REPORT

OF

THE SUPERINTENDENT OF THE CENSUS,

DECEMBER 1, 1852.

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REPORT OF THE SUPERINTENDENT OF THE CENSUS.

CENSUS OFFICE, *December* 1, 1852.

SIR: I have the honor to report that much the largest portion of the topics embraced within the last census have been prepared for publication, and that the unfinished parts of those subjects contemplated by the act of Congress are in such a state of forwardness, that their preparation will not interfere with the printing. Had our duties been limited to the preparation of the statistical tables, this work would, ere now, have been completed; but, in addition to our ordinary labors, this office has performed a large amount of work in answering calls from members of Congress, State legislatures, various institutions throughout our country, and the representatives of foreign governments. Many of our reports, in answer to these calls, have been quite voluminous, and several have been printed by authority of State legislatures. The uncertainty which seemed to exist respecting the printing of the census increased the number of these demands, and induced us the more readily to accede to such requests, especially as they could be complied with without retarding the publication by Congress.

In my last annual report was presented a full statement of the population of the United States, together with a portion of the returns of agriculture and manufactures. At the close of the last session of Congress, a report was made respecting the condition of the finances of this office, and its expenditures from its first organization to that date.

The classification of the returns has greatly advanced since the commencement of the last session of Congress; and the condition of the work will enable me to present a statement respecting our agricultural resources and the relative increase of our agricultural productions, and to exhibit some facts respecting the value of real and personal estate, education, pauperism, crime, internal improvements, and other topics having an important relation to the welfare and progress of our country.

Having obtained, during my visit to Europe last year, from the different government departments, official data respecting the population of other countries, it may be proper to make such information available, to some extent, in this report; and I therefore append tables of the population of several nations, for different periods in the present century, with other statistics of no less interest and importance.

It might seem, from an examination alone of that portion of our statements relating to internal improvements, that the attention of our people was directed solely to the means of intercommunication for thought or ideas and the interchange of matter, and that the entire population were concentrating their energies, as it were, in a spasmodic effort to extend railways and telegraphs over the country. A more general and particular observation, however, will prove that, while these interests have only advanced with the necessities of our people, the subjects of education, morals, and religion have not only not been neglected, but have received their due share of private attention and public consideration.

While a net-work of internal improvement spreads over our country, there appears to be no inhabited space without its schools and churches, for promoting the education and morals of our people. Institutions are everywhere rising to protect comfortably those visited with the infirmities of life, for the restoration of lost or impaired reason, and for the instruction of those whose education was formerly held to be impossible and hopeless; and it is gratifying to realize that the increase of wealth and refinement has not served to blunt the moral sensibilities of our people, and that prosperity has not tended to obstruct, but to enlarge, the avenues to charity and liberality.

At the commencement of the last session of Congress, I had the honor to report the number of inhabitants of the United States according to the census of 1850, and to present a table showing the rate of increase for sixty years, from which it was seen that we had multiplied at the rate of about 3 per cent. per annum for the whole period. It may not be out of place here to avail ourselves of one of the uses of statistics to exhibit the comparative progress of the population of the mother country for a portion of the period, that, with a full knowledge of her condition, we may study the causes of her distress, and while thankful for our prosperity, may avoid those evils under which she has so much suffered.

By the census of 1851 it appears that the population of England, Ireland, Scotland, Wales, and the islands, including persons in the army, navy, and the merchant service, amounted to 27,619,866; of whom 13,537,052 were males, and 14,082,814 females.

This population is distributed as follows, viz:

	Houses.	Males.	Females.	Total.
England and Wales	3,280,961	8,762,588	9,160,180	17,922,768
Scotland	366,650	1,363,622	1,507,162	2,870,784
Ireland	1,047,735	3,176,727	3,339,067	6,515,794
Islands in the British seas	21,826	66,511	76,405	142,916
Part of the army and navy out of the kingdom	----------	167,604	----------	167,604
	4,717,172	13,537,052	14,082,814	27,619,866

There exists no official record of the population of England previous to the commencement of the present century. The first enumeration of the population of Ireland was made in 1813; but so imperfectly was the work accomplished, that English statists place no reliance on the correctness of the returns, and make no use of them as the basis of calculation; so that the only tables upon which we can found statements with reference to the progress of Ireland from time to time, must be made with reference to the termination of each ten years, ending in 1831, 1841, and 1851. The first census of Great Britain was taken in 1801, at which date the population amounted to 10,567,893. By the census of 1841 the population of Great Britain and the Islands of Jersey, Guernsey, and Man, amounted to 18,658,372. During each ten

years, from 1801 to 1851, the actual increase was as follows, viz: 1,479,562, 2,132,896, 2,184,542, 2,260,749, 2,227,438, being at the rate of 14, 18, 15, 14, and 12 per cent. respectively. The actual increase of the population in fifty years has been 10,317,917; the rate per cent. in fifty years 98, the annual rate per cent. being 1.96.

With respect to Ireland and the returns of 1821, the number of inhabitants at that period was 6,801,827. In 1831, 7,767,401—increase, 965,574; rat per cent., 14.19. In 1841, 8,175,124—increase, 407,723; rate per cen , 5.25. In 1851, 6,515,794—*decrease*, 1,659,330; rate per cent., 20

By this statement we perceive that the population of Ireland increased from 1821 to 1841 at the average rate of about 1 per cent. per annum, while a decrease of 1,659,330 from 1841 to 1851 indicates a most appalling diminution of population, amounting to 2 per cent per annum, or 20 per cent. for the entire ten years—a reduction amounting to the total emigration from the whole United Kingdom from 1839 to 1850.

The contemplation of such a state of affairs is the more melancholy when we consider that the great diminution of population, in place of being equalized through the period of ten years, must have occurred mainly within one or two years; a reduction of population sinking the number of people to a lower point than it was in 1821, when the first census of Ireland was taken; and it would appear in still stronger light if we were to calculate the natural progress the population would have made up to 1846, the year of famine, and estimate what should be the present population if no unnatural cause had operated to reduce it.

The decrease extended to no less than 31 counties and cities, and varied from 9 to 31 per cent., while the only increase which occurred was confined to 9 towns and cities, to which many probably fled to find relief. The greatest decrease occurred in the county of Cork, the population of which was reduced 222,246, viz: from 773,398 inhabitants in 1841, to 551,152 in 1851—equivalent to a reduction of 28 per cent. The decrease in the several provinces was as follows, viz: Leinster, 305,960; Munster, 564,344; Ulster, 382,084; Connaught, 406,942.

These startling and appalling facts proclaim the reality of the sufferings experienced from the famine in Ireland; yet it is some consolation to feel that our distance did not preclude those efforts in her behalf, by our own citizens and government, without which the desolation would have been even more strongly marked.

During ten years the population of the entire kingdom of Great Britain and Ireland increased from 26,833,496 to 27,452,262, or at the rate of a little more than half a million in ten years. In the last fifty years England and Wales increased 102 per cent., (males 105, females 97,50,) and Scotland, 78 per cent., (males 84, females 73.) The population of the United States during the past fifty years has increased at the rate of 337 per cent., and in ten years intervening between the last two censuses, it increased from 17 and a fraction millions to over 23 millions, or 36 per cent. During the same period, (leaving Ireland out of view,) the population of Great Britain increased at the rate of 12 per cent. during ten years, or 1 2-10 per cent. per annum.

Houses.—By the last census it appears that in the United States the number of houses occupied by free persons amounted to 3,363,427. It would seem from the British reports that the population of that country is supplied with houses almost in the precise proportion as in our own country. The proportion being so very nearly alike in the two countries, it would be perhaps satisfactory to institute some inquiry concerning the character of what are termed "houses" by the British census, that we may be enabled to judge of the propriety of estimating the degree of comfort enjoyed by the people from their house accommodations.

While our country cannot boast the princely residences of European countries, the occupancy of which is limited to comparatively few persons, we think there is a general sufficiency and comfort in the house accommodations of the American people, and that in the most remote regions of our country. Where their accommodations are most limited, they exhibit a very satisfactory degree of comfort and cleanliness. The fact is notorious, that where wretchedness is at all general, there will be found a population which formed habits and imbibed tastes in a foreign land.

In comparing the population of Great Britain and Ireland with the inhabited houses, it appears that the whole number of houses in Great Britain amounts to 3,669,437, being nearly one house to each six persons; and that in Ireland the number of inhabited houses amounts to 1,047,735, being in the proportion of 2 houses to each 13 persons. The fact is somewhat extraordinary, that almost precisely in proportion to the diminution of the Irish population since 1841, has been the reduction in the number of houses. By this is not meant the "inhabited houses," but the whole number, including inhabited and uninhabited, built and building, the number of which in 1841 was 1,384,360, to 1,115,007 in 1851, being a reduction of 269,353. The fact is unquestioned that in a very great number of instances in Ireland, the term "house" should be understood merely as applying to something containing human beings, and not as indicating such a structure as the term usually signifies.

Belgium.—*Population and Houses.*—The population of Belgium on the 31st December, 1845, amounted to 4,298,560; on the 15th October, 1846, to 4,337,196.

In the cities of Belgium the houses inhabited amount to 170,455, and those uninhabited to 9,302. In the rural communes the inhabited houses number 629,393; the uninhabited, 20,411. Total number of inhabited houses, 799,848; uninhabited, 29,713. Of these houses, 78.20 per cent. had but one (basement) story; 18.32 per cent. were of two stories, including the basement, and 3.48 per cent. were of three or more stories, including the basement. Of the entire number of houses 160,500 were insured against fire, for the average amount of 6,811 francs. One-fourth of the Belgian population is found enclosed in cities, and the other three-fourths spread over the rural communes. Of the number of dwelling-houses in cities, 72,407 had but one room for a family; 65,461 had two rooms, and 100,402 had three or more rooms, for a family. In the rural communes 82,047 houses had but one room for a family, 217,324 had two rooms, and 352,925 had three or more rooms, for a family.

PRUSSIA.—For the first time the Prussian government has made provision for the publication of their statistics in an extended form. Their census was taken at the close of the year 1849, of which a portion of the results have been published in one large quarto volume, to be followed by two others, under the direction of Dieterici, Director of the Statistical Bureau. The subjects embraced and the divisions included, are public buildings enumerated as churches and houses for prayer, school-houses, orphan and poor asylums, buildings for the administration of public affairs, justice, customs, &c., buildings for ecclesiastical and communal magistracies, military and hospital buildings, private dwelling-houses, factories, mills, &c., stables and barns. Population: male and female, at the ages of 5, 7, 14, 16, 19, 24, 32, 39, 45, and 60, and those over 60. They are enumerated also according to religion, as far as respects Evangelical Christians, Roman Catholics, Greek Christians, Mennonites, and Jews. The deaf and dumb are returned as to age and sex—enumerating them at the ages of 5, 15, 30, and over, respectively; and the blind are returned by age and sex, at the ages of 15, 30, and over 30, respectively. They enumerate their horses, asses, mules, cattle, hogs, sheep and goats, dividing the sheep into three classes. By their census, (1849,) the population of Prussia amounts to—

Males	8,162,805
Females	8,168,382
Total	16,331,187
Number of families	3,180,707
Number of dwelling-houses	1,945,174

Number of churches, 16,897; school-houses, 23,384; asylums for orphans and destitute persons, 5,710; civil, ecclesiastical, military, and hospital buildings, 35,353.

The Evangelical Christians number	10,020,161
Roman Catholics	6,076,252
Deaf and dumb	11,973
Blind	9,579

Population of France.

Years.	Sex.		Total.	Increase of population.	For all the period.	Yearly.
	Men.	Women.				
1801...	13,311,889	14,037,114	27,349,003	.....	.....	.....
1806...	14,312,850	14,794,575	29,107,425	1,758,422	6.43	1.28
1821...	14,796,775	15,665,100	30,461,875	1,354,450	4.65	0.31
1831...	15,930,095	16,639,128	32,569,223	2,107,348	6.92	0.69
1836...	16,460,701	17,080,209	33,540,910	971,687	3.00	0.60
1841...	16,908,674	17,321,504	34,230,178	689,268	2.05	0.41
1846...	17,542,083	17,858,403	35,400,486	1,170,308	3.42	0.68
1851...	.....	.....	35,781,628	381,142	1.06	0.21

From the foregoing statement it will be seen that France, with a population of more than thirty-five millions, has increased in the number of her people but little more than the two States of New York and Pennsylvania, with not more than one-sixth her population, in the same period.

Mortality.—In a former report, the aggregate number of deaths in each State of the Union, during the twelve months prior to June 30, 1850, was given, together with the ratio of deaths to the number living; and some considerations were adduced, showing the most feasible mode of arriving at the law of mortality. The work of condensing this order of statistics has been continued with such discrimination as the nature and value of the returns seemed to require. A great diversity of opinions, it is well known, exists, with respect to the salubrity of the northern and the southern, the maritime and the inland localities of our country, and on no point, perhaps, could reliable information be more reasonably desired. It is not here proposed to discuss the numerous inquiries which this important branch of statistics suggests—how far it shall confirm existing opinions, or awaken an interest, and prepare the way for more full researches. The returns, being the first of their kind in the national census, may seem to require some mode of verification, and in this view the following investigations have been prepared.

The great mass of the white population of this country is of Teutonic origin, with a considerable admixture of Celtic. Located in temperate latitudes, with a climate not greatly differing from that of Europe, the presumption naturally arises that the same laws of life would prevail, and to nearly an equal degree, on both sides of the Atlantic. In the absence of any assignable and special source of change, the universal law of self-preservation and protection might be assumed to produce like results upon both continents. As has been truly observed, "a race of men launched upon the tide of existence, have, by virtue of all the conditions, a determined course to run, which will make its own way, and fulfil its own destiny, in accordance with a system of laws as unalterable and supreme as those which control the physical universe." Without enumerating the conditions and circumstances of vital develop-

ment, the practical conclusion arises, that the values of life for different branches of the Teutonic family of nations, in temperate climates, will not greatly differ; and if the ratios of annual mortality and the expectations of life in America should substantially agree with the like values in European tables, the general correspondence would afford so many credentials of statistical authority. With respect to the northern United States, the returns of Massachusetts have been selected for comparison with those of the national census of England. In applying the same mode of verification to the middle States, the statistics of Maryland have been taken, the table described in last year's report being revised, and male and female lives distinguished. The computations have been executed by Mr. L. W. Meech, whose familiarity with the subject and scientific qualifications afford a sufficient guarantee. In contrast with these results are set the expectations of life in France. The proportion of deaths and the expectations of life, at its several periods, may thus be compared, as follows:

(I.) *Annual deaths per cent.*, 1850.

Ages.	MASSACHUSETTS.		MARYLAND.		ENGLAND, 1841.	
	Males.	Females.	Males.	Females.	Males.	Females.
0— 5	7.105	6.052	5.466	4.875	6.838	5.860
5—10	1.168	.983	1.041	.855	.955	.922
10—15	.452	.573	.477	.606	.509	.545
15—20	.572	.831	.605	.757	.718	.801
20—30	.998	1.170	.896	.938	.949	.942
30—40	1.253	1.346	.991	1.146	1.080	1.121
40—50	1.513	1.325	1.884	1.249	1.410	1.308
50—60	2.067	1.654	2.433	1.712	2.230	1.938
60—70	3.482	2.960	3.405	3.285	4.232	3.761
70—80	6.767	5.762	8.977	7.221	9.150	8.378
80—90	15.000	13.470	15.157	12.280	19.85	18.85
90—100	35.240	27.540	31.132	23.430	37.39	34.57

(II.) *Expectation of life.*

Completed age.	MASSACHUSETTS.		MARYLAND.		ENGLAND.		FRANCE.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
	Years.	*Years.*	*Years.*	*Years.*	*Years.*	*Years.*	*Years.*	*Years.*
0	38.3	40.5	41.8	44.9	40.2	42.2	38.3	40.8
10	48.0	47.2	47.3	49.5	47.1	47.8	47.9	47.4
20	40.1	40.2	39.7	42.1	39.9	40.8	40.0	40.1
30	34.0	35.4	32.9	35.7	33.1	34.3	34.0	33.4
40	27.9	29.8	25.8	29.5	26.6	27.7	27.0	26.6
50	21.6	23.5	20.2	22.7	20.0	21.1	19.9	19.6
60	15.6	17.0	14.4	16.0	13.6	14.4	13.3	13.2
70	10.2	11.3	9.1	10.5	8.5	9.0	8.1	8.1
80	5.9	6.4	6.2	7.0	4.9	5.2	4.8	4.8
90	2.8	3.0	3.9	4.3	2.7	2.8	3.2	3.2

The expectation of life expresses, in years and decimal parts of a year, the future length of life to be lived, on an average, after attaining a given age. Thus, on arriving at the age of thirty the average future life-time of males, by the Massachusetts table, is 34 years, while that of females is 35 and 4-10. The expectations for other ages and columns of the table will readily be understood from mere inspection; though the analytic process of deriving the values, requires much collateral research and professional experience. As the year is a natural unit of time, universally familiar, the expectation is, doubtless, the simplest method that could be devised for exhibiting, at a glance, the changing value of life. Viewed as a whole, the general correspondence both of the ratios of mortality and the mean length of life, from independent sources, sufficiently verifies their accuracy.

For general estimates, adopting the current classification of the States, the American census exhibits the following ratios of mortality, disregarding the ages at death:

	Annual deaths, per cent.	Ratio to the number living.
New England States	1.55	1 to 64
Middle States, with Ohio	1.39	1 to 72
Central slave States	1.38	1 to 73
Coast planting States	1.37	1 to 73
Northwestern States	1.24	1 to 80
United States, total	1.38	1 to 73

It will be seen that the values for the three middle divisions strikingly agree with the average for the United States, as a whole, representing 1 death to 73 living, and this is substantially the ratio stated by N. Webster for interior towns in 1805. "The annual deaths," he observes, "amount only to one in seventy or seventy-five of the population."

The inquiry might arise, in examining the preceding abstract, why the rate of deaths in the northwestern States should be so much lower than in the middle States, and especially New England. In reply, the mere ratios of mortality are not conclusive upon the question of relative longevity, without taking into account the proportions of young and aged, and the increase of population. Without attempting a full explanation, one source of the difference referred to undoubtedly lies in the youthful character of the population of the new States, and the comparative absence of aged persons, who remain in the older States of the Union. The influence of this emigration will be understood by table (I,) where, from the age of five to thirty, the deaths are only from one-half to one per cent.; while above the age of fifty-five, the rate of deaths increases from two to thirty-five per cent. Wisconsin, and other northwestern States, being newly settled by persons chiefly in the prime of

life, in the comparative absence of older persons the per-centage of deaths should be less, as it is indeed given by the census. This distinction will tend, in a considerable degree, to reconcile apparent differences in the returns.

From the year 1840 to 1850, the population of the United States was augmented from seventeen millions to twenty-three millions, the increase being six millions in ten years. At the rate of annual mortality above stated, the total deaths during the same period were from two and a half to three millions, being nearly equal to half the residual increase by births and emigration. Thus, and in various other ways, which space here precludes our specifying, statistics of the persistence of life, pointing ultimately to the removal of special causes of mortality, are essentially related to national happiness and advancement.

With respect to the longevity and vital characteristics of slaves and the free colored, the following epitome of life tables is given for three localities, selected from the northern, middle, and southern States.

The values for New England are deducted from the general census, embracing 23,020 colored residents; that of Maryland is founded upon the total returns of 90,368 slaves; and that of Louisiana upon the aggregate of 244,786 slaves, and 17,537 free colored, taken collectively. The relative preponderance of female African life is remarkable, while the prevalent opinion of the greater mortality of male slaves in Louisiana is statistically confirmed. The table possesses a higher interest, not only from the definite and comprehensive information contained, but from its being the first of the kind for the colored classes in the United States.

(III.) *Expectation of life for colored persons.*

Completed age.	NEW-ENGLAND.		MARYLAND.		LOUISIANA.	
	Colored, male.	Colored, female.	Slaves, male.	Slaves, female.	Colored, male.	Colored, female.
	Years.	*Years.*	*Years.*	*Years.*	*Years.*	*Years.*
0	39.75	42.20	38.47	39.47	28.89	34.09
10	42.92	45.75	45.30	45.00	35.92	40.69
20	35.87	39.92	39.28	39.62	30.48	35.36
30	29.77	34.96	34.41	34.62	26.87	30.86
40	22.83	28.75	27.50	29.00	23.25	25.85
50	18.27	22.11	21.16	23.17	19.13	21.07
60	13.89	17.31	14.32	16.71	14.75	15.27
70	9.42	13.06	8.76	10.57	11.33	10.93
80	6.44	7.87	5.40	6.80	5.38	6.16
90	3.69	4.61	3.80	4.00	3.43	3.34

Nativity of the population.—One of the most interesting results of the census is the classification of inhabitants according to the countries of their birth, presented in an authentic shape in No. 5 of the accompanying tables. We are thus enabled to discover, for the first time, of what our nation is composed. The investigations under this head have re-

sulted in showing that, of the free inhabitants of the United States, 17,737,505 are natives of its soil, and that 2,210,828 were born in foreign countries; while the nativity of 39,014 could not be determined. It is shown that 1,965,518 of the whole number of foreign-born inhabitants were residents of the free States, and 245,310 of the slave States. It is seen that the persons of foreign birth form 11.06 per cent. of the whole free population. The countries whence have been derived the largest portions of these additions to our population appear in the following statement:

Natives of Ireland in the United States in 1850			961,719
Germany	do.	do.	573,225
England	do.	do.	278,675
British America	do.	do.	147,700
Scotland	do.	do.	70,550
France	do.	do.	54,069
Wales	do.	do.	29,868
All other countries	do.	do.	95,022
			2,210,828

The proportion in which the several countries above named have contributed to the aggregate immigrant population, is shown in the subjoined statement:

Ireland	43.04 per cent.
Germany	25.09 "
England	12.06 "
British America	6.68 "
Scotland	3.17 "
France	2.44 "
Wales	1.34 "
Miscellaneous	4.47 "

This view of the living immigrant population is important, as serving to correct many extravagant notions concerning it which have attained extensive currency.

Another interesting branch of this inquiry is that which concerns the inter-migration of our native citizens among the States. The tables presenting a view of this movement will be most useful and valuable in tracing the progress of different portions of the country. The facts developed will show how far one section has impressed its own characteristics and peculiar customs on others. It is found that out of 17,736,792 free inhabitants, 4,112,433 have migrated and settled beyond the States of their birth. Three hundred and thirty-five thousand natives of Virginia, equal to 26 per cent. of the whole, have found homes outside of her own borders. South Carolina has sent forth 163,000, which is 36 per cent. of all native citizens of that State living in the United States at the date of the census, and the very remarkable proportion of 59 per cent. of the number remaining in the State of their nativity. North Carolina has lost 261,575 free inhabitants, equal to 31 per cent., by emigration. Among the northern States,

Vermont and Connecticut have contributed most largely to the settlement of other parts of the country. Their proportion, about 25 per cent. of their native citizens, would exceed perhaps that of either of the southern States already mentioned, were the number of slaves in the latter admitted as an element of the calculation. But the roving tendency of our people is incident to the peculiar condition of their country, and each succeeding census will prove that it is diminishing. When the fertile plains of the West shall have been filled up, and men of scanty means cannot by a mere change of location acquire a homestead, the inhabitants of each State will become comparatively stationary, and our countrymen will exhibit that attachment to the homes of their childhood, the want of which is sometimes cited as an unfavorable trait in our national character.

No. 1—*Nativities.*

STATES.	Maine.	New Hampshire.	Vermont.	Massachusetts.	Rhode Island.	Connecticut.	New York.	New Jersey.	Pennsylvania.	Delaware.	Maryland.	Dist. Columbia.	Virginia.	North Carolina.	South Carolina.	Georgia.	Florida.
Maine	517,117	13,509	1,177	16,535	410	460	973	134	201	36	113	28	94	27	31	24	24
New Hampshire	9,635	261,591	11,266	18,495	364	1,105	1,171	49	148	10	34	14	48	10	21	16	1
Vermont	835	19,609	232,086	15,059	801	4,551	7,218	171	158	1	23	5	21	7	5	18	6
Massachusetts	29,507	39,592	17,646	695,236	11,414	15,602	14,483	778	1,831	90	744	196	796	196	224	237	32
Rhode Island	768	716	459	11,888	102,641	3,976	2,055	193	427	50	365	64	191	76	57	68	22
Connecticut	670	795	1,508	11,366	6,890	292,653	14,416	1,174	1,055	58	265	50	228	95	116	217	46
New York	4,509	14,519	52,599	55,773	13,129	66,101	2,151,196	35,319	26,352	899	3,953	538	3,347	673	935	510	135
New Jersey	287	301	280	1,494	264	2,105	20,561	385,429	15,014	1,384	1,400	82	628	98	141	87	17
Pennsylvania	1,157	1,775	4,532	7,330	1,946	9,266	58,835	29,117	1,844,672	12,552	21,013	767	10,410	409	559	176	21
Delaware	24	31	12	113	204	50	218	1,186	5,067	72,351	4,360	28	139	18	13	14	4
Maryland	456	260	262	1,421	209	484	2,646	1,321	16,076	4,373	400,594	1,940	7,030	225	158	74	37
District of Columbia	87	84	43	331	23	135	817	163	1,164	99	9,245	24,967	4,950	100	100	67	26
Virginia	271	239	231	1,193	100	556	2,934	11,447	6,323	542	10,328	1,184	872,923	7,343	381	193	26
North Carolina	68	26	27	261	59	272	468	174	665	96	635	28,	10,838	556,248	4,420	844	54
South Carolina	68	39	37	407	97	228	884	182	362	14	320	30	1,621	6,173	282,160	1,504	55
Georgia	178	122	186	594	138	712	1,203	331	642	117	703	72	7,331	37,522	52,154	402,582	1,103
Florida	140	61	55	235	66	179	614	83	240	9	194	33	643	3,537	4,470	11,316	20,563
Alabama	215	151	155	654	74	612	1,443	271	876	73	757	66	10,387	28,521	48,663	58,997	1,060
Mississippi	139	100	141	339	62	242	952	221	981	67	791	73	8,357	21,487	27,908	17,506	629
Louisiana	816	247	283	1,620	239	469	5,510	498	2,493	117	1,440	156	3,216	2,923	4,583	5,917	372
Texas	226	97	144	414	56	369	1,589	205	1,005	61	521	35	3,580	5,155	4,482	7,639	365
Arkansas	80	49	82	174	36	121	537	117	702	51	326	49	4,737	8,772	4,587	6,367	38
Tennessee	97	64	179	331	38	261	1,019	248	2,146	95	1,554	101	46,631	72,027	15,197	4,863	369
Kentucky	227	225	277	665	226	448	2,881	1,249	7,491	507	6,470	176	54,694	14,279	3,164	892	30
Ohio	3,314	4,621	14,320	18,763	1,959	22,855	83,979	23,532	200,634	4,715	36,698	598	85,762	4,807	1,468	447	17
Michigan	1,117	2,744	11,113	8,167	1,031	6,751	133,756	5,572	9,452	368	537	45	1,504	312	81	68	12
Indiana	976	886	3,183	2,678	438	2,485	24,310	7,337	44,245	2,737	10,177	227	41,819	33,175	4,069	761	21
Illinois	3,693	4,288	11,381	9,230	1,051	6,899	67,180	6,848	37,979	1,397	6,898	226	24,697	13,851	4,162	1,341	23
Missouri	311	304	630	1,103	124	742	5,040	885	8,291	518	4,253	238	40,777	17,009	2,919	1,254	67
Iowa	713	580	1,645	1,251	256	1,090	8,134	1,199	14,744	439	1,888	70	7,861	2,589	676	119	51
Wisconsin	3,252	2,520	10,157	6,285	690	4,125	68,595	1,566	9,571	141	462	33	1,611	322	107	495	4
California	2,700	904	1,194	4,760	861	1,317	10,160	1,022	4,506	305	1,164	86	3,407	1,027	519	876	54
TERRITORIES.																	
Minnesota	1,334	365	47	100	92	3	48	488	115	227	3	31	3	59	6	4	4	.....
Oregon	3,175	129	44	111	187	20	72	618	69	337	18	73	15	469	201	34	22	4
Utah	1,381	151	123	232	350	21	193	1,430	96	553	17	27	1	99	92	53	12	4
New Mexico	58,421	12	6	8	24	1	10	101	9	97	6	37	12	77	13	18	9	5
Total	64,311	584,310	371,469	377,741	894,818	145,941	447,544	2,698,414	518,810	2,266 727	104,316	528,393	32,236	1,260,982	839,395	448,639	525,536	25,297

No. 1—*Nativities*—Continued.

