 1875; the percentage which such manufactures formed of the total having been, in 1905, 25.55, as against 29.83 in 1895, 32.19 in 1885, and 35.92 in 1875.

Thus manufacturers' materials in 1905 formed 47.39 per cent of the total imports, as against 26.50 per cent in 1875; finished manufactures formed, in 1905, 25.55 per cent of the total, as against 35.92 in 1875; and foodstuffs and live animals, 24.49 per cent in 1905, as against 36.84 per cent in 1875. The principal articles imported for use in manufacturing are raw silk, india rubber, fibers, tin, wool, tobacco, wood, hides and skins, raw cotton, and chemicals. The imports of silk increased from \$22,626,056 in 1895 to \$61,040,053 in 1905; india rubber, from \$18,475,382 in 1895 to \$51,683,312 in 1905; wool, from \$25,572,763 in 1895 to \$46,225,558 in 1905; fibers, from \$13,282,081 in 1895 to \$38,118,071 in 1905; tin, from \$6,787,424 in 1895 to \$23,378,471 in 1905; wood, from \$14,690,416 in 1895 to \$22,047,054 in 1905; hides and skins, from \$26,122,942 in 1895 to \$64,764,146 in 1905; tobacco, from \$14,745,720 in 1895 to \$18,038,677 in 1905; raw cotton, from \$4,714,375 in 1895 to \$9,414,750 in 1905; and chemicals, drugs, and dyes as a whole, from \$43,567,609 in 1895 to \$64,794,238 in 1905, these ten classes supplying about 75 per cent of the total imports of manufacturers' materials. These articles, it will be observed, are largely of tropical or subtropical origin, and to this extent of a class not produced in the United States, though in many cases suited to production in the tropical islands which have been recently added to our producing area.

The second class of articles in which the increase in importations has been considerable is that of foodstuffs, including live animals, of

which the imports in 1905 were \$273,629,853, an increase of \$40,418,455 over the figures of the immediately preceding year. The chief articles in this class are sugar, coffee, tea, cacao, fruits, and nuts, and therefore chiefly of classes not produced in the United States, at least in sufficient quantities to meet domestic requirements. Even these large figures of tropical foodstuffs imported do not include those brought from Porto Rico and the Hawaiian Islands, which aggregated \$48,250,396, bringing the total of articles of food brought into the country during the year above 320 million dollars.

Of the \$285,562,942 of manufactured articles brought into the country during the year, manufactures of cotton, fibers, silk, iron and steel, jewelry, and wool formed the most important items. Manufactures of cotton imported amounted to \$48,919,936; manufactures of fibers, \$40,125,406; manufactures of silk, \$32,614,540; manufactures of iron and steel, \$23,510,164; jewelry and precious stones, cut, \$23,947,883; and manufactures of wool, \$17,893,663.

GROWING DEMAND FOR TROPICAL PRODUCTS.

Tropical and subtropical products form a constantly increasing proportion of our growing imports. Of the manufacturers' materials imported, india rubber, fibers, raw silk, Egyptian cotton, and other articles are of tropical and subtropical production, as is also true of the sugar, coffee, tea, cacao, and fruits included under the grouping of foodstuffs, and the materials from which were produced the silks, cotton goods, and manufactures of fibers under the classification of manufactures. The total value of tropical and subtropical products brought into the country during the year 1905 exceeded 500 million dollars, against 140 millions in 1870, and of this grand total of 500 millions in 1905, about 12 per cent was supplied from the islands recently added to our producing area, as against less than 5 per cent in 1895.

EXPORT RECORD OF THE YEAR.

The exports of the year supplied evidence of the activity of our manufacturers quite as striking as that indicated by the imports already discussed. While exports of agricultural products and products of the forests and fisheries showed a slight decline as compared with 1904, the increase in exports of manufactures was sufficient to more than offset these losses and to bring the total exports to a point higher than ever before reached, being \$1,518,561,666, against \$807,538,165 in 1895, \$742,189,755 in 1885, and \$513,442,711 in 1875. The decrease in exports of agricultural products was due to a remarkable decline in the exportation of wheat and wheat flour, the result in part of reduced production in 1904, of large crops and low prices abroad, and of a large demand from the home market.

The result of these unusual conditions was that the exports of flour fell from \$73,756,404 in 1903 and \$68,894,836 in 1904 to \$40,176,136 in 1905; and those of wheat, from \$87,795,104 in 1903 and \$35,850,318 in 1904 to \$3,905,579 in 1905. In quantity the exports of wheat and flour (in terms of wheat) amounted to but 44,112,910 bushels in 1905, as against 120,727,613 bushels in 1904 and 202,905,598 bushels in 1903. This great reduction in exports of wheat and wheat flour from \$161,551,508 in 1903 and \$104,745,154 in 1904 to \$44,081,715 in 1905 was partially offset by an increase in cotton exports, of which the total value in 1905 amounted to \$381,398,939, against \$372,049,264 in 1904 and \$291,598,356 in 1902. Cotton exports in 1905 were the largest in the history of our export trade, while those of wheat and wheat flour were less than in any year since 1872.

As a consequence of this large reduction in exports of wheat and wheat flour the total of agricultural exports for the year 1905 amounted to but \$820,863,405, against \$853,643,073 in 1904 and \$943,811,020 in 1901, the high-record year of agricultural exports. This loss in agricultural exports was more than compensated by the increase in exports of manufactures, of which the total in 1905 was \$543,607,975, as compared with \$452,415,921 in the preceding year, \$183,595,743 in 1895, \$147,187,527 in 1885, and \$92,678,814 in 1875. Manufactures formed in 1905, 36.44 per cent of the total domestic exports; in 1895, 23.14 per cent; in 1885, 20.25 per cent, and in 1875, 16.57 per cent.

This increase of 91 million dollars in exports of manufactures is greater than that of any preceding year except 1900, when the increase was 94 millions. The increase occurs chiefly in manufactures of iron and steel, copper, cotton cloths, and manufactures of leather, though a large proportion of the other articles and classes of articles exported show moderate gains over the preceding year. In iron and steel the increase is 23 million dollars; in copper, 29 millions; in cotton cloths, 27 millions, and in leather, 4 millions. Of the 29 million dollars increase in copper, about one-third occurred in exports to China and the remainder chiefly to Europe. Of the 27 millions increase in cotton cloths, 24 millions occurred in exports to China, and of the 4 millions increase in leather, 3½ millions was in exports to Japan.

TRADE WITH GRAND DIVISIONS OF THE WORLD.

The increase in imports was distributed among all of the grand divisions and most of the principal countries, while the increase in exports was chiefly to China, Japan, Canada, Argentina, Cuba, and the new Republic of Panama. The increase in imports was, from Europe 41 million dollars; from North America, 28 millions; from South America, 30 millions; from Asia and Oceania, 24 millions, and from Africa, 2 millions. The increase from Europe was distributed among the principal countries, and was chiefly composed of manufactured

articles and raw wool, raw silk, hides and skins, and diamonds. In exports a reduction of 37 million dollars occurred in the trade with Europe, due to the falling off in exports of wheat and flour, and a reduction of over 5 millions in the trade with Africa, where a general reduction of imports has characterized the past two years.

