

Census of 1840—Industry.

Name of county.	
Name of town, township, &c.	
Iron, cast.	
Iron, bar.	
Lead.	
Gold.	
Other metals.	
Coal, anthracite.	
Coal, bituminous.	
Domestic salt.	
Granite, marble, and other stone.	
Live stock.	
Cereal grains.	
Various crops.	
Cotton, sugar, silk, &c.	
Gardens.	
Minerals.	
Commerce.	
Fisheries.	
Products of the forest.	
Machinery.	
Hardware, cutlery, &c.	
Number of cannon and small arms.	
Precious metals.	
Granite, marble, &c.	
Bricks and lime.	
Wool.	
Cotton.	
Silk.	
Flax.	
Mixed manufactures.	
Tobacco.	
Hats, caps, bonnets, &c.	
Leather, tanneries, saddlery, &c.	
Soap, candles.	
Distilled and fermented liquors.	
Powder mills.	
Drugs, medicines, paints, and dyes.	
Glass, earthenware, &c.	
Sugar refineries, chocolate, &c.	
Paper.	
Printing and binding.	
Carriage.	
Musical instruments.	
Carriages and wagons.	
Mills.	
Ships.	
Furniture.	
Houses.	
All other manufactures.	

SCHEDULE 1.—Free inhabitants.—[1850 and 1860.]

1	2	3	4	5	6	7	8		9	10	11	12	13	14
							Value of real estate.	Value of person's estate.						
Dwelling-houses numbered in the order of visitation.	Families numbered in the order of visitation.	The name of every person whose usual place of abode on the first day of June, 1860, was in this family.	Age.	Sex.	Color. } White, black, or mulatto.	Profession, occupation, or trade of each person, male and female, over 15 years of age.	Value of real estate.	Value of person's estate.	Place of birth, naming the state, territory, or country.	Married within the year.	Attended school within the year.	Persons over 20 years of age who cannot read and write.	Whether deaf, dumb, blind, insane, idiotic, pauper, or convict.	

* In 1850 the schedule had but one column for "value of real estate owned." The ninth column was added in 1860, which extended the number from 13 to 14.

SCHEDULE 2.—Slave inhabitants—1850 and 1860.

Names of slave owners.	DESCRIPTION.				Number of slaves.	Fugitives from the State.	Number manumitted.	Deaf and dumb, blind, insane, or idiotic.	Number of slave houses.
	Age.	Sex.	Color.						
1	3	4	5		2	6	7	8	9

SCHEDULE 3.—Persons who died during the year ending June 1—1850 and 1860.

Name of every person who died during the year ending 1st June, 1860, whose usual place of abode at the time of death was in this family.	DESCRIPTION.						The month in which the person died.	Profession, occupation, or trade.	Disease or cause of death.	Number of days ill.
	Age.	Sex.	Color. } White, black, or mulatto.	Free or slave.	Married or widowed.	Place of birth: Naming the State, Territory, or country.				
1	2	3	4	5	6	7	8	9	10	11

SCHEDULE 6.—Social Statistics of 1850 and 1860.

Name of division.		ANNUAL TAXES.						COLLEGES, ACADEMIES, AND SCHOOLS.									
		Name or kind of each.	Amount of each.	How paid.	No.	Character, rank, or kind.	No. of teachers.	No. of pupils.	Amount annually realized from endowments.	Raised by taxation.	Received from public funds.	Received from other sources.					
1	2	3	4	5	6		8	9	10	11	12	13					
Valuation of estate, real and personal.																	
Real estate..... \$																	
Personal estate.....																	
Total.....																	
How valued.....																	
True valuation.....																	
SEASONS AND CROPS.																	
What crops are short.		To what extent.		Usual average crop.													
14	15	16															
Name of division.		LIBRARIES.						NEWSPAPERS AND PERIODICALS.						RELIGION.			
17	18	19	20	21	22	23	24	25	26	27	28	29					
No.	Kind.	No. of volumes.	Name.	Character.	How often published.	Circulation.	No. of churches.	Denomination.	No. each will accommodate.	Value of church property.							
18	19	20	21	22	23	24	25	26	27	28							

The growth of the American census cannot be illustrated in a more striking manner than by making an exhibit of the various census publications, and of the cost of taking the several censuses and publishing the results. Such an exhibit is here appended:

1790.—“Return of the whole number of persons within the several districts of the United States, &c.” This first census publication was an octavo pamphlet of fifty-two pages, published in 1792. The entire cost of this census was \$44,377 18.

1800.—“Return of the whole number of persons within the several districts of the United States, &c.” This was a folio of seventy-eight pages, published in 1801. The cost of this census was \$66,609 04.

1810.—The report of this census was in two folio volumes: I. “Aggregate amount of each description of persons within the United States, &c.” This was an oblong folio of ninety pages; but it does not show the date of publication. II. “A series of Tables of the several branches of American Manufactures, exhibiting them in every County of the Union, so far as they are returned in the Reports of the Marshals and of the Secretaries of the Territories, and of their respective assistants, in the autumn of the year 1810: together with returns of certain doubtful goods, productions of the soil and agricultural stock, so far as they have been received.” 170 pp., 4to. Edited by Tench Coxe, and published May 30, 1813. The cost of the census of 1810, \$178,444 67.

1820.—I. “Census for 1820, &c.,” a folio of one hundred and sixty-four pages; published in 1821. II. “Digest of Accounts of Manufacturing Establishments, &c.,” a folio of one hundred pages, printed in 1823. Cost of the census, \$208,525 99.

