

REPORT

160

OF THE

DIRECTOR OF THE TWELFTH CENSUS

TO THE

SECRETARY OF THE INTERIOR

FOR THE

FISCAL YEAR ENDED JUNE 30, 1901.



WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1901.

R E P O R T
OF THE
D I R E C T O R O F T H E T W E L F T H C E N S U S .

DEPARTMENT OF THE INTERIOR,
CENSUS OFFICE,
Washington, D. C., November 1, 1901.

SIR: I have the honor to report as follows concerning the operations of this office from November 1, 1900, to the above date:

The work of tabulating the returns and results of the field work of the enumerators and special agents of the Twelfth Census has progressed with reasonable celerity. Much difficulty has been experienced, however, and more or less delay caused by the reduction of the clerical force, owing to the absence of employees from either illness or annual leave.

The law provides that the four principal reports shall be placed in the hands of the public by the 1st of July, 1902, and this requirement has rendered it absolutely necessary to maintain a clerical force adequate to complete the work within the prescribed period. The statisticians made estimates of the time needed to finish the particular branch assigned to each of them. The plans so submitted have been greatly interfered with owing to the absence of clerks from duty, as explained above. It was hoped by the 1st of November a large number of employees could be dispensed with; but inasmuch as the work has been retarded, owing to the difficulty of maintaining the clerical force at its maximum, it is not likely that there will be any material reduction until after the first of the year. The officials of the office believe that their allotted task will be completed in ample time.

It was hardly to be expected out of the large number of agents employed in the field work—about 55,000 in all—that there would not be some who would prove incompetent and unfaithful to duty. The Director has endeavored to enforce the census act to the letter, and through the assistance of the Attorney-General has proceeded against all offenders. Please find below a statement of the various prosecutions that have been conducted by this office.

MARYLAND.

St. Mary County.—Stephen A. Abell, Charles H. Guyther, Philip T. Graves, Daniel J. Bowles, enumerators, and Joseph H. Ching, attorney at law. The preliminary examination in the Geographer's Division showed that in this county these enumerators had made false

and fraudulent returns by placing on the schedules fictitious names—names of persons who had died prior to taking the census and the names of nonresidents.

All these men were arrested on warrants sworn out in Baltimore, and were brought before the Federal grand jury at that city, and nine indictments against them were returned on May 6, there being four indictments against each enumerator individually, and four against each enumerator and Ching jointly. The trial began May 27, but on May 25 Guyther appeared before the jury and pleaded guilty. Sentence was suspended, and he was called as a witness for the Government. Ching was convicted, on June 8, of conspiracy with Guyther, and was sentenced to two years' imprisonment and to pay a fine of \$1,000. An appeal was taken and the case is now before the United States court of appeals. Guyther was sentenced to one day in jail and to pay a fine of \$100. Abell, Bowles, and Graves were acquitted of the conspiracy charge, and the charge against Graves for making false and fictitious returns was withdrawn. Bowles pleaded guilty to making false returns, and was sentenced to sixty days in jail and to pay a fine of \$200. Abell was tried on June 24 on a charge of making false and fictitious returns. The jury failed to agree, and he will probably be tried again some time in November.

Charles County.—The examination of the schedules, made at the same time as in St. Mary County, showed the same condition of affairs, and the results of the investigation were laid before the grand jury in Baltimore, who rendered true bills against Henry Mattingly, an enumerator, who came to court on June 15, pleaded guilty, and was sentenced to one day in jail and to pay a fine of \$200.

Anne Arundel County.—An investigation was also made in this county, and evidence was presented to the grand jury who found true bills against William Frisbee Anderson and Fred H. Borneman for making false and fictitious returns. Anderson was convicted June 24, and sentenced to pay a fine of \$200. Borneman's case was continued until the fall term of the district court, and the trial will probably take place in November.

Baltimore County.—An examination of the schedules returned by Eli F. Wilhelm, in reporting the deaf, dumb, and blind, developed the fact that his returns, when tested by correspondence with individuals reported, were, in many instances, incorrect. The case was submitted to the United States attorney for the district of Maryland, who reported that, it being uncertain whether they could prove the charges against him, they advised that proceedings be not started.

PENNSYLVANIA.

