BUREAU OF THE CENSUS

## REPORT OF THE DIRECTOR

TO THE SECRETARY OF COMMERCE AND LABOR



Concerning the Operations of the Bureau for the Year 1904-5

**WASHINGTON: 1905** 

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#### REPORT

OF THE

#### DIRECTOR OF THE CENSUS

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Washington, October 16, 1905.

SIR: I have the honor to submit the following report upon the operations of the Bureau of the Census for the fiscal year 1904–5, and down to the present date, covering the second year of the office under the supervision of the Department of Commerce and Labor, and the third year of its existence as a permanent bureau under the act of March 6, 1902.

#### EXPENDITURES DURING THE FISCAL YEAR.

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Attached to this report as an appendix will be found the financial statement of Mr. John W. Langley, disbursing officer, showing in detail the expenditures of the Bureau during the last fiscal year. The total amount disbursed was \$1,591,353.06. Included in this sum are the expenses incident to tabulating and compiling the census of the Philippine Islands. Much of the expenditure for this work was made from the unexpended balance of the Twelfth Census appropriation, reappropriated by Congress for that purpose, but a considerable part of the work was performed by the regular force of the Bureau and paid for out of the current appropriations. Also, the cost of printing and binding the Philippine Census volumes was defrayed out of the Bureau's allotment under the appropriation, "Public printing and binding."

The appropriations for the fiscal year 1905-6 are \$1,605,340, including \$150,000 for printing. This also includes the sum of \$125,000 appropriated in the general deficiency act of 1905, to enable the Bureau to carry out the requirements of public resolution 16, calling for semimonthly reports of the amount of cotton ginned, in lieu of the monthly reports heretofore made. The estimates submitted for the fiscal year 1906-7, including \$135,000 for printing, call for appropriations aggregating \$1,353,520, a decrease of \$251,820 as compared with the amount appropriated for the current year.

#### COMPARISON OF COST FOR SEVERAL CENSUSES.

The total appropriations for the Census from its organization down to July 1, 1905, have been as follows:

Fiscal	nses of the Twelfth Census, 1899–1903 year 1903–4	1,176,460
Fiscal	year 1904-5	1,424,260
	Total	16, 116, 930

This total is fairly comparable with the appropriations made for the Tenth and Eleventh censuses, inasmuch as the reports upon which the Bureau has been engaged since it was made a permanent office on July 1, 1902, have been largely the same as those made by the previous censuses within the original and supplementary appropriations, work under which continued, at the Tenth Census, down to the year 1888, and, at the Eleventh Census, down to the year 1897, in both instances beyond the date covered by the above statement for the Twelfth Census. Several important special reports included in the work of the Tenth and Eleventh censuses have not yet been taken up by the permanent Bureau. The total cost of the "special reports" of the Eleventh Census was \$2,265,472.28, as compared with the \$2,600,720, appropriated for the permanent office. In the Eleventh Census for one investigation alone—that of farms, homes, and mortgages—among those omitted from the Twelfth Census and the permanent Census act, the cost of compilation was \$1,330,000. There were other investigations, both at the Tenth and Eleventh censuses, which have not been authorized or undertaken since. On the other hand, the permanent Census has compiled the Philippine Census, the annual cotton reports, the annual mortality reports, certain minor reports assigned to the Bureau by order of the Secretary, and is now engaged upon the quinquennial census of manufactures; the cost of all this additional work may be roughly stated as equivalent to that of the farms, homes, and mortgages report referred to. No injustice is done, therefore, if a comparison of costs is made on the basis suggested. This comparison shows the following results:

Census year.	Total cost.	Increase of cost over previous census (per cent).	Population enumerated.	Cost per capita.
	[5,790,678.40]	73. 71 69. 25 99. 40 39. 57	38, 558, 371 50, 429, 345 62, 979, 766 76, 149, 386	\$0.0887 0.1148 0.1833 0.2116

It appears that there has been a progressive increase in the cost of the census, whether measured by total appropriations or by per capita cost, altogether out of proportion to the increase in the population

and resources of the country. The greater accuracy attained in the enumeration at the later censuses, due to closer supervision, accounts for much of the increased cost, and the results undoubtedly justify this increase. When allowance is made for this factor, there still remains a large increase in the cost for which no adequate explanation appears on the face. The cost of future censuses can not continue to practically double from decade to decade without compelling serious criticism. I have therefore undertaken a careful analysis and study of the several items of cost at each of the last three censuses, with a view to determining the points at which retrenchment and economy can be applied. If, as a result of this investigation, the cost of taking the Thirteenth Census can be kept below the expenditures of the Twelfth Census, as I now believe it can, the establishment of a permanent Census office will have been abundantly justified by that result

The tendency has been, at each census since the introduction of mechanical tabulating methods, to carry the analysis of the data to much greater refinement, thus rapidly multiplying the costs of tabulation. The mere matter of bulk, with the rapid growth of the country, has become an important consideration; and the time seems to have arrived when, in planning the next decennial census, the aim must be to reduce rather than to extend the minutiae of detail presented. The study of this branch of the work has also been undertaken in connection with the investigation of costs.

