

BUREAU OF THE CENSUS  
REPORT OF THE DIRECTOR  
TO THE SECRETARY OF  
COMMERCE AND LABOR



Concerning the Administra-  
tion of the Permanent Bureau

WASHINGTON : 1903

## REPORT OF THE DIRECTOR OF THE CENSUS



*Washington, D. C., October 28, 1903.*

SIR: The report of the operations of the Census Office for the fiscal year ended June 30, 1903, has been submitted to the Secretary of the Interior, whose jurisdiction over the office ended on that date, when it became a part of the Department of Commerce and Labor, under the provisions of the act of Congress, approved February 14, 1903.

A supplemental report now seems desirable, not only to describe the progress of census work in the interval, but to outline plans for the future, and to submit certain recommendations and suggestions regarding the proper field and function of the permanent Census Bureau.

The establishment of the Census on a permanent basis has made necessary some radical changes in the organization of the internal work of the office and in the plans for carrying on future investigations. The temporary office was necessarily organized into four main technical divisions, with such additional divisions as were required for administrative purposes. To these four divisions, respectively, was committed the preparation of the main reports of the Twelfth Census on population, vital statistics, agriculture, and manufactures. When these reports were completed and published, the duties of the divisions became less clearly defined; and in readjusting the work of the office, my predecessor assigned the preparation of the various special reports authorized by Congress, with a view to keeping the main, or technical, divisions fully employed, and insuring simultaneous progress upon all the inquiries. This policy has been followed thus far with satisfactory results; but after a careful

Organization of  
the Census  
Bureau.

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study of the situation, I am convinced that the best interests of the service and the greatest usefulness of the Bureau of the Census require a general modification of the plan described.

The skeleton organization of the four main divisions referred to, each in charge of a chief statistician, will be preserved intact, but a system of general cooperation and collaboration between all of the divisions will be established, under which it will be feasible to concentrate most of the clerical force of the bureau on single investigations, thereby greatly increasing the celerity with which single special reports can be prepared and published.

Incidentally the new plan of administration will familiarize the entire staff and clerical force of the bureau with all branches of census work, thus making them all available for efficient service at any given time at the point where their work can be utilized to the best advantage.

One or two of the investigations actually begun under my predecessor may be somewhat delayed by this new arrangement of the work; but all future investigations will be so scheduled that no more than one or two of them will be in progress at the same time; and the net result will be to increase greatly the speed with which future reports can be completed.

Groups of Investigations.

The work of the Bureau of the Census naturally arranges itself into groups of investigations, as follows:

*Continuous*, such as the compilation of the statistics of immigration (recently transferred to this bureau by your order); and the cotton production investigation, which covers nine months of the year.

*Miscellaneous*, including such special reports or investigations as may be ordered by the President, by the Secretary of Commerce and Labor, or by Congress, as the compilation of the Philippine census and the compilation of the statistics of the classified service of the United States, recently undertaken by your order.

*Annual*, such as the statistics of births and deaths in registration areas, provided for by the act establishing the permanent Census Bureau.

*Biennial*, such as the statistics of cities.

*Quinquennial*, such as the census of manufactures.

*to the Secretary of Commerce and Labor*

*Decennial*, the census proper, which is divided by law into two groups, the first consisting of four main reports (relating to population, manufactures, agriculture, and vital statistics), and the second, of special decennial reports.

Of the investigations already under way, special reports on employees and wages and on occupations, at the Twelfth Census, are now completed and in the hands of the Public Printer. Other special reports will be completed and issued on the following approximate dates: Irrigation (called for by special resolution of Congress), December 1, 1903; Electric Railways, January 1, 1904; Telegraphs and Telephones, March 1, 1904; Interpretation of the Twelfth Census, July 1, 1904; and Mines and Quarries, July 1, 1904.

Special Investigations  
in Progress.

Other inquiries which I found in progress when I became director on June 8, 1903, are the annual report on vital statistics, the report on children born and children living at the Twelfth Census, and the report on wealth, debt, and taxation. Work upon the two latter investigations is likely to be somewhat delayed or temporarily suspended, in order that the clerical force may be concentrated upon the compilation and publication of the census of the Philippine Islands.

This census was taken in the first six months of the current year, pursuant to an order issued by the President, in accordance with section 6 of the act of Congress, approved July 1, 1902, entitled "An act temporarily to provide for the administration of the affairs of civil government in the Philippine Islands, and for other purposes," and its compilation by the Bureau of the Census will be undertaken pursuant to another order of the President, dated September 30, 1902, issued in compliance with a request of the Philippine Commission, under which the President directed the employment of "the service of the United States Census Bureau in the compilation and tabulation of all Philippine census returns transmitted to the Census Bureau by the government of the Philippine Islands, and the printing and distribution of the printed matter in connection therewith."

Compilation of  
the Philippine  
Census.

Under this order the sole function of the Bureau of the Census, in connection with the census of the Philippines, is the compilation of the data, and its printing and distribution.

The field work of the census was performed under the direction of Gen. Joseph P. Sanger, detailed for that purpose by the War Department, assisted by Mr. Henry Gannett, of the United States Geological Survey, and Mr. Victor H. Olmsted, of the Department of Agriculture, both of whom were associated with General Sanger in taking the recent census of Cuba and that of Porto Rico. The nature of the tables to be prepared will be determined by General Sanger and his assistants, who also will supply the accompanying interpretative text. The facilities and experience of the Bureau of the Census in similar work are to be utilized, in accordance with the President's order, to secure economy and accuracy in compilation.

Preparations are practically completed to commence the tabulation of the returns on November 16, and the work will be done by means of the punched-card system and automatic tabulating machines. In accordance with the plan of adjustment of the office force, to which reference already has been made, it is intended to detail for this purpose about two hundred and fifty clerks from the other work, and this number should be able to complete the compilation before the expiration of the present fiscal year.

The act of Congress making appropriations "to supply deficiencies in the appropriations for the fiscal year ending June 30, 1903, and for prior years, and for other purposes," approved March 3, 1903, made the entire unexpended balance of the earlier census appropriation, amounting to \$402,268.29, available for the employment of temporary clerks, and for other expenses incident to the compilation of the Philippine census.

Under the readjustment of work, the temporary force thus provided for will become unnecessary, thus effecting a very considerable saving in the total cost of the Census Bureau for the fiscal year, and at the same time insuring the highest degree of efficiency in the work.

Statistics of Special Classes.

Three other inquiries, for which preparations are now in progress, will be commenced January 1, 1904. These inquiries (authorized by section 7 of the act of Congress establishing the permanent Census Office) relate to the deaf, dumb, and blind, and to insanity, feeble-mindedness, crime, pauperism,

and benevolence, including prisoners, paupers and juvenile delinquents, and inmates of benevolent and reformatory institutions.

The names and addresses of the deaf, dumb, and blind were gathered upon a special schedule by the enumerators of the Twelfth Census, and the details required have been secured by subsequent correspondence. The statistics resulting from this inquiry are now being tabulated, and an analysis is to be prepared by Dr. Alexander Graham Bell, of Washington, D. C. I hope that the special report upon the deaf, dumb, and blind may be completed and published early in the coming year.

The remaining statistics of this character have been divided into two general classes, for each of which a report will be published; one, concerning the statistics of crime, including juvenile delinquents and reformatory institutions, to be made under the supervision of Dr. Roland P. Falkner, as expert special agent; the other, to present the statistics concerning inmates of all institutions of a benevolent or semibenevolent character. This report has been intrusted to the supervision of Mr. John Koren, of Boston, as expert special agent.

It has long been apparent to students of criminology and the dependent classes that radical reform was necessary in the method of handling statistics relating to these classes. Opportunity for this reform has been afforded by the establishment of the permanent bureau.

The census law confines the statistics of special classes to the inmates of institutions. While this fact deprives these statistics of one important and valuable element, namely, a complete statement of the numerical size of the afflicted classes, with the ratio of each to the total population, it is a fact, thoroughly demonstrated by past experience, that any census of these afflicted classes, beyond the number contained in institutions, is practically impossible. Efforts have been made to secure complete returns at several censuses, but for obvious reasons the results were wholly unsatisfactory. Heads of families will not give to enumerators the details regarding afflicted members, but resort to any means to conceal the fact that there are afflicted persons in their families. Moreover, it has been found that to ask questions of this character tends to create a prejudice against the census greater than arises from all other causes combined. Accepting as wise,

*Reform in the  
Method of  
handling Statis-  
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Classes.*

therefore, the action of Congress in confining these reports to inmates of institutions, it becomes necessary to plan the inquiry so as to obtain results of the greatest value possible within these narrow limits. To this end it has been decided to secure returns which not only will furnish certain details concerning the population of all classes of institutions on a given date, but which also will measure the movement of the population of these institutions during a fixed period, namely, one year from the date of the commencement of the inquiry, January 1, 1904.

Improved Pre-  
sentation of Re-  
turns.

The first feature of the reports will be comparable with results attained at the Eleventh Census. The second feature will develop an entirely new series of facts, and this, in my judgment, will constitute the most valuable portion of the reports from the sociological point of view. The statistics of pauperism, for instance, when taken as of a given date, can present no adequate picture of the amount of pauperism for which the community pays, and can convey no adequate idea of the true relationship of this class of relief to the economy of a community. Under the plan now proposed the movement of the pauper classes through almshouses and other institutions for their care will be measured for an entire year.

It is the judgment of students of criminology that the number of admissions to prisons, reformatories, etc., for a period of time, as one year, constitutes the only proper basis for the study of the statistics of this subject. Moreover, it is the basis of all similar statistics prepared by foreign governments. In previous censuses of the United States the prison population at a given date has been taken as the sole basis for the statistics of penal institutions. For purposes of comparison, a similar record will be made of these institutions as of January 1, 1904, and under the plan now proposed a record will be presented of the admissions to prisons, reformatories, etc., for a period of one year.

To ascertain the quantity of crime may be said to be the object of criminal statistics. This means an enumeration of the number of crimes committed in a given community, during a given period of time, but to give true significance to the figures obtained they must be brought into relation with the population and a rate obtained, for the ultimate object of statistics of crime is to obtain a "crime rate." Such rates may be calcu-

lated for different places, for different periods, for different social classes, for the whole body of crimes, for different groups of crimes, or for specific offenses. The prison population upon a given date, however, has significance only as it represents the average for the year. As it depends altogether upon the length of the sentences imposed upon offenders, it is clear that it does not actually exhibit the amount of crime committed, and it is not a proper basis for the calculation of a rate. Thus it follows that statistics of crime, based upon the prison population of a given date, exaggerate the various crimes for which longer sentences are imposed, and minimize the importance of the lesser offenses. Of the latter, the number for which imprisonment is inflicted for a short period of time only, can not be properly measured by a static census. Every comparison of crime rates, based on static figures, must be seriously vitiated by this fact.

Accordingly, in both of the investigations above indicated, the inquiry will extend over the entire year 1904, and arrangements will be made whereby the records of the various institutions may be copied for the Census Bureau by the local officials at reasonable rates of compensation.

The report on the social statistics of cities, provided for in section 7 of the act establishing the permanent Census Office, will be undertaken early in the calendar year 1904. These municipal statistics were first undertaken at the census of 1880, under the charge of the late George E. Waring, Jr., and were continued at the census of 1890, under the supervision of Dr. J. S. Billings. They are intended to show for each large city in the country, incorporation, population, and area including altitude and topography, city officials, police and fire departments, parks, street mileage, pavements and lighting, sewerage, waterworks, education, charities, public buildings, boards of health, food, and sanitary inspection, places of amusement, saloons, licenses, public vehicles, suburban travel, cemeteries (including area within and without city limits), and statistics relating to interment, valuation of property, and to receipts and expenditures. They are thus practically similar to the statistics of cities of 30,000 inhabitants and over, which have been collected by the Department of Labor, in accordance with the

Social Sta  
of Cities.

provisions of an act of Congress approved July 1, 1898.<sup>1</sup> Reports were published by the Department of Labor in 1899, 1900, 1901, and 1902.

The data contained in these city reports of the Department of Labor are largely comprehended in the decennial reports on the social statistics of cities, for 1880 and 1890, and now again authorized by the census law. In view of this fact an effort was made by the Commissioner of Labor, acting in cooperation with the Director of the Census, shortly after the organization of the permanent Census Bureau, to secure legislation whereby the work relating to cities carried on by the Commissioner of Labor should be transferred to the Bureau of the Census and coordinated with the municipal statistics contemplated in the decennial reports on this subject. A bill was reported by the House Committee on the Census under which the Census Bureau was called upon to collect biennially statistics of cities with a population of 30,000 or more, of which there were 137 in 1900, and decennially statistics of cities containing a population of less than 30,000. This bill was reported favorably to the House of Representatives February 13, 1903, accompanied by a report in which was incorporated a letter from the Commissioner of Labor recommending the transfer of the work to the Census Bureau; but it remained on the House Calendar at the expiration of the Fifty-seventh Congress.

Under the provisions of the act establishing the Department of Commerce and Labor, the Secretary of that department issued an order on July 1, 1903, on the recommendation of the Commissioner of Labor and the Director of the Census, transferring from the Bureau of Labor to the Bureau of the Census all the work on the statistics of cities. Under a subsequent order of the Secretary of Commerce and Labor, dated September 11, 1903, the annual report of the statistics of cities of 30,000 population and over was omitted for the year 1903. This was done in order that the statistics of all cities, irrespective of size, might be collected as of the same date and as a part of the decennial report of the Census Bureau. Undoubtedly that

<sup>1</sup>30 Stat. L., chap. 546, page 648.

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Preparation of  
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*to the Secretary of Commerce and Labor*

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order and the subsequent postponement of the partial annual report will add materially to the value and comparability of the entire inquiry.

Another reason for postponement lay in the fact that the largest and most important series of inquiries included in this investigation relates to municipal finance, and is thus identical in character with the similar investigation which the Bureau of the Census is now conducting upon the subject of wealth, debt, and taxation. Therefore, in order to avoid extensive duplication of work in a very difficult field, it is proposed to utilize in the reports on the social statistics of cities, information obtained from the inquiry concerning wealth, debt, and taxation.

In the absence of any legislation on the part of Congress, it is considered advisable to repeat these reports for cities of 30,000 population and over at intervals of two years. It is the uniform judgment of those who have made a study of the subject that once in two years is as often as it is necessary to make so important and expensive a report as is contemplated by existing legislation.

Your general order of July 29, 1903, directs that on and after January 1, 1904, the statistics of immigration shall be compiled by the Census Bureau. This was one of the most obvious and important of the statistical reforms made possible by the establishment of the Department of Commerce and Labor. The immigrants to the United States become immediately an integral part of our population, and it is essential that their social statistics shall be gathered upon arrival in conformity with the population schedule of the census. This can be done without any modification of the existing requirements of the law regarding alien manifests. An immediate advantage of the transfer will be the harmonizing of the tables showing the country of the immigrant's birth with the census tables showing birthplace of the foreign born. By the use of the electric tabulating machines and the punched-card system, the statistics of immigration can be presented in much greater detail than heretofore, at a much smaller cost for compilation.

Statistics of Immigration to be compiled by the Census Bureau.

Immigration to this country has been so steadily increasing and its character has so greatly changed that the time seems opportune to recommend legislation which will permit its more

accurate statistical measurement. I join most heartily in the recommendation of the Commissioner-General of Immigration for legislation that will enable us to measure the volume of alien emigration. While we determine with approximate accuracy the number of incoming aliens, we have no official machinery for ascertaining the number who annually return to foreign countries. There can be no accurate statistical record of the changes effected in the character of our population by immigration without the corresponding details of emigration. The number of these returning emigrants is large, reaching many thousands a year; and until it is officially ascertained we can not hope to bring the statistics of immigration into conformity with census statistics of the foreign born.

Estimates of Pop-  
ulation.

Estimates of population are now made by the Treasury Department, for the purpose of measuring the per capita circulation of money and for other purposes; by various local officials in order to measure the annual death rate; and by many authorities and experts for a variety of purposes. There can be no question that in spite of the margin of error inseparable from them such estimates are useful and necessary.

It is found also that in most of the reports of the Census Bureau made in the intercensal years such estimates are essential, particularly in the reports relating to wealth, debt, and taxation, social statistics of cities, and mortality statistics, the value of which depends largely upon showing the relation of different factors to population by rates or percentages.

It is clear that if these estimates are to be made they should all come from the same official source, to insure uniformity, and that they should be prepared and published by the Census Bureau. Its corps of experts is always at work investigating and recording changes in local and municipal boundaries and studying the incidents of migration and the causes of increase and decrease in population at particular points. Accordingly, the Census Bureau proposes to publish intercensal estimates of the population of the United States as a whole, of the several states, and of the principal cities. The general plan adopted for these periodical estimates of population was formulated by a committee appointed for that purpose by my predecessor, consisting of Chief Statisticians William A. King and William C.

*to the Secretary of Commerce and Labor*

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Hunt, and Special Agent Walter F. Willcox. The report of this committee contains the following recommendations, which have been approved:

1. That the population be estimated, as of June 1 in each year subsequent to 1900, for such states and cities as may be necessary to supply data for the periodical reports, as indicated by the Chief Statistician in charge.
2. That the estimate of population of individual cities be confined to cities of 10,000 population and upwards, the urban population of each state in cities of less than 10,000 population to be computed as a whole.
3. That the population of the states—exclusive of cities separately computed—be computed as a whole, and the state total obtained by addition of the urban and rural population computed as above.
4. That the Geographical Division be directed to secure information concerning any changes in the boundaries of incorporated places, to be taken into consideration.
5. That the method of estimating employed be the arithmetical method, i. e., that the growth in each year is equal to one-tenth the decennial increase or one-fifth the quinquennial increase between the two last censuses.
6. That where the corporate limits of cities are extended, and the new territory added does not correspond to minor civil divisions or enumeration districts, the population of which can be determined, local inquiry be made to ascertain the approximate population included.
7. That a further investigation be made to determine what checks can be applied to secure greater accuracy in the work.

In accordance with this report a list of cities and towns of 8,000 population and upward in 1900 has been prepared in this bureau, and already inquiry has been made regarding any changes in area between 1890 and 1900 and subsequent to 1900 in these cities, thus making it possible to determine the amount of population gained or lost by increase or decrease in area resulting from the changes in boundary lines. It has been determined that the Census Bureau will accept in these estimates the results of intermediate state censuses, but that it will not adopt the results of municipal enumerations. It is believed that when the

population is satisfactorily established for identical areas as at the last two censuses, the application of the derived rate of growth will be comparatively easy. The first publication of the estimates of growth in population at the intercensal years will be made for the year 1903, and will be published on or about January 15, 1904.

Systematizing  
Statistical Work.

The establishment of the permanent bureau, and the concentration in one department of so many bureaus engaged in statistical investigation, has placed this branch of Government work on a new basis. It is now possible to avoid much duplication, inconsistency, and contradiction in official statistics, and to more fully develop systematic, uniform, and scientific methods of statistical compilation. The opportunity thus presented for coordination, cooperation, and unification is one of the most important advantages to spring from the establishment of the permanent Census Bureau. Plans for taking gradual and complete advantage of the opportunity are now maturing, and already important preliminary steps have been taken. These relate chiefly to securing general harmony between the official statistics of the United States Government and of the several states, municipalities, and other local authorities engaged in statistical work along lines more or less cognate.

The absence heretofore of any central statistical bureau, or clearing house as it may be called, such as the permanent Census is destined to become, has resulted in confusion, discrepancy, and discord in every branch and variety of official statistical investigation. Independent authorities in most of the states of the Union, and in all of our great cities, have been carrying on important statistical work, much of it intimately associated with the regular work of the Federal census; but they have made little or no effort to secure uniformity and comparability with the results obtained by the Federal census. In consequence the value of the work has been diminished, and the usefulness of Federal, state, and municipal work of this character has been minimized.

The most important service the permanent bureau can render official statistics of every description will be in the direction of standardizing them, thus bringing about harmony and comparability with each other. The first task, therefore, to present

*to the Secretary of Commerce and Labor*

itself in every branch of inquiry that has been taken up by the Census Bureau since the completion of the main work of the Twelfth Census has been to secure uniformity of inquiries and schedules of the census with those of the state and municipal offices engaged in contemporaneous and similar inquiries. Steps to this end have been taken in every field of pending investigation, and the overtures of the Census Bureau to state and local officials, for cooperation and coordination in the statistical work upon which both are engaged, have received a most courteous and sympathetic response.

There is a widespread belief that the rapid social evolution and complex industrial growth of the United States call for a complete Federal census more frequently than every ten years. In view of the great cost of an enumeration of the people, Congress might well say that the intermediate, or five-year, census should be undertaken by the individual states, and to this plan there would undoubtedly be a much more general response, if it were understood that the permanent Census Bureau would undertake the work of compiling and combining the statistics collected by all the states. Even if a considerable number of lesser states should decline to undertake the quinquennial enumeration here suggested, the value of the work done by the others would be sufficient to warrant such an undertaking by the National Government. Already, however, thirteen states and one territory take a census of population under constitutional or statutory requirements, between the decennial Federal censuses, namely: Florida, Iowa, Kansas, Massachusetts, Michigan, Minnesota, New Jersey, New York, Oklahoma, Oregon, Rhode Island, South Dakota, Utah, and Wisconsin.<sup>1</sup> The Census Bureau is now in correspondence

Importance of  
Uniformity in Sta-  
tistics of Popula-  
tion.

<sup>1</sup>The following thirteen states took a census of population during the last decade: Florida, Iowa, Kansas, Massachusetts, Michigan, Minnesota, New Jersey, New York, Oregon, Rhode Island, South Dakota, Utah, and Wisconsin. All of them except Michigan (1894) and New York (1892) made the enumeration in 1895. One territory, Oklahoma, took a census in 1902, and its laws provide for an enumeration every two years.

Nine additional states have either a constitutional or statutory provision for a census at interdecennial periods, namely: Alabama (if United States census is not "full and satisfactory"), Colorado, Mississippi, Nebraska, Nevada (at the discretion of the legislature), North Dakota, South Carolina (the United States census may be adopted as correct), Washington, and Wyoming.

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with the official in each of these states in charge of the population census of 1905, with a view to the adoption by each of them of the Federal census population schedule, or such modification of this schedule as can be mutually agreed upon for its improvement. It is now believed that each of these intermediate state censuses of population will be conducted along lines comparable with the ten-year Federal census, and thus be made a perfect supplement to it. The results of these state censuses, or the more important results, can be compiled readily by the Federal Census Bureau; and thus we shall be able to obtain a return of the population in 1905 for a large portion of the Union (26 per cent in 1895), from which the remaining portion can be estimated with substantial accuracy.

Difficulties and Progress in securing Vital Statistics.

In my report to the Secretary of the Interior for the fiscal year ended June 30, 1903, I outlined the great amount of work that has been done already by the Census Bureau in carrying out the provisions of section 8 of the act establishing the permanent office, which provides for a collection of the statistics of the births and deaths in registration areas for the year 1902 and annually thereafter. It is unnecessary again to recite the practical difficulties experienced in complying with this provision of law, by reason of the confusion of method and the lack of uniformity in the registration records of the different cities where vital statistics are compiled under the direction of some municipal authority. The progress already made in the direction of uniform classification and uniform registration is most gratifying. Heretofore, even in the larger cities, vital statistics have been extremely defective and deficient, but it is now probable that the energetic missionary work of the Census Bureau will lead gradually to the high standard which obtains for this class of statistics in many foreign countries.

The act of March 6, 1902, provided for the collection of statistics of births and deaths in registration areas for the year 1902 and annually thereafter, but several practical difficulties in connection with this work already have appeared, and an amendment to the existing law is clearly required. Annual reports upon vital statistics were authorized by Congress because the interval between the decennial census reports was considered too long to permit satisfactory comparison. The

Legislation required to secure Statistics of Births and Deaths.

*to the Secretary of Commerce and Labor*

lack of statistics of population, however, from which to compute rates and ratios, limits the usefulness of data furnished by annual reports. Moreover, broader and more reliable analysis can be obtained by combining the figures for several years. The fact that the calculation of rates and ratios should be based upon a mean population suggests at once the wisdom of making the census date the mean, and covering the period five years before and five years afterwards. We have in hand the necessary population details for the ten-year period, 1895 to 1905, and will have all mortality returns since June 1, 1899. It only remains, therefore, to secure authority to gather returns for the four years from June 1, 1895 to June 1, 1899, from such states and cities as can supply them. This plan has the unqualified approval of the American Public Health Association and of all prominent students of vital statistics.

It is evident also that some immediate change is necessary in the method of securing the returns or transcripts of records. Congress authorized payment at the rate of 2 cents for each death reported, but it has been found that the compensation is too small to secure proper service, and in some cases any service at all; moreover, the transcripts secured are unsatisfactory, being generally made from record books which do not contain all the information reported upon the death certificates.

It is especially important, therefore, that sufficient compensation be allowed to secure accurate and complete transcription upon Standard Certificate of Death blanks, to be forwarded to the Census Bureau monthly or periodically, thus facilitating tabulation in this office and greatly increasing the accuracy of the reports. The increase in compensation for these returns can be secured readily by abandoning the payment of 2 cents per death, and employing special agents. In the prosecution of this inquiry the importance of changes thus briefly outlined can scarcely be overestimated. I therefore respectfully suggest the early submission to Congress of the following amendment:

*That section 8 of the act of March 6, 1902, providing for a permanent Census Office, be amended to read as follows: The Director of the Census is hereby authorized to prepare and publish a report upon mortality statistics in registration areas covering the ten-year period, 1895 to 1905, and to obtain transcripts of the registration records of deaths from June 1, 1895 to June 1, 1899, in states and cities where the records are sufficiently com-*

plete and satisfactory for such purpose. And there shall be a collection of the statistics of births and deaths in registration areas for the year 1902, and annually thereafter, the data for which shall be obtained only from and restricted to such registration records of such states and municipalities as in the discretion of the Director possess records affording satisfactory data in necessary detail. And for the purpose of securing the returns required by this section, the Director may employ special agents when necessary.

Importance of  
Collaboration  
between the  
Federal Census  
and State Sta-  
tistical Bureaus.

I consider the question of collaboration between the Federal census and the several state statistical bureaus one of great and growing importance. I may direct your attention to the fact that in recent years there has been an enormous increase in the amount and enlargement in the scope of the statistical work done under state authority. In many states there are mining bureaus or boards of mining inspectors; boards of agriculture; state geologists; state boards of charities; boards which compile statistics of the criminal, delinquent, and defective classes; railway and electric-light commissions; forestry commissions; and boards of health or vital statistics; all of them regularly engaged in work which touches closely at some point the work assigned by Congress to the permanent Census Bureau.

The statistical data compiled by these boards in the forty-five states of the Federal Union constitute a mass of statistical material which is growing so rapidly from year to year that it is no longer possible for any private library to find room for it, and very few public libraries can do so, while the individual student of statistics is overwhelmed and lost when he seeks to secure by personal research all the available data. No attempt is anywhere made to correlate and compare this vast accumulation of statistical facts. While a certain general similarity runs through the kindred statistics of the several states, their most striking characteristic is a lack of scientific homogeneity. No one can compare the kindred statistics of one state with those of another with certainty that they are truly comparable in any given particular, and at many points they are hopelessly out of joint with each other, and therefore useless or misleading in any comparative study. They may, and probably do, answer local and state requirements, but for the larger purpose of general statistical study their usefulness is greatly limited.