D. Smith Talbot, supervisor of Second district.—Proceedings were started against Mr. Talbot for his failure to pay the interpreters who had assisted the enumerators in taking the census in his district, Mr. Talbot having rendered his account for their services and received the money from this office. After proceedings against him had been begun by the United States attorney at Philadelphia, the defendant made payment in full to all interpreters, except in those instances where the interpreters had departed from the district. The United States attorney was authorized by the Department of Justice on May 24 last to continue this case until the next term of court.

NEW MEXICO.

City of Santa Fe, Pedro Sánchez, supervisor.—An investigation into the accounts of this supervisor showed that he had failed to pay interpreters employed by him during the enumeration, although the money had been remitted to him for that purpose from this office, and that he had also made false and fictitious returns of the amount of services rendered by some of the interpreters. Upon application to the Department of Justice, the United States attorney for the district of New Mexico was instructed to begin proceedings at once against Sánchez and his clerk, Sena. They were arrested, and information was presented to the grand jury, who found indictments against both Sánchez and his chief clerk, Sena, under the charge of having filed false and fraudulent vouchers. Two other indictments were secured against them, charging each of them with embezzlement and forgery. The United States attorney writes that it was not practicable to try these cases at the last term of court on account of want of time, but that they will come up for trial at the next term.

TENNESSEE.

Selmer, McNairy County.—Henry C. Gooch, an enumerator, was found, upon examination of the schedules, to have made false returns of the population. An examination by special agent was made and the fact established that he had placed on his schedules fictitious names—names of persons who had died prior to taking the census and the names of nonresidents. A warrant was sworn out for this man and he was arrested. He will probably be tried at the November term of court.

MISSISSIPPI.

Third supervisor's district.—Samuel W. Glidden, enumerator in E. D. 71; Paul W. Davidson, E. D. 74; William Knight, E. D. 76; Scott E. J. Watson, E. D. 85; Abraham L. Stringer, E. D. 87; William H. Toler, E. D. 92: An investigation of the agricultural schedules returned by these men, in comparison with the population schedules, showed that they had made false and fictitious returns of the number of farms in their districts. Proceedings were brought against them, they were arrested, and their cases were presented to the grand jury, which met at Vicksburg, and on July 3 rendered indictments for all six on charges as alleged. Their trials will come up at the next term of the court, which will be early in January.

ARIZONA.

Charles W. Pugh, special agent for the Agricultural Division of the Census Office, Phoenix.—An examination of this man's expense vouchers, rendered from time to time during the summer of 1900, led to the suspicion that he was having subvouchers signed in blank and filling them in afterwards for much larger amounts than he had actually expended, and that he had also put in fraudulent vouchers for bills he had never contracted. An investigation was begun by mail with parties whose names and addresses were signed on the subvouchers, which corroborated the impression that the office had as to his honesty. The

case was presented through the Department of Justice to the United States attorney, who arrested Mr. Pugh, and he was indicted by the grand jury and brought to trial at the July term of the court. The case was continued on a demurrer, which the court now has under advisement, and can not be reopened until the November term of court. Indictments against Pugh, of the same character, were also secured at Florence, Ariz. This case will probably come up after the case above referred to is decided. We have also evidence of fraud on Pugh's part, committed on a trip to California, but it was thought best not to take up the California case until after the Arizona cases were settled.

I submit herewith statements from the chief statisticians showing the condition of the work of their respective divisions at the present time:

POPULATION DIVISION.

W. C. HUNT, *Chief Statistician.*

I have the honor to transmit the following statement concerning the condition of the work of the Population Division to October 31, 1901, inclusive:

In the work of machine tabulation there have been counted to October 31, inclusive, 314,280,314 cards, representing very nearly 84 per cent of the entire number of cards to be handled. If this figure, representing the actual number of cards handled to date, is compared with the original estimate as to the number of cards necessary to be handled daily in order to complete the machine work by March 1, 1902, it appears that we are to date (October 31) more than 19,000,000 cards ahead of my estimate. It is apparent, therefore, from this statement, that the work of machine tabulation is likely to be completed easily within the time originally estimated, and that this work could be completed early in January, 1902, if the number of machines now in operation (about 140) could be utilized. Toward the close of the machine work, however, it will not be possible to use to advantage a large number of tabulating machines, and this will extend somewhat the period of machine tabulation, but certainly not, with even a small number of machines, beyond the estimated date of completion, namely, March 1, 1902.