#### PUBLICATIONS OF THE BUREAU DURING THE YEAR.

The work of the Bureau of the Census during the year is represented by reports published, reports completed and awaiting publication, and reports upon which the work of compilation is still in progress. The actual publications of the year are as follows:

#### VOLUMES.

Street and Electric Railways. Mines and Quarries. Central Electric Light and Power Stations. Census of the Philippines-4 volumes: Vol. I.—Geography, History, and Population.

Vol. II.—Population.

Vol. III.—Mortality, Defective Classes, Education, and Families and Dwellings.

Vol. IV.—Agriculture, and Social and Industrial Statistics.

#### BULLETINS.

	Numper.
A Discussion of Age Statistics	. 13
Proportion of the Sexes in the United States	
Irrigation in the United States: 1902	
Telephones and Telegraphs: 1902	

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	Number.
Census of Manufactures: 1904. Michigan	. 18
Quantity of Cotton Ginned in the United States (crops of 1900 to 1904, inclu	-
síve)	
Statistics of Cities having a Population of over 25,000: 1902 and 1903	
Commercial Valuation of Railway Operating Property in the United States	:
1904.	. 21.
Proportion of Children in the United States	. 22
Census Statistics of Teachers	. 23
Insular and Municipal Finances in Porto Rico, for the Fiscal Year 1902-3	
American Cotton Supply and its Distribution for the Year Ending August 31	,
1905	. 25

The report of the Philippine Census was published in four volumes and in both the English and Spanish languages. The translation into Spanish was made under the direction of the Bureau of Insular Affairs of the War Department, for circulation chiefly in the Philippine Islands. Of the English edition 6,000 copies were printed and of the Spanish edition 4,000 copies.

The reports completed during the year but not yet published are as follows: Benevolent Institutions; Telephones and Telegraphs.

#### CURRENT WORK.

The work upon which the Bureau is now engaged, and all of which it is hoped will appear in the form of published reports during the current fiscal year, may be summarized as follows:

#### SPECIAL INQUIRIES AND REPORTS APPROACHING COMPLETION.

- 1. The several additional reports upon the special classes for which provision is made in section 7 of the act to establish a permanent Census office. One of these reports, that upon benevolent institutions, is included in the above list of completed publications; another, that on paupers, is almost completed. The reports on the insane and feeble-minded, and on criminals in institutions will be completed and published early in the next calendar year. In the compilation of the reports on the deaf and blind there have been unforeseen delays, over which the Director of the Census had no control. These reports are being prepared under the supervision of Dr. Alexander Graham Bell.
- 2. The statistics of mortality in registration areas. In my last annual report it was explained why it has been impossible up to the present time to publish annually the statistics of mortality in registration cities and states, but the vital statistics for the five years 1900–1904 will be published as one report about December 15.
- 3. The report on wealth, debt, and taxation. The first volume of this decennial report will be completed during the current fiscal year. The second and final volume should be issued within six months

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thereafter. An important chapter of this report, that on railway valuation, has recently appeared in bulletin form. Other important features covering the financial statistics of cities of 25,000 population and over have also appeared in Bulletin 20.

4. A bulletin presenting for cities having a population of less than 25,000, financial and social statistics of the same character as those presented for larger cities in Bulletin 20. Taken together these two bulletins, giving statistics for all cities having over 8,000 population in 1900, will constitute the decennial report on statistics of cities, authorized by section 7 of the permanent Census act. The financial statistics contained in these bulletins also form a part of the material for the report on wealth, debt, and taxation, to which reference has just been made.

5. The special report presenting a general review, analysis, and correlation of some of the results of the Twelfth Census. This report, prepared under the supervision of Prof. Walter F. Willcox, of Cornell University, is now in the hands of the printer. The more important chapters have already been given to the public as bulletins. Some additional studies along similar lines are in contemplation.

#### REPORTS OF COTTON PRODUCTION AND CONSUMPTION.

6. The reports regarding the annual cotton crop as returned by the ginners. These reports have been enlarged and extended by the act of the last Congress, approved February 9, 1905, which provides that the Director of the Census shall substitute semimonthly reports of the quantity of cotton ginned for the monthly reports heretofore made, and also requires periodical reports upon the consumption, available supplies, and exports of cotton. Plans for carrying out this increased service were completed during the summer. The cost of the service, on the monthly basis, has been \$125,000 per annum, and to enable it to be doubled the general deficiency appropriation act for 1905-6 carried an additional appropriation of \$125,000. With this total sum of \$250,000 it will be possible to present at two-week intervals the most accurate records of the volume of the cotton crop during the period of its maturing that have ever been available to the commercial world, and gradually to supplement them with exact records of the distribution and consumption of the staple. It will require time to perfect the facilities for this additional feature, and the first report, issued in October, was largely tentative in its character. In order to have the most experienced assistance in this work the Bureau of the Census obtained the cooperation of Mr. Henry G. Hester, who for thirty-five years has been secretary of the New Orleans Cotton Exchange, and is recognized as the leading cotton statistician of the country.