1830.—“Fifth Census or Enumeration of the Inhabitants of the United States.” This volume was a large folio of 163 pages, printed in 1832. This report was so wretchedly printed, that Congress required by law a republication, which was made the same year under the immediate direction of the Secretary of State. The erroneous and corrected editions are bound together. This republication enhanced the cost of this census to \$378,543 13.

1840.—I. “Compendium of the Enumeration of the Inhabitants and Statistics of the United States,” a folio of 379 pages, printed in 1841. II. “Sixth Census or Enumeration of the Inhabitants of the United States,” folio of 470 pages, 1841. III. “Statistics of the United States, &c.,” a large, oblong folio of 410 pages, 1841. IV. “Census of Pensioners for Revolutionary and Military Service, with their names, ages, and places of residence, &c.” 4to, 196 pages.

The total cost of these censuses was \$833,370 95.

1850.—I. “The Seventh Census of the United States,” quarto of 1,022 pp., 1853. II. “Statistical View of the United States,” octavo of 400 pp., 1854. III. “Mortality Statistics of the Seventh Census, &c.,” octavo, pp. 304, 1855. IV. “Digest of the Statistics of Manufactures,” octavo, pp. 143, published in 1859 as Senate Ex. Doc. No. 39, second session thirty-fifth Congress. Cost up to September 30, 1853, \$1,318,027 53. There were three or four subsequent appropriations for this census, amounting to about \$11,000.

1860.—I. “Preliminary Report of the Eighth Census, 1860,” octavo, 294 pages, 1862. II. “Final Report,” in four quarto volumes, as follows:

Volume I. “Population,” pp. 694. Published in 1864.

Volume II. “Agriculture,” pp. 292. Published in 1864.

Volume III. “Manufactures,” pp. 746. Published in 1865.

Volume IV. “Mortality and Miscellaneous Statistics,” pp. 584. Published in 1866.

The appropriations for this census have amounted to \$1,786,350 73, and over \$200,000 remain unpaid, chiefly the final payments to assistant marshals in the southern States, for which no appropriations have been made.

The foregoing historical view of the rise and progress of the American census shows that its development has been, in the main, uniform and constant. Still two dates may be fixed upon that are justly entitled to be called eras: 1787, the era of the Constitution, when the national government made itself responsible for taking a decennial enumeration of the people; 1850, when the law under which the last two censuses were taken, was passed—a law that gave us in 1860 the most complete census that any nation has ever had. With the lapse of the last twenty years statistical science, and the census especially, or an instrument of the census, has made rapid progress. Parallel with the growth of statistical science there has been an astonishing development of the power of the American people and the resources of our country. The time has come when, in framing a new law; another step in the advance should be taken—a step so important that 1870, like 1850 and 1787, may hereafter be pointed to as an epoch in the growth of the national census.

While recognizing the great relative merits of the last census, it is also evident that the important advances made in social science, and the great changes that have occurred in our country during the last decade, require a revision of the law.

To this end the committee have examined the principal defects in the methods and inquiries of the existing law, and will point out the remedies proposed in the pending bill.

I.—DEFECTS IN THE PRESENT METHOD OF TAKING THE CENSUS.

1. The work of taking the census should no longer be committed to the charge of the United States marshals. These officers belong to the judicial department of the government; are not chosen with a view to their fitness for census-taking, or any statistical inquiry; and whether so qualified or not, the greatly increased duties devolved upon them by the revenue laws, bankrupt laws, and other legislation, since the last census was taken, make it more difficult now than ever before for them to do this work and do it well; and in the popular mind they are so associated with arrests and seizures that their census visits will create uneasiness and suspicions.

The unequal size of territory embraced in their several districts leads to an unequal and unwise distribution of the duties of supervision, and this injuriously affects the uniformity, promptness, and efficiency of the work. One is charged with the supervision of all the census work in Massachusetts, with its million and a quarter of inhabitants, while another superintends a district embracing but one-half of Florida and a population of seventy thousand, and another has but one-third of Alabama and a population of three hundred and twenty thousand.

There are sixty-two judicial districts and as many marshals. Thirty-three of the States and Territories compose each a single district. Ten States contain two districts each, and three are divided into three districts each.

This is not only an unequal distribution of duty, but the growth of the country has made many of the districts too large for any one man to perform thoroughly and expeditiously the work of supervision.

2. Too much time is allowed in taking the census and publishing its results.

The law of May 23, 1850, under which the seventh and eighth censuses were taken, allows five months in which to make the enumeration and make the returns to Washington, and authorizes the Secretary of the Interior to extend the time in certain cases. It contains no provision concerning the time of publication. As a consequence, the main report for 1850 was not printed till 1853, and the volume relating to manufactures was not printed till 1859. The preliminary report of 1860 was not printed till 1862; the full reports on population and agriculture were delayed till 1864, and those on manufactures and mortality till the end of 1866.

It has been strongly urged that the enumeration should be made in a single day, and the example of England is cited to show that it is practicable. The inquiries made in the British census are very few in number, and almost exclusively confined to facts of population. General statistics are not provided for in their census.

Again, the small extent of territory to be traversed and the density of the population make it possible to carry out a plan there which would prove a disastrous failure here, with our vast areas and sparse population.

The census is our only instrument of general statistics, and must be more elaborate than that of countries having permanent statistical bureaus; and as our enumeration is not of the actual but the legal population, a longer time, say one month, can safely be allowed.

3. Another important matter (which affects, also, the question of time) is the present objectionable method of obtaining the population statistics. The census-taker calls on a family and spreads before them his array of blanks, which they then see for the first time. Suspicions of his inquisitorial character must be allayed; fears that it is an assessment for purposes of taxation must be quieted; the subject must be explained, the memories of the family stimulated, and the data they furnish criticised and recorded.