The first four runs of the cards, for which are obtained the data contained in the tabular presentations to be included in part 1 of the Report on Population, and equivalent to the handling of 210,292,859 cards, are completed. The fifth, sixth, seventh, eighth, and ninth runs, from which are obtained the data contained in the tabular presentations to be included in part 2 of the Report on Population, represent the handling of 165,103,387 cards, of which 103,987,455 have been counted to date, including all of the fifth run, from which are derived the data relating to ages (in detail), conjugal condition, school attendance, illiteracy, and inability to speak English. There remain, therefore, 61,115,932 cards to be counted, subdivided by runs as follows:

	Total cards.	To be counted Oct. 31, 1901.
Fifth run	76,303,387
Sixth run	130,100,000	8,794,287
Seventh run	27,700,000	22,351,165
Eighth run	15,500,000	14,507,396
Ninth run	15,500,000	15,463,084
Total	165,103,387	61,115,932

¹Including the second handling of approximately 2,400,000 cards.

This statement shows that for the sixth and seventh runs, from which are derived the data relating to occupations, there has been counted to October 31, 46 per cent, and for the eighth and ninth runs, from which are derived the data relating to dwellings and families and the ownership of homes, 3 per cent; this part of the machine tabulation having only recently been commenced.

Of the estimated number of cards (27,700,000) representing persons with gainful occupations to be handled on the sixth and seventh runs there were originally punched, approximately, 21,300,000 cards, leaving 6,400,000 cards to be rejected by the machines and subsequently classified, this number of cards representing occupations that were not classified when the cards were originally punched. Of the

REPORT OF THE DIRECTOR OF THE TWELFTH CENSUS.

6,400,000 cards, there have been classified to date 3,852,024, or 60 per cent. The average number of cards classified daily during the month of October was 36,784, and on this basis there is no reason why this classification work should not be completed during the month of January, 1902.

Of the estimated number of family cards (15,500,000) to be handled on the eighth and ninth runs there have been punched to date 6,458,914, or 42 per cent. During the month of October the average number of cards punched daily was 114,917. Since the 1st of September the force engaged in punching the family cards has been increased from less than 100 to a maximum force of 233, the latter number representing the whole number of seats at present available for the work of keyboard punching. This number of machines is kept in operation daily, and with the present daily output it is safe to assume that the work of punching the family cards will be completed by the close of January, 1902.

The present condition of the tabular matter (general tables) for part 1 of the report on population is briefly summarized as follows:

Part 1.

Subjects.	Printed.	Plated.	In type.	In copy.	To be supplied.	Total pages.
Aggregate population	480					480
Sex, general nativity, and color ...	81	49	74			204
State or Territory of birth				46		46
Country of birth				74		74
Foreign parentage				21	81	102
Citizenship and years in the United States			44	50	6	100
Total	561	49	118	191	87	1,000

From this summary it appears that practically 91 per cent of the tabular matter comprising part 1 is in process of printing, 561 pages, or 56 per cent, being already printed, 49 pages, or 5 per cent, plated, and 309 pages, or 30 per cent, either in type or in copy. The 87 pages not yet supplied to the printer comprehend the data relating to foreign parentage, derived from the fourth run of the cards, which has only recently been completed, but the copy resulting therefrom will be made in time to follow the completion of the matter already in process of printing.

The textual matter to accompany the general tables, representing approximately 200 pages of print, is also in process of preparation, and will be supplied to the printer at an early day. Much of the analytical text has already been prepared and used in the several bulletins which have been issued to date, and only needs to be amplified in certain cases for use in the final report.

Of the 1,014 pages of tabular matter to be included in part 2 of the report on population, 100 pages, relating to "school, militia, and voting ages," and derived from the first run of the cards, are already in type or in copy. Of the remaining 914 pages, 414 pages comprehend tables relating to ages, conjugal condition, school attendance, illiteracy, and inability to speak English, 354 those relating to occupations, and 146 those relating to dwellings and families and the ownership of homes. The tables representing the 414 pages first mentioned are derived from the fifth run of the cards, which, as I have already stated, is entirely completed.

