

THE UNITED STATES CENSUS.

BEFORE proceeding to discuss the results of the eleventh census, it may be instructive and not without interest to consider what a census of the United States is, how it is taken, how it differs from a census of the European type, and what are its special liabilities to error. Historically, the census of the United States occupies a very proud position. We were the first nation of the world to institute a regular periodical enumeration of the people. Our first census was taken in 1790. The earliest census in England was that of 1801; in Ireland, that of 1811. The censuses of continental Europe came later; but they all came at last, so that to-day there is no civilized country which does not carry on this work at regular intervals.

The priority of this country in a matter of such great consequence has been made the subject of a very high eulogium by a French statistician of eminence, who declares that the United States present a phenomenon without parallel in history—"that of a people who instituted the statistics of their country on the very day when they founded their government, and who regulated by the same instrument the census of their inhabitants, their civil and political rights, and the destinies of their nation." Candor compels us to say that the praise of M. Moreau de Jonnès is not wholly merited. It was not an enlightened appreciation of the value of statistics which induced the statesmen of 1787 to incorporate in the national Constitution the provision requiring a decennial enumeration. The main, if not the sole, reason which actuated them was found in the character of the government which they proposed to set up. For by the Constitution of 1787 the States, while possessing equal powers in the Senate, were to have weight in the House of Representatives and in the Electoral College according to their respective numbers. For carrying out such a system of government a regular periodical enumeration was an absolute necessity. This, and not any felt need of accurate

statistics, led to the provision in question. Not philosophical, but purely political, considerations gave the United States priority among the nations in the institution of the modern census.

At first the census was confined strictly to its original object—that of ascertaining the number of the people for the purposes of representation or of direct taxation. Even the names of all the inhabitants were not taken; only the names of householders, with the numbers of their respective families, divided into classes according to age, sex, and color. Soon, however, the census began to grow more extensive and complicated in two different ways: first, through the multiplication of inquiries relating to individuals, upon the family schedule, and, secondly, through the introduction of altogether new subjects of investigation, such as agriculture, the fisheries, mining, and manufactures. The first of these ways of enlarging the work of the census did not involve a departure from its primary object. The earliest census had been too simple fully and fairly to secure that object. To make sure that an enumeration is correct, to be able to verify it in case of complaint or doubt, to eliminate all duplications, to supply all omissions, not a few particulars are necessary regarding each individual counted. For this purpose there are needed, at least, the name, age, sex, race, and occupation. The place of birth—whether abroad or at home, and in what foreign country or what State of the Union—may also become a decisive means of identification in case of dispute. Moreover, in order that the census may determine the natural militia of the country, it is important to have not only the number of males between eighteen and forty-five years of age, but also all ascertainable facts regarding mental sanity and physical soundness. This last consideration fully justifies the incorporation, in the family schedule, of the inquiries regarding blindness, deafness and muteness, idiocy, insanity, and permanent disabilities, which, in greater or less fullness, have long been a part of the census.

Certain other inquiries, long ago introduced into the family schedule, have not so clear a justification, according to the strict meaning and primary purpose of a census; yet they constitute no abuse of this agency, either theoretically or practically. For example, that the state may know what provision should be

made for public education, the inquiry as to illiteracy becomes of great importance. But whether we have regard to the interest and the attention of the enumerator, which should be concentrated on comparatively few subjects, or to the patience of the public, we must say that a highly conservative spirit should control the number and the nature of the census interrogatories. The commendable zeal and scientific ambition of the officers in charge may easily carry them over the line which marks the maximum value of a popular enumeration. The quality of the information to be obtained is generally of more importance than its quantity. A comparatively few interrogatories, searchingly put, carefully answered, and accurately recorded, will be worth more than a wider canvass conducted with any failure of interest and attention on the part of the enumerator, or with increasing impatience and irritation on the part of the public.

A second way in which the census has been enlarged since 1790 is through the institution of inquiries not in any sense appropriate to the family schedule, especially such as relate to industry and to certain social interests. This movement toward the addition of new schedules to the census began as early as 1810, when an awakening regard for manufactures led to an attempted enumeration of the nascent industries of the country, which was only in a faint degree successful. At three subsequent censuses prior to 1850 more or less work of the same nature was undertaken, seldom with profit. The agencies established were ill adapted to the purpose; statistical science was hardly yet born; the public interest in the results was feeble; the enumerators were inadequately instructed for their work.