A very capable gentleman, who was an assistant marshal in 1860, has estimated the average time required for each family, exclusive of travel, at thirty minutes. Thus an honest day's work would accomplish the enumeration of not more than twenty families. Far more important than the waste of time is the inaccuracy which must result from this method. It is not reasonable to suppose that a family can in half an hour make anything like a complete and accurate statement of a great number of details to which they have not previously given any special attention.

4. The operations of the Census Office under the present law are not sufficiently confidential. The citizen is not adequately protected from the danger, or rather the apprehension, that his private affairs, the secrets of his family and his business, will be disclosed to his neighbors.

The facts given by the members of one family will be seen by all those whose record succeeds them on the same blank; and the undigested returns at the central office are not properly guarded against being made the quarry of bookmakers and pamphleteers.

5. The rule of compensation is arbitrary, complicated, and of doubtful wisdom.

One rule is followed in paying the officers and employes at the central office, another for the marshals, and still another for the assistant marshals. One principle of compensation is adopted for enumerating the inhabitants; another for taking the statistics of industry; another for mileage; and still another for copying returns.

It has been charged, on what appear to be reasonable grounds, that

these rules offer temptations to exaggerate some parts of the returns and to make constructive charges which swell the expenses to an unreasonable degree.

It should be added that the great change which has occurred in prices and wages since the passage of the law makes the rule inapplicable to the present condition of affairs.

To remedy these defects this bill provides that the enumeration shall be made by persons chosen for their special fitness for such work, and in no way connected with the national constabulary or with the assessment or collection of taxes.

The districts should be much smaller than they now are—so small that one man may intelligently arrange the work, designate census-takers of whose qualifications and fitness he may easily have full knowledge, and personally supervise and unify all the work within his jurisdiction.

The congressional district seems to be the most convenient and appropriate unit of classification for the States; and each Territory may properly, as under the present law, constitute a district.

Separate schedules, at least for the household, the farm, and for manufacturing and commercial and other industrial establishments, are to be distributed before the day to which the enumeration relates, so that the people may be familiarized with the inquiries made, and that, as far as possible, without the aid of the census-taker, the blanks may be filled up.

This will insure greater correctness and will greatly reduce the time required for the enumeration. By the use of these schedules and the organization provided in the bill it is believed that the enumeration may actually be completed in one month from the first of June.

The committee propose to put into the law and into the official oath of all officers and employes of the bureau a provision that the returns of the census shall be confidential; that the business of no citizen shall be made public, and that the returns of money values shall not in any way be made the basis of taxation nor be used as evidence in the courts.

These provisions of the law should be printed on the schedules, and the President should issue his proclamation calling upon all the people to aid in making the returns as full and accurate as possible.

A liberal compensation in the simple form of salary or *per diem*, with no mileage or constructive charges, is provided, and the time during which persons may receive compensation is carefully restricted.

A sufficient clerical force is provided in the Census Office at Washington to tabulate, condense, and arrange the whole for publication within two and a half years after the returns are in.

The results ought to be published in a form considerably more condensed than in the last report.

II.—DEFECTS IN THE INQUIRIES PRESCRIBED IN THE SCHEDULES OF THE PRESENT LAW.

1. *Statistics of Population and Mortality.*—As numbered in the census of 1860, the first three schedules relate to statistics of population and mortality; the second had exclusive reference to slaves. We are now happily one people, and need but one schedule of population.

All the inquiries retained from the three have been entered on the family schedule, and by dropping the nine inquiries of the slave schedule, other important ones have been added without greatly increasing the aggregate number. None of the inquiries of the first and third schedules have been

wholly omitted, but several have been modified. That relating to color has been made to include distinctively the Chinese, so as to throw some light on the grave questions which the arrival of the Celestials among us has raised.

The committee believe that the value of the inquiry in regard to children attending school will be greatly enhanced by requiring the enumerator to enter under that head the grade of school—whether a common school, academy, college, or professional school. This has been done on the schedule relating to educational institutions. The registration of those who cannot read and write is required in the old law only of persons twenty years of age and upward. This class has been extended to persons fifteen years old. It is more important to know how many illiterate persons there are between the ages of fifteen and twenty than at any later period, for between ten and twenty it is usually determined whether an education is gained or lost.

The last column of the first schedule has been so amended as to exhibit more fully the physical force of the country. The war has left us so many mutilated men that a record should be made of those who have lost a limb or have been otherwise disabled; and the committee have added an inquiry to show the state of public health and the prevalence of some of the principal diseases. Dr. Jarvis, of Massachusetts, one of the highest living authorities on vital statistics, in a masterly paper presented to the committee, urged the importance of measuring as accurately as possible the effective physical strength of the people.

It is not generally known how large a proportion of each nation is wholly or partially unfitted by physical disability for self-support. The statistics of France show that in 1851, in a population of less than thirty-six millions, the deaf, dumb, blind, deformed, idiotic, and those otherwise mutilated or disabled, amounted to almost two millions. We thus see that in a country of the highest civilization the effective strength of its population is reduced one-eighteenth by physical defects. What general would venture to conduct a campaign without ascertaining the physical qualities of his soldiers as well as the number on his rolls? In this great industrial battle which this nation is now fighting we ought to take every available means to ascertain the effective strength of the country. Beside the inquiries in these schedules that have been amended, a few new ones have been added.