To North America the exports increased 26 millions, of which 11 millions was to Cuba, 9 millions to Canada, and nearly 4 millions to Panama. To South America the exports increased 6 millions, of which practically all was to Argentina. To Asia the increase in exports amounted to 68 millions, of which 41 millions was to China and 27 millions to Japan. Of the 41 million dollars increase to China, 23½ millions was in cotton cloths, 10 millions in copper, and 3½ millions in mineral oil. Of the 27 millions increase to Japan, 14 millions was in raw cotton, 3½ millions in sole leather, 1 million in cotton cloths, and 1 million in canned beef.

COMMERCE WITH CUBA UNDER RECIPROCITY.

The commerce with Cuba in 1905, the first full fiscal year under the reciprocity treaty, shows a considerable increase over 1904, of which one-half was under the reciprocity treaty, and a marked increase over 1903, the last full year prior to that treaty, which went into effect December 27, 1903. The total exports to Cuba from the United States in 1905 were \$38,380,601, against \$27,377,465 in 1904 and \$21,761,638 in 1903, an increase of 76.3 per cent over 1903, the last full year prior to the operations of the reciprocity treaty. The import values are greater than those of 1904 or 1903, being \$86,304,259 in 1905, \$76,983,418 in 1904, and \$62,942,790 in 1903. This increase in value, however, in 1905 is apparently largely due to increased prices of sugar, the chief article imported from Cuba, rather than to increased quantity. The total value of sugar imported from that island in 1905 was \$64,366,104, exceeding by nearly 8 million dollars that of 1904 and by nearly 22 millions that of 1903; while the quantity of sugar imported into the United States from Cuba in 1905 was 2,057,684,169 pounds, or 762 million pounds below that of 1904 and 338 million pounds below that of 1903. The other articles which show an increase in 1905 as compared with immediately preceding years are leaf tobacco, with an increase of about 1 million dollars over 1904 and 1903, respectively, and cigars, also an increase of about 1 million dollars over 1904 and 1903, respectively. In exports to Cuba from the United States the increase occurs in nearly all of the principal articles, but is especially marked in manufactures of iron and steel, flour, provisions, lumber, and rice.

A marked change has recently occurred in the trade of the United States in rice following the development of rice production in the

United States, which occurred simultaneously with our closer relations with the rice-consuming communities of Porto Rico, Cuba, and the Hawaiian Islands. The value of rice of domestic production sent out of the United States in 1905 aggregated \$5,361,641, against \$667,387 in 1900 and but \$16,454 in 1895, while the imports of rice in 1905 amounted to but \$2,096,190, against \$3,445,512 in 1895. The value of rice brought into the United States always exceeded that of rice sent out of this country prior to 1905, but in that year the value of rice sent out of the country to its noncontiguous territories, to Cuba under the reciprocity treaty, and to other foreign countries was more than 2½ times in value that imported.

TRADE WITH THE NONCONTIGUOUS TERRITORIES OF THE UNITED STATES.

Trade with the noncontiguous territories of the United States—under which term are included Porto Rico, the Hawaiian Islands, and the Philippine Islands, the Midway Islands, Guam, Tutuila, and Alaska—shows a marked increase in 1905 over any preceding year. The total value of merchandise shipped from the United States to these various noncontiguous territories was \$43,519,226, against \$38,096,528 in 1904; while the value of merchandise shipped from these territories to the United States in 1905 aggregated \$75,244,665, against \$59,138,045 in 1904. In addition to this there were shipped to the United States \$9,059,023 of gold produced in Alaska and \$10,733,835 of gold produced in adjacent territory but sent into Alaska for shipment to the United States.

The quantity of gold of domestic production received in the United States from Alaska in 1905 exceeded that of 1904 by nearly 43 per cent, the total for 1905 being \$9,059,023 and for 1904 \$6,347,742. The value of merchandise shipped from the respective noncontiguous territories to the United States was: From Hawaii, \$36,112,055, of which \$35,112,127 was sugar; from Porto Rico, \$15,633,145, of which \$11,925,575 was sugar and \$2,146,846 was cigars; from the Philippine Islands, \$12,657,904, of which \$11,076,286 was manila hemp and \$1,498,399 sugar; and from Alaska, \$10,801,446, of which \$8,381,466 was canned salmon, \$494,764 furs and fur skins, and \$440,488 copper ore. The \$43,519,226 worth of merchandise shipped from the United States to its noncontiguous territories was composed of nearly all classes of foodstuffs and manufactures, especially cotton goods and manufactures of iron and steel.

GOLD AND SILVER MOVEMENT.

The movement of gold and silver in the foreign trade of the United States during the fiscal years 1905 and 1904 was as follows: In 1905 imports of gold, \$53,648,961; imports of silver, \$27,484,865; total

imports of gold and silver, \$81,133,826. Exports of gold, \$92,594,024; exports of silver, \$48,848,812; total exports of gold and silver, \$141,442,836. In 1904 imports of gold, \$99,055,368; imports of silver, \$27,768,814; total imports of gold and silver, \$126,824,182. Exports of gold, \$81,459,986; exports of silver, \$49,472,702; total exports of gold and silver, \$130,932,688.

STEAMBOAT-INSPECTION SERVICE.

It is the duty of the Steamboat-Inspection Service to inspect the hulls, boilers, machinery, equipment, and appliances, and to examine the qualifications of officers, engineers, and pilots of certain classes of vessels for the general purpose of promoting the safety of life in connection with traffic upon the public waters of the United States. The details of the work of the Service for the fiscal year ended June 30, 1905, are as follows:

EXPENSES.

The personnel of this Service at the close of the year consisted of 213 officers and clerks and 1 messenger.

The expenses of the Service were: For salaries, \$325,190.16, an increase over the previous fiscal year of \$8,811; for contingent expenses, \$80,569.69, an increase over the previous year of \$11,922.04. The increase of expenditures under the item of salaries is due to the appointment of additional assistant inspectors and slight advances in the salaries of a few assistant inspectors who have been long in the Service and in the salaries of clerks who have merited the increase by intelligent and faithful service. The increase in the contingent expenses is due, in a great measure, to the travel of the inspectors engaged in the reinspection and examination of steamers ordered by the Department. Old and worn-out instruments have been repaired, when possible, and replaced by new when necessary. This also has contributed slightly to the increase in contingent expenses.

INSPECTION OF VESSELS.

The number of vessels inspected and certificated was 8,705, with a total tonnage of 5,910,824, a decrease from the previous year of 596 in the number of vessels and of 73,899 in tonnage. Of this total number and tonnage of vessels inspected and certificated, there were 328 foreign passenger steamers, with a total of 1,680,376 gross tons, a decrease from the previous year of 27 in number and a decrease in tonnage of 241,504. There were inspected and certificated 7,621 domestic steamers, with a total of 3,608,701 gross tons, a decrease from 1904 of 575 in number and an increase of 63,175 gross tons: 249 motor vessels, with a total of 10,874 gross tons, an increase of 43 in number and of 1,483

in tonnage, and 507 sail vessels and barges, with a total tonnage of 610,873, a decrease from the previous year of 17 in number and 596 in tonnage.

OFFICERS LICENSED.

There were licensed during the fiscal year 7,336 officers of all grades, a decrease from the previous year of 603. There were 1,466 applicants examined for color-blindness, of which number there were rejected 57.