STATES.	Alabama.	Mississippi.	Louisiana.	Texas.	Arkansas.	Tennessee.	Kentucky.	Ohio.	Michigan.	Indiana.	Illinois.	Missouri.	Iowa.	Wisconsin.	California.	Territories.	Total native.
Maine	6	16	21	9	6	6	14	68	19	5	38	11	1	10	2	4	551,129
New Hampshire	13	9	9	2	8	3	11	66	48	20	31	12	4	10	1	2	304,277
Vermont	11	5	12	1	2	6	7	165	86	15	34	10	5	32	.....	1	280,066
Massachusetts	71	34	179	10	10	25	75	593	122	60	165	58	12	32	7	9	830,066
Rhode Island	13	8	21	4	.....	4	19	98	22	11	15	13	9	6	.....	40	124,299
Connecticut	74	23	64	20	.....	13	41	400	89	47	80	28	18	23	11	3	332,536
New York	184	164	563	46	20	116	369	3,743	1,921	415	605	173	70	360	7	53	2,439,296
New Jersey	36	43	83	6	2	21	64	372	66	61	61	28	7	15	3	1	430,441
Pennsylvania	87	101	187	17	10	158	497	7,729	224	399	333	220	70	45	3	2	2,014,619
Delaware	4	6	4	1	.....	4	16	54	12	19	5	8	.....	1	.....	2	83,968
Maryland	51	143	181	24	14	39	131	535	16	65	54	86	5	4	1	1	438,916
District of Columbia	45	55	58	7	4	58	90	123	28	29	24	28	1	2	.....	3	42,956
Virginia	92	78	93	7	150	1,560	2,029	5,206	33	288	126	223	37	11	4	3	926,154
North Carolina	131	57	14	6	1	2,037	141	48	2	67	23	33	3	4	.....	.....	577,750
South Carolina	225	60	30	1	9	188	73	23	2	11	6	3	.....	.....	1	.....	274,813
Georgia	3,154	184	42	28	25	8,211	458	46	3	50	41	60	1	2	.....	.....	517,995
Florida	2,340	92	146	8	5	112	87	53	7	14	8	7	.....	3	.....	.....	45,320
Alabama	237,542	2,852	628	55	91	22,541	2,694	276	3	93	114	158	7	3	.....	.....	420,032
Mississippi	34,047	140,885	2,557	139	456	27,439	3,948	594	10	413	311	303	7	4	1	5	291,114
Louisiana	7,346	10,913	145,474	864	803	3,352	2,968	1,473	68	414	401	909	28	7	1	1	205,921
Texas	12,040	6,545	4,472	49,160	4,693	17,692	5,478	947	125	1,799	2,855	5,139	109	42	.....	14	137,053
Arkansas	11,250	4,463	1,096	336	63,206	33,807	7,428	1,051	17	2,128	3,276	5,328	106	13	6	9	160,345
Tennessee	6,398	2,137	261	100	496	585,084	12,609	742	7	769	872	920	30	8	.....	2	755,655
Kentucky	792	657	671	71	271	23,623	601,769	9,985	59	5,898	1,649	1,467	59	11	.....	3	740,881
Ohio	209	422	648	29	141	1,873	13,829	1,219,432	2,238	7,377	1,415	656	378	196	.....	24	1,757,556
Michigan	19	34	30	4	25	101	402	14,677	140,648	2,003	496	92	59	332	3	36	341,591
Indiana	395	287	321	44	151	12,734	68,651	120,193	1,817	541,079	4,173	1,006	407	99	.....	11	931,392
Illinois	1,335	490	480	63	727	32,303	49,588	64,219	2,158	30,953	343,618	7,228	1,511	1,095	3	16	736,931
Missouri	2,067	638	746	248	2,120	44,970	69,694	12,737	295	12,752	10,917	277,604	1,366	193	4	80	520,826
Iowa	180	138	133	10	163	4,274	8,994	30,713	521	19,925	7,247	3,807	50,380	692	3	135	170,620
Wisconsin	49	35	78	4	67	449	1,429	11,402	1,900	2,773	5,292	1,012	445	63,015	.....	26	197,912
California	631	772	929	250	350	3,145	4,690	5,500	284	2,077	2,722	5,890	341	248	6,602	317	69,610
TERRITORIES.																	
Minnesota	6	.....	4	.....	11	21	71	241	41	35	168	90	81	301	1	7	4,007
Oregon	20	8	6	15	61	402	730	653	37	739	1,023	2,206	452	10	25	7	11,992
Utah	62	119	8	6	7	294	256	694	121	303	1,285	519	720	30	14	76	9,355
New Mexico	5	.....	4	46	17	25	62	34	8	11	24	93	3	1	6	56	59,261
Total	320,930	172,473	160,253	51,641	74,122	826,690	809,407	1,514,885	153,057	633,117	389,507	315,428	56,738	66,790	6,709	949	17,737,505

No. 2—*Nativities.*

STATES.	England.	Ireland.	Scotland.	Wales.	Germany.	France.	Spain.	Portugal.	Belgium.	Holland.	Turkey.	Italy.	Austria.	Switzerland.	Russia.	Norway.	Denmark.
Maine	1,949	13,871	532	60	290	143	18	58	2	12	4	20	3	11	2	12	47
New Hampshire	1,469	8,811	467	11	147	69	8	8	.....	1	.....	.....	1	9	.....	2	3
Vermont	1,546	15,377	1,045	57	218	40	3	5	.....	2	.....	7	.....	2	1	8	
Massachusetts	16,685	115,917	4,469	214	4,319	805	178	290	36	138	14	196	10	72	38	69	181
Rhode Island	4,490	15,944	988	12	230	80	14	58	2	12	1	25	1	8	1	25	15
Connecticut	5,091	26,689	1,916	111	1,671	321	12	74	2	19	2	16	20	55	5	1	16
New York	84,820	343,111	23,418	7,582	118,398	12,515	461	194	401	2,917	12	833	168	1,850	617	392	429
New Jersey	11,377	31,092	2,263	166	10,686	942	23	16	43	357	.....	30	20	204	22	4	28
Pennsylvania	38,048	151,723	7,292	8,920	78,592	4,083	101	34	126	257	2	172	49	914	139	27	97
Delaware	952	3,513	155	17	343	73	1	.....	1	5	.....	.....	.....	22	1	.....	1
Maryland	3,467	19,557	1,093	260	26,936	507	18	29	5	106	11	82	16	68	23	10	35
District of Columbia	682	2,373	142	20	1,404	80	20	6	14	4	.....	74	3	36	2	.....	6
Virginia	2,598	11,643	947	173	5,511	321	29	51	7	65	.....	65	15	83	8	5	15
North Carolina	394	567	1,012	7	344	43	4	12	1	4	.....	4	2	3	8	.....	6
South Carolina	921	4,051	651	10	2,180	274	30	14	.....	9	.....	59	11	18	19	7	24
Georgia	679	3,202	367	13	947	177	13	5	41	11	1	33	13	38	8	6	24
Florida	300	878	182	11	307	67	70	17	4	8	.....	40	8	7	2	17	21
Alabama	941	3,639	584	67	1,068	503	163	39	4	1	1	90	33	113	10	3	18
Mississippi	593	1,928	317	10	1,064	440	49	2	3	8	.....	121	16	41	9	8	24
Louisiana	3,550	24,266	1,196	48	17,507	11,552	1,417	157	115	112	48	915	156	723	65	64	288
Texas	1,002	1,403	261	17	8,191	647	62	5	8	14	.....	41	11	134	10	105	49
Arkansas	196	514	71	11	516	77	3	3	2	2	.....	15	.....	12	6	1	7
Tennessee	706	2,640	327	17	1,168	245	3	2	4	57	.....	59	10	266	9	.....	8
Kentucky	2,805	9,466	683	171	13,607	1,116	21	5	27	38	.....	143	12	279	70	18	7
Ohio	25,660	51,562	5,232	5,849	111,257	7,375	28	7	103	348	1	174	29	3,291	84	18	53
Michigan	10,620	13,430	2,361	127	10,070	945	10	2	112	2,542	2	12	21	118	25	110	13
Indiana	5,550	12,787	1,341	169	28,584	2,279	3	6	86	43	.....	6	17	724	6	18	10
Illinois	18,628	27,786	4,661	572	38,160	3,396	70	42	33	220	.....	43	65	1,635	27	2,415	93
Missouri	5,379	14,734	1,049	176	44,352	2,138	46	11	58	189	7	124	71	984	29	155	55
Iowa	3,785	4,885	712	352	7,152	382	1	8	4	1,108	.....	1	13	175	41	361	19
Wisconsin	18,952	21,043	3,527	4,319	34,519	775	4	4	45	1,157	.....	9	61	1,244	71	8,651	146
California	3,050	2,452	883	182	2,926	1,546	220	109	12	63	.....	228	87	177	48	124	92
TERRITORIES.																	
Minnesota	84	271	39	2	141	29	1	.....	1	16	.....	1	1	22	2	7	1
Oregon	207	196	106	9	155	45	.....	.....	11	1	.....	5	.....	8	1	1	2
Utah	1,056	106	232	125	50	13	1	.....	.....	.....	.....	1	3	1	1	32	2
New Mexico	43	292	29	1	215	26	8	1	.....	2	.....	1	.....	11	4	2	2
Total	278,675	961,719	70,550	29,868	573,225	54,069	3,113	1,274	1,313	9,848	106	3,645	946	13,358	1,414	12,678	1,838

No. 2—*Nativities*—Continued.

STATES.	Sweden.	Prussia.	Sardinia.	Greece.	China.	Asia.	Africa.	British America.	Mexico.	Central America.	South America.	West Indies.	Sandwich Isl'ds.	Other countries.	Total foreign.	Unknown.	Aggregate.
Maine	55	27	.....	.....	3	5	5	14,181	2	.....	31	61	1	51	31,456	584	583,169
New Hampshire	12	2	.....	.....	.....	4	3	2,501	5	.....	11	17	3	7	13,571	178	317,976
Vermont	.....	6	.....	.....	.....	7	.....	14,470	.....	.....	3	6	4	23	32,831	323	314,120
Massachusetts	253	98	1	23	2	31	27	15,862	32	7	84	303	89	466	160,909	3,539	994,514
Rhode Island	17	5	.....	.....	.....	1	9	1,024	7	21	4	57	8	52	23,111	135	147,545
Connecticut	13	42	.....	1	5	16	72	959	4	.....	35	192	45	57	37,462	794	370,792
New York	753	2,211	.....	.....	34	66	80	47,200	83	29	179	1,067	40	1,041	651,801	6,207	3,097,394
New Jersey	34	57	1	4	4	10	17	581	23	2	27	265	.....	66	58,364	528	489,333
Pennsylvania	133	413	.....	7	1	42	40	2,500	42	4	83	666	3	361	294,871	22,96	2,311,786
Delaware	2	28	.....	.....	.....	.....	10	21	3	.....	3	25	.....	35	5,211	63	89,242
Maryland	57	188	.....	.....	1	2	10	215	8	.....	52	279	2	251	53,288	462	492,666
District of Columbia	5	11	.....	.....	1	4	2	32	9	.....	5	15	.....	17	4,967	77	48,000
Virginia	16	36	.....	.....	3	4	3	235	4	1	7	72	1	76	22,304	585	949,133
North Carolina	9	19	.....	.....	2	.....	2	30	2	4	3	37	.....	5	2,524	217	580,491
South Carolina	29	44	.....	1	1	4	9	57	4	.....	8	177	.....	50	8,662	48	283,523
Georgia	11	25	.....	1	.....	2	13	108	8	.....	8	95	.....	58	5,907	517	524,419
Florida	33	17	.....	.....	.....	3	23	97	6	.....	3	599	.....	37	2,757	58	48,135
Alabama	51	45	.....	7	.....	.....	18	49	39	3	2	28	3	116	7,638	1,109	428,779
Mississippi	14	71	.....	.....	.....	2	6	79	13	1	4	25	.....	110	4,958	576	296,648
Louisiana	249	380	9	23	33	17	90	499	405	3	15	1,337	1	1,173	66,413	619	272,953
Texas	48	75	.....	.....	.....	.....	4	137	4,459	3	1	22	5	60	16,774	604	154,431
Arkansas	1	24	.....	.....	.....	.....	1	41	68	.....	.....	7	.....	50	1,628	684	162,657
Tennessee	8	32	2	2	.....	3	5	76	12	.....	.....	20	.....	59	5,740	1,759	763,154
Kentucky	20	198	1	1	.....	3	4	275	42	1	2	41	.....	133	29,189	1,354	771,424
Ohio	55	765	15	.....	3	6	7	5,880	26	12	41	86	1	544	218,512	4,359	1,980,427
Michigan	16	190	2	1	1	.....	3	14,008	4	.....	5	34	2	66	54,852	1,911	397,654
Indiana	16	740	.....	.....	.....	4	4	1,878	31	.....	4	12	.....	108	54,426	2,508	988,416
Illinois	1,123	288	.....	4	1	2	11	10,699	30	.....	12	75	9	495	110,593	3,946	851,470
Missouri	37	697	1	.....	.....	3	7	1,053	94	.....	20	50	1	954	72,474	1,322	594,622
Iowa	231	88	.....	1	.....	2	.....	1,756	16	.....	1	14	.....	124	21,232	362	192,214
Wisconsin	88	3,545	1	1	.....	17	1	8,277	9	11	6	20	1	191	106,695	784	305,391
California	162	158	1	9	660	117	65	834	6,454	39	877	64	319	400	22,358	629	92,597
TERRITORIES.																	
Minnesota	4	5	.....	.....	.....	.....	.....	1,417	.....	.....	.....	.....	.....	4	2,048	22	6,077
Oregon	2	1	.....	.....	2	.....	.....	293	1	.....	6	.....	50	57	1,159	143	13,294
Utah	1	6	.....	.....	1	.....	.....	338	7	.....	.....	2	.....	12	1,990	9	11,354
New Mexico	1	14	.....	.....	.....	.....	.....	38	1,365	.....	1	2	.....	5	2,063	223	61,547
Total	3,559	10,549	34	86	758	377	551	147,700	13,317	141	1,543	5,772	588	8,214	2,210,828	39,014	19,987,347

Deaf and Dumb.—No one thing perhaps, better proves the value of the statistical details connected with our census, than its efficacy in pointing out the number of the unfortunates who come within the above designation, and who are unable to make known their own wants. Not only does it give us the aggregate in each State, and in our whole country, but its unpublished details so designate and particularize the deaf mutes in the United States, that those who have been led to make their condition and improvement a special study, have now, for the first time, the means to arrive at the age, sex, color, condition, and wants of each. It will appear, from the tabular statement annexed, that the number of white mutes in the United States amounts to 9,091, and the colored to 632, of which 489 are slaves. The census of 1840 returned the number of white deaf and dumb at 6,685, and the colored at 979. The latter amount is clearly erroneous, and was calculated to create an opinion that the deaf mutes were so much more numerous among the colored population of the North than among the whites; in fact, there were, by the census of 1840, colored mutes returned for counties where no colored persons existed. The proportion of deaf mutes among the colored is less than among the white population; and among the slaves the proportion is still smaller. Among the white population there appears to be one deaf mute to each 2,151 persons; of the free colored, one to each 3,005; and among the slaves, one to each 6,552.

The directors of several institutions for the deaf and dumb memorialized Congress at its last session to provide for the publication of a small volume, to be prepared by this office, in which should be given the name, age, sex, residence, occupation, &c., of each deaf mute in the United States. Such a work would be of great value to such institutions, but of more consequence to the unfortunate class it would be specially designed to benefit. It would lead to the discovery of hundreds whose abode is unknown, and render available to those unable to proclaim their wants, the blessings of instruction. In addition to its beneficent effects upon the afflicted, the information thus imparted would furnish many interesting details useful in a practical point of view.

The method of deaf mute instruction was introduced from Europe, thirty-five years ago. To study into the improvements effected there within that time, institutions in this country have sent, at different periods, commissioners into different portions of Europe, and the result of their investigations appears to have led to the conclusion "that in the matter of intellectual instruction we have very little to learn from European schools, while in the very important point of religious instruction *they* are painfully inferior."

Deaf and Dumb.

States and Territories.	White.		Free colored.		Slaves.		Aggregate.
	Male.	Female.	Male.	Female.	Male.	Female.	
Maine	140	89	1	.....	.....	.....	230
New Hampshire	87	76	.....	.....	.....	.....	163
Vermont	75	68	.....	1	.....	.....	144
Massachusetts	204	156	1	3	.....	.....	364
Rhode Island	34	27	2	1	.....	.....	64
Connecticut	211	174	2	2	.....	.....	389
New York	682	615	5	5	.....	.....	1,307
New Jersey	111	81	7	4	.....	.....	203
Pennsylvania	521	465	14	4	.....	.....	1,004
Delaware	28	26	1	1	.....	2	58
Maryland	103	92	19	17	15	8	254
District of Columbia	7	9	.....	2	1	.....	19
Virginia	325	256	10	8	67	45	711
North Carolina	198	153	1	3	29	23	407
South Carolina	74	55	.....	1	11	4	145
Georgia	116	95	.....	.....	20	21	252
Florida	8	4	.....	.....	6	4	22
Alabama	96	61	1	.....	28	25	211
Mississippi	52	29	.....	1	13	13	108
Louisiana	58	31	3	2	22	12	128
Texas	33	16	.....	.....	6	3	58
Arkansas	46	37	.....	.....	4	2	89
Tennessee	195	140	.....	2	16	24	377
Kentucky	253	232	1	3	28	22	539
Ohio	503	436	6	2	.....	.....	947
Michigan	62	59	.....	1	.....	.....	122
Indiana	301	213	4	.....	.....	.....	518
Illinois	283	190	.....	2	.....	.....	475
Missouri	128	116	.....	.....	10	5	259
Iowa	27	24	.....	.....	.....	.....	51
Wisconsin	42	23	.....	.....	.....	.....	65
California	5	1	.....	.....	.....	.....	6
Minnesota Territory	.....	.....	.....	.....	.....	.....	.....
Oregon Territory	.....	.....	.....	.....	.....	.....	.....
Utah Territory	.....	.....	.....	.....	.....	.....	.....
New Mexico Territory	19	9	.....	.....	.....	.....	28
Aggregate	5,027	4,058	78	65	276	213	9,717

Blind.—By the table annexed, it will be seen that the number of persons in the United States who are destitute of sight is 9,702, of which 7,997 are white, and 1,705 colored, of which latter 1,211 are slaves. By the census of 1840, the number of white blind persons in the United States was returned at 5,030; the colored ditto, 1,892. The same error respecting the *colored* blind existed with the last census as has been shown to exist respecting the deaf and dumb. We present a table giving the numbers and proportions of the deaf and dumb, blind, insane, and idiotic, among the white, free colored, and slaves, respectively. From this table it will be seen that muteness and insanity are more prevalent among the whites, and blindness and idiocy among the colored. Among the white population there appears to be one blind person for each

2,445 persons; among the free colored, one to each 870; and among the slaves, one to each 2,645.

An analysis with respect to native and foreign population, made from the returns, by Harvey P. Peet, LL. D., presents the fact that the blind and insane are much more numerous among our foreign population, which he attributes to "home-sickness, change of climate, and the various hardships of an emigrant's lot," which have a strong influence in inducing insanity, and perhaps blindness.

Blind.

States and Territories.	White.		Colored.		Slaves.		Aggregate.
	Male.	Female.	Male.	Female.	Male.	Female.	
Maine	115	86	.....	.....	.....	.....	201
New Hampshire	69	65	1	1	.....	.....	136
Vermont	89	49	.....	.....	.....	.....	138
Massachusetts	270	220	4	3	.....	.....	497
Rhode Island	39	22	1	2	.....	.....	64
Connecticut	110	67	12	3	.....	.....	192
New York	738	483	29	22	.....	.....	1,272
New Jersey	114	72	10	17	.....	.....	213
Pennsylvania	443	355	20	11	.....	.....	829
Delaware	10	17	7	12	.....	.....	46
Maryland	96	97	30	41	22	21	307
District of Columbia	7	7	5	3	.....	1	23
Virginia	261	275	56	65	137	202	996
North Carolina	182	205	13	15	57	60	532
South Carolina	91	61	6	8	31	25	222
Georgia	128	96	1	4	38	42	309
Florida	10	2	.....	2	8	4	26
Alabama	82	82	1	2	73	68	308
Mississippi	75	55	.....	1	35	51	217
Louisiana	36	31	15	10	60	66	218
Texas	36	23	2	1	12	2	76
Arkansas	45	30	.....	1	3	2	81
Tennessee	199	186	4	6	29	44	468
Kentucky	249	172	8	11	46	44	530
Ohio	370	283	7	5	.....	.....	665
Michigan	72	50	.....	.....	.....	.....	122
Indiana	189	151	4	5	.....	.....	349
Illinois	156	97	1	3	.....	.....	257
Missouri	104	76	2	1	11	17	211
Iowa	28	19	.....	.....	.....	.....	47
Wisconsin	34	16	.....	.....	.....	.....	50
California	.....	.....	.....	.....	.....	.....	.....
Minnesota Territory	.....	.....	.....	.....	.....	.....	.....
Oregon Territory	.....	.....	.....	.....	.....	.....	.....
Utah Territory	2	.....	.....	.....	.....	.....	2
New Mexico Territory	70	28	.....	.....	.....	.....	98
Aggregate	4,519	3,478	239	255	562	649	9,702

Insane and Idiotic.—The number of insane persons in the United States is given at 15,768; of whom 15,156 are whites, 321 free colored, and 291 slaves. The number of idiots returned is 15,706, distributed as follows: whites, 14,230; free colored, 436; slaves, 1,040: total insane and idiotic, 31,474; total whites, 29,386; total blacks, 2,088. By the census of 1840 these two classes of persons were returned together—a thing not generally understood—and presented the following numbers: white insane and idiotic, 14,508; colored insane and idiotic, 2,926: total, 17,434. These figures make it appear that with the white population in the United States there exists one insane person for each 1,290 individuals; among the free colored, one to each 1,338; and among the slaves, one to each 11,010. With respect to idiocy, the white population presents one to each 1,374 persons; the free colored, one to each 985; and among the slaves, one to each 3,080. Want of time will not permit a sufficiently detailed examination to arrive at the causes which present these unfortunate beings in such greater number than they appeared in 1840. From the manner of taking the census of 1850, they could not be rated higher than their actual numbers; and it follows, therefore, that the returns of 1840 must have been deficient, or that an error occurred in placing the figures in the tables. A more particular examination of both sets of returns will be made previous to the printing of the Seventh Census, in which it is hoped the discrepancy will be satisfactorily explained. Throughout our country increased attention is being paid to the amelioration of the condition of this class of our population—a feeling kept in active operation, and made to yield continually practical fruits, mainly through the instrumentality and devoted zeal of one American lady, whose reputation is not limited, and whose influence is not confined to her native country.

Insane.

States and Territories.	Whites.		Free colored.		Slaves.		Aggregate
	Male.	Female.	Male.	Female.	Male.	Female.	
Maine	279	254	3	----	----	----	536
New Hampshire	188	197	----	----	----	----	385
Vermont	276	276	----	----	----	----	552
Massachusetts	781	848	10	8	----	----	1,647
Rhode Island	121	127	3	1	----	----	252
Connecticut	218	231	9	4	----	----	462
New York	1,198	1,346	18	18	----	----	2,580
New Jersey	197	178	3	8	----	----	386
Pennsylvania	924	918	16	33	----	----	1,891
Delaware	29	28	6	7	----	----	70
Maryland	226	251	23	29	9	15	553
District of Columbia	10	3	4	4	1	----	22
Virginia	505	417	19	27	22	36	1,026
North Carolina	220	242	4	1	9	15	491
South Carolina	108	84	1	2	3	6	204
Georgia	157	124	1	1	7	16	306
Florida	4	2	----	----	1	1	8
Alabama	106	102	1	1	18	17	245
Mississippi	71	56	----	----	12	10	149
Louisiana	83	67	6	9	14	29	208
Texas	24	15	----	1	1	----	41
Arkansas	38	22	----	----	2	1	63
Tennessee	258	195	1	3	8	13	478
Kentucky	271	217	1	2	8	8	507
Ohio	695	640	11	6	----	----	1,352
Michigan	71	64	1	----	----	----	136
Indiana	300	269	2	8	----	----	579
Illinois	137	109	----	3	----	----	249
Missouri	140	131	1	1	2	7	282
Iowa	19	21	----	----	----	----	40
Wisconsin	27	21	----	----	----	----	48
California	2	----	----	----	----	----	2
Minnesota Territory	----	----	----	----	----	----	----
Oregon Territory	4	----	----	----	----	----	4
Utah Territory	2	1	----	----	----	----	3
New Mexico Territory	8	3	----	----	----	----	11
Aggregate	7,697	7,459	144	177	117	174	15,768

Idiotic.

States and Territories.	Whites.		Free colored.		Slaves.		Aggregate.
	Male.	Female.	Male.	Female.	Male.	Female.	
Maine	330	225	3	.....	.....	.....	558
New Hampshire	208	140	4	.....	.....	.....	352
Vermont	171	109	1	.....	.....	.....	281
Massachusetts	465	320	4	2	.....	.....	791
Rhode Island	65	39	1	2	.....	.....	107
Connecticut	182	114	3	1	.....	.....	300
New York	1,032	689	8	10	.....	.....	1,739
New Jersey	242	168	9	7	.....	.....	426
Pennsylvania	799	587	34	28	.....	.....	1,448
Delaware	38	40	7	12	3	1	101
Maryland	147	121	32	21	41	31	393
District of Columbia	3	4	3	1	.....	.....	11
Virginia	560	385	64	56	125	95	1,285
North Carolina	338	266	12	20	74	64	774
South Carolina	139	103	1	2	26	24	295
Georgia	264	212	.....	3	59	39	577
Florida	23	6	1	.....	4	3	37
Alabama	219	144	.....	.....	80	62	505
Mississippi	88	53	1	4	36	28	210
Louisiana	67	37	5	8	28	28	173
Texas	58	39	1	.....	7	3	108
Arkansas	51	40	2	.....	7	2	102
Tennessee	439	350	2	2	36	25	854
Kentucky	428	321	13	7	48	32	849
Ohio	769	611	10	9	.....	.....	1,399
Michigan	113	74	3	.....	.....	.....	190
Indiana	520	386	7	6	.....	.....	919
Illinois	213	155	2	1	.....	.....	371
Missouri	186	118	.....	.....	11	18	333
Iowa	45	48	.....	.....	.....	.....	93
Wisconsin	45	31	1	.....	.....	.....	77
California	2	1	.....	.....	.....	.....	3
Minnesota Territory	.....	1	.....	.....	.....	.....	1
Oregon Territory	4	.....	.....	.....	.....	.....	4
Utah Territory	1	1	.....	.....	.....	.....	2
New Mexico Territory	22	16	.....	.....	.....	.....	38
Total	8,276	5,954	234	202	585	455	15,706

Statement showing the ratio of the deaf and dumb, blind, insane and idiotic, to the aggregate population, by classes.

	Aggregate population.	Number of deaf and dumb.	Ratio of one to—	Ratio per cent.	Number of blind.	Ratio of one to—	Ratio per cent.	No. of insane	Ratio of one to—	Ratio per cent.	No. of idiotic.	Ratio of one to—	Ratio per cent.	Total afflicted.	Ratio of one to—	Ratio per cent.
Whites	19,557,271	9,091	2,151	0.04	7,997	2,445	0.04	15,156	1,290	0.07	14,230	1,374	0.07	46,474	420	0.23
Free colored.	429,710	143	3,005	0.03	494	870	0.11	321	1,338	0.07	436	985	0.10	1,394	308	0.32
Slaves	3,204,093	489	6,552	0.01	1,211	2,645	0.03	291	11,010	.....	1,040	3,080	0.03	3,031	1,057	0.09
Aggregate.	23,191,074	9,723	2,385	0.04	9,702	2,390	0.04	15,768	1,470	0.06	15,706	1,476	0.06	50,899	455	0.21

Education.—It was intended to accompany this report with a tabular statement, presenting the statistics of education in the United States. We are compelled to defer such table to a future period for want of time to complete it. It may be satisfactory to state that near 4,000,000 of our youth were receiving instruction in the various educational institutions of the country on the 1st of June, 1850, or at the rate of one in every five free persons. The teachers number more than 115,000, and the colleges and schools near 100,000. I will endeavor to furnish in a few weeks a detailed statement of the condition of the American people as respects education, to which time it will be proper to defer extended remarks.

Pauperism.—No State in the Union is without its legal provisions for the protection and support of the indigent population. In many they receive a care and attention which places them in an enviable condition, compared with some of the laboring classes of other countries.

By the table annexed to this report, it will be perceived that the whole number of persons who have received the benefit of the public funds of the different States for the benefit of indigent persons, amounts to 134,972. Of this number there were 68,538 of foreign birth, and 66,434 Americans; while of the whole number receiving support on the first day of June there were 36,916 natives, and 13,437 foreigners, making a total of 50,353 persons. Of those termed Americans, many are free persons of color. The entire cost of the support of these individuals during the year has amounted to $2,954,806. This aggregate may seem startling to persons who have paid but little attention to pauper statistics in our own and other countries, and it may be useful, and perhaps not amiss, to compare these facts with results as they are officially developed abroad.