In a scheme for the National unification of official statistics at every point where the work of the Census Bureau touches the statistical work of any bureau, board, or commission, in any state, effort should be made to secure uniformity in date of investigation, schedules of inquiry, and scope of tabulation, thus securing uniformity in results and a basis for the comparative use of these statistics. Every state canvass would then supplement every National canvass; the actual, practical value of both would be multiplied many times, and the Census would be saved the expense of making many canvasses which the states also make—a saving to be divided between them. The question of economy, however, is of little importance compared with the intrinsic improvement of official statistical work.

Advantages of  
Cooperation.

The Census Bureau has had already several opportunities of demonstrating the practicability of a working arrangement with state boards and officials. In the recent investigation of electric railways, arrangements were made whereby the reports submitted to the latter by all the street railway corporations in these several states were placed at the service of the Census Bureau, thus saving this office many thousands of dollars in field work and bringing the state and the census reports into harmony with each other. Similar cooperation was effected in a more limited field in the Census report on electric light and power stations.

Practicability of  
Cooperation  
demonstrated.

The most important field for National and state cooperation in statistical work is in connection with the state bureaus of labor statistics, of which there are some thirty, charged with the duty of making reports regarding the condition and progress of manufactures and of the labor engaged in manufacturing industries. Heretofore there has been little uniformity of method in the work of these bureaus, such as would permit exact comparison between the results obtained in the several states or in the Federal census. The practical value of these industrial statistics has been greatly circumscribed by this absence of similarity in method and the impossibility, in consequence, of ascertaining comparative conditions from the several reports.

The attention of the present Director was early drawn to the possibilities of definite cooperation between these bureaus and the permanent Census, and a general scheme was devised

*Report of the Director of the Census*

whereby the latter might be made a central clearing house, through which this great mass of statistical material may be brought gradually into a harmonious and consistent whole, each report of every state bureau supplementing every other, and all of them worked out on lines so similar to the five and ten year reports of the census that the results would be practically a continuous census report, thus avoiding a vast amount of duplication which now occurs and saving much money which is now wasted.

Cooperation approved by the Commissioners of State Bureaus of Labor.

This plan was submitted to the annual convention of the officials of state bureaus of labor held in Washington, D. C., on April 28 last, by which body it was unanimously approved. The report of the committee to which the subject was referred is submitted in a footnote.<sup>1</sup> In accordance with this report, a special committee was appointed, with Mr. W. M. Steuart, chief statistician of the division of manufactures of the Census Bureau, as chairman. This committee is now in active correspondence with all the state bureaus of labor statistics in planning uniform schedules of inquiry and uniform methods of tabulation. It is meeting with the most encouraging response, and I look upon the results which must ultimately spring from its labors as a most important reform and advance in official statistics, directly due to the establishment of the permanent Census Bureau. The first result of this cooperative movement is an arrangement whereby the Census Bureau will join forces with the census authorities of the commonwealth of Massachusetts in taking the manufacturing census of that state in 1905, for which provision is made in the act establishing a permanent census. Without this cooperation there would have been two manufacturing censuses of Massachusetts in that year, which would not have agreed with each other, and of course would

<sup>1</sup> NINETEENTH ANNUAL CONVENTION OF THE ASSOCIATION OF OFFICIALS OF BUREAUS OF LABOR STATISTICS.

*Report of committee on cooperation of Federal and state governments in the collection of statistics and resolutions of the association.*

The undersigned committee was appointed at the Eighteenth Convention of the Association of Officials of Bureaus of Labor Statistics held at New Orleans April 1-5, 1902, in accordance with the following resolution:

"Whereas the act of Congress, approved March 6, 1902, establishing a permanent Census Office, provides for the collection of various classes of statistics which in some degree and at different times the bureaus of labor

*to the Secretary of Commerce and Labor*

have cost twice the sum of money which will now be expended by the United States and the commonwealth in conjunction. Similar arrangements are pending with the bureaus in other states.

and other statistical offices in the several states collect for their respective localities; and

"Whereas said act provides for the collection in 1905, and every ten years thereafter, of statistics of manufactures confined to manufacturing establishments under the factory system; and

"Whereas it is desirable that the work of the state bureaus and that of the permanent Census Office of the Federal Government should be brought into cooperative relations through the adoption of some plan by which the work of the Federal and state governments in the lines indicated can be made practically uniform: Therefore, be it

"Resolved, That in order to secure proper cooperation between the Federal Census Office and the various state bureaus a committee of four be appointed, of which committee the president of this association shall be one, to confer with the Director of the Federal Census and to represent the interests and work of the state labor bureaus; and, further, that in conference with the Director such Federal and state legislation as may be necessary for securing cooperative relations be considered and reported, with other recommendations, at the next meeting of this association."

The committee has been in conference with the Director of the Census and has found him in entire harmony with the spirit and purpose of the above resolution. The terms and proposals of this report meet with his hearty sympathy, and the United States Census Office may be relied upon to cooperate with the several state bureaus of labor statistics in all lines of investigation where such cooperation is found to be feasible and desirable. It should be understood also that there is no disposition on the part of the Census Office to minimize the work of the state bureaus, to restrict or to control the nature or extent of the inquiries they are conducting, or to interfere in any way with their initiative or their functions. It is believed by the Director, and your committee concurs in the belief, that the results of cooperation, such as is now suggested, will be to improve the quality of the work both of the state bureaus and of the Census Office, and to add materially to the dignity and strength of both.

The committee suggests collaboration and coordination between the Census Office and the state bureaus with a view to unification in the similar work of these offices. The secondary and not less important result to follow from this unification will be a gradual bringing together of like data collected by all the state bureaus, thus making possible, in time, accurate comparison of the results reported by all the state bureaus.

In a word, the purpose of this movement is the standardizing of industrial statistics.

By collaboration is meant joint and cooperative work in the gathering of the material for statistical reports, *i. e.*, in the field work. By coordination is meant concert of action in the preparation, tabulation, and compilation of the results of field work, with a view to uniform schedules of inquiry, harmonious and consistent results, and the establishment of a scientific basis of comparison between state and Federal industrial investigations.

The opportunities for and advantages of such cooperation and coordination were fully set forth in the remarks of Hon. Carroll D. Wright, United States Commissioner of Labor, and Mr. William M. Steuart, Chief of the Division of Manufactures in the Twelfth Census, at the New Orleans convention, and need not be repeated here in detail. These advantages may be summed up as follows:

a. It will insure uniformity in schedules, methods, and results, and thus

Value of Cooperation in securing Statistics of Wealth, Debt, and Taxation.

Fully as important as the movement for reform in industrial statistics, and more perplexing and difficult of accomplishment, is the effort of the Census Bureau to secure uniformity in the statistics of wealth, debt, and taxation.

make possible comparisons between the state and Federal investigations upon the same subjects and between the reports of the several states from year to year.

b. It will obviate the necessity and disadvantages of constant duplication of work.

c. It will effect a saving of expense both to the Federal Government and to the several states.

Participation in these advantages will be mutual. They will accrue to the several states in the following ways among others:

1. By giving to trained statisticians in state offices the supervision, within their own states, of the field work of the Census Office, when the latter is undertaken in collaboration, allowing them suitable compensation for their services.

2. By depositing in the state bureaus, whenever desired, complete records of the census work for that state, and by allowing state publication of the results simultaneously with their publication by the Census Office.

3. By saving to the state a large part of the expense of supervision, field work, tabulation, and compilation.

4. By the insertion upon the several schedules of inquiry or by the use of supplemental schedules embodying special local questions in any state that may desire to gather information in addition to that called for upon the Census Office schedules.

5. As time passes the Census Office will require, in the several states, a permanent headquarters or central state office, and particularly at the periods of the decennial censuses. A state office, equipped with experienced officials and clerks, will offer superior inducements, as compared with a temporary office of its own.

The practicability of the proposed cooperative work between the Census Office and the several state bureaus of labor statistics is demonstrated by the annexed agreement (Appendix, page 17), already effected between the Census Office and the Bureau of Statistics of Labor of Massachusetts, whereby but one canvass is to be made for the manufacturing census of 1905 in that state under the joint auspices of the two offices. By this agreement the state of Massachusetts will be saved the expenditure of about \$32,000, being the amount expended for field work in that state in the collection of the statistics of manufactures for the Twelfth Census of the United States.

The Census Office has already successfully inaugurated the proposed plan of cooperation and coordination, through the courtesy of the officials of another group of state offices, in connection with its forthcoming reports on street railways and electric light and power. The Electric Light and Power Commission of Massachusetts and the railroad commissions of Massachusetts, Connecticut, New York, Pennsylvania, Illinois, and other states have permitted the Census Office to make copies of all the reports received by them from the individuals and corporations doing business within these states and required by law to make annual reports to these commissions.

This assistance has saved the Federal Census many thousand dollars in field work, and has relieved the corporations in question of the necessity of making out two sets of returns covering practically the same data for slightly different periods of time. The only additional field work required by the Census Office in these states has been where the questions on the

*to the Secretary of Commerce and Labor*

This bureau is now engaged in the preparation of the decennial report on these subjects, which the act establishing the permanent census authorizes it to make. The first report upon wealth, debt, and taxation was made at the census of 1880. In

state and Federal schedules have differed. It is believed that in the course of time a practical uniformity in the forms of schedules used by the Census Office and by the several street railway commissions will result from this cooperation, and that there will thus accrue an ultimate advantage of the highest scientific importance.

It must necessarily be a work of many years to fully develop collaboration and coordination among so many states; but the advantages to accrue to statistical science are so obvious, so numerous, and so important that the end is worthy of the most earnest endeavor and the hearty cooperation of all concerned.

It appears to the committee that the bureaus of labor statistics offer the most practical and the most important field in which to inaugurate the proposed plan. A careful consideration has convinced the committee that this cooperation between the Census Office and the state bureaus of labor can be begun, and perhaps carried out, in all the states, without additional legislation on the part of any of them. The Director of the United States Census has full authority, under the present law, to effect and to carry out the plan of cooperative work suggested in this report.

The committee therefore recommends that the following resolutions be adopted by this convention:

*Resolved*, That the report of the special committee on collaboration and coordination between the United States Census Office and the several state bureaus of labor be adopted as the sense of this convention; and that the chiefs of the several state bureaus be requested to communicate directly with the Census Office, and to furnish said office with a detailed statement of the special investigations and reports which they are required by law to make, or which they may contemplate on their own initiative, with copies of such blanks, schedules, and other forms as are used or contemplated in these investigations and reports, in so far as they relate to the subjects covered by the census law, with a view to such modifications of said blanks, schedules, and forms as may be necessary and agreed upon as a basis for future cooperation in the work of the offices.

*Resolved*, That a permanent committee of three be appointed by the president to take into consideration the schedules now in use, or contemplated, by the Federal Census Office and the statistical offices of the several states, with a view to harmonizing the same. Said committee is to report at the next annual meeting upon the best methods to be adopted for securing a degree of harmony in scope, schedules, instructions, and tabulations for the inquiries to be conducted by the Federal Census Office and the state offices during the year 1905.

*Resolved*, That the commissioner of each state be requested to communicate to the above committee what additional legislation, if any, is necessary or desirable in his own state in order to carry out the plan of this report.

Respectfully submitted.

CARROLL D. WRIGHT,  
WILLIAM ANDERSON,  
JOHN MCMACKIN,  
CHARLES F. PIDGIN,  
*Committee.*

APRIL 28, 1903.

view of the obstacles encountered, that report and the next one, for 1890, possess a gratifying degree of accuracy and value. Guided, however, by this early experience, and profiting by the longer time and greater deliberation made possible by the complete separation of this investigation from the emergency work of the census proper, the office will now be able to present a more complete and accurate account of public finance in all its aspects—National, state, county, municipal, and local—than ever before has been possible in any country. In many respects this is the most important single investigation committed by law to the Census. The question of taxation, involving the cost of government, the distribution of this cost among its several items, and the relative cost of these items in one community, as compared with similar communities, is the most important one in every locality, and the one regarding which it is possible for the Bureau of the Census to be of the most practical service to each civil entity.

But the difficulties in the way of its successful accomplishment are almost incredible. Uniformity of accounting in the expenditure of public money for whatever purpose is practically unknown. No two states, no two cities, no two counties in a state, no two towns in a county, observe uniform methods of bookkeeping or classification of accounts. To bring the results of this diverse financial bookkeeping into something like orderly and comparable statistics is the work of the Census Bureau after having collected the data from its several official sources.

At best the results must be unsatisfactory, but a vast improvement in them as compared with the similar work at previous censuses is observable in the states of Alabama, California, Louisiana, Maine, Massachusetts, New York, North and South Dakota, Ohio, Virginia, and Wyoming, in all of which laws have been passed which enforce uniform public accounting to a greater or less degree. Agitation for similar legislation in other states is in progress and is encouraged and made effective by the work of many volunteer students of the subject, acting individually or through associations. Prominent in this work is the National Municipal League, with whose officials the Census Bureau has been in constant correspondence and conference, for the purpose of extending such aid and cooperation as can be

supplied from its own experience and from its official records. As this movement progresses, the value of the census reports on wealth, debt, and taxation will be greatly increased and the labor of their preparation correspondingly reduced.

In the discussion which preceded the enactment of the law establishing the permanent Census Office, the standardization of state and municipal statistics with those of the Federal census was not advanced as an argument in favor of the change, but the creation of the permanent bureau immediately opened an almost unlimited opportunity for improvement in general statistical methods and results. To lead the way by example, co-operation, and advice in reducing the huge mass of ill-arranged state and municipal returns to orderly and comparable statistics is a task of far-reaching importance. I feel profoundly convinced, therefore, that the first year of the existence of the permanent Census Bureau has not only shown the sufficiency of the reasons which were originally advanced in behalf of the bureau, but has developed a new field of usefulness, practically overlooked in the original discussion, and important enough in itself to justify the establishment of the permanent office.

Standardization sufficiently important to justify Permanence of the Census Bureau.

In separating the special reports of the Census from the main reports, the wisdom of Congress has been demonstrated already by the much more satisfactory results attained in the former and the greater confidence which can be placed in the data published and hereafter to be published. We are pursuing our work upon these special reports with a corps of trained clerks, all of them specially selected for their aptitude and efficiency. Most of these clerks we hope to retain in the bureau so that they may be utilized in the great task of taking and compiling the Thirteenth Census. Through them, and more especially through the experts in the several divisions, there will be preserved a continuity in the methods of the bureau, a knowledge of, and adhesion to, its traditions, with an avoidance of the errors and the waste which inevitably occur in building a new office from the beginning.

The officials of the bureau are taking advantage also of the opportunity (which never existed under the temporary census organization) to constantly study and secure improvement in method and the attainment of greater accuracy. In short, the

Improvements in Methods and Accuracy within the Bureau.

Bureau of the Census has already become a great statistical and sociological laboratory in which the inexhaustible material supplied by the schedules can be analyzed and properly classified and conclusions weighed and tested before they are announced. Already, by your order, and in accordance with your general plan of concentrating all the statistical work of the department, so far as possible, in the Bureau of the Census, two important branches of statistical inquiry have been transferred to the permanent bureau, and the office is now so organized and equipped that it is prepared to handle with celerity, economy, and accuracy, any additional statistical inquiries which may be intrusted to it, either by your order, under the law establishing the Department of Commerce and Labor, or by the authority of Congress.

Representation  
at the Louisiana  
Purchase  
Exposition.

Early in June Hon. Carroll D. Wright, who had been placed in charge of the representation of the Department of Commerce and Labor at the Louisiana Purchase exposition, allotted to the Census Bureau 600 square feet of floor space for its exhibit, and the sum of \$2,500 for the expenses connected therewith. Both the space and the appropriation are less than were requested, but the plans of this bureau have been modified accordingly, and the census exhibit will include:

1. *Illustrations.*—A series of illustrations on a large scale, similar to the diagrams and maps used in the *Statistica! Atlas* for illustrating the statistics of the Twelfth Census. The most important part of this exhibit will consist of twelve large wall maps representing the distribution of the population at each census, and collectively showing the progress of the United States in population.

2. *Mechanical tabulation.*—The machine used for tabulating purposes by Colonel Seaton in the Tenth Census; the tabulating machine used in the Eleventh Census; punching machines; the new automatic tabulating machine; and an automatic sorting machine. Of these machines those which represent the system now in use will be in operation to show the manner in which the data relating to population and agriculture were punched on cards and tabulated.

3. *Census schedules, reports, and blanks.*—Bound volumes of the schedules returned by the enumerators at each census from

*to the Secretary of Commerce and Labor*

1790 to 1900, inclusive; copies of the printed census reports issued at each census; and a full set of the 1,735 blank forms printed for and used by the Twelfth Census.

The annual report of the Director of the Census for the fiscal year ended June 30, 1903, submitted to the Secretary of the Interior, shows the total disbursements of the bureau to have been \$1,343,481.93, which sum represents the cost of the office in the first year of its permanent organization. The full sum available for the conduct of the bureau during the current fiscal year is \$1,585,528.29, including the regular appropriation voted by Congress, \$1,183,260, and the unexpended balance of the previous appropriation, amounting to \$402,268.29, which was reappropriated by Congress in the deficiency act, approved March 3, 1903, and which has been construed and interpreted by the Attorney-General of the United States as available for all general census purposes during the fiscal year ending June 30, 1904.

Expenses and  
Estimates.

My estimates for the cost of conducting the bureau during the fiscal year beginning July 1, 1904, were submitted to you October 1, and received your approval. These estimates call for an appropriation of \$1,520,750 as per the following recapitulation:

Salaries .....	\$755,360
Collection of statistics .....	455,690
Tabulation of statistics .....	62,300
Rent .....	36,600
Stationery .....	15,000
Miscellaneous and contingent expenses .....	20,800
Library .....	5,000
	<hr/>
	1,350,750
Printing (allotment required for the Census Bureau under appropriation for public printing and binding) .....	170,000
	<hr/>

Total amount of estimates for year ending June 30, 1905... 1,520,750

This sum includes provision for the cost of the quinquennial census of manufactures which Congress has directed to begin January 1, 1905. The estimates for the coming fiscal year are therefore considerably in excess of the amount which otherwise would be required for the conduct of the bureau.

All of which is respectfully submitted.

S. N. D. NORTH,

*Director.*

BUREAU OF THE CENSUS  
REPORT OF THE DIRECTOR  
TO THE SECRETARY OF  
COMMERCE AND LABOR



Concerning the Operations of  
the Bureau for the Year 1903-4

WASHINGTON : 1904

## REPORT OF THE DIRECTOR OF THE CENSUS



*Washington, October 15, 1904.*

SIR: I have the honor to submit the following report upon the operations of the Bureau of the Census for the last fiscal year. The report covers the first year under the supervision of the Department of Commerce and Labor, and the second year of the existence of the Bureau of the Census as a permanent office under the act of March 6, 1902.

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 \$1,316,811.22. Included in this sum is the cost of tabulating and compiling the census of the Philippine Islands, approximately \$214,117.58. This amount should be deducted in comparing the expenditures of the Bureau for 1904 with those for 1903. Much of the extra expenditure caused by this tabulation was met 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 clerical force of the Bureau, and paid for out of the current appropriations. The cost, also, of preliminary Philippine Census printing, such as blanks, tabulation sheets, bulletins, etc., was defrayed out of the appropriation to the Public Printer for the requirements of the Bureau of the Census.

*Expenditures  
of Bureau  
during the Fiscal  
Year.*

Deducting the cost of the Philippine Census as shown above, the amounts required for the conduct of the Bureau for the fiscal years 1903 and 1904 were as follows:

	1904	1903
Expenses, exclusive of printing and engraving .....	\$959,022.24	\$1,154,117.94
Printing and engraving .....	143,671.40	196,153.14
Total .....	1,102,693.64	1,350,271.08

*Report of the Director of the Census*

The census of manufactures ordered by Congress for 1905 makes it necessary to increase the amount estimated to be required for the coming year so as to include that undertaking. The estimate for the fiscal year 1905-6 is \$1,482,340.

Justification of  
the Establish-  
ment of the  
Permanent  
Census Bureau.

Sufficient time has now elapsed to justify the conclusion that the establishment of a permanent Census Office was wise legislation, altogether apart from the main arguments which led Congress to enact the law. These arguments were that it would permit of careful and scientific study of the main and secondary results of the decennial enumerations; that it would keep together a corps of experts, trained and competent to prepare for and take the Thirteenth Census, and sufficiently familiar with the methods and scope of previous censuses to insure close comparability and greater accuracy in the results; and that it would create a central office, exclusively devoted to statistical investigation, in which many statistical inquiries now carried on in bureaus not specially equipped for such work could gradually be concentrated.

Value of Census  
Bureau Publica-  
tions.

Much has already been accomplished along these lines. The list of publications of the Bureau of the Census for the last fiscal year, Appendix C, shows a number of supplementary statistical reports, analyzing and interpreting the results of the Twelfth Census, in directions that heretofore have been neglected, for lack of time and opportunity to consider them. Other studies, of equal interest and importance, are in progress or are contemplated. These studies in many instances deal with data hitherto untabulated. They possess a sociological value hardly less than that which attaches to the main census results. Their presentation places the census of the United States in the first place among the censuses of the world; for no other country has as yet been able to carry its interpretative analysis as far as this Bureau is now doing. This achievement possesses special significance when the practice in previous census work is recalled. It long has been the custom in the United States to secure census information considered essential by all civilized nations, and in addition to obtain on the schedules material not included in foreign census inquiry, yet heretofore the interpretation of basic material has been inadequate and no analysis whatever of most of the remaining information has

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been attempted, although the cost of obtaining it was often very large.

This work is the most effective preparation for the Thirteenth Census. It lays bare the errors and sources of error in the last enumeration, and affords every facility for guarding against their recurrence. In order that the best possible utilization of the opportunity may be made, your predecessor appointed a special advisory commission on the recommendation of the Director of the Census, whose duty it will be to make a thorough study of all the conditions surrounding census work in this and other countries, and to prepare a report for the guidance of Congress in enacting legislation for the Thirteenth Census. This committee, with which the Director of the Census will act, consists of Hon. Carroll D. Wright, of the Bureau of Labor; Prof. Walter F. Willcox, of Cornell University; Dr. Henry Gannett, of the United States Geological Survey; Prof. Davis R. Dewey, of the Massachusetts Institute of Technology; and Mr. John Hyde, of the Department of Agriculture—all of them trained students of the theory and technique of modern statistics, and interested in raising the statistical work of the United States to the highest standard. This commission will also advise with the Director of the Census as to the current work of the Bureau, in order to aid him in the effort to bring that work to the highest standard of modern scientific statistical inquiry. It plans to meet at stated intervals, and to obtain suggestions and criticisms from students in all lines of statistical investigation.

Preparation for  
Thirteenth Cen-  
sus.

The practical usefulness of the Bureau of the Census as a part of the permanent organization of the Government is shown again by the character of the work of the Bureau, in addition to that specifically assigned to it by law. Most important has been the compilation and publication of the census of the Philippine Islands, assigned to the Bureau by the proclamation of the President, dated September 30, 1902, in accordance with the provisions of section 6 of the act of Congress approved July 1, 1902, entitled "An act temporarily to provide for the administration of the affairs of civil government in the Philippine Islands," and in compliance with the request of the Philippine Commission. The schedules of the Philippine Census were received in this Office on September 25, 1903; and

Compilation of  
the Philippine  
Census.

*Report of the Director of the Census*

the complete tables for population, agriculture, manufactures, and vital statistics, and much other data, have been placed in the hands of the Director of the Philippine Census at intervals during the first six months of the year, the last of the tables being transmitted on October 19, 1904. The work of compiling the population statistics was under the supervision of Mr. William C. Hunt, chief statistician for population.

The final results of the Philippine Census will be printed in four octavo volumes, of approximately 700 pages each. These volumes are now passing through the Government Printing Office, under the supervision of the technical expert of this Bureau, and their publication may be looked for prior to March 1, next.

In the compilation of the Philippine Census, the regular clerical force of the Census Bureau was utilized exclusively, except for a period of three months, during which 150 temporary clerks were employed in order to expedite the punching of the cards.

By order of your predecessor, dated October 8, 1903, the Bureau of the Census has compiled the statistics of the Executive Civil Service of the United States, and the results have recently appeared as Census Bulletin 12. These statistics were collected, pursuant to the Executive order of March 31, 1903, in connection with the preparation of the biennial Official Register by the Secretary of the Interior, and they have been presented in accordance with a scheme formulated by the Civil Service Commission. They show the sex, nativity, age, character of appointment, state from which appointed, length of service, salary, character of work, and place and office where employed, of the 150,383 employees of the Federal Government. The data presented are important and interesting. Accurate information regarding the personnel of the Executive Civil Service can be secured only by compilations of this character, and there will undoubtedly be a demand for it at stated intervals. The Official Register is published biennially; and as much of the information collected for it can be utilized for statistical purposes, the Bureau of the Census should be authorized to compile a similar bulletin at intervals of two, four, or six years. The Census is the only Bureau of the Government equipped to make

Statistics of the  
Executive Civil  
Service.

*to the Secretary of Commerce and Labor*

this compilation; and it is respectfully suggested that it will tend to economy and unity of work if the compilation of the Official Register should at the same time, and by amendment of the act of Congress approved January 12, 1895, be transferred from the Department of the Interior to the Bureau of the Census, in order that work so intimately related may be simultaneously carried on.

By a similar order of the Secretary of Commerce and Labor the statistics of immigration for the year 1903-4 have been compiled by the Bureau of the Census in cooperation with the Bureau of Immigration. These statistics will hereafter be compiled in harmony with the decennial census tables, showing the birthplace of the foreign born population. Thus an obvious statistical unification has been brought about. In the compilation of the immigration statistics the punched card has been used, and much information from the alien manifests, hitherto untabulated, is thus brought within reach.

Statistics of Immigration compiled in Cooperation with Bureau of Immigration.

In this connection I desire to repeat my recommendation of last year, in which the Commissioner-General of Immigration has joined, that Congress be urged to enact legislation by which the alien emigration, as well as immigration, can be statistically measured. There can be no accurate record of the changes effected in the character of our population by immigration, without the corresponding details of emigration. The number of these returning immigrants is large, reaching many thousands a year; and until it is officially ascertained we can not hope to bring the statistics of immigration into conformity with census statistics of the foreign born.