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We hope in time to bring these reports to the point of accuracy and completeness necessary to accomplish the purpose of Congress in establishing them, viz, to furnish official periodical reports from which can be determined the facts of supply and demand in their relations to each other, and thus to place the markets for this great staple as far as possible beyond the manipulation of speculators. This work would duplicate in a large measure the annual report on the cotton crop heretofore published by the Bureau of Statistics of the Department of Agriculture; but to avoid this unnecessary and undesirable duplication of official statistics the Secretary of Agriculture has turned over to the Director of the Census all the instrumentalities heretofore employed by the Agricultural Department in the collection of these data, and will hereafter rely upon the Bureau of the Census to furnish such statistics on this subject as may be required in the reports and bulletins of that Department. His action affords a practical illustration of one of the advantages of a permanent statistical office with which all departments and bureaus of the Government can cooperate and through whose agency duplications and inconsistencies, which so frequently mark official statistics, can be avoided.

This year the reports of the amount of cotton ginned will be ten in number. The chief criticism upon the previous cotton ginning reports of the Census has been the delay in publication, but in order that the publication of the reports may be expedited, certain of the larger cotton growing counties have been divided and the Census will employ, in reporting the current crop, 702 agents instead of 667 employed last season. To further expedite this work, the experiment will be tried of requiring each agent to telegraph to Washington the results of his canvass immediately upon its completion. Upon the day of the receipt of these telegrams they will be consolidated and made public, not later than one week from the date to which the canvass relates. Simultaneously with the telegraphic publication of the semimonthly canvasses a postal card will be mailed to every cotton ginner in the South, upon which will appear the results of the canvass, and which he will be requested to post conspicuously in his ginnery. Thus every effort will be made to secure accuracy in the reports, promptness in their compilation, and widest publicity of the results.

The system of determining the size of the annual cotton crop by counting it as it comes from the gins, in accordance with the plan adopted by the Bureau of the Census, has now been proven to be the most trustworthy method of securing this important information; but its success depends absolutely upon the friendly cooperation of the ginners and the accuracy of the returns made by them to the agents of the Census. When they refuse to give the information requested

or purposely supply false reports of their output, the work of the Census will cease to have any value and the money expended will be worse than wasted. The system was on trial until the season of 1904, when it encountered its crisis. As report followed report, each making more certain the phenomenal size of the record crop of that year, there developed among the planters a sudden and perhaps natural hostility toward an official record which revealed to the world the fact that the crop was the largest ever grown, and correspondingly affected the market price. The opposition took two forms—an assertion of erroneous and exaggerated returns in specific counties, and an organized refusal on the part of ginners in certain localities to furnish the Census agents with any information whatever concerning the product of their ginneries. In every instance where complaint was made of false returns an agent was immediately sent from the office to ascertain the facts. No instance was discovered in which the county totals reported were not found to be substantially correct. A resolution was adopted by the House of Representatives calling upon the Census to report the exact quantity of cotton ginned to December 13 in two typical counties in each state of the cotton belt. The report was published and widely circulated in the South, and in no county was the record challenged. Thereafter the trustworthiness of the record was accepted.

The largest number of ginners who refused in any monthly canyass to give information to the Census agents was 842 out of a total of 32,000 ginners. It was a manifestation of an organized boycott, and the Director of the Census accordingly announced, on December 29, that if evidence of a purpose to withhold information continued to appear, the reports would be abandoned. He called attention to the fact that the reports had been authorized by Congress at the urgent demand of the cotton planters, and that no class of citizens was more vitally concerned in early and accurate knowledge of the size of the crop, whether it be large or small. In this particular canvass of 1904 it was already evident that the Census had not overstated the size of the crop, and that the early knowledge of its unusual dimensions had been of the utmost advantage to the planters, by enabling them to intelligently adjust their acreage for the new season. The great convention of cotton growers that met in New Orleans in January passed resolutions urging the continuance of the Census cotton ginning reports, and expressing confidence in their accuracy. In the final canvass of the season the number of recalcitrant ginners greatly decreased, and there is every evidence that hereafter the agents of the Census, instead of encountering resistance and opposition, will again find both the ginners and the planters ready and anxious to assist them in accounting for every bale of cotton from the crop of 1905.

CENSUS OF MANUFACTURES, 1905.