Since the present census law was passed an international statistical society has been organized, and the profoundest scholars of Europe and America have united to give it authority and efficiency in the treatment of social questions. At several of its sessions the subject of national censuses has been very ably and elaborately discussed, and recommendations have been made looking to greater efficiency and uniformity both in methods and inquiries. A collation and comparison of the personal statistics of twenty seven modern States and nations show that in all these States there have been thirty-three different inquiries made in regard to population. From these the international congress selected eight, which they recommended to all nations as indispensable for purposes of general statistical science, and seven others which they urged the use of whenever it was practicable. Two of the inquiries urged by the congress as indispensable are not in the old schedule of population, but are here added. One is the relation of each person to the head of the family, whether wife, son, daughter, boarder, servant, &c.; and the other is the civil or conjugal condition of each person, whether single, married, or widowed. These elements are the leading factors which

determine the power and value of the family as a social and producing force, and in them are infolded the destiny of the nation.

Two other inquiries not in our schedules were suggested as advisable, namely, the language spoken and the religion professed by each person. But in a nation whose speech is so nearly one, the first is hardly needed in addition to the light that will be thrown upon this question by the record of nationality, and the second might be deemed an uncalled-for impertinence, and the committee therefore omitted them.

It has been strongly urged, and with good reason, that to the inquiry of the birth-place there should be added the birth-places of the father and mother of each person. This would enable us to ascertain the relative fecundity of our American and foreign-born populations. It has lately been asserted that the old ratio of increase among our native population is rapidly diminishing. If this be true the vitally important fact should be ascertained and its full extent and significance determined.

The inquiry concerning parentage was inserted in the schedule by the committee. An inquiry was also added in regard to dwelling-houses, so as to exhibit the several principal materials of construction, as wood, brick, stone, &c., and the present value of each. Few things indicate more fully the condition of a people than the houses they occupy. The average home is not an imperfect picture of the wealth, comfort, refinement, and civilization of the average citizen. The census ought to show us how comfortable a place is the average American home, and how great a physical and social force is the average American citizen.

The committee conclude the discussion of personal statistics with one further statement.

The thirteenth and fourteenth amendments of the national Constitution have radically changed the basis of representation and provided for a redistribution of political power. By the former, two-fifths of those who were lately slaves are added to the representative population; by the latter, the basis for each State is to be determined by finding the whole number of male citizens twenty-one years of age whose right to vote is denied or abridged for any other reason than participation in the rebellion or other crime, and reducing the whole population in the proportion which the number thus excluded bears to the whole number of adult male citizens.

The census is our only constitutional means of determining the political or representative population. The fourteenth amendment has made that work a difficult one. At the time of its adoption it was generally understood that the exclusion applied only to colored people who should be denied the ballot by the laws of their State. But the language of the article excludes all who are denied the ballot on any and all grounds other than the two specified. This has made it necessary to ascertain what are in fact the grounds of such exclusion, and the Census Committee have compiled a record from the constitutions and laws of the several States from which exclusion from the privilege of voting (otherwise than on account of rebellion or other crime) may be stated in nine general classes as follows:

1. On account of race or color.....	16 States.
2. On account of residence on lands of United States.....	2 "
On account of residence less than required time in United States.....	2 "
On account of residence in State less than required time, (six different specifications).....	36 "
On account of residence in county, city, town, district, &c., (eighteen different specifications).....	37 "
3. Wanting property qualifications or non-payment of taxes, (eight specifications).....	8 "

4. Wanting literary qualifications, (two specifications)	2	States.
5. On account of character or behavior, (two specifications)	2	"
6. On account of services in army or navy	2	"
7. On account of pauperism, idiocy, and insanity, (seven specifications)	24	"
8. Requiring certain oaths as preliminary to voting, (two specifications) ..	5	"
9. Other causes of exclusion, (two specifications)	2	"

After much reflection the committee could devise no better way than to add to the family schedule a column for recording those who are voters, and another with this heading, copied substantially from the amendment: "Citizens of the United States, being twenty-one years of age, whose right to vote is denied or abridged on other grounds than rebellion or crime." It may be objected that this will allow the citizen to be a judge of the law as well as the fact, and that it will be difficult to get true and accurate answers. I can only say this is the best method that has been suggested.

Dr. Jarvis presented to the committee an able argument in favor of taking the actual as well as the legal population of the country. While the committee acknowledge the scientific value of such an enumeration, yet it is evident that to take it with sufficient accuracy the enumeration must be made in so short a time as to endanger the fullness and accuracy of answers in the other schedules, and the two results thus obtained would greatly complicate and increase the difficulty of determining the representative population.

The committee gave to the schedule of agriculture a very careful and protracted consideration. The schedule, as suggested by the Commissioner of Agriculture, contained two hundred and forty-six columns of inquiries. After repeated revisions and considerations of the material presented, the committee settled upon the schedule reported in this bill, which contains seventy-three columns, to which a few others have been added by the House, and is, the committee venture to claim, a great improvement on the schedule of the old law, which contained forty-eight inquiries. The additions made in the corresponding schedule in this bill may be classified as follows:

1. An inquiry to show by what tenure the occupier holds his farm, whether as owner or tenant.
2. An extension of the present classification of lands as "improved or unimproved," so as to exhibit separately the acres cultivated and not cultivated, and the acres of woodland and of uncultivated pasture.
3. An inquiry into the value of farm buildings other than dwelling-houses.
4. An inquiry into the total value of all labor expended on the farm during the year.
5. An inquiry into the average number of cows milked during the year.
6. A separate exhibit of the cheese made on the farm and that made at factories.
7. Instead of the present exhibit of the aggregate value of all slaughtered animals, a separate statement of the value of slaughtered cattle, hogs, and sheep.
8. A statement of the value of all the poultry on the farm and the value of its products during the year.
9. In addition to the statistics of wine produced, a statement of the value of grapes sold which were not made into wine.
10. An omission from the schedule of "water-rotted hemp." It is not thus treated in this country, as in 1859 was supposed it would be.
11. An omission also of the silk culture, which has not fulfilled the promise of the days of *morus multicaulis*.