Also, by direction of the Secretary, a portion of the clerical force of the Bureau of the Census was employed for six weeks in computing rates of wages for a special report of the Bureau of Labor; the results demonstrated the great advantage, from the point of view of celerity in compiling and promulgating official statistics, which comes from the existence of a large central office, officered by trained experts, to which statistical work, whatever its technical character, may be transferred, by proper executive order, for quick handling. About one-quarter of the clerical force of the Bureau has been continuously occupied upon such work during the past year—work supplemental

Rates of Wages computed for the Special Report of the Bureau of Labor.

to that contemplated by the census act. In the interest of efficiency, expedition, and economy, it seems desirable that additional transfers shall be made in the future as occasion arises; and for such transfers, or for the preparation of statistical reports on any subject, there is ample authority under the provisions of the act establishing the Department of Commerce and Labor.

A General Information Office.

The permanent Census Bureau is coming to be regarded as the general information office of the Government. The daily correspondence, covering inquiries on every variety of topic, is large, and steadily increasing. The rule of the Bureau is to supply the desired information, whenever possible, whether or not it relates to the specific work of the Census.

The Library.

The Bureau is constantly enlarging its facilities for supplying such information. The Census library now contains 10,362 bound volumes and 15,639 unbound pamphlets; and the additions have come almost entirely without cost to the Government. The Bureau has established a system by which it exchanges its own publications for the trade and technical periodicals of this and foreign countries, and with practically all the governments—national, state, and local—both foreign and domestic, which publish reports statistical in character. The Census is thus rapidly accumulating one of the most complete current statistical and reference libraries in the country.

The Geographer's Division.

The geographer's division of this Bureau, under the supervision of Mr. Charles S. Sloane, has greatly enlarged its collection of maps, which now includes topographical maps of every state and territory, and of nearly every city in the United States. These maps are being kept up to date by platting upon them each annexation and detachment of territory. The Bureau will thus be in possession, at the Thirteenth Census, of all the data required to lay out enumeration districts to the best advantage, the lack of this preliminary information at previous censuses having been the chief cause of confusion and delay.

The Census Records.

The original schedules of the twelve decennial censuses of the United States from 1790 to 1900 are now in possession of the Bureau of the Census. These records were transferred from the Department of the Interior to the Census building, in June last, under the act of Congress approved January 12, 1903, pro-

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viding for such transfer and authorizing the Director of the Census "upon the request of a governor of any state or territory, or the chief officer of any municipal government, to furnish such governor or municipal officer with copies of as much of said files or records as may be requested, at the discretion of the Director of the Census, upon payment of the actual cost of making such copies; and the amounts so received shall be covered into the Treasury of the United States, to be placed to the credit of and in addition to the appropriation made for the taking of the census."

The vault in the Census building has been put in fireproof condition and all of these valuable records are now stored in it, except the schedules of the census of 1890. The population returns of that census were taken upon what is known as the family schedule, that is, a schedule for each family, of which there were 12,690,152: Their bulk is so great as to preclude binding, it being estimated that they would comprise 30,000 volumes. During the past year the population schedules of the Twelfth Census have been bound in 2,812 volumes. Thus the population schedules of all the censuses but the Eleventh are now in condition for permanent preservation. The records of the earlier censuses have, however, been subjected to much handling, and many of the bound volumes are in bad condition, necessitating their rebinding at an early date. There are constant requests for information from these records, and it has been the habit heretofore to permit the public unrestricted access to them. A rule has now been made, under which the records will be searched only by the clerks in charge, who are under instructions to exercise the greatest care. With these records in its keeping, the Census Bureau is now in position to be of service to the increasing number of people interested in early history and genealogy, and to furnish certified transcripts for court proceedings. The law above cited authorizes, for the first time, the exaction of a small fee for furnishing copies, certified or otherwise, of the census records, and establishes a proper safeguard for their use.

In this connection I ask your attention to a request frequently made by the patriotic organizations of the country and by individuals, that the Government shall compile and publish the

Preservation of  
all Population  
Schedules.

Propriety of  
Publishing the  
Returns of the  
First Census.

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names of the heads of families in the original thirteen states, as returned at the census of 1790. Unfortunately the First Census schedules for Delaware, Georgia, Kentucky, New Jersey, Tennessee, and Virginia were burned at the time of the capture of Washington by the British, or have since been lost or destroyed; but the schedules still in existence—comprising Connecticut, Maine, Maryland, Massachusetts, New Hampshire, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, and Vermont—contain much information, ready access to which would be welcomed by students. This information would increase the general knowledge of the origin and distribution of the early population of the country. The population of the United States in 1790, excluding slaves, was returned as 3,231,533, of which number 824,713 resided in the states and territories for which the schedules are missing, leaving 2,406,820 as the population enumerated on the schedules now in possession of the Bureau. I estimate that this population represents 401,134 heads of families, and that the desired information could be printed in 2,507 pages, at a cost, for printing and binding an edition of 5,000 in two volumes, of \$32,570. I doubt if the Government can make a more substantial and welcome contribution to its own history for a like sum of money; and I recommend that Congress be asked to make a specific appropriation for this publication, much of which is certain to return to the Treasury from the sale of these volumes. If they are sold to the public at a price corresponding somewhat with their cost, it will insure their distribution only to those who will prize them, and avoid the waste which so frequently attends the distribution of public documents.

The Sale of  
Census Reports.

It is a question worthy of careful consideration, whether the United States, following the example of nearly all the European governments, should not set a price upon all Census publications except the bulletins and the Abstract. The volumes are large, and costly to produce. While much care and discrimination are exercised in their distribution, I am nevertheless convinced that a large proportion go literally to waste, and I know of no way to prevent this so effective as to place a small price upon each volume—not a price representing the cost of printing

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and binding, but sufficient to insure distribution only to those who have actual need and use for the reports.

Of the main reports of the Twelfth Census, contained in ten quarto volumes, of approximately 1,000 pages each, there have been printed to date 150,000 copies. In the earnest effort to avoid waste, this total has been reached only after several editions for each volume.

The work of the Census during the past year is represented by actual publications, reports completed but not yet published, and reports upon which work is still in progress. A detailed list of these publications, of which the following is a summary, will be found as an appendix to this report.

Publications for  
the Year.

*Reports published during year.*

## VOLUMES.

Statistical Atlas.  
Employees and Wages.  
Occupations at the Twelfth Census.

## BULLETINS.

	Number.
Street and Electric Railways .....	3
Discussion of Increase of Population .....	4
Central Electric Light and Power Stations .....	5
Mineral Industries of Porto Rico .....	6
Estimates of Population .....	7
Negroes in the United States .....	8
Mines and Quarries .....	9
Quantity of Cotton Ginned in the United States (Crops of 1899 to 1903, inclusive) .....	10
Electric Fire Alarm and Police Patrol Systems .....	11
The Executive Civil Service of the United States .....	12
A Discussion of the Vital Statistics of the Twelfth Census .....	15

## PHILIPPINE CENSUS BULLETINS.

Population of the Philippines .....	1
The Climate of the Philippines .....	2
Volcanoes and Seismic Centers of the Philippine Archipelago .....	3

## PAMPHLETS.

Statistical Treatment of Causes of Death.  
Registration of Births and Deaths.  
Report of the Director to the Secretary of Commerce and Labor.  
Uniform Municipal Accounting.  
Collaboration in Federal and State Statistical Work.  
American Census Taking.

*Report of the Director of the Census**Reports in press.*

## VOLUMES.

Street and Electric Railways.

Mines and Quarries.

Supplementary Analysis and Discussion of Statistics of Population.

Census of the Philippines—4 volumes:

Vol. I. Introduction. Geography. History. Population. Appendices I and II.

Vol. II. Population Tables and Analysis.

Vol. III. Mortuary Statistics and Education, inclusive of schools.

Vol. IV. Agriculture. Social and Industrial Statistics.

## BULLETINS.

	<i>Number.</i>
The Ages of the Population of the United States .....	13
Proportion of the Sexes in the United States .....	14
Irrigation in the United States: 1902 .....	16
Telegraphs and Telephones .....	17

**Abstract of the  
Twelfth Census.**

Of the Abstract, which contains in an abridged form, without text, the more important results of the Twelfth Census, three editions have been published, of 25,000, 10,000, and 31,000, respectively, making a total of 66,000 copies so far issued. The demand for this volume continues unabated, showing that it meets the requirements of the great mass of the people for census information and justifies the continuance of its distribution free of cost.

**Methods of  
Handling Publi-  
cations.**

An earnest effort was made by my predecessor to present effective interpretation of the statistics gathered at the Twelfth Census, and to secure better presentation both in literary style and in printing and binding than had characterized much of previous census work. The time allotted for the production of the main reports was very short, but they undoubtedly marked a noteworthy advance in American Census publications. Since the establishment of the permanent Bureau much attention has been paid to the details of production. Although it gathers its own facts and prepares its own manuscript, this Bureau is in reality but a huge publishing house, for all productive work is ultimately recorded in printed pages. It is appropriate, therefore, that the standards for statistical, literary, and mechanical presentation should be very high. Furthermore, many of those especially interested in the information secured by the Bureau are students and writers upon economic subjects, who are them-

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selves keen critics. Therefore, in addition to collecting facts with increasing speed and accuracy, this Bureau is constantly endeavoring to improve the contents and appearance of Census publications. For the expert interpretation of investigations which are in progress, the assistance of scientists eminent in their respective lines is secured; but it is my policy to train such employees of the Bureau as give evidence of literary ability, to themselves interpret census statistics in a scientific and effective manner.

Two divisions have been created to handle Census manuscript: that of revision and results, under the supervision of a student and scientific writer of some note, assisted by an efficient corps of editors, whose duty it is to examine all statements and to correct defects, whether in subject-matter or style; and that of publication, which has charge of all Census printing, and thus of the mechanical form in which the report, bulletin, or paper is to appear. In the latter division all proof is read with great care, and finally verified in cooperation with the producing division.

The policy of the Bureau is to disregard official tradition in typographical form and in binding, as far as may be necessary in securing results which accord with the best modern standards. Good taste costs no more than poor taste. The initial cost of Census volumes, the labor and skill involved in their preparation, and their permanent preservation in libraries as the statistical records of the United States, entitle them to the most dignified and tasteful presentation, in both printing and binding, consistent with economy. No reason exists why Census publications should not be given the same advantages in these particulars accorded, as a matter of course, by private publishing houses to scientific works of far less importance.

If the work of these two divisions is prosecuted in the future with the same enthusiasm and success that so far have attended it, the excellence of the literary style and of the appearance of Census volumes will add materially to the reputation of the Bureau.

The additional work, in various stages of progress, which has occupied the office during the year may be briefly summarized:

The report upon the wealth, debt, valuation, and taxation of the United States, by states, counties, and municipalities, au-

Editing and Publishing Census Results.

The Current Work.

Report on Wealth, Debt, and Taxation.

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thorized by section 7 of the act to establish a permanent Census Office, has continued chiefly to occupy the attention of the division of agriculture, under the charge of Mr. L. G. Powers, chief statistician. The fieldwork for the report was completed during the month of May last. The preliminary report, covering the financial operations of the larger cities, will be ready for publication during the present calendar year.

This report is one of the most difficult and important the Census is called upon to make; and nothing heretofore attained in this field has been satisfactory. This has been due largely to the fact that the work was carried on simultaneously with the main census inquiries; and in the rush of that work, could not receive the attention its technical character demanded. The postponement of this report until after the completion of the census proper was one of the wisest provisions of the act for taking the Twelfth Census; it has given the Bureau ample time and opportunity for a most complete presentation of the material resources and financial operations of the nation.

**Statistics of Municipal Finance.**

The inquiry relating to municipal finance was one of the most noteworthy of the many extensions of census statistics undertaken at the Tenth Census. Since the publication of the information then secured, increased attention has been paid to this class of Federal and state statistics, popular interest has been aroused, and this has led to a general and earnest demand for improvement in methods of municipal accounting.

The earlier statistics were more or less imperfect, because there was no common classification of municipal accounts and no uniform method of municipal bookkeeping. To encourage reform the National Municipal League arranged a classification of payments and receipts and recommended its general adoption. This was done experimentally by Baltimore, Md., Cambridge, Mass., and a few small cities, before the work of the Twelfth Census began. The Bureau of the Census adopted this classification with minor changes, and, in order to secure uniformity of results, prepared instructions for rearranging local statements of accounts. These instructions and the accompanying schedules have contributed appreciably toward uniformity in classification of accounts and methods of accounting.

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While these were steps in the right direction, so much diversity still existed that the task of securing comparable statistics was exceedingly difficult, and in order to complete satisfactorily the decennial inquiry authorized by Congress, it was necessary for the Census to take the lead in a movement looking to greater uniformity in the accounting methods of municipalities. Accordingly, in response to the invitation of the Director of the Census, a conference was held in November, 1903, at Washington, attended by a number of representative auditors, comptrollers, expert accountants, and other students of municipal problems. Interest in the subject of uniformity in classification and methods of municipal accounting received a decided impetus from this conference; minutes of the meeting were published in pamphlet form, and have been in much demand. During the past year the different phases of this problem have been actively discussed at sessions of the Commissioners on Uniform State Laws, the National Municipal League, the Congress of Public Accountants, the National Association of State Bank Supervisors, and the associations of the fiscal officers of the cities of Pennsylvania and Wisconsin. Many municipal officials have expressed a desire for a second conference under the auspices of the Bureau of the Census.

Conference to  
secure Uniform-  
ity in Municipal  
Accounting.

Several cities have made changes in their systems of accounting, to conform wholly or in part to the classification adopted by the Bureau of the Census. Among these are New York city, St. Louis, Buffalo, Minneapolis, Atlanta, Houston, South Bend, and Lincoln. The state of Ohio has established for all its cities a uniform system of accounting in harmony with that of the Census schedules, so far as local laws permit. Cities in New York having less than 250,000 population are now required to make annual reports to the Secretary of State, of their payments and receipts. The state schedule prepared for this purpose is based upon that of this Bureau. Many cities have installed already, or have under consideration, improved accounting systems in harmony with the one above referred to. The representatives of this Bureau have met everywhere with the hearty cooperation of local officials.

It is probable that the annual Census reports upon municipal finance for cities of 30,000 population and over will prove the

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most influential factor in securing the adoption of uniform classification, thus materially lessening the cost of compiling census statistics upon this subject, increasing the accuracy of the returns, making comparison possible between the itemized expenditures of cities of the same population, and encouraging reforms in the public service.

## Special Investigations.

As outgrowths of the financial report, two special reports have been undertaken as essential to a full valuation of property. One of these, relating to the valuation of railroad properties, properly apportioned to the several states and territories, has been undertaken in cooperation with the Interstate Commerce Commission, which has placed at the disposal of the Census all the data in its possession gathered from the railroad corporations since the organization of the Commission. The immediate supervision of this investigation has been placed in charge of Prof. Henry C. Adams, the statistician of the Interstate Commerce Commission, and Prof. Henry Balthasar Meyer, Ph. D., of the University of Wisconsin.

The second special investigation relates to the par and market values of the negotiable securities of the country. It has been placed in the charge of Mr. Charles A. Conant, of New York city. This report will cover an entirely new field of Federal statistical investigation, although for the past ten years similar statistics for most of the European countries have been collected. Its object is to ascertain not only the present par and market value of outstanding capital stocks, bonds, and debentures of all active corporations, but also the fluctuations in the value of such securities within a series of years. The data are found in published reports of the corporations and recorded selling prices of stock exchanges.

## Defective, Dependent, and Delinquent Classes.

Another pending investigation authorized by section 7 of the census act is that relating to the defective, dependent, and delinquent classes. This inquiry has been placed under the charge of Mr. John Koren, of Boston. Mr. William A. King, chief statistician for vital statistics, has general supervision of the work. Satisfactory progress has been made, and reports are now being received from 5,441 special agents, who are the bookkeepers or wardens of the institutions under review, and who furnish transcripts of their records for a nominal compen-

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sation. The report will cover the movement of population in all these institutions for the calendar year 1904; its completion can therefore hardly be looked for during the present fiscal year.

The annual reports of mortality in registration areas, authorized by section 7 of the census act, have been delayed in compilation by a defect in the statute, which fixed the compensation to be paid for the transcription of registration records at so low a figure that it proved impossible to secure a complete and satisfactory performance of the service. Congress was accordingly asked at its last session to amend the law, but the amendment did not become effective until April 27 last. This amendment permitted the Director to fix a minimum compensation of \$25 for such transcriptions, and in his discretion, in other cases, to pay at the rate of four cents per name, instead of two cents, as provided in the original act. The average compensation fixed, under this amendment, does not exceed  $3\frac{1}{2}$  cents a name.

Annual Mortality Reports.

Further delay arose in connection with these mortality reports, by reason of the fact that the force of the division was engaged in compiling the vital statistics of the Philippine Census. As soon as the latter work was completed, the compilation of the mortality reports was resumed, and the statistics for the years 1900, 1901, 1902, and 1903 are now in process of compilation, and should be ready for publication during the current calendar year.

The division of vital statistics is also engaged upon reports concerning the blind, deaf, and dumb, based upon data collected by the enumerators of the Twelfth Census. The statistical tables for these reports were completed some time ago. The preparation of the text and analysis of the tables was committed by my predecessor to Dr. Alexander Graham Bell, of Washington, and he is now engaged upon this work.

Reports concerning Blind, Deaf, and Dumb.

Another investigation now in progress, authorized by section 7 of the census act and of the act of Congress approved July 1, 1898 (30 Stat. L., 546, page 648), relates to the social and financial statistics of cities. The conditions leading to the transfer of the annual report for cities of 30,000 population and over from the Bureau of Labor to the Bureau of the Census, by the order of the Secretary of Commerce and Labor, were explained in the last report of the Director. The Census reports for cities of less than 30,000 population are decennial only; but

Social and Financial Statistics of Cities.

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the two inquiries are so identical in character that there is obvious advantage in making them together, and accordingly the annual canvass of the larger cities required by law was postponed last year, by order of the Secretary, and the data for the years 1903 and 1904 are now being simultaneously collected. A field force of 100 clerks and special agents was assigned to this work at different dates in the months of July and August last, and it is expected that the data will all be in the Bureau during the month of November.

A sixth report, growing out of the original plans for the Twelfth Census, contemplates a general review, analysis, and correlation of the results of that census, under the direction of Prof. W. F. Willcox, of Cornell University, formerly one of the chief statisticians of the Twelfth Census. A number of the special studies of census results produced by this division, in accordance with the original plan, have already been published in bulletin form. Others are now in the hands of the printer, and the final studies are approaching completion so rapidly that I anticipate the publication of the volume within the next six months. These supplemental reports will bring together in one quarto volume of about 1,200 pages, studies on the topics of area, population, increase of population, density and distribution, sex, age, race, negro population and farming, Indian population, Mongolian population, internal migration, illiteracy, marital condition, occupations, vital statistics, birth rate, report on boundaries of accessions, methods of estimating population, methods of mechanical tabulation, and derivative tables relating to the foregoing subjects.

The division of manufactures, Mr. William M. Steuart, chief statistician, is engaged in completing a series of important reports upon the electrical industries. These reports are four in number, and cover street and electric railways, the complete report upon which subject is in the hands of the printer; electric light and power plants, upon which a final bulletin has been published; municipal electric fire alarm and police patrol systems, already published in bulletin form; and telegraphs and telephones, upon which a bulletin is now in preparation. This series of reports is to be assembled in one quarto volume. To-

Special Reports  
to be Incorporated  
in Quarto  
Volume.

Electrical Industries.

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gether they present a complete account of the remarkable development of the electrical industry, in its application to public utilities. Nothing so rapid, so striking, and so revolutionary in its effects upon private manufacturing and public convenience, 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 electricity 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.

The annual canvass of the cotton ginners of the Southern states, taken for the purpose of ascertaining the size of the crop during the progress of the picking, was made last year with results highly gratifying from the point of view both of accuracy and of the promptness with which the information was given to the public. The increasing experience of the Bureau has produced such improvement in canvassing methods that preparations for this year's reports were promptly completed.

Cotton Statistics.

There will be six canvasses, showing the amount of cotton ginned to September 1, October 18, November 14, December 13, 1904, January 16, 1905, and the end of the season.

The number of special agents employed has been increased from 631 to 667, by the division of a number of the larger districts, thus insuring greater rapidity in gathering the data.

Although the reports of each agent show the quantity of cotton ginned to fixed dates, they are received at the Bureau at different times, depending upon the period required to complete the canvass in the respective districts. The publication of the results has been delayed heretofore until all of the returns were received, but the statistics for the crop of 1904 will be published by county totals and the results made public as rapidly as received. The individual returns will be summarized when all

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are received and the totals will be published as the quantity ginned to the given date in each state, in conformity with the practice followed heretofore.

It is believed that this system will result in satisfying the demand for the early publication of the data, that it will aid in avoiding the fluctuation in prices due to an anticipation or a manipulation of the facts contained in the reports, and that it will also eliminate all possibility of information being given out in advance of its publication by the Bureau.

The cost of the canvass of 1903 was \$99,395, but by reason of the increased number of agents employed, the cost in 1904 will be \$116,400.

The division of manufactures is also engaged in the preliminary work of the quinquennial census of manufactures, authorized by section 8 of the census act. This preliminary work consists in the preparation of the main and supplemental schedules, and the carding of the manufacturing establishments to be canvassed. The information for the latter work is obtained from the schedules returned in 1900, supplemented by state, county, and local directories. The plans of the Bureau contemplate the collection of a considerable percentage of the schedules by correspondence; and a copy of the schedule will be mailed to every manufacturer in the United States, whose existence is known, in advance of the actual canvass by districts. It is proposed, in that canvass, to utilize the clerical force of the Bureau, as far as possible, thus avoiding the necessity of appointing untried and untrained special agents to superintend the work in the field.

An important step in the direction of cooperation and collaboration between the Bureau of the Census and the statistical offices of the several states, was taken by Congress at its last session, in the enactment of the following law, approved March 1, 1904:

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Director of the Census is hereby authorized and empowered to cooperate with the secretary of state of the state of Michigan in taking the census of manufactures and shall equitably share the expenses thereof, the results of which may be accepted by the United States as its census of manufactures for that State for the year nineteen hundred and five: Provided, That the expenditures incident*

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to this cooperation shall not exceed twenty thousand dollars, such expenditures to be paid from the fund appropriated for the expenses of the fieldwork of the census for the fiscal year ending June thirtieth, nineteen hundred and five. And the Director of the Census may, in his discretion, cooperate with the officials of other states which take a like census in so far as it may aid in the collection of statistics of manufactures required by existing law.

The immediate occasion for this legislation was the fact that the constitution of Michigan requires a census of population, agriculture, manufactures, and mining to be taken in the year 1904. The secretary of state of Michigan, under whose authority this census is taken, desired to cooperate with the Bureau of the Census in the manufacturing canvass, in accordance with the recommendation of the Director of the Census in his last report, in order to save the expense of what would prove to be almost a duplicate canvass but six months apart, and in order that the manufacturers of the state might not be subjected to the annoyance of making two returns. The Bureau of the Census could not, however, accept manufacturers' returns for the year 1904 as a part of its census of 1905. The Michigan official therefore appealed to Congress; and with the approval of the Secretary of Commerce and Labor and the Director of the Census, the above quoted statute was unanimously enacted.

Under this law an agreement was made with the secretary of state of Michigan, whereby the manufacturing schedule of the Census Bureau was accepted for the Michigan census, and the correction and compilation of the returns were undertaken by this Bureau. Thus complete agreement between the Census report and the Michigan report was assured. In consideration of the control over the form and character of the returns thus accorded the Census, the latter undertook to defray two-thirds of the expense of the fieldwork, the state of Michigan, on the other hand, affording the Census free use of its office facilities and clerical force at the state capital. In this way the cost of the canvass is "equitably shared," and a considerable sum of money is saved to both the national and state governments.

The money saved is the least important advantage growing out of this joint canvass of the manufacturing industries of Michigan. It is the first practical step ever taken looking to

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the unification of the official statistics of the states and the nation, and the avoidance of the conflict and confusion which have attended their contradictory character. It must lead logically to systematic and sympathetic cooperation along similar lines in many other states, thus foreshadowing an ultimate unity and harmony in official investigations of the utmost advantage to statistical science.

The fieldwork for the Michigan census was undertaken in the latter part of July and entirely completed by the latter part of September.

Cooperation with the State of Massachusetts. An arrangement nearly identical with that made with Michigan has already been entered into with the Bureau of the Statistics of Labor of the state of Massachusetts for a cooperative canvass of the manufacturing industries of the state, which takes a decennial census in 1905. The saving of money by the avoidance of a double canvass will be considerably greater in this state; and the union of forces is the more gratifying and significant by reason of the fact that among the states Massachusetts has long taken the front rank in statistical investigation.

Cooperation with other States. A number of states in which no midway census is taken maintain bureaus of statistics, well organized and equipped, which compile annual or biennial reports upon the industries and industrial conditions of the commonwealth. These reports, while possessing much intrinsic value in many instances, have never been compiled from schedules uniform with those of the United States census, or even with those used in other states. It follows that the statistics are not comparable with those of the Federal census or with those of neighboring states. Their usefulness has therefore been greatly, and it would seem unnecessarily, circumscribed. All these periodical state reports can be made to serve as supplements to the Federal census, if the returns are secured along identical lines. State reports, which are now only useful locally, would thus become of far greater value. They would measure accurately comparative growth from year to year within the state and could readily be made to possess national significance.

Acting on this theory, and so construing the authority conferred by the Michigan statute, the Director of the Census is now engaged in making arrangements with the chiefs of the

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bureaus of statistics in a number of these states, whereby their cooperation will be secured in the manufacturing census of 1905. Under the plan proposed the chief of the state bureau will be appointed a special agent of the Census Bureau and have charge of the canvass of a portion of his state, subject to such regulations as may be necessary to secure uniformity of method, thus giving the Census Bureau the advantage of a supervising special agent having training and experience in similar work, who is familiar with industrial conditions in the state, and who already possesses much of the machinery and organization necessary to a prompt and efficient canvass. In consideration, the chief of the state bureau agrees to accept the results of the Federal census in his state report for the current year, and not to make any additional canvass of the industries covered by the Federal census. Having once adopted the Census method of presenting results, it is highly probable that the state bureaus will continue to use them in subsequent reports; and thus another gratifying advance in the movement for unification of industrial statistics will have been made.

The states in which it has been feasible to make the arrangement above described, in whole or in part, and the officials in charge of the several bureaus, are as follows:

California: W. V. Stafford, Commissioner, Bureau of Labor Statistics.

Illinois: David Ross, Secretary, State Bureau of Labor Statistics.

Indiana: Benjamin F. Johnson, Chief, Bureau of Statistics.

Iowa: Edward D. Brigham, Commissioner, Bureau of Labor Statistics.

Kansas: W. L. A. Johnson, Commissioner, Bureau of Labor and Industry.

Massachusetts: Charles F. Pidgin, Chief, Bureau of Statistics of Labor.

Michigan: A. C. Bird, Supervisor of Census.

Minnesota: John O'Donnell, Commissioner, Bureau of Labor.

Missouri: William Anderson, Commissioner of Labor, Bureau of Labor Statistics and Inspection.

Nebraska: Burrett Bush, Deputy Commissioner of Labor, Bureau of Labor and Industrial Statistics.

New Hampshire: Lysander H. Carroll, Commissioner, Bureau of Labor.