7. The quinquennial census of manufactures authorized by section 7 of the permanent Census act was organized during January last, under the immediate supervision of Mr. William M. Steuart, chief statistician for manufactures. The active fieldwork was undertaken in different parts of the country during the months of March, April, and May, and is now practically completed. In this fieldwork there have been employed 150 clerks detailed from the Bureau, 25 office special agents, and 734 local special agents appointed especially for this purpose for a period of two or three months. The total cost of the canvass to this date, including the salaries of detailed clerks, has been \$425,000, which is less than the estimates. The canvass has served as a practical demonstration of the wisdom of that provision of law which permits the detail of the clerical force of the office for fieldwork. In each of the large cities the canvass was placed in charge of one of these detailed clerks, thoroughly familiar with his duties and anxious to make a record by completing the canvass in the shortest possible time.

This census was limited by law to manufactures carried on under what is known as the factory system, and consequently excluded the so-called neighborhood industries and hand trades. The number of schedules collected is therefore less than half the number returned at the census of 1900. It is believed to be the most thorough canvass ever made of American manufactures within the limits indicated. Some part of the remarkable growth that apparently took place during the intervening five years is due to this more careful canvass; nevertheless the statistics, when fully compiled, will reveal a rate of advancement in many industries and localities as unexpected as it is gratifying. A complete record of this growth in domestic manufactures at this midway point between decennial censuses is well worth what it has cost.

The great body of the manufacturers of the country responded to the requests for a report of their operations with an interest and care that can not be too highly commended. In some instances, however, they objected to supplying the Government with the detailed information regarding their private business called for by the manufacturing schedule and the special schedules devised for the return of particular industries. In a comparatively few instances the Census agents encountered positive refusals to comply with the law and supply any portion of the data asked for. In some cases the office has been notified that attorneys had been instructed to contest any attempt to enforce by legal process the penalties prescribed by the law for refusal to furnish these data. No legal proceeding of this character has been undertaken.

The census of manufactures, both decennial and quinquennial, is undertaken primarily in the interest of the manufacturers themselves, and a satisfactory presentation of the growth of our national industries must always be dependent upon the voluntary cooperation of those who are engaged in these industries. Definite knowledge of the relative advance these several industries are making is of the utmost practical advantage to manufacturers, and with few exceptions the manufacturers are the first to recognize this fact. This knowledge is also indispensable for intelligent legislation on many economic questions. The information elicited by the manufacturing schedule has come, under changing conditions, to bear most intimate relation to the subjects that now command the attention of Congress and state legislatures.

Any suggestion that the census of manufactures shall be abandoned in future enumerations would meet with the most emphatic and wide-spread objection, in which the manufacturing interests would be the first to join. At the same time there is some justice in the claim that the schedule as now constructed calls for a multiplicity of detail, which in certain industries it is oftentimes troublesome to compile. This fact is fully recognized in the Census Bureau, and plans for the simplification of the schedules are under consideration.

The above completes the recapitulation of the productive work upon which the Bureau of the Census is now engaged. It remains to outline the work of the coming year and to submit certain recommendations for new work, some of which ought to be authorized by the next session of Congress.

#### OUTLINE OF WORK FOR THE COMING YEAR.

The more important of the "special reports" provided for by section 7 of the permanent Census act are now completed, or will be substantially completed during the present fiscal year. The only "special reports" remaining to be taken up are those relating to transportation by water, express companies, and religious bodies. These three inquiries are comparatively simple, and will employ the services of but a small proportion of the 600 clerks and special agents now carried on the Census rolls.

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In addition to these reports a special report on the subject of marriage and divorce was authorized by the last Congress, upon the recommendation of the President. It is planned to begin the fieldwork for this latter inquiry as soon as a sufficient number of clerks can be released from the compilation of the census of manufactures. The report will be practically a continuation of the similar report made by the Department (now Bureau) of Labor in 1889, covering the judicial records of the twenty years 1867 to 1886, inclusive; and it will bring these records down to date, thus making a second report for sub-

stantially twenty years. The Bureau has been fortunate in securing the services of Hon. Carroll D. Wright, late Commissioner of Labor, who made the first report on this subject and will supervise, in the capacity of expert special agent, the compilation of the report about to be undertaken.

There are in addition four annual reports with the compilation of which the Bureau is charged, viz, the cotton report, the statistics of mortality, the statistics of immigration, and the statistics of cities of 30,000 population and over. These four annual reports require the services of not to exceed 100 clerks, at intermittent intervals. There remains, also, some important material gathered upon the population schedule which is still untabulated. For one group of data, that relating to children born and children living, there is a distinct popular demand, and the Bureau plans to undertake its tabulation as soon as it can do so without delaying reports having a more immediate current interest.

#### RECOMMENDATIONS FOR ADDITIONAL INQUIRIES.

Now that the Bureau of the Census has become permanent it is in a position, with the force at its command, to take up other subjects possessing great importance, for which statistical data ought to be obtained and can be successfully collected only through the agency of a statistical office of the National Government. So various, in fact, are the social, political, and industrial problems demanding statistical investigation that selection becomes a difficult matter. The question of what additional inquiries should be undertaken by the permanent Census Bureau has, however, been carefully considered by the advisory census commission, appointed by your predecessor, and the recommendations now submitted have received the unanimous approval of this commission. It should be remembered, moreover, that these inquiries can be taken up only during the next two or three years. After that the entire force of the office will be required for the work of preparing for the Thirteenth Census. The opportunity, then, to conduct these investigations, if neglected now, will not be open again until the latter half of the decade 1910 to 1920.