12. A statement as regards all the principal crops, of the acreage as well as the amount of product. The importance of this last element cannot be over estimated. Without it we cannot learn the yield of the several products in different localities, and the increase or decrease of that yield at different periods. It is well known, for example, that the center of the wheat product has been rapidly moving west, but its track and rapidity of movement cannot be traced without knowing both the acres sown and the bushels produced.

It is believed that the schedule thus amended will enable us to ascertain the elements of those wonderful forces which have made our country the granary of the civilized world; will exhibit also the defects in our agricultural methods, and stimulate our farmers to adopt those means which have doubled the agricultural products of England since the days of the Stuarts, and have more than doubled the comforts of her people. The extent of that great progress can be seen in such facts as these: that "in the reign of Henry VII fresh meat was never eaten even by the gentlemen attendant on a great earl except during the short interval between midsummer and Michaelmas," because no adequate means were known of fattening cattle in the winter, or even of preventing the death of one-fifth of their whole number each year; that Catharine, queen of Charles II, sent to Flanders for her salad, which the wretched gardening of England did not sufficiently provide.

Russia alone of European States makes any considerable surplus contribution to the food of the world. The United States must continue to be the main source of supply. The fact stated by Mr. S. B. Ruggles, delegate of the United States to the International Statistical Congress, which met at the Hague, in September last, is of startling importance: that in 1868 the whole of Europe, with a population of 296,123,293 souls, produced cereals to the amount of 4,784,516,604 imperial bushels, or sixteen bushels to each person; while the United States, during the same year, with a population of 39,000,000, produced 1,405,449,000 bushels, or thirty-six bushels to each person.

III. STATISTICS OF INDUSTRY.

This schedule, the fifth of the series in the old law, has performed exceedingly valuable service to the country and to statistical science. It is said to be the first of its kind ever successfully used in any national census; but it can be improved in several particulars.

1. There are two serious defects in the heading of the first column, which reads as follows: "Name of corporation, company, or individual producing articles to the annual value of \$500."

The first defect is in the word "articles," which has been construed to mean merchantable articles, or such products of manufacture as can be done up in packages and sold over the counter as merchandise. A large proportion of all the products of industry cannot thus be handled. The carpenter, mason, plasterer, plumber, painter, builder of ships, cars, bridges, &c., all perform most valuable labor, and their products are homes, buildings, and structures of all kinds, a most important part of the fixed capital of the nation; but these cannot be called "articles" in the restricted sense in which the word is employed in the schedule. A plumber in Washington has lately finished a single job amounting to \$20,000, but he has produced no "article" which would be entered in the schedule. A job of general repairs, however extensive, would not be entered. This defect has been remedied by requiring, in addition to the value of articles produced, an exhibit of the value of jobbing and repairing done within the year.

The second defect in this heading is the limitation of \$500. He must be a very small manufacturer whose annual product, including materials, is not more than \$500. A shoemaker who should make but two pairs of boots per week would show a product of more than that amount. And yet it is manifest from the returns themselves that the products of the great majority of artisans were not enumerated in 1860. For example, the eighth census showed that there were in the United States 144,433 manufacturing establishments, but the product of the industry of only 7,115 was reported.

The population schedule exhibited in its inquiries concerning occupation the number of persons belonging to each trade, while but a small per cent. of the product of their industry was reported in the industrial schedule. The following table exhibits the great deficiency in this respect:

NUMBER REPORTED IN THE POPULATION SCHEDULE AS BELONGING TO THE FOLLOWING TRADES.

Coopers.....	43,624
Blacksmiths.....	112,357
Carpenters.....	242,958
Painters.....	51,695

NUMBER OF THE SAME TRADES THE PRODUCT OF WHOSE INDUSTRY WAS REPORTED IN THE INDUSTRIAL SCHEDULE.

Coopers.....	13,750
Blacksmiths.....	15,720
Carpenters.....	9,006
Painters.....	913

PER CENT. REPORTED.

Coopers.....	32
Blacksmiths.....	14
Carpenters.....	3.7
Painters.....	1.8

We propose to remedy this defect by making establishments the unit of enumeration. Wherever there is a manufactory or shop in operation its occupants are required to give the facts called for in the schedule. This will include the product of all manufacturers and artisans except those at work as journeymen, and in almost every instance the latter and their work will be included under the inquiry concerning laborers employed in the establishment. It is believed that these changes will greatly increase the completeness and value of the results obtained.

In noticing the defects of this heading I am strongly reminded of the statement of Moreau de Jonnes that two monosyllables in the instructions, added by a subordinate in the statistical bureau, destroyed the whole value of the French census of 1836.

2. The inquiry in reference to motive-power has been so modified as to give the specific kinds: as steam, water, or horse, and the total power reckoned in horse-power. It is a matter of growing importance to know how the labor of society is being distributed; to ascertain what part is performed by the muscle of man, and what by the use of machinery.

3. To secure this more fully, a statement of the kind and number of machines, such as looms, spinning-jennies, &c., has also been added.

4. In reference to labor and wages the committee thought it would be useful to state separately the number of persons laboring in an industrial establishment who are owners or partners, and the number of those who work for wages.