In 1850 a new law was enacted for the seventh census, and a truly vast addition was made to the scope of the inquiry. The agencies established by this act constituted an improvement in some respects upon those previously existing; but they were still far from adequate to the gigantic task undertaken. In spite of all deficiencies, however, the United States census of 1850, and those of 1860 and 1870, which were taken under the same law, assumed monumental proportions, which became the admiration of all foreign statisticians. A close and critical examination of the results would doubtless have qualified this feeling in

no inconsiderable degree; yet, when all was known, for good or for ill, it remained true that the statistics collected under the act of 1850 were, in amount and quality, highly honorable to a people so young and necessarily so crude, occupying so vast a territory, and enjoying so little of scientific and political education. In preparation for the tenth census, in 1880, a new law was enacted. Again there took place a large extension of the scope of inquiry; but this time agencies as nearly adequate to the work as the wisdom of those in charge could devise were freely provided. That law was substantially re-enacted for the census of 1890, and determines the present census system.

I have said that the necessary agencies for taking this great decennial inventory, which now embraces population, wealth, taxation, industry in all its forms, transportation, education, physical and mental infirmity, pauperism, and crime, have been freely provided by Congress. The only limit now to the usefulness of this great work is found in the limited ability of any one man to grasp so many subjects at once; to make fitting preparations for a canvass of a nation of such territory and population as ours; to build in a few months, from the ground upward, the entire machinery of enumeration; to raise, organize, officer, equip, and instruct an army of fifty or sixty thousand men for this service; to set them at work on the first of June, all over the country, from Maine westward to Oregon and southward to Florida and Texas; and thereafter to keep them at work, vigorously, zealously, unflinchingly, to the full completion of this mighty task. The limits spoken of are not theoretical merely. It is a question if those limits—whether as to brain power or as to will power—have not already been reached and overpassed. The labor of organizing and energizing a census is such as no man can conceive who has not himself undertaken it, or, at least, stood close by and watched the machine in full operation. Aside from the question of the superintendent's intellectual ability to comprehend his work in all its parts, and to make provision for every foreseen occasion and for every sudden exigency of the enumeration, the strain upon the nerve and the vital force of whomsoever is in charge of the census is something appalling. My successor in the tenth census, Col. Charles W. Seaton, was

literally killed by the work, and three successive chief clerks of that census died in office. The present superintendent of the eleventh census, Mr. Porter, was driven away to Europe by his physician last summer, while the work was at its height, to save his life. Taking a census of the United States under the present system, and upon the existing scale, is like fighting a battle every day of the week and every week for several months.

The reason for loading upon the decennial census of the United States such a mass of statistics, relating to so many subjects, many of them not necessarily connected with the enumeration of population or even theoretically related to it, has been twofold: first, the sparseness of settlement over large portions of the United States, making it exceedingly expensive to traverse the ground several times to obtain different classes of statistics, when, by crowding the enumerator's portfolio and the enumerator's brain, these might be collected in a single tour, though perhaps at some sacrifice of quality in the results; secondly, the real or affected doubts of certain politicians as to the "constitutionality" of establishing agencies, aside from the census, for conducting inquiries under "federal" authority, purely in the interest of statistics themselves—that is, in the interest of public intelligence, social science, and political education.

Either of these reasons would have sufficed to give the United States census its present form, if the other had not existed. Constitutional scruples would have probably existed on the part of enough congressmen in 1850 to cause the defeat of any proposition for the collection of statistics on a large scale, through a popular inquiry conducted by authority and sustained by legal penalties, if that inquiry had not been made an adjunct of the census expressly authorized and required by the Constitution. It is certain that by 1879 this sort of objection, arising from a paltry and bigoted construction of the Constitution, and from petty and disparaging views of the United States government which it is no longer possible for any intelligent citizen to maintain, had so far diminished that it would not have withstood the adoption of a better system, urged on statistical grounds. To-day, let us hope, we are enough of a nation to put aside consider-

ations so unworthy, and to deal with the subject with reference to practical considerations only. As I have said in another place:

“It has become simply absurd to hold any longer that a government which has a right to tax any and all the products of agriculture and manufactures, to supervise the selling and making of ‘butterine,’ to regulate the agencies of transportation, to grant public moneys to schools and colleges, to conduct agricultural experiments and distribute seeds and plant cuttings all over the United States, to institute scientific surveys by land and deep soundings at sea, has not full authority to pursue any branch of statistical information which may conduce to wise legislation, intelligent administration, or equitable taxation, or in any other way promote the general welfare.”