The work of compiling the results derived from the fifth run will be taken in hand immediately following the completion of the work compiling the results relating to foreign parentage, etc., derived from the fourth run, and this work will be followed in turn by that relating to occupations and the family data, in order that upon the completion of the copy needed for part 1 the printer may be supplied with copy for part 2 in the order, as nearly as possible, of the several subjects, as follows:

Part 2.

Subjects.	Number of pages.	Subjects.	Number of pages.
Ages	150	Dwellings and families	56
School, militia, and voting ages	100	Ownership of homes	90
Conjugal condition	96		
School attendance	62	Total	1,014
Illiteracy	75	Textual matter (estimated)	186
Can not speak English	28		
Occupations	354	Aggregate	1,200

¹ In type or copy, as previously stated.

The present condition of my work, as herein outlined, shows that there is every prospect for completing the work relating to part 1 at a comparatively early date, in order that that portion of the report may be issued during the month of December, if possible, and that copy for part 2 can be supplied to the printer from time to time thereafter, so that the last batch of copy may be transmitted not later than April 15, 1902, according to my estimate made under date of February 2, 1900. It is not possible to state positively that this will be the case, but I see no reason now why I should not conform substantially to the statements made in my original estimate.

DIVISION OF MANUFACTURES.

S. N. D. NORTH, *Chief Statistician.*

The work of the division of manufactures is rapidly drawing to completion under circumstances which apparently render it possible to comply with the provision of the census act which requires the main results of the manufacturing census to be completed and published prior to July 1, 1902.

In order to insure this result it has been necessary to increase the force of the division temporarily to 412 clerks; and the work has been greatly expedited by the substitution of mechanical appliances. The entire tabulation of general schedule No. 3 has been done upon tabulating typewriter machines, this being the first use of this machine in census work. By making a carbon copy of the tabulation sheets the amount of clerical labor in handling the returns has been enormously reduced, and the completion of the work within the time limit set by Congress would not have been possible without the aid of these machines except by a large increase in the clerical force. Some forty adding machines of the latest improved pattern have also been utilized in the division in obtaining results from the tabulation sheets. Actual experience has demonstrated that one clerk with an adding machine can turn out at least four times the amount of work in addition that can be achieved by a clerk adding mentally. There has been in addition a much higher average of general accuracy than is attainable by the mental process.

The several stages of the work of the division of manufactures already completed are those of classification, which was finished on February 9; revision, which was finished on September 26; tabulation of general schedule No. 3, which was finished on October 7; tabulation of special schedules by hand, which was finished on October 14. The force of the division is now very largely concentrated upon the work of addition and summarization, and this work is now progressing with a steady swing, as the clerks become more expert through experience, which indicates that it will be finally completed about the 1st of March, 1902. From the summarization the work passes to the section of final results, which is now so organized that it can prepare the figures for the printer practically as fast they are received. Barring unforeseen contingencies, therefore, it seems probable that the entire material for Part II of the manufacturing statistics—a volume of approximately 1,200 pages—will be ready for the printer on about March 15. This volume will contain the manufacturing statistics by States, and will also include, in connection with each State, the statistics of the several cities in that State. At the present writing the work has been completed and published in bulletin form for the States of Arkansas, Arizona, Colorado, Connecticut, Delaware, Florida, Idaho, Indian Territory, Iowa, Kansas, Louisiana, Montana, Nevada, New Hampshire, New Mexico, North Dakota, Oklahoma Territory, Oregon, Rhode Island, South Dakota, Utah, Vermont, and Wyoming. The States completed and shortly to be sent to the printer are Alabama, California, Georgia, Illinois, Kentucky, Maryland, Michigan, and the Hawaiian Islands. These States represent 30.5 per cent of the total product of manufacturing and mechanical industries as reported at the Eleventh Census.

Simultaneously with the work upon the statistics of the States, the preparation of the statistics of the United States totals by States and by industries, which will constitute the major portion of Part I of the manufacturing volumes, has been progressing, and it will be possible to place the entire copy for Part I—also comprising about 1,200 pages—in the hands of the printer within a month or six weeks from the date when copy is completed for Part II.