5. An important class of products, belonging to what the Italian government has appropriately called "extractive industry," has hitherto been wholly neglected in the census. I refer to the products of our mines and fisheries and to petroleum. No further proof of the propriety of this addition is needed than the fact that last year our coal mines must have yielded thirty million tons, our iron mines four million tons, and from our oil-wells were exported over one hundred million gallons of petroleum, in addition to vast consumption at home. The schedule of industrial statistics, with the amendments proposed, can be used for petroleum and the products of mines, and a special schedule has been added for fisheries.

IV.—STATISTICS OF INTERNAL COMMERCE.

In the preliminary law of March 3, 1849, the census board were directed to prepare a schedule of trade and commerce, but no such schedule appeared in the law of 1850. It has been the habit to treat the exchangers of wealth—the middle-men who transport and buy and sell—as belonging to the unproductive class. But an enlightened political economy will recognize all as producers of wealth who give value to commodities by bringing them within easy reach of the consumer and aid in facilitating exchanges. According to the census of 1860, there were in the United States 13,340,000 men and women above nineteen years of age; and there were 227,177 persons set down in the list of occupations as persons engaged in trade, or one in fifty-eight of the adult population of the country. There can be no adequate defense for omitting this large and intelligent class of the community from the records of national industry.

1. A simple and comprehensive schedule for all persons engaged in trade was laid before the Census Committee by General Francis A. Walker, of the Treasury Department, and has been made a part of this bill. It follows the general plan of the industrial schedule in regard to labor and wages, and requires in addition a statement of the amount of capital invested in trade and the gross annual amount of purchases and sales.

2. Without adding to the duties of the enumerators, the bill requires the superintendent at Washington to procure full statistics of railroad, lake, river, and canal transportation, exhibiting, among other facts, the number of persons employed, the amount of freight, and cost of transportation. Such inquiries are now made in Ohio in regard to railroads by authority of the legislature, and the results are exceedingly valuable. The bill also requires full statistics of express and telegraph companies, and of life and fire and marine insurance companies.

Now that the great question of human slavery is removed from the arena of American politics, the committee are persuaded that the next great question to be confronted will be that of corporations and their relation to the interests of the people and to the national life. The fear is now entertained by many of our best men that the national and State legislatures of the Union, in creating these vast corporations, have evoked a spirit which may escape and defy their control, and which may wield a power greater than that of legislatures themselves. The rapidity with which railroad corporations have been consolidated and placed within the grasp of a few men during the past year is not the least alarming manifestation of this power. Without here discussing the right of Congress to legislate on all the matters suggested in this direction, the committee have provided in this bill for arming the Census

Office with the power to demand from these corporations a statement of the elements of their power and an exhibit of their transactions. The bill also provides for full statistics in regard to the business of fire and marine insurance. It is reported in the columns of a journal published by the insurance institutions of this country that there is at the present moment \$3,092,000,000 of insurance against fire and marine losses.

Since the census of 1860 was taken, the life insurance business of the country has grown up from almost nothing to enormous proportions. For instance, there were, in 1860, but seventeen life insurance companies in the United States, and fifty-six thousand and some odd policies in force. In 1868, the statistics of that year being the latest the committee have, there were 537,594 policies in force; over half a million of the population of the United States were insured in the fifty-five life insurance companies of this country; and the total amount insured reached the enormous sum of \$1,528,000,000.

Now, whether these companies are sound or not, whether the people may rely upon the safe investment of the money which they have put into their hands, will altogether depend upon the way in which they are conducting their business; and we propose by this bill to bring out the facts so that the country may see what are the operations of these great corporations.

V.—SOCIAL STATISTICS.

Under this head there were forty-eight inquiries in the old law, several of which in practice proved almost worthless. Those concerning taxation and the aggregate value of real and of personal estate, the character of the seasons and the crops, and the rate of wages for the different kinds of labor, failed to produce results which were considered worthy of publication in the final report. In the pending bill some of these inquiries are omitted altogether, and the others are placed in other schedules where they are more likely to be answered. Besides these modifications several additions have been made to this branch of the census. A more extended schedule for educational institutions has been provided, which will require not only the number of teachers and pupils in our common schools and other institutions of learning, but also the total amount of money which the nation has permanently invested in education, together with the annual amount paid for its support.

The inquiries concerning churches and religious worship have also been somewhat extended, and provision has been made for obtaining a report of the amount of money permanently and annually invested in religious enterprise, and also the number of children in Sunday schools under the supervision of churches. In the inquiries concerning libraries a column has been added which will exhibit the annual cost of maintenance and increase of those institutions, and another showing the date of their establishment, from which may be learned the increase of the aggregate number.

In the statistics of newspapers and other periodicals the committee propose an important modification, which requires the superintendent of the census to obtain a copy of each newspaper and periodical in the United States, together with a statement of the circulation of each. From the paper itself can be gathered all the important facts which it is desirable to know concerning that class of industry, and the copies thus obtained are to be classified and bound up for preservation in the archives of the government. What would we not give for a similar collection for each decade since the foundation of the government? What

more striking exhibit could be made of the country's progress in this respect?

It must be borne in mind that if our national statistics are to be taken with completeness we must lay more stress on the census than do the States of Europe. They have bureaus of statistics permanently established and under the direction of experienced statisticians; with us such a bureau is still a desideratum. The great advantages attending such an establishment are thus forcibly stated by Dr. E. M. Snow, the eminent statistician of Rhode Island, in a letter addressed to the Census Committee:

"I sincerely hope that in the statute organizing the census of 1870 provision will be made for the establishment of a permanent census bureau, or, better still, notwithstanding one failure, a permanent statistical bureau. The reasons for this are perfectly conclusive to all who are acquainted with the collection and compilation of statistics. The greatest defects in all our censuses have been owing to the want of knowledge and of experience in those employed upon them. We are almost destitute of men in this country, except in three or four States, who are familiar with the practical duties required in taking a census. The whole country needs educating on this subject. A permanent bureau with an efficient head would soon organize a corps of men in each State who would be familiar with the information to be obtained and with the best methods of obtaining it.