New Jersey: Winton C. Garrison, Chief, Bureau of Statistics of Labor and Industries.

New York: A. F. Weber, Chief Statistician, Department of Labor, Bureau of Statistics.

North Carolina: Henry B. Varner, Commissioner, Bureau of Labor and Printing.

Wisconsin: Halford Erickson, Commissioner, Bureau of Labor and Industrial Statistics.

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Cooperation in  
taking the Census  
of Population.

This movement for cooperation in the compilation of industrial statistics suggests the advantages which would result from a similar cooperation between the several states and the Census Bureau in taking the census of population.

In 24 states and territories of the Union there is a constitutional or statutory requirement for a decennial census of population. Of this number, 13—Florida, Iowa, Kansas, Massachusetts, Michigan, Minnesota, New Jersey, New York, Oregon, Rhode Island, South Dakota, Utah, and Wisconsin—took a population census between 1890 and 1895. These states contained, in 1900, 23,950,628 inhabitants, or 31.52 per cent of the total population of continental United States. The remaining 11—Alabama, California, Colorado, Idaho, Mississippi, Montana, Nebraska, Nevada, Oklahoma, South Carolina, and Wyoming—do not comply with their legal requirement for enumeration. These states contained, in 1900, 8,749,634 inhabitants, forming 11.51 per cent of the total population. The 24 states and territories above named contained, in 1900, 32,700,262 inhabitants, thus comprising 43.03 per cent of the total population of the United States. The 11 states and territories having unobserved laws for decennial enumeration and the 28 without such legal requirement, prefer to rely wholly upon the Federal census rather than to incur the expense of taking a midway census of their own.

That the rapid social evolution and complex growth of the United States call for a census of population more frequently than once in ten years, is a proposition generally admitted by economic and sociological experts. Provision for five-year enumerations has already been made by some countries of Europe, notably France and Germany, and there is a thoroughly organized movement to secure a quinquennial census of Great Britain. In May last a deputation representing the Royal Statistical Society, the Royal Institute of Actuaries, the Sanitary Institute, the Society of Medical Officers of Health, and other similar organizations, appeared before the Local Government Board to urge action looking to a quinquennial census of England and Ireland in 1906. Reference was made at the hearing to the recent establishment of a permanent Census Bureau in the United States, as an example Great

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Britain should follow, and as the necessary preliminary to a more frequent census of the population. It was pointed out that at the census of 1891 there was a discrepancy of 701,843 between the estimated and enumerated population, while at the census of 1901 a difference of 142,000 occurred in the opposite direction. These discrepancies were especially marked in certain localities, for example, in 1901 the Registrar General's estimate of the population of West Ham was 58,278 in excess of the actual figures, causing an error of 3.5 per 1,000 in the estimated death rate. In Liverpool the Registrar General, in 1891, overestimated the population by 100,000, and in 1901 underestimated it by 50,000.

As stated by Sir Robert Giffen, the actual number of the population is the dominant factor governing every statistical investigation into the condition of national health, wealth, and well-being. The only objection raised in England to a quinquennial census of population is that of the expense involved. It is proposed to reduce this expense to a minimum by restricting the intermediate census to the simplest schedule, relating to age, sex, and the distribution of the people. One of its chief advantages would be the check it would afford upon the accuracy of the decennial census.

The objection based upon cost is more valid in the United States than in Great Britain, and the obvious way to meet it in the United States is through the cooperation of the states. A carefully devised plan to secure such cooperation was incorporated in the act for taking the Tenth and subsequent censuses, approved March 3, 1879. The plan was suggested by Hon. Francis A. Walker, Superintendent of the Ninth and Tenth censuses, and the closest student of census problems we have had in this country. This plan was embodied in section 22 of that act, which read 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

Cooperation  
Authorized by  
Congress in  
1879.

*Report of the Director of the Census*

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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 equal to 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 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.

Under this provision the Federal Government was to pay practically one-half the cost of the quinquennial enumeration of each state taking a census, thus securing all the advantages of an enumeration on lines exactly parallel to its own decennial census. Several states took advantage of the provision, sent forward to Washington copies of their schedules, and received their money for them. These returns were stored away in the Department of the Interior, and no use was ever made of them. The fatal obstacle to the success of General Walker's plan was the fact that there existed no permanent Census Bureau to handle the returns as received. That obstacle is now removed. By the reenactment of section 22 of the act of 1879, the United States can obtain, for one-half the actual cost of the work, a census of a large number of the states at the midway periods. The number of states will be sufficiently large to permit an accurate estimate of population for the remainder, and if this provision of law, so advantageous to the states, should be reenacted, there undoubtedly will be a rapid increase in the number of states and territories taking an intermediate census. It is even possible that eventually all would participate in a work so essential to each.

It would be especially appropriate to reenact the law of 1879 at the present time, for this law may be called the forerunner of the various lines of cooperation between the Federal census and state and municipal officials, described elsewhere in this report.

A bill to reenact section 22 of the act of 1879 was introduced at the last session of Congress, by Mr. Crumpacker, of Indiana, chairman of the House Census Committee. I earnestly urge

*to the Secretary of Commerce and Labor*

that you recommend favorable action upon this measure. If it can be passed at an early period in the approaching session of Congress, it will undoubtedly lead to legislation in some states for a cooperative population census in 1905.

As announced in the last report of the Director, the Census Bureau has undertaken, both in response to a popular demand and to meet the requirements of its own work, to prepare and publish estimates of population in intercensal years, for cities and towns of 8,000 population and upward, and for the several states and the entire country. The bulletin containing these estimates for the years 1901, 1902, and 1903 was published in April, 1904. The estimates were made in accordance with the uniform plan described in detail in the bulletin.

Estimates of Pop-  
ulation.

The constant demand for this bulletin from all parts of the country proves that its publication has met a definite and intelligent popular requirement. It is surprising to find in how many lines of business there is need for estimates of this character. But their chief usefulness is in determining the death rates of municipalities; and it is cause for comment that these death rates have been so long computed in this country on the basis of local estimates of population, in the calculation of which no uniform method has obtained, making it inevitable that no accurate comparison is possible between the death rates of different cities, except in the census years, when all local ratios are supposed to be corrected on the basis of the enumeration.

The science of sanitary statistics is still in its infancy in the United States, and it is in the further development of this science that the permanent Census Bureau is destined to perform its most important service to the public. Estimates of population for municipalities have been officially made in Great Britain for a long period, and the closest attention is paid to them in all matters that have to do with sanitation and the promotion of the public health. But, as stated above, these official estimates of population are sometimes found to be grossly in error, resulting in most misleading conclusions. Similar errors will be inevitable in the population estimates of the Census Bureau; indeed, they should naturally be even greater and more frequent than has been the case in England, for our population is much more mobile, and the growth of our cities

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is influenced by many conditions which do not prevail in older countries, and which can not be measured by any uniform rule based upon the ratio of annual growth in the previous decade. The danger of inaccuracy increases rapidly as the distance from a decennial census increases, and conditions undoubtedly prevail in many Western cities where it will be better not to attempt to compute the rate of growth for a period beyond five years, when there is no intermediate state census by which to correct the estimates. These considerations emphasize the necessity of such censuses, and reenforce the argument in favor of the plan for taking them by cooperation between the Federal and state governments.

Reasons for the Method of Estimating Population adopted by the Bureau.

Considerable criticism of the Census population estimates has been aroused in certain cities which, for various reasons and on evidence more or less satisfactory, believe that they are growing more rapidly than the normal rate, as ascertained by the Census methods.<sup>2</sup>

<sup>2</sup> Inasmuch as it is proposed to continue to make these estimates, the Director made a general reply to these criticisms in a letter addressed to the Secretary of Commerce and Labor on May 19, 1904, which follows:

You have called my attention to certain comments and criticisms upon the estimates of population published in a bulletin recently issued by the Bureau of the Census. I am glad of the opportunity to reply to them in one general statement. It is worth attention that these criticisms are much fewer in number and much less violent in tone than the complaints which attended the actual enumeration of population at the Twelfth Census, and also that they come, as a rule, from the same localities. It is apparent, moreover, that they are written by persons who had not read and digested the text which accompanies the estimates, and fully explains the purpose and the method of making them, and the limitations surrounding them. In all quarters where these are understood, the bulletin has met with high commendation as supplying information of great interest and value obtained by the application of a carefully considered scientific method for projecting the census into intercensal years.

Population estimates for intercensal years are demanded by the current work of the Census Bureau; they are equally necessary in the annual mortality reports of our great municipalities, in the calculations and tabular presentations of the Treasury Department, and in many other directions that at once suggest themselves. Heretofore these estimates have been made by local authorities; and since the methods followed differed widely in different localities, the results possessed no uniformity, and thus lacked the first requisite of comparable statistics. This deplorable condition was probably unavoidable so long as there was no permanent Census Bureau. Now that such a bureau exists, it would seem that one of its first duties is to establish a definite, uniform rule for projecting population beyond the date of the latest census, and to make the computations for the public use. Nothing more important in the direction of standardizing official statistics

*to the Secretary of Commerce and Labor*

The Bureau will so far recognize the justice of these criticisms as to omit the estimates for any city, in future publications, upon receipt of a formal request from the mayor, and provided the city in question is not a city in which registration of deaths is made. In all such cities the estimates must continue to be

has yet been done, in my judgment. The Comptroller of the Treasury has recognized the value of the service of the Census by utilizing its population estimates in determining whether certain localities are entitled to national bank charters under the provisions of law; and it is hoped that all Government officials who have occasion to use population estimates in their work will also make use of them.

These estimates are not in any sense a census, nor are they based upon an investigation of the peculiar local conditions which may affect individual cases. This fact is an answer to the criticisms coming from cities which adduce various reasons for asserting that their rate of growth in population since 1900 has been in excess of that indicated. Each estimate rests upon an hypothesis sufficiently accurate for most statistical purposes—the hypothesis that the annual increase of population since 1900 is one-tenth of the total increase from 1890 to 1900, as established by census enumerations. In only one class of cases has the Census deviated from a strict adherence to this hypothesis and endeavored to make allowance for disturbing local factors. These are the cases in which growth has been affected by annexations of new territory, either before or since the census of 1900. Where such annexations have occurred, their effect upon the population has been carefully calculated, after correspondence with the local authorities, city engineers, mayors, assessors, etc.

In all well settled communities, the hypothesis is found to come remarkably close to the actual fact, when tested by similar computations based upon the growth in previous census decades. For such communities the estimates can safely be accepted in preference to calculations based upon directory canvasses, school canvasses, increase of post office business, or ballots cast at elections. Experience almost invariably demonstrates that these methods of determining population are fallacious and unreliable.

Estimates of the population of the large cities of the United States in 1900, made by this method on the basis of the census results in 1880 and 1890, show that the probable error of the method is 6 per cent; that is, in half the cities the estimates for a date ten years after the last census were within 6 per cent of the truth.

The usual English method, that of assuming that the percentage of increase, instead of the amount, remains constant from decade to decade, or from year to year, gives for American cities a probable error of 18 per cent, showing clearly that this method, however applicable in Great Britain, does not apply to present American conditions.

A common American method, that of multiplying the number of votes cast in a Presidential election by an assumed ratio of that number to population, when tested, shows a probable error of 12 per cent. Estimates based upon accurate city censuses of school children show a probable error of 6 per cent. But such censuses in American cities are often carelessly taken and extremely inaccurate. Estimates based upon multiplying the number of names in a city directory by some assumed ratio show a probable error of 13 per cent, and in every one of the cases tested the population as thus estimated was found to be too large. No one of the alternative methods, therefore, is as accurate for American cities, under present conditions, as the method we have employed.

For cities which have recently entered upon a period of exceptional

*Report of the Director of the Census*

made and published in connection with the annual report on vital statistics.

Comparison of  
Returns of Michi-  
gan Population  
Census with Esti-  
mates of the Bu-  
reau of the Cen-  
sus.

The Michigan state census of 1904 is the first opportunity which has occurred for testing the value of the Census Bureau method of estimating the population. This census showed 28 cities in that state to have 827,294 inhabitants; as estimated by the Census Bureau these cities contain 824,310, a difference of 2,984 inhabitants, the state census exceeding the estimated population less than one-half of 1 per cent. The total population reported by the state census was 2,530,016; as estimated by the Census Bureau, 2,546,258. The estimate for the entire state therefore exceeds the exact figures by 16,242, or six-tenths of 1 per cent. These general figures clearly illustrate how closely the results of the Census Bureau method of estimating approximate to actual enumeration in states showing normal conditions, as in the case of Michigan. The population of Detroit, the

growth produced by the influx of new settlers in great numbers, and which may be said not to have been fairly born when the census of 1890 was taken, the estimates of the census on the basis indicated will undoubtedly prove too small. This fact was frankly admitted in Bulletin Number 7; and a caution was added against any false conceptions in consequence of rigid adherence to the rule of estimating. Several cities from which complaints have been received, are undoubtedly within this category; and they should find whatever solace is necessary for their wounded municipal pride in this admission of the fallibility of the rule in exceptional cases, which is found on page 4 of the census bulletin.

In several cases the suggestion is made that the census should have sent its agents to the locality, and satisfied itself by actual examination that the rate of growth in population is greater than that arrived at by the arithmetical calculation. Such a course was impossible, for reasons that seem to me obvious. As already stated, this office was not taking a census, or anything akin to a census. If, as a result of superficial investigations, unsupported by an actual enumeration, the Bureau had undertaken to publish estimates of population for particular cities larger than those reached by its established rule, then indeed it would have deliberately invited endless criticism. For then it would have substituted sheer guessing for estimates based upon actual enumerations and obtained by a uniform method; wherever it failed to report a population as large as the local expectation, it would have been denounced; wherever it increased the estimate over the population arrived at by the calculation, it would have laid itself open to the criticism that it was favoring certain communities at the expense of others. In the absolute impartiality with which the rule was applied lay the only possible safety for the Census Bureau. It can command respect by consistency, even when it knows that consistency involves a certain element of error. It will lose public confidence when it attempts to arbitrate upon the claims of local directory makers and real estate agents.

By applying a uniform rule, admitting its defects in certain instances, the Census deprives any city of the right to make complaint against it for unfairness or partiality; and all cities can make use of the estimates for

*to the Secretary of Commerce and Labor*

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largest city in Michigan, was estimated by this Bureau to be 317,636 in 1904; the actual population returned by the census is 317,591. In this noteworthy case there was a difference of only 45, or less than one-tenth of 1 per cent, between the estimated and the actual enumeration. For some of the other cities of the state greater variation occurred, owing to local conditions. For cities growing more rapidly than at the normal rate, such as Kalamazoo, Lansing, Marquette, and Saginaw, the estimates resulted in a lower figure than the actual population as returned at the state census, the difference being more than 10 per cent; while in other cities growing less rapidly than at the normal rate, such as Ann Arbor, Iron Mountain, Ishpeming, Manistee, and Menominee, the Census estimates exceeded the state census returns more than 10 per cent. For the 28 cities referred to, this Bureau overestimated the population of 16 and underestimated that of 12. The greatest increase over the Census estimate appears in the city of Saginaw, due to the decrease in population

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the purpose of computing statistical rates in mortality and other municipal reports, with the certainty that these rates will be sufficiently accurate to answer the purposes for which they are ordinarily required.

In many of the states of the Union intercensal censuses will be taken next year; and the returns of these enumerations will be utilized by this office in correcting its estimates for future years. But the office can not accept the result of local censuses, however taken, as a basis for modifying its estimates, and for the very good reason that these local censuses are almost invariably found to be grossly incorrect when checked up by a national census.

Turning now to the general results of the census method of projecting the population, as applied to the entire country, I call your attention to the remarkable accuracy that attends the computation when it concerns conditions which can not be affected by local influences and variants. The estimated population of continental United States for 1900, as determined by this method on the basis of the increase from 1880 to 1890, was 75,414,181, while the actual population as returned by the census of 1900 was 75,994,575. In other words, the actual population was 580,394 in excess of the estimate, showing the latter to be in error by three-fourths of one per cent. How far this negligible error is due to the influence of immigration can not be determined.

If we project the population of continental United States for the entire decade in which we are now living, by the census method, we reach the conclusion that the Thirteenth Census, in 1910, will show a population in the neighborhood of 89,041,436. This indicates a percentage of increase of 17.2, as compared with 20.7 in the decade 1890-1900. Events are possible in the future development of the country which will put this estimate awry from the actual census of 1910. Such a possibility exists under every method of estimating.

Very respectfully,

(Signed) S. N. D. NORTH,  
*Director.*

*Report of the Director of the Census*

from 1890 to 1900 and to the increase which has subsequently occurred. Such a condition, however, is clearly exceptional, but Census Bulletin 7, Estimates of Population, calls attention with considerable emphasis to the fact that there will always be many individual cases where the estimates will be far from correct, owing to exceptional changes in municipal growth. In general, the larger the area the more likely to be correct is the method of estimating adopted by the Bureau of the Census.

The importance of training as a factor in connection with the preparation of special reports, and the Thirteenth Census was one of the reasons which led to the establishment of the permanent Census Bureau. Therefore, it is especially agreeable to be able to report to you that the clerks and officials of this Bureau, as they grow more proficient, are becoming individually more interested in the lines of work under investigation, are showing greater adaptability for assignment to different inquiries, and promise to become an exceptionally efficient force. It is my policy to transfer clerks in large numbers from one division to another, as the pressure of work demands. Incidentally this policy has increased greatly the familiarity of the clerks in the Bureau with different classes of work. As many male clerks are assigned to fieldwork as can be spared from duty in the office; thus a considerable proportion of the employees of the Bureau are constantly dealing directly with the business and professional classes in different communities. This policy enables many of the employees of the Bureau to obtain practical experience in the first step of census work, in addition to the knowledge which they already possess of Census Bureau routine.

The lack of expert assistance in training and directing clerks in this office was recognized by Congress at the last session, and the number of expert chiefs of division was increased from 4 to 8. A list of the officials in the Bureau of the Census, and the number of clerks and employees, by different grades, will be found in Appendix B.

Respectfully,

S. N. D. NORTH,  
*Director.*

HON. VICTOR H. METCALF,  
*Secretary of Commerce and Labor.*

## APPENDIX A.

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

For the fiscal year ended June 30, 1904.

I. *Appropriations, disbursements, unexpended balance, and outstanding liabilities for the fiscal year ended June 30, 1904.*

	Amount ap- propriated.	Amount dis- bursed. <sup>1</sup>	Amount un- expended.	Amount of outstand- ing liabili- ties.
Total .....	\$1,322,247.14	\$1,129,192.88	\$193,054.26	\$32,196.81
Salaries .....	685,860.00	634,457.06	51,402.94	513.79
Special Agents .....	160,000.00	159,242.43	757.57	757.57
Rent .....	26,600.00	24,383.33	2,216.67	2,216.67
Stationery .....	10,000.00	3,494.93	6,505.07	5,818.91
Library .....	5,000.00	4,871.92	128.08	128.08
Transcript of Registration Records.	14,000.00	5,353.04	8,646.96	3,556.96
Rent of Tabulating Machines .....	10,000.00	10,000.00		
Miscellaneous Expenses .....	15,000.00	14,988.39	11.61	11.61
Expenses of the Twelfth Census ...	395,787.14	272,401.78	123,385.36	19,193.22

<sup>1</sup> Including payments by the Auditor for the State and other departments from the appropriations:

Special agents, Census Office, 1904 .....	\$6,118.11
Miscellaneous expenses, Census Office, 1904 .....	88.95
Expenses of the Twelfth Census .....	1,678.45
Excluding disallowances from the appropriations:	
Special agents, Census Office, 1904 .....	45.99
Expenses of the Twelfth Census .....	48.09

2. *Unexpended balance of the appropriation made for the expenses of the Twelfth Census reappropriated March 3, 1903.*

(1) The unexpended balance as shown by the report of the Director of the Census to the Secretary of the Interior, July 15, 1903 .....	\$462,753.94
(2) Disallowances, year 1903, collected and credited .....	735.65
(3) Less supplemental accounts paid for the fiscal year 1903 .....	463,489.59
	68,010.45
(4) Receipts during the year 1904, from the sale of transcripts of census records .....	395,479.14
	308.00
Total amount of the unexpended balance available for the fiscal year 1904 .....	395,787.14

*Report of the Director of the Census*3. *Expenditures, including outstanding liabilities, for the fiscal year 1904, chargeable against the unexpended balance of the appropriation for the expenses of the Twelfth Census.*

Amounts (including outstanding liabilities) for current expenses of the office (other than for the Philippine Census) after the specific appropriations provided in the legislative act for the purposes indicated were exhausted:

Special agents, Census Office, 1904 .....	\$87,942.42	
Miscellaneous expenses, Census Office, 1904 .....	14,467.90	
Library, Census Office, 1904 .....	493.40	
		\$102,903.72
Amount of that portion of the Philippine Census paid from this unexpended balance .....		167,675.18
Amount of settlements made by the Auditor for the State and other Departments .....		1,678.45
Amount of miscellaneous expenses .....		19,337.65
		291,595.00
Amount of the unexpended balance available for the fiscal year 1905 .....		104,192.14

4. *Approximate cost of the tabulation and compilation of the census of the Philippines, to June 30, 1904.*

Expended from unexpended balance of Twelfth Census appropriation .....	\$167,675.18
Expended from specific appropriations for 1904:	
Approximate cost of clerical labor .....	\$31,742.64
Cost of printing .....	11,750.13
Miscellaneous .....	2,949.03
	46,442.40
Total .....	214,117.58

## APPENDIX B.

*Clerical and Field Force.*

Chief clerk .....	Edward McCauley.	
Disbursing and appointment clerk .....	John W. Langley.	
Chief statisticians:		
Population .....	William C. Hunt.	
Manufactures .....	William M. Stuart.	
Agriculture .....	Le Grand Powers.	
Vital statistics .....	William A. King.	
Geographer .....	Charles S. Sloane.	
Expert chiefs of division:		
Director's office .....	Leon B. Leavitt.	
Population .....	{ William H. Jarvis.	
Manufactures .....	{ Edward W. Koch.	
Agriculture .....	{ Joseph D. Lewis.	
Vital statistics .....	{ Hart Momsen.	
Revision and results .....	{ Richard C. Lappin.	
Publication .....	{ Joseph A. Hill.	
Total .....	{ William S. Rossiter.	15
Stenographer .....		1
Clerks class 4 .....		4
Clerks class 3 .....		7
Clerks class 2 .....		16
Clerks class 1 .....		312
Clerks \$1,000 .....		212
Clerks \$900 .....		37
Expert map mounter .....		1
Engineer .....		1
Electrician .....		1
Skilled laborers \$1,000 .....		3
Skilled laborers \$900 .....		5
Skilled laborers \$840 .....		2
Firemen .....		2
Messengers .....		6
Assistant messengers .....		13
Unskilled laborers \$720 .....		19
Unskilled laborers \$660 .....		2
Watchmen .....		10
Charwomen .....		43
		697
Total .....		712

*Report of the Director of the Census*

*Temporary Force (Philippine Census).*

Translator \$3,000 .....	I	
Clerks class I .....	I	
Clerks \$1,000 .....	3	
Clerks \$900 .....	9	
Charwomen .....	3	
		17
Total .....		729

*Special Agents.*

Regular fieldwork .....	27	
Cotton crop agents .....	667	
Expert special agents, special classes, and vital statistics .....	2	
Expert special agents in railroad valuation .....	II	
Chemical expert .....	I	
Electrical expert .....	I	
Special agents for special classes .....	5, 45I	
		6, 160
Total .....		6, 889

## APPENDIX C.

SUMMARY OF CONTENTS OF VOLUMES PUBLISHED DURING  
THE PAST YEAR.

## STATISTICAL ATLAS (SECOND EDITION).

*207 plates. Edition, 15,000 copies.*

Illustrating statistics of population, vital statistics, agriculture, and manufactures.

## EMPLOYEES AND WAGES.

*1,344 pages. Edition, 7,000 copies.*

Comprising rates of wages and amounts earned for males and females, for specified periods, in typical manufacturing establishments in various lines of industry and in all sections of the United States.

## OCCUPATIONS AT TWELFTH CENSUS.

*1,029 pages. 34 diagrams. Edition, 7,000 copies.*

A detailed classification of occupations for males and females, by general nativity, color, age periods, parentage, conjugal condition, and months unemployed.

## BULLETINS.

No. 3.—*Street and Electric Railways.* (193 pages. Edition, 8,000 copies.) Preliminary report on equipment, cost of construction, expenses, income, wages, wage-earners, and operations for year.

No. 4.—*Discussion of Increase of Population.* (63 pages. 10 maps and diagrams. Edition, 8,500 copies.) Discussion of increase of population for the United States and outlying districts, by geographic and physiographic divisions, states and territories, counties, cities, and country districts.

No. 5.—*Central Electric Light and Power Stations.* (59 pages. Edition, 10,000 copies.) Detailed statistics of equipment, cost of construction, expenses, income, wages, and wage-earners.

No. 6.—*Mineral Industries of Porto Rico.* (18 pages. 7 maps and illustrations. Edition, 6,000 copies.) Historical, descriptive, and statistical.

*Report of the Director of the Census*

No. 7.—*Estimates of Population.* (21 pages. Edition, 10,000 copies.) Method and result of estimating the population of the larger cities of the United States in 1901, 1902, 1903.

No. 8.—*Negroes in the United States.* (333 pages. 14 maps and diagrams. Edition, 8,000 copies.) Analysis of negro population and the negro as a farmer, with general tables.

No. 9.—*Mines and Quarries.* (59 pages. Edition, 13,000 copies.) Preliminary report on mines and quarries, presenting statistics for all mines and quarries, and petroleum and gas wells, with such manufacturing operations as were carried on in immediate connection therewith, for year ending December 31, 1902. Statistics confined to operations at mine, quarry, or well.

No. 10.—*Quantity of Cotton Ginned in the United States (crops of 1899 to 1903, inclusive).* (56 pages. 13 maps. Edition, 40,000 copies.) Statistics for cotton crop of 1903, with comparative statistics for 1902, 1901, 1900, and 1899. Special features: cotton reclaimed by thrashing cotton bolls; estimate of cotton destroyed by the boll weevil; and distribution by states of the quantity of linter cotton saved by the cottonseed-oil mills from reginning seed of the crop of 1903.

No. 11.—*Municipal Electric Fire Alarm and Police Patrol Systems.* (33 pages. 2 illustrations. Edition, 7,000 copies.) Containing a historical and descriptive account of these systems with detailed statistics of construction and equipment.

No. 12.—*The Executive Civil Service of the United States.* (239 pages. Edition, 15,000 copies.) Detailed statistics of nativity, age, sex, service, salary, occupation, and location of the employees in the civil service of the United States.

No. 13.—*A Discussion of the Vital Statistics of the Twelfth Census.* (24 pages. Edition, 8,000 copies.) Supplemental and comparative statistics.

## PHILIPPINE CENSUS BULLETINS.

No. 1.—*Population of the Philippines.* (100 pages. Edition, 35,000 copies.) Population by islands, provinces, municipalities, and barrios, 1903.