In 1818, about $39,000,000, and during the years 1832, '33, and '34, more than $100,000,000, was expended for the relief and maintenance of the poor of England and Wales, exclusive of the immense expenditure of the Poor Law administration in the unions and parishes. In 1842 and '43, the amount of $50,000,000, and during each of the years 1847, '48, and '49, there was expended $28,500,000 in England and Wales. The entire number of paupers relieved by the public funds in England and Wales for nine years, from 1840 to 1848 inclusive, amounted to 13,193,425, equal to 1,649,178 persons per annum; in 1848, the number relieved was 1,876,541, by which it appears that one person in every eight was a pauper. The average number of those annually relieved, who are represented to have been "adult and able-bodied paupers," amounted to more than 477,000; and it is on British authority asserted that in 1848 more than 2,000,000 in England and Wales were kept from starvation by relief from public and private sources. The total public expenditure for the poor in England and Ireland, in 1848, amounted to $42,750,000. Within the past seventeen years, the Poor Law fund expended in England and Wales amounted to $426,600,000. This enormous expenditure, accompanied, as it is, by immense private contributions, falls far short of relieving the wants of the poor of Great Britain. While her population embraces a large number of persons of princely estates, and other classes composed of individuals of every variety of income, combining with it ease, com-

fort, and elegance, the statistics of the nation prove that the substratum of pauperism, or want, is of a magnitude alarming to the English moralist and thinker, as well as the statesman, and of an extent and nature harrowing to all.

The expenses of the organized benevolent institutions of France amounted, in 1847, to 52,000,000 francs. The number of distressed persons relieved amounted to about 450,000 annually. We have no means of arriving approximately at the number of paupers in France, as the institutions above referred to are confined to the cities and large towns, while among the rural communes, which contain several millions of landed proprietors, there are large numbers of persons in receipt of public support. It appears from a report of M. Duchatel, Minister of Commerce, that 695,932 persons received public alms at their own houses.

The Netherlands, in 1847, with a population of 6,167,000, contained 11,400 charitable institutions, which contributed to the support of 1,214,055 persons—about one-fifth of the entire population.

Pauperism.

States.	Whole No. of paupers who received support within the year ending June 1, 1850.			Whole No. of paupers on June 1, 1850.			Annual cost of support.
	Native.	Foreign.	Total.	Native.	Foreign.	Total.	
Maine	4,553	950	5,503	3,209	326	3,535	$151,664
New Hampshire	2,853	747	3,600	1,998	186	2,184	157,351
Vermont	2,043	1,611	3,654	1,565	314	1,879	120,462
Massachusetts	6,530	9,247	15,777	4,059	1,490	5,549	392,715
Rhode Island	1,115	1,445	2,560	492	204	696	45,837
Connecticut	1,872	465	2,337	1,463	281	1,744	95,624
New York	19,275	40,580	59,855	5,755	7,078	12,833	817,336
New Jersey	1,816	576	2,392	1,339	239	1,578	93,110
Pennsylvania	5,898	5,653	11,551	2,654	1,157	3,811	232,138
Delaware	569	128	697	240	33	273	17,730
Maryland	2,591	1,903	4,494	1,681	320	2,001	71,668
Virginia	4,933	185	5,118	4,356	102	4,458	151,722
North Carolina	1,913	18	1,931	1,567	13	1,580	60,085
South Carolina	1,313	329	1,642	1,113	180	1,293	48,337
Georgia	978	58	1,036	825	29	854	27,820
Florida	64	12	76	58	4	62	937
Alabama	352	11	363	306	9	315	17,559
Mississippi	248	12	260	245	12	257	18,132
Louisiana	133	290	423	76	30	106	39,806
Texas	7	.....	7	4	.....	4	438
Arkansas	97	8	105	67	.....	67	6,888
Tennessee	994	11	1,005	577	14	591	30,981
Kentucky	971	155	1,126	690	87	777	57,543
Ohio	1,904	609	2,513	1,254	419	1,673	95,250
Michigan	649	541	1,190	248	181	429	27,556
Indiana	860	322	1,182	446	137	583	57,560
Illinois	386	411	797	279	155	434	45,213
Missouri	1,248	1,729	2,977	251	254	505	53,243
Iowa	100	35	135	27	17	44	5,358
Wisconsin	169	497	666	72	166	238	14,743
Aggregate	66,434	68,538	134,972	36,916	13,437	50,353	2,954,896

Crime.—The statistics of crime form a subject of our investigation. From the returns, it appears that the whole number of persons convicted of crime in the United States, for the year ending the first day of June 1850, was about 27,000; of these, 13,000 were native and 14,000 foreign born. The whole number in prison on the first day of June was about 6,700, of whom 4,300 were native and 2,460 foreign. It will be born in mind that the native prisoners include colored convicts, the number of whom it is impossible to state, as time has not sufficed to admit of the more particular separation into classes other than native and foreign. Our criminal statistics, when fully understood, will present many subjects for reflection, and open a wide and interesting field for the study of the Christian, moralist, and statesman.

Churches.—The assistant marshals were required to give an account of churches, including halls and chapels, if statedly used as places of public worship, belonging to all religious denominations. By the returns made, it appears there are 36,011 churches in the several States, and 210 in the District of Columbia and the Territories. The churches in California and the Territories are not fully returned; but the religious denominations in those places are not supposed to have possessed numerous or large buildings. The halls and school-houses which are used in many of the thinly-settled portions of the country, and in cities, by societies which are unable to build houses of worship for their own use, are not included. By the "aggregate accommodations," in the table, is meant the total number of seats for individuals. Under the "value of church property" is included the valuation of each of the churches and property owned by the different religious denominations.

By the annexed tables it will appear that the total value of church-property in the United States is $86,416,639, of which one-half is owned in New York, Massachusetts, and Pennsylvania. In the table we specify the principal, out of more than 100 denominations returned, although between some of these there are but slight shades of difference in sentiment or form of church government. About 30 are returned as "African," 30 as "Independent," and 20 as "Protestant," without distinguishing them more particularly. These, and all the churches not properly classed under the heads given, are included in "minor sects." All the varieties of Baptists, Methodists, and Presbyterians, are included under their general heads, except where distinctly specified.

There is one church for every 557 free inhabitants, or for every 646 of the entire population.

The average number the churches will accommodate is 384, and the average value $2,400.

Churches are more numerous, in proportion to the population, in Indiana, Florida, Delaware, and Ohio; and less numerous in California, Louisiana, and Iowa.

Those in Massachusetts are the largest, and have the greatest average value.

The following tables present interesting facts respecting the relative value and size of the churches in the several States, and those of dif-

ferent denominations. They also show the number of churches to the total population in each State:

States.	Number of churches.	Ratio of churches to the population.	Aggregate accommodations of the churches.	Av'age accommodations in each State.	Total value of church property.	Average value in each State.
Maine	851	685	304,477	358	$1,712,152	$2,012
New Hampshire	602	528	233,892	389	1,401,586	2,327
Vermont	564	556	226,444	401	1,213,126	2,151
Massachusetts	1,430	695	682,908	478	10,205,284	7,137
Rhode Island	221	667	98,736	447	1,252,900	5,669
Connecticut	719	515	305,249	425	3,554,894	4,944
New York	4,084	758	1,896,229	464	21,132,707	5,174
New Jersey	807	606	344,933	427	3,540,436	4,387
Pennsylvania	3,509	658	1,566,413	446	11,551,885	3,297
Delaware	180	508	55,741	310	340,345	1,891
Maryland	909	641	390,265	429	3,947,884	4,343
Virginia	2,336	608	834,691	357	2,849,176	1,220
North Carolina	1,678	517	558,204	333	889,393	530
South Carolina	1,163	574	453,930	391	2,140,346	1,962
Georgia	1,723	525	612,892	356	1,269,159	737
Florida	152	507	41,170	271	165,400	1,088
Alabama	1,235	624	388,605	315	1,132,076	836
Mississippi	910	666	275,979	303	754,542	829
Louisiana	278	1,862	104,080	374	1,782,470	6,412
Texas	164	1,296	54,495	332	200,530	1,223
Arkansas	185	1,133	39,930	216	89,315	483
Tennessee	1,939	517	606,695	313	1,208,876	623
Kentucky	1,818	540	672,033	370	2,260,098	1,243
Ohio	3,890	509	1,447,632	372	5,765,149	1,225
Michigan	362	1,098	118,892	328	723,200	1,998
Indiana	1,947	507	689,330	354	1,512,485	777
Illinois	1,167	729	479,078	411	1,476,335	1,265
Missouri	773	882	241,139	312	1,558,590	2,016
Iowa	148	1,298	37,759	255	177,400	1,199
Wisconsin	244	1,250	78,455	322	350,600	1,437
California	23	7,173	9,600	417	258,300	1,123
Total	36,011	646	13,849,896	384	86,416,639	2,400

Denominations.	No. of churches.	Aggregate accommodations.	Average accommodations.	Total value of church property.	Average value of property.
Baptist	8,791	3,130,878	356	$10,931 382	$1,244
Christian	812	296,050	365	845,810	1,041
Congregational	1,674	795,177	475	7,973,962	4,763
Dutch Reformed	324	181,986	561	4,096,730	12,644
Episcopal	1,422	625,213	440	11,261,970	7,919
Free	361	108,605	300	252,255	698
Friends	714	282,823	396	1,709,867	2,395
German Reformed	327	156,932	479	965,880	2,953
Jewish	31	16,575	534	371,600	11,987
Lutheran	1,203	531,100	441	2,867,886	2,383
Mennonite	110	29,900	272	94,245	856
Methodist	12,467	4,209,333	337	14,636,671	1,174
Moravian	331	112,185	338	443,347	1,339
Presbyterian	4,584	2,040,316	445	14,369,889	3,135
Roman Catholic	1,112	620,950	558	8,973,838	8,069
Swedenborgian	15	5,070	338	108,100	7,206
Tunker	52	35,075	674	46,025	885
Union	619	213,552	345	690,065	1,114
Unitarian	243	137,367	565	3,268,122	13,449
Universalist	494	205,462	415	1,767,015	3,576
Minor Sects	325	115,347	354	741,980	2,283
Total	36,011	13,849,896	384	86,416,639	2,400

States and Territories.	BAPTIST.			CHRISTIAN.			CONGREGATIONAL.		
	No. of churches.	Aggregate accommodations.	Total value of church property.	No. of churches.	Aggregate accommodations.	Total value of church property.	No. of churches.	Aggregate accommodations.	Total value of church property.
Maine	283	93,079	$426,787	9	3,580	$13,800	165	67,153	$526,270
New Hampshire	180	62,621	318,756	23	7,240	30,350	172	79,656	527,340
Vermont	88	31,937	153,842	7	2,220	12,000	168	76,122	451,084
Massachusetts	262	114,140	1,460,350	29	11,020	84,450	439	237,237	3,279,089
Rhode Island	100	40,131	366,300	7	2,500	24,300	21	11,703	178,550
Connecticut	113	44,384	406,034	4	950	5,500	252	127,320	1,657,185
New York	776	334,274	2,252,350	62	20,000	79,650	214	102,430	779,304
New Jersey	107	43,225	334,600	8	2,835	10,400	8	3,500	37,700
Pennsylvania	317	127,308	806,395	19	6,400	24,400	9	3,100	17,250
Delaware	12	2,975	16,800	.....	.....	.....	.....	.....	.....
Maryland	48	16,800	132,810	.....	.....	.....	.....	.....	.....
Virginia	639	241,689	687,918	16	4,900	7,595	.....	.....	.....
North Carolina	573	195,727	201,448	29	11,600	10,575	.....	.....	.....
South Carolina	413	165,805	293,863	.....	.....	.....	1	2,000	70,000
Georgia	821	310,063	390,801	5	1,710	12,050	1	250	2,700
Florida	45	10,400	25,640	.....	.....	.....	.....	.....	.....
Alabama	505	158,880	227,297	13	3,550	6,165	.....	.....	.....
Mississippi	336	105,050	186,192	8	2,350	9,950	.....	.....	.....
Louisiana	72	15,385	30,470	2	1,500	61,000	.....	.....	.....

Texas	30	8,075	19,790	1	100	150			
Arkansas	73	14,730	21,870						
Tennessee	611	188,815	269,424	57	17,800	48,295			
Kentucky	789	290,460	571,655	112	48,040	165,725			
Ohio	545	184,098	598,730	90	30,190	56,155	100	41,920	207,880
Michigan	58	17,615	84,050	1	350	1,000	29	10,500	59,550
Indiana	412	136,333	211,585	182	64,266	88,640	2	1,400	8,000
Illinois	265	91,620	204,095	67	30,754	42,950	46	15,576	89,250
Missouri	273	71,857	154,480	51	19,370	43,210			
Iowa	16	3,497	19,550	8	2,125	6,300	14	4,725	21,550
Wisconsin	28	9,505	52,500	2	700	1,200	33	10,585	61,260
California	1	400	5,000						
	8,791	3,130,878	10,931,382	812	296,050	845,810	1,674	795,177	7,973,962
District of Columbia	6	3,460	29,300						
Minnesota Territory									
New Mexico Territory									
Oregon Territory	1	100	2,000				1	500	6,200
Utah Territory									

Statistics of the Churches in the United States—Continued.

States and Territories.	DUTCH REFORMED.			EPISCOPAL.			FREE.		
	No. of churches.	Aggregate accommodations.	Total value of church property.	No. of churches.	Aggregate accommodations.	Total value of church property.	No. of churches.	Aggregate accommodations.	Total value of church property.
Maine	.....	.....	.....	8	3,937	$52,600	19	6,742	$25,700
New Hampshire	.....	.....	.....	11	4,425	41,400	2	750	4,000
Vermont	.....	.....	.....	25	10,525	81,500	1	100	300
Massachusetts	.....	.....	.....	53	23,595	697,250	3	1,000	11,750
Rhode Island	.....	.....	.....	26	11,606	248,500	2	611	5,000
Connecticut	.....	.....	.....	100	44,350	773,875	1	325	800
New York	232	131,025	$3,542,850	275	138,945	4,110,824	15	4,600	28,700
New Jersey	66	39,146	460,430	51	19,447	473,409	7	2,400	7,500
Pennsylvania	7	6,640	79,500	135	67,324	1,483,700	22	6,400	15,050
Delaware	.....	.....	.....	21	7,650	78,900	.....	.....	.....
Maryland	.....	.....	.....	133	60,105	610,877	.....	.....	.....
Virginia	.....	.....	.....	167	73,884	527,150	107	35,025	61,900
North Carolina	.....	.....	.....	47	14,970	112,100	51	14,545	15,860
South Carolina	.....	.....	.....	71	28,540	615,450	5	1,550	1,700
Georgia	.....	.....	.....	19	8,975	109,910	5	1,580	2,650
Florida	.....	.....	.....	10	3,810	37,800	1	400	400
Alabama	.....	.....	.....	16	6,220	76,300	5	1,800	2,300
Mississippi	.....	.....	.....	13	4,550	66,800	3	700	1,850
Louisiana	.....	.....	.....	12	4,410	57,900	3	675	10,430

Texas	.....	.....	.....	5	1,025	15,100	7	1,600	7,100
Arkansas	.....	.....	.....	2	350	4,250	1	200	200
Tennessee	.....	.....	.....	17	7,810	85,300	28	6,900	6,665
Kentucky	.....	.....	.....	17	7,050	112,150	32	8,777	13,100
Ohio	5	1,150	2,600	79	31,975	367,425	13	5,100	9,550
Michigan	6	1,575	6,250	25	8,425	82,800	1	700	3,000
Indiana	4	1,025	1,650	24	7,300	74,000	10	2,750	5,700
Illinois	2	875	2,700	27	14,000	78,350	2	750	6,400
Missouri	.....	.....	.....	10	4,200	135,600	13	2,350	4,400
Iowa	.....	.....	.....	4	670	5,000	.....	.....	.....
Wisconsin	2	550	750	19	5,140	45,750	2	275	250
California	.....	.....	.....	.....	.....	.....	.....	.....	.....
	324	181,986	4,096,730	1,422	625,213	11,261,970	361	108,605	252,255
District of Columbia	.....	.....	.....	8	6,400	57,500	.....	.....	.....
Minnesota Territory	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Mexico Territory	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oregon Territory	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utah Territory	.....	.....	.....	.....	.....	.....	.....	.....	.....

Statistics of the Churches in the United States—Continued.

States and Territories.	Friends.			German Reformed.			Jewish.		
	No. of churches.	Aggregate accommodations.	Total value of church property.	No. of churches.	Aggregate accommodations.	Total value of church property.	No. of churches.	Aggregate accommodations.	Total value of church property.
Maine	24	7,225	$14,580	.....	.....	.....	.....	.....	.....
New Hampshire	15	4,700	15,200	.....	.....	.....	.....	.....	.....
Vermont	7	2,550	5,500	.....	.....	.....	.....	.....	.....
Massachusetts	37	13,823	108,600	.....	.....	.....	1	200	$1,200
Rhode Island	18	6,370	57,800	.....	.....	.....	1	300	1,000
Connecticut	5	1,025	7,150	.....	.....	.....	.....	.....	.....
New York	132	49,314	309,380	1	600	$15,000	9	5,600	126,000
New Jersey	52	25,545	207,100	.....	.....	.....	.....	.....	.....
Pennsylvania	141	60,974	661,787	203	104,262	639,210	7	3,175	45,700
Delaware	9	3,636	24,900	.....	.....	.....	.....	.....	.....
Maryland	26	7,760	114,050	22	14,800	197,800	3	1,400	41,000
Virginia	14	6,300	18,825	9	3,800	16,200	1	600	4,000
North Carolina	30	12,620	7,575	15	5,725	17,200	.....	.....	.....
South Carolina	1	500	500	.....	.....	.....	3	2,400	83,700
Georgia	2	500	400	.....	.....	.....	.....	.....	.....
Florida	.....	.....	.....	.....	.....	.....	.....	.....	.....
Alabama	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mississippi	.....	.....	.....	.....	.....	.....	.....	.....	.....
Louisiana	.....	.....	.....	1	500	4,000	1	600	20,000

Texas									
Arkansas									
Tennessee	4	1,600	1,300						
Kentucky							1	600	13,000
Ohio	94	30,866	82,175	71	26,315	71,860	3	1,300	29,000
Michigan	7	1,400	4,850						
Indiana	85	43,015	59,555	2	550	3,500			
Illinois	6	1,550	2,340	2	180	310			
Missouri							1	400	7,000
Iowa	5	1,550	6,300	1	200	800			
Wisconsin									
California									
	714	282,823	1,709,867	327	156,932	965,880	31	16,575	371,600
District of Columbia	1	200	1,000						
Minnesota Territory									
New Mexico Territory									
Oregon Territory									
Utah Territory									

Statistics of the Churches in the United States—Continued.

States and Territories.	LUTHERAN.			MENNONITE.			METHODIST.		
	No. of churches.	Aggregate accommodations.	Total value of church property.	No of churches.	Aggregate accommodations.	Total value of church property.	No. of churches.	Aggregate accommodations.	Total value of church property.
Maine	.....	.....	.....	.....	.....	.....	171	55,111	$259,695
New Hampshire	.....	.....	.....	.....	.....	.....	99	32,340	175,290
Vermont	.....	.....	.....	.....	.....	.....	123	45,010	221,850
Massachusetts	1	450	$11,193	.....	.....	.....	255	94,011	934,380
Rhode Island	.....	.....	.....	.....	.....	.....	23	9,310	102,900
Connecticut	.....	.....	.....	.....	.....	.....	178	56,625	351,550
New York	80	37,870	252,200	4	1,000	$2,050	1,215	478,145	2,885,543
New Jersey	7	2,900	28,512	.....	.....	.....	312	109,350	683,850
Pennsylvania	495	259,502	1,633,356	86	23,870	82,400	878	339,026	1,715,658
Delaware	.....	.....	.....	.....	.....	.....	106	29,300	127,845
Maryland	42	26,800	287,950	4	850	2,000	479	181,715	837,665
Virginia	50	18,750	52,445	6	2,250	5,550	1,002	315,763	721,003
North Carolina	47	19,550	29,025	.....	.....	.....	727	214,937	284,930
South Carolina	41	14,750	109,500	.....	.....	.....	467	159,920	311,168
Georgia	8	2,825	34,850	.....	.....	.....	735	233,143	393,743
Florida	.....	.....	.....	.....	.....	.....	75	18,010	55,260
Alabama	1	200	250	.....	.....	.....	531	150,675	276,939
Mississippi	.....	.....	.....	.....	.....	.....	406	112,983	240,265
Louisiana	.....	.....	.....	.....	.....	.....	106	30,260	236,500

Texas	.....	.....	.....	.....	.....	.....	88	28,985	56,095
Arkansas	.....	.....	.....	.....	.....	.....	73	14,250	27,070
Tennessee	12	3,400	2,600	.....	.....	.....	831	240,353	378,511
Kentucky	5	2,850	21,300	.....	.....	.....	522	167,860	462,955
Ohio	259	90,348	259,975	9	1,730	1,825	1,520	539,840	1,542,181
Michigan	12	3,205	12,625	.....	.....	.....	103	33,610	142,650
Indiana	60	18,000	36,825	.....	.....	.....	745	256,372	482,460
Illinois	40	16,440	40,120	.....	.....	.....	389	176,474	327,290
Missouri	21	7,260	34,560	1	200	420	200	57,350	280,245
Iowa	4	1,000	6,950	.....	.....	.....	50	12,197	43,450
Wisconsin	18	5,000	13,650	.....	.....	.....	54	15,008	62,430
California	.....	.....	.....	.....	.....	.....	4	1,400	15,300
	1,203	531,100	2,867,886	110	29,900	94,245	12,467	4,209,333	14,636,671
District of Columbia	2	1,000	15,000	.....	.....	.....	16	10,460	71,900
Minnesota Territory	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Mexico Territory	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oregon Territory	.....	.....	.....	.....	.....	.....	1	500	22,000
Utah Territory	.....	.....	.....	.....	.....	.....	.....	.....	.....

Statistics of the Churches in the United States—Continued.

States and Territories.	MORAVIAN.			PRESBYTERIAN.			ROMAN CATHOLIC.		
	No. of churches.	Aggregate accommodations.	Total value of church property.	No. of churches.	Aggregate accommodations.	Total value of church property.	No. of churches.	Aggregate accommodations.	Total value of church property.
Maine	.....	.....	.....	7	4,086	$32,000	11	6,650	$20,700
New Hampshire	.....	.....	.....	13	6,500	71,000	2	1,450	20,000
Vermont	.....	.....	.....	10	4,100	17,500	8	4,305	42,200
Massachusetts	.....	.....	.....	15	7,785	82,500	36	30,315	477,500
Rhode Island	.....	.....	.....	.....	.....	.....	7	7,300	72,500
Connecticut	.....	.....	.....	17	7,500	88,700	12	9,015	97,500
New York	3	1,500	$36,000	662	369,314	4,347,206	174	122,588	1,569,875
New Jersey	.....	.....	.....	146	81,400	1,175,250	21	9,335	99,385
Pennsylvania	84	32,715	221,350	755	357,481	2,574,700	139	89,251	1,084,204
Delaware	.....	.....	.....	26	10,100	75,500	3	1,630	15,000
Maryland	12	5,350	32,500	57	23,235	378,300	65	31,100	1,161,532
Virginia	8	1,500	2,550	236	101,625	567,165	17	7,930	126,100
North Carolina	7	3,000	34,000	143	62,730	170,030	4	1,400	5,900
South Carolina	.....	.....	.....	125	64,465	471,125	14	6,030	78,315
Georgia	1	75	25	92	39,996	218,805	8	4,250	79,500
Florida	.....	.....	.....	14	5,700	31,500	5	1,850	13,600
Alabama	.....	.....	.....	150	58,705	222,775	5	5,200	300,000
Mississippi	.....	.....	.....	135	47,166	183,085	8	3,000	66,000
Louisiana	.....	.....	.....	17	9,510	149,300	55	37,240	1,045,650

Texas	.....	.....	.....	15	6,100	19,070	13	6,760	79,700
Arkansas	.....	.....	.....	25	7,200	28,275	6	1,400	6,650
Tennessee	.....	.....	.....	357	132,717	365,531	3	1,300	45,000
Kentucky	.....	.....	.....	222	99,006	492,303	48	24,240	336,910
Ohio	158	49,545	93,072	659	271,499	1,388,199	130	76,215	763,307
Michigan	1	200	500	67	22,530	142,650	42	15,972	159,775
Indiana	53	17,400	20,800	267	103,432	324,170	63	25,115	167,725
Illinois	2	400	350	198	81,529	395,130	58	29,000	220,400
Missouri	.....	.....	.....	108	41,750	285,970	64	26,102	494,575
Iowa	2	500	2,200	24	6,655	28,350	17	3,990	28,250
Wisconsin	.....	.....	.....	21	6,000	35,800	57	23,717	66,085
California	.....	.....	.....	1	500	8,000	17	7,300	230,000
	331	112,185	443,347	4,584	2,040,316	14,369,889	1,112	620,950	8,973,838
District of Columbia	.....	.....	.....	6	5,000	73,000	6	7,100	105,300
Minnesota Territory	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Mexico Territory	.....	.....	.....	.....	.....	.....	146	76,100	188,200
Oregon Territory	.....	.....	.....	1	200	5,000	5	1,833	41,320
Utah Territory	.....	.....	.....	.....	.....	.....	.....	.....	.....

Statistics of the Churches in the United States—Continued.

States and Territories.	Swedenborgian.			Tunker.			Union.			Unitarian.		
	No. of churches.	Aggregate accommodations.	Total value of church property.	No. of churches.	Aggregate accommodations.	Total value of church property.	No. of churches.	Aggregate accommodations.	Total value of church property.	No. of churches.	Aggregate accommodations.	Total value of church property.
Maine	2	640	$8,000	....	.....	.....	83	26,087	$108,670	15	10,144	$103,000
New Hampshire	....	.....	.....	....	.....	.....	32	10,450	39,350	13	8,380	72,800
Vermont	....	.....	.....	....	.....	.....	88	34,550	122,800	2	1,000	32,000
Massachusetts	3	1,340	66,000	....	.....	.....	6	1,810	9,550	162	92,938	2,320,147
Rhode Island	2	325	4,400	....	.....	.....	4	2,450	5,000	4	2,950	127,000
Connecticut	....	.....	.....	....	.....	.....	4	1,850	28,400	5	1,750	42,000
New York	2	450	1,400	....	.....	.....	74	27,379	110,300	22	10,225	292,075
New Jersey	....	.....	.....	2	800	$1,800	5	1,450	6,500	2	450	1,500
Pennsylvania	3	1,475	11,700	14	6,100	11,700	80	28,300	78,325	4	1,630	28,000
Delaware	....	.....	.....	....	.....	.....	1	200	1,000	....	.....	.....
Maryland	....	.....	.....	6	14,100	8,400	10	4,250	13,000	1	1,000	104,000
Virginia	....	.....	.....	8	4,400	8,200	47	13,250	24,025	....	.....	.....
North Carolina	....	.....	.....	1	200	100	4	1,200	650	....	.....	.....
South Carolina	....	.....	.....	....	.....	.....	....	.....	.....	1	700	30,000
Georgia	....	.....	.....	....	.....	.....	16	7,250	21,100	....	.....	.....
Florida	....	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....
Alabama	....	.....	.....	....	.....	.....	4	1,125	1,650	1	1,000	6,000

Mississippi	....	.....	.....	....	.....	.....	1	180	400	....	.....	.....
Louisiana	....	.....	.....	....	.....	.....	6	1,350	8,220	....	.....	.....
Texas	....	.....	.....	....	.....	.....	2	350	525	....	.....	.....
Arkansas	....	.....	.....	....	.....	.....	5	1,800	1,000	....	.....	.....
Tennessee	....	.....	.....	1	500	300	15	3,900	3,800	....	.....	.....
Kentucky	....	.....	.....	1	200	200	31	11,600	18,000	1	700	15,000
Ohio	2	700	15,800	10	4,550	9,975	48	18,646	37,900	1	650	15,000
Michigan	....	.....	.....	....	.....	.....	3	800	1,400	....	.....	.....
Indiana	....	.....	.....	5	3,000	3,100	5	1,250	2,350	1	250	600
Illinois	1	140	800	4	1,225	2,250	31	8,875	32,050	6	1,500	9,000
Missouri	....	.....	.....	....	.....	.....	11	2,350	6,200	2	2,100	70,000
Iowa	....	.....	.....	....	.....	.....	2	450	7,100	....	.....	.....
Wisconsin	....	.....	.....	....	.....	.....	1	400	800	....	.....	.....
California	....	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....
	15	5,070	$108,100	52	35,075	46,025	619	213,552	690,065	243	137,367	3,268,122
District of Columbia	....	.....	.....	....	.....	.....	....	.....	.....	1	500	10,000
Minnesota Territory	....	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....
New Mexico Territory	....	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....
Oregon Territory	....	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....
Utah Territory	....	.....	.....	....	.....	.....	....	.....	.....	....	.....	.....