INSPECTION OF BOILER PLATES AND LIFE-PRESERVERS.

Under the authority of the act of Congress approved January 22, 1894, there were inspected at the various mills by the United States assistant inspectors of boilers 4,206 steel plates for the construction of marine boilers, of which number 468 were rejected. The total number of plates inspected is 441 more than that of the previous year. In addition to this there were inspected a large number of steel bars for braces and stay bolts in marine boilers, and several hundred plates were also inspected at the mills for stock and repairs. There were received 78 requests from other branches of the Government service for tests of materials at mills, which tests were completed and reports rendered to the proper officials. There were examined at the different factories during the year 422,313 life-preservers of various kinds, of which number 4,761 were rejected.

CASUALTIES.

The total number of accidents of all kinds resulting in loss of life on vessels subject to the jurisdiction of the Service during the year was 44, a decrease of 2 from the last year, and the total number of lives lost was 251, a decrease of 1,052 from the previous year. Of the 251 fatalities recorded, 41 were from suicide and other causes which no possible precaution could have prevented and 110 were from accidental drowning.

During the year there were carried 342,260,350 passengers on steamers required by law to make report of such number of passengers, and, estimating that there were carried at least 250,000,000 more on steamers not required to make such report, it can be safely calculated that nearly 600,000,000 passengers were carried by steamers under the jurisdiction of this Service. In this number an average of 1 life was lost for every 2,390,438 passengers carried.

CHANGES IN LAWS.

Consequent upon the disaster to the *General Slocum*, and as the result of a careful study of the conditions of the Service carried on by the Department since the last report, it became clear that both the statutes and the rules and regulations governing the construction,

equipment, maintenance, and operation of steamboats required considerable revision and strengthening. A number of bills covering the subject were therefore prepared and submitted to Congress, most of which were duly enacted. By far the most important change was that in the salary system for the pay of local inspectors. Under the old system, as provided by statute, the inspectors were paid according to the number of vessels inspected and passed. A substantial premium was thus actually placed on lax inspection, and the change to a fixed salary for each inspector, regardless of the number of vessels inspected, was a most salutary one.

These recent acts also made more definite the requirements for life-saving equipment, eliminated from the statutes certain details which should rather be treated in the rules and regulations, and also established an executive committee of the board of supervising inspectors, composed of three members thereof, with power to make, subject to the approval of the Secretary, and in the intervals between the meetings of the full board, such alterations in the rules as might from time to time appear necessary. This provision has already justified itself in relieving many of the hardships bearing upon steamboat owners by reason of the fact that meetings of the full board were hardly practicable more frequently than once a year.

CHANGES IN RULES AND REGULATIONS.

A special meeting of the Board of Supervising Inspectors was held in December, 1904, and they submitted to the Secretary for his approval an entire preliminary revision of the rules and regulations. Public notice of the proposed changes was widely given, and a public hearing was held in the office of the Secretary on January 16, 1905, at which nearly all the maritime interests of the country were represented. After this hearing nearly two months additional were devoted to these rules, both by the Board and by various officials of the Department, with the aid of outside experts on technical subjects, and as a result an entirely new body of rules and regulations was passed by the Board and approved by the Secretary March 11, 1905, and has since been in operation. Considering the wide scope of these rules, and their important commercial bearing upon steamboat interests, the fact that but two or three substantial objections have been raised to them since that time by maritime interests, shows the care and efficiency with which the work was done. These objections were considered in July, 1905, by a meeting of the executive committee, and it is believed they have been met to the satisfaction of all parties.

SPECIAL REINSPECTION OF STEAMERS.

As a further measure of safety, and with a view also to determining the general condition of the Service, the reinspection of steamers, with the aid of officers detailed from the Navy Department, was completed,

and showed in detail the conditions in all the more important districts. A further inspection, ordered in September, 1905, and made by the Service itself, showed a great improvement in the condition of vessels generally, and indicated that the work of the Service, with few exceptions, is careful and efficient. It is also pleasing to note that there is a general cooperation with the Service on the part of the great majority of steamboat owners in maintaining vessels and equipment at the desired standard.

RECIPROCAL INTERNATIONAL INSPECTION.

In pursuance of the provisions of section 4400, Revised Statutes, arrangements have been entered into providing for the reciprocal exemption from inspection in proper cases of vessels of the United States and Great Britain, and also the United States and the Dominion of Canada, thus doing away with a useless duplication of inspection, and removing an element of considerable hardship bearing upon important steamboat interests.

BUREAU OF FISHERIES.

The primary objects of the Bureau are to maintain and increase the supply of economic aquatic animals, to develop the methods of taking and utilizing them, to determine the extent of the commercial fisheries, and to study the economic aspects of the industry. The phase of the work which has always been considered most important is the artificial propagation and distribution of food fishes and the investigation of related biological problems, and the report of the Commissioner of Fisheries shows that the work of hatching and distributing food fishes in 1905 was carried on more extensively than ever before, owing to the operation of additional stations, to increased efficiency of methods, and to unusually favorable seasonal conditions at certain stations.

FISH PROPAGATION.

The aggregate output of fishes (including lobsters) was 1,759,475,000, of which about 98 per cent represented commercial species of great importance. From the three marine hatcheries on the New England coast upward of 500,000,000 cod, pollock, flounders, and lobsters were liberated. The river fishes of the Atlantic slope were hatched at six stations, the output of which was over 205,000,000, chiefly shad, salmon, yellow perch, white perch, and striped bass. The season for shad was very poor, owing to peculiar weather conditions, and the take of eggs was much below the average. On the Great Lakes four hatcheries and four subhatcheries were operated for whitefish, lake trout, and pike perch, of which 893,000,000 were distributed.

The cultivation of the fresh-water fishes of the interior streams and lakes was conducted at 17 stations and 3 auxiliary stations, the out-

put of which exceeded 23,000,000 rainbow trout, brook trout, black-spotted trout, and other trouts, landlocked salmon, grayling, black basses, crappies, and other indigenous species, a large percentage of which were reared to the fingerling and yearling size. The 3 hatcheries and 9 subhatcheries on the Pacific coast, which are conducted exclusively in the interests of the salmon fishery, have accomplished very important work, more especially on the Sacramento River, all previous records being broken in the distribution of over 137,000,000 salmon.

ALASKAN SALMON HATCHERY.

An act approved March 3, 1905, appropriated funds to establish one or more hatcheries in Alaska, and steps were promptly taken to carry the law into effect, so that actual hatching might begin during the calendar year 1905. The site selected was in a tributary of Yes Bay, in the southeast part of the Territory, as recommended by the special salmon commission. In order to facilitate the work, the steamer *Albatross* was detailed to assist, and the construction of the first Alaskan hatchery under Government control is now well under way. The hatchery as planned will have a capacity for 25,000,000 salmon eggs. ✓

FISH LIFE AND IRRIGATION OPERATIONS.

It is important that adequate steps be taken to prevent the destruction of fish life through failure to provide gates which will prevent fish from passing from the streams and reservoirs into the irrigation ditches of the West. In some States the loss of food and game fish from this cause has already become serious. In the event of the failure of the States interested to meet the condition properly, a Federal law may be advisable to apply to all waters for the utilization of which the Government has given aid.

INVESTIGATIONS.