The recommendations which I have the honor to submit in this connection are the following:

1. That the reports on the electrical industries shall be made at five-year intervals. This recommendation was made in the last annual report of the Director, wherein it was stated that "nothing so rapid, so striking, and so revolutionary in its effects upon private manufacturing and public utilities as the application of electricity to power and heating purposes has been witnessed in industrial history. So marked are the improvements made and the new uses to which elec-

tricity is applied that changes in the statistics of these industries occur with great rapidity, and marked variations doubtless arise during the brief period that elapses between compilation and actual publication. The relation of these industries to the economic and social welfare of the country is so intimate, and is daily becoming so much more important, that I recommend that Congress be asked to authorize new inquiries at dates five years subsequent to those covered, instead of waiting for the decennial period, as originally contemplated by the Census law."

- 2. That the compilation of the Official Register of the United States be transferred from the Department of the Interior to the Bureau of the Census. This recommendation also was made in my last annual report. The compilation of the Register is in keeping with the regular work of the Bureau, and was originally assigned to the Department of the Interior simply because there was at that time no better place for it. If the publication of the Official Register is hereafter to be accompanied by a statistical analysis of the Federal civil service, similar to that contained in Census Bulletin 12, it is imperative that the compilation of the material upon which this statistical analysis is based shall be made in the same office.
- 3. That a decennial report on life, fire, and marine insurance be authorized. A report on this subject was a feature of the Eleventh Census. The subject was omitted from the inquiries included in the Twelfth Census, on the ground that the delay in the publication of the report for 1890 rendered it practically useless when it finally appeared, and also that private publications supplied the necessary statistics. The first of these objections disappears under the conditions of a permanent Census office, making possible the commencement and prompt completion of reports through the intercensal period. Life insurance has assumed in recent years many new forms—fraternal, cooperative, beneficiary, etc.—the statistics of which are very meagerly presented in the private publications referred to, and the effect of which upon the general situation in life insurance has been far-reaching. Recent events have aroused intense interest in the general conditions surrounding life insurance in the United States, and an official report on the subject would be timely, in view of the agitation in favor of Federal supervision of the business of life insurance.

The compilation of a report on this subject would be a comparatively inexpensive undertaking, because of the elaborate annual reports made by the principal life insurance companies, and the complete statements they are required to make in each to the state officers of nearly all the states regarding their business. The Census report would consist chiefly of a consolidation and correlation of all these separate reports, and the amount of fieldwork required would be small.

The need for a Federal report on fire and marine insurance is not so pressing; but in both instances the cost of the compilation would be limited to the compensation of the clerks engaged in the work and the cost of printing.

- 4. That a report be authorized to treat of savings banks, institutions for savings, and cooperative banks, mortgage, loan, and investment companies, and similar institutions, the purpose of which is not commercial, but rather to encourage and promote thrift. This is a wide field of inquiry, elaborately covered by state reports in many states, notably in Massachusetts, New York, and Pennsylvania, and almost wholly neglected in Federal statistics. The only report covering these fiduciary institutions, which touch the welfare and the material progress of the people so intimately, is the annual report of the Comptroller of the Treasury, which condenses into less than a dozen octavo pages all the data in this field, and which must be regarded as inadequate when measured by the importance of the subject, the extensive statistics compiled by the several states, and the careful and exhaustive statistical treatment given it in nearly all the countries of Europe. Here, again, the cost of the inquiry would be inconsiderable, as it would consist mainly in bringing the official reports of the several states into one compact and well-arranged compilation, so as to supply a proper coordination and comparison of the conditions surrounding and governing these institutions in all sections of the country and record the relative progress made in each state of the Union.
- 5. That consolidation and study of the several state censuses, taken midway between the Federal censuses, be authorized with a view to measuring the growth of the population by five-year periods. quinquennial state censuses have been taken in fourteen states-Michigan in 1904, and Florida, Iowa, Kansas, Massachusetts, Minnesota, New Jersey, New York, Oregon, Rhode Island, North and South Dakota, Utah, and Wisconsin, in 1905. These states contained, at the census of 1900, 24,269,774 inhabitants, or 31.93 per cent of the total population of continental United States—a sufficient proportion of the whole, and rightly distributed geographically, to enable a fairly correct estimate to be made of the true population of the country in 1905.