Simultaneously, also, work has been progressing upon the reports for selected industries, which will comprise Part III of the manufacturing volumes. Census bulletins have already been printed or are in type for the following industries: Coke manufacturing, petroleum refining, salt, paper and pulp mills, copper, lead, and zinc smelting and refining; gas, railroad repair shops, and the tar and turpentine industry. The final results in the following selected industries are now in the hands of expert special agents, who are engaged in the preparation of the text for their reports,

REPORT OF THE DIRECTOR OF THE TWELFTH CENSUS.

which it will be possible to publish during the winter months: Brick and pottery products, dyeing and finishing of textiles, silk manufacture, flax, hemp, and jute manufacture; leather, tanned and carried; boots and shoes; glass; iron and steel—tin plate works, blast furnaces, and rolling mills; shipbuilding—steel and iron vessels and wooden vessels.

REPORT ON COTTON GINNING.

During the current year the division of manufactures has prepared and published two bulletins showing the cotton crops grown in the years 1899 and 1900, as returned to the Census Office by the cotton ginners.

The statistics of the crop of 1899 were gathered largely by the enumerators under instructions to secure a return from every cotton ginney operated for the crop mentioned. By the canvass of the enumerators a complete mailing list of the gineries of the country was compiled, but it was problematical whether the office could obtain similar reports through the mails. The results of the canvass by mail, as shown by the second cotton bulletin, demonstrated this method to be entirely feasible. Every ginning establishment in the United States was heard from, either directly or indirectly. Wherever there was failure on the part of the ginners to respond to the inquiries of the Census Office, the cooperation of the local postmasters was secured through the courtesy of Postmaster-General Smith, and thus the product of every ginney obtained, or the fact ascertained that it had not been in operation for the crop of 1900.

The second report, like the first, is therefore believed to present complete statistics of the cotton crop and give the same with a detail and accuracy not possible under other methods, having to depend upon reports of transportation lines and port receipts.

This office has secured from cotton producers, cotton exchanges, cotton factors, and cotton manufacturers an overwhelming approval of the services rendered by these reports. I am, therefore, led to recommend that Congress pass a joint resolution authorizing and instructing the Census Office to make a similar canvass of the cotton gineries annually. Under its present organized system of machinery this office will be able to publish this cotton report as early as the month of May or June in each year, or three to four months in advance of their possible publication through other agencies. The commercial advantages resulting from these earlier, more accurate, and detail statistics as to the volume of the annual cotton crop are too obvious to be further dwelt upon.

DIVISION OF AGRICULTURE.

L. G. POWERS, *Chief Statistician.*

I herewith submit a detailed report of the state of the work in the agricultural division of the Twelfth Census, and the prospect of completing the same within the time called for by the act of Congress. The work of the division naturally divides itself into a number of distinct branches concerning each of which I will make specific mention.

After the preliminary work incidental to the sending out of the schedules and receiving the same and settling the accounts of the enumerators, the first important work of the division has been the revision of schedules. This includes the examination of the same for the detection and correction of errors and omissions by the enumerators. It involves the sending out of over a million letters to the farmers and enumerators and the entry upon the schedules of the information received in return. This work has been divided into four different branches, known in the office as the first, second, third, and fourth revisions. There are about 5,725,000 farm schedules, and all have to pass through each of these four revisions. The amount of labor expended on such revisions up to and including October 15, 1901, was 820,895 hours, or the equivalent of the work of one clerk for 117,271 days. At that time the first and second revisions had been finished, and of the 5,725,000 schedules all but 50,000 had passed through the third revision, and all but 210,000 through the fourth or final revision.

The labor required to complete the third revision was equal to that of one clerk for 300 days; that needed for the fourth revision, the work of one clerk for 1,425 days. Of the work required to revise the schedules 98.5 per cent had, therefore, been performed October 15. With the present force the third revision will be completed about November 1, and the fourth revision shortly thereafter.

By the method adopted in the division, after the schedules have been revised the facts contained thereon are transferred to cards by punching machines preparatory to their addition on the Hollerith tabulating machines.

There are to be punched 5,725,000 farm cards, or one for each schedule, and not

far from 120,000,000 crop and animal cards, or a little more than 20 for each schedule. Of these there were punched, October 15, a total of 5,047,510 farm cards and 100,007,871 crop and animal cards. There remained to be punched 677,500 farm cards and 20,000,000 crop cards, or about 12 per cent of the former and 17 per cent of the latter. There had been expended in punching and gang punching, and in the necessary supervision, a total of 602,917 hours of work, or the equivalent of the services of 86,131 clerks for one day. The work remaining to be done represents the labor of 17,000 clerks for one day, and with the present force will be completed in about 35 working days, or not far from the 1st of December.