Biological inquiries and experiments pertaining to useful and commercially important water animals have been conducted in all parts of the country. The oyster, the most valuable fishery product, the hard-shell clam, the green turtle, and the diamond-back terrapin have received much attention, with special reference to cultivation; the experiments in the raising of bath sponges from cuttings have progressed satisfactorily; the habits, food, spawning, abundance, etc., of various important food fishes have been studied, and the aquatic resources of a number of definite areas have been systematically investigated. At the biological laboratories at Woods Hole, Mass., and Beaufort, N. C., studies of the local marine faunas have been continued and results of immediate or prospective value have been secured.

In October the steamer *Albatross* was dispatched on an important scientific expedition to the eastern Pacific Ocean under the direction

of Mr. Alexander Agassiz. The cruise continued for six months, and extended from San Francisco to the Galapagos Archipelago, Easter Island, and the Gambier Islands. In addition to the very extensive and valuable collections of deep-sea, intermediate, and surface animals, valuable data relative to the physics and chemistry of the ocean were secured.

Statistical canvasses and investigations of the fisheries of the Great Lakes, the Lake of the Woods, and the Mississippi River and tributaries were completed, and similar canvasses of the fisheries of the Middle Atlantic and Pacific States were in progress at the close of the year. The return of the important offshore vessel fisheries centering at Boston and Gloucester, Mass., has been published in special monthly bulletins.

INTERNATIONAL CONGRESS OF FISHERIES.

At the Fourth International Congress of Fisheries, held in Vienna, Austria, in June, 1905, the Department was represented by the Deputy Commissioner of Fisheries. An official invitation for the congress to hold its next session in Washington was accepted, and the time of meeting selected was September, 1908.

ALASKAN SALMON FISHERIES.

Statistics of the Alaska salmon pack for the season of 1905 show that the business has been generally prosperous. Considering the fact that the number of canneries in operation was 10 less than in 1904 the product in 1905 was comparatively, though not actually, larger. On a close estimate (full reports not yet having been received) the output was 1,917,250 cases, against 2,012,928 cases in 1904—a decrease of 95,678 cases. Had all the plants been operated this year, the season's pack undoubtedly would have exceeded that of 1904 by not less than 150,000 cases. The pack of the world (including salted salmon) will probably be about 4,292,250 cases, against 3,286,259 in 1904—a gain of 1,005,991 cases.

It is agreed by all experts that in order to maintain existing resources artificial propagation of salmon on an extensive scale is imperative. Since my last report a Government hatchery has been installed and hatching has already begun. Next year the output of this plant should add materially to the production of salmon fry by private parties, which this year will aggregate about 110,000,000. Nevertheless, the fry hatched will still be far short of the number required to adequately reinforce nature. It is desirable that the Government should considerably augment its efforts in this direction by establishing additional hatcheries.

Under the act of March 3, 1899, a tax of 4 cents per case is levied and collected on canned salmon and a tax of 10 cents per barrel on

salted salmon. The total revenue (not including that of the current year) has been \$429,781.52, while the expense to the Government during the same period for enforcement of the law for the protection of these fisheries has not exceeded \$35,000. Whatever the Government may do in the line of artificial propagation, it is desirable that persons engaged in the business of salmon packing in Alaska be encouraged to build and maintain hatcheries. To accomplish this it is probable that a rebate from this tax, based upon a proper ratio of the annual pack to the fry liberated by persons maintaining hatcheries, would afford the most satisfactory method of dealing with the question. Such private hatcheries should be under the supervision of this Department, which should have power to make all necessary rules for their conduct.

The enforcement of the law for the protection of the Alaskan salmon fisheries has been thorough, and the situation in this regard probably could not be improved upon except by the recommended changes in the law.

ENCROACHMENT OF JAPANESE FISHERMEN.

During the early spring American interests engaged in the Alaskan fisheries petitioned the Department to take steps to prevent the encroachment of Japanese fishermen on the salmon fisheries of Alaska. In the absence of a law prohibiting aliens from fishing in Alaskan waters, the Department could do no more than investigate the situation. Instructions to this effect were accordingly issued to the special agents of this Department and, through the Treasury Department, to the officers of the Revenue-Cutter Service.

Acting under these instructions Capt. W. H. Roberts, commanding the revenue cutter *Perry*, proceeded to Attu Island, the farthest island of the Aleutian group, where, on June 27, 1905, he discovered four Japanese schooners conducting extensive fishing operations. The vessels carried substantial crews, were equipped with all necessary apparatus for catching, cleaning, and salting fish, and when discovered had taken about 7,500 salmon. They had observed no customs regulations, were clearly trespassers, and left Saranna Bay within twenty-four hours after the arrival of the revenue cutter. The reports received by the Department from its special agents also show that during the season three other Japanese schooners entered regularly at Juneau, Alaska. This latter expedition did not attempt to conduct fishing operations, but bought from American fishermen.

While the extent of the operations of alien fishermen has not thus far assumed a formidable or dangerous aspect, the situation is nevertheless one which requires immediate attention. The catching, curing, and canning of salmon is an American industry of great promise. It is estimated that the value of property invested in this business is \$30,000,000, that the number of employees is 28,000, and that the

value of the annual product is \$20,000,000. If the Japanese are permitted to take salmon in Alaskan waters, they will not purchase from American fishermen, and the sale of this commodity to Japanese, which in 1904 amounted to 3,461,194 pounds, valued at \$96,265, will decrease or stop altogether.

In view of the fact that there are estimated to be nearly 900,000 Japanese families engaged in fishing; that Attu island, where the Japanese expeditions were discovered, is upward of 900 miles nearer to Tokyo than it is to San Francisco; and that salted salmon is a favored food among the Japanese, it is feared that Japanese fishermen will swarm into Alaskan waters in large numbers unless some preventive action is immediately taken by this Government.

To the end that the foreign demand for Alaskan fisheries products may be supplied by American fishermen, I recommend the enactment of a law which will absolutely prohibit aliens from fishing in Alaskan waters. The administration of this law should be vested in the Secretary of Commerce and Labor, who should be empowered to make and enforce such rules and regulations as may be necessary to carry it into effect.

ALASKAN FUR-SEAL SERVICE.

The agents of this Department charged with the management of the seal fisheries properly enforced, during the past year, the regulations of the Department designed to exempt from slaughter enough young male seals to provide an adequate supply of male adults for breeding purposes. The extent of the diminution in seal life during the past year, and the causes thereof, were given careful study. The welfare of the native inhabitants on the islands received constant attention, as did also matters in general in which the interest of the Government was involved.

SKINS TAKEN IN 1905.

The North American Commercial Company, the lessee of the sealing right on the Pribilof Islands, shipped from the islands during the fiscal year ended June 30, 1905, 14,368 fur-seal skins, of which 13,000 were taken on St. Paul and 1,368 on St. George. Contrasted with 1904, when 13,128 skins were taken, the catch of 1905 shows an increase of 1,240 skins. This increase is attributable to the regulations enforced by this Department in 1904, exempting from killing in that year a large number of young males regarded as being too small to furnish skins of a given weight. These exempted seals, returning to the islands in 1905, augmented the catch, as already noted.

SEALS RESERVED FOR BREEDING.

In view of the decrease in breeding seals, which has been constant for years, there were selected in 1905 for breeding purposes 2,174

choice young male seals. In addition, 7,625 young male seals appearing in the killing drives were dismissed as being ineligible for killing under the Department's regulations.