Statistics of the Churches in the United States—Continued.

States and Territories.	Universalist.			Minor Sects.			Total.		
	No. of churches.	Aggregate accommodations.	Total value of church property.	No. of churches.	Aggregate accommodations.	Total value of church property.	No. of churches.	Aggregate accommodations.	Total value of church property.
Maine	53	19,893	$120,150	1	150	$200	851	304,477	$1,712,152
New Hampshire	36	14,280	83,100	4	1,100	3,000	602	233,892	1,401,586
Vermont	34	13,325	71,750	3	700	800	564	226,444	1,213,126
Massachusetts	117	49,364	643,875	11	3,880	17,450	1,430	682,908	10,205,284
Rhode Island	4	2,230	55,000	2	950	4,650	221	98,736	1,252,900
Connecticut	22	8,905	90,200	6	1,250	6,000	719	305,249	3,554,894
New York	110	52,470	327,100	22	8,500	64,900	4,084	1,896,229	21,132,707
New Jersey	3	1,000	6,800	10	2,150	5,700	807	344,933	3,540,436
Pennsylvania	19	8,920	82,800	92	32,560	254,700	3,509	1,566,413	11,551,885
Delaware	.....	.....	.....	2	250	400	180	55,741	340,345
Maryland	1	1,000	26,000	.....	.....	.....	909	390,265	3,947,884
Virginia	1	200	500	8	2,825	18,050	2,336	834,691	2,849,176
North Carolina	.....	.....	.....	.....	.....	.....	1,678	558,204	889,393
South Carolina	2	650	5,600	19	6,620	69,425	1,163	453,930	2,140,346
Georgia	3	900	1,000	7	1,375	1,625	1,723	612,892	1,269,159
Florida	.....	.....	.....	2	1,000	1,200	152	41,170	165,400
Alabama	1	250	400	3	1,000	12,000	1,235	388,605	1,132,076
Mississippi	.....	.....	.....	.....	.....	.....	910	275,979	754,542
Louisiana	1	1,000	100,000	2	1,650	59,000	278	104,080	1,782,470

Texas	.....	.....	.....	3	1,500	3,000	164	54,495	200,530
Arkansas	.....	.....	.....	.....	.....	.....	185	39,930	89,315
Tennessee	.....	.....	.....	3	1,600	2,150	1,939	606,695	1,208,876
Kentucky	6	2,000	10,650	31	8,650	27,150	1,818	672,033	2,260,098
Ohio	53	20,765	100,590	41	20,250	111,950	3,890	1,447,652	5,765,149
Michigan	6	1,210	7,100	1	800	15,000	362	118,892	723,200
Indiana	15	5,050	17,800	12	2,822	4,025	1,947	689,330	1,512,485
Illinois	4	1,300	11,500	17	6,890	11,050	1,167	479,078	1,476,335
Missouri	1	250	500	17	5,600	41,430	773	241,139	1,558,590
Iowa	1	200	1,600	.....	.....	.....	148	37,759	177,400
Wisconsin	1	300	3,000	6	1,275	7,125	244	78,455	350,600
California	.....	.....	.....	.....	.....	.....	23	9,600	258,300
	494	205,462	1,767,015	325	115,347	741,980	36,011	13,849,896	86,416,639
District of Columbia	.....	.....	.....	.....	.....	.....	46	34,120	363,000
Minnesota Territory	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Mexico Territory	.....	.....	.....	.....	.....	.....	146	76,100	188,200
Oregon Territory	.....	.....	.....	.....	.....	.....	9	3,133	76,520
Utah Territory	.....	.....	.....	9	4,200	5,100	9	4,200	5,100
							210	117,553	632,820
Total	.....	.....	.....	.....	.....	.....	36,221	13,967,449	87,049,459

Real and Personal Estate.—The table of real and personal estate owned by individuals is made up from official returns of property for taxation. Where the assessment has been made on a sum less than the intrinsic worth, the assistant marshals were instructed to add the necessary per centage. For the purposes of taxation the full amount is not generally given—in rural districts especially. Stocks or bonds owned by States, or by the general government are not represented. The value of slaves is included.

Valuation of real and personal estate of the inhabitants of the United States, for the year ending June 1, 1850.

States and Territories.	Real and personal estate.	
	Assessed value.	True or estimated value.
Maine	$96,765,868	$122,777,571
New Hampshire	92,177,959	103,652,835
Vermont	71,671,651	92,205,049
Massachusetts	546,003,057	573,342,286
Rhode Island	77,758,974	80,508,794
Connecticut	119,088,672	155,707,980
New York	715,369,028	1,080,309,216
*New Jersey	190,000,000	200,000,000
Pennsylvania	497,039,649	722,486,120
Delaware	17,442,640	18,652,053
Maryland	208,563,566	219,217,364
Virginia	381,376,660	430,701,082
North Carolina	212,071,413	226,800,472
South Carolina	283,867,709	288,257,694
Georgia	335,110,225	335,425,714
Florida	22,784,837	22,862,270
Alabama	219,476,150	228,204,332
Mississippi	208,422,167	228,951,130
Louisiana	220,165,172	233,998,764
Texas	51,027,456	52,740,473
Arkansas	36,428,675	39,841,025
Tennessee	189,437,623	201,246,686
Kentucky	291,387,554	301,628,456
Ohio	433,872,632	504,726,120
Michigan	30,877,223	59,787,255
Indiana	152,870,399	202,650,264
Illinois	114,782,645	156,265,006
Missouri	98,595,463	137,247,707
Iowa	21,690,642	23,714,638
Wisconsin	26,715,525	42,056,595
†California	22,123,173	22,161,872
District of Columbia	14,018,874	14,018,874
Total	5,998,983,281	7,122,145,697
Minnesota Territory (not returned in full)		
Utah Territory	986,083	986,083
Oregon Territory	5,063,474	5,063,474
New Mexico	5,174,471	1,174,471
Aggregate	6,010,207,309	7,133,369,725

* In New Jersey, as the real estate only was returned, the above is partly estimated.
† Only thirteen counties in California are returned.

Agriculture.—As agriculture is a branch of industry coeval with the history of mankind, its connexion with the general welfare of the nation so intimate, its reciprocal bearing on manufactures so immediate—both admitted to form the base of prosperity and power of the people, as it is a branch of science the prosperity of which, in all its resources, affects individuals of every order, and without which there could be no commerce—it has seemed proper, while exhibiting the actual condition of agricultural industry in the middle of the century, to present, in connexion therewith, some history of the character, introduction, and increase, of the most important of the agricultural productions of our country and of their former and present commercial consequence to ourselves and other governments. Realizing that all human life is dependent upon it, and that the earth would be nearly depopulated by a year's failure, nearly all the nations of the earth, from the remotest period, have maintained institutions pre-eminently calculated for the promotion of agriculture, honoring husbandry, and encouraging the advancement of the science.

Agriculture is now fostered by the nations on the continent of Europe; is publicly taught in institutions designed for this special purpose, as well as in many of their colleges; and the result has been that, as formerly, while the ancients encouraged agriculture, and it received the attention of orators, and its praises and precepts were recited by the bards and sung by poets, and monarchs participated in its labors, learning and agriculture went hand in hand, so that the greatest geniuses of the age identified themselves with its promotion; so in these later years, where properly fostered and encouraged, it has received the attention of some of the greatest intellects and scholars, who have striven to throw most light upon this "grand art of rendering mankind happy, wealthy, and powerful."

In view of what has been done by other nations, of the little which has been accomplished by the official documents of our country, and in view of the fact that we possess no regularly organized office for the dissemination of agricultural information—although such an establishment was urged by Washington, and many of his successors in office to the present time—it is hoped that the devotion to this subject of more space than that needed for a mere table of figures representing our products of agriculture will be tolerated, and that you will approve of the short history attempted for each of our great productions of agriculture, well calculated, as such an account will be, to make our people better acquainted with the importance of their productions reciprocally, and lead to a more general and perfect sympathy among our citizens. The subject is one worthy more able pens, and we would shrink from the task, conscious of inability to do it justice, were it not supposed that this feeble effort may present points of practical value for embellishment by others better adapted to the duty.

Improved land.—The statement under this head in the agricultural table shows that the average quantity of improved land, by which is meant only such as produces crops, or in some manner adds to the productions of the farmer, is about 7¼ acres to each inhabitant; but as perhaps two-fifths of the population live in towns and villages, and are engaged in other pursuits than those of agriculture, the proportion of im-

proved land to be assigned to each person occupying or working it may be assumed as not less than twelve acres. In the New England States, the average for the whole population is a little more than four acres to each person; in New York and Pennsylvania, 3.9 acres; in the other middle States, the same. In Virginia, the proportion is about seven acres; in South Carolina, six acres; in Kentucky, twelve acres; and in Tennessee, five acres. The value of the farms in the United States is returned at $3,270,733,093.

Unimproved land.—This return is to be understood as including the unimproved land connected with, or belonging to, those farms from which productions are returned. In the present unsettled state of large portions of the country, this classification is of less practical utility than it will become at a future day, when similar returns will enable us to form calculations respecting the quantity of land brought into requisition annually for agricultural purposes. The following table will exhibit the quantity and value of the improved and unimproved land belonging to the farms and plantations of the several States, and, of course, it includes the value of the buildings thereon:

Statement showing the number of acres of improved and unimproved land, in farms, the cash value thereof, and the average cash value per acre, in each State and Territory.

States and Territories.	Acres of improved land.	Acres of unimproved land in farms.	Total.	Cash value of land, improved and unimp'd.	Average cash val. per acre.
Maine	2,039,596	2,515,797	4,555,393	$54,861,748	$12 04
New Hampshire	2,251,488	1,140,926	3,392,414	55,245,997	16 28
Vermont	2,601,409	1,524,413	4,125,822	63,367,227	15 36
Massachusetts	2,13[illegible],436	1,222,576	3,356,012	109,076,347	32 50
Rhode Island	356,487	197,451	553,938	17,070,802	30 82
Connecticut	1,768,178	615,701	2,383,879	72,726,422	30 50
New York	12,408,968	6,710,120	19,119,088	554,546,642	29 00
New Jersey	1,767,991	984,955	2,752,946	120,237,511	43 67
Pennsylvania	8,628,619	6,294,728	14,923,347	407,876,099	27 33
Delaware	580,862	375,282	956,144	18,880,031	19 75
Maryland	2,797,905	1,836,445	4,634,350	87,178,545	18 81
District of Columbia	16,267	11,187	27,454	1,730,46[illegible]	63 03
Virginia	10,360,135	15,792,176	26,152,311	216,401,441	8 27
North Carolina	5,453,977	15,543,010	20,996,987	67,891,766	3 23
South Carolina	4,072,651	12,145,049	16,217,700	82,431,684	5 08
Georgia	6,378,479	16,442,900	22,821,379	95,753,445	4 19
Florida	349,049	1,236,240	1,585,289	6,323,109	3 99
Alabama	4,435,614	7,702,067	12,137,681	64,323,224	5 30
Mississippi	3,444,358	7,046,061	10,490,419	54,738,634	5 22
Louisiana	1,590,025	3,939,018	5,529,043	75,814,398	13 71
Texas	639,107	14,454,669	15,093,776	16,398,747	1 09
Arkansas	781,531	1,816,684	2,598,215	15,265,245	5 88
Tennessee	5,175,173	13,808,849	18,984,022	97,851,212	5 16
Kentucky	11,368,270	10,972,478	22,340,748	154,330,262	6 91
Ohio	9,851,493	8,146,000	17,997,493	358,758,603	19 93
Michigan	1,929,110	2,454,780	4,383,890	51,872,446	11 83
Indiana	5,046,543	7,746,879	12,793,422	136,385,173	10 66
Illinois	5,039,545	6,997,867	12,037,412	96,133,290	7 99
Missouri	2,938,425	6,794,245	9,732,670	63,225,543	6 50
Iowa	824,682	1,911,382	2,736,064	16,657,567	6 09
Wisconsin	1,045,499	1,931,159	2,976,658	28,528,563	9 58
California	62,324	3,831,571	3,893,895	3,874,041	99
Minnesota Territory	5,035	23,846	28,881	161,948	5 61
Oregon do	132,857	299,951	432,808	2,849,170	6 58
Utah do	16,333	30,516	46,849	311,799	6 65
New Mexico do	166,201	124,370	290,571	1,653,952	5 69
Aggregate	118,457,622	184,621,348	303,078,970	3,270,733,093	av. 10 79

Value of farming implements and machinery.—For no stronger proof of the ingenuity and activity of the American mind need we search than that developed in the readiness with which labor-saving expedients for carrying on the commonest operations in agriculture are discovered and applied. One hundred and fifty-one millions of dollars would appear to be at this time invested in implements and machines for aiding and abridging the work of the hands in cultivating the earth and in preparing its produce for consumption. In most civilized countries of the Old World, so great is the density of the population, and so low the prices of labor, that less necessity is created for such machines; and nowhere does the same amount of ingenuity appear to

have been exercised in their preparation as is evinced by our mechanics and husbandmen.

In some portions of the Old World, where the necessity is felt and acknowledged by the intelligent, a predominating prejudice not unfrequently exists among others in the community against what is new, and prohibits the introduction of anything not stamped with the approval of their ancestors. Here, however, no such sentiment influences the farmer to reject a useful invention.

No greater delight was enjoyed by foreigners in London, during the great Industrial Exhibition, than that by Americans on the trial of the reaping machines, and the triumphant success of the American reaper. Of the whole sum expended in articles of this character, New York has invested $22,084,926; Pennsylvania, $14,722,541; Louisiana, $11,576,938, (perhaps to a great extent in machinery for crushing sugar-cane;) Ohio, $12,750,585; Kentucky, $5,169,037; Virginia, $7,021,772.

Domestic Animals.—When we consider the social condition of nations long congregated and civilized, and necessarily existing under the impulses of utilitarianism, it is not surprising that man, whether possessing a permanent abode, or having emigrated to a distant land, should become attached to those animals which have proffered to him their perfect obedience, sagacity, courage, strength, velocity, milk, fleeces, flesh, &c., and should regard them with admiration, gratitude, and even affection. Such, doubtless, was the case with most of the adventurers who first sought a new home on our shores, and brought with them those animals which would render them the most assistance and subserve the best purposes for clothing and food.

The first animals introduced into America from Europe were by Columbus, in his second voyage, in 1493. He left Spain as admiral of seventeen ships, bringing a collection of European trees, plants, and seeds of various kinds, a number of horses, a bull, and several cows.

The first horses brought into any part of the territory at present embraced in the United States were landed in Florida by Cabeça de Vaca, in 1527, forty-two in number, all of which perished or were otherwise killed. The next importation was also brought to Florida, by De Soto, in 1539, which consisted of a large number of horses and swine, among which were thirteen sows, the progeny of the latter soon after increasing to several hundred.

The Portuguese took cattle and swine to Newfoundland and Nova Scotia in the year 1553. Thirty years after, they had multiplied so abundantly that Sir Richard Gilbert attempted to land there to obtain supplies of cattle and hogs for his crew, but was wrecked.

Swine and other domestic animals were brought over to Acadia by M. l'Escarbot, a French lawyer, in 1604, the year that country was settled. In 1608, the French extended their settlement into Canada, and soon after introduced various animals.

In 1609, three ships from England landed at Jamestown, in Virginia, with many immigrants, and the following domestic animals, namely: six mares, one horse, six hundred swine, five hundred domestic fowls, with a few sheep and goats. Other animals had been previously in-

troduced there. In 1611, Sir Thomas Gates brought over to the same settlement one hundred cows, besides other cattle. In 1610, an edict was issued in Virginia, prohibiting the killing of domestic animals of any kind, on penalty of death to the principal, burning the hand and loss of the ears to the accessory, and twenty-four hours' whipping to the concealer. As early as the year 1617, the swine had multiplied so rapidly in the colony that the people were obliged to palisade Jamestown, to prevent being overrun with them. In 1627, the Indians, near the settlement, fed upon hogs which had become wild, instead of game. Every family in Virginia at that time, who had not an abundance of tame hogs and poultry, was considered very poor. In 1648, some of the settlers had a good stock of bees. In 1657, sheep and mares were forbidden to be exported from the province. By the year 1722, or before, sheep had somewhat multiplied, and bore good fleeces.

The first animals were introduced into Massachusetts by Edward Winslow, in 1624, consisting of three heifers and a bull. In 1626, twelve cows were sent to Cape Ann. In 1629, one hundred and fifteen cattle were imported into the plantations on Massachusetts bay, besides some horses and mares, several conies, and forty-one goats. They were mostly ordered by Francis Higginson, formerly of Leicestershire, whence several of the animals were brought.

The first importation into New York was made from Holland, by the West India Company, in 1625, comprising one hundred and three animals, consisting of horses and cattle for breeding, besides as many sheep and hogs as was thought expedient.

In 1750, the French, of Illinois, were in possession of considerable numbers of horses, cattle, and swine.

The present stock of the United States consists of the offspring of the animals first introduced, the crosses of the original breeds with one another, or the intermixture of the progeny of these crosses with those of more recent importation, and the pure-blooded animals brought directly from Europe, or the crosses of these with one another.

The principal breeds of horses, adapted for specific purposes, in the middle, northern and western States, are the Norman, the Canadian, the Morgan, the Conestoga or Pennsylvanian, the Virginian, and the Kentuckian. For carriages of heavy draught the Conestogas are regarded by many as the best. For the saddle, draught, and other useful purposes, the Morgans are highly prized, especially in New York. For roadsters, the Normans and Canadians are frequently sought. For blood, the Virginians and Kentuckians generally take the lead.

Among the various races of cattle existing among us, where strict regard is paid to breeding with a definite object in view, a preference is given to the Durhams or shorthorns, the Herefords, the Ayrshires, and the Devons. The *Durhams*, from their rapid growth, early maturity, and capability of taking on fat, are adapted only for high keeping, or to the richest pastures of the middle and northern States, and those of Ohio, Kentucky, and other parts of the West. The males, when judiciously crossed with the other breeds, or with the common cows of the country, often beget the best of milkers, and for this purpose they have been especially recommended. The Herefords, on the contrary, from their peculiar organization, are better adapted for poor or indif-

ferent pastures, and regions subject to continued drought; and for this reason they are well suited for California, New Mexico, Texas, and other parts of the South. The oxen of this breed are good in the yoke, and the cows, when properly fed, give an abundance of milk. The Ayrshires are best suited for a cool, mountainous region, or a cold, rigorous climate. They succeed well in Massachusetts, New Hampshire and Vermont, and are highly prized for their tameness, docile tempers, and rich milk. The Devons, from their hardihood, comparatively small size, and peculiar structure, appear to be adapted to almost every climate, and to all kinds of pasturage. From their stoutness, good tempers, honesty, and quickness of action, they make the best teams, and in this respect their chief excellency consists. The cows make fair milkers, and their flesh very good beef. They also possess great aptitude to take on fat.

The kinds of sheep most sought for are the pure-blooded Merinos, the Saxons, the Cotswolds, the Leicestershires, the Oxfordshires, and the South Downs. The *Merinos*, (including the Rambouillets,) the Cotswolds, the Leicestershires, the Oxfordshires, and the Saxons, are the most highly prized for their wool. The South Downs are particularly esteemed for the excellence of their flesh, and their wool is valuable for many purposes on account of the facility with which it can be wrought.

The prevailing breeds of swine in the middle, northern and western States, are the Berkshire, the Leicestershire, the Suffolk, the Essex, the Neapolitan, and the Chinese. From these and other varieties various crosses have been produced, the more important of which are the Byfield, the Woburn, the Bedford, the Grass, and the Mackay. The Neapolitans are particularly well adapted for a southern climate.

In 1627, the plantations on James river contained about 2,000 head of horned cattle, goats in great abundance, and wild hogs in the forest without number. In 1639, there were in Virginia 30,000 cattle, 200 horses, and 70 asses; and in 1648, there were 20,000 cows, bulls, and calves, 200 horses and mares, 50 asses, 3,000 sheep, 5,000 goats, swine both tame and wild, hens, turkeys, ducks, and geese, innumerable. There were exported from Savannah, in 1755, 48 horses, and 16 steers and cows; in 1770, 345 horses, 30 mules, and 25 steers and cows; and in 1772, 136 steers and cows. In 1820–21, there were exported from the United States 853 horses, 94 mules, 5,018 horned cattle, 11,117 sheep, and 7,885 swine; in 1830–31, 2,184 horses, 1,540 mules, 5,881 cattle, 8,262 sheep, and 14,690 swine; in 1840–41, 2,930 horses, 1,418 mules, 7,861 cattle, 14,639 sheep, and 7,901 swine; in 1850–51, 1,364 horses, 2,946 mules, 1,350 cattle, 4,357 sheep, and 1,030 swine.

According to the Census returns of 1840, there were in the United States 4,335,669 horses and mules, 14,971,586 neat cattle, 19,311,374 sheep, and 26,301,293 swine; of 1850, 4,335,358 horses, 559,229 asses and mules, 28,360,141 horned cattle, (including 6,392,044 milch cows and 1,699,241 working oxen,) 21,721,814 sheep, and 30,316,608 swine.

Horses.—In the tables of 1840, horses, mules, and asses were returned together; in those of the late census the number of horses is given in one column, and asses and mules in another. The increase in the aggregate number of these three classes of animals during the ten

years was 559,053. It is presumed the greatest increase has occurred in the number of mules. Many suppose that the great extension of railroads has a tendency to dispense with the use of large numbers of horses; but one very good reason for the small apparent increase in the number of horses exists in the fact that the enumeration of 1850 omits all in cities, and includes only or mainly such as are employed in agriculture, or owned by farmers. In the State of New York, where there are less than a thousand mules, there appears to be a decline in the number of horses and mules together of 26,566; in Pennsylvania, of about 13,000; in New England, of 77,000, or more than 25 per cent; while in all these States railroad conveyance has almost superseded the use of horses for travelling purposes along main routes of travel. We would more readily attribute the apparent diminution to the omission to enumerate the horses in cities and towns, than to any superseding of horse power, which the opening of railroads would often bring into requisition in various other operations not required previously. In Ohio and the new States of the Northwest, the increase of horses has kept pace with that of the population. The four and a quarter millions of these noble animals in the United States constitute a proportion of one to five of the inhabitants. New York has one horse to seven persons, Pennsylvania, one to six and six-tenths, Ohio, one to four, Kentucky, one to three free inhabitants. The number of horses in the United States is more than three times as large as that in Great Britain.

Asses and Mules.—As mentioned in the preceding paragraph, we find in the tables of 1840 no basis of comparison in regard to the raising of asses and mules. By the returns of 1850, it is shown that the number of these animals in the Union is 559,070, of which all but 30,000 are found in the southern States. For various employments the mule is far better adapted to that region than the horse. Extreme and long-continued heat does not enfeeble him, and the expense of his subsistence and general care is much less in comparison with the service he is able to perform. In some northern States a considerable number was reared formerly for export, and a brisk trade was kept up with the West Indies in this kind of stock. What are now exported from the points which formerly monopolized this branch of traffic, are brought from the South. Tennessee is the largest producer of mules, of which the number in that State, in 1850, was 75,303. Kentucky stands next, having 65,609. In New Mexico the number of mules was 8,654, greater by nearly four-fifths than the horses returned for that Territory. Much attention has been given to the improvement of mules in some of our southern States, and those sent from Kentucky, Tennessee, and Missouri, to be employed in army transportation in Mexico, were often not inferior in height to the horses of that country, and were at all times superior to them in strength, endurance, and usefulness.

Milch Cows.—Under the general term of "neat cattle" were embraced in the Sixth Census the three descriptions of animals designated in that of 1850 as milch cows, working oxen, and other cattle. The aggregate of the three classes, in 1840, was 14,971,586; in 1850, 18,355,287. The increase, therefore, between the two periods, was 3,383,701, or about 20 per cent. They appear to be distributed quite equally over

the Union. The amount of butter produced gives an average of something over 49 pounds to each milch cow. The average production of cheese to each cow is 16⅔ pounds. As with horses, the same allowance must be made, on account of the omission of cows, except in connexion with agriculture. The only schedules in which the live stock of the country could be enumerated, were those used for obtaining the agricultaral products of farms. From the fact that the schedules for enumerating agricultural productions and live stock were not used in cities, their live stock was necessarily omitted.

Butter and Cheese.—The census of 1840 furnishes us no statistics from which we can accurately determine the quantity of butter and cheese then produced. The value of both is given under the heading of "value of the products of the dairy" at the sum of $33,787,008. It is presumed that the marshals made their returns in accordance with the prices governing in their respective districts, which would differ so widely as to render any assumed average a mere conjecture. New York is far in advance of any other State in the productiveness of its dairies. They yield one-fourth of all the butter and nearly one-half the cheese produced in the Union. Pennsylvania, which makes 40,000,000 pounds of butter, is less prolific in cheese than several smaller States. In this latter article, Ohio is before all other competitors, except New York.

The following table shows the amount of dairy products exported from the United States for several years past:

Years.	Butter—pounds.	Cheese—pounds.	Value.
1820–'21	1,069,024	766,431	$190,287
1830–'31	1,728,212	1,131,817	264,796
1840–'41	3,785,993	1,748,471	504,815
1841–'42	2,055,133	2,456,607	385,185
1842–'43	3,408,247	3,440,144	508,968
1843–'44	3,251,952	7,343,145	758,829
1844–'45	3,587,489	7,941,187	878,865
1845–'46	3,436,660	8,675,390	1,063,087
1846–'47	4,214,433	15,673,600	1,741,770
1847–'48	2,751,086	12,913,305	1,361,668
1848–'49	3,406,242	17,433,682	1,654,157
1849–'50	3,876,175	13,020,817	1,215,463
1850–'51	3,994,542	10,361,189	1,124,652

Sheep.—There was between 1840 and 1850 an increase of 2,309,108 in the number of sheep in the United States. It will be useful to observe with some closeness the progress of sheep-breeding in different parts of the country. We perceive that in New England there has occurred a remarkable decrease in their number. There were in that division of the Union in 1840, 3,811,307; in 1850, the number had declined to 2,164,452; being a decrease of 1,646,855, or 45 per cent.

In the five Atlantic middle States, New York, New Jersey, Pennsyl-

vania, Delaware, and Maryland, there was a decrease from 7,402,851 to 5,641,391, equal to 1,761,460, or about 22½ per cent. In Pennsylvania there was a gain, however, during this period, of 155,000 sheep.

We see that while there has been a positive diminution of 3,408,000 in the States above named, there has been an augmentation of 5,717,608 in those south of Maryland and west of New York. Ohio has gained most largely, having been returned as pasturing in 1840, 2,028,401; and in 1850, 3,942,929; an increase of 1,914,528, or nearly 100 per cent.

In each of the States south and west of the lines above indicated, there has been a very large proportional increase in this kind of stock, and there is reasonable ground for the opinion that the hilly lands of Virginia, North and South Carolina, Tennessee, and the prairies of Illinois, Iowa, and Texas, will prove highly favorable for the rearing of sheep for their wool and pelts.

New Mexico has the extraordinary number of 377,271 sheep—more than six to each inhabitant; proving the soil and climate of that Territory to be well adapted to this description of stock, and giving promise of a large addition from that quarter to the supply of wool. The importance of fostering this great branch of national production is shown by the fact, as assumed by an intelligent writer on the subject, that our population annually consumes an amount of wool equal to seven pounds for each person.

If this estimate be even an approximation to correctness, we are yet very far short of producing a quantity adequate to the wants of the country; and it is equally clear that we possess an amount of unemployed land adapted to grazing, sufficient to support flocks numerous enough to clothe the people of the world.

Value of Live Stock.—The very large sum representing the value of live stock in the United States cannot be considered extravagant, in view of the immense number of animals returned. It is an item of agricultural capital which affords a good indication of the wealth and prosperity of the country.

Wheat.—Wheat, where the soil and climate are adapted to its growth, and the requisite progress has been made in its culture, is decidedly preferred to all other grains, and, next to maize, is the most important crop in the United States, not only on account of its general use for bread, but for its safety and convenience for exportation. It is not known to what country it is indigenous, any more than our other cultivated cereals, all of which, no doubt, have been essentially improved by man. By some, wheat is considered to have been coeval with the creation, as it is known that upwards of a thousand years before our era, it was cultivated, and a superior variety had been attained. It has steadily followed the progress of civilization, from the earliest times, in all countries where it would grow.