"On the score of economy, also, a permanent bureau would be the cheapest. With a corps of clerks educated in the best methods of doing their duties, and with trained men to obtain the information, and by making use of local officers and other sources of information in different States, I am perfectly confident that a permanent census bureau could obtain all the information now obtained by a decennial census, except that relating to population, and could obtain it every year with no greater expense than is now required to obtain it once in ten years. The efficiency and economy, in statistical matters, of men familiar with their duties are greater beyond comparison than of men who are ignorant of these duties.

"A permanent national bureau of statistics is also very much needed to systematize the whole subject, to give information to all portions of the country, and to take the lead in the organization of similar bureaus in the several States. When such bureaus become general in all the States the national government will be able, with their assistance, to obtain all the statistics now obtained by the national census, and much more, far more frequently, far more correctly, and with much less expense."

We have already a commissioner of mining statistics, some provisions in the Treasury Department for financial statistics, a department whose chief function is to collect educational statistics, and some attention is given to statistics in the Department of Agriculture. It is greatly to be regretted that these statistical forces have not been consolidated, the scope of their work enlarged, and the whole thoroughly organized; all of which could be done at an expense not greatly increased. But at this late day it is manifestly impossible to organize and equip a permanent statistical bureau in time to take the next census, and hence, regret it as we may, we must again depend wholly on the Census Office.

The committee desire to acknowledge their obligations to H. Villard, esq., of Boston, Secretary of the American Social Science Association, to Dr. F. B. Hough, of New York, and to Professor B. A. Hinsdale, of Ohio, for valuable aid in the preparation of this report.

In conclusion, the committee respectfully recommend the passage of the following bill:

A BILL to provide for taking the ninth census of the United States, and to fix the number of the members of the House of Representatives, and to provide for their future apportionment among the several States.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there shall be established in the Department of the Interior an office to be denominated the Census Office; the chief officer of which shall be called the Superintendent of the Census, whose duty it shall be, under the direction of the head of the department, to superintend and direct the taking of the ninth census of the United States, in accordance with the laws relating thereto; and to perform such other duties as may be required by law.

SEC. 2. *And be it further enacted*, That the Superintendent of the Census shall be appointed by the President, by and with the advice and consent of the Senate, within ten days after the passage of this act, and his term of service shall continue for the term of three years and no longer, and he shall receive an annual salary of five thousand dollars. Before entering upon the duties of his office, he shall, in addition to the oath now required by the Constitution, take and subscribe the following oath or affirmation before any judge of the circuit or district court of the United States, to wit: "I, _____, Superintendent of the Census, do solemnly swear (or affirm) that I will, to the best of my ability, cause to be enumerated all the inhabitants of the United States, and will cause to be collected all the statistical information required by the law providing for taking the ninth census, and that I will faithfully execute, or cause to be executed, all the provisions of law relating thereto;" a copy of which said oath, duly authenticated, shall be filed with the Secretary of the Interior. As soon as practicable after the passage of this act, the Superintendent of the Census, under the direction of the Secretary of the Interior, shall provide blanks and distribute the same among the district superintendents, to be hereinafter provided for, and shall prepare and distribute printed instructions, defining and explaining the duties of said district superintendents and of the enumerators hereinafter provided for, and the limits by which such duties are circumscribed, in a clear and intelligible manner, and shall see also that all due diligence is employed by the district superintendents and enumerators to make the returns of their respective doings complete at the time hereinafter prescribed; and shall, as the returns are so made, cause the same to be classified, condensed, and arranged in the best and most convenient manner for exhibiting the results of the census.

SEC. 3. *And be it further enacted*, That the Secretary of the Interior shall appoint for the Census Office one chief clerk, to be paid at the same rate allowed by law to the chief clerk of the Patent Office, and such number of clerks of the first, second, third, and fourth class, and such number of watchmen, messengers, and laborers, as the duties of the office shall from time to time require, to be paid at the same rates as now allowed for similar services in the Department of the Interior: *Provided*, That at the end of three years from the date fixed by this act as the beginning of the term of service of the Superintendent of the Census, and whenever their services shall cease to be required, the terms of all officers and employes herein provided for shall expire.

SEC. 4. *And be it further enacted*, That, within thirty days after the appointment of the Superintendent of the Census, the Secretary of the Interior shall appoint, in each congressional district, and in each of the Territories of the United States, in Alaska, and in the District of Columbia, one district superintendent of the census, whose duty it shall be to cause all the inhabitants to be enumerated, and to obtain, or cause to be obtained, the other statistical information within his district, in the manner provided for in this act: *Provided*, That in any city which forms the whole or a part of two or more congressional districts, the Secretary of the Interior may, if in his judgment the efficiency of the service will thereby be promoted, appoint one district superintendent for such city, and for the whole territory of the congressional districts of which such city forms a part, instead of one for each congressional district; and a reasonable allowance for clerk hire may be made to any district superintendent, the amount whereof shall be determined by the Secretary of the Interior, whenever, in his judgment, the necessities of the service shall require it.