Sufficient authority resides in the Secretary of Commerce and Labor, under the provisions of section 8 of the act establishing the Department, to authorize the Director of the Census to compile this report without legislation by Congress. But direct legislation is highly desirable, in view of the importance of inducing a larger number of the states to take quinquennial censuses, and thus meet the demand for a more frequent enumeration of our rapidly increasing population. The subject was alluded to at length in the last annual report of the Director,

and I again urgently recommend that Congress be asked to reenact, with slight modifications, section 22 of the act for taking the Tenth and subsequent censuses, approved March 3, 1879. In addition to the fourteen states named above there are eleven other states with constitutional or statutory requirements for a decennial census which ignore the requirement, deterred no doubt by the expense. If the Federal Government will undertake to pay one-half the cost of enumeration, as provided by the section referred to, many additional states might be induced to provide for a quinquennial census, and thus the United States would secure all the advantages of a midway census on lines exactly parallel to its own decennial enumeration. It is now too late to get the benefit of such a provision of law before 1915; but if the enactment is made at once, there will be ample time for the subject to be carefully considered in all the states, and an increased probability of securing the cooperation of a large number of them. A bill for the reenactment of section 22 of the Census act of 1879 was introduced in the last Congress.<sup>1</sup>

6. That a report be authorized upon the fisheries of the United States. Provision was made in the Census law of 1880 for a census of the fishing industry. The results were not altogether satisfactory, and the authorization was omitted from subsequent Census laws. The fisheries represent an important phase of the productive industry of the country, and no enumeration of the sources and volume of national wealth is complete that omits it. The difficulties surrounding an attempt to properly measure the fishing industries are obvious and admitted. The Bureau of Fisheries collects each year a variety of statistics on the subject which are most useful, but which are not collected or tabulated in a manner that renders it possible to fit them into the plan of industrial statistics as formulated by the Bureau of the Census. In view of the fact that the Bureau of Fisheries possesses superior facilities for collecting information in this special field, it is

<sup>&</sup>lt;sup>1</sup>Section 22 of the act of 1879 reads as follows: "That if any state or territory, through its duly appointed officers or agents, shall, during the two months beginning on the first Monday of June of the year which is the mean between the decennial censuses of the United States is by this act directed to be taken, take and complete a census in all respects according to the schedules and forms of enumeration in the census of the United States, and shall deposit with the Secretary of the Interior on or before the first of September following a full and authentic copy of all schedules returned and reports made by the officers and agents charged with such enumeration, then the Secretary of the Treasury shall, upon receiving a certificate from the Secretary of the Interior that such schedules and reports have been duly deposited, pay, on the requisition of the governor of such state or territory, out of any funds in the Treasury not otherwise appropriated, a sum of fifty per centum of the amount which was paid to all supervisors and actual enumerators within such state or territory at the United States census next preceding, increased by one-half the percentage of gain in population in such state or territory between the two United States censuses next preceding: Provided, That the blank schedules used for the purposes of the enumeration to be a supervised of the purposes of the enumeration to be a supervised of the purposes of the enumeration to be a supervised of the purposes of the enumeration to be a supervised of the supervised of th ation herein provided for shall be similar in all respects of form and size of heading and ruling to those used in the census of the United States."

respectfully recommended that a plan of cooperation between the two bureaus be authorized by which, after appropriate legislation, this important omission from our industrial statistics can be made good.

7. That the Census Bureau be authorized to compile what are commonly known as judicial statistics. This line of inquiry will open a field of statistical research which heretofore has been wholly neglected in the United States; although in all other civilized countries its importance is fully recognized. Such statistics possess the utmost sociological significance, and are of especial importance in the United States because of its composite population. Judicial statistics include the records of homicides, felonies, misdemeanors, and other punishable offenses, with the disposal of each. But one state in the Union, so far as I am informed—Massachusetts—attempts the official compilation of the data contained in police dockets and court records. Unofficial statistics, compiled as a rule from newspaper reports of crimes committed, have for many years been current and have led to exaggerated misconceptions regarding the prevalence and the increase of crime in different sections of the country. Having established a permanent Census office, the Federal Government can no longer justify itself for neglecting this field of statistical inquiry. The demand for authentic information along these lines has become more and more insistent. The European countries, by annually compiling the records of their courts of law, are able to measure with accuracy the moral advance or retrogression of the community by exact knowledge of the comparative number of crimes, properly classified and tabulated with respect to age, sex, color, and place of birth of the party accused, and the disposition of each case. These reports make it possible to direct wisely the organized movements for social reform and restrictive legislation. They are important in their economic significance, for they establish the relationship of the material condition of the nation, whether it be one of prosperity or depression, to the increase or decrease of crime. The lack of such information in the United States results in a mass of conflicting state laws and local ordinances and haphazard effort.

In the United States the collection of judicial statistics will be attended with difficulties that do not exist in other countries. The code of laws relating to crimes and misdemeanors differ greatly in the various states of the Union: they contain different definitions and prescribe varying penalties. It is manifestly of the utmost importance that some degree of uniformity should be secured. A Census investigation of this subject, presenting authentic statistics of crime and pointing out the inconsistencies of state ordinances, would greatly assist in solving this problem and make possible proper comparisons between the different states and municipalities. It is the first step and the indispensable beginning of a movement for the unification and

coordination of our criminal statutes, under which the conditions of social existence and legal restraint and obligation shall be similar throughout the Union. The inquiry should not be attempted oftener than every five years at the start, but that start should be made at once and while the Census Bureau is comparatively free and can devote its best energies to the problem. The investigation would naturally be conducted in connection with the inquiry regarding marriage and divorce, for both involve a systematic overhauling of court dockets, and their simultaneous undertaking by the same field force would greatly reduce the cost of the combined work.