After the cards have been punched and gang punched they are sorted and arranged in order for the tabulating machines through which they are run and the figures upon them automatically added. By the method at present in use the 5,725,000 farm cards are run through the machines three times, making the equivalent of tabulating 17,175,000 cards once. Of this work there had been completed October 15 the following amount:

Tabulated for the first time	4,918,330
Tabulated for the second time	1,458,161
Tabulated for the third time	872,050
Total	7,248,541

There remained the equivalent of 10,900,000 cards to be tabulated once.

Of the 120,000,000 crop and animal cards those reporting live stock are passed through the tabulating machines three times; those reporting cereals, cotton, and other leading crops twice, and the others only once. The exact number of cards in each of these subdivisions can not as yet be estimated exactly. The work of tabulating the crop and animal cards will, however, probably be the equivalent of tabulating 220,000,000 cards once. Of that work the following portion has been performed October 15:

Cards tabulated once	85,617,194
Cards tabulated twice	5,956,717
Cards tabulated three times	1,174,409
Total	92,748,320

The unfinished work of the tabulation, therefore, probably equals that of tabulating 128,000,000 cards once.

From the foregoing it can be seen that October 15 there had been completed 42 per cent of the work of tabulating the farm cards and that of tabulating the crop and animal cards.

The work expended prior to October 15 in operating the tabulating machines, sorting the cards, and other work incidental to tabulation by the Follerith system has been 267,849 hours, or the equivalent of the labor of 36,835 clerks for one day. At the present rate of work the tabulation of the farm cards will be completed shortly before February 1, 1902. With the machines in use and that will be in operation by October 20, the average rate of tabulating the crop and animal cards will be 1,100,000 per day. This will permit the completion of the tabulation in 117 working days from October 15. By working a small force at night after the completion of the work of card punching it is expected to shorten the time of tabulation to 100 days and close the same not far from February 10.

The results of the additions made by the tabulating machines are transferred to result slips that are sent to the sections of final results, and there critically examined. The same sections take measures for detecting all errors, and place the figures in tables for the final report. The amount of labor performed upon this branch of work October 15 was 154,234 hours, or the equivalent of the work of 22,033 clerks for one day. This is about 40 per cent of the total amount of labor in the sections of final results. As the work is arranged the last table will be finished and ready for the printer about ten days after the completion of the work on the tabulating machines.

The tables of the two volumes of the final report will cover about 1,057 pages, of which 712 are tables by counties and 345 tables by States and Territories. A portion of each of the latter class of tables is completed when the corresponding county table is finished. The work upon the two classes of tables goes forward with equal speed, and the State tables are completed at substantially the same time as the county tables. The county tables are prepared in their first form shortly after the tabulation of the data for the same on the first run of cards. They are, however, held for revision until the completion of the final run for the State of which they form a part. The completion of the county tables, therefore, measures the rapidity with which the tabular work of the report progresses.

There had been completed and made ready for the printer, October 15, 100 of the

REPORT OF THE DIRECTOR OF THE TWELFTH CENSUS.

712 pages of county tables. A much larger number of pages were finished but awaited verification from the second and third runs of cards. It is expected that prior to the close of the week ending October 26 there will be 126 pages of the county tables ready for the printer. During the month ending November 30 there will be completed 100 pages; during the month ending December 28, 99 pages; during the month ending January 25, 155 pages; and during the five weeks ending March 1, 202 pages. On this latter date all county and State tables will be finished. If the tabulation is completed by February 10, as stated above, the date for preparing the county and State tables for publication will be about February 15, instead of March 1, as stated above.

In addition to the work embodied in the tabular matter referred to above, the division is carrying on an investigation relating to irrigation. This will be embodied in a report of some 250 pages. It will be prepared and copy sent to the printer from time to time between January 1 and March 1, at which date the last copy relating to the subject will be finished.

In the foregoing exhibit I have given no statement of the amount of labor expended in the general work of the division, nor of the amount of labor expended in a number of minor and incidental investigations. These in the past have made up quite a large aggregate, but, with the exception of the general work of supervision and direction, will be small in the future. I omit detailed mention of them for the reason that a statement thereof is not necessary for the proper presentation of the present state of the work and the plans for completing the same in the time called for by the act of Congress.