PELAGIC SEALING.

The decrease in seal life on the Pribilof Islands is directly attributable to pelagic sealing, and a strong effort should be made to secure international regulations which will stop it. The especial fatality involved in this practice consists in the killing of mother seals at sea. Those killed in Bering Sea, in addition to being pregnant, have also a nursing pup on shore, which, on the death of its mother, dies from starvation. In addition to this, 50 per cent of all seals killed at sea sink and are not recoverable. For these reasons the skin of every mother seal secured by the pelagic sealers represents the destruction of at least four lives from the herd.

Due largely to this wanton destruction of seal life the herd on the Pribilof Islands has been reduced from approximately 2,000,000 animals in 1885 to about 200,000 in 1905. The Government's financial interest in this matter lies in the fact that each seal skin taken on these islands produces a revenue of \$10.22½. The ravages of the pelagic sealers have reduced the number of skins taken from 100,000 in 1885 to 14,368 during the present season.

While the reports for the present year are incomplete, and will doubtless be augmented by later returns, they are nevertheless sufficient to give an approximate idea of the extent of the operations of the pelagic sealers. These incomplete returns show that during the season of 1905 the British Columbian sealing fleet took 2,779 seals from the Pribilof herd on the northwest coast and 8,634 in Bering Sea. The coast catch from the same herd by British Columbian Indians amounted to 792.

A vessel under Mexican registry, called the *Acapulco*, spent the summer in taking seals from waters in close proximity to the Pribilof Islands. It is reported that the master and owners of this craft are citizens of the United States.

With the exception of one vessel, which took 399 seals on the northwest coast of America, the Japanese appear to have confined their operations in 1905 to the Russian Commander herd. A Japanese fleet consisting of 30 vessels took 11,007 seals and 172 sea otter. The Canadian fleet took 1,972 seals from the same herd.

CATCH OF FOXES.

The feeding of foxes on the Pribilof Islands in an effort to domesticate them has continued during the past year under the supervision of the agents of the lessee. The taking of the foxes for their pelts is permitted under proper restrictions, the catch last winter amounting

to 258 blue fox skins and 10 white fox skins on St. George Island, 1 white fox skin on St. Paul Island, and 31 blue fox skins and 2 white fox skins on Otter Island. In 1894 all the foxes on Otter Island, some 15 in number, were killed, after which year no trapping took place on the island until 1905. In the interval between those years enough foxes reached the island on the northern drift ice to allow the catch noted above.

The catch of foxes on St. George Island in 1905 shows a decrease of 213 blue skins and 5 white skins from that of the previous year. Efforts have been made by the agents of this Department, by the careful selection of the best animals for breeders and an insistence upon an adequate supply of fox food to be furnished by the lessee, to produce an enlarged birth rate and a lessening of the death rate among breeders.

BUREAU OF NAVIGATION.

The total documented shipping of the United States on June 30, 1905, consisted of 24,681 vessels of all descriptions, aggregating 6,456,543 gross tons, the largest tonnage in our history. The total increase during the year, 165,008 gross tons, is less than the annual increase for any year since 1899, and the tonnage built, 330,316 gross tons, is only about 75 per cent of the average annual construction since 1900. The prospect for the current year is encouraging. On July 1 nearly 200,000 tons of steel vessels were under contract or construction, while on the corresponding date last year less than 100,000 tons were building or had been ordered. The first quarter's output is double that for the first quarter last year. Only 1,300,000 gross tons of steel merchant shipping were on British ways on June 30 last.

The most satisfactory phase of the year's returns is the increase in tonnage for the foreign trade from 898,768 gross tons on June 30, 1904, to 954,513 gross tons on the same date this year. On this increase is based the increase of foreign trade carried in American bottoms from 11.3 per cent in 1904 to 12.1 per cent in 1905, the largest percentage since 1894.

The attention of Congress is especially invited to the small percentage of our exports and imports carried in American bottoms, as also to the proportionately small share of the passenger traffic on the Atlantic carried on in American ocean steamers. Collectors of customs at the principal seaports named in the following statement report that during the past fiscal year 240 ocean steamers, mainly of the highest power, greatest dimensions, and most modern construction, were engaged in the transportation of passengers to the United States under the passenger act of 1882. These vessels carry steerage passengers and are of the types which maritime powers rely upon in case of war as auxiliaries to their navies. Of this number only 30 carry the American flag. That number, it should be recalled, comprises

nearly all the vessels of the United States available as a second line of defense, while all the foreign nations referred to have passenger steamship lines running to other countries, and are further augmenting their maritime strength, naval as well as commercial. Only 6 out of 215 trans-Atlantic passenger steamers carry the colors of the United States. On the Pacific coast, due to our expansion in the East, the disproportion is not so great. Twenty-four out of 49 passenger steamers to the Orient were American, and the majority of these are better in most respects than their foreign competitors. The foreign proportion will, however, increase rapidly with the cessation of the war between Japan and Russia.

The following table shows in detail the facts above outlined:

Port and steamship line.	Flag.	Steamers.	Voyages.
New York, N. Y.:			
American	American	4	45
Red Star	do	2	25
Cunard	British	12	94
Anchor	do	10	67
White Star	do	9	77
Allan	do	7	23
Lamport & Holt	do	5	15
Other British	do	6	34
North German Lloyd	German	28	105
Hamburg American	do	20	89
Other German	do	3	4
Compagnie Générale Trans-Atlantique	French	10	58
Cyprien Fabre	do	4	22
Navigazione Generale Italiana	Italian	7	29
La Veloce	do	6	27
Other Italian	do	4	10
Compañía Trasatlántica	Spanish	6	12
Holland Amerika	Dutch	6	45
Unione	Austrian	6	17
Union	Danish	6	37
Red Star	Belgian	3	14
Miscellaneous .....	.....	3	8
Total		167	852
San Francisco, Cal.:			
Pacific Mail Steamship	American	16	.....
Oceanic	do	4	.....
Kosmos	German	13	.....
North German Lloyd	do	3	.....
Hamburg American	do	3	.....
White Star	British	3	.....
Toyo Kaisen	Japanese	1	.....
Total		43	.....
Boston, Mass.:			
White Star	British	6	.....
Allan	do	7	.....
Cunard	do	2	.....
Total		15	.....
Baltimore, Md.: North German Lloyd	German	17	52

Port and steamship line.	Flag.	Steamers.	Voyages.
Philadelphia, Pa.:			
Allan	British	5	
Red Star	do	2	
Red Star	Belgian	6	
Total		13	
Portland, Me.:			
British and North America	British	4	16
Other British	do	3	6
Total		7	22
Port Townsend, Wash.:			
North Pacific Railroad connections	American	4	11
Nippon Yusen Kaisha	Japanese	2	8
Total		6	19
New Orleans, La.: Navigazione Generale Italiana	Italian	2	

SUMMARY.

Flag.	Steamers.	Voyages.	Flag.	Steamers.	Voyages.
American	30	81	Danish	6	37
British	81	332	Austrian	6	17
German	87	250	Spanish	6	12
French	14	80	Japanese	3	8
Italian	19	66	Miscellaneous	3	3
Belgian	9	14	Total	270	1945
Dutch	6	45			

a Incomplete.