The introduction of this grain into the North American colonies dates back to the earliest periods of their settlement by Europeans. It was first sown, with other grains, on the Elizabeth islands, in Massachusetts, by Gosnold, at the time he explored that coast, in 1602. In 1611, wheat, as well as other grains, was also sown in Virginia, and by the year 1648 there were cultivated many hundred acres in that colony. Although premiums were offered as an encouragement of its growth,

in 1651, it was not much cultivated for more than a century after, in consequence of the ill-directed attention to the culture of tobacco.

Wheat was introduced into the valley of the Mississippi by the "Western Company," in 1718, where, from the careless mode of cultivating it by the early settlers, and the sudden alternations of temperature, it would only yield from five to eight-fold, running to straw and blade without filling the ear. In 1746, however, the culture had so far extended, that six hundred barrels of flour were received at New Orleans from the Wabash; and by the year 1750, the French of Illinois raised three times as much wheat as they consumed, and large quantities of grain and flour were sent to the same place.

Prior to the Revolution, the primitive soils of New York, New Jersey, and of New England, appear not to have rewarded the cultivation of this grain much, if any, beyond the wants of the inhabitants. Considerable quantities were raised on the Hudson, and in some parts of New Jersey and Pennsylvania, which were exported to the West Indies, and New England, and to Great Britain, France, Portugal, and Spain in years of scarcity, previously to 1723.

In 1776, there was entailed upon this country an enduring calamity, in consequence of the introduction of the Hessian or wheat fly, which was supposed to have been brought from Germany in some straw employed in the debarkation of Howe's troops, on the west end of Long Island. From that point this insect gradually spread in various directions, at the rate of twenty or thirty miles a year, and the wheat of the entire regions east of the Alleghanies is now more or less infested with the larvæ, as well as in large portions of the States bordering on the Ohio and Mississippi, and on the great lakes; and so great have been the ravages of these insects that, the cultivation of this grain in many places, has been abandoned.

The geographical range of the wheat region in the Eastern Continent and Australia, lies principally between the thirtieth and sixtieth parallel, of north latitude, and between the thirtieth and fortieth degrees south, being chiefly confined to France, Spain, Portugal, Italy, Sicily, Greece, Turkey, Russia, Denmark, Norway, Sweden, Poland, Prussia, Netherlands, Belgium, Great Britain, Ireland, Northern and Southern Africa, Tartary, India, China, Australia, Van Dieman's Land, and Japan. Along the Atlantic portions of the Western Continent, it embraces the tracts lying between the thirtieth and fiftieth parallels; and in the country westward of the Rocky mountains, one or more degrees further north. Along the west coast of South America, as well as in situations within the torrid zone, sufficiently elevated above the level of the sea and properly irrigated by natural or artificial means, abundant crops are often produced.

The principal districts of the United States in which this important grain is produced in the greatest abundance, and forms a leading article of commerce, embrace the States of New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, Ohio, Kentucky, Michigan, Indiana, Illinois, Missouri, Wisconsin, and Iowa. The chief varieties cultivated in the northern and eastern States are the white flint, tea Siberian, bald, Black sea, and the Italian spring wheat; in the middle and western States, the Mediterranean, the Virginia white May, the

blue-stem, the Indiana, the Kentucky white-bearded, the old red-chaff, and the Talavera. The yield varies from ten to forty bushels and upwards per acre, weighing per bushel, from fifty-eight to sixty-seven pounds.

It appears that on the whole crop of the United States there was a gain, during the ten years, of 15,645,378 bushels. The crop of New England decreased from 2,014,000 to 1,090,000 bushels, exhibiting a decline of 924,000 bushels, and indicating that the attention of farmers has been much withdrawn from the culture of wheat. Grouping the States from the Hudson to the Potomac, including the District of Columbia, it appears that they produced, in 1849, 35,085,000 bushels, against 29,936,000 in 1839. (In Virginia there was an increase of 1,123,000 bushels.) These States embrace the oldest wheat-growing region of the country, and that in which the soil and climate seem to be adapted to the permanent culture of the grain. The increase of production in the ten years has been 6,272,000 bushels, equal to 17.4 per cent. The area of tilled land in these States is 36,000,000 acres, only 30 per cent. of the number of acres returned for the whole United States, while the proportion of wheat produced is 46 per cent. of the entire crop of the country. In North Carolina there has been an increase of 170,000 bushels; but in the southern States generally there was a considerable decrease. Indiana, Illinois, Michigan, and Wisconsin contributed to the general aggregate, under the Sixth Census, only 9,800,000 bushels; under the last they are shown to have produced upwards of 25,000 000 bushels, an amount greater than the whole increase in the United States for the period.

When we see the growth of wheat keeping up with the progress of population in the oldest States of the Union, we need have no apprehension of a decline in the cultivation of this important crop.

The amount of flour exported from New Jersey in 1751 was 6,424 barrels; from Philadelphia, in 1752, 125,960 barrels, besides 86,500 bushels of wheat; in 1767, 198,816 barrels, besides 367,500 bushels of wheat; in 1771, 252,744 barrels; from Savannah, in 1771, 7,200 pounds; from Virginia, for some years annually preceding the Revolution, 800,000 bushels of wheat. The total exports of flour from the United States in 1791 were 619,681 barrels, besides 1,018,339 bushels of wheat; in 1800, 653,052 barrels, besides 26,853 bushels of wheat; in 1810, 798,431 barrels, besides 325,924 bushels of wheat; in 1820–21, 1,056,119 barrels, besides 25,821 bushels of wheat; in 1830–31, 1,806,529 barrels, besides 408,910 bushels of wheat; in 1840–41, 1,515,817 barrels, besides 868,585 bushels of wheat; in 1845–46, 2,289,476 barrels, besides 1,613,795 bushels of wheat; in 1846–47, 4,382,496 barrels, besides 4,399,951 bushels of wheat; in 1850–51, 2,202,335 barrels, besides 1,026,725 bushels of wheat.

According to the Census of 1840, the wheat crop of the United States amounted to 84,823,272 bushels; in 1849, according to the census of 1850, 100,503,899 bushels, although in some of the largest wheat-growing States the crop of 1849 fell far below the average.

In the State of Ohio, especially, there was great deficiency, as was made apparent by the returns of the wheat crop for the ensuing year, made in pursuance of an act of the legislature of that State. From

the almost universal returns of "short crop," by the marshals in that State, in 1849, which fell below that of 1839, 2,000,000 bushels, and the ascertained crop of 1850, we are fully satisfied that the average wheat crop of Ohio, would appear 30 per cent. greater than shown by the census returns. The same causes which operated to diminish the wheat crop of Ohio, were not without their effects upon that of other States bordering on the upper portion of the valley of the Mississippi.

In the London Exhibition very little wheat was exhibited equal to that from the United States, especially that from Genesee county, in the State of New York—a soft, white variety—to the exhibitor of which a prize medal was awarded by the Royal Commissioners, and recently transmitted to Mr. Bell by the President of the United States, the chairman of the American Executive Committee. The red Mediterranean wheat exhibited from the United States attracted much attention. The wheat from South Australia was probably superior to any exhibited, while much from our own country fell but little behind, and was unquestionably next in quality.

Rye.—This grain is supposed to be a native of the Caspian Caucasian desert, and has been cultivated in the north of Europe and Asia from time immemorial, where it constitutes an important article of human subsistence, being generally mixed with barley or wheat. Its introduction into western Europe is of comparatively recent date, as no mention is made of it in the "Ortus Sanitatis," published at Augsburg in 1485, which treats at length of barley, millet, oats, and wheat.

Rye was cultivated in the North American colonies soon after their settlement by the English. Gorges speaks of it as growing in Nova Scotia in 1622, as well as of barley and wheat. Plantagenet enumerates it among the productions of North Virginia (New England) in 1648, and alludes to the mixing of it with maize in the formation of bread. It was also cultivated in South Virginia by Sir William Berkeley previous to that year.

Geographically, rye and barley associate with one another, and grow upon soils the most analogous, and in situations alike exposed. It is cultivated for bread in northern Asia, and all over the continent of Europe, particularly in Russia, Norway, Denmark, Sweden, Germany, and Holland; in the latter of which it is much employed in the manufacture of gin. It is also grown to some extent in England, Scotland, and Wales. In this country it is principally restricted to the middle and eastern States, but its culture is giving place to more profitable crops.

The three leading varieties cultivated in the United States are the spring, winter, and southern, the latter differing from the others only from dissimilarity of climate. The yield varies from 10 to 30, or more, bushels per acre, weighing from 48 to 56 pounds to the bushel.

The production of rye has decreased 4,457,000 bushels in the aggregate; but in New York it is greater than in 1840 by about 40 per cent. Pennsylvania, which is the largest producer, has fallen off from 6,613,373, to 4,805,160 bushels. Perhaps the general diminution in the quantity of this grain now produced may be accounted for by supposing a corresponding decline in the demand for distilling purposes, to which a large part of the crop is applied.

This grain has never entered largely into our foreign commerce, as the home consumption for a long period nearly kept pace with the supply. The amount exported from the United States, in 1801, was 392,276 bushels; in 1812, 82,705 bushels; in 1813, 140,136 bushels. In 1820–'21, there were exported 23,523 barrels of rye flour; in 1830–'31, 19,100 barrels; in 1840–'41, 44,031 barrels; in 1845–'46, 38,530 barrels; in 1846–'47, 48,892 barrels, in 1850–'51, 44,152 barrels.

During the year ending June 1, 1850, there were consumed, of rye, about 2,144,000 bushels in the manufacture of malt and spirituous liquors.

According to the Census returns of 1840, the product of the country was 18,645,567 bushels; in 1850, 14,188,637 bushels.

Maize, or Indian Corn.—Among the objects of culture in the United States, maize, or Indian corn, takes precedence in the scale of crops, as it is best adapted to the soil and climate, and furnishes the largest amount of nutritive food. Where due regard is paid to the selection of varieties, and cultivated in a proper soil, it may be accounted as a sure crop in almost every portion of the habitable globe, between the 44th degree of north latitude and a corresponding parallel south. Besides its production in this country, its principal culture is limited to Mexico, the West Indies, most of the States of South America, France, Spain, Portugal, Lombardy, and southern and central Europe generally. It is also cultivated with success in northern, southern, and western Africa, India, China, Japan, Australia, and the Sandwich Islands, the groups of the Azores, the Madeiras, the Canaries, and numerous other ocean isles.

Although there has been much written on the Eastern origin of this grain, it did not grow in that part of Asia watered by the Indus at the time of Alexander the Great's expedition, as it is not among the productions of that country mentioned by Nearchus, the commander of the fleet. Neither is it noticed by Arrian, Diodorus, Columella, nor any other ancient author. And even as late as 1491, the year before Columbus discovered America, Joan: di Cuba, in his "Ortus Sanitatis," makes no mention of it. It has never been found in any ancient tumulus, sarcophagus, or pyramid; nor has it ever been represented in any ancient painting, sculpture, or work of art, except in America. But in this country, according to Garcilaso de la Vega, one of the earliest Peruvian historians, the palace gardens of the Incas were ornamented with maize in gold and silver, with all the grains, spikes, stalks, and leaves; and in one instance, in the "Garden of Gold and Silver," there was an entire corn-field of considerable size, representing the maize in its exact and natural shape; a proof no less of the wealth of the Incas, than of their veneration for this important grain.

In further proof of the American origin of this plant, it may be stated that it is still found growing in a wild state, from the Rocky mountains, in North America, to the humid forests of Paraguay, where, instead of having each grain naked, as is always the case after long cultivation, it is completely covered with glumes, or husks. It is, moreover, a well uthenticated fact that maize was found in a state of cultivation by the borigines, on the island of Cuba at the time of its discovery by Co-

lumbus, as well as in most other places in America first explored by Europeans.

The first successful attempt of the English in North America to cultivate this grain was made on James river, in Virginia, in 1608. The colonists sent over by the "London Company" adopted the mode then practised by the Indians, which, with some modifications, has been pursued ever since. The yield at that time is represented to have been from two hundred to more than a thousand fold. The same increase was noticed by the early settlers in Illinois. The present yield, east of the Rocky mountains, when judiciously cultivated, varies from twenty to one hundred and thirty-five bushels to an acre.

The varieties of Indian corn are very numerous, exhibiting many grades of size, color, and conformation. Among these are the shrubby reed, that grows on the shores of Lake Superior; the gigantic stalks of the Ohio valley; the tiny ears, with flat, close-clinging grains of Canada; the brilliant, rounded little pearl; the bright-red grains and white cob of the eight-rowed hematite; the swelling ear of the big white; and the yellow gourd-seed of the South.

From the flexibility of this plant, it may be acclimatized, by gradual cultivation, from Texas to Maine, or from Canada to Brazil; but, in either case, its character is somewhat changed, and often new varieties are the results. The blades of the plant are of great value as food for stock, and form an article but rarely estimated sufficiently, when considering the agricultural products of the southern and southwestern States especially.

The increase of production from 1840 to 1850 was 214,000,000 bushels, equal to 56 per cent. The production of New England has advanced from 6,993,000 to 10,377,000 bushels, showing an increase of 3,384,000 bushels—nearly 50 per cent. New York, New Jersey, Pennsylvania, Delaware, and Maryland increased 20,812,000 bushels—more than 50 per cent. In the production of this crop, no State has retrograded. Ohio, which in 1840 occupied the fourth place as a corn-producing State, now ranks as the first; Kentucky, second; Illinois, third; Tennessee, fourth. The crop of Illinois has increased from 22,000,000 to 57,500,000 bushels, or at the rate of 60 per cent. in ten years.

Of the numerous varieties, some are best adapted to the southern States, while others are better suited for the northern and eastern. Those generally cultivated in the former are the southern big and small yellow, the southern big and small white-flint, the yellow Peruvian, and the Virginia white gourd-seed. In the more northerly and easterly States, they cultivate the golden Sioux, or northern yellow-flint, the King Philip, or eight-rowed yellow, the Canada early white, the Tuscarora, the white flour, and the Rhode Island white-flint.

The extended cultivation of this grain is chiefly confined to the eastern, middle, and western States, though much more successfully grown in the latter. The amount exported from South Carolina in 1748 was 39,308 bushels; from North Carolina, in 1753, 61,580 bushels; from Virginia, for several years preceding the Revolution, annually, 600,000 bushels; from Philadelphia, in 1752, 90,740 bushels; in 1767–'68, 60,205 bushels; in 1771, 259,441 bushels.

The total amount exported from this country in 1770 was 578,349

bushels; in 1791, 2,064,936 bushels, 351,695 of which were Indian meal; in 1800, 2,032,435 bushels, 338,108 of which were in meal; in 1810, 1,140,960 bushels, 86,744 of which were in meal. In 1820–'21, there were exported 607,277 bushels of corn and 131,669 barrels of Indian meal; in 1830–'31, 571,312 bushels of corn and 207,604 barrels of meal; in 1840–'41, 535,727 bushels of corn and 232,284 barrels of meal; in 1845–'46, 1,286,068 bushels of corn and 298,790 barrels of meal; in 1846–'47, 16,326,050 bushels of corn and 948,060 barrels of meal;* in 1850–'51, 3,426,811 bushels of corn and 203,622 barrels of meal. More than eleven millions of bushels of Indian corn were consumed in 1850 in the manufacture of malt and spirituous liquors.

According to the Census of 1840, the corn crop of the United States was 377,531,875 bushels; of 1850, 592,326,612 bushels.

Oats.—The oat, when considered in connexion with the artificial grasses and the nourishment and improvement it affords to live stock, may be regarded as one of the most important crops we produce. Its history is highly interesting, from the circumstance, that, while in many portions of Europe, when ground into meal, it forms an important aliment for man, one sort, at least, has been cultivated from the days of Pliny, on account of its superior fitness as an article of diet for the sick. The country of its origin is somewhat uncertain, though the most common variety is said to be indigenous to the island of Juan Fernandez. Another oat, resembling the cultivated variety, is also found growing wild in California.

This plant was introduced into the North American colonies soon after their settlement by the English. It was sown by Gosnold, on the Elizabeth islands, in 1602; cultivated in Newfoundland in 1622, and in Virginia, by Berkeley, prior to 1648.

The oat is a hardy grain, and is suited to climates too hot and too cold either for wheat or rye. Indeed, its flexibility is so great, that it is cultivated with success in Bengal, as low as latitude 25 degrees north, but refuses to yield profitable crops as we approach the equator. It flourishes remarkably well when due regard is paid to the selection of varieties, throughout the inhabited parts of Europe, the northern and central portions of Asia, Australia, southern and northern Africa, the cultivated regions of nearly all North America, and a large portion of South America.

In this country the growth of the oat is confined principally to the middle, western, and northern States. The varieties cultivated are the common white, the black, the gray, the imperial, the Hopetown, the Polish, the Egyptian, and the potato oat. The yield of the common varieties varies from forty to ninety bushels and upwards per acre, weighing from twenty-five to fifty pounds to the bushel. The Egyptian oat is cultivated south of Tennessee, which, after being sown in autumn and fed off by stock in winter and spring, yields from ten to twenty bushels per acre. In the manufacture of malt and spirituous liquors, oats enter but lightly, and their consumption for this purpose does not exceed sixty thousand bushels annually in the United States.

* The fluctuations in the amounts exported in 1845–'46–'47 of this, as well as the other kinds of grain cultivated in this country, were occasioned by the great famine in Ireland, caused by the failure of the potato crops of those years.

The oat, like rye, never has entered much into our foreign commerce, as the domestic consumption has always been nearly equal to the quantity produced. The annual average exports, for several years preceding 1817, were 70,000 bushels.

By the Census returns of 1840, it will be seen that the total produce of the United States was 123,071,341 bushels; of 1850, 146,678,879 bushels.

Rice—the chief food, perhaps, of one-third of the human race—possesses the advantage attending wheat, maize, and other grains, of preserving plenty during the fluctuations of trade, and is also susceptible of cultivation on land too low and moist for the production of most other useful plants. Although cultivated principally within the tropics, it flourishes well beyond, producing even heavier and better filled grain. Like many other plants in common use, it is never found wild, (it is to be understood that the wild rice, or water oat, *Zizania aquatica*, which grows along the muddy shores of our tide-waters, is a distinct plant from the common rice, and should not be confounded with it,) nor is its native country known. Linnæus considers it as a native of Ethiopia, while others regard it of Asiatic origin.

At the Industrial Exhibition in London last year, there were displayed many curious samples and varieties of rice, grown without irrigation, at elevations of 3,000 to 6,000 feet on the Himalayas, where the dampness of the summer months compensates for the want of artificial moisture. At the exhibition above alluded to, American rice received not only honorable mention for its very superior quality, but the Carolina rice, exhibited by E. J. Heriot, was pronounced by the jury "magnificent in size, color, and clearness," and to it was awarded a prize medal. The jury were free to admit that the American rice, though originally brought from the Old World, is now much the finest in quality.

The common variety is cultivated throughout the torrid zone, wherever there is a plentiful supply of water, and will mature, under favorable circumstances, in the Eastern Continent as high as the forty-fifth parallel of north latitude, and as far south as the thirty-eighth. On the Atlantic side of the Western Continent it will flourish as far north as latitude thirty-eight degrees, and to a corresponding parallel south. On the western coast of America it will grow as far north as forty or more degrees. Its culture is principally confined to India, China, Japan, Ceylon, Madagascar, Eastern Africa, the south of Europe, the southern portions of the United States, the Spanish Main, Brazil, and the valley of Parana and Uruguay.

This grain was first introduced into Virginia by Sir William Berkeley, in 1647, who received half a bushel of seed, from which he raised sixteen bushels of excellent rice, most or all of which was sown the following year. It is also stated that a Dutch brig from Madagascar, came to Charleston in 1694, and left about a peck of paddy (rice in the husk) with Governor Thomas Smith, who distributed it among his friends for cultivation. Another account of its introduction into Carolina is that Ashby was encouraged to send a bag of seed rice to that province, from the crops of which sixty tons were shipped to England in 1698. It soon after became the chief staple of the colony.

Its culture was introduced into Louisiana in 1718, by the "Company of the West."

The present culture of rice in the United States is chiefly confined to South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, and Texas. The yield per acre varies from twenty to sixty bushels, weighing from forty-five to forty-eight pounds when cleaned. Under favorable circumstances, as many as ninety bushels to an acre have been raised.

Another variety is cultivated in this country, to a limited extent, called Cochin-China, dry or mountain rice, from its adaptation to a dry soil without irrigation. It will grow several degrees further north or south than the Carolina rice, and has been cultivated with success in the northern provinces of China, Hungary, Westphalia, Virginia, and Maryland; but the yield is much less than that of the preceding, being only fifteen to twenty bushels to an acre. It was first introduced into Charleston from Canton, by John Bradby Blake, in 1772.

The amount of rice exported from South Carolina in 1724 was 18,000 barrels; in 1731, 41,957 barrels; in 1740, 90,110 barrels; in 1747–48, 55,000 barrels; in 1754, 104,682 barrels; in 1760–61, 100,000 barrels; from Savannah in 1755, 2,299 barrels, besides 237 bushels of paddy, or rough rice; in 1760, 3,283 barrels, besides 208 bushels of paddy; in 1770, 22,120 barrels, besides 7,064 bushels of paddy; from Philadelphia in 1771, 258,375 pounds. The amount exported from this country in 1770 was 150,529 barrels; in 1791, 96,980 tierces; in 1800, 112,056 tierces; in 1810, 131,341 tierces; in 1820–21, 88,221 tierces; in 1830–31, 116,517 tierces; in 1840–41, 101,617 tierces; in 1845–46, 124,007 tierces; in 1846–47, 144,427 tierces; in 1850–51, 105,590 tierces.

According to the Census of 1840, the rice crop of the United States amounted to 80,841,422 pounds; of 1850, 215,312,710 pounds.

Tobacco.—Tobacco, from the extent to which it is cultivated, its importance in commerce, and the modes of employing it to gratify the senses, exhibits one of the most remarkable features in the history of man. From the solace only of the wild Indian of America, it has become one of the luxuries of the rich, and gives pleasure to the poor throughout the habitable globe, from the burning desert to the frozen zone. In short, its use for snuff, for chewing, or for smoking, is almost universal, and for no other reason than a sort of convulsion (sneezing) produced by the first, and a degree of intoxication by the last two modes of usage. This plant is indigenous to tropical America, and was cultivated by the aborigines in various parts of the continent previous to its discovery by Europeans. Columbus found it on the island of Cuba, in 1492, where he was invited by a chief to partake of a cigar. In 1496, Romanus Pane published the first account of it as growing in St. Domingo, calling it *cohoba*, *cohobla*, and *gioia*. Sir Richard Grenville found it in Virginia, in 1585, when the English, for the first time, saw it smoked by the natives in pipes made of clay. It is believed to have been introduced into England by Raleigh's colonists on their return from Virginia, in 1586. Soon after the settlement of Jamestown, from the increased demand in Europe, and the peculiar adaptation of the soil to its culture, considerable quantities were raised, and numerous

individuals, interested in the colony, contributed to induce that taste for it which had already been diffused among all classes.

In 1611, tobacco was first cultivated in Virginia by the use of the spade; previous to which, it had only been raised after the rude manner of the Indians. In 1616, it was cultivated in that colony to so alarming an extent that even the streets of Jamestown were planted with it, and various regulations were framed to restrain its production; but every admonition to the settlers was disregarded. James I. attempted, by repeated proclamations and publications, to restrain its use, but his efforts had very little effect; and the colonists continued to experience a more rapidly-increasing and better demand for this staple than for any other in the province.

Previous to the war of Independence, its culture had spread into Maryland, Carolina, Georgia, and Louisiana, from which nearly all Europe was supplied; but at present, most of the sovereigns of the Old World derive a considerable part of their revenue from the cultivation of this plant.

Independent of its production in the middle and southern States of the Union, tobacco is extensively cultivated in Mexico, the Spanish Main, Cuba, Brazil, Trinidad, St. Domingo, Turkey, Persia, India, China, Australia, the Philippines, and Japan. It has also been raised with success in nearly every country in Europe, Egypt, Algeria, the Cape of Good Hope, the Canaries and numerous other islands in the ocean, Canada, New Brunswick, and on the western coast of America.

The principal varieties cultivated in the United States are the Virginian, the large-leaved, the dwarf, the Cuba, and the common green tobacco.

In 1622, there were raised in Virginia 60,000 pounds. The amount exported from that colony in 1639 was 120,000 pounds; annually for ten years preceding 1709, 28,868,666 pounds; annually for several years preceding the Revolution, 55,000 hogsheads; in 1758, 70,000 hogsheads; from North Carolina, in 1753, 100 hogsheads; from Georgia, in 1772, 176,732 pounds. The amount exported from the United Colonies in 1772 was 97,799,263 pounds; in 1780, 17,424,267 pounds; from the United States, in 1787, 99,041,000 pounds; in 1791, 101,272 hogsheads, 81,122 pounds manufactured, and 15,689 pounds of snuff; in 1800, 78,680 hogheads, 457,713 pounds manufactured, and 41,453 pounds of snuff; in 1810, 84,134 hogsheads, 495,427 pounds manufactured, and 46,640 pounds of snuff; in 1820–'21, 66,858 hogsheads, 1,332,949 pounds manufactured, and 44,552 pounds of snuff; in 1830–'31, 86,718 hogsheads, 3,639,856 pounds manufactured, and 27,967 pounds of snuff; in 1840–'41, 147,828 hogsheads, 7,503,644 pounds manufactured, and 68,553 pounds of snuff; in 1850–51, 95,945 hogsheads, 7,235,358 pounds manufactured, and 37,422 pounds of snuff.

According to the Census returns of 1840, the amount of tobacco raised in the United States was 219,163,319 pounds; of 1850, 199,752,646 pounds; showing a decrease in its culture of 19,410,673 pounds.

Cotton.—Cotton, which administers so bountifully to the wants of civilized as well as to savage man, and to the wealth and economy of the countries producing it, stands pre-eminent in the United States, both as regards its superior staple and the degree of perfection to which its

cultivation has been brought. One or more of its species is found growing wild throughout the torrid zone, whence it has been disseminated, and become an important object of culture in several countries thereto adjacent, from time immemorial. It is mentioned by Herodotus as growing in India, where the natives manufactured it into cloth; by Theophrastus as a product of Ethiopia; and by Pliny as growing in Egypt, towards Arabia, and near the borders of the Persian Gulf. Nieuhoff, who visited China in 1655, says that it was then cultivated in great abundance in that country, where the seed had been introduced about five hundred years before. Columbus found it in use by the American Indians of Cuba in 1492; Cortez, by those of Mexico, in 1519; Pizarro and Almagro, by the Incas of Peru, in 1532; and Cabeça de Vaca, by the natives of Texas and California, in 1536.

Of the precise period of the first introduction of the cultivation of this plant into the North American colonies, history is silent. In a pamphlet entitled "Nova Brittania offering most excellent fruits by planting in Virginia," published in London in 1609, it is stated that cotton would grow as well in that province as in Italy. It is also stated, on the authority of Beverley, in his History of Virginia, that Sir Edmund Andros, while governor of the colony, in 1692, "gave particular marks of his favor towards the propagating of cotton, which, since his time, has been much neglected." It further appears that it was cultivated for a long time in the eastern parts of Maryland, Virginia, Carolina, and Georgia, in the garden, though not at all as a planter's crop, for domestic consumption. In another pamphlet, entitled "A State of the Province of Georgia, attested, upon oath, in the Court of Savannah," in 1740, it was averred that "large quantities have been raised, and it is much planted; but the cotton, which in some parts is perennial, dies here in the winter; which, nevertheless, the annual is not inferior to in goodness, but requires more trouble in cleansing from the seed." In about the year 1742, M. Dubreuil invented a cotton-gin, which created an epoch in the cultivation of this product in Louisiana. During the Revolution, the inhabitants of St. Mary's and Talbot counties, in Maryland, as well as those of Cape May county, New Jersey, raised a sufficient quantity of cotton to meet their wants for the time. It was formerly produced in small quantities, for family use, in the county of Sussex, in Delaware, near the headwaters of the Choptank.

The seed of the Sea Island cotton was originally obtained from the Bahama islands, in about the year 1785, being the kind then known in the West Indies as the "Anguilla cotton." It was first cultivated by Josiah Tattnall and Nicholas Turnbull, on Skidaway island, near Savannah; and subsequently by James Spaulding and Alexander Bisset, on St. Simon's island, at the mouth of the Altamaha, and on Jekyl island, by Richard Leake. For many years after its introduction, it was confined to the more elevated parts of these islands, bathed by the saline atmosphere, and surrounded by the sea. Gradually, however, the cotton culture was extended to the lower grounds, and beyond the limits of the islands to the adjacent shores of the continent, into soils containing a mixture of clay; and lastly into coarse clays, deposited along the great rivers, where they meet the ocean tides.

Previous to 1794—the year after the invention of Whitney's saw-gin

—the annual amount of cotton produced in North America was comparatively inconsiderable; but since that period, there is probably nothing recorded in the history of industry, including its manufacture in this country and Europe, that would compare with its subsequent increase.