#### OTHER POSSIBLE INQUIRIES.

The above recommendations, if approved by Congress, would supply sufficient work to keep the clerical force of the Bureau fully employed for two years. Other suggestions have been made, to which the attention of Congress ought to be called. They involve, however, so large a cost for fieldwork that the Director refrains from including them in his recommendations. Two inquiries proposed, however, are of especial importance: one is for a continuation of the special report of the Eleventh Census on mortgage indebtedness. The 1890 report was embodied in two volumes, one entitled "Farms and Homes: Proprietorship and Indebtedness," and the other entitled "Real Estate Mortgages." From the records of the Eleventh Census it appears that \$1,330,000 was charged to the account of this investigation. These volumes were regarded by economic students as among the most significant results of that census and well worth the money expended in their preparation. It is now urged that a record of the changes that have occurred in these directions since the census of 1890 would reveal more clearly and more certainly than any other investigation the material advancement of the people in the interval.

A portion of the information embodied in the first of these two volumes was obtained at the Twelfth Census by means of certain inquiries on the population schedule, and is published in Population, Part II (pages 661 to 754, inclusive). At this distance in time from the enumeration, however, it would be practically impossible to compile a trustworthy report supplying for the Twelfth Census the information regarding value of owned homes and the amount of mortgage debt resting thereon, such as was presented for the Eleventh Census. The data contained in the second of the two volumes of the Eleventh Census and relating to real estate mortgages, was obtained from the local records; and a similar investigation can be undertaken at any time, can be made to cover as long or as short a period as may be desired, and can be confined to typical localities or can include the entire nation. The Eleventh Census report covered

the ten years from 1880 to 1889, inclusive, and all the 2,818 counties of the Union. Should this investigation again be undertaken, it would be highly desirable to include the years from 1889 to the present date. Such an investigation would show separately, for acre property (which is nearly identical with farm property in many counties) and for city and town lots, the number and amount of mortgages placed on record each year in each civil division. It would give an approximate statement of the mortgage debt in force at the close of the investigation. It would show the ebb and flow of new mortgage debt incurred with the fluctuations of business prosperity throughout the country. It would also show, in addition to the data collected at the Eleventh Census, the record of mortgage foreclosures, which record corresponds, so far as the farmers are concerned, to the record of business failures in the commercial world, and is the true test of commercial prosperity or depression. Such an investigation would be a logical supplement to the report on wealth, debt, and taxation upon which the Census Bureau is now engaged. This latter investigation will reveal the debt of the nation, the states, the counties, and the municipalities. The aggregate of this public indebtedness is estimated to be only about one-third of the aggregate of the private mortgage indebtedness of the nation.

The other inquiry which Congress might with much propriety authorize is a census of the live stock of the country. Powerful organizations of agriculturists have repeatedly insisted upon the necessity of such a report at intervals more frequent than ten years. It is not necessary in this connection to recapitulate the arguments upon which this demand is based. The Department of Agriculture urges such a census as necessary to the correction of its annual estimates of live stock.

#### THE CLERICAL FORCE.

The regular clerical force of the Bureau of the Census, exclusive of skilled laborers, laborers, watchmen, charwomen, etc., now consists of 598 persons, in addition to 15 special agents regularly employed in fieldwork. Frequent changes occur in the personnel of this force, and it is a noteworthy fact that those clerks who drop out are largely from the class whom the office can ill afford to lose. Their special training in the methods of statistical work and their aptitude in this work win for them positions in private life where the emolument is larger than the Government is willing to pay, and the opportunities for advancement are more frequent. It so happens, then, that the office is losing clerks who were retained in the permanent organization because of their special qualifications, and it is not possible to supply their places from the regular registers of the Civil Service Commission, which supplies eligibles for routine clerical work only.

During the past year these facts were brought to the attention of the Commission by the Director. It promptly recognized the situation and established a special register for the Bureau of the Census from which recruits for the clerical force will hereafter be largely drawn. The examination for this register was restricted to graduates of a college or university, preferably those with a postgraduate degree, and in their rating, experience and training in economic and statistical work was given equal weight with a thesis submitted on a specified statistical subject. From this register it is hoped that clerks can be secured who are competent, by ability, education, and natural aptitude, to qualify themselves for the work of analysis, interpretation, and criticism of statistical material, and to become understudies for supervisory positions in the office. The Census Bureau offers the best practical training school for young men ambitious to fit themselves for the higher fields of statistical work, either as instructors or in the practical development of all branches of statistical investigation. The new civil service register makes it possible for the Census to secure the services of the most promising students in a line of work the growing importance of which is now recognized in our leading institutions of learning and schools of political science.