But even if we may consider as disposed of the political objection to pursuing statistical inquiry separately from the decennial enumeration provided for by the Constitution, what shall be said of the geographical objection once so formidable? It is, at the beginning, to be remarked that the sole ground of this objection is found in the greater labor and expense of traversing sparsely-settled districts several times, to collect different classes of statistics. Where population is compact, economy and efficiency are actually on the side of successive, or at least separate, enumerations. In a city, for instance, the effort of “getting about” is reduced to a minimum; and three, four, or five different enumerators, each dealing with a class of subjects with which he has, by special instruction and by frequent repetition, become more familiar, will do the work in less time, proportionally, than one enumerator undertaking to carry on the whole line of inquiry himself. Even in small towns and villages this would still hold. In rural districts the time spent in going from house to house constitutes so considerable a part of the whole period occupied, that an enumeration conducted by different sets of enumerators would necessarily be more expensive; but even in regard to this two things must be said: In the first place, the whole course of the national life has tended to reduce the proportion of the total population thus placed. At the beginning, in 1790, only 131,472 persons, or one thirtieth of the people, lived in cities of more than 8,000 inhabitants; in 1880 the residents of such cities numbered 11,318,547, or two ninths of the whole population. The relative importance of the city population of

1890 was greater still. Were small cities, small towns, and villages included, and also densely-occupied agricultural districts, we should scarcely estimate the proportion of the population which could not be enumerated in the manner proposed without an appreciable increase of expense, at more than one half. To this half applies my second remark, namely, that the wonderful growth in the wealth of the whole country, in these later days, has made of smaller and smaller account the additional cost of collecting the various classes of industrial and social statistics through separate agencies, until to-day it is not worth considering in comparison with the advantages to be derived.

Those advantages are twofold. In the first place, by such a divorce of the census proper from the other statistics now taken in the census, the value of the latter would be greatly enhanced. Each class of statistics could then be taken in the time and in the way best suited to secure good results. One illustration of this, out of many that might be offered, I will select from the statistics of agriculture. The United States census is taken on June 1; but at that time the crops of the year are not harvested, consequently, it is the crops of the preceding year which are enumerated. The census of agriculture, therefore, in addition to all its other defects, starts out with being a year behindhand, and the statistics are musty before they are gathered. In Massachusetts, on the other hand, where the proposed separation of agencies has been effected with the best results, the statistics of agriculture are dated November 1, when the crops of the year are all in the barns, and the facts relating to them are fresh in the minds of the farmers. The second advantage which would result from the change proposed, would be found in the gain which the census proper would derive from singleness of aim and attention on the part of the census office and the enumerators; and perhaps, also, from a better temper on the part of the people.

It is only of the census thus constituted—that is, of the census in its original function as an enumeration of inhabitants—that I shall speak in the remainder of this article. Thus considered, we see at a glance that a census of the United States differs in its very conception from a European census. To exhibit this fundamental difference let us take the English census. Once in

ten years, as with us, the English government makes an enumeration of the inhabitants of the Kingdom. The time chosen is the night of the second of April. On or before that day the enumerator must leave at each house within his district a family schedule, which calls for the name and personal characteristics—age, sex, color, occupation, etc.—of each person who on that night shall sleep in that house. The next day, namely, the third of April, the enumerator calls and collects the schedules. If, as so often happens, no one in the household can write, the enumerator acts as the friend of the family and fills out the schedule himself for them, upon the information that they give. Otherwise, he simply looks over the schedule as filled to see that it is properly made out, and “takes it up” on his rounds. Although all this is supposed to be done in one day, the enumerator, if necessary, can take a part of the second day for his collection; but every schedule has reference to the night of the second of April. If a man be travelling on that night, he is to be reported at the hotel or private house at which he arrives in the morning. Special arrangements are made for enumerating persons employed in caravans and circuses; people on canal boats and in ships at the wharves; janitors, porters, and watchmen sleeping in stores; tramps in the station houses and paupers in the casual wards. Even the poor wretches lying under the arches of bridges, on the pavements of public squares, or on benches in the parks, are, so far as possible, identified and accounted for. A great army of trained officials is at work and on the watch, to seize, momentarily to fix, and, as it were, to photograph the inhabitants of the whole Kingdom at the same time; and thus, so far as human skill and ingenuity can effect, to present a picture of the population.

A census of the United States is a very different thing. As in England, the census is supposed to be taken on a certain day—with us, the first of June—but the question regarding each and every man is not where he was on that day, but where, on that day, he had “his usual place of abode.” And to record the inhabitants according to this definition the enumerator is allowed, not one day only, but many days—in cities, two weeks; in rural districts, one month. The most apparent reason for this differ-

ence is the sparseness of settlement over large portions of the country. There are hundreds of thousands of square miles with us on which there is, on an average, but one house to the square mile. There are hundreds of thousands more on which the average is but two or three. Clearly, to organize a system by which the whole census work shall be done in one day, over vast, half-desert areas like these, would be an almost impossible thing.