In the Eastern hemisphere, the growth of cotton is principally restricted to the maritime countries lying between the 40th degree of north latitude and a corresponding parallel south. On the easterly side of the Western Continent, this plant will perfect its growth in most of the districts adjacent to the tidal waters, including the regions bordering on the Mississippi, the Amazon, and the Parana, between latitude 39 degrees north and 40 degrees south; and on the west coast of America, between the 40th parallel north and a corresponding degree south.

The growth of this staple is chiefly confined to India, China, Japan, Australia, Persia, Turkey, southern Europe, Arabia, Egypt, Algeria, southern and western Africa, the southern section of the United States, British Guiana, New Granada, Venezuela, Peru, Brazil, Uruguay, the West Indies, and numerous other ocean isles.

According to Dr. Royle, who has recently investigated the subject, the different varieties of cotton may be classed under four distinct species, in the following manner:

1. *Gossypium indicum*, or *herbaceum*—the cotton plant of India, China, Arabia, Persia, Asia Minor, and some parts of Africa.

2. *Gossypium arboreum*—a tree cotton, indigenous to India.

3. *Gossypium barbadense*—the Mexican or West Indian cotton, of which the Sea Island, New Orleans, and upland Georgia, are varieties. It was long since introduced into the island of Bourbon, and thence into India; hence it acquired the name of "Bourbon cotton."

4. *Gossypium peruvianum*, or *accuminatum*—which yields the Pernambuco, Peruvian, Maranham, and Brazilian cotton, especially distinguished by its black seeds, which adhere firmly together. This variety has long since been introduced into India.

The chief varieties cultivated in the United States are the black-seed, or Sea-Island, (*G. arboreum*,) known, also, by the name of "long-staple," from its fine, white, silky appearance and long fibres; the green-seed, (*G. herbaceum*,) called "short-staple," from its shorter, white staple, with green seeds, and commercially known by the name of "upland cotton;" and two kinds of Nankin or yellow, (*G. barbadense*,) the Mexican and petit gulf. The average yield is about five hundred pounds per acre.

The earliest record of sending cotton from this country to Europe is in the table of exports from Charleston, in 1747–'48, when seven bags were shipped; another parcel, consisting of 2,000 pounds, was shipped in 1770; and a third shipment of seventy-one bags was made in 1784, which England seized, on the ground that America could not produce a quantity so great. The amount exported from the United States in 1791 was 189,316 pounds; in 1793, 487,600 pounds; in 1794, 1,601,760 pounds; in 1795, 6,276,300 pounds; in 1800, 17,789,303 pounds; in 1810, 93,261,462 pounds; in 1820–'21, 124,893,405 pounds; in 1830–'31, 276,979,784 pounds; in 1840–'41, 530,204,100 pounds; in 1850–'51, 927,237,089 pounds.

According to the Census returns of 1840, the amount cultivated was

790,479,275 pounds; of 1850, 987,449,600 pounds; showing an increase of 196,970,325 pounds.

It appears that the culture of cotton is rapidly diminishing in Virginia and North Carolina. In those States it is doubtless giving place to other productions of the soil. There has been a very heavy falling off, also, in Louisiana, and no appreciable increase in Mississippi; but the diminution in the former State, and the failure of any advance in the latter, are accounted for by the terrible inundations of the Mississippi and its tributaries. But for that calamity, it is probable that their increased yield would have equalled that of Alabama, which now occupies the first place as a cotton-planting State, and has almost doubled its production since 1840. Immense as the extent and value of this crop has become, it is not extravagant to anticipate a rate of increase for the current decennial period, which will bring up the aggregate for the year 1860 to 4,000,000 bales.

The average annual yield for the five years ending with 1835, was estimated at 1,055,000 bales; for the same period ending in 1840, 1,440,000 bales; for a like period terminating with 1850, 2,270,000 bales. Had no disturbing cause interrupted the progressive advance, the amount of 1850 would have exceeded 3,000,000 bales.

Wool.—Analogous in the uses for which it serves to cotton, wool is a product of only less importance to the prosperity of the country than that leading staple of our agriculture and commerce.

It is a very gratifying fact that though the number of sheep has increased in ten years but 12 per cent., the aggregate weight of their fleeces has augmented 46 per cent.

In 1840, there were 19,311,374 sheep, yielding 35,802,114 pounds of wool, equal to 1.84 pound per head.

In 1850, the average weight of each fleece was 2.43 pounds, from which it would appear that such an improvement had taken place in the various breeds of the American sheep as to increase their average product about 32 per cent. throughout the United States. And a critical analysis of the returns of sheep and wool proves not only that our breeds are capable of such improvement, but that it has actually taken place.

In Vermont, the greatest attention has been given to sheep-breeding; time, money, and intelligence having been freely applied to the great object of obtaining a breed combining weight and fineness of fleece. These efforts have succeeded so well, that although the number of sheep in that State had declined nearly one-half in the period from the Sixth to the Seventh Census, the yield of wool remained nearly the same. The average weight of the fleece in this State in 1840 was 2.2 pounds, and in 1850 it had increased to 3.71, the gain being equal to almost 70 per cent

In Massachusetts, also, where strenuous exertions have been made—though not on so large a scale as in Vermont—to improve their sheep, a correspondingly beneficial result has been obtained, and the average weight of the fleece has been increased from 2.5 to 3.1 pounds.

The State of New York produced 226,000 pounds more wool in 1850, from 3,453,000 sheep, than from 5,118,000 in 1840, showing that the weight of the fleece had been raised from less than two to nearly three pounds.

Our imports of wool during the past ten years have varied as follows:

Quantity and value of wool imported into the United States from 1841 *to* 1850, *inclusive.*

Date.	Quantity in pounds.	Value in dollars.
1841	15,006,410	$1,091,953
1842	11,420,958	797,482
1843—9 months	3,517,100	245,000
1844	14,008,000	851,460
1845	23,833,040	1,689,794
1846	16,558,247	1,134,226
1847	8,460,109	555,622
1848	11,341,429	857,034
1849	17,869,022	1,177,347
1850	18,669,794	1,681,691

By this statement it is shown that the quantity of wool brought into the country of late years amounts to almost one-third of that produced in it, while at former periods, as from 1841 to 1845, the amount was nearly one-half. The largest proportion of this imported wool came from Buenos Ayres and the neighboring States on the Rio de la Plata, and is of a coarse and cheap variety, costing from six to eight cents per pound. It always will be cheaper to bring this kind of wool from regions where sheep are reared without care or labor, than to produce it at home; but there is no country in the world in which sheep may, by judicious treatment, be made a source of greater wealth and comfort to its inhabitants than the United States.

The importations of wool in 1850–51 exhibit a remarkable increase over the preceding or any former year, amounting in quantity to 32,548,693 pounds, and to the value of $3,800,000.

Buckwheat.—Buckwheat is cultivated in almost every part of the temperate and arctic climates of the civilized world for the farinaceous albumen of its seeds, which, when properly cooked, affords a delicious article of food to a large portion of the human race. It also serves as excellent fodder to milch cows, and the straw, when cut green and converted into hay, as well as the ripened seeds, are fed to cattle, poultry, and swine. It is believed to be a native of central Asia, as it is supposed to have been first brought to Europe in the early part of the twelfth century, at the time of the Crusades for the recovery of Syria from the dominion of the Saracens; while others contend that it was introduced into Spain by the Moors, four hundred years before.

This grain appears not to have been much cultivated in this country prior to the last century, as it is not often mentioned by writers on America previous to that period. Holm, in his History of Pennsylvania, (Nieu Swedeland,) published at Stockholm in 1702, mentions it among the productions of that province; and Kalm, the Swedish naturalist, who visited this country in 1748–'49, speaks of it as growing in Pennsylvania, New Jersey, and New York; and several American writers on agricultural subjects have treated of it since.

The cultivation of buckwheat, in one or other of its species, is principally confined to Great Britain, France, Switzerland, Italy, Netherlands, Germany, Sweden, Russia, China, Tartary, Japan, Algeria, Canada, and the middle and northern portions of the United States.

In this country from thirty to forty-five bushels per acre may be considered as an average yield in favorable seasons and situations, but sixty or more bushels are not unfrequently produced.

This grain heretofore has never entered into our foreign commerce. According to the Census returns of 1840, the annual quantity raised in the United States was 7,291,743 bushels; of 1850, 8,956,916 bushels.

Barley.—Barley, like wheat, has been cultivated in Syria and Egypt for more than three thousand years; and it was not until after the Romans adopted the use of wheaten bread, that they fed this grain to their stock. It is evidently a native of a warm climate, as it is known to be the most productive in a mild season, and will grow within the tropics at an elevation of three or four thousand feet above the level of the sea. It is one of the staple crops of northern and mountainous Europe and Asia.

The introduction of barley into the North American colonies may be traced back to the periods of their settlements. It was sown by Gosnold, together with other English grains, on Martha's Vineyard and the Elizabeth islands, in 1602, and by the colonists in Virginia in 1611. By the year 1648, it was raised in abundance in that colony; but soon after, its culture was suffered to decline in consequence of the more profitable and increased production of tobacco. It has also been sparingly cultivated in the regions of the middle and northern States for malting and distillation, and has been employed, after being hulled, as a substitute for rice. Although believed to have been indigenous to the countries bordering on the torrid zone, this grain possesses the remarkable flexibility of maturing, in favorable seasons and situations, on the Eastern Continent, as far north as seventy degrees, and flourishes well in latitude forty-two degrees south. Along the Atlantic side of the continent of America, its growth is restricted to the tract lying between the thirtieth and fiftieth parallels of north latitude, and between thirty and forty degrees south. Near the westerly coast its range lies principally between latitude twenty and sixty-two degrees north. Barley is at present extensively cultivated in the temperate districts and islands of Europe, Asia, Africa, and Australia. In Spain, Sicily, the Canaries, Azores, and Madeira, two crops are produced in a year. In North America, its growth is principally confined to Mexico, the middle, western, and northern States of the Union, and to Canada, New Brunswick, Nova Scotia, and Newfoundland.

The barley chiefly cultivated in the United States is the two-rowed variety, which is generally preferred, from the fulness of its berry and its freedom from smut. The yield varies from thirty to fifty, or more, bushels per acre, weighing from forty-five to fifty-five pounds to the bushel.

Barley has never been much exported from this country, as we have been consumers rather than producers of this grain. In 1747–'48, there were shipped from Charleston to England, fifteen casks.

The consumption of barley for the past year in the manufacture of malt and spirituous liquors amounted to 3,780,000 bushels.

According to the Census returns of 1840, the annual amount of barley raised in the United States was 4,161,504 bushels; of 1850, 5,167,016 bushels.

Potatoes.—The common English or Irish potato, (*Solanum tuberosum,*) so extensively cultivated throughout most of the temperate countries of the civilized globe, contributing, as it does, to the necessities of a large portion of the human race, as well as to the nourishment and fattening of stock, is regarded as of but little less importance in our national economy than maize, wheat, or rice. It has been found in an indigenous state in Chili, on the mountains near Valparaiso and Mendoza; also near Montevideo, Lima, Quito, as well as in Santa Fé de Bogota, and more recently in Mexico, on the flanks of the Orizaba.

The history of this plant, in connexion with that of the sweet potato, is involved in obscurity, as the accounts of their introduction into Europe are somewhat conflicting, and often they appear to be confounded with one another. The common kind was doubtless introduced into Spain in the early part of the sixteenth century, from the neighborhood of Quito, where, as well as in all Spanish countries, the tubers are known as *papas.* The first published account of it we find on record is in La Cronica del Peru, by Pedro de Cieca, printed at Seville in 1553, in which it is described, and illustrated by an engraving. From Spain it appears to have found its way into Italy, where it assumed the same name as the truffle. It was received by Clusius, at Vienna, in 1598, in whose time it spread rapidly in the south of Europe, and even into Germany. To England it is said to have found its way by a different route, having been brought from Virginia by Raleigh's colonists in 1586, which would seem improbable, as it was unknown in North America at that time, either wild or cultivated; and, besides, Gough, in his edition of Camden's Brittania, says it was first planted by Sir Walter Raleigh on his estate at Youghall, near Cork, and that it was cultivated in Ireland before its value was known in England. Gerard, in his Herbal, published in 1597, gives a figure of this plant, under the name of *Batata Virginiana,* to distinguish it from the sweet potato, *Batata Edulis,* and recommends the root to be eaten as a "delicate dish," but not as a common food. "The sweet potato," says Sir Joseph Banks, "was used in England as a delicacy long before the introduction of our potatoes; it was imported in considerable quantities from Spain and the Canaries, and was supposed to possess the power of restoring decayed vigor." It is related that the common potato was accidentally introduced into England from Ireland at a period somewhat earlier than that noticed by Gerard, in consequence of the wrecking of a vessel on the coast of Lancashire, which had a quantity on board. In 1663, the Royal Society of England took measures for encouraging the cultivation of this vegetable, with the view of preventing famine. Notwithstanding its utility as a food became better known, no high character was attached to it; and the writers on gardening towards the end of the seventeenth century, a hundred years or more after its introduction, treated of it rather indifferently. "They are much used in Ireland and America as bread," says one author, "and may be propagated with advantage to poor people." The famous nurserymen, London and Wise, did not consider it worthy of notice in their Complete Gardener, published in 1719. But its use gradually spread, as its excellencies

became better understood. It was near the middle of the last century before it was generally known either in Britain or North America, since which it has been most extensively cultivated.

The period of the introduction of the common potato into the British North American colonies is not precisely known. It is mentioned among the products of Carolina and Virginia in 1749, and among those growing in New York and New England the same year.

The culture of this plant extends through the whole of Europe, a large portion of Asia, Australia, the southern and northern parts of Africa, and the adjacent islands. On the American Continent, with the exception of some sections of the torrid zone, the culture of this root extends from Labrador on the east, and Nootka Sound on the west, to Cape Horn. It resists more effectually than the cereals the frosts of the north. In this country it is principally confined to the northern, middle and western States, where, from the coolness of the climate, it acquires a farinaceous consistence, highly conducive to the support of animal life. It has never been extensively cultivated in Florida, Alabama, Mississippi, nor Louisiana—perhaps from the greater facility of raising the sweet potato, its more tropical rival. Its perfection, however, depends as much upon the soil as on the climate in which it grows; for in the red loam on the banks of Bayou Bœuf, in Louisiana, where the land is new, it is stated that tubers are produced as large, savory, and as free from water, as any raised in other parts of the world. The same may be said of those grown at Bermuda, Madeira, the Canaries, and numerous other ocean isles.

The chief varieties cultivated in the northern States are the Carter, the kidneys, the pink-eyes, the Mercer, the orange, the Sault St. Marie, the Merino, and the western red; in the middle and western States, the Mercer, the long red, or Merino, the orange, and the western red. The yield varies from 50 to 400 bushels and upwards per acre, but generally it is below 200 bushels.

Within the last ten years an alarming disease, or "rot," has attacked the tubers of this plant about the time they are fully grown. It has not only appeared in nearly every part of our own country, but has spread dismay at times throughout Great Britain and Ireland, and has been felt more or less seriously in every quarter of the globe.

To the greater uncertainty attending its cultivation of late years, from this cause, must be attributed the deficiency of the crop of 1849 as compared with that of 1839. This is one of the four agricultural products which, by the present Census, appears smaller than it was ten years since.

Sweet Potato.—The sweet potato *(Batatas edulis)* is a native of the East Indies, and of inter-tropical America, and was the "potato" of the old English writers in the early part of the fourteenth century. It was doubtless introduced into Carolina, Georgia, and Virginia, soon after their settlement by the Europeans, being mentioned as one of the cultivated products of those colonies as early as the year 1648. It grows in excessive abundance throughout the southern States, and as far north as New Jersey and the southern part of Michigan.

The varieties cultivated are the purple, the red, the yellow, and the white, the former of which is confined to the South.

The amount of sweet potatoes exported from South Carolina in

1747–'48 was 700 bushels; that of the common potato exported from the United States in 1820–'21, 90,889 bushels; in 1830–'31, 112,875 bushels; in 1840–'41, 136,095 bushels; in 1850–'51, 106,342 bushels.

According to the Census returns of 1840, the quantity of potatoes, of all sorts, raised in the Union, was 108,298,060 bushels; of 1850, 104,055,989 bushels, of which 38,259,196 bushels were sweet.

American Wine.—The extent of our territory over which the wine culture may be advantageously diffused, has long afforded a subject of much speculation. It early attracted the attention of the first colonists, who not only attempted to form vineyards of the European vine, but to make wine from our own native grapes. Although the subject has been zealously and sedulously pursued at various periods since, all those dwelling on the easterly half of the continent who have made trial of the foreign grape, have never been able to bring their designs to perfection; and those who have tested their skill in our native varieties have only met with partial success, yet, a degree of perseverance and enthusiasm seems to have pervaded all the votaries of this delightful pursuit, and a warm and mutual interchange of views and sentiments has existed among them, which has been comparatively unknown in other species of culture. Although the operators in recent times, from being interspersed over so great an extent of territory, are consequently more widely separated, still the connecting link, by a friendly co-operation in one common cause, may justly and appropriately assimilate their united exertions to that joyous period in the history of France when, during the reign of Probus, thousands of all ages and sexes united in one spontaneous and enthusiastic effort for the restoration of their vineyards. Indeed, when the far greater limits of our domain are considered, the combined efforts of our fellow-countrymen cannot fail to produce effects even more important, from the great extent of their influence, and cause each section of our republic reciprocally to respond to the efforts of others, with all their attendant advantages and blessings.

The earliest attempt to establish a vineyard in the British North American colonies was by the "London Company," in Virginia, prior to 1620. By the year 1630, the prospects were sufficiently favorable to warrant the importation of several French *vignerons*, who, it was alleged, ruined them by bad management. Wine was also made in Virginia in 1647; and in 1651, premiums were offered for its production. On the authority of Beverley, who wrote prior to 1722, there were vineyards in that colony which produced 750 gallons a year.

Beauchamp Plantagenet, in his "Description of the Province of New Albion," published in London in 1648, states that the English settlers in Uvedale, (now in Delaware,) had vines running on mulberry and sassafras trees, and that there were four kinds of grapes. "The first," says he, "is the Tholouse Muscat, sweet scented; the second, the great foxe and thick grape, after five moneths reaped, being boyled and salted, and well fined, it is a strong red Xeres; the third, a light claret; the fourth, a white grape, creeps on the land, maketh a pure gold-color wine: Tenis Pale, the Frenchman, of these four, made eight sorts of excellent wine; and of the Muscat, acute boyled, that the second draught will fox a reasonable pate, four moneths old; and here may be gathered

and made two hundred tun in the vintage moneth, and replanted, will mend."

An attempt to establish a vineyard near Philadelphia was made by William Penn, in 1683; also by Andrew Dore, in 1685; but neither succeeded.

In 1769, the French settlers on Illinois river made upwards of 100 hogsheads of strong wine from the American wild grape.

The quantity of wine annually produced in the United States has become a subject of some discussion since the appearance of the return in the Seventh Census on that interest. The Census of 1840 gave 124,000 gallons as the produce of that year. It has been stated in the public prints that since that period the culture of the grape, and the manufacture of wine therefrom, have grown into a business of considerable importance in the States bordering on the Ohio river, and that several hundred acres have been planted in vineyards in that valley, which yield at the rate of more than 45,000 gallons of wine a year. The total product of the Union in 1850, was given at 221,249 gallons. But during the intervening period there had been added to our own territory California and New Mexico, which, in the latter year, produced 60,718 gallons. This quantity deducted from the aggregate, leaves 160,531 gallons for the portion of the Union covered by the returns of 1840—indicating a gain of only 36,000 gallons. This is probably an understatement, but it seems to prove that no considerable progress has yet been made towards supplying, by a home production, the demand, to meet which, importations of foreign wines to a very large amount are annually made.

The consumption of wine in the United States, though by no means general, amounts in the aggregate to a large sum. The imports during the year ending June, 1851, were 6,160,000 gallons, of which, probably, three-fourths consisted of the wines of France. The value or invoice cost of the article was $2,370,000. The average consumption of foreign wines was, therefore, in quantity, but about one-quarter of a gallon for each person, and in value only ten cents. The coincidence is somewhat remarkable, that this is almost precisely the rate of consumption of imported wine among the people of Great Britain. But in France, according to official returns, there is produced and retained for consumption 900,000,000 gallons of wine, allowing 25¾ gallons to each person in the population.

It appears, from other tables in our Census returns, that the quantity of ale and spirituous liquors produced in the United States, in 1850, exceeded 86,000,000 gallons. The amount exported was balanced by the imports, and the quantity rejected, in forming the above estimate, for the sake of preserving round numbers; the consumption of malt and spirituous liquors for manufacturing purposes, and as a beverage, appears to have been at the rate of nearly four gallons per head. It is the opinion of many, whose inquiries upon the subject entitle them to respect, that among what are called "civilized" nations, the vice of inebriation has always been found to prevail most extensively where the vine is not cultivated; while, on the other hand, where this species of culture is widely disseminated, the temperance of the people is proverbial. If such be the case, we may proudly hope that the day is not far distant when America will fully establish and claim a rivalry with

the most favored land of the vine and the olive, and exultingly disclaim being tributary to any foreign clime.

Pounds of Hops produced.—A gratifying increase has taken place in the culture of this useful article. The gain has been nearly 200 per cent. Almost the whole of the increment, however, has been in the State of New York, which, from less than half a million of pounds in 1840, now produces more than two and a half millions, which exceeds five-sevenths of the whole crop of the United States.

In connexion with this circumstance, it may be mentioned that New York also stands foremost in the production of ale, beer, and porter, in the manufacture of which the larger part of the hops raised is consumed. The breweries of this State produced 645,000 barrels of ale, &c., in 1850, being more than a third of the quantity returned for the whole Union.

Flax and Hemp.—During the last half century great efforts have been made in Europe, and to some extent, of late, in the United States, to increase and improve the production and manufacture of flax and hemp. Formerly they were considered as indispensable crops among our planters and farmers; but their use has been superseded, in a measure, by the cotton of the South.

Common flax is a native of Britain, where it has been cultivated from time immemorial, and, from its hardihood and adaptation to a wide range of temperature, it has been grown in almost every country on the Eastern Continent, from Egypt to the polar circle, and in North America, from Texas to Newfoundland.

Hemp—which is supposed to be a native of India, but long since acclimatized and extensively cultivated in Spain, Italy, and several other countries in Europe, particularly in Poland and Russia, as well as in different parts of America—also forms an article of primary importance in commerce, and is of extensive utility.

Both of these products were introduced into the North American colonies soon after their settlement by the English. They are mentioned as growing in New England prior to 1632, and bounties were offered for their cultivation in Virginia as early as 1751. Captain Matthews sowed, yearly, both hemp and flax, which he caused to be spun and woven, prior to the year 1648. In 1662 an edict was passed requiring each poll in Virginia to raise annually and manufacture six pounds of linen thread; but, from the change of the laws and the cessation of the bounties, the culture declined.

In the late Exhibition at London of the Works of Industry of All Nations, both of these materials held a conspicuous rank. Flax was exhibited, the growth of Great Britain, Ireland, Holland, Belgium, France, Spain, Portugal, Italy, Prussia, Germany, Poland, Russia, Turkey, Egypt, India, Van Dieman's Land, Canada, and the United States, and hemp from all of these countries except Britain, Ireland, Canada, and Van Dieman's Land.

The fibre of flax and hemp has never been produced in this country in sufficient abundance to form much of an article of foreign commerce, but flax-seed was formerly shipped to Europe in large quantities. There were exported from New Jersey, in 1751, 14,000 pounds of hemp; from Savannah, in 1770, 1,860 pounds; from the United States, in 1850–'51, 4,769 hundred-weight. The amount of flax-seed

exported from Philadelphia in 1752 was 70,000 bushels; in 1767, 84,658 bushels; in 1771, 110,412 bushels; from New York, in 1755, 12,528 hogsheads; from the British North American colonies, in 1770, 312,612 bushels; from the United States, in 1791, 292,460 bushels; in 1800, 289,684 bushels, in 1810, 240,579 bushels; in 1820–'21, 264,310 bushels; in 1830–'31, 120,702 bushels; in 1840–'41, 32,243 bushels; in 1850–'51, 9,185 bushels.

According to the Census returns of 1840, there were raised in the United States 95,251¾ tons of flax and hemp; of 1850, 35,093 tons of hemp and 7,715,961 pounds of flax.

The correctness of the returns as to hemp, in the Seventh Census, has not yet been perfectly verified. There has been some doubt whether, in a number of instances, the marshals have not written *tons* where they meant *pounds*. If, however, the returns are allowed to stand without reduction, it would appear that the cultivation of hemp or flax has materially changed since 1840. In the returns of that year, as stated above, both of these articles were included under the same head. In 1840, those of Virginia gave 25,594 tons of hemp and flax together. In 1850, only 141 tons of hemp and 500 tons of flax were returned. Such a falling off would amount to almost an abandonment of the culture of hemp in that State, which there is no reason to suppose has taken place.

The discovery of new methods for separating the fibrous from the woody parts of the flax-plant has doubtless given a vigorous stimulant to its cultivation in the United States. The process of Chevalier Clausen first attracted general attention among us in 1850. Though considerable quantities of flax have been produced in former years, it has been raised principally for the seed, which commanded a remunerating price. The want of a cheap and speedy process for separating the textile from the refuse parts of the stalk has occasioned a vast annual loss of useful material to the country. Should the attempts which have lately been made to apply Clausen's invention succeed, the production of flax in the United States may become of great importance, and be advantageously used, not only alone, but in the manufacture of mixed fabrics, as it appears capable of being spun with wool, silk, and other fibres.

Silk Cocoons.—The culture and manufacture of silk, like many productions of nature and art, are difficult to trace from their origin. All that we know concerning them is, that they have come to us from the East in a state of comparative perfection. It seems to have been in Asia that silk was first known, and was called *Serica*, from the name of the country in which its use was supposed to have been discovered. The Chinese claim to have manufactured this delicate luxury as early as 2,700 years before the Christian era, at which time their attention was first attracted to the operations of the silk-worm on wild mulberry trees. It was soon after found that they thrived much better in rooms than in the open air, and produced cocoons of much larger size and superior quality. From that period the culture of silk rapidly increased, and subsequently became a source of great wealth, and spread from China to India, Persia, and Arabia, where, down to the present time, it has continued to be abundantly produced.

The expedition of Alexander the Great into Persia and India, first

brought silk to the knowledge of Europeans, about 350 years before Christ. About the beginning of the sixth century, after the Roman Empire had been transferred to Constantinople, two monks arrived in the court of the Emperor Justinian, from a mission into China, bringing with them the seeds of the mulberry, and communicated the discovery of the mode of rearing silk-worms. Although the exportation of the eggs of the insects from China was prohibited on pain of death, by the liberal promises and persuasions of Justinian, they were induced to undertake to import some from that country; returning from the expedition through Bucharia and Persia, in the year 555, with the eggs of the precious insect, which they had obtained, concealed in the hollow of their canes, or pilgrim staves. From Constantinople, the silk culture spread into Arabia, thence into Spain, and Portugal, Greece, Sicily Italy, and other parts of Europe.

The introduction of this culture into the North American colonies, dates back to the first settlement of Virginia. James I., who was anxious to promote this branch of industry, several times urged the "London Company" to encourage the growth of mulberry trees, and addressed a letter to them on the subject, in 1622, conveying strict injunctions that they should use every exertion for this purpose, and stimulated the colonists to apply themselves diligently and promptly to the breeding of silk-worms, and the establishment of silk-works, bestowing their labors rather in producing this rich commodity than to the growth of tobacco—an article to which his Majesty had recorded and published his violent aversion. The company thus incited, showed much zeal in their endeavors to accomplish the King's wishes. A considerable number of mulberry trees was planted; but little silk was produced, owing to difficulties involved by their dissolution soon after. In about the year 1651, the rearing of silk-worms again became a subject of interest in Virginia, and premiums were offered for its encouragement; but it does not appear that the business was ever prosecuted to any extent.

The silk culture was introduced into Louisiana, in 1718, by the "Company of the West."

In the infant settlement of Georgia, in 1722, a piece of ground belonging to government was allotted as a nursery-plantation for white mulberry trees, and the attention of some of the settlers was soon engaged in rearing silk-worms. In 1726, a quantity of raw silk was raised in that colony, which was manufactured into a piece of stuff, and presented to the Queen.

In 1749, an act of Parliament was passed for encouraging the growth of silk in Georgia and Carolina, exempting the producer from the payment of duties on importation into London. A bounty was also offered for the production of silk, and a man named Ortolengi, from Italy, was employed to instruct the colonists in the Italian mode of management. A few years before the Revolution, considerable quantities of raw material began to be raised, which was said to be equal, in some cases to the best Piedmont silk, and worked with less waste than the Chinese article.

In Carolina, the culture was undertaken by the small farmers. In 1766, the House of Assembly of this province voted the sum of £1,000 towards the establishment of a silk filature at Charleston, under the direction of Mr. Gilbert.