The total number of seamen shipped and discharged on American vessels (including repeated shipments) before shipping commissioners was 218,031. Of the seamen shipped 37,098 were native Americans, 22,511 naturalized Americans, and 61,026 were foreigners. The shipping commissioners' service was maintained at a cost of \$59,282.67, plus an expenditure well within the appropriation of \$7,000 for rent and equipment of offices. The precise amount can not be stated, as all outstanding claims have not been settled.

When the revised international rules for preventing collisions at sea were promulgated by the President on December 31, 1896, article 9, relating to lights, etc., on fishing vessels, was held for further consideration by the maritime powers. The matter has been under consideration for some years, and in September the British Government submitted a draft of an article covering the subject and completing the revised international rules. The Department is engaged in ascertaining the sentiment of the maritime interests of the country upon the proposed new rule. If it prove favorable, a bill embodying the rule will be transmitted to Congress, and the work undertaken by the

Washington International Marine Conference of 1889 will have been completed.

The revised Canadian rules for preventing collisions of vessels on the Great Lakes and connecting and tributary waters as far east as Montreal went into effect last April. These rules are substantially the same as the American rules approved February 8, 1895, for the same waters. The desirability of uniform American and Canadian rules for the Great Lakes and the St. Lawrence to the head of ocean navigation is manifest. To further the interests of international uniformity in maritime legal conditions, a conference, at which the United States was represented, met in October at Brussels to consider especially the division of damages in cases of collision, and salvage. The report of the conference has not yet been received.

The many laws imposing fines, penalties, and forfeitures for violations of the navigation laws and laws relating to vessels, their owners, crews, etc., could with advantage be revised. These laws, it should be recalled, begin with the earliest and end with the latest acts of Congress. Covering over one hundred years and passed under varying conditions, they carry penalties often quite disproportionate to the gravity of offenses and inconsistent with one another. Thus, for example, with modern means of cable communication and the thoroughness of modern quarantine inspection, the penalty of \$5,000 for failure to produce duplicate consular bills of health is concededly excessive. Congress, to be sure, has already provided a remedy for injustice by empowering the Secretary of Commerce and Labor to mitigate or remit these penalties, but a more equitable adjustment of punishment for violations of the statutes is deemed desirable. The report of the Commissioner of Navigation gives details of fines, penalties, and forfeitures considered by the Department during the past fiscal year.

The annual message of the President transmitted to Congress on December 7, 1903, recommended the establishment of a Commission, comprising the Secretary of the Navy, the Postmaster-General, and the Secretary of Commerce and Labor, associated with a proper representation from the Senate and the House of Representatives, to investigate and report upon the legislative needs of the American merchant marine. Congress, however, deemed it wise to omit the three executive officers from the Commission, and the bill reported by the Commission and subsequently by the appropriate committees of Congress was not referred to this Department. The Department stands ready, however, to furnish all the information at its command. The report of the Commissioner of Navigation necessarily contains, as usual, information bearing upon some phases of the subject. Pursuant to statute, it also contains recommendations for changes in the laws relative to navigation, to which attention is invited.

BUREAU OF IMMIGRATION.

The number of aliens who applied for admission during the year—1,026,499—is in excess by 237,507 of the number reported for 1882, the arrivals during which year were in excess of those during any year prior to 1903, and 213,629 in excess of the arrivals in 1904. With respect to the sources from which these immigrants are derived, it is interesting to note that, compared with the corresponding figures for the last year, the quota from Russia increased by 39,756; from Italy 28,183, and from the United Kingdom 49,544. This and much other information of practical value upon the subject of alien immigration is shown in the annual report of the Commissioner-General of Immigration, to which attention is directed.

The important feature is that more than a million aliens have been added to our population in the course of twelve months, a fact that suggests the necessity of considering whether some adequate measure should not be adopted so to limit the number of arrivals as to lessen the obvious dangers from our alien population increasing more rapidly than it can be assimilated. Various suggestions have been made with this end in view, but there is none which promises so effectively to control the actual number of arrivals as the suggestion of the Commissioner-General that the number brought on any vessel should be limited so as to bear a fixed ratio to the tonnage of such vessel. Such a plan would furthermore have the additional advantage that it would remove the temptation to bring aliens of whose admissibility there could be any question, as well as avoid the unsanitary conditions resulting from overcrowding in the steerage.

Of the total arrivals, it is shown that 175,624 had resided in the United States before, thus indicating a net increase in our population of about 850,000, a number which is further reduced by the 11,480 persons rejected during the year. These figures, however, are not entirely reliable, because the only information as to the former residence of aliens in this country is that given by the aliens themselves. The actual annual increase from immigration is a matter of such importance as to justify legislation requiring the transportation lines to furnish complete manifests of aliens departing from the United States on their vessels.

Those denied admission, 11,480, represent only about 1 per cent of the total. That they do not represent all, however, who should be refused admission is clear from the fact that many of those admitted in previous years have become public charges or have been found to be here in violation of law after admission. Of such, 845 were discovered during the year, and after a hearing as to their right to be in the United States were deported. Many are not discovered, and many who are not within the excluding provisions of the law are neverthe-

less a detriment to the United States. Among these may be reckoned the large number of children, whose parents have been left behind, who seek admission, professedly to go to school.

These children are in many instances, it has been learned, brought here under the padrone system to be used as hootblacks and in other capacities for the profit of those who deal in child labor. In view of this condition, it is urged that there be added to the classes of aliens now excluded from admission to the United States all children under 17 years of age unaccompanied by their parents, unless coming to join parents already resident in this country who are able to support them.

I desire also to urge upon Congress, as recommended by the Commissioner-General, the necessity of locating at foreign ports of embarkation, medical and immigrant inspectors as a means of preventing the departure for the United States of those who are excluded by law. Such an arrangement promises a more effective enforcement of the law, since it establishes officers of this Government nearer to the sources of information, by which means diseased or mentally unsound aliens, and those who have been convicted of some moral offense, will be prevented from embarking for this country upon the chance of eluding the vigilance of inspection officers at our ports.

With respect to the present provision of law in regard to the aliens upon whose account the head tax is collectible, it is important that the law which existed from 1882 to 1903 be restored by repealing that provision in the last immigration act which exempted the transportation lines from the payment of head tax on aliens in transit. The effort to administer this feature of the law and at the same time prevent its evasion upon the pretense that aliens really intend to pass through the United States has been productive of much embarrassment, and is obviously of no benefit to the alien so exempted. Such transits during the year under consideration reached a total of 33,256, or 5,412 more than the preceding year.

There should also be an amendment placing aliens who have resided in foreign contiguous territory for more than one year upon the same footing as the citizens of such territory in regard to the payment of head tax, such residence being within the reason which it is understood occasioned the exemption of citizens, namely to avoid a restriction of intercourse with neighboring nations.

In addition to the foregoing changes in regard to the payment of the head tax, it is recommended that diplomatic officers of foreign countries coming to the United States across our land boundaries should not be subject to the collection of the head tax.

CHINESE EXCLUSION.

Of the exempt classes of Chinese applying for admission for the first time, 800 out of 1,084 were admitted and 284 deported during the

year; while of 618 applying for readmission as domiciled merchants, 548 were allowed to land and 70 were deported. During the same period all but 57 of 680 returning laborers were allowed to enter. There were also allowed to enter the United States during the year 634 Chinese persons who were found to be citizens of this country, having been born here. Thus the number of Chinese persons who entered the United States for the first time during the past year was 800. The total number of Chinese admitted to the United States during the past year was 2,605.