After the completion of the tables, which it is expected will take place not far from the 1st of March or a little before, the only work of the division remaining will be writing the introduction to the two volumes. Work upon that introduction is being performed at the present time, and it is expected that all the materials will be collected by the 1st of March and in a form that will require less than a month to put them in shape for the printer. This will close the work of the division with reference to the census of agriculture. As the printer can readily print and bind the volumes after April 1 prior to July 1 it can be seen that there is every reason to expect so to close the work of the division as to comply with the act of Congress establishing the Census Office.

DIVISION OF VITAL STATISTICS.

W. A. KING, *Chief Statistician.*

I have the honor to submit the following report of the work of the Division of Vital Statistics since my last annual report (October 16, 1900):

At the date of the last report we had not quite completed the collection of the data.

The number of deaths reported by the enumerators was 686,615. In addition to these, transcripts of registration records aggregating 628,813 deaths were secured. In order to determine the accuracy of registration and to make the returns as complete as possible, both enumeration and registration returns were secured for the greater part of the registration area, and the two were thoroughly and systematically compared.

The comparisons made resulted in the addition of some 60,936 deaths to the registration records, and the further completion of the same by supplying 63,249 items of omitted information.

The total number of deaths secured from both sources was 1,039,094. This is exclusive of stillbirths. The corresponding figures in 1890 were 841,419, the increase being 197,675, or 23.6 per cent. It is gratifying to state that the returns are much more complete than at the last census. The registration data are also much more uniform, and therefore more valuable, on account of the preliminary work of this office in securing modifications and improvements in the forms of certificates used, so as to supply the essential details required for the census compilations.

The registration area was extended by the inclusion of Maine and Michigan and 96 additional cities of 8,000 or more population in nonregistration States. It now embraces 10 entire States (including the District of Columbia) and 153 cities in other States, and comprehends a population of 28,807,269, or about 38 per cent of the entire population of the United States.

During the year the schedules were all carefully edited to adapt the statement of facts to the mechanical system of tabulation employed, and the data transferred to cards to be counted by the tabulating machines.

Five runs of the cards have been completed, furnishing the data for tables showing deaths by sex and age in relation to color, general nativity, parent nativity; to cause of death; to conjugal condition, and to time (months) in various combinations. The remaining counts involve only part of the cards (such as those having stated occupations, etc.), and provision has been made to execute them expeditiously.

A bulletin of 63 pages was prepared and published on August 20, 1901, giving the preliminary results for States and cities, with an analysis of the registration figures as far as the data available at that time would permit.

Copy for the final report, covering the first eight tables, and estimated to make about 680 pages of printed matter, has been forwarded to the printer.

Additional copy representing about 400 pages of printed matter has been completed, but it is not in the consecutive order of the tables, and is held pending the completion of the intermediate matter.

The work of this division has been performed well within the estimates of time, clerical force, and cost. There is no question that the work, so far as it is not dependent upon population data, at least, will be completed before the time limit fixed by Congress.

At the last annual meeting of the National Conference of Charities and Correction the question of the possibility of the creation of a national bureau of charities and correction was discussed.

From the expressions of the conference as a whole and of its individual members, there is evidently a strong desire on the part of those who can appreciate the importance of such work to have it done under the direction of the National Government. In order that the information gathered should be of permanent value, it must be collected by means of uniform blanks and methods throughout the whole country. This can be done only through the agency of a national bureau, such as the Census Bureau. At present such information is gathered by the different States, but their methods are so varied that the results can not be safely used for purposes of comparison.

The most important things that could be done by the Bureau are as follows: To prepare and publish annually, or at other stated intervals—

1. A list of all the public and private charitable, correctional, and kindred institutions, societies, and associations in the United States.

2. Statistics showing the value of property, receipts and expenditures, and work of such institutions and societies.

3. Statistics showing the movements of the population in the institutions.

4. Judicial statistics showing the number of arrests, convictions, and other dispositions made of the arrested; also the number of times that individual criminals have been convicted.

Statistics of prisons are not sufficient. The lengths of the sentences vary so in different States that a list of the number of prisoners at any given moment in any State is not an accurate measure of the volume of crime in that State. Statistics from coroners are also valuable for the study of suicide.