In Connecticut, attention was first directed to the rearing of silk-worms in 1760. Dr. Aspinwall, of Mansfield, from motives of patriotism, used his best exertions to introduce this important branch of rural economy. He succeeded in forming extensive nurseries of the mulberry at New Haven, Long Island, Pennsylvania, and other places. Half an ounce of mulberry seeds was sent to each parish in the colony, with such directions as his knowledge of the business enabled him to impart. In 1783, the legislature of Connecticut passed an act granting a bounty on mulberry trees and raw silk. It here may be stated to the honor of Connecticut, that she is the only State in the Union, which has continued the business without suspension, and probably has produced more silk, from the time of her commencement up to the year 1830, than all the other States.

In the year 1769, on the recommendation of Dr. Franklin, through the American Philosophical Society, a filature of raw silk was established in Philadelphia, by private subscription, and placed under the direction of an intelligent and skilful Frenchman, who, it is said, produced samples of reeled silk not inferior in quality to the best from France and Italy. In 1771, the managers purchased 2,300 pounds of cocoons—all the product of Pennsylvania, New Jersey, and Delaware. The enterprise was interrupted by the Revolution. A similar undertaking was again attempted in Philadelphia, in 1830, under the supervision of M. J. D'Homergue, and cocoons were brought in abundance to the establishment from various parts of the country, and so continued for some time afterwards; but, for want of capital, the enterprise failed.

In about the year 1831, the project of rearing silk-worms and establishing filatures of silk was renewed in various parts of the Union; and the subject was deemed to be of so much importance that it not only attracted the attention of Congress, but afterwards received encouragement from the legislatures of several States, by bounties offered for all the raw silk produced within their limits for certain periods of time. The business soon began to be prosecuted with extreme ardor, and continued for several years, resulting in the establishment of several nurseries of mulberry trees, and ending in the downfall of the famous "Morus Multicaulis speculation" in 1845.

The amount of raw silk exported from Georgia in 1750 was 118 pounds; in 1755, 138 pounds; in 1760, 558 pounds; in 1766, more than 20,000 pounds; in 1770, 290 pounds. From South Carolina, in 1772, 455 pounds. In the year 1765, there were raised on Silk Hope plantation, in South Carolina, 630 pounds of cocoons; in Mansfield, Connecticut, in 1793, 265 pounds of raw silk; in 1827, 2,430 pounds; in 1831, 10,000 pounds; in Connecticut, in 1844, 176,210 pounds; in the United States, the same year, 396,790 pounds. (See Patent Office Report.)

According to the Census returns of 1840, the amount of silk cocoons raised in the United States was 61,552½ pounds; of 1850, 10,843 pounds. From the above, it is obvious that the production of cocoons has decreased, since 1840, 46,789 pounds; and since 1844, 382,027 pounds.

Sugar.—Sugar, so extensively used in every country of the habitable globe, and forming, as it does, one of our chief staples, supplies its commercial demand mainly from the juice of the cane, which contains it

in greater quantity and purity than any other plant, and offers greater facilities for its extraction. Although sugar, identical in its character, exists in the maple, the cocoanut, and the beet-root, and is economically obtained to a considerable extent, yet it is not often sufficiently pure to admit of ready separation from the foreign matter combined with it, at least by the means the producers usually have at hand.

The history of cane sugar, like that of many other necessaries of life, is involved in great obscurity. It appears to have been imperfectly known to the Greeks and Romans, as Theophrastus, who lived 320 years before Christ, describes it as a sort of "honey extracted from canes or reeds." And Strabo, who states on the authority of Nearchus, the commander of the fleet in the expedition of Alexander the Great, says that "reeds in India yield honey without bees." We are also informed that sugar candy has been made in China from very remote antiquity; and that large quantities of it have been exported from India, in all ages, whence it is most probable that it found its way to Rome.

Sugar cane occurs in a wild state on many of the islands of the Pacific, but in no part of the American Continent, notwithstanding a contrary opinion has been expressed. Its cultivation and the manufacture of sugar were introduced into Europe from the East, by the Saracens, soon after their conquests, in the ninth century. It is stated by the Venetian historians, that their countrymen imported sugar from Sicily, in the twelfth century, at a cheaper rate than they could obtain it from Egypt, where it was then extensively made. The first plantations in Spain were at Valencia, but they were extended to Granada, Murcia, Portugal, Madeira, and the Canary islands, as early as the beginning of the fifteenth century. From Gomera, one of these islands, the sugar cane was introduced into the West Indies by Columbus, in his second voyage to America, in 1493. It was cultivated to some extent in St. Domingo, in 1506, where it succeeded better than in any of the other islands. In 1518, there were twenty-eight plantations in that colony, established by the Spaniards, where an abundance of sugar was made, which, for a long period formed the principal part of the European supplies. Barbadoes, the oldest English settlement in the West Indies, began to export sugar in 1646, and in the year 1676, the trade required four hundred vessels, averaging 150 tons burden.

The introduction of sugar cane into Florida, Texas, California, and Louisiana, probably dates back to their earliest settlement, by the Spaniards or French. It was not cultivated in the latter, however, as a staple product, before the year 1751, when it was introduced with several negroes, by the Jesuits, from St. Domingo. They commenced a small plantation on the banks of the Mississippi, just above the old city of New Orleans. The year following, others cultivated the plant, and made some rude attempts at the manufacture of sugar. In 1758, M. Dubreuil established a sugar estate, on a large scale, and erected the first sugar-mill in Louisiana, in what is now the lower part of New Orleans. His success was followed by other plantations, and in the year 1765, there was sugar enough manufactured for home consumption; and in 1770, it had become one of the staple products of the colony.

Soon after the Revolution, a large number of enterprising adventurers emigrated from the United States to Lower Louisiana, where, among other objects of industry, they engaged in the cultivation of cane, and by the year 1803 there were no less than eighty-one sugar estates on the Delta alone. Since that period, while the production of cane-sugar has been annually increasing at the South, the manufacture of maple-sugar has been extending in the North and West.

The common sugar cane is a perennial plant, very sensitive to cold, and is therefore restricted in its cultivation to regions bordering on the tropics, where there is little or no frost. In the Eastern hemisphere its production is principally confined to situations favorable to its growth, being between the fortieth parallel of north latitude and a corresponding degree south. On the Atlantic side of the Western Continent it will not thrive beyond the thirty-third degree of north latitude and the thirty-fifth parallel south. On the Pacific side it will perfect its growth some five degrees further north or south. From the flexibility of this plant, it is highly probable that it is gradually becoming more hardy, and will eventually endure an exposure, and yield a profitable return, much further north, along the borders of the Mississippi, and some of its tributaries, than it has hitherto been produced. In most parts of Louisiana the canes yield three crops from one planting. The first season it is denominated "plant cane," and each of the subsequent growths "ratoons." But sometimes, as on the prairies of Attakapas and Opelousas, and the higher northern range of its cultivation, it requires to be replanted every year. Within the tropics, as in the West Indies, and elsewhere, the ratoons frequently continue to yield abundantly for twelve, fifteen, and even twenty-four years, from the same roots.

The cultivation of this plant is principally confined to the West Indies, Venezuela, Brazil, Mauritius, British India, China, Japan, the Sunda, Philippine, and Sandwich islands, and to the southern districts of the United States. The varieties most cultivated in the latter are the striped blue, and yellow ribbon, or Java; the red ribbon, or violet, from Java; the Creole crystalline, or Malabar; the Otaheite, the purple, the yellow, the purple-banded, and the grey canes. The quantity of sugar produced on an acre varies from five hundred to three thousand pounds; averaging, perhaps, from eight hundred to one thousand pounds.

Hitherto the amount of sugar and molasses consumed in the United States has exceeded the quantity produced; consequently, there has been no direct occasion for their exportation. In the year 1815, it was estimated that the sugar made on the banks of the Mississippi alone amounted to ten million pounds. In 1818, the entire crop of Louisiana was only twenty-five million pounds; in 1850, it had reached the enormous quantity of 226,001,000 pounds, besides about twelve million gallons of molasses.

According to the Census of 1840, the amount of cane and maple sugar was 155,100,809 pounds, of which 119,947,720 pounds were raised in Louisiana. By the Census of 1850 the cane-sugar made in the United States was 247,581,000 pounds, besides 9,700,606 gallons of molasses; maple-sugar, 34,249,886 pounds; amounting to 281,830,886 pounds; showing an increase, in ten years, of 126,730,077 pounds.

States and Territories.	ACRES OF LAND IN FARMS.		Cash value of farms.	Value of farming implements and machinery.
	Improved.	Unimproved.		
Maine	2,039,596	2,515,797	$54,861,748	$2,284,557
New Hampshire	2,251,488	1,140,926	55,245,997	2,314,125
Vermont	2,601,409	1,524,413	63,367,227	2,739,282
Massachusetts	2,133,436	1,222,576	109,076,347	3,209,584
Rhode Island	356,487	197,451	17,070,802	497,201
Connecticut	1,768,178	615,701	72,726,422	1,892,541
New York	12,408,968	6,710,120	554,546,642	22,084,926
New Jersey	1,767,991	984,955	120,237,511	4,425,503
Pennsylvania	8,628,619	6,294,728	407,876,099	14,722,541
Delaware	580,862	375,282	18,880,031	510,279
Maryland	2,797,905	1,836,445	87,178,545	2,463,443
District of Columbia	16,267	11,187	1,730,460	40,220
Virginia	10,360,135	15,792,176	216,401,441	7,021,772
North Carolina	5,453,977	15,543,010	67,891,766	3,931,532
South Carolina	4,072,651	12,145,049	82,431,684	4,136,354
Georgia	6,378,479	16,442,900	95,753,445	5,894,150
Florida	349,049	1,236,240	6,323,109	658,795
Alabama	4,435,614	7,702,067	64,323,224	5,125,663
Mississippi	3,444,358	7,046,061	54,738,634	5,762,927
Louisiana	1,590,025	3,939,018	75,814,398	11,576,938

Texas	639,107	14,454,669	16,398,747	2,133,731
Arkansas	781,531	1,816,684	15,265,245	1,601,296
Tennessee	5,175,173	13,808,849	97,851,212	5,360,220
Kentucky	11,368,270	10,972,478	154,330,262	5,169,037
Ohio	9,851,493	8,146,000	358,758,603	12,750,585
Michigan	1,929,110	2,454,780	51,872,446	2,891,371
Indiana	5,046,543	7,746,879	136,385,173	6,704,444
Illinois	5,039,545	6,997,867	96,133,290	6,405,561
Missouri	2,938,425	6,794,245	63,225,543	3,981,525
Iowa	824,682	1,911,382	16,657,567	1,172,869
Wisconsin	1,045,499	1,931,159	28,528,563	1,641,568
California	62,324	3,831,571	3,874,041	103,483
Minnesota Territory	5,035	23,846	161,948	15,981
Oregon Territory	132,857	299,951	2,849,170	183,423
Utah Territory	16,333	30,516	311,799	84,288
New Mexico Territory	166,201	124,370	1,653,952	77,960
Aggregate	118,457,622	184,621,348	3,270,733,093	151,569,675

Productions of Agriculture in the United States—Continued.

States and Territories.	LIVE STOCK,							Value of live stock.
	Horses.	Asses and mules.	Milch cows.	Working oxen.	Other cattle.	Sheep.	Swine.	
Maine	41,721	55	133,556	83,893	125,890	451,577	54,598	$9,705,726
New Hampshire	34,233	19	94,277	59,027	114,606	384,756	63,487	8,871,901
Vermont	61,057	218	146,128	48,577	154,143	1,014,122	66,296	12,643,228
Massachusetts	42,216	34	130,099	46,611	83,284	188,651	81,119	9,647,710
Rhode Island	6,168	1	28,698	8,189	9,375	44,296	19,509	1,532,637
Connecticut	26,879	49	85,461	46,988	80,226	174,181	76,472	7,467,490
New York	447,014	963	931,324	178,909	767,406	3,453,241	1,018,252	73,570,499
New Jersey	63,955	4,089	118,736	12,070	80,455	160,488	250,370	10,679,291
Pennsylvania	350,398	2,259	530,224	61,527	562,195	1,822,357	1,040,366	41,500,053
Delaware	13,852	791	19,248	9,797	24,166	27,503	56,261	1,849,281
Maryland	75,684	5,644	86,859	34,135	98,595	177,902	352,911	7,997,634
District of Columbia	824	57	813	104	123	150	1,635	71,643
Virginia	272,403	21,480	317,619	89,513	669,137	1,310,004	1,830,743	33,656,659
North Carolina	148,693	25,259	221,799	37,309	434,402	595,249	1,812,813	17,717,647
South Carolina	97,171	37,483	193,244	20,507	563,935	285,551	1,065,503	15,060,015
Georgia	151,331	57,379	334,223	73,286	690,019	560,435	2,168,617	25,728,416
Florida	10,848	5,002	72,876	5,794	182,415	23,311	209,453	2,880,058
Alabama	128,001	59,895	227,791	66,961	433,263	371,880	1,904,540	21,690,112
Mississippi	115,460	54,547	214,231	83,485	436,254	304,929	1,582,734	19,403,662
Louisiana	89,514	44,849	105,576	54,968	414,798	110,333	597,301	11,152,275

Texas	75,419	12,364	214,758	49,982	636,805	99,098	683,514	10,266,880
Arkansas	60,197	11,559	93,151	34,239	165,320	91,256	836,727	6,647,969
Tennessee	270,636	75,303	250,456	86,255	414,051	811,591	3,104,800	29,978,016
Kentucky	315,682	65,609	247,475	62,074	442,763	1,102,121	2,861,163	29,591,387
Ohio	463,397	3,423	544,499	65,381	749,067	3,942,929	1,964,770	44,121,741
Michigan	58,506	70	99,676	55,350	119,471	746,435	205,847	8,008,734
Indiana	314,299	6,599	284,554	40,221	389,891	1,122,493	2,263,776	22,478,555
Illinois	267,653	10,573	294,671	76,156	541,209	894,043	1,915,910	24,209,258
Missouri	225,299	41,667	230,169	112,168	449,173	762,511	1,702,625	19,892,580
Iowa	38,536	754	45,704	21,892	69,025	149,960	323,247	3,689,275
Wisconsin	30,179	156	64,339	42,801	76,293	124,892	159,276	4,897,385
California	21,719	1,666	4,280	4,780	253,599	17,574	2,776	3,351,058
Minnesota Territory	860	14	607	655	740	80	734	92,859
Oregon Territory	8,046	420	9,427	8,114	24,188	15,382	30,235	1,876,189
Utah Territory	2,429	325	4,861	5,266	2,489	3,262	914	546,968
New Mexico Territory	5,079	8,654	10,635	12,257	10,085	377,271	7,314	1,494,629
Aggregate	4,335,358	559,229	6,392,044	1,699,241	10,268,856	21,721,814	30,316,608	543,969,420

Productions of Agriculture in the United States—Continued.

States and Territories.	PRODUCE DURING THE YEAR ENDING JUNE 1, 1850.					
	Wheat, bushels of.	Rye, bushels of.	Indian corn, bushels of.	Oats, bushels of.	Rice, pounds of.	Tobacco, pounds of.
Maine	296,259	102,916	1,750,056	2,181,037	.....	.....
New Hampshire	185,658	183,117	1,573,670	973,381	.....	50
Vermont	535,955	176,233	2,032,396	2,307,734	.....	.....
Massachusetts	31,211	481,021	2,345,490	1,165,146	.....	138,246
Rhode Island	49	26,409	539,201	215,232	.....	.....
Connecticut	41,762	600,893	1,935,043	1,258,738	.....	1,267,624
New York	13,121,498	4,148,182	17,858,400	26,552,814	.....	83,189
New Jersey	1,601,190	1,255,578	8,759,704	3,378,063	.....	310
Pennsylvania	15,367,691	4,805,160	19,835,214	21,538,156	.....	912,651
Delaware	482,511	8,066	3,145,542	604,518	.....	.....
Maryland	4,494,680	226,014	11,104,631	2,242,151	.....	21,407,497
District of Columbia	17,370	5,509	65,230	8,134	.....	7,800
Virginia	11,232,616	458,930	35,254,319	10,179,045	17,154	56,803,218
North Carolina	2,130,102	229,563	27,941,051	4,052,078	5,465,868	11,984,786
South Carolina	1,066,277	43,790	16,271,454	2,322,155	159,930,613	74,285
Georgia	1,088,534	53,750	30,080,099	3,820,044	38,950,691	423,924
Florida	1,027	1,152	1,996,809	66,586	1,075,090	998,614
Alabama	294,044	17,261	28,754,048	2,965,697	2,311,252	164,990
Mississippi	137,990	9,606	22,446,552	1,503,288	2,719,856	49,960
Louisiana	417	475	10,266,373	89,637	4,425,349	26,878

Texas	41,689	3,108	5,926,611	178,883	87,916	66,897
Arkansas	199,639	8,047	8,893,939	656,183	63,179	218,936
Tennessee	1,619,381	89,163	52,276,223	7,703,086	258,854	20,148,932
Kentucky	2,140,822	415,073	58,675,591	8,201,311	5,688	55,501,196
Ohio	14,487,351	425,718	59,078,695	13,472,742	.....	10,454,449
Michigan	4,925,889	105,871	5,641,420	2,866,056	.....	1,245
Indiana	6,214,458	78,792	52,964,363	5,655,014	.....	1,044,620
Illinois	9,414,575	83,364	57,646,984	10,087,241	.....	841,394
Missouri	2,981,652	44,268	36,214,537	5,278,079	700	17,113,784
Iowa	1,530,581	19,916	8,656,799	1,524,345	500	6,041
Wisconsin	4,286,131	81,253	1,988,979	3,414,672	.....	1,268
California	17,328	.....	12,236	.....	.....	1,000
Minnesota Territory	1,401	125	16,725	30,582	.....	.....
Oregon Territory	211,493	106	2,918	65,146	.....	325
Utah Territory	107,702	210	9,899	10,900	.....	70
New Mexico Territory	196,516	.....	365,411	5	.....	8,467
Aggregate	100,503,899	14,188,639	592,326,612	146,567,879	215,312,710	199,752,646

Productions of Agriculture in the United States—Continued.

States and Territories.	PRODUCE DURING THE YEAR ENDING JUNE 1, 1850.					
	Ginned cotton, bales of 400 pounds each.	Wool, pounds of.	Peas and beans, bushels of.	Irish potatoes, bushels of.	Sweet potatoes, bushels of.	Barley, bushels of.
Maine	.....	1,364,034	205,541	3,436,040	.....	151,731
New Hampshire	.....	1,108,476	70,856	4,304,919	.....	70,256
Vermont	.....	3,400,717	104,649	4,951,014	.....	42,150
Massachusetts	.....	855,136	43,709	3,585,384	.....	112,385
Rhode Island	.....	129,692	6,846	651,029	.....	18,875
Connecticut	.....	497,454	19,090	2,689,725	80	19,099
New York	.....	10,071,301	741,636	15,398,362	5,623	3,585,059
New Jersey	.....	375,396	14,174	3,207,236	508,015	6,492
Pennsylvania	.....	4,481,570	55,231	5,980,732	52,172	165,584
Delaware	.....	57,768	4,120	240,542	65,443	56
Maryland	.....	480,226	12,816	764,939	208,993	745
District of Columbia	.....	525	7,754	28,292	3,497	75
Virginia	3,947	2,860,765	521,581	1,316,933	1,813,671	25,437
North Carolina	73,849	970,738	1,584,252	620,318	5,095,709	2,735
South Carolina	300,901	487,233	1,026,900	136,494	4,337,469	4,583
Georgia	499,091	990,019	1,142,011	227,379	6,986,428	11,501
Florida	45,131	23,247	135,359	7,828	757,226	.....
Alabama	564,429	657,118	892,701	246,001	5,475,204	3,958
Mississippi	484,293	559,619	1,072,757	261,482	4,741,795	229

Louisiana	178,737	109,897	161,732	95,632	1,428,463	.....
Texas	57,596	131,374	179,332	93,548	1,323,170	4,776
Arkansas	65,346	182,595	285,738	193,832	788,149	177
Tennessee	194,532	1,364,378	369,821	1,067,844	2,777,716	2,737
Kentucky	758	2,297,403	202,574	1,492,487	998,184	95,343
Ohio	.....	10,196,371	60,168	5,057,769	187,991	354,358
Michigan	.....	2,043,283	74,254	2,359,897	1,177	75,249
Indiana	14	2,610,287	35,773	2,083,337	201,711	45,483
Illinois	.....	2,150,113	82,814	2,514,861	157,433	110,795
Missouri	.....	1,627,164	46,017	939,006	335,505	9,631
Iowa	.....	373,898	4,775	276,120	6,243	25,093
Wisconsin	.....	253,963	20,657	1,402,077	879	209,692
California	.....	5,520	2,292	9,292	1,000	9,712
Minnesota Territory	.....	85	10,002	21,145	200	1,216
Oregon Territory	.....	29,686	6,566	91,326	.....	.....
Utah Territory	.....	9,222	289	43,968	60	1,799
New Mexico Territory	.....	32,901	15,688	3	.....	5
Aggregate	2,468,624	52,789,174	9,219,975	65,796,793	38,259,196	5,167,016

Productions of Agriculture in the United States—Continued.

States and Territories.	PRODUCE DURING THE YEAR ENDING JUNE 1, 1850.					
	Buckwheat, bushels of.	Value of orchard products.	Wine, gallons of.	Value of produce of market gardens.	Butter, pounds of.	Cheese, pounds of.
Maine	104,523	$342,865	724	$122,387	9,243,811	2,434,454
New Hampshire	65,265	248,563	344	56,810	6,977,056	3,196,563
Vermont	209,819	315,255	659	18,853	12,137,980	8,720,834
Massachusetts	105,895	463,995	4,688	600,020	8,071,370	7,088,142
Rhode Island	1,245	63,994	1,013	98,298	995,670	316,508
Connecticut	229,297	175,118	4,269	196,874	6,498,119	5,363,277
New York	3,183,955	1,761,950	9,172	912,047	79,763,094	49,741,413
New Jersey	878,934	607,268	1,811	475,242	9,487,210	365,756
Pennsylvania	2,193,692	723,389	25,590	688,714	39,878,418	2,505,034
Delaware	8,615	46,574	145	12,714	1,055,308	3,187
Maryland	103,671	164,051	1,431	200,869	3,806,160	3,975
District of Columbia	378	14,843	863	67,222	14,872	1,500
Virginia	214,898	177,137	5,408	183,047	11,089,359	436,298
North Carolina	16,704	34,348	11,058	39,462	4,146,290	95,921
South Carolina	283	35,108	5,880	47,286	2,981,850	4,970
Georgia	250	92,776	796	76,500	4,640,559	46,976
Florida	55	1,280	10	8,721	371,498	18,015
Alabama	348	15,408	220	84,821	4,008,811	31,412
Mississippi	1,121	50,405	407	46,250	4,346,234	21,191

Louisiana	3	22,359	15	148,329	683,069	1,957
Texas	59	12,605	99	12,254	2,326,556	94,619
Arkansas	175	40,141	35	17,150	1,854,239	30,088
Tennessee	19,427	52,894	92	97,183	8,139,585	177,681
Kentucky	16,097	106,230	8,093	293,120	9,887,523	213,954
Ohio	638,064	695,921	48,207	214,004	34,449,379	20,819,542
Michigan	472,917	132,650	1,654	14,738	7,065,878	1,011,492
Indiana	149,740	324,940	14,055	72,864	12,881,535	624,564
Illinois	184,504	446,089	2,997	127,494	12,526,543	1,278,225
Missouri	23,641	514,711	10,563	99,454	7,834,359	203,572
Iowa	52,516	8,434	420	8,848	2,171,188	209,840
Wisconsin	79,878	4,823	113	32,142	3,633,750	400,283
California	.....	17,700	58,055	75,275	705	150
Minnesota Territory	515	.....	.....	150	1,100	.....
Oregon Territory	.....	1,271	.....	90,241	211,464	36,980
Utah Territory	332	.....	.....	23,868	83,309	30,998
New Mexico Territory	100	8,231	2,363	6,679	111	5,848
Aggregate	8,956,916	7,723,326	221,240	5,269,930	313,266,962	105,535,219

Productions of Agriculture in the United States—Continued.

States and Territories.	PRODUCE DURING THE YEAR ENDING JUNE 1, 1850.								
	Hay, tons of.	Clover seed, bushels of.	Other grass seeds, bushels of.	Hops, pounds of.	Hemp.		Flax, pounds of.	Flaxseed, bushels of.	Silk cocoons, pounds of.
					Dew rotted, tons of.	Water rotted, tons of.			
Maine	755,889	9,097	9,214	40,120	.....	.....	17,081	580	252
New Hampshire	598,854	829	8,071	257,174	.....	.....	7,652	189	191
Vermont	866,153	760	14,936	288,023	.....	.....	20,852	939	268
Massachusetts	651,807	1,002	5,085	121,595	.....	.....	1,162	72	7
Rhode Island	74,818	1,328	3,708	277	.....	.....	85	.....	.....
Connecticut	516,131	13,841	16,608	554	.....	.....	17,928	703	328
New York	3,728,797	88,222	96,493	2,536,299	1	3	940,577	57,963	1,774
New Jersey	435,950	28,280	63,051	2,133	.....	.....	182,965	16,525	23
Pennsylvania	1,842,970	125,030	53,913	22,088	44	.....	530,307	41,728	285
Delaware	30,159	2,525	1,403	348	.....	.....	11,174	904	.....
Maryland	157,956	15,217	2,561	1,870	.....	.....	35,686	2,446	39
District of Columbia	2,279	3	.....	15	.....	.....	.....	.....	.....
Virginia	369,098	29,727	23,428	11,506	90	51	999,450	52,318	517
North Carolina	145,662	576	1,275	9,246	36	3	593,796	38,196	229
South Carolina	20,925	376	30	26	.....	.....	333	55	123
Georgia	23,449	132	428	261	.....	.....	5,387	622	813
Florida	2,510	.....	2	14	.....	.....	50	.....	6

Alabama	32,685	138	547	276	.....	.....	3,921	69	167
Mississippi	12,505	84	533	473	7	.....	665	26	2
Louisiana	25,752	2	97	125	.....	.....	.....	.....	29
Texas	8,279	10	.....	7	.....	.....	1,048	26	22
Arkansas	3,977	90	436	157	.....	15	12,291	321	38
Tennessee	74,092	5,096	9,118	1,032	456	141	368,131	18,906	1,923
Kentucky	113,747	3,230	21,481	4,309	16,432	1,356	2,107,261	75,801	1,281
Ohio	1,443,142	103,197	37,310	63,731	100	50	446,932	188,880	1,552
Michigan	404,934	16,989	9,285	10,663	.....	.....	7,152	519	108
Indiana	403,230	18,321	11,951	92,796	67	62	584,609	36,888	387
Illinois	601,952	3,427	14,380	3,551	93	56	160,063	10,785	47
Missouri	116,925	619	4,346	3,130	15,968	60	527,160	13,696	186
Iowa	89,055	342	2,096	8,242	.....	.....	62,660	1,959	246
Wisconsin	275,662	483	5,003	15,930	.....	2	68,393	1,191	.....
California	2,038	.....	.....	.....	.....	.....	.....	.....	.....
Minnesota Territory	2,019	.....	.....	.....	.....	.....	.....	.....	.....
Oregon Territory	373	4	22	8	.....	.....	640	.....	.....
Utah Territory	4,805	2	.....	50	.....	.....	550	5	.....
New Mexico Territory	.....	.....	.....	.....	.....	.....	.....	.....	.....
Aggregate	13,838,579	468,979	416,811	3,496,029	33,294	1,799	7,715,961	562,312	10,843

Productions of Agriculture in the United States—Continued.