No. 2.—*Climate of the Philippines.* (103 pages. 29 maps and diagrams. Edition, 15,000 copies.) Description of islands, the temperature, water vapor, and movements of the atmosphere.

No. 3.—*Volcanoes and Seismic Centers of the Philippine Archipelago.* (80 pages. 17 maps and outlines. Edition, 15,000 copies.) Containing an account of the volcanic nature, the historical geology, and the earthquakes of the archipelago, with description of principal volcanoes and seismic centers.

## PAMPHLETS.

*Statistical Treatment of Causes of Death.*—(19 pages. Edition, 1,000 copies.) Plan proposed by the Committee on Demography of the American Public Health Association in cooperation with the Census Bureau, relative

to the Secretary of Commerce and Labor

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to the treatment of jointly returned causes of death, and the revision of the international classification.

*Registration of Births and Deaths.*—(32 pages. Edition, 1,000 copies.) Draft of laws and forms of certificates for the registration of births and deaths, approved by cooperating committees, the Surgeon-General of the United States Public Health and Marine-Hospital Service, and the Director of the Census, with list of pamphlets on vital statistics issued by the Census Bureau.

*Report of the Director to the Secretary of Commerce and Labor.*—(27 pages. Edition, 2,500 copies.) A report of the progress of census work in the interval between report to Secretary of the Interior, June 30, 1903, when this office was incorporated in the Department of Commerce and Labor, and this date, October 28, 1903, with an outline of plans for the future, and certain recommendations and suggestions regarding the proper field and function of the permanent Census Bureau.

*Uniform Municipal Accounting.*—(89 pages. Edition, 1,000 copies.) Minutes of a conference on uniform municipal accounting held in the city of Washington, November 19 and 20, 1903, under the auspices of the United States Bureau of the Census.

*Collaboration in Federal and State Statistical Work.*—(73 pages. Edition, 500 copies.) Report of the permanent committee on uniformity of schedule and cooperative work in the census of manufactures, 1905, for the Twentieth Annual Convention of the Commissioners of State Labor Bureaus, Concord, N. H., July 12, 1904, showing difference between census manufacturing schedule and state schedules.

*American Census Taking.*—(34 pages. 11 illustrations and diagrams. Edition, 50,000 copies.) Published for distribution at the Louisiana Purchase Exposition. History of American census taking and description of mechanical devices used, with plans for future census work and summary of census publications.



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



REPORT  
OF THE  
DIRECTOR OF THE CENSUS



*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.

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 semi-monthly 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:

Expenses of the Twelfth Census, 1899-1903 .....	\$13,516,210
Fiscal 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.
1870 .....	\$3,421,198.33	73.71	38,558,371	\$0.0887
1890 .....	5,790,678.40	69.25	50,429,345	0.1148
1899 .....	11,547,127.13	99.40	62,979,766	0.1833
1900 .....	16,116,930.00	39.57	76,149,386	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 alone.

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.

	Number.
A Discussion of Age Statistics .....	13
Proportion of the Sexes in the United States .....	14
Irrigation in the United States: 1902 .....	16
Telephones and Telegraphs: 1902 .....	17

	Number.
Census of Manufactures: 1904. Michigan.....	18
Quantity of Cotton Ginned in the United States (crops of 1900 to 1904, inclusive) .....	19
Statistics of Cities having a Population of over 25,000: 1902 and 1903 .....	20
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 .....	24
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

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 ginner. 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.

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 canvass 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.

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 widespread 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.

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 field-work 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. These 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>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 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 field-work. 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.*

## to the Secretary of Commerce and Labor

## APPENDIX.

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

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

Appropriations.	Amount appropriated.	Expenses.	Balances.
Total .....	\$1,526,705.06	<sup>1</sup> \$1,470,726.02	<sup>2</sup> \$55,979.04
Salaries, 1905 .....	711,700.00	697,024.11	14,785.89
Collecting statistics, 1905 .....	438,400.00	438,400.00	
Tabulating statistics, 1905 .....	50,000.00	30,087.00	19,913.00
Stationery, 1905 .....	10,000.00	8,506.88	1,493.62
Library, 1905 .....	2,500.00	2,500.00	
Rent, 1905 .....	26,600.00	26,585.29	14.71
Miscellaneous expenses, 1905 .....	15,000.00	15,000.00	
Printing, 1905 .....	170,000.00	150,178.18	19,821.82
Expenses, Twelfth Census .....	102,445.06	102,445.06	

<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 .....	\$21,040.80
To defray a portion of the expenses incurred during the fiscal year 1905 in connection with the tabulation and compilation of the census of the Philippine Islands .....	\$65,911.97
To supplement the appropriation "Library, Census Office, 1905" .....	1,860.40
To supplement the appropriation "Miscellaneous Expenses, Census Office, 1905" .....	6,640.87
To supplement the appropriation "Collecting Statistics, Census Office, 1905" ..	28,632.32
	<u>102,445.06</u>
	123,485.36

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

Clerical labor .....	\$235,988.65
Printing .....	74,340.82
Rental of tabulating apparatus and cost of cards .....	40,603.39
Miscellaneous expenses .....	1,042.64
	<u>\$351,925.50</u>

BUREAU OF THE CENSUS  
REPORT OF THE DIRECTOR  
TO THE SECRETARY OF  
COMMERCE AND LABOR



Concerning the Operations of  
the Bureau for the Year 1905-6

WASHINGTON : 1906

1906

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REPORT  
OF THE  
DIRECTOR OF THE CENSUS



*Washington, October 25, 1906.*

SIR: I have the honor to submit the following report upon the operations of the Bureau of the Census during the fiscal year ended June 30, 1906, and upon the work of the coming year as now outlined. The report covers the fourth year of the permanent existence of the Bureau under the act of March 6, 1902, and the seventh year of its existence as an office under the act of March 3, 1899.

EXPENDITURES DURING THE FISCAL YEAR.

The financial statement of Mr. Thomas S. Merrill, disbursing clerk of the Bureau, attached as Appendix A, shows in detail the expenditures of the Office during the past fiscal year. The total amount appropriated for the service of the fiscal year ended June 30, 1906, was \$1,605,340. Of this amount \$120,627.04 was applied to the payment of expenses incident to fieldwork incurred during the fiscal year 1905 (expenditures authorized by Congress, legislative act, February 3, 1905), and \$1,249,045.45 was applied to the payment of expenses incurred during the fiscal year 1906, leaving an unexpended balance on June 30, 1906, amounting to \$235,667.51. Of this unexpended balance, \$180,911.80 has been reappropriated for the service of the fiscal year 1907, and the remainder, amounting to \$54,755.71, will be covered into the General Treasury.

In the appropriation for fieldwork a saving of \$149,980.67 was effected, due chiefly to the more economical conduct of the fieldwork for the manufacturing census of 1905, by reason of the employment of a large body of the trained office force in lieu of untrained special agents temporarily appointed for the purpose. At the suggestion of the Director, Congress reappropriated this unexpended balance of \$149,980.67 for the fieldwork of the present fiscal year, thus making it possible to reduce the direct fieldwork appropriation to \$250,000.

The expenditures for salaries during the year were \$34,115.27 less than the sum appropriated for that purpose. This saving was effected by leaving unfilled vacancies arising in the clerical force during the last months of the year. As the work assigned to the Bureau during the period between decennial censuses approaches completion, it is felt that a gradual reduction in the force can be made; and the vacancies that arise from natural causes—death, transfer, resignation, and marriage—make it possible to accomplish this reduction without dismissals. The salary appropriation for the last fiscal year was \$745,760; for the current year it is \$717,020, a reduction of \$28,740. In the first year of the permanent Office the salaries paid to the clerical force aggregated \$818,924.90, showing a total reduction in the annual salary roll, in five years, of something more than \$100,000. It is expected that some further reduction can be effected the coming year; but attention is called to the fact that Congress is constantly increasing the work of the Bureau, thus making it impossible to reduce the force to the extent that appeared probable when the permanent Office was established. The total force provided for under the current appropriation is 649, as compared with 691 in the past year. Of this number, 567 are on the clerical roll, and 81 are laborers, messengers, watchmen, charwomen, etc. No increase in the clerical force will be required in preparation for the Thirteenth Census until the year 1909.

The total census appropriations for the current fiscal year, including printing, and the unexpended balances reappropriated are \$1,317,511.80 as compared with \$1,605,340 for the fiscal year 1906, a reduction of \$287,828.20.

Attention may be called to the fact that a very large part of the annual cost of the permanent Census Office since its establishment is due to work imposed upon the Bureau by acts of Congress or by order of the Secretary of a kind which never fell to the Office during the periods when it was temporarily organized for the taking of the decennial censuses prior to the Twelfth. As examples of work of this character may be cited the compilation of the Philippine census, the annual reports of cities of 30,000 population and over, the annual mortality reports, the semimonthly cotton ginning reports, and the quinquennial census of manufactures. There has been expended upon the cotton ginning reports alone since the establishment of the permanent Office the sum of \$489,728.18, and upon the other reports named, approximately \$1,500,000.

The work of analyzing the costs of the Eleventh and Twelfth censuses, to which reference was made in my last annual report, has proceeded satisfactorily, and it will shortly be possible to state the actual cost of each branch of work at each of these censuses.

## OPERATIONS OF THE BUREAU SINCE LAST REPORT.

The work of the Bureau is represented by reports published, reports completed and awaiting publication, and reports upon which compilation is still in progress. The following is a complete list of the Census publications since my last annual report:

## VOLUMES.

	Pages.
Supplementary Analysis and Derivative Tables, Twelfth Census of the United States .....	1,162
Benevolent Institutions.....	336
Mortality: 1900-1904 .....	1,004
Telephones and Telegraphs.....	184
The Blind and the Deaf.....	274
Paupers in Almshouses.....	216
Insane and Feeble-minded in Hospitals and Institutions .....	238

## BULLETINS.

	Bulletin number.
Census of Manufactures, 1905:	
Maryland and District of Columbia.....	27
Kansas.....	28
Nebraska.....	29
Arizona, Indian Territory, New Mexico, and Oklahoma.....	30
Delaware.....	31
Iowa.....	32
Florida.....	33
Montana, North Dakota, South Dakota, and Wyoming.....	34
Missouri and Arkansas.....	35
Rhode Island.....	36
Colorado, Idaho, Nevada, and Utah.....	37
Indiana.....	38
North Carolina and South Carolina.....	39
New Hampshire and Vermont.....	41
Connecticut.....	42
Alabama.....	43
Virginia and West Virginia.....	44
Minnesota.....	46
Kentucky and Tennessee.....	47
Louisiana, Mississippi, and Texas.....	48
California, Oregon, and Washington.....	49
Maine.....	51
Illinois.....	52
Massachusetts.....	53
New Jersey.....	54
Georgia.....	55
Wisconsin.....	56
United States.....	57
Ohio.....	58
Illiteracy in the United States.....	26
Cotton Production and Statistics of Cottonseed Products, 1905.....	40
Statistics of Cities having a Population of 8,000 to 25,000, 1903.....	45
Statistics of Cities having a Population of over 30,000, 1904.....	50

The volume containing the decennial report upon the Wealth, Debt, and Taxation of the United States and the several states, comprising 1,200 quarto pages, is now in the hands of the printer for immediate publication.

This list of publications affords an adequate conception of the volume and variety of the work upon which the Census Bureau is engaged during the intercensal period. They present statistical data relating to many phases of our national life, and are prepared with a care and accuracy never possible under the conditions which surrounded the work of the temporary office.

#### MORTALITY STATISTICS.

The year's publications include the first report on Mortality under the authority of section 8 of the permanent census act, providing for an annual report on the statistics of births and deaths in such registration areas, states, and municipalities "as in the discretion of the Director possess satisfactory data in necessary detail."

The volume covers the vital statistics for the years 1900-1904. It was prepared by the late William A. King, chief statistician, who was taken ill immediately after its transmission to the printer and died April 27, 1906. The volume represents his last, and in some respects his best, work in the service of the Census. Mr. King first became associated with census work at the Tenth Census. He returned to it at the organization of the Eleventh Census and remained in this branch of public service from that time until his death, or almost seventeen years, probably the longest term of continuous service in this field of Government work. At the Eleventh Census Mr. King worked in close association with Dr. John S. Billings, obtaining a thoro training in the subject of vital statistics. He was *ad interim* clerk in charge of the Census work and records in the period between the disbandment of the Eleventh Census and the organization of the Twelfth, and rendered invaluable service to the committees of both Houses of Congress when the act for the taking of the Twelfth and subsequent censuses was under consideration. Immediately upon the organization of the Twelfth Census he was appointed chief statistician for vital statistics, and upon the organization of the permanent Census Office he was reappointed to that position. Mr. King earnestly promoted the adoption of the standard certificate of death now in use in practically all the registration states and cities, and his untiring zeal in the great work of standardizing vital statistics and extending the registration area entitles him to a rank among the very foremost of the comparatively few men in this country who have devoted their lives to the development of this important branch of statistical science.

On July 1, Dr. Cressy L. Wilbur, of Michigan, was appointed chief statistician to succeed Mr. King, and entered immediately upon his duties. Doctor Wilbur had been for thirteen years the registrar of the state of Michigan, and at the time of his resignation of that office had brought the vital statistics of Michigan to the highest rank among our states. During the Twelfth Census and since the organization of the permanent Office he acted as medical referee and expert special agent, so that he was well fitted by training and experience to take up the work at the point where Mr. King left it.

The plans of the Bureau contemplate the future publication of the mortality reports as soon as possible after the close of the year to which they relate, and the report for 1905 will appear before the close of the present calendar year. In previous reports I have explained the reasons for the delays which have occurred heretofore. Important among these reasons has been the impossibility of promptly obtaining transcripts of the local records. Systematic efforts to hasten the work of local transcription have long been in progress, and hereafter communities which do not respond to these efforts will be excluded from consideration in the Census reports.

#### EXTENSION OF REGISTRATION AREA.

The Bureau will continue and increase its efforts to enlarge the registration area by encouraging the enactment of the necessary legislation in states where it is still lacking, and by urging more careful registration in other states where the laws exist but are indifferently enforced. The most encouraging results have already followed the efforts of the Bureau in both of these directions. Dr. Charles V. Chapin, of Providence, R. I., an eminent authority on vital statistics, has recently stated that the year 1905 witnessed a greater advance in the enactment of laws for the proper registration of births and deaths than any previous year in our history. Nearly all of the states have at one time or another enacted registration laws, more or less perfect, which are enforced with more or less rigor. Of these states, eleven, including the District of Columbia, have heretofore been accepted by the Director as affording data which meet the full requirements of the census law. These states contained a population of 19,960,742 in 1900. In July, 1906, five additional states—California, Colorado, Maryland, Pennsylvania, and South Dakota—containing a population of 9,916,482 in 1900, were added to the registration states for census purposes, on the application of their health officials and on the presentation of satisfactory evidence that their registration laws are fully enforced and the results obtained in harmony with methods prevailing elsewhere.

This important step increases by nearly one-fifth the area covered by the Census reports, and will add correspondingly to their value. In two of the states—Nebraska and Utah—which are not yet accepted as having reached the full standard of the registration area, laws were enacted in 1905 requiring burial permits, the thoro enforcement of which will probably result in the recommendation for the admission of the states at an early date. Among the other nonregistration states six—Florida, Iowa, Minnesota, North Dakota, Oregon, and Wisconsin—have laws requiring a census of population in the interdecennial year, and it is especially important, therefore, that their registration laws be so improved, and enforced with such a degree of efficiency, as to permit their inclusion in the area covered by the Census reports, as very valuable comparisons of mortality and population will thereby be rendered available.

Whenever it shall appear that adequate laws exist and are so enforced as to secure approximately complete records, the proposition to include the returns of the states as a part of the annual Census reports will be favorably considered. On the other hand, evidence that defective registration is permitted and that the laws are carelessly enforced in any of the states whose returns are now included will result in the exclusion of these returns from the subsequent reports, making it sharply evident to the people of the state that their laws either require amendment or are not being properly enforced. The responsibility for the negligence can then be located and the necessary remedy applied. It is believed that the Census Bureau can best establish and encourage accurate and careful registration everywhere by an impartial enforcement of this general policy. The same situation exists in the case of the registration cities, and the same policy will be adopted by the Office with respect to their inclusion or exclusion from the registration areas.

It is gratifying to record the evidence of the substantial progress in the institution of effective mortality records following so quickly the establishment of a permanent Census Office, with facilities for the annual compilation and analysis of the statistics of the whole country, and their correlation and comparison with each other. Results of the greatest medical, sanitary, and scientific value are certain to follow in due course of time. The facts above stated regarding the registration states are summarized in Appendix C. It will be noted that the states and cities with registration laws contained, on the basis of the census of 1900, nearly one-half of the total population of continental United States—a most gratifying progress.

Attention may also be called to the fact that there is no strictly Southern state in which efficient state registration laws exist. Because

of the presence of a large negro population, as well as by reason of climatic influences, it is highly important that registration should be undertaken in this section of the Union; and attention is here drawn to the subject in the hope that the movement for proper legislation, now under way in several of the Southern states, may bear fruit before the Thirteenth Census.

## ANNUAL ESTIMATES OF POPULATION.

In this connection reference may be made to the annual estimates of population which the Census is compelled to compute in order to establish death rates in the vital statistics reports. Thirteen states of the Union took intercensal enumerations of population in 1905 (Michigan in 1904), by which these Census estimates may be tested and by which their substantial accuracy for the purpose in view is strikingly confirmed. The total population returned by these state censuses was 25,793,236. The Census Bureau estimate of the population of these states for 1905, was 25,743,311, the estimate being below the actual enumeration by 49,925, or 0.019 per cent; that is, less than two-tenths of 1 per cent. While in individual states the estimate varies from 8.2 per cent above to 12.8 per cent below the figures of the actual enumeration, in two-thirds of the states it was within 4 per cent of the true figures. These results confirm the conclusion that the Census method of estimating the population for the intercensal years is more nearly accurate than the local methods commonly resorted to for that purpose.

The Bureau is about to publish a bulletin in which the results of the thirteen state censuses are brought together and summarized, as far as the restricted nature of the inquiries permits, on a basis comparable with the Twelfth Census returns for the same states, together with estimates of the population of states and territories and principal cities for 1906.

## STATISTICS OF CITIES.

In my report for 1903-4, I called attention to the subject of the statistics of municipal finance, and briefly reviewed what had been attempted and accomplished prior to that time in the way of working out a basis for uniform classification of municipal payments and receipts. I closed that portion of my report with the statement that "It is probable that the annual Census reports upon municipal finance for cities of 30,000 population and over will prove the most influential factor in securing the adoption of uniform classification, thus materially lessening the cost of compiling Census statistics upon this subject, increasing the accuracy of the returns, making comparison possible between the itemized expenditures of cities of the same population, and encouraging reforms in the public service."

Since the publication of that report the Bureau of the Census has issued three bulletins containing statistics of municipal finance—one for cities of 25,000 inhabitants and over, for 1902 and 1903; one for cities of 30,000 inhabitants and over, for 1904; and the other for cities with 8,000 to 25,000 inhabitants, for 1903. These publications have presented, with other statistics, those of municipal payments and receipts, classified according to the scheme worked out by the Bureau of the Census in cooperation with city officials, the officials of the National Municipal League, public accountants, and writers on public finance. The bulletin first mentioned contained a brief statement of the basis of classification adopted, and also definitions of the most important financial terms made use of in the Census reports. These bulletins have attracted wide attention, and have demonstrated that the statement in my 1903-4 report, concerning the probable result of these Census statistical publications, is in a fair way of being realized, and at a much earlier date than was at that time anticipated. In the intervening period the Census schedules, instructions, and bulletins relating to this subject have been in constant demand by accountants and others interested in improving city accounts and in the preparation of comparable municipal statistics.

These bulletins have demonstrated that comparable statistics of municipal finance are possible, and that they can be made of great public service to all interested in the improvement of our municipal governments. They have been the most important single factor leading to the enactment of laws in Massachusetts, New York, and Iowa requiring uniform reports of municipal finance under the supervision of a state official. The classification of accounts made use of by these states, and by Ohio—which state had previously adopted a similar system of reports—has been that of the Census so far as it is in conformity with local charters and statutory provisions governing cities. This uniformity has been made obligatory by the provisions of the Iowa law; which directs that “In the system to be devised as herein contemplated the officers and persons charged therewith shall adopt so far as practicable the latest and most improved methods in municipal accounting, especially the classification and definitions of municipal finance in use in the National Census Office.”

#### COOPERATION OF CITY OFFICIALS.

The officials and employees of the Bureau of the Census have striven in all practical ways to secure the hearty cooperation of all city officials and others interested in the subject. As an aid to this end a second conference of these officials was held in Washington on February 13 and 14, 1906. This was largely attended, and resulted in the perma-

ment organization of the fiscal officers of cities throuth the country. The first regular conference was held in Chicago on September 26, 27, and 28, 1906. The call for the convention recited that the organization aims to bring "into closer relationship with each other the finance department of the country thru the interchange of experience in the solution of administrative problems and to more efficiently cooperate with the Census Office in its great work of compiling uniform municipal statistics."

Largely under the leadership of the fiscal officers of our cities, and especially of those associating themselves in the organization above referred to, bills have been prepared along the lines of the laws now in force in Ohio, Iowa, Wyoming, Massachusetts, and New York, and there is a fair prospect of their early enactment into laws by a number of other states. The three Census bulletins relating to municipal finance have been the basis for modifying local budgets in a number of cities; they have called forth discussions that promise in many cities to lead to marked improvement in methods of raising revenue and conducting business; and they demonstrate that with proper extension these statistics can assist the local officials to a more efficient administration in all branches of city government.

The first bulletin issued for the larger cities contained many general statistics as well as those relating to finance. The Bureau officials were of the opinion that all practical purposes sought by the act of Congress relating thereto would be served by the publication of these statistics only once in every two or three years. They were consequently not included in the report for 1904, but will be in that for 1905. The frequency with which these general statistics will be compiled will depend upon their popular reception, as the Office aims to restrict the volume of this and other publications to the least amount consistent with the observance of the law on the one hand and with meeting the popular demand on the other.

In connection with the annual municipal reports the Bureau plans a series of special statistical studies of the more important phases of municipal development. It is hoped that one or more of these studies can accompany each annual report hereafter. Among the subjects to be thus treated are parks, markets, paving, sewers, police and fire departments, baths, schools, libraries, etc. Dr. Edward M. Hartwell, chief of the Municipal Statistics Bureau of Boston, will prepare the first of these special reports, on the subject of municipal markets.

The importance of municipal statistics may be noted from the following facts: The indebtedness, less sinking fund assets, of the 148 cities containing over 30,000 inhabitants in 1903 was \$1,106,821,651 and of the 151 cities in 1904 was \$1,228,216,933. The indebtedness

of the cities of the latter group increased during the year 1904 by \$110,083,797. The indebtedness of cities containing 8,000 to 30,000 inhabitants in 1903 was \$173,718,313, and the last statistics compiled recorded an annual increase of \$10,098,961. The aggregate for the two classes of cities in 1903 was \$1,280,539,964. The foregoing, combined with other facts relating to the increase of municipal debt, makes it certain that the present debt of cities of the United States containing over 8,000 inhabitants is in excess of \$1,600,000,000, or greater than that of the combined debt of the National and state governments and of the counties, school districts, and other minor civil divisions.

The payments and receipts of those cities having a population of 8,000 and over were greater than those of the United States Government in 1902, but somewhat less than those of that Government in its last fiscal year. They also exceed the payments and receipts of all state and local governments.

In 1900, 33 per cent of the people of the United States resided in cities having a population of 8,000 and over, and in a few decades over one-half of the people will reside in those cities. The problem of self-government is therefore becoming one of city government, and no class of statistics is of such vital importance as that relating to cities, and especially to cities containing over 30,000 inhabitants. It is the aim of the Bureau of the Census so to arrange its financial statistics as to provide the means of testing the relative economy of the governments of the several cities, to disclose the best methods of raising public revenue, and to afford the fullest information relating to all questions of fiscal administration. The Bureau further aims to present, in connection with these financial statistics, such general statistics as can be made to contribute to the same ends. The good results which have attended the earlier publications of the Bureau give omen of still greater success as the statistics of cities are perfected along the lines contemplated by the act of Congress authorizing the same.

#### CENSUS OF MANUFACTURES OF 1905.

The clerical force has been largely concentrated during the year upon the completion of the tabulation of the manufacturing census of 1905. The final results of this census were given to the public in August last. State bulletins have been printed for all of the states and territories. They will be followed, during the autumn and winter, by a series of special industry bulletins, showing the growth and development of the leading manufacturing industries since the census of 1900.

The quinquennial manufacturing census has presented a record of growth and development so striking that it has justified the judgment

of Congress in enacting that such a census shall be taken periodically midway between the decennial censuses. It has cost for fieldwork approximately \$445,000, and for clerical and supervisory services in compilation \$495,000, total \$940,000, as compared with a cost for the same items at the Twelfth Census of \$1,211,000, showing a saving of \$271,000. The reduced cost is due largely to the omission of the local, household, and neighborhood industries from the enumeration. The latter industries represented but 12.3 per cent of the gross value of the manufactured products at the Twelfth Census, and fully 35 per cent of the cost of the fieldwork and of the tabulation. They constitute a group of intermittent industries in no way identified with the great manufactures of the country, having little present relation to its economic development, and often not capable of separation from the daily household vocations of families. Experience has demonstrated at each successive decennial census that it is impossible adequately or uniformly to enumerate them; and it is earnestly to be hoped, in the interest of accurate and scientifically valuable census results, that their enumeration will not again be attempted at the decennial periods.

It is gratifying to record the fact of successful cooperation, in taking this manufacturing census, with several of the state bureaus of statistics, under the authority granted by the act of Congress approved March 1, 1904. By interchange of facilities and information much expenditure was avoided and the statistics of the state and the Nation brought into exact harmony. In other states the state bureaus suspended their canvasses for that year, and have adopted the figures of the Census. Cooperation and correlation between the National and state authorities are thus gradually bringing their conflicting and unrelated industrial statistics into harmonious and comparable form.

#### A QUINQUENNIAL CENSUS OF AGRICULTURE.

The successful inauguration of the quinquennial census of manufactures has led to a revival of the demand for a quinquennial census of agriculture. A bill providing for a five-year enumeration of the acreage of the principal farm crops, and of live stock, was introduced in the House of Representatives at the recent session, was favorably reported by the Census Committee, and is now on the calendar of the House. In the hearings on this bill the Secretary of Agriculture stated that such a census would be a most important factor in improving the accuracy of the annual estimates of the principal crops and of live stock. Secretary Wilson said:

There is no reason given for a midway census of manufactures that does not apply with much greater force to agricultural products. \* \* \* Before there was a permanent Census Bureau provided for, the Department of Agriculture had been for many years in the habit of making estimates of these products. But the time between decennial censuses is too long, because the increase of production in one class of

products and the decrease or possible standstill in the production of another might have a very great influence on the producer and the dealer in the United States. The benefit that would come to the Department of Agriculture would be that instead of having once in ten years a reliable basis for estimating, we should have it once in five years. \* \* \* The reason why I should like to see the acreage census taken every five years is that we could then make more intelligent annual estimates and be less likely to report wide of the truth.<sup>1</sup>

This statement of the Secretary is strongly confirmed by the conclusions of the Keep Commission on departmental methods, in two special reports on crop statistics made public during the year.