SEC. 5. *And be it further enacted*, That each district superintendent, before entering upon the duties of his office, shall, in addition to the oath now required by the Constitution, take and subscribe the following oath or affirmation, before any judge of any court of record, to wit: "I, _____, district superintendent of the ninth census of the _____ district of _____, do solemnly swear (or affirm) that I will, to the best of my ability, enumerate or cause to be enumerated all the inhabitants of the said district; that I will collect, or cause to be collected, the other statistical information within the same; that I will not disclose the same to any person or persons except to my superior officers; and that I will faithfully perform all the duties enjoined on me by the laws providing for the taking of the ninth census;" and when duly authenticated by the said judge, he shall forward a copy thereof, so authenticated, to the Superintendent of the Census.

SEC. 6. *And be it further enacted*, That each district superintendent, immediately after receiving his appointment, and taking and subscribing the oaths hereinbefore prescribed, shall proceed to divide his district into as many subdivisions, to be known as enumeration districts, as may be necessary to carry out the provisions of this act, and to complete the enumeration within one month after the date fixed for taking the census; and he shall employ one enumerator in each enumeration district thus formed, and shall, without delay, transmit to the Superintendent of the Census the name and post office address of each enumerator, together with a description of the subdivision assigned to each, and as near as practicable the number of square miles contained therein. The formation of enumeration districts, and the employment of enumerators, shall be subject to the approval of the Superintendent of the Census. The enumera-

tion districts shall be as nearly equal as practicable in the amount of labor to be performed, and they shall together embrace the whole territory of the United States; and their boundaries shall be clearly described by civil divisions, rivers, roads, public surveys, or other easily distinguished lines; and in no case shall an enumeration district include parts of two counties, (or parishes,) wards, or townships.

SEC. 7. *And be it further enacted*, That no enumerator shall enter upon the discharge of his duties until he shall have received from the district superintendent a certificate that he has been designated with the approval of the Superintendent of the Census as an enumerator, in accordance with the provisions of this act, and shall, in addition to the oath required by the Constitution, have taken and subscribed, before any judge of any court of record, or any justice of the peace, whose official character shall be duly certified under the seal of the clerk of a court of record, the following oath or affirmation, which shall be indorsed on said certificate, to wit: "I, _____, enumerator of the _____ enumeration district, of _____ district of the State of _____, do solemnly swear (or affirm) that I will make a true and exact enumeration of all the inhabitants within the district assigned to me, and will faithfully collect the other statistical information therein, in the manner provided for by law, and in conformity with all lawful instructions which I may receive, and will make due and correct returns thereof, as required by law, and will not disclose any information contained in the schedules, lists, or statements obtained by me, to any person or persons, except to my superior officers;" and said certificate, with said oath or affirmation so indorsed and duly authenticated, shall be forwarded to the district superintendent by the enumerator before he enters upon his duties; and no person shall be employed as an enumerator who holds any office under the government of the United States, except as hereinafter provided, and no enumerator, during actual employment as such, shall engage in any business as traveling agent, nor shall he collect any other statistics than those required by law.

SEC. 8. *And be it further enacted*, That each district superintendent shall promptly supply each enumerator within his district with the instructions issued from the Census Office, the schedules and blanks provided for the enumeration of the population and the collection of the other statistics required by law, and shall give to him, from time to time, all such information and directions as may be necessary, to enable him properly to discharge his duties. He shall carefully examine whether the returns of each enumerator are made in conformity with law; and where discrepancies, errors, or omissions are detected, he shall require the same to be corrected. He shall make an accurate copy of all the returns received or obtained by him, which he shall transmit forthwith to the Superintendent of the Census, and the original he shall carefully preserve subject to the order of the said Superintendent. He shall from time to time make himself acquainted with the progress made by each enumerator in the discharge of his duties, and, in case of inability or neglect of any enumerator, shall employ a substitute.

SEC. 9. *And be it further enacted*, That the Superintendent of the Census, as soon as possible after his appointment, shall prepare and furnish to the district superintendents all the necessary blanks, schedules, and instructions for carrying into effect the provisions of this act, to the end that district superintendents and enumerators may be fully instructed in their duties before the time fixed for distributing the schedules and for taking the census.

SEC. 10. *And be it further enacted*, That, in the course of the twenty days preceding the day fixed for taking the census, the enumerator shall deliver to the head of each family in his subdivision, or in the absence of such head to an adult member of such family, a family or householder schedule; and to each occupier of a farm, a copy of the farm schedule; and to each owner, proprietor, or manager of a manufacturing, mechanical or mining establishment, a copy of the schedule for manufacturing, mechanical, and mining establishments; and to the proprietor or manager of each store or trading establishment, a copy of the schedule for persons engaged in trade and of fisheries; and it shall be his duty to explain to each person to whom he may deliver such schedules the objects of the same, and the obligation of such person in relation thereto, in order that the persons receiving said schedules may correctly fill the blanks and complete the answers to the inquiries therein, by the day fixed for taking the census.

SEC. 11. *And be it further enacted*, That it shall be the duty of each enumerator, in the course of the month succeeding the day fixed for taking the census, to visit personally each family, farm, manufacturing, mechanical, and mining establishment, store or trading establishment, and fishery in his subdivision, and having ascertained, from the occupier, owner, manager, or responsible agent, whether the schedule or schedules provided for in the preceding section have been filled, he shall proceed, in the presence of the owner, occupier, manager, agent, or other responsible person, to read and verify the same, and, in case of defect, to revise and correct the same; and in case the said schedule or schedules have been mislaid, lost, or neglected, he shall obtain from some member of each family, if any can be found capable of giving the information, but if not, then of the agent or other acquaintance of the family, full answers to all the inquiries relating to families and the members thereof, required by law; and he shall