The present census law may give sufficient power to the Director to do nearly all that is necessary. His power, however, seems to be limited to institutions, and might not be held to cover statistics of associations, the results of whose work are necessary to a complete view of the situation. Neither does the law seem to authorize the payment to institutions, societies, or courts for such information and transcripts of records as may be most economically obtained by this means. If necessary, it would seem that the law should be amended so as to leave no doubt on these subjects.

I hand you herewith an estimate of the appropriations required for census purposes for the fiscal year ending June 30, 1902. Also statement from the disbursing officer showing expenditures during the past fiscal year.

Respectfully, yours,

W. R. MERRIAM, *Director.*

The SECRETARY OF THE INTERIOR.

APPENDIX.

EXHIBIT A.

Cost of the Twelfth Census by divisions, from November 1, 1900, to October 31, 1901, both dates inclusive.

Administration:		
Salaries	\$207,797.27	
Rent	38,603.84	
Office fixtures and furniture	4,168.80	
Printing machinery and fixtures	4,697.46	
Stationery	28,305.87	
Printing (not otherwise charged):		
Salaries and wages	\$47,641.43	
Public Printer	7,702.79	
Interior Department	1,481.74	
Miscellaneous	2,638.75	
		59,464.71
Miscellaneous:		
Examinations, material for repairs, etc., electrical equipment, light, heat, ice, stable, telephones, telegrams, advertising, travel (other than supervisors and special agents), and office supplies	15,962.32	
		\$369,000.27
Supervisors		64,912.86
Enumerators		46,465.31
Population		1,189,981.23
Vital statistics		76,825.85
Manufactures		482,542.45
Agriculture		1,212,182.67
Methods and results		28,765.09
Alaska:		
Disbursed at Washington	186.00	
Disbursed by S. C. Dunham		
Disbursed by A. F. Wines		
Disbursed by W. A. Kelly		
		186.00
Hawaiian Islands		1,239.90
Blind and deaf		26,629.66
Disbursements as per "Statement of the condition of the appropriation for the expenses of the Twelfth Census"	3,498,781.26	
Add settlements by Interior Department	6,228.23	
Total		3,504,959.49

EXHIBIT B.

Estimate of appropriations required for the expenses of the twelfth census for the fiscal year beginning July 1, 1902, and ending June 30, 1903, in accordance with the act of March 3, 1899, and amendments thereto.

1. Director of the Census	\$7,500
One assistant director	4,000
Five chief statisticians, at \$3,000 each	15,000
One chief clerk	2,800
One disbursing clerk	2,500
One purchasing agent	2,500

14 REPORT OF THE DIRECTOR OF THE TWELFTH CENSUS.

One superintendent of printing	\$2,500
One geographer	2,500
One appointment clerk	2,500
Seven expert chiefs of divisions; at \$2,000 each	14,000
Two stenographers, at \$2,000 each	4,000
Fifteen clerks of class 4	27,000
Twenty-one clerks of class 3	33,600
Twenty-eight clerks of class 2	39,200
One captain of the watch	840
Two messengers	1,680
Total	162,120
2. Clerks, copyists, computers, skilled laborers, watchmen, assistant messengers, laborers, messenger boys, and charwomen, 1,200 at \$1,000 per annum	1,200,000
3. Special agents to secure information for special reports	100,000
4. Rental of quarters	30,000
5. Stationery	25,000
6. Furniture, carpets, ice, lumber, hardware, dry goods, advertising, telegraphing, expressage, horses, wagons, harness, food for and shoeing of horses, diagrams, awnings, shelving, file cases, file holders, repair of cases and furniture, fire, lights, and all other expenses for miscellaneous supplies	50,000
7. For the purchase of law books, books of reference and periodicals, manuscript, investigation of census work in other countries, etc., to be made a specific item in appropriation bill	5,000
8. For use of machines of the Hollerith Tabulating Machine Company, including cards	50,000
9. Printing and binding census reports	350,000
TOTALS.	
Item No. 1	162,120
Item No. 2	1,200,000
Item No. 3	100,000
Item No. 4	30,000
Item No. 5	25,000
Item No. 6	50,000
Item No. 7	5,000
Item No. 8	50,000
Item No. 9	350,000
Total	1,972,120