At the request of the House Census Committee, the Director of the Census submitted a plan for the taking of a midway or five-year census of agriculture, confined to the principal crops and omitting many of the collateral statistics of the Twelfth Census of Agriculture, together with an estimate of its probable cost, which he placed at \$900,000, assuming that the tabulation of the returns can be made by the regular clerical force of the Office.

The advance of agriculture in the United States and the changes that occur in its character and environment, are no less notable than in manufactures; and the opinion now prevails very generally among those familiar with all the surrounding conditions, that a decennial enumeration of agricultural products is not frequent enough to determine the commercial situation or properly to safeguard either the producers or the handlers of farm products. The Director of the Census recognizes the justice of the demand of the agricultural sections for a quinquennial census of their products, and the advantage to the Department of Agriculture of a more frequent check upon its annual estimates of crops and live stock. If the pending bill had been enacted at the last session of Congress, so that this census of agriculture could have been taken as of October of the present year, the legislation would have met with general public approval. A year's delay has already brought such a census within two years of the thirteenth decennial census, which will be taken as of the crop year 1909 and it is a debatable question whether it is wise to undertake two agricultural censuses at intervals so close together, because of the large expenditure involved. But I recommend that when legislation for the Thirteenth Census is under consideration in Congress, provision be made that thereafter there shall be a quinquennial census of agriculture on the lines proposed in the bill now pending.

#### CENSUS COTTON REPORTS.

In this connection, reference can be appropriately made to the cotton statistics of the Census. A complete working understanding has

<sup>1</sup> Hon. James Wilson, before House Committee on the Census, March 1, 1906.

been reached between the Census Bureau and the Bureau of Statistics of the Department of Agriculture, whereby the reports of these two bureaus relating to cotton production will hereafter be brought into harmony with each other, and made public, so far as possible, on identical dates, and in such a manner as to reduce to a minimum any disturbing effect upon the markets.

During the last season the Census Bureau inaugurated the semi-monthly reports of cotton ginned to given dates, as required by act of Congress; and also the plan for securing telegraphic reports from its cotton agents, thus advancing by a full week the date of publication of the semimonthly reports. The methods employed in reporting the crop of 1905 are being continued during the present cotton ginning season. It is evident that the Census ginning reports have been accepted in commercial quarters as the most reliable means for measuring the volume of the maturing crop, and have removed from cotton statistics much of the damaging influences which formerly attached to private estimates. Recognizing this fact, it is the earnest desire of the Office to bring its system to the highest possible degree of efficiency. Much remains to be done to accomplish this.

The compilation of the annual Census report on the supply and distribution of cotton for the year ending August 31, 1906, has revealed the fact that the Census ginning reports of the production in 1905 were short of the total production. These reports necessarily check and verify each other, and if accurate returns are secured, they afford means of ascertaining the truth regarding the annual production and consumption of cotton not possible under former systems. The value of these cotton reports depends upon their accuracy, and when the public ceases to have confidence in their accuracy, Congress will no longer be justified in appropriating the money required to gather and compile them. It is important, therefore, to study the causes of the deficiencies in the reports of the ginners in showing the production in 1905 and the best method of preventing a recurrence. Some part of the fault undoubtedly lies in the carelessness and inefficiency of some of the Census agents. New agents have been selected in all cases where defective service is clearly established from the records and all the agents have received more stringent instructions as to the future performance of their duties. In addition, the Office has inaugurated a system of inspection of the fieldwork, under which every county in the cotton belt will be scrutinized, with a view to eliminating any defect in the service which can not be detected at Washington. The whole service could undoubtedly be improved if more money were placed at the disposal of the Office, thus permitting an increase in the compensation of the agents, which now is undoubtedly too meager.

But the real difficulty lies further back, and with the ginners themselves. A complete record of the quantity of cotton ginned is not possible unless the ginners report accurately the output of their gins. That the great majority of them do this I have no doubt; that many have failed to do so is made evident by the distribution report; and in some sections there are signs of a more or less concerted purpose to understate the ginnings, in the hope of thereby influencing the current market price of the crop. It has been the belief of the Office that as time passed the earlier prejudices against making these returns would wear completely away, and this belief is still entertained. There can be no question that the Census ginning reports have been worth many millions of dollars to the cotton planters by protecting the market from assaults of speculators, whose privately gathered statistics no longer carry weight when they differ from those of the Census. But in order that this protection against sham statistics shall continue to be effective it is imperative that the Census returns shall command absolute confidence. This they can not do if the distribution reports shall reveal at the close of each season discrepancies so marked and significant as are shown this year. It would seem that the mere statement of the case must be sufficient to convince the ginners that they can only serve the interests of their patrons by supplying our agents with the exact facts.

At the same time the law should be strengthened, if it is to be continued in force. It would seem that the time has now come when the Government should definitely take the stand that it has the right to exact this information, and that persistent refusal to furnish it will result in prosecution.

#### RECOMMENDATION FOR THE REVISION OF CERTAIN CENSUS LAWS.

The only doubt that can arise as to the right of the Government to insist upon these returns under existing law grows out of the insufficiency of the penal provisions of section 22 of the act for taking the Twelfth and subsequent censuses. A Federal court in Ohio, at the Eleventh Census, on a test case arising under a similar provision of law, declared it to be defective, in that it did not definitely define the duty, failure to perform which was punishable as therein prescribed. That case was never carried beyond the inferior court; nor has any case since arisen, either at the Twelfth Census or subsequently, in which it was deemed expedient to test the constitutionality of the law.

Apart from its defective phraseology, as before indicated, there is another reason why section 22 should now be amended. Its provisions are limited to such inquiries as are "provided for by this act"—the act of March 3, 1899—and they can not be held to apply to the provisions of any subsequent act of Congress, such as that providing for

the cotton ginning reports. There are several other subsequent acts to which the penalties should be made applicable when necessary. I therefore recommend that Congress be asked to amend section 22 of the act of March 3, 1899, so that it shall read as follows, the additional matter being indicated by italics:

That each and every person more than twenty years of age belonging to any family residing in any enumeration district or subdivision, and in case of the absence of the heads and other members of any such family, then any representative of such family, shall be, and each of them hereby is, required, if thereto requested by the Director, supervisor, or enumerator, to render a true account, to the best of his or her knowledge, of every person belonging to such family in the various particulars required, and whoever shall wilfully fail or refuse to render such true account shall be guilty of a misdemeanor, and upon conviction thereof shall be fined in a sum not exceeding one hundred dollars; *and it shall be the duty of every president, treasurer, secretary, director, agent, or other officer of every corporation and every establishment of productive industry, whether conducted as a corporate body, limited liability company, or by private individuals, from which answers to any of the schedules, inquiries, or statistical interrogatories provided for by the census law shall be required by the Director, supervisor, enumerator, or special agent, to give true and complete answers; and if they wilfully neglect or refuse to do so, or wilfully give false information, they shall be guilty of a misdemeanor, and upon conviction thereof shall be fined not exceeding ten thousand dollars, to which may be added imprisonment for a period not exceeding one year.*

The general question of the right of Congress to exact information from private citizens, relative to their private business, has been much mooted at every census, and in view of the failure to bring it to decisive test in the Federal courts, is held in some quarters to be still a doubtful question. It would appear that recent events and decisions have forecasted what the attitude of the courts must be, should this question again reach them. Even if there were no other power in the Constitution authorizing the collection of Census statistics (other than an enumeration of population) the commerce clause of the Constitution would be sufficient, so far as these statistics relate directly or indirectly to interstate commerce. As the Supreme Court said in the famous case of *Gibbons v. Ogden*, referring to the power of Congress to regulate interstate commerce:

This power, like all others vested in Congress, is complete in itself, may be exercised to its utmost extent, and acknowledges no limitations, other than are prescribed in the Constitution.

When it is remembered that the term "interstate commerce" is construed under this clause in the widest sense, denoting not only traffic but every species of commercial intercourse, including all the means by which it is carried on (navigation, railroads, and all other modes of interstate transportation and communication), and that it is all pervading, operating in every part of the Union, it is made manifest that

it is applicable to practically all commercial and industrial statistics which the census laws require to be collected, in precisely the manner that the power to regulate interstate railway transportation carries with it the power to collect the statistical data necessary to intelligently exercise that power. The power to regulate necessarily implies the power to obtain all the information essential to the intelligent enactment of laws to regulate. Congress alone must be the judge of the materiality thereto of the information it directs to be collected. The exercise of that power is subject only to such constitutional restrictions as that there shall be no unreasonable search and seizures, and that no person shall be deprived of life, liberty, and property without due process of law, and no private property taken for public use without just compensation, etc.

I have made this extended reference to this subject, not only because the legislation recommended seems necessary to bring the cotton reports to the highest degree of trustworthiness, but because it is in every way important and desirable that the fundamental and far reaching principle involved should be definitely determined before we enter upon the work of the Thirteenth Census.

#### REPORTS IN PROCESS OF COMPILATION.

During the past summer the Office has been employed in perfecting plans for five additional inquiries authorized by law, work upon which will continue until their completion. These reports are:

The statistics of Marriage and Divorce since 1886.

The decennial census of Religious Bodies.

Criminal Judicial Statistics.

The decennial census of Transportation by Water.

The Express Business.

The first three inquiries are under the immediate supervision of Mr. William C. Hunt, chief statistician for population. As explained in my last annual report, the report upon Marriage and Divorce will be a continuation of the report made by the Department (now Bureau) of Labor in 1887, covering the statistics on these subjects for the prior twenty years. The Bureau has secured the services of Hon. Carroll D. Wright, lately Commissioner of Labor, who compiled the original report, to assist in the preparation of tables and text analysis, in the capacity of expert special agent.

The fieldwork for this report requires that representatives of the Office shall be sent to a large proportion of the 2,880 counties in the several states, to examine their judicial records for twenty years. We plan to complete the transcription of these records, with the assistance

of the court clerks wherever possible, without the employment of temporary special agents. The preliminary survey of the field indicated that in a number of the large cities the courthouses are in so congested a condition that suitable quarters could not be provided for the Census clerks except during the summer months when the courts are not in session. Two hundred clerks, including a considerable number of female clerks, were therefore detailed to this work in August, and the work of transcription has been practically completed in these cities.

The collection of the data for the Criminal Judicial Statistics also involves the scrutiny of court records at the county seats, and it has therefore been planned to carry on the fieldwork for these two reports in immediate conjunction. The same clerk will make the transcriptions for each report at all the minor county seats, thus avoiding the necessity of again visiting the several localities, and greatly reducing the cost of the fieldwork.

The census of Religious Bodies, as planned, is a comparatively simple report to make, and the bulk of the data will be collected by correspondence with the central organizations of the various denominations.

The decennial report upon Transportation by Water, to be made under the immediate supervision of Mr. William M. Steuart, chief statistician for manufactures, will cover the investment, equipment, tonnage, quantity of freight carried, employees, and wages of the entire shipping of the country, whether coastwise, lake, or river. Much preliminary work, in the way of lists of the documented and undocumented craft, has already been done thru the cooperation of the customs officers and the Bureau of Navigation of the Department of Commerce and Labor. Several conferences have been held with the representatives of the leading shipping interests of the country, and a schedule has been prepared, much simpler than that in use at previous censuses, which has received their approval, with gratifying assurances of hearty cooperation.

The decennial census of the Express Business, authorized by the permanent census act, will also be undertaken during the present fiscal year. The railroad rate legislation of the last session of Congress gave the Interstate Commerce Commission jurisdiction over the express business, and the statistical department of that Commission is accordingly preparing to secure annual statistical reports from the express companies. An agreement has been reached between the Bureau of the Census and the Interstate Commerce Commission whereby the first report of that Commission will be made in cooperation with this Office, and will cover the same ground with the decennial Census report, thus avoiding a duplication of statistical reports on this subject.

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

#### WOMEN AND CHILDREN IN GAINFUL OCCUPATIONS.

The social and economic problems connected with the employment of women and children in gainful occupations are attracting much attention at the present time, and the importance of securing fuller information regarding this class of breadwinners has been emphasized in the President's message to Congress. The Census Bureau found that much valuable information bearing on this subject had been collected in connection with the general inquiries conducted by the Twelfth Census, and that this class of data, which could readily be compiled from the schedules of that census, had never before been published and could not be derived in such completeness from any other sources. Accordingly, with your approval, the Bureau undertook the preparation of a special report for the purpose of compiling and publishing material already in its possession. This report is now nearly completed and will shortly be issued.

Perhaps the most important feature of the report will be the publication of data regarding the families of those children and women who are wage-earners. From the Census schedule it is possible to ascertain such facts as the number of persons in the family, with sex and age; the number of breadwinners and the number of dependents; the occupation, sex, and marital condition of the head of the family; the nationality of the family as determined by the country in which the head of the family was born; and the school attendance and illiteracy of the children. Data of this character have been compiled and tabulated for the families of 23,000 child breadwinners, representing the principal industries in which child labor is employed in different sections of the country. Information of a similar tho less detailed character will be presented regarding 1,232,000 women reported as engaged in gainful occupations in 28 of the principal cities in the United States. It may be noted that these data will be presented so as to throw some light upon the important question of the extent to which the families are dependent upon the earnings of the child or woman employed in the shop or factory.

#### ADDITIONAL CENSUS REPORTS AUTHORIZED BY LAW.

Important legislation, materially enlarging the scope of the Census work, was enacted at the first session of the Fifty-ninth Congress.

The new law, which amends section 7 of the permanent census act, provides:

- (a) For a decennial report on criminal judicial statistics.
- (b) For a decennial census of the fisheries industry.
- (c) For a decennial report on savings banks and other savings institutions, mortgage, loan, and investment companies and similar institutions.
- (d) For a quinquennial census of the electrical industries, in lieu of the decennial census heretofore authorized.

All of these inquiries were recommended in the last annual report of the Director of the Census. The reports on judicial statistics and on savings institutions open up entirely new fields of Census investigation. The fisheries and the electrical industries have been covered by previous censuses. Work on these several reports will be undertaken at such intervals as can be most advantageously fitted into the current work of the Office. The census of the fisheries and the five-year report on the electrical industries—which include telegraphs and telephones, electric railways, and central power stations—will be made as of the year 1907.

The same law contains a provision transferring the duty of compiling the Official Register of the United States from the Department of the Interior to the Director of the Census. This was done in order that the Official Register may be compiled simultaneously with and from the same data as the Census bulletin containing the statistics of the classified civil service of the United States, thus avoiding much duplication of work. The next edition of both publications will relate to the fiscal year ending June 30, 1907. Plans are under consideration for materially reducing the bulk and the cost of the Official Register.

The sundry civil appropriation act for the year 1906-7 contains the following provision:

The Director of the Census is hereby authorized and directed to publish, in a permanent form, by counties and minor civil divisions, the names of the heads of families returned at the First Census of the United States in seventeen hundred and ninety; and the Director of the Census is authorized, in his discretion, to sell said publications, the proceeds thereof to be covered into the Treasury of the United States, to be deposited to the credit of miscellaneous receipts on account of "Proceeds of sales of Government property": *Provided*, That no expense shall be incurred hereunder additional to appropriations for the Census Office for printing therefor made for the fiscal year nineteen hundred and seven; and the Director of the Census is hereby directed to report to Congress at its next session the cost incurred hereunder and the price fixed for said publication and the total received therefor.

The publication of the names of the heads of families, as returned at the First Census of 1790, was recommended by the Director in 1904, and has long been earnestly advocated and urged by historical, genealogical, and patriotic associations and societies. The resulting volumes will be a valuable contribution to the biographical and local annals of the nation.

The proviso seems to contemplate that the publication of the First Census shall be undertaken at once, and that the cost of printing it shall be paid from the \$125,000 appropriated for all Census printing for the current fiscal year. So interpreted, the proviso imposes limitations which are likely to work serious detriment to the usefulness of the Census Bureau in its regular lines of work. It is estimated that the printing of the First Census in two quarto volumes will cost \$40,000. The printing appropriation for the Census in the fiscal year 1905-6 was \$150,000, and of this sum all but a few thousand dollars was required to print the reports made ready for the printer in that year. A number of large, important, and expensive volumes will be ready for publication during the present fiscal year; and the sum of \$90,000, which will be left after printing the First Census, will not be sufficient to permit the publication of all of them during the fiscal year. Delay in publication detracts from the value of Census statistics. I therefore recommend that the estimates submitted for the coming fiscal year shall include a request for the modification of the above proviso in the urgent deficiency bill. I do not regard it as necessary to increase the amount appropriated for Census printing; but I suggest that the Director of the Census be permitted to publish the First Census at such time as will not interfere with the regular work of the Office and as other and more pressing demands upon the Census printing appropriation shall permit. Whatever residue is left after providing for the current demands may then be applied to this publication, and the printing appropriation slightly increased for the following year, so as to permit its appearance in the fall of 1907.

#### SALE OF CENSUS PUBLICATIONS.

The foregoing provision of law is the first enactment which authorizes the sale of any of the Census publications. I believe it is a step in the right direction, and I again recommend that the Director be authorized by law to affix a price to all Census publications, and in his discretion to sell the same to the general public. There are certain quarters in which the present free distribution must necessarily continue, at least for a long time to come—the public libraries, the newspaper and periodical press, the Members of Congress, foreign governments, the National and state officials, etc.; but the remainder of the edition of each report, perhaps the larger part, should be sold to such persons as desire them, at a nominal price—less than the cost of printing and binding, but enough to bring back to the Federal Treasury a fixed proportion of this cost. Such a provision would at once shut off a great waste, which now necessarily occurs in the distribution of these documents, no matter how carefully that distribution is watched and guarded. The fact that the Government publications are for abso-

lutely free distribution undoubtedly stimulates a demand for them in quarters where they meet no real need and serve no public purpose. If the plan herein suggested shall be approved by Congress, the cost of Census printing can be reduced 25 per cent.

In the absence of such law every pains is taken to safeguard the distribution of the Census publications. The editions of each report are limited to the known requirements, and second and third editions are published only when necessary to supply the demand. The Abstract is substituted for the ten quarto volumes of the Twelfth Census whenever it is evident that it will meet the requirements of a particular case. Finally, the traditional congressional "quota" for each publication has been abolished. It is apparent in the experience of the Office that *this step has reduced very largely the cost of the Census printing and shut off the most important source of waste.* No Member of the Senate or House who desires that certain of his constituents shall be supplied with particular publications is denied the privilege, within reasonable limits, and no Member of Congress is loaded with a mass of printed reports which he must often distribute without personal knowledge of individual wants.

The Census Bureau is not covered by the congressional allotments for printing, and altho conducting periodically publishing operations larger than those of any other branch of the Government, it is the only important bureau the entire cost of whose printing appears in the appropriation made directly to it. It is therefore the only bureau to which the joint resolutions on printing, adopted at the last session of Congress, do not apply. The census laws exempt the Census Bureau publications from the limitations of the general printing act of 1895—an exception made necessary by the large initial demands for the decennial reports. An unusual responsibility in connection with the printing is thus vested in the Director, and it is met by every expedient which the trained printers of the publication division can apply for reducing the costs of publication and improving the standards and quality of the work.

In the last analysis the Census Bureau is nothing but a great publishing house, with no administrative functions except such as are connected with its own organization. The *necessary fieldwork* and the compilation and the tabulation of the statistics are followed in due course by the printing, publication, and distribution of the reports, all being closely interwoven steps in the progressive movement of the material and occupying the exclusive attention of the whole official staff.

#### DISTRIBUTION OF CENSUS PUBLICATIONS.

The number of copies of the Census publications distributed during the year was 656,668; of this number 200,745 were bulletins,

399,000, cotton reports of the permanent Census, and 10,068, bulletins of the Twelfth Census. The bound reports distributed numbered 44,725, comprising 23,279 Twelfth Census reports and 21,446 special reports of the permanent Census; 2,130 sets, or 8,520 volumes, of the Philippine Census reports and 1,135 of the reports of the Eighth, Ninth, Tenth, and Eleventh censuses were also distributed.

In order to secure much needed storage space, 60,780 volumes of the Tenth and Eleventh censuses were transferred to the custody of the Superintendent of Documents, Government Printing Office.

#### DEVELOPMENT OF TABULATING APPARATUS.

Much progress has been made during the year in the development of an independent system of automatic tabulating machinery for handling the population returns of the Thirteenth Census. The legislative appropriation act of last year appropriated \$40,000 for this purpose, of which sum \$9,068.87 was expended. The legislative act for the current year reappropriates the unexpended balance of \$30,931.13 "for tabulating census returns, including cost of cards, rental, purchase and construction of necessary apparatus, and experimental work in developing tabulating machinery."

For the small sum above indicated the Census experts have succeeded in devising a tabulating apparatus, along lines entirely novel, which infringes no patents and which is a marvel of simplicity, of accuracy, and of rapid manipulation of the punched cards. The possibilities of saving, in the cost of compiling future censuses, which this successful outcome represents, are enormous, approaching three-quarters of a million dollars at the Thirteenth Census alone. The Census experts are now engaged in the development of a new and improved system of counters to be attached to this tabulating machine, and they will proceed from that to other subsidiary mechanisms needed to make a complete system from which the hand manipulation of the cards will be practically eliminated at every stage. Still other devices have been worked out, which, if they can be mechanically perfected, will revolutionize the whole method of modern census taking. The main mechanism, that which permits the Census Bureau to carry thru the great and expanding work of tabulating a decennial census, has been perfected, and has already demonstrated its capacity to handle the work in much quicker time than has ever been done. I can not speak in terms of too high praise of the ingenuity, the skill, the enthusiasm, and the perseverance of the experts who have achieved this gratifying result.

Respectfully,

S. N. D. NORTH, *Director.*

Hon. VICTOR H. METCALF,

*Secretary of Commerce and Labor.*

## APPENDIX A.

## REPORT OF THOMAS S. MERRILL, DISBURSING CLERK, BUREAU OF THE CENSUS.

1. *Expenditures during the fiscal year ended June 30, 1906.*

Appropriations.	Expenditures.	Remarks.
Salaries, 1906 .....	\$711,644.78	The amount appropriated was \$745,760. The unexpended balance (\$34,115.27) will be covered into the General Treasury.
Collecting statistics, 1905-6..	354,392.29	The amount appropriated was \$625,000. Of this amount \$120,627.04 was applied to the payment of expenses incurred during the fiscal year ended June 30, 1905. The unexpended balance on June 30, 1906 (\$149,980.67), was reappropriated for the service of the fiscal year 1907. (Legislative act approved June 22, 1906.)
Tabulating statistics, 1906 ...	9,068.87	The amount appropriated was \$40,000. The unexpended balance (\$30,931.13) was reappropriated for the service of the fiscal year 1907. (Legislative act approved June 22, 1906.)
Stationery, 1906 .....	8,000.00	The amount appropriated (\$8,000) was entirely expended.
Library, 1906 .....	2,500.00	The amount appropriated (\$2,500) was entirely expended.
Rent, 1906 .....	22,080.00	The amount appropriated (\$22,080) was entirely expended.
Miscellaneous expenses, 1906.	12,000.00	The amount appropriated (\$12,000) was entirely expended.
Printing allotment, 1906.....	129,359.56	The amount appropriated was \$150,000. The unexpended balance (\$20,640.44) will be covered into the General Treasury.
Total expenditures during the fiscal year ended June 30, 1906.	1,249,045.45	

2. *Statement showing amounts appropriated for the support of the permanent Census Office, exclusive of printing.*

Fiscal year.	Amount appropriated.	Remarks.
1903.....	\$1,184,749.58	No appropriations were made specifically for this fiscal year, but the unexpended balance of the appropriation "Expenses of the Twelfth Census" was reappropriated. The expenditures from this balance during the year, exclusive of printing, amounted to the sum indicated.
1904.....	1,219,902.08	The appropriations made specifically for this fiscal year, exclusive of printing, amounted to \$926,460. The unexpended balance of the appropriation "Expenses of the Twelfth Census" was also reappropriated. The expenditures from this balance during the year, exclusive of printing, amounted to \$295,442.08.
1905.....	1,356,705.06	The appropriations made specifically for this fiscal year, exclusive of printing, amounted to \$1,254,260. The unexpended balance of the appropriation "Expenses of the Twelfth Census" was also reappropriated. The expenditures from this balance during the year, exclusive of printing, amounted to \$102,445.06.
1906.....	1,455,340.00	This amount was specifically appropriated for the fiscal year 1906 and does not include the allotment for printing. The appropriation "Expenses of the Twelfth Census" was exhausted during the preceding year.
1907.....	1,008,920.00	This amount was specifically appropriated for the fiscal year 1907 and does not include the allotment for printing.
Total .....	6,225,616.67	

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## 3. Statement showing amounts appropriated for salaries of the clerical force of the permanent Census Office.

Fiscal year.	Amount appropriated.	Remarks.
1903.....	\$818,024.90	No appropriation was made specifically for salaries for this fiscal year. The amount indicated was expended for this purpose from the appropriation "Expenses of the Twelfth Census."
1904.....	824,210.28	The appropriation made specifically for salaries for this fiscal year amounted to \$685,860, and the expenditures for this purpose from the appropriation "Expenses of the Twelfth Census" aggregated \$138,350.28.
1905.....	777,532.97	The appropriation made specifically for salaries for this fiscal year amounted to \$711,766, and the expenditures for this purpose from the appropriation "Expenses of the Twelfth Census" aggregated \$66,772.97.
1906.....	745,760.00	This amount was specifically appropriated for salaries for the fiscal year 1906, and constituted the only fund available for that purpose.
1907.....	717,020.00	This amount was specifically appropriated for salaries for the fiscal year 1907, and constituted the only fund available for that purpose.
Total .....	3,883,448.15	

## APPENDIX B.

*Clerical and subclerical force.*

Chief clerk .....	William S. Rossiter.	
Disbursing and appointment clerk .....	Thomas S. Merrill.	
Chief statisticians:		
Population .....	William C. Hunt.	
Manufactures .....	William M. Steuart.	
Agriculture .....	Le Grand Powers.	
Vital statistics .....	Cressy L. Wilbur.	
Geographer .....	Charles S. Sloane.	
Expert chiefs of division:		
Population .....	Edward W. Koch.	
Manufactures .....	Joseph D. Lewis.	
	Frank L. Sanford.	
	Jasper E. Wheelchel.	
Agriculture .....	Hart Momsen.	
Vital statistics .....	Richard C. Lappin.	
Revision and results .....	Joseph A. Hill.	
Total .....		14
Stenographer .....		1
Clerks, class 4 .....		4
Clerks, class 3 .....		7
Clerks, class 2 .....		25
Clerks, class 1 .....		299
Clerks, \$1,000 .....		196
Clerks, \$900 .....		16
Expert map mounter .....		1
Engineer .....		1
Electrician .....		1
Skilled laborers, \$1,000 .....		2
Skilled laborers, \$900 .....		5
Watchmen .....		10
Messengers .....		6
Firemen .....		2
Assistant messengers .....		10
Skilled laborers, \$720 .....		11
Unskilled laborers, \$720 .....		8
Charwomen .....		24
		629
Total .....		648

## SPECIAL AGENTS.

Regular field work .....	17
Cotton agents .....	721
Expert special agents .....	13
Experts appointed in connection with the development of tabulating machinery .....	4
	755
Total number of employees .....	1,398

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APPENDIX C.