#### THE DEVELOPMENT OF TABULATING APPARATUS.

In accordance with your recommendation, the last session of Congress made an appropriation to defray "the cost of experimental work in developing tabulating apparatus" with which to mechanically compile the returns of future censuses. Plans for this experimental work were promptly made, and are already well under way, under the general supervision of Prof. S. W. Stratton, Chief of the Bureau of Standards, which contains the most approved mechanical appliances and facilities required. He is assisted by Mr. H. H. Allen, formerly of the Patent Office, who has made a study of the subject, as it is contained in the patents issued in this line of apparatus; and the way is already clear along which new and improved mechanisms can be devised, which will not intrude upon the rights of patentees in this line. The original patent upon the hand mechanism employed in the tabulation of the Eleventh and Twelfth censuses expires on January 8, 1906, and the Government is at liberty to make use of this mechanism and to further develop it along original lines, for use in the current work of the office; and I am hopeful that prior to the time when work begins upon the Thirteenth Census the Government will be the owner of a new system of tabulating apparatus, by the aid of which the next census can be compiled with great rapidity and on a more economical basis of cost. With this end in view, the appropriation for experimental work should be continued for another year.

#### DISTRIBUTION OF CENSUS PUBLICATIONS.

There were 25 publications printed for the Bureau of the Census during the fiscal year ended June 30, 1905, and the number of copies printed was 185,000. Of the publications, 17, with 74,000 copies, were reprints, special reports, and Philippine Census reports, and 8, with 111,000 copies printed, were bulletins.

The number of copies of the Census publications distributed during the year was 198,443. Of this number, 112,899, or almost one-half, were bulletins of the permanent Census. The number of bound reports distributed was 67,115, comprising 16,387 main reports of the Twelfth Census, including the Statistical Atlas and the Abstract; 20,293 supplementary or special reports issued since the office became permanent; 5,831 reports of previous censuses; and 24,604 reports of the Philippine Census, 14,033 of which were in Spanish. Of the remaining copies, 18,429 were Twelfth Census bulletins.

The popular demand for the current reports of the Census continues unabated, and indicates a constantly increasing interest in the work of the Bureau.

Respectfully,

S. N. D. NORTH, Director.

Hon. Victor H. Metcalf, Secretary of Commerce and Labor.

#### APPENDIX.

#### REPORT OF JOHN W. LANGLEY, DISBURSING CLERK, BUREAU OF THE CENSUS.

 Expenses and balances under the appropriations available for the support of the Bureau of the Census during the fiscal year, 1905.

Appropriations.	Amount appro- printed.	Expenses.	Balances.
Total	\$1,526,705.06	1\$1,470,726.02	<sup>2</sup> \$55,979.04
Salaries, 1905 Collecting statistics, 1905 Tabulating statistics, 1905 Stationery, 1905 Library, 1905 Expenses, 1906 Miscellaneous expenses, 1905 Printing, 1905 Expenses, Twelfth Census	50, 000, 00 10, 000, 00 2, 500, 00 26, 600, 00 15, 000, 00 170, 000, 00	80, 087, 00 8, 506, 38 2, 500, 00 26, 585, 29 15, 000, 00 150, 178, 18	14, 735. 89 19, 913. 00 1, 493. 62 14, 71

<sup>&</sup>lt;sup>1</sup> In addition to this amount there was expended during the fiscal year ended June 30, 1905, \$120,627.04 from the appropriation "Collecting Statistics, Census Office, 1905 and 1906." (Expenditure authorized by Congress, legislative act, February 3, 1905.)

<sup>2</sup> To be covered into the General Treasury.

2. Status of the appropriation "Expenses of the Twelfth Census."

The undisbursed balance to the credit of this appropriation July 1, 1904, as shown by the annual report of the Director of the Census dated October 15, 1904, amounted to \$123,385.36. During the fiscal year 1905 this amount was augmented by \$100 received in payment for transcripts of Census records, making the total amount available during the fiscal year 1905, \$123,485.36. This available balance was utilized during the fiscal year mentioned for the following purposes:

To pay supplemental accounts for fiscal year 1904	•••••	\$21,040.30
ippine Islands	\$65, 911. 97	
To supplement the appropriation "Library, Census Office, 1905"		
To supplement the appropriation "Miscellaneous Expenses, Census Office,		
1905''	6, 540.87	
To supplement the appropriation "Collecting Statistics, Census Office, 1905"	28, 632. 32	100 415 00
en e	,	102, 445, 06
		109 705 96

3. Approximate cost of the tabulation and compilation of the census of the Philippine Islands.

Clerical labor	<b>\$235, 938. 65</b>
Printing	74, 340. 82
Rental of tabulating apparatus and cost of cards	
Miscellancous expenses	
	\$351,925.50