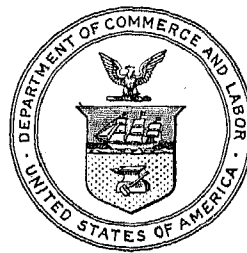


BUREAU OF THE CENSUS
REPORT OF THE DIRECTOR
TO THE SECRETARY OF
COMMERCE AND LABOR



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.

Report of the Director of the Census

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 entrusted 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-
tics of Special
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, 1898.¹ 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

¹ 30 Stat. L., chap. 546, page 648.

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Preparation of Statistics of Cities transferred from the Bureau of Labor to the Bureau of the Census.

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to the Secretary of Commerce and Labor

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.

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

Statistics of Immigration to be compiled by the Census Bureau.

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

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.¹ The Census Bureau is now in correspondence

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

¹The 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.

Report of the Director of the Census

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.

Legislation required to secure Statistics of Births and Deaths.

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

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-

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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.¹ 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

¹ 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 Statistical 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

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

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.