*Status of effective registration of deaths, 1906.*

Registration states, 1900.		Added as registration states, 1906.		Not yet accepted as registration states.	
State.	Population, 1900.	State.	Population, 1900.	State.	Population, 1900.
				Alabama .....	1,828,697
				Arizona .....	122,931
				Arkansas .....	1,311,564
Connecticut .....	908,420	California .....	1,485,053		
District of Columbia..	278,718	Colorado .....	589,700	Delaware.....	184,785
				Florida .....	528,542
				Georgia .....	2,216,391
				Idaho .....	161,772
				Illinois .....	4,821,550
Indiana .....	2,516,462			Indian Territory ..	392,060
				Iowa .....	2,231,858
				Kansas .....	1,470,495
Maine .....	694,466	Maryland .....	1,188,044	Kentucky .....	2,147,174
Massachusetts .....	2,805,346			Louisiana .....	1,381,625
Michigan .....	2,420,982				
				Minnesota.....	1,751,394
				Mississippi .....	1,651,270
				Missouri .....	8,106,665
				Montana .....	243,329
				Nebraska .....	1,066,300
				Nevada .....	42,335
New Hampshire.....	411,588				
New Jersey .....	1,883,669			New Mexico.....	195,310
New York .....	7,268,894			North Carolina.....	1,893,810
				North Dakota .....	319,140
				Ohio .....	4,157,645
				Oklahoma .....	398,381
				Oregon .....	413,536
Rhode Island.....	428,556	Pennsylvania .....	6,302,115		
		South Dakota .....	401,570	South Carolina.....	1,340,316
				Tennessee .....	2,020,616
				Texas .....	8,048,710
Vermont .....	343,641			Utah .....	276,743
				Virginia .....	1,854,184
				Washington .....	518,103
				West Virginia .....	953,800
				Wisconsin .....	2,069,042
				Wyoming .....	92,581
Total .....	19,960,742	Total .....	9,916,482	Total .....	46,117,351

Population, registration states, 1900 .....	19,960,742
Per cent of total population.....	26.3
Population, registration cities in states added, 1906 .....	8,835,119
Per cent of total population.....	5.0
Population of registration cities in nonregistration states .....	6,969,767
Per cent of total population.....	9.2
Population in registration area, 1900.....	30,765,618
Per cent of total population.....	40.5
Net population added to registration area in 1906 .....	6,081,303
Per cent of total population.....	8.0
Population in registration area in 1906.....	36,846,921
Per cent of total population.....	48.5

BUREAU OF THE CENSUS  
REPORT OF THE DIRECTOR  
TO THE SECRETARY OF  
COMMERCE AND LABOR



Concerning the Operations of  
the Bureau for the Year 1906-7

WASHINGTON : 1907

1907

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REPORT  
OF THE  
DIRECTOR OF THE CENSUS



*Washington, November 1, 1907.*

SIR: I have the honor to submit the following report upon the operations of the Bureau of the Census during the fiscal year ended June 30, 1907, and upon the work for the coming year as now outlined. The report covers the fifth year of the existence of the permanent Bureau under the act of March 6, 1902, and the eighth year of its existence as an office under the act of March 3, 1899. During three months of the year the Director was absent from the country at the request of the Department of State, and the Bureau was in charge of Mr. William S. Rossiter, chief clerk. The fidelity and good judgment with which he administered the office during this period can not be too highly commended.

EXPENDITURES DURING THE FISCAL YEAR.

The financial statement of Mr. Thomas S. Merrill, disbursing clerk of the Bureau of the Census, attached as Appendix A, shows in detail the appropriations for the Bureau during the fiscal year covered by this report and the actual expenditures under each item.

The appropriations made specifically for the fiscal year covered by this report aggregate \$1,136,600. This, together with certain reappropriated balances of the preceding year's appropriation, to wit, "Collecting Statistics," \$149,980.67, and "Tabulating Statistics," \$30,931.13, and the \$65,000 expended from the 1908 appropriation for "Collecting Statistics," which was made immediately available, made the total amount available during the fiscal year 1907, \$1,382,511.80. The total expenditures were \$1,362,173.93, leaving an unexpended balance of \$20,337.87 to be covered into the General Treasury.

The total appropriations for the current fiscal year, including the allotment for printing, aggregate \$1,490,940.

Mr. Merrill's report also contains a statement showing the amounts appropriated for the maintenance of the Census Office each year since its establishment in 1899 and the amounts actually expended.

## CLERICAL SITUATION IN THE BUREAU.

An unfortunate clerical situation has been gradually developing in the Census Bureau since the establishment of the permanent Office. Practically all of the clerical force has been in the Bureau since it was originally established. They have thus grown up together and been trained together and have developed their respective aptitudes. Many of them have become highly efficient in special lines of work and are qualified to render the best possible service at the Thirteenth Census. In all other bureaus of the Government, long established, the clerical force represents a gradual process of appointment, and clerks are promoted, as their fitness is demonstrated, to recurring vacancies at higher salaries. In the Census Office, on the other hand, there are not enough higher grade positions allowed by law to permit of promotion in accordance with merit. In consequence a number of Census clerks are discharging important supervisory duties, while paid the same salaries as the clerks whose work they direct. Elsewhere in the service they would receive a compensation based upon this fact. In the Census, as now organized, this is impossible.

Moreover, the census appropriation divides the main body of the clerical force into two divisions, one of 300 clerks at \$1,200; the other of 192 clerks at \$1,000. Ninety per cent of the clerks in both classes have been in the service for an equal length of time. At least 50 per cent of the \$1,000 clerks are as well trained and qualified, as industrious and efficient, as are 50 per cent of the \$1,200 clerks and are doing the same character of work, both in quantity and quality, side by side with them.

The glaring injustice of this situation is obvious. Necessarily it creates dissatisfaction, discontent, and something approaching demoralization. It makes the duty of the Director in determining promotions to the few vacancies which occur through resignation, death, and transfer, most trying and disagreeable. No clerk can be selected for promotion without the knowledge that dozens of others are equally entitled to it.

As a result of this situation there is a systematic effort to escape from this Bureau by transfer to some other bureau or department where the opportunity for promotion seems greater. The Census has lost in this way since its permanent organization nearly 50 of its best clerks. One of the main purposes of establishing a permanent Census Office—to retain a trained body of clerks to handle the work of the decennial period—is thus being gradually defeated. The situation is so acute that I deem it my duty to direct your attention to it in this

manner and to request that Congress may be urged to supply a remedy by the readjustment of the clerical salaries of the Bureau.

Even should the readjustment recommended in the estimate for the next fiscal year be granted by Congress, the proportion of employees in grades above \$1,200 will still remain far below the proportion which obtains in every other bureau of the Government. A year ago I submitted a tabular statement which showed that only 7.2 per cent of the clerical employees in the Census Office received above \$1,200, while the general average of these employees in all other departments of the Government was above 50 per cent.

#### WORK OF THE BUREAU SINCE LAST REPORT.

The work of the Bureau is represented by reports published, reports completed and awaiting publication, and reports the field-work and compilation of which are in progress. The following is a complete list of the Census publications since the last annual report:

#### VOLUMES.

	Pages.
Mortality Statistics: 1905.....	360
Manufactures, Part I (United States by Industries).....	1010
Manufactures, Part II (States and Territories).....	1244
Wealth, Debt, and Taxation.....	1246
Statistics of Women at Work.....	400
Statistics of Cities over 30,000: 1905.....	372
Prisoners and Juvenile Delinquents.....	296

#### BULLETINS.

	Number.
Census of Manufactures, 1905:	
New York.....	59
Pennsylvania.....	60
Canning and preserving, rice cleaning and polishing, and the manufacture of beet sugar.....	61
Glass and clay products.....	62
Butter, cheese, and condensed milk, flour and grist mill products, and starch.....	64
Coke.....	65
Automobiles and bicycles and tricycles.....	66
Metal working machinery.....	67
Petroleum refining.....	70
Boots and shoes, leather, and leather gloves and mittens.....	72
Electrical machinery, apparatus, and supplies.....	73
Textiles (combined textiles, cotton manufactures, hosiery and knit goods, wool manufactures, silk manufactures, flax, hemp and jute products, and dyeing and finishing textiles).....	74
Agricultural implements.....	75
Lumber and timber products.....	77
Iron and steel and tin and terne plate.....	78

Report of the Director of the Census

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Census of Manufactures, 1905—Continued.	Number.
Printing and publishing.....	79
Paper and wood pulp.....	80
Shipbuilding.....	81
Musical instruments, attachments, and materials.....	82
Slaughtering and meat packing, manufactured ice, and salt.....	83
Carriages and wagons, and the steam and street railroad car industry....	84
Pens and pencils, buttons, needles, pins, and hooks and eyes, oilcloth and linoleum, and turpentine and rosin.....	85
Copper, lead, and zinc, smelting and refining.....	86
Tobacco.....	87
Power employed in manufactures.....	88
← Population of Oklahoma and Indian Territory: 1907 .....	89
Supply and distribution of cotton for the year ending August 31, 1906 .....	63
Child labor in the District of Columbia.....	68
Child labor in the United States.....	69
Estimates of population: 1904, 1905, 1906.....	71
Cotton production: 1906.....	76

These reports represent more than 6,000 printed quarto pages, largely tabular matter. They include the final results of two of the great inquiries committed to the Bureau during the intercensal period: the report on Wealth, Debt, and Taxation, and the quinquennial census of Manufactures. The former report covers (a) the estimated value of all tangible property in the United States, (b) the debts of the national, state, and local governments, (c) the assessed valuations of property taxed by the state and local governments, and the taxes levied by them, and (d) the receipts and payments of the national, state, and local governments. The wealth of the nation is given for 1900 and 1904, while the other data refer chiefly to the year 1902. In connection with the statistics on assessed valuations and tax levies, the report contains an abstract of the revenue laws of the several states, showing the taxes and other revenues provided for the state, county, township, city, and other local governments. This abstract was prepared by Prof. Carl C. Plehn of the University of California, and is the most comprehensive compilation of this character ever made. Its value to students of taxation and kindred topics, both in this country and abroad, has been established in a most gratifying manner by the correspondence which has followed its publication.

The wisdom of Congress in authorizing the five year census of manufactures has been abundantly justified by the results, which determine with exactness the surprising and unprecedented advance made in all branches of manufacturing industry since the census of 1900. The division of manufactures is now engaged on a supplementary analysis of the wage statistics of this census of manufactures, which will be published during the year.

Two reports in the above list (*Women at Work and Child Labor*) represent further studies from the returns of the Twelfth Census. These data, never before compiled, present the exact proportions and locations, geographically and by industries, of a phase of labor now attracting widespread attention, and supply the basis for the special investigation of all the conditions surrounding the employment of women and children, which was authorized at the last session of Congress.

#### CURRENT WORK OF THE BUREAU.

The Bureau has been engaged during the year upon the fieldwork for the reports upon marriage and divorce, religious bodies, criminal judicial statistics, transportation by water, and the annual reports upon mortality, statistics of cities, cotton production, and cotton consumption.

The fieldwork upon marriage and divorce was substantially completed on October 1. There were employed in it, at intervals, 138 of the regular clerical force of the office, 220 special agents (including some cotton agents), and 775 county clerks. The services of the latter were utilized in remote counties where the number of divorces was comparatively small, in order to save the traveling expenses and subsistence of detailed clerks. The data have been secured for 1,275,000 divorces, applied for in 2,880 counties in the United States in the twenty years since 1886, when the last report on this subject was made by the Department (now Bureau) of Labor. The compilation and analysis of the statistics will occupy the Bureau during the coming winter and spring.

The data for the decennial census of religious bodies have been secured almost wholly by correspondence, at a comparatively small expense. Substantially complete statistics have been received from 78 denominational bodies, and the final reports will be received during the fall. The Director acknowledges the cordial and effective cooperation of the church authorities of nearly every denomination in the collection of these statistics. Their compilation and analysis is now in progress in the Bureau.

The statistics for the decennial report upon transportation by water were collected by 43 detailed clerks and 3 special agents. The fieldwork was substantially completed on September 1. The compilation of the tables has already made satisfactory progress.

By direction of the Secretary of Commerce and Labor, the Census Office, in collaboration with the Forest Service Bureau of the Department of Agriculture, undertook during the past year the compilation of the annual statistics of the lumber-cut of the United States.

The experts of the Bureau of Forestry were given full control over the technical details of the report, the Census Office conducting the correspondence and the compilation of the statistics. The results were made public by states, as fast as completed. The final result, published in July last, was the most complete report of the annual lumber-cut ever compiled. It showed this cut to be 37,490,067 M feet B. M., probably the largest in the history of the country.

It is the understanding that this cooperative work between the Census Office and the Forest Service is to continue from year to year. It affords an excellent illustration of the relationship which seems likely ultimately to be established between the Census and various other technical bureaus of the government, and is another evidence of the advantages which spring from the establishment of the permanent Census Office. It is a practical demonstration of the true function of the Bureau in a harmonious reorganization of the autonomy of the general business administration of the Government.

#### CRIMINAL JUDICIAL STATISTICS.

In compliance with the act of Congress of June 7, 1906, authorizing the collection of criminal judicial statistics, active fieldwork in connection with the inquiry was begun in June, 1907, and at the present time 50 clerks are engaged in collecting data from the court records. The items of information sought embrace the entire procedure in each criminal case reported, from the commencement of proceedings until the final disposition of the case, together with certain items of personal description of the accused prescribed by the act.

In view of the enormous number of cases and the experimental nature of this first report in an entirely new field of statistical inquiry, it was deemed wise to confine the inquiry to the disposition of major criminals, and not only to exclude certain lower courts having a limited jurisdiction, but also to confine the inquiry to limited areas in each state. It is hoped that from this inquiry the following results may be obtained: *First.* A record in detail for the year 1906 of the disposition of all major criminal cases within the territory covered. This will include all cases originating prior to 1906, but tried and finally disposed of in this year; for cases filed during 1906, but continued beyond this year, the progress of the case until the end of 1906 will be shown. *Second.* A survey of the criminal court systems in the different states, accompanied by such presentations of the penalties provided by the criminal codes of the various states as is necessary to elucidate the statistics.

In addition to the investigations now under way, as above stated, there remain untouched, of the reports authorized by Congress, the

census of fisheries, to be made in cooperation with the Bureau of Fisheries; the report on express companies, to be made in cooperation with the Interstate Commerce Commission; the report on savings institutions; and the quinquennial report on the electrical industries.

These investigations, together with the annual reports committed to the Bureau, will keep the present force fully occupied until July 1, 1909, after which date the energies of the present clerical force should be concentrated upon the preliminary work of the Thirteenth Census. No increase in the clerical force for the purposes of that census will be necessary prior to April, 1910.

#### CENSUS COTTON REPORTS.

The season of 1906-7 marked the fifth consecutive year in which the Census reports on cotton ginned have been collected by local special agents, and the results were the most satisfactory since the inauguration of this work. The opposition of certain ginners to making these returns has practically disappeared, and the reports issued semimonthly during the harvesting and the final report at the close of the season, fixing the volume of the crop of 1906, have been accepted by the trade as correct and trustworthy. The superintendent of the New York Cotton Exchange in his last annual report says: "It is pleasant to find that the Census report proved so accurate. The trade feels that it is of most valuable assistance to the individual in forecasting the probable crop, because it correctly indicates the actual yields of the different states, irrespective of how the cotton reaches the market." The cotton "supply and distribution" report is a check on the returns of production; and the fact that the disparity between the two reports is less than was the case last year is a further verification of the accuracy of the ginners' returns. Progress has been made in perfecting the field organization for collecting the statistics of cotton ginned. The number of local agents has been increased from 711 for the season of 1906-7 to 724 for next season, an increase made necessary by the recent development of the cotton growing industry in western Texas, and the reorganization of the proposed state of Oklahoma in accordance with the new county boundaries.

An important modification of previous methods in the promulgation of the cotton ginning reports will be undertaken during the season of 1907-8. The hour of making these reports public has hitherto been 2 p. m. Hereafter they will be made public at 10 a. m. on the day following the close of each semimonthly canvass, except when this day falls on Sunday, when the report will be made public on the following Monday. There are three reasons which justify the belief that this change of hour will prove a decided advantage:

1. There will be no unnecessary waiting for results on the part of trade interests, as the reports will be announced practically at the opening of business (10 a. m.) on the morning following the day on which the canvass closes.

2. The publication of these reports at 10 a. m. will permit the results to reach Europe within trading hours on the day of their publication in America. This is in line with the earnest requests of European spinners of American cotton. It is believed that by enabling them to trade on these reports in their own markets on the dates of publication the fluctuations in the price of cotton and speculation in the product will be materially reduced.

3. Between the hours of 6 p. m., when the agents complete their canvass and compile their county summaries for telegraphing, and 10 a. m. of the following morning, when the summary will be published in Washington, no business is transacted on cotton exchanges in this country and hence under this plan no improper use of the data is possible.

The success of the Census Office in obtaining accurate statistics of the annual cotton crop through the cooperation of the ginner has led several of the cotton growing states to enact legislation for obtaining similar information through state agencies established for that purpose. Alabama and Texas have passed laws of this character, and other states have the subject under consideration. Cooperation between state bureaus and the Census Office, in a work of this character, should result in more complete and accurate returns than are otherwise possible, provided that cooperation is conducted on uniform lines and by uniform methods. Otherwise there can only follow confusion and discrepancy. This fact was realized by the director of the Alabama Bureau of Cotton Statistics, who, shortly after his appointment, conferred with the Director of the Census with a view to determining the possibility of an arrangement to that end. The result of this conference and of subsequent correspondence was a complete understanding between the two bureaus; and the Alabama legislature, at its recent session, repealed its original law and enacted a new statute embodying this understanding. Under this law the state and federal returns of cotton ginned will be collected and published on identical dates, thus avoiding any confusion in the public mind as to the relative significance of the figures. The Census agents will supply their returns to the Alabama bureau simultaneously with their transmission to Washington, and without cost to the state; and any discrepancies which appear in the returns for the state, as compiled by the two offices, will be immediately investigated, and the error located and corrected.

The most conspicuous advantage of this plan of cooperation between the state and federal bureaus grows out of the fact that the Alabama law makes it compulsory for the grower to supply these reports to the state bureau through such agents as it may designate, fixes a severe penalty for refusal or for the making of inaccurate returns, and provides the necessary legal machinery for the prompt enforcement of the requirements. Thus the federal Census will get the full benefit of the state law requiring regular and accurate reports. The state can require such reports and enforce such penalties, within its own jurisdiction, without arousing the antagonism and suspicion which would follow if the United States Government were to attempt a similar procedure under the Census laws.

In developing the annual Census reports on the supply and distribution of cotton, it has become necessary for the Bureau to make European connections through which annual data relative to cotton consumption and manufacture in foreign countries can be promptly secured. In view of the fact that a large percentage of the American crop is exported, it is necessary to know the quantity of stocks held throughout the world at the close of the commercial year, as a guide in arriving at the possible future demand for the American crop. With a view to establishing channels through which to obtain this information, Mr. D. C. Roper, chief of division in charge of cotton statistics, was instructed to attend the Fourth International Cotton Congress, which convened in Vienna, May 27-31, to explain to the Congress the methods of the Census Office in collecting cotton statistics, and to arrange plans of cooperation with foreign manufacturers and organizations in obtaining this necessary data for the annual report on the supply and distribution of cotton. As a result of Mr. Roper's efforts, an agreement has been signed between the Director of the Census and the International Federation of Master Cotton Spinners' and Manufacturers' Associations, in which the Federation agrees to collect and furnish the Census Bureau information relative to spindles, stocks, and consumption of cotton for practically all foreign countries. This Federation has been in existence only about four years; and inasmuch as it has to rely at present upon the mails for its returns, the Census Bureau may not be able to secure for the present, all the foreign statistical information desired; but it will secure whatever the Federation is able to collect, together with information arranged for through other European sources; and thus the Bureau will be enabled to materially extend the scope of its reports dealing with the world's cotton industry as of September 1 of each year.

## VITAL STATISTICS.

The annual report on Mortality Statistics, 1905, has been published and distributed. It embraces returns of 545,533 deaths that occurred in the registration area only of the United States during the year, or rather more than the number (520,031) that occurred in England and Wales during 1905. The report for 1906 is in an advanced stage of compilation and will probably be ready at an earlier date than that for the preceding year, although the number of deaths (over 655,000) considerably exceeds the number for 1905, owing to the inclusion of new registration territory, as explained in my last report. Steps are now being taken to ascertain whether any states are admissible as having a fairly complete registration of births; and it is believed, on account of the increasing interest shown in this subject by registration officials and a more apparent disposition to enforce existing laws, that a registration area for births may be constituted at an early date. Much help is expected in this and other matters from the organization of a national association of registration officials, under the auspices of the American Public Health Association, especially in the standardization of registration returns. A recent Census pamphlet on "Modes of Statement of Cause of Death and Duration of Illness upon Certificates of Death" explains the importance of this movement. It is also gratifying that the Conference of Commissioners on Uniform State Laws, at its recent meeting at Portland, Me., decided to cooperate with the Census in promoting the adoption of satisfactory legislation.

The extension of the registration area by the inclusion of new registration states is proceeding apace. There were ten registration states in 1900—Connecticut, Indiana, Maine, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Rhode Island, and Vermont—besides the District of Columbia (city of Washington). Of these, two—Maine and Michigan—were added during the previous decade, while Delaware was dropped. In 1906 five additional states were included—California, Colorado, Maryland, Pennsylvania, and South Dakota. Complete laws were enacted in 1907, which should bring Minnesota, Montana, North Dakota, Wisconsin, and perhaps other states into the list. Earnest efforts will be made by the state authorities in Kentucky, Ohio, and Virginia to secure adequate legislation in 1908; and Illinois, Kansas, and other states will endeavor to secure it in 1909. But since 1900 no registration cities in nonregistration states have been added, although it is entirely practicable for many cities in states which are not likely to secure effective state registration for some years to come to at once pass local ordinances

for this purpose and so execute them as to obtain complete registration of deaths. As soon as this is done and the results tested the cities can at once be admitted into the registration area.

## REPUBLICATION OF THE 1790 CENSUS.

The sundry civil appropriation act of 1906-7 contained a provision directing the Director of the Census to publish, by counties and minor civil divisions, the names of the heads of families returned at the first census (1790) of the United States, and to sell such publication, the proceeds to be deposited to the credit of "miscellaneous receipts" in the Treasury Department. The statute contained a proviso that "no expense shall be incurred hereunder, additional to appropriations for the Census Office, for printing therefor, made for the fiscal year 1907." In other words, the Census Office was required to publish the 1790 census out of a printing appropriation which had been estimated on the basis of its requirements for the regular work of the Office, authorized and directed by law. As these authorized reports were of important current interest, the Director did not feel warranted in delaying the publication of any of them in order that the reprint of the census of 1790 might be given precedence. There were therefore only sufficient funds in the printing appropriation of the last fiscal year to permit of the publication of the 1790 census for three states—Vermont, New Hampshire, and Maryland. These were published in three separate parts, and offered to the public at \$1 a part. They were printed in exceptional typographical form, and were made additionally valuable by the inclusion of an authentic map of each state, first published in 1796. The total cost of printing the census of these three states was \$6,566.24. At this writing subscriptions have been received for the pamphlets which aggregate \$1,200, and the Office is in daily receipt of additional subscriptions. The edition of each state publication is 2,000; and if the demand for them shall continue until the edition shall be exhausted, the Government will be made whole. Subscribers to these three states have frequently indicated their desire for one or more of the other states. They have been informed that further publication is dependent upon the action of Congress, and the removal of the restriction of law which requires the publication to be made from the census printing appropriation for 1906-7. The public interest aroused by the three parts already published justifies a recommendation that the completion of the work be authorized.

The remaining states of which the records of the census of 1790 are intact are Connecticut, Maine, Massachusetts, New York, North

Carolina, Pennsylvania, Rhode Island, and South Carolina. The records for Delaware, Georgia, Kentucky, New Jersey, Tennessee, and Virginia were destroyed at the time of the burning of the Capitol by the British forces during the war of 1812.

## CENSUS OF OKLAHOMA.

On June 20, 1907, the President, through the Secretary of Commerce and Labor, and under the authority conferred by section 8 of the organic act of the Department, ordered the Director of the Census to take a census of the population of the territory of Oklahoma and Indian Territory, comprising the proposed new state of Oklahoma. The directions were to undertake the work at once and complete it with all possible expedition. Plans were immediately made, and the general order covering these plans was made public on June 24. The immediate conduct of the fieldwork was placed in charge of Mr. William C. Hunt, chief statistician for population. The territory was divided into five districts, and a chief of division of the Census Office was assigned to the charge of each. The census of Oklahoma was therefore supervised at every point by men thoroughly trained in census methods, and familiar with all the details of the work. The result has been the quickest piece of Census work ever accomplished, and, in view of the many difficult conditions encountered, probably the most efficient. A corps of census clerks, twenty-five in number, including stenographers, proceeded to Guthrie, Oklahoma, on June 30, where ample office quarters in the city hall were assigned them by Governor Frantz. The district supervisors were likewise provided for at their several headquarters, by the judicial and other federal authorities having jurisdiction. Every facility and assistance was accorded the representatives of the Census by the local authorities, of all political faiths, and the work of enumeration, when once under way, proceeded rapidly to a conclusion, the last returns being received by the supervisor in charge on September 10. Considerable delay in the fieldwork necessarily occurred, owing to the difficulties encountered in properly adjusting and describing the enumeration districts, by reason of insufficient data, local uncertainty as to boundary lines, and the unsettled condition of parts of the country, particularly in the Indian Territory. The two territories were divided into 1,473 enumeration districts; and as fast as the enumerators were selected, commissioned, and instructed they entered upon their work. These enumerators were selected, so far as possible, without regard to partisan politics, preference being given, wherever possible, to the substitute city letter carriers and substitute rural free delivery agents of the Post Office Department, presumed to be thoroughly

familiar with their localities. Students in the educational institutions were also sought, and in many districts the services of the Census cotton ginning agents were utilized. The schedule employed was the simplest possible, and related only to the relationship of each person to the head of the family, color or race, sex and age.

The enumeration revealed a population in both territories of 1,414,177. A detailed statement of the results of the census, by Congressional districts, counties, and minor civil divisions, has just been published. The cost of the fieldwork for the census of Oklahoma was \$70,000.