The agitation of the subject of Chinese exclusion during the past year suggests the necessity of a critical consideration of our laws. We can not expect to establish close commercial relations with a country against whose people alone we have an exclusion law, unless that law is so framed as to do no more than is necessary for the protection of the United States. It is assumed that the exclusion of those Chinese persons whose coming both China and the United States avowedly desire to prevent is a settled policy, but such policy should be so enforced as to endanger neither the commercial intercourse of the two countries nor the reputation of this Government for acting justly and in good faith.

China offers a fertile field for American products and American manufactures, but if the price to be paid for trade with China is the unrestricted immigration of Chinese of all classes, then, in the interest of American labor and American citizenship, we had better forego entirely that trade. I believe that there are amendments which can and properly should be made in the present laws—amendments which will in no wise weaken them, but will remove the injustice and hardship, apparent or actual, incident to their administration. One of the chief sources of such injustice has been the rejection, after arrival at our ports, of those Chinese persons possessed of certification of their right to enter, both from their own and our Government.

The denials were necessarily made because these persons, according to their own statements, had imposed upon the two Governments and secured certificates by misrepresentation. None the less it was a hardship, after so much expenditure and such a long journey, to be returned. To obviate this difficulty I have to urge, as has been recommended by the Commissioner-General also, that suitable provision be made for the issuance of certificates to persons of the exempt classes in China by agents of the Department of Commerce and Labor, and that the action of these agents be based solely upon the permission of the Chinese Government to each member of an exempt class desiring to go to the United States, leaving the agents to ascertain whether the person thus permitted is entitled to come to this country. Every Chinese person furnished with a certificate in the manner described above should be

admitted at once upon his arrival at a port of the United States simply upon being identified as the person to whom such certificate was issued.

In those foreign countries, other than China, in which Chinese of the exempt classes reside the permission should be granted by any Chinese consular officer, or, in the absence of such representative, by any consular officer of the United States, unless China has designated some person for that purpose in said country, and the certificate should be issued by United States consular or diplomatic officers. This recommendation is made because of the failure of China to designate, since the termination of the treaty of 1894, an officer in Guatemala to grant such permission. As a result of this a Chinese merchant located in that country, doing an annual business in cotton and silk goods of nearly \$300,000 gold, was unable to carry out his design of visiting the United States in person to make those purchases which heretofore he has made through commission houses. The obvious result of this condition is detrimental to the commercial interests of the United States.

There is another feature of the existing law, working unnecessary hardship and involving a large expenditure of money, that should be repealed. The Chinese laborer lawfully possessed of the certificate of residence should be allowed to visit his own country and return to the United States without other condition than his identification at the time of his return. He is now required to prove that he has unliquidated debts due him in this country to the amount of \$1,000, or property of like amount, or a wife, parent, or child resident here, in order to reenter after a temporary absence.

This absence is also limited to one year, unless in case of sickness or other unavoidable cause, and even in that event to two years. The result of this legislation is to prevent Chinese laborers from visiting their own homes—an unquestioned hardship and one, apparently, that has no justification, since it keeps such Chinese persons in the United States. There is, besides, the further consideration that the cost of making investigations of such claims is a very considerable item in the total expense of enforcing the Chinese exclusion laws.

There is still another recommendation of the Commissioner-General which is urged for the consideration of Congress as a means to rendering the exclusion policy less open to the charge of unnecessary severity. I believe that all Chinese in the United States at some recent, fixed date should be granted certificates of residence, so devised as to avoid the risk of counterfeiting, and that all Chinese persons found engaged after the period of such registration in any other occupation than such as may be lawfully pursued, if without such certificate, shall be deemed to be unlawfully in the United States, and shall be arrested and deported from this country upon Department warrant,

as is now done in the case of aliens found in the United States in violation of the immigration laws.

This measure would also largely reduce the cost of administering the law, as is shown by the fact that 1,402 Chinese persons were under arrest during the year, all of whom were charged for a greater or less length of time upon the appropriation for the maintenance of Federal prisoners, and who also occupied the time of the courts and the officers of justice, and 647 of whom were deported at an expense, simply for the cost of transportation, of about \$60,000.

It is impracticable to estimate, with any approximate exactness, the other costs, such as officers' salaries, expenses of attendance on trials, cost of arrest, and many other items which are incurred in the expulsion, under the present system, of each Chinese person found to be unlawfully in the United States. There is involved also, under the existing system, the imprisonment, for varying lengths of time, of Chinese persons charged with unlawful residence in the United States, since the law forbids their release on bail pending the execution of an order of deportation. This imprisonment, although purely for the purpose of preventing escape, is in effect a punishment, and one which has been the occasion of much resentment.

If the foregoing suggestions are adopted by Congress, I believe that the occasion for complaint of the hardships involved in enforcing the Chinese exclusion laws will be removed. I am convinced, likewise, that the law will be even more effective of its declared purpose, thus furnishing the best assurance of the reestablishment of those relations with China which are essential to that freedom of commercial intercourse so much to be desired, both for business considerations and upon grounds of international comity and good will.

The cost of administering the immigration law during the past year has been \$1,508,901.13, and there is now on hand a balance of \$1,841,044.53.

The cost of enforcing the Chinese exclusion law has been \$533,223.11, leaving a balance of \$66,776.89 on hand from the appropriation of \$600,000.

Inasmuch as the Chinese exclusion law is an immigration law, regulating the admission of Chinese aliens into the United States, and, furthermore, since said Chinese aliens are subjects for the head tax, it is submitted for the consideration of Congress whether it would not be wise to pay the cost of administering both laws from the immigrant fund, which showed the large, unexpended balance above stated at the close of the fiscal year.

BUREAU OF STANDARDS.

The work of the Bureau of Standards has greatly increased during the year, and the variety of the requests which have been received for the testing and standardizing of apparatus and the making of tests

for which the Bureau is prepared indicates an extending appreciation and use of the facilities afforded by the Bureau for this important work. During the year 16,644 standards and measuring instruments were tested, an increase of 115 per cent over the number of tests made during the previous fiscal year.

In January a conference on the subject of weights and measures, attended by the sealers of weights and measures of the various States, was held at the Bureau. Important results in the matter of securing uniform legislation on the subject of weights and measures are expected to come from this meeting, and it was arranged to hold a similar conference next year.

Two bulletins were issued during the year, containing papers on subjects connected with investigations, researches, and testing of the Bureau, and a compilation of "Laws Concerning the Weights and Measures of the United States" was issued for the use of the Bureau and for State and city officials having in charge matters pertaining to weights and measures.

The physical laboratory has been completed according to the original plans, enabling the Bureau to transfer its entire work permanently to its new quarters. The construction of the low temperature laboratory within which will be placed the facilities for testing low temperature apparatus is well under way. The appropriations for the improvement of the grounds have been only sufficient to construct temporarily the most necessary roads and to do a small amount of grading.

The instrument shop has been equipped in a modern and efficient manner and has been of great service to the work of the Bureau. Many problems and tests undertaken require special apparatus which can not be bought in the open market, and such apparatus can be constructed better and more cheaply under the personal supervision of the experts who have planned it and who will superintend its use.