But an even stronger reason for the difference indicated is found in the essentially political character of the enumeration with us. In Europe the interest is mainly statistical. Here the primary and principal purpose is to prepare for the redistribution of representation. Hence it follows that persons must be recorded, not where they chance to be at any given moment, but where they properly belong. By disregarding this consideration it might easily happen that a great city, like New York or Chicago, would gain fifty or a hundred thousand at the expense of other communities. There were days during the Centennial Exhibition of 1876 when Philadelphia would, according to the European system, have gained fully as much as the largest of these numbers. Such a result would justly be held a grave infringement upon the rights of the cities and States which suffered this accidental loss of population. In a word, a European census is an enumeration of the population *de facto*; and as the interest there is mainly statistical, this is the most satisfactory method, the results being the best that are humanly attainable. The United States census attempts a *de jure* enumeration of the people, and accepts a certain amount of error, statistically, as the price to be paid, since, whenever a definition of residence is introduced into the count, there is always a liability that a person may be taken in both of two places, or that between the two he may be left out of the enumeration altogether; nor is there any assurance that the omissions will balance the duplications. The tendency on one side may be two, three, or four times as great as on the other. The liability to error of one kind or the other is vastly greater in a city or a factory town than in a long-settled agricultural district. It is often greater in one town or city than in another; for example, in New York, where people largely reside in hotels, flats, or boarding-houses, and where in-

termural migration is incessant, than in Philadelphia, where the people, to an almost unparalleled degree, live in their own houses, and where movement within the city is exceptional.

The liability to error in a census of the United States, as a whole, is to-day many fold what it was forty years ago. If one is disposed to ask why, let him consider not only the changes wrought in the proportion between city and rural populations in that time; not only the changes in city populations themselves as to their modes of living; but the astonishing dimensions to which the annual movement from city to country in May and June, and from country to city in October and November, has recently attained. Let him contemplate the great Summer cities which have been built up all along our coasts, the hundreds of hotels and boarding-houses among the mountains, the thousands of Summer villas along the rivers and upon the lakes, which are occupied only in Summer; and he will find no difficulty in accepting the statement that has been made.

To the professional statistician the only thoroughly satisfactory census is one which makes a *de facto* enumeration of the population at the very best time that can be taken for that purpose—a census that takes an instantaneous photograph of the people as they are at a given moment; but the political reasons which have given form to the United States census are likely long to prevent the introduction of such a style of enumeration among us. It may come about in time that the people, out of patience with the inevitable errors of the traditional census, and weary with the quarrels and recriminations between States and cities necessarily attendant upon it, will unanimously agree to waive the theoretical objections to the photographic method, as possibly, probably, and in some degree certainly, affecting unequally the basis of representation, and will accept the latter system as good enough for political purposes, and as vastly more satisfactory from all other points of view.

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RECIPROCITY—WHY SOUTHWARD ONLY?

ALL trade is advantageous to those engaged in its exchanges. It is profitable to him that sells and to him that buys. Without this reciprocity of benefit trade could not exist. The sum of its benefits is in proportion to the value of the articles exchanged, and depends upon the presence or the absence of obstructions in the way between consumer and producer. If obstructions, either natural or artificial, should prevent all trade, domestic and foreign, civilization would be extinguished and human life would go out with it. The converse also is true. If no obstructions, either natural or artificial, should exist, prosperity would touch its highest possible point, and civilization would attain its highest possible development. The mutual profits derived from trade are not restricted to any particular articles nor confined to any particular country. They are not controlled by degrees of latitude, of longitude, or of altitude. Trade is the same in the frigid, the temperate, and the torrid zone. It owes no allegiance to any king, prince, potentate, or power; and yet it is the surest and best supporter of all. It speaks a universal language which, like that once heard at Pentecost, is understood by every people in its own tongue. Wherever it goes—north, south, east, or west; at home or abroad—its message is "On earth, peace; good will toward men."

Many of our statesmen have been deeply impressed with the conviction that though trade at home is a benefit, foreign trade is an unmixed evil, and that to prevent it the oceans should be set on fire, and our sailors should all be hanged rather than be permitted to engage in this hurtful traffic. It is gratifying to see the relaxation of this ironclad idea, even to a very limited extent. This relaxation is one of the happy results of "the campaign of education," whereby the country is now thoroughly aroused. The Executive and the Department of State have impressed upon the attention of Congress and of the country the great