## OFFICIAL REGISTER.

The Bureau is now also engaged in the compilation of the Biennial Official Register of the United States (otherwise known as the "Blue Book"), publication of which was transferred from the Secretary of the Interior to the Director of the Census, by the act of June 7, 1906. In making preparations for the Register for 1907 it became evident that radical steps must be taken to reduce the size of the volumes. The civil service has been increasing so rapidly that the Official Register has grown from a volume of 175 pages in 1816, when the first issue appeared, to two volumes of 1,756 and 2,480 pages, respectively, a total of 4,236 pages, in 1905. For several decades after 1816, the Register was issued at frequent though irregular intervals; and the increase during each ten-year period was approximately 50 per cent in both pages and number of names. The following table indicates the increase in the size and cost of the publication since the first issue:

YEAR.	Volume.	Pages.	Approximate number of names.	Index (pages).	Cost.	Printer.
1816.....		175	6,767	.....	.....	J. Elliott.
1821.....		257	9,443	.....	.....	Davis & Force.
1831.....		407	13,431	.....	.....	W. A. Davis.
1841.....		637	25,666	.....	.....	Thomas Allen.
1851.....		1,091	39,631	.....	.....	Gideon & Co.
1863.....		824	60,000	.....	\$3,681.02	Government Printing Office.
1871.....		1,244	92,370	.....	8,115.98	Government Printing Office.
1881.....	Volume I.....	881	52,540	134	11,666.66	Government Printing Office.
	Volume II.....	892	74,480	196	11,843.77	Government Printing Office.
1891.....	Volume I.....	1,179	71,820	189	15,144.10	Government Printing Office.
	Volume II.....	1,425	114,380	301	17,883.61	Government Printing Office.
1893.....	Volume I.....	1,221	72,960	192	15,739.89	Government Printing Office.
	Volume II.....	1,546	123,120	324	19,580.39	Government Printing Office.
1895.....	Volume I.....	1,228	74,800	187	19,336.92	Government Printing Office.
	Volume II.....	1,580	133,000	334	24,669.52	Government Printing Office.
1897.....	Volume I.....	1,269	76,000	190	19,841.30	Government Printing Office.
	Volume II.....	1,474	134,000	338	23,358.20	Government Printing Office.
1899.....	Volume I.....	1,561	108,896	249	24,227.92	Government Printing Office.
	Volume II.....	1,567	142,800	357	24,669.75	Government Printing Office.
1901.....	Volume I.....	1,602	109,962	278	24,834.17	Government Printing Office.
	Volume II.....	1,798	160,895	400	28,060.19	Government Printing Office.
1903.....	Volume I.....	1,698	123,200	308	26,620.35	Government Printing Office.
	Volume II.....	2,247	201,600	504	34,057.30	Government Printing Office.
1905.....	Volume I.....	1,756	128,000	322	29,504.43	Government Printing Office.
	Volume II.....	2,480	218,000	547	41,304.23	Government Printing Office.

The table shows that the cost of the last issue was approximately \$71,000. The two volumes required to present the material contained in the last Official Register weighed together nearly 30 pounds. The space required to include merely the index is sufficient to form a large volume. In weight, number of pages, cost, and general unwieldy character the Official Register in its present form more than reached the limit of its usefulness in 1905.

The forthcoming Register would contain, on the old basis, not less than 350,000 names, necessitating an increase of about one-third in the size of the publication. The question of cost thus became a matter for serious consideration.

The Director of the Census therefore consulted with the Printing Commission of Congress and obtained its cordial approval to plans for reducing the bulk, and at the same time increasing the usefulness of the Official Register. The most radical feature of the plan was that which disposed of the necessity for an index by printing the names of all Federal employees, irrespective of the department in which employed, in alphabetical order, under appropriate symbols indicating their official location.

The next step was the elimination from the Register of the names of all temporary employees, and of substitute employees in the Post Office Department. It is estimated that the names thus eliminated aggregate 60,000. Not more than 5 per cent of the temporary employees of the Government on July 1 in any year are still in the service at the date when the Register is published, and to include their names is to cumber the volume with worthless data. Other less important modifications undertaken on the suggestion of the Congressional Printing Committee will still further reduce its bulk and cost. It is respectfully suggested in this connection that the several statutes relating to the Official Register be revised and reenacted, with a view to further curtailment.

By the act of 1895 the information to be contained in the Official Register must be furnished July 1, and the Register compiled and published by December 1 following, in order to be of service to the incoming Congress. As July 1 is the beginning of the fiscal year, at which time many changes occur, obviously the data can not be supplied until brought up to date for the new fiscal year. This requires from 30 to 60 days, and so great has become this undertaking, as heretofore conducted, that the resources of the Interior Department for the compilation and of the Government Printing Office for the mechanical production have not been sufficient to complete the publication as required by law, and in the case of the last issue the second volume was not published until the succeeding May.

In order to make it possible to publish the Register on the date established by law, the Director of the Census detailed to the several departments of the Government such number of Census clerks as they requested, in order to prepare their lists of employees within the month of July. Even with the assistance thus rendered complete returns from a number of the departments were not obtained until about September 1. Nevertheless, it now appears probable that the Register may be published practically upon the date fixed by law. It will include, in addition to the customary data, a statistical analysis of the Civil Service of the United States, similar to that contained in Census Bulletin 12.

#### COST ACCOUNTING SYSTEM.

During the past fiscal year a cost accounting system has been put into operation in the Bureau of the Census for the purpose of determining the cost of clerical labor required for various Census inquiries and for different classes of work, both of which are matters of much consequence in the administration of this Bureau. This system is proving itself to be complete, inexpensive, and flexible. It is an adaptation of the electrical system of tabulating employed at the Eleventh and Twelfth censuses. Under the system established every employee is assigned a number and at the close of each working day fills out a time slip, accounting for the day's work. These slips are turned in to the time clerk of each division, who is responsible for the delivery to the cost accounting room of a slip properly filled out for each clerk upon the rolls of the division. A card is then punched for each entry upon the time slip, showing date, employee's number, division, and salary, the inquiry, character of work, time employed upon it, rate of remuneration, and the money value of the work.

The work of the Census is grouped under nine main classes, and these in turn are subdivided into 42 minor specifications, designating the different kinds of work performed in the Bureau. By this system an accurate distribution of the cost of the clerical operations of the Census is obtained for each month within six days after the close of the month, and the Director thus has at hand information, both by months and cumulative for the year, concerning the cost, not only of inquiries, but also of classes of work, and can obtain from the cards additional detail at any time it may be required. In addition to this information, sick and annual leave are tabulated each month, and the proportion which each bears to the various inquiries and classes of work is shown. It is thus possible to watch intelligently the tendencies of the clerks in connection with these two ever present classes of expenditure, and to judge of the effect of kinds of employment upon the employees of the Bureau.

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By this system every dollar expended for clerical labor in the Bureau of the Census is distributed against some item or items, and by those classifications which are most helpful to the Director in organizing and conducting the work of the Bureau. The cost of maintaining this system is scarcely two-tenths of 1 per cent of the amounts distributed.

#### TABULATING MACHINERY.

The work of developing a system of tabulating machinery for the compilation of the Thirteenth and subsequent censuses progressed so satisfactorily during the year that it became necessary to vacate the cramped quarters assigned to this work in the Bureau of Standards, and to establish our own machine shop in the Census building. This shop has been properly equipped for the continuance of the experimental work connected with the development of an entirely new system of mechanical tabulation, and for the construction of the machines. With this machine shop, the building and repair of machinery can be done much more effectively and economically by the Bureau than by contract with private manufacturers. A force of seven expert mechanics is now regularly employed in the work. Machines have already been devised and constructed which are in daily and successful use in the current work of the Bureau. While the time has not yet come for a detailed statement of the results of this experimental work, it is proper to add that the results already attained exceed the most sanguine hopes entertained at the time the recommendation to undertake it was approved by Congress.

#### LEGISLATION FOR THE THIRTEENTH CENSUS.

The time is rapidly approaching when preparations for the taking of the Thirteenth Census must begin. The first step to that end is the framing of the law under which this census is to be taken and its enactment by Congress. A bill for that purpose should become a law during the first session of the Sixtieth Congress. The Director of the Census is entitled to at least two years in which to prepare for the greatest single piece of work which the Government undertakes; and in order to make this preparation intelligently and to the best possible advantage, he should know, for that length of time, just what are the provisions of the law under which the work is to be undertaken.

The most serious faults in all previous censuses have been due to the lack of sufficient time, prior to the actual enumeration, to select and instruct the supervisors and enumerators. The supervisors should be designated at least one year in advance of the

enumeration, so that the enumeration districts can be laid out and their geographical limits clearly defined and scrutinized in each locality, with a view to the correction of omissions and errors. This has never yet been possible at a federal census. With this end in view, and under instructions from the chairmen of the census committees of both Houses, the officials of the Bureau have been engaged for a number of months in a critical study of the Twelfth Census act, as tested by practical experience.

The law under which the Twelfth Census was taken is undoubtedly the most effective census law ever enacted. The results achieved under it were far more satisfactory from every point of view than at any previous census. It made possible the prompt compilation and publication of the main reports, by postponing all work not dependent upon enumeration proper until after the completion of these main reports. By the continuance of this plan all the subsidiary inquiries will hereafter relate to decennial periods differing from those of the census proper, but definitely comparable with the like statistics for ten-year periods. The establishment of the permanent Census Office made it possible for this adjustment of the work to continue indefinitely, with constantly increasing efficiency.

The main amendments in the census act of 1899 necessary are such as are required to fit it into and harmonize it with the permanent census act. When this has been done, there will be two distinct census codes, one for the decennial period covering three years in each decade, and the other relating to the permanent office and the intermediate work. These two codes should so dovetail that they will automatically work in harmony with each other without periodically disrupting the permanent organization, but simply grafting upon it the temporary organization at decennial periods.

A thorough consideration of all the conditions confirms the view that it is necessary during the three year decennial periods, that the permanent Census Office shall cease to be provided for in the annual appropriation acts and that its expenditures of every character should be paid out of the lump sum appropriation for the Thirteenth and subsequent censuses. Any other adjustment will lead to much confusion in the adjustment of disbursements, and will greatly hamper the work and decrease the efficiency of the organization.

There were three appropriations for the Twelfth Census—the preliminary appropriation of one million dollars, made by the Twelfth Census act approved March 3, 1899, and the subsequent appropriations amounting to \$12,516,210—not all of which was expended for the decennial census proper. It is now estimated that a lump sum appropriation of fourteen million dollars will be necessary for the

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expenses incident to the three-year decennial period. If it shall be decided by Congress that the censuses of Porto Rico and the Philippine Islands shall be taken as a part of the Thirteenth Census of the United States—either as of the same date, or at dates ten years from the dates as of which these censuses were previously taken by the War Department—1909 for Porto Rico and 1913 for the Philippines—then an additional appropriation of one million dollars will be required.

In estimating the cost of the Thirteenth Census as the same, approximately, as that of the Twelfth, I have in mind certain economies which existing conditions seem to render possible. The cost of the preliminary work of the Twelfth Census will now be largely met out of the regular appropriations for the permanent Office prior to and including those for 1909. The machinery it was necessary to construct and put in motion at the Twelfth Census is now ready and at hand, including a large part of the necessary furniture and fittings. It is estimated that there can be a saving of approximately half a million dollars, due to the fact that the Census Office will own and operate its own tabulating machinery, and that this machinery will be more rapid and efficient than that previously employed. It now seems probable that the saving due to these causes will be sufficient to equal the additional cost of enumerating 25,000,000 more people than were counted at the Twelfth Census.

Certain other sources of economy may be referred to. The annual mortality reports will make it possible to reduce the number of the main reports from four to three. It is the unanimous judgment of the census experts that with these annual reports covering the mortality of the registration areas, it is a useless expense to continue to collect death returns for the rest of the population upon an enumerator's schedule. By every test that can be applied the enumerator's returns of deaths are too inaccurate to be worth what they cost. They convey no trustworthy indication of the death rates prevailing in the nonregistration areas. Such death rates for these areas can only be secured by proper state and municipal provision for vital statistics. The absence of any such data in the Thirteenth Census may bring sharply to the attention of these states and cities the necessity for this course.

Another amendment proposed is to abandon the canvass of the household and mechanical industries, in connection with the manufacturing census, thus conforming it to the precedent set in the quinquennial census of 1905. No criticism has ever reached the office upon the omission of this branch of census industrial statistics. The returns received from this group of industries have always been too incomplete and inaccurate to justify their compilation. Their

elimination will make it possible to entrust the entire canvass of manufactures to special agents, as was done in 1905, thus withdrawing another schedule from the enumerator, leaving him only the population and agricultural schedules to handle, and in cities the population schedule only. It is plain that the fewer the schedules the enumerator is called upon to understand and to fill out the more accurately his work will be done. There will be a corresponding gain in expedition and reduction in cost. It is deemed necessary, however, to restore the census of mining to the decennial reports, and to make this census in close association with that of manufactures. In the rapid evolution of industry, mining and manufacturing have become so intimately allied in their processes and so closely associated in ownership and control, that it is no longer possible to accurately enumerate them, except in connection with each other.

Other plans for simplifying the work and reducing its volume are under consideration in connection with the proposed revision of the census law. It is obvious that as the country grows and conditions become more complex the census must be correspondingly *simplified*, or it will in time become a physical impossibility to compile it within a reasonable time. While the American census reports have come to be regarded by foreign statisticians as the best and most scientific censuses anywhere taken, the criticism has been made that certain branches of it are carried to an unnecessary detail. In the *Thirteenth Census* the tendency, for the first time, will be distinctly in the direction of condensation instead of expansion.

#### OFFICE QUARTERS FOR THE THIRTEENTH CENSUS.

The matter of adequate accommodations for the *Thirteenth Census* should also be brought to the immediate attention of Congress. Although the building now rented and occupied by the Census Office was built for its especial use and in conformity with its own plans, it was wholly inadequate for the requirements. It can accommodate but 2,200 clerks at the utmost, and 3,554 were employed at the height of the *Twelfth Census* work. The maximum number required to compile the *Thirteenth Census* will be at least 4,000. It is a great handicap, in work of this character, to be obliged to scatter the clerical force throughout the city in rented buildings, as was the case in 1900-1902. It increases cost, reduces efficiency, and consumes time.

It is evident that a building for the Department of Commerce and Labor, should it be immediately authorized by Congress, can not be ready for occupancy in time for the *Thirteenth Census*.

It therefore seems wise to seriously consider the possibilities of adapting the present Census quarters to the needs of the *Thirteenth*

Census. The available land contiguous to this building is ample for the purpose, and it would be a wise business transaction for the Government to purchase the plot of land bounded by First and Second streets east and west and B street and the alley north and south. Besides the Census building, this block contains the large four-story building on First street, formerly occupied by the Business High School, and the vacant lot in the rear of this building, facing Second street, which is owned by the Emery estate, which owns the lot and building occupied by the Census Office.

The building formerly occupied by the Business High School, after suitable repairs, will afford accommodations for 1,000 clerks. Upon the lot west of it, owned by the Emery estate, another building can be erected, six or seven stories in height, ample in size to accommodate all the additional clerks required to compile the Thirteenth Census. An ornate and expensive building is not necessary.

The property above described is one that will ultimately be purchased by the Government as necessary to complete the approaches to the Capitol. It is probable that such a purchase will ultimately include the entire block bounded by B and C streets and by First and Second streets. It can never hereafter be purchased for so reasonable a sum as at present. If a part of the block is to be purchased, to meet the present requirements of the Census, the whole of the block might as well be secured at the same time, as a part of the same transaction, with a view to meeting the future requirements of the Census.

The property upon which the present Census building stands, including the additional lot of 11,000 square feet owned by the Emery estate, covers 106,900 square feet of land, and can be purchased from the estate for the sum of \$354,126, which is the original purchase-price option given the Government at the time when the contract for the construction of the building was made between the former Director of the Census and the late M. G. Emery. This option expires July 1, 1908. In the event of condemnation proceedings, judging by experience in connection with the purchase of the land for the two new congressional buildings, it is believed that this price is less than the Government would be called upon to pay. The high school building and site (11,000 square feet) can be purchased for \$60,000, making the total cost of the two buildings, and of 117,000 square feet of land, \$414,126.

The Government has already paid out for rental of the present Census building the sum of \$190,000, or more than one-half the amount for which the entire property above described can now be purchased. It has also paid out, for census purposes, for extra quarters during the Twelfth Census, and for storage room since, the sum

of \$12,000. There will be necessary, to supply additional accommodations for the Thirteenth Census, a further expenditure for rent of at least \$25,000. It is evident therefore that by purchasing this property now the Government will become the owner of it for a price no greater, if as great, as it will have paid out in rental for census purposes by the time the Fourteenth Census is undertaken.

The suggested purchase is therefore a good business proposition, especially as the price asked for the property under consideration is less per square foot than the prevailing price per square foot for any property equally desirable and available in any other part of the city.

If the necessary building above referred to is to be completed prior to the beginning of the Thirteenth Census, the legislation should be enacted at the coming session of Congress. It is estimated that a plain, substantial fireproof building of brick, seven stories in height, with ample accommodations for 2,000 clerks, can be constructed for \$300,000. The total appropriation necessary to carry into effect the plans herein outlined would therefore be \$714,000.

Respectfully,

S. N. D. NORTH, *Director.*

HON. OSCAR S. STRAUS,  
*Secretary of Commerce and Labor.*

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## APPENDIX B.

*Clerical and subclerical force.*

Chief clerk.....	William S. Rossiter.	
Disbursing and appointment clerk.....	Thomas S. Merrill.	
Chief statisticians:		
Population.....	William C. Hunt.	
Manufactures.....	William M. Steuart.	
Agriculture.....	Le Grand Powers.	
Vital statistics.....	Cressy L. Wilbur.	
Geographer.....	Charles S. Sloane.	
Expert chiefs of division:		
Population.....	Edward W. Koch.	
Manufactures.....	Joseph D. Lewis.	
	Daniel C. Roper.	
	Frank L. Sanford.	
	Jasper E. Whelchel.	
Agriculture.....	Hart Momsen.	
Vital statistics.....	Richard C. Lappin.	
Revision and results.....	Joseph A. Hill.	
Publication.....	William S. Rossiter.	
Total.....		15
Stenographer.....		1
Clerks, class 4.....		4
Clerks, class 3.....		7
Clerks, class 2.....		25
Clerks, class 1.....		300
Clerks, \$1,000.....		198
Clerks, \$900.....		17
Expert map mounter.....		1
Engineer.....		1
Electrician.....		1
Skilled laborers, \$1,000.....		2
Skilled laborers, \$900.....		5
Watchmen.....		10
Messengers.....		6
Firemen.....		2
Assistant messengers.....		10
Skilled laborers, \$720.....		12
Unskilled laborers, \$720.....		8
Charwomen.....		24
		<u>634</u>
Total.....		649
SPECIAL AGENTS.		
Expert special agents.....		5
Regular fieldwork.....		17
Cotton agents.....		718
Experts appointed in connection with the development of tabulating machinery.....		8
		<u>748</u>
Total number of employees.....		1,397

BUREAU OF THE CENSUS  
REPORT OF THE DIRECTOR  
TO THE SECRETARY OF  
COMMERCE AND LABOR



Concerning the Operations of  
the Bureau for the Year 1907-8

WASHINGTON : 1908

# 1907

## Report of the Director of the Census

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### APPENDIX A.

#### REPORT OF THOMAS S. MERRILL, DISBURSING CLERK, BUREAU OF THE CENSUS.

##### 1. Appropriations and expenditures, fiscal year ended June 30, 1907.

OBJECT.	Amount appropriated.	Amount expended.	Unexpended balance.
Total.....	\$1,136,600.00	\$1,362,173.93	\$20,337.87
Salaries.....	717,020.00	698,710.84	18,309.16
Collecting statistics.....	250,000.00	<sup>2</sup> 464,980.67	.....
Tabulating statistics.....	(5)	429,000.00	1,081.13
Stationery.....	6,000.00	6,000.00	.....
Library.....	1,500.00	1,500.00	.....
Rent.....	22,080.00	22,080.00	.....
Miscellaneous expenses.....	15,000.00	15,000.00	.....
Printing allotment.....	125,000.00	124,902.42	97.58

<sup>1</sup>To be covered into the General Treasury (surplus fund).

<sup>2</sup>Expended from the appropriation for 1906 which was "reappropriated" (\$140,980.67) from the appropriation for 1907 (\$250,000), and from the appropriation for 1908, which was made "immediately available" (\$65,000).

<sup>3</sup>Unexpended balance on June 30, 1906, reappropriated for fiscal year 1907.

<sup>4</sup>Expended from the appropriation for 1906 which was "reappropriated."

##### 2. Appropriations for the census from March 3, 1899, to June 30, 1908, and expenditures to June 30, 1907.

NOTE.—In a number of instances appropriations for the census have been made "immediately available" and unexpended balances have been "reappropriated." In this statement such appropriations are charged against the fiscal year for which they were primarily made, notwithstanding they were used in part for a preceding or a succeeding fiscal year. This accounts for the seeming discrepancy between the appropriations and expenditures for certain fiscal years.

#### APPROPRIATIONS.

OBJECT.	March 3, 1899, to June 30, 1903.	1904	1905	1906
Total.....	\$13,516,210.00	\$1,176,460.00	\$1,424,260.00	\$1,005,340.00
Expenses of the Twelfth Census.....	113,516,210.00	.....	.....	.....
Salaries.....	.....	685,860.00	711,760.00	745,790.00
Collecting statistics.....	.....	2174,000.00	438,400.00	<sup>2</sup> 625,000.00
Tabulating statistics.....	.....	410,000.00	50,000.00	<sup>3</sup> 40,000.00
Stationery.....	.....	10,000.00	10,000.00	8,000.00
Library.....	.....	5,000.00	2,500.00	2,500.00
Rent.....	.....	26,600.00	26,600.00	22,080.00
Miscellaneous expenses.....	.....	15,000.00	15,000.00	12,000.00
Printing allotment.....	.....	250,000.00	170,000.00	150,000.00

OBJECT.	1907	1908	Total.
Total.....	\$1,136,600.00	\$1,490,940.00	\$20,346,810.00
Expenses of the Twelfth Census.....	.....	.....	13,516,210.00
Salaries.....	717,020.00	706,860.00	3,567,260.00
Collecting statistics.....	250,000.00	<sup>2</sup> 525,000.00	2,012,400.00
Tabulating statistics.....	(5)	30,000.00	130,000.00
Stationery.....	6,000.00	6,000.00	40,000.00
Library.....	1,500.00	1,000.00	12,500.00
Rent.....	22,080.00	22,080.00	110,440.00
Miscellaneous expenses.....	15,000.00	15,000.00	72,000.00
Printing allotment.....	125,000.00	185,000.00	880,000.00

<sup>1</sup> Acts of March 3, 1899 (\$1,000,000), June 6, 1900 (\$9,000,000), March 3, 1901 (\$3,516,210). Available for general Census purposes to June 30, 1905.

<sup>2</sup>Two appropriations, viz, "Special Agents" (\$160,000) and "Transcripts of Registration Records" (\$14,000).

<sup>3</sup>Made "immediately available" and unexpended balance on June 30, 1906, reappropriated for the fiscal year 1907, was therefore available during the fiscal years 1905, 1906, and 1907.

<sup>4</sup>Title of appropriation was "Rent of Tabulating Machines."

<sup>5</sup>Unexpended balance on June 30, 1906, reappropriated for fiscal year 1907.

<sup>6</sup>\$150,000 made "immediately available."

## 2. Appropriations for the census from March 3, 1899, to June 30, 1908, and expenditures to June 30, 1907—Continued.

## EXPENDITURES.

OBJECT.	March 3, 1899, to June 30, 1902.	1903	1904	1905
Total .....	\$11,770,051.78	\$1,350,271.08	\$1,318,710.78	\$1,590,356.99
Expenses of Twelfth Census .....	11,770,051.78	1,350,271.08	293,442.08	101,398.11
Salaries .....			634,950.49	697,026.44
Collecting statistics .....			<sup>1</sup> 108,857.54	<sup>2</sup> 583,991.71
Tabulating statistics .....			<sup>3</sup> 10,000.00	30,087.00
Stationery .....			9,423.93	8,596.06
Library .....			4,996.61	2,495.78
Rent .....			26,600.00	26,585.29
Miscellaneous expenses .....			14,932.60	14,998.44
Printing allotment .....			165,421.53	160,178.18

OBJECT.	1906	1907	Total.
Total .....	\$1,248,612.45	\$1,362,173.93	\$18,640,177.01
Expenses of Twelfth Census .....			13,515,163.05
Salaries .....	711,550.62	698,710.84	2,742,238.39
Collecting statistics .....	354,392.29	<sup>4</sup> 464,980.67	1,547,262.21
Tabulating statistics .....	9,068.87	<sup>5</sup> 29,000.00	78,155.87
Stationery .....	7,844.47	6,000.00	31,870.46
Library .....	2,345.09	1,500.00	11,337.46
Rent .....	22,080.00	22,080.00	97,345.29
Miscellaneous expenses .....	11,971.55	15,000.00	56,952.59
Printing allotment .....	129,359.56	124,902.42	569,861.69

<sup>1</sup> Expended from appropriation "Special Agents" (\$159,977.54) and "Transcripts of Registration Records" (\$8,910).

<sup>2</sup> Expended from the appropriation for the fiscal year 1905 (\$438,364.67) and from the appropriation for the fiscal year 1906 which was made "Immediately available" (\$120,627.04).

<sup>3</sup> Expended from the appropriation "Rent of Tabulating Machines."

<sup>4</sup> Expended from the appropriation for 1906 which was "reappropriated" (\$140,980.67) from the appropriation 1907 (\$250,000) and from the appropriation for 1908 which was made "Immediately available" (\$65,000).

<sup>5</sup> Expended from the appropriation for 1906 which was "reappropriated."

## UNEXPENDED BALANCES.

	1904	1905	1906	1907	Total.
Total .....	<sup>1</sup> \$151,191.30	<sup>2</sup> \$56,975.11	<sup>3</sup> \$55,188.71	<sup>4</sup> \$20,337.87	\$283,692.99
Expenses of the Twelfth Census .....		1,046.95			1,046.95
Salaries .....	50,909.51	14,733.56	34,209.38	18,509.16	118,161.61
Collecting statistics .....	<sup>5</sup> 5,112.46	35.33			5,147.79
Tabulating statistics .....		19,913.00		1,931.13	21,844.13
Stationery .....	570.07	1,403.94	155.53		2,129.54
Library .....	3.39	4.24	154.91		162.54
Rent .....		14.71			14.71
Miscellaneous expenses .....	17.40	1.50	28.45		47.41
Printing allotment .....	94,578.47	19,821.82	20,640.44	97.58	136,138.31

<sup>1</sup> Covered into the General Treasury (surplus fund), \$208,166.41.

<sup>2</sup> To be covered into the General Treasury (surplus fund), \$75,523.68.

<sup>3</sup> Of appropriation "Special Agents" (\$22.46) and of appropriation "Transcripts of Registration Records" (\$5,090).