WEIGHTS AND MEASURES.

The precision balances of the Bureau have been mounted. The new 25-kilogram balance is about fifty times as sensitive as the old balance formerly used by the office of weights and measures. Secondary standards of mass are being established and more rigid specifications in regard to weights submitted for test have been prepared, which it is expected will result in an improvement in the quality of weights submitted. An accurate comparator for intercomparing line and end standards has been constructed in the instrument shop of the Bureau according to designs prepared by the Bureau. The length comparators in the tunnel are being installed. These will be used for testing engineers' tapes and precision tapes used in geodetic work.

Methods have been perfected for accurate and rapid testing of volumetric apparatus, and considerable testing has been done for the

public and Government service. Preparations for the work of testing time-measuring apparatus have been carried forward during the year. The standard Riefler clock has been temporarily mounted and tested by noon signals received from the Washington Navy-Yard by wireless telegraphy.

HEAT AND THERMOMETRY.

The work in the section on thermometry and pyrometry carried on during the year included the testing of thermometers of all kinds, various forms of pyrometers for the measurement of high temperatures, and the determination of the calorific values of fuels. During the year over 13,000 thermometers of various kinds were tested, including laboratory standards, deep-sea and clinical thermometers, industrial thermometers of various types, and the standards used by manufacturers. A number of thermometric, radiation, and expansion pyrometers were tested for the metallurgical and ceramic industries.

LIGHT AND OPTICAL INSTRUMENTS.

The completion of the new laboratory made it possible for several important optical problems to be taken up and some testing has been done in connection with polariscopic apparatus and standards. The spectroscopic work has been confined chiefly to determining the laws and conditions governing pure spectra with a view to their application in spectroscopic methods, and the determination of standard wave lengths and their use in optical methods of measurements.

The work in polarimetry has included the examination of methods and apparatus used in the polariscopic analysis of sugar. During the year precision polarizing apparatus has been designed and built in the Bureau's instrument shop. An accurate quartz compensation polariscope has been assembled and a number of quartz control plates have been secured for use as primary standards. A large amount of sugar testing has been done for the Treasury Department, the principal ports sending samples of imported sugars daily to the Bureau, and the results of the tests are forwarded to the Secretary of the Treasury to check the accuracy of each day's work at these ports. The Bureau is cooperating with the Treasury Department in establishing improved methods of polariscopic analysis of sugar.

TESTING OF MATERIALS AND ENGINEERING INSTRUMENTS.

There has been an increasing demand for tests of materials and miscellaneous engineering instruments, and it is important that the facilities for this work be increased. The tests made during the past year include different types of water meters, speed indicators, a paper tester, wire cable, mucilages, and cements.

ELECTRICAL WORK.

The electrical work of the Bureau is divided into five principal groups or sections. The first has to do with resistance and electromotive force, the second with magnetism, the third with inductance and capacity, the fourth with a wide range of electrical measuring instruments, and the fifth with photometry. The establishment of the electrical work in the new quarters has enabled the Bureau to begin several investigations relating to fundamental electrical units and standards. This is especially important in view of the coming International Electrical Congress at which the Bureau will be expected to contribute the results of its work.

The work of the first section of the electrical division includes the construction and verification of standards of resistance and of electromotive force and testing of all kinds of precision apparatus for measuring these quantities. The second section is devoted to magnetic measurements, the testing of magnetic materials and instruments, and to researches on the absolute measurement of electric current. The third section is concerned with the measurement of inductance and capacity, the testing of instruments and standards, the investigation of methods of measurement, and the determination of some of the fundamental electrical units.

The fourth section tests a variety of electrical measuring instruments used both in scientific laboratories and in commercial work for the measurement of current, voltage, and power for both direct and alternating currents. The fifth section, photometry, includes the testing of standard lamps for other laboratories and the testing of lamps supplied by manufacturers to various Departments of the Government. Much time during the past year has been devoted to the investigation and development of new photometric apparatus and to an experimental study of important practical questions in photometry.

CHEMICAL WORK.

The chemical laboratories in the new building were not equipped for use until March, 1905. In addition to the planning and installation of the permanent equipment of the laboratories, work has been undertaken upon standards of purity for chemical reagents, upon standard methods of technical analysis, and in the preparation of standard samples of iron and steel for the use of chemists in industrial laboratories. At the request of this Department and of other Departments of the Government, a number of substances have been examined physically and chemically with a view to determining standards and standard specifications to be employed in the purchase of Government supplies.

SPECIAL AGENTS TO INVESTIGATE TRADE CONDITIONS ABROAD.

The act of February 3, 1905, making appropriations for the legislative, executive, and judicial expenses of the Government appropriated \$30,000 for the investigation by special agents of trade conditions abroad, with the object of promoting the foreign commerce of the United States. In accordance with that act four agents were appointed and assigned, one to South America, one to Canada and Mexico, one to Japan, and one to China. These agents have forwarded reports to the Department, which have been published in the Daily and Monthly Consular and Trade Reports. These reports, together with conclusions and recommendations, will be presented to Congress in due time.

BUILDING FOR THE DEPARTMENT.

While I do not at this time press the question of erecting a suitable building for the Department, it seems to me imperative that Congress should at once authorize the leasing, for a term of years, of a building large enough to accommodate the various bureaus and offices of the Department now occupying rented buildings. The locations of these buildings and the amounts appropriated for rentals for the fiscal year 1905-6 are shown by the following table:

Location.	Occupied by—	Annual rental.
Willard Building, 513-515 Fourteenth street NW..	Department (main building)	\$11,830.00
Emery Building, northwest corner First and B streets NW.	Bureau of the Census	21,000.00
204 and 206 Fourteenth street NW	Bureau of the Census (storage purposes)	1,080.00
National Safe Deposit Building, corner New York avenue and Fifteenth street NW.	Bureau of Labor.....	6,750.00
Do	Bureau of Labor (rooms for storage)...	750.00
Builders' Exchange Building, 719-721 Thirteenth street NW. (in part).	Light-House Board, Steamboat-Inspection Service, and Bureau of Navigation.	7,600.00
Adams Building, 1333-1335 F street NW. (in part)	Bureau of Statistics	4,039.80
1137-1139 Seventeenth street NW	Department (stables)	1,200.00
Total.....		54,249.80

It will be seen from the foregoing statement that the buildings now occupied by the Department are about $1\frac{1}{2}$ miles apart east and west, and about one-third of a mile apart north and south. The delay, inconvenience, and expense incident to the transaction of daily business by so scattered an organization are self-evident.

The rent of a building large enough to accommodate these bureaus and offices would, in my judgment, be at least \$100,000 a year. But the assembling of the bureaus and offices of the Department under one roof would result in a saving in the cost of administration on a very conservative estimate of at least \$66,000 a year, thus more than compensating for the increased rental. This

saving would result from a reduction in the clerical force, made possible by consolidation of the libraries and the disbursing and appointment work of outlying bureaus and offices, from a reduction in the sub-clerical force, including watchmen, engineers, charwomen, laborers, elevator conductors, mechanics, and the like, and through economy of time and service and a saving in fuel, electric lights and power, printing, horses, wagons, and telephones.

V. H. METCALF,
Secretary.

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