States and Territories.	PRODUCE DURING THE YEAR ENDING JUNE 1, 1850.					
	Maple sugar, pounds of.	Cane sugar, hhds. of 1,000 pounds.	Molasses, gallons of.	Beeswax and honey, pounds of.	Value of home-made manufactures.	Value of animals slaughtered.
Maine	93,542	.....	3,167	189,618	$513,599	$1,646,773
New Hampshire	1,294,863	.....	9,811	117,140	393,455	1,522,873
Vermont	6,349,357	.....	5,997	249,422	267,710	1,861,336
Massachusetts	795,525	.....	4,693	59,508	205,333	2,500,924
Rhode Island	28	.....	4	6,347	26,495	667,486
Connecticut	50,796	.....	665	93,304	192,252	2,202,266
New York	10,357,484	.....	56,529	1,756,190	1,280,333	13,573,983
New Jersey	2,197	.....	954	156,694	112,781	2,638,552
Pennsylvania	2,326,525	.....	50,652	839,509	749,132	8,219,848
Delaware	.....	.....	50	41,248	38,121	373,665
Maryland	47,740	.....	1,430	74,802	111,828	1,954,800
District of Columbia	.....	.....	.....	550	2,075	9,038
Virginia	1,227,665	.....	40,322	880,767	2,156,312	7,503,006
North Carolina	27,932	.....	704	512,289	2,086,522	5,767,866
South Carolina	200	671	15,904	216,281	909,525	1,302,637
Georgia	50	1,644	216,150	732,514	1,838,968	6,339,762
Florida	.....	2,752	352,893	18,971	75,582	514,685
Alabama	643	8,242	83,428	897,021	1,934,120	4,823,485
Mississippi	.....	388	18,318	397,460	1,164,020	3,636,582
Louisiana	255	226,001	10,931,177	96,701	139,232	1,458,990

Texas	.....	7,351	441,638	380,532	255,719	1,106,032
Arkansas	9,330	.....	18	192,338	638,217	1,162,913
Tennessee	158,557	248	7,223	1,036,572	3,137,810	6,401,765
Kentucky	437,405	284	30,079	1,158,019	2,458,128	6,462,598
Ohio	4,588,209	.....	197,308	804,275	1,712,196	7,439,243
Michigan	2,439,794	.....	19,823	359,232	340,947	1,328,327
Indiana	2,921,642	.....	180,325	935,329	1,631,039	6,567,935
Illinois	248,904	.....	8,354	869,444	1,155,902	4,972,286
Missouri	178,910	.....	5,636	1,328,972	1,674,705	3,367,106
Iowa	78,407	.....	3,162	321,711	221,292	821,164
Wisconsin	610,976	.....	9,874	131,005	43,624	920,178
California	.....	.....	.....	.....	7,000	100,173
Minnesota Territory	2,950	.....	.....	80	.....	2,840
Oregon Territory	.....	.....	24	.....	.....	164,530
Utah Territory	.....	.....	58	10	1,392	67,985
New Mexico Territory	.....	.....	4,236	2	6,033	82,125
Aggregate	34,249,886	247,581	12,700,606	14,853,857	27,481,399	109,485,757

Railroads in the United States.—In no other particular can the prosperity of a country be more strikingly manifested than by the pefection of its roads and other means of internal communication. The system of railroads, canals, turnpikes, post-routes, river navigation, and telegraphs, possessed by the United States, presents an indication of its advancement in power and civilization more wonderful than any other feature of its progress. In truth, our country in this respect occupies the first place among the nations of the world.

From returns received at this office, in reply to special circulars and other sources of information, it is ascertained that there were, at the commencement of the year 1852, 10,814 miles of railroads completed and in use; and that 10,898 miles were then in course of construction, with a prospect of being speedily brought into use. While the whole of these 10,898 miles will, beyond reasonable doubt, have been finished within five years, such is the activity with which projects for works of this character are brought forward and carried into effect, that it is not extravagant to assume that there will be completed within the limits of the United States before the year 1860 at least 35,000 miles of railroads.

The Quincy railroad, for the transportation of granite from the quarries at Quincy to Neponset river, and the Mauch Chunk railroad, from the coal mines to the Lehigh river, in Pennsylvania, were the first attempts to introduce that mode of transportation in this country; and their construction and opening, in the years 1826 and 1827, are properly considered the commencement of the American railroad system. From this period until about the year 1848, the progress of the improvements thus begun was interrupted only by the financial revulsion which followed the events of 1836 and 1837. Up to 1848, it is stated that about 6,000 miles had been finished. Since that date an addition of 5,000 miles has been made to the completed roads, and, including the present year, new lines, comprising about 14,000 miles, have been undertaken, surveyed, and mostly placed under contract.

The usefulness and comparative economy of railroads as channels of commerce and travel have become so evident, that they have in some measure superseded canals, and are likely to detract seriously from the importance of navigable rivers for like purposes. In a new country like ours, many items of expense, which go to swell the cost of railroads in England and on the Continent, are avoided. Material is cheap; the right of way usually freely granted; and heavy land damages seldom interpose to retard the progress of an important work. It is difficult to arrive at a clear approximation to the average cost of railroad construction in the United States. Probably the first important work of this class undertaken and carried through in the Union was the cheapest, as it has proved one of the most profitable, ever built. This was the road from Charleston, in South Carolina, to Augusta, on the Savannah river. It was finished and opened for traffic in 1833. The entire expense of building the road and equipping it with engines and cars for passengers and freight was, at the date of its completion, only $6,700 per mile; and all expenditures for repairs and improvements, during the eighteen years that the road has been in

operation, have raised the aggregate cost of the whole work to only $1,336,615, or less than $10,000 per mile.

It is estimated that the 2,870 miles of railroads finished in New England have cost $132,000,000, which gives an average of nearly $46,000 per mile. In the middle States, where the natural obstacles are somewhat less, the average expense per mile of the railroads already built is not far from $40,000. Those now in course of completion—as the Baltimore and Ohio railroad, Pennsylvania Central and other lines, the routes of which cross the Alleghany range of mountains—will probably require a larger proportionate outlay, owing to the heavy expense of grading, bridging, and tunnelling. In those States where land has become exceedingly valuable, the cost of extinguishing private titles to the real estate requires, and the damages to property along the routes, form a heavy item in the account of general expenses of building railroads. In the South and West the case is reversed; there the proprietors along the proposed line of a road are often willing and anxious to give as much land as may be needed for its purposes, and accord many other advantages in order to secure its location through or in the vicinity of their possessions. In the States lying in the valleys of the Ohio and Mississippi the cost of grading, also, is much less than at the eastward. Where the country is wooded, the timber can be obtained at the mere cost of removing it from the track; and through prairie districts, Nature seems to have prepared the way for these structures by removing every obstacle from the surface, while fine quarries of stone are to be found in almost every region. These favorable circumstances render the estimate of $20,000 per mile in all the new States safe and reliable.

The primary design of nearly all the great lines of railway in the United States has been to connect the seacoast with the distant interior; to effect which object it was necessary to cross the Alleghanies, which intersect every line of travel diverging to the West from the great commercial cities of the sea-board.

The following are some of the vast enterprises which have been undertaken to accomplish this great purpose, which have either been finished or are in such a state of progress as leaves no doubt of their being brought to a successful issue within a few years:

First. The railroads connecting Portland, the commercial capital of Maine, with the British provinces, and through their public works, the St. Lawrence river and the lakes, with the western States of the Union.

Second. The railroads from Boston westward, connecting at Albany with the roads of central New York, and, by the more northern route, traversing New Hampshire and Vermont, continuing towards the West by the Ogdensburg railroad, and bringing Montreal, the chief commercial city of Upper Canada, into communication with the capital of New England.

Third. The New York and Erie railroad, extending from New York city to Lake Erie, and intended to form a part of a continuous line from the Hudson to the Mississippi—a project likely to be effected within the ensuing ten years.

Fourth. The Pennsylvania Central railroad, from Philadelphia to Pittsburg, with numerous diverging branches to points north and south of the general direction. This great route will reach St. Louis by a nearly due west course through Ohio, Indiana, and Illinois. The Pennsylvania section will be completed about the end of 1852.

Fifth. The Baltimore and Ohio railroad, one of the most magnificent works of the day, will pass from Baltimore, through Maryland and Virginia, to Wheeling, on the Ohio. At the latter point, it will form a connexion with the system of roads traversing the West and Northwest. It crosses the Alleghanies by the most favorable passes, and, to avoid the worst ascent, a tunnel has been cut, perhaps, the longest and most expensive in the world.

Sixth. The roads proposed to be constructed under authority of Virginia, and already commenced, intended to establish communication between tide-water and the interior, and southwestern parts of that State, and to continue the same through Tennessee to the Mississippi. These routes pass through the mountains at the southeast corner of Virginia, and the works are in a state of less forwardness than those upon any other of the great lines referred to in this connexion.

Seventh. The several lines of railroad from Charleston and Savannah, penetrating South Carolina and Georgia, concentrating in northeastern Alabama, and reaching the level region of the Mississippi by the valley of the Tennessee river. These roads, by their western continuation, will intersect lines running to every important point between the mountains and the Mississippi.

Eighth. The Mobile and Ohio railroad, from the Mexican gulf to Cairo, on the Ohio river, and thence by the Illinois Central railroad to the lakes, a distance in a straight line of about eleven hundred miles.

It will be seen at a glance that the leading idea in all these vast enterterprises was to overcome the barrier presented by this chain of mountains, to a direct and unrestricted intercourse between the sea-board and the West, and to supply the want of those natural channels of commerce, navigable rivers, extending into the section we desire to reach. The enormous aggregate of expense of the numerous works specified above, undertaken with this one object, and their importance as public improvements, may be estimated from the following brief notice of the New York and Erie railroad, which occupies the third place in our preceding enumeration. The longest continuous line of railroad in the world, and that in the construction of which the greatest natural obstacles have been overcome, is that which extends from the Hudson river, through the southern counties of New York, to Lake Erie. Its length is four hundred and sixty-nine miles, and it has branches of an additional length of sixty-eight miles. Nearly its whole course is through a region of mountains. The bridges by which it is carried over the Delaware and Susquehannah rivers, and other streams, and the viaducts upon which it crosses the valleys that intercept its route, are among the noblest monuments of power and skill to be found in our country. The most of these works are of heavy masonry; but one of them is a wooden bridge, one hundred and eighty-seven feet in height, with one arch, the span of which is two hundred and seventy-five feet. One of the viaducts is twelve hundred feet long, and one hundred and ten feet high.

The aggregate cost of this important work was $23,580,000, and the expense of construction was $42,333 per mile. The road was originally suggested in 1829; a company was organized in 1833—it was finished in May, 1851, and opened with great ceremony for travel and transportation in that month. The State advanced three millions of dollars towards the work, and afterwards released the company from the obligation to pay the loan. It will be seen that the execution of this great work was pursued through nineteen years, and was not accomplished without calling into requisition both the resources of the State and the means of her citizens.

The following table presents, in a convenient form, some of the principal facts connected with railroads in the United States, on the first January, 1852:

States with railroads in operation, or in process of construction.	Miles of railroad completed and in operation.	Miles of railroad in course of construction.	Area of the States in square miles.	Population in 1850.	Number of inhabitants to the square mile.
Maine	315	127	30,000	583,188	19.44
New Hampshire	489	47	9,280	317,964	34.26
Vermont	380	59	10,212	314,120	30.76
Massachusetts	1,089	67	7,800	994,499	127.49
Rhode Island	50	32	1,306	147,544	112.97
Connecticut	547	261	4,674	370,791	79.33
New York	1,826	745	46,000	3,097,394	67.33
New Jersey	226	111	8,320	489,555	58.84
Pennsylvania	1,146	774	46,000	2,311,786	50.25
Delaware	16	11	2,120	91,535	43.17
Maryland	376	125	9,356	583,035	62.31
Virginia	478	818	61,352	1,421,661	23.17
North Carolina	249	385	45,000	868,903	19.30
South Carolina	340	298	24,500	668,507	27.28
Georgia	754	229	58,000	905,999	15.62
Alabama	121	190	50,722	771,671	15.21
Mississippi	93	273	47,156	606,555	12.86
Louisiana	63	.....	46,431	517,739	11.15
Texas	.....	32	237,321	212,592	.89
Tennessee	112	748	45,600	1,002,625	21.98
Kentucky	93	414	37,680	982,405	26.07
Ohio	828	1,892	39,964	1,980,408	49.55
Michigan	427	.....	56,243	397,654	7.07
Indiana	600	915	33,809	988,416	29.23
Illinois	176	1,409	55,405	851,470	15.36
Missouri	.....	515	67,380	682,043	10.12
Wisconsin	20	421	53,924	305,191	5.65
	10,814	10,898			

From the best information obtained, it is assumed that 1,200 miles of railroad have been completed during the present year, 1852, and that about 2,000 miles of new road have been placed under contract, which are in course of construction. These figures increase the state

ment of railroads completed in the United States December 1, 1852, to 12,014 miles, and of such as are in progress to 3,698 miles.

From the brief sketch of American railroads should not be excluded some mention of several projects, which are not only closely connected with the interests of the United States, but possess something of national importance. The first of these, in point of vastness of design, is the enterprise of building a railroad from the Mississippi river to the Pacific ocean. The routes proposed in this great work are almost as numerous as the persons who claim the merit of having first suggested and brought forward the scheme of thus completing the chain of railroad connexion between the Atlantic and Pacific coasts of the Union. Although the importance of such a work to the prosperity of the nation cannot be doubted, there is reason to fear that many years will elapse before the resources of the country will be found sufficient for its accomplishment. No scientific survey of any route west of the frontier of Missouri has been made, but it is not probable that any could be found that would bring the line of travel between the Mississippi and the ocean within the limit of 1,600 miles.

The natural obstacles to be overcome are the Rocky mountains and the Sierra Nevada, the deserts between the Missouri and the former chain, and those of the great basin, the flying sands, and the want of timber. Further explorations may lead to the discovery of means to overcome these difficulties. Should the cost not exceed the average of western roads, it would form no objection to the enterprise, since it would be only about $32,000,000, or only twenty-five per cent. more than has been expended upon the Erie railroad—less than fifty per cent. greater than the aggregate expenditure upon the Baltimore and Ohio railroad, and not two-thirds of that incurred by the State of Massachusetts on her railroads; and even though the average cost should be as heavy as that of the most expensive roads in the country—those of New England, for example—the aggregate expenditure required for the completion of this great national enterprise would not exceed $72,000,000, which is not a larger sum than has been invested in such improvements in England in a single year. The only question, then, affecting the probability of the construction of the Pacific railroad, is that of practicability.

This can only be determined by thorough surveys of some or all of the routes proposed, from the valley of the Rio Grande, the Arkansas, the Missouri, and the upper Mississippi. If this road were completed, and the route continued westward by steamship to Calcutta, it would reduce the time required for the circuit of the globe, by the American overland route, to ninety-three days, as follows:

From New York to San Francisco	4	days.
San Francisco to Hong-Kong	25	"
Hong Kong to Calcutta	6	"
Calcutta to Bombay	13	"
Bombay to England	35	"
London to New York	10	"
	93	days.

Another project for connecting, by the means of cheap and rapid conveyance, the two coasts of our confederacy, which deserves, as it has received, very great attention, is the proposition to build a railroad across the isthmus of Tehuantepec, in Mexico. The difficulties which surround this undertaking are chiefly of a diplomatic character, upon the ultimate decision of which the success of the enterprise depends. An American company has taken the work in hand, and caused a preliminary survey to be made, which establishes its feasibility. The length of the road, according to the report of the surveyors, will be 166 miles from sea to sea; but only about 80 miles from the head of navigable water on either side.

The cost of the road, with all the necessary equipments, station-houses, &c., is estimated at $7,848,000. The time expected to be required for its construction is three years. With this connecting link of communication completed, the voyage from New Orleans to San Francisco will be performed in eight or nine days.

The subjoined table, prepared for the most part from actual returns, exhibits the amount expended upon roads in operation on the 31st December, 1851:

New England States	$131,940,000
New York	76,000,000
New Jersey	9,040,000
Pennsylvania, Delaware, Maryland, and Virginia	81,600,000
North Carolina	3,800,000
South Carolina	9,860,000
Georgia	13,000,000
Mississippi	1,400,000
Alabama	2,000,000
Louisiana	1,000,000
Tennessee	2,000,000
Kentucky	1,670,000
Ohio	17,560,000
Indiana	9,000,000
Illinois	2,600,000
Michigan	10,000,000
Wisconsin	300,000
Cost of completed railroads in the United States	372,770,000
Probable cost of those in progress	220,000,000
Total amount of capital invested in railroads, December 31, 1851	592,770,000

For the purpose of comparison with the foregoing, the subjoined statement has been prepared, showing the number of miles of railroads, with their costs, according to the most generally received authorities in

all the countries of Europe in which those improvements have been to any considerable extent introduced:

	Miles.	Aggregate.	Cost per mile.
Great Britain and Ireland	6,890	$1,218,000,000	$177,000
German States, including Prussia and Austria	5,332	325,875,000	61,000
France	1,018	238,905,000	254,000
Belgium	532	46,288,000	49,000
Russia	200	15,000,000	75,000
Italy	170	15,000,000	88,000
	14,142	1,859,068,000	

The preceding table was made before the opening of the railway from St. Petersburg to Moscow, which, being nearly 400 miles in length, would add largely to these statistics, so far as refers to Russia. In France, also, during the past season, 1,500 miles of railway, in addition to that stated in the table, were opened, making the whole extent of railway in that country, in July last, about 2,500 miles; and it is expected that, during the course of the ensuing year, 1,800 miles additional will be completed.

By these statistics, it is made to appear that the average cost of European railroads was $130,300 per mile. The average cost of American railroads completed previous to the commencement of the present year, was $34,307 per mile. The excess of expenditure, therefore, in the construction of European roads over those in the United States, is $95,993 per mile, or about 280 per cent.; but it may be remarked that the estimated, average cost of construction in the United States of all the roads completed and in progress does not exceed $27,300 per mile; so that the actual excess is $103,000 per mile.

The foregoing statements develop the striking fact that the United States possess an extent of railroad nearly equal to that of the rest of the world combined; and, at our present rate of progression, we are likely, in a few years, far to exceed it.

In the infancy of the American railroad system, a favorite means of providing funds for their construction was the advance of loans from the treasuries of the respective States in which they were situated; but this plan has been superseded by the use of private capital, and, within the last ten years, frequent recourse has been had to the expedient of loans and subscriptions by counties, cities, and towns through which the roads pass. Loans of this character, however, are in all cases made under the sanction of authority conferred by the State legislatures. The bonds representing these transactions with the stocks of the companies have been estimated to amount to $300,000,000. This sum may be assumed as the amount of the capital invested in those roads now in progress, and those which may have been completed

since the opening of the year. If, then, we add this sum to the estimated cost of the roads finished in December, 1851, we shall have $672,770,000 as the total amount of investments in railroads in the United States.

From the best data accessible at this time, we prepare the following table, representing the financial condition of some of the railroads of the States, selected as affording a fair exemplification of the whole system in this country:

	Length of roads.	Aggregate cost.	Net income.	Declared dividends.	Estimated actual profits.
Massachusetts .	1,089	$52,595,288	$3,260,670	6.2	7.5
New York....	1,826	76,500,000	4,023,000	5	9.44
Georgia	754	7,266,000	.....	7.5	10

The figures under the head of "estimated actual profits" present the assumed net income after the addition to the amount of the dividends of the surplus earnings, reserved profits, and all receipts in excess of expenditure not included in the calculation of which the dividend is a result.

The rates of fare on our railroads are lower than on those of any country of which we have returns affording the means of comparison. In New England, the average rate per mile is slightly over two cents; from New York to Washington, it is three cents and a half per mile. From New York to Cincinnati, the railroad and steamboat fare together is less than two cents per mile. From New York to Albany, the price of passage is a fraction over one cent per mile, and the average rate upon all the New York railroads has been stated at two cents and one-fifth per mile.

Telegraphs.—As telegraphs have formed a subject of inquiry, it is deemed proper to present some account of the information obtained respecting this recent but widely extended and daily enlarging means of communication. At the present time it is a subject engrossing much of the attention of our own citizens, and frequent applications are made to this office, from foreign countries, for information regarding the *minutiæ* of the system as conducted in the United States.

Here, the telegraphic system is carried to greater extent than in any other part of the world, and the numerous lines now in full operation form a net-work over the length and breadth of the land. They are not confined to the populous regions of the Atlantic coast, but extend far into the interior, climb the sides of the highest mountains, and cross the almost boundless prairies; and in a few years a continuous communication will be established between the capital of the nation and the shores of the Pacific, as it now exists between the Atlantic, the great lakes, and the Gulf of Mexico.

It is to American ingenuity that we owe the practical application of the magnetic telegraph for the purpose of communication between dis-

tant points, and it has been perfected and improved mainly by American science and skill. While the honor is due to Professor Morse for the practical application and successful prosecution of the telegraph, it is mainly owing to the researches and discoveries of Professor Henry, and other scientific Americans, that he was enabled to perfect so valuable an invention.

The first attempt which was made to render electricity available for the transmission of signals, of which we have any account, was that of Lesage, a Frenchman, in 1774. From that time to the present, there have been numerous inventions and experiments to effect this object; and from 1820 to 1850, there were no less than sixty-three claimants for different varieties of telegraphs. We will direct attention only to those of Morse, Bain, and House, they being the only kinds used in this country.

During the summer of 1832, Professor S. F. B. Morse, an American, conceived the idea of an electric or electro-magnetic telegraph, and, after numerous experiments, announced his invention to the public in April, 1837.

On the 10th of March, 1837, Hon. Levi Woodbury, then Secretary of the Treasury, issued a circular requesting information in regard to the propriety of establishing a system of telegraphs for the United States, to which Professor Morse replied, giving an account of his invention, its proposed advantages and probable expense. At that time he "presumed five words could be transmitted in a minute." Professor Morse having petitioned Congress for aid to enable him to test the practical operation of his invention, an appropriation of $30,000 was made for this purpose; and in June, 1844, he erected the first telegraphic line in the United States, between Washington and Baltimore, a length of 40 miles.

This line was extended to Philadelphia and New York, a distance of 250 miles. It reached Boston in 1845, and became the great line of the North, from which branched two others, one from Philadelphia to Pittsburg, Cincinnati, and St. Louis, 1,000 miles; the other from New York to Albany, Buffalo, Cleveland, Chicago, and Milwaukie, 1,300 miles. Another line, 1,395 miles in length, connects Buffalo, Niagara, Toronto, Montreal, Quebec, and Halifax.

Two lines run south to New Orleans: one from New York, Washington, and Charleston, 1,966 miles—the other from Cleveland, Ohio, and Cincinnati, via Nashville, 1,200 miles long.

The only line constructed with government aid was that connecting the cities of Washington and Baltimore. The others have been established by private enterprise. This line is at present, perhaps, the best appointed and most reliable in the world. The following table exhibits the annual receipts of the "Magnetic Telegraph Company," extending

from Washington to New York, which was the first organized in this country:

From January 27, 1846, to July 1, 1846				$4,228 77
" July 1, 1846, to July 1, 1847				32,810 28
" " 1847,	"	1848		52,252 81
" " 1848,	"	1849		63,367 62
" " 1849,	"	1850		61,383 98
" " 1850,	"	1851		67,737 12
" " 1851,	"	1852		103,860 84
Total amount received up to July, 1852				385,641 42

The number of messages sent over this line in the last six months was 154,514, producing $68,499 23.

The amount of business which a well conducted office can perform is immense. Nearly seven hundred messages, exclusive of those for the press, were sent in one day over the Morse Albany line; and a few days after, the Bain line at Boston sent and received five hundred communications. Another office, with two wires—one five hundred, the other two hundred miles in length—after spending three hours in the transmission of public news, telegraphed, in a single day, four hundred and fifty private messages, averaging twenty-five words each, besides the address, sixty of which were sent in succession, without a word of repetition.

The apparatus cannot be worked successfully without skilful operators, good batteries and machines, and thorough insulation of the conductors. The expense of copper-wire, which was at first used, has caused it to be superseded by iron, which is found to answer the purpose as well, though it is requisite to give the iron-wire six times the weight of a copper one, to gain the same conducting power with equal lengths. About two hundred and fifty pounds of iron-wire are required to a mile. Its insulation is effected by winding it around or passing it through caps or knobs of glass, or well-glazed stoneware, or enclosing it with gutta percha. The wires are generally supported on spars or posts, from twenty to thirty feet in height, nine inches in diameter at the base, four and a half at the top, set in the ground five feet deep, and placed from twelve to fifteen rods apart.

Although the wires have been buried in the earth, in some countries, and experiments tried here to effect this object, it would appear, from the latest information received, that this method is unsuccessful, and will be relinquished.

The cost of construction, including wire, posts, labor, &c., is about one hundred and fifty dollars per mile.

The only constant and economical battery used in the United States is Grove's, consisting of cups of zinc, with strips of platinum, in an earthenware or porcelain cup, which cup is filled with nitric acid and is placed inside of the zinc cup, in a tumbler containing diluted sulphuric acid. The main battery on a line (from four to fifty cups) requires renewing once in every two weeks, and daily in unfavorable weather and in local batteries of two or three cups.

The earth itself has been made to furnish a supply of electric force; a single pair of zinc and copper plates buried sufficiently deep below the surface to be in the wet sub-soil, will cause a current of low intensity. The earth acts as the return-wire to any given number of distinct wires, without in the least affecting the regularity of the action of any of them.

The average performance of the Morse instruments is to transmit from eight thousand to nine thousand letters per hour. The usual charge of transmission is twenty-five cents for ten words, or less, sent one hundred miles.

The following table will show the rates of telegraphic communication between the city of Washington and some of the principal cities of the Union. The distances are given from a table prepared at the Post Office Department.

Telegraphic charges, from Washington to the following places, for messages containing ten words or less:

Places.		Miles.	Rates.
Albany	N. Y.	376	$0 80
Augusta	Me.	619	1 15
Baltimore	Md.	40	20
Baton Rouge	La.	1,539	2 25
Boston	Mass.	448	75
Buffalo	N. Y.	703	90
Chicago	Ill.	1,238	1 25
Cincinnati	Ohio	578	70
Cleveland	do.	439	80
Detroit	Mich.	970	1 00
Dubuque	Iowa.	1,449	1 70
Erie	Pa.	439	1 00
Frankfort	Ky.	669	2 00
Harrisburg	Pa.	124	45
Hartford	Conn.	345	75
Indianapolis	Ia.	639	1 00
Jackson	Miss.	1,325	2 00
Louisville	Ky.	720	95
Madison	Wis.	1,413	1 55
Memphis	Tenn.	1,305	1 70
Milwaukie	Wis.	1,332	1 35
Nashville	Tenn.	1,142	1 35
Natchez	Miss.	1,694	2 05
New Albany	Ia.	723	1 10
Newport	R. I.	414	75
New Orleans	La.	1,408	2 20
New York	N. Y.	232	50
Philadelphia	Pa.	142	30
Pittsburg	Pa.	307	45

Places.		Miles.	Rates.
Portland	Me	555	$0 95
Portsmouth	N. H.	503	1 00
Providence	R. I.	405	75
St. Louis	Mo.	989	1 20
Springfield	Ill.	851	1 45
Syracuse	N. Y.	524	90
Vicksburg	Miss.	1,371	2 30
Wheeling	Va.	331	50
Wilmington	Del.	112	25

Messages passing from one very distant point to another have usually to be re-written at intermediate stations, though by an improved method the seaboard line has, in good weather, transmitted communications direct between New York and Mobile—a distance of near 1,800 miles—without intermediate re-writing. By the Cincinnati route to New Orleans—a distance of nearly 2,000 miles—the news brought by an Atlantic steamer at 8 o'clock A. M., has been telegraphed from New York to that distant point, and the effects produced in the market there returned to New York, by 11 o'clock A. M. The Congressional reports from Washington are usually received simultaneously in Baltimore, Philadelphia, and New York; and all that is necessary at the intermediate stations is for an operator to be present and receive the message as it is developed on paper by the instruments.

The electric telegraph has been applied in this country to a new and highly important purpose—that of the registration of astronomical observations; thus establishing the best possible means for the determination of the difference of longitude. The observatories in different parts of the country are connected by telegraphic wires; and the most delicate experiments, dependent upon the appreciation of minute portions of time, have been successfully performed. This method has been recently used for the determination of the wave-time of electrical currents.

The great extent of the telegraphic business, and its importance to the community, is shown by a statement of the amount paid for despatches by the associated press of New York, composed of the seven principal morning papers—the Courier and Enquirer, Tribune, Herald, Journal of Commerce, Sun, Times, and Express. During the year ending November 1, 1852, these papers paid nearly fifty thousand dollars for despatches, and about fourteen thousand dollars for special and exclusive messages not included in the expenses of the association.

The Morse system is used generally throughout the United States. It is used in Prussia, wherever intelligence is transmitted great distances. The great German-Austrian Telegraphic Union, comprising all the states of Germany and Austria, after deliberating in convention at Vienna, came to the conclusion that none but the American system would fully accomplish their object for international correspondence.

Alexander Bain, a native of Scotland, patented an electro-chemical telegraph on the 12th December, 1846; and another patent was granted to him in connexion with Robert Smith, in October, 1849. The advantages which the inventor attributes to the electro-chemical telegraph are: "1st. More economy and simplicity in the primitive construction. 2d. More rapidity in the transmission of despatches. A single wire, with a good insulator, can transmit 1,200 letters a minute. 3d. An electric current more feeble than is ordinary suffices to cause the apparatus to work. 4th. More simplicity and economy in the correspondence and superintendence. 5th. Fewer chances of error in the despatches sent." The Bain telegraph used in this country has been materially improved by Henry J. Rogers.

The following is a list of the Bain telegraphic lines in the United States:

New York to Boston, (250 miles each)	2 wires	500 miles.
Boston to Portland	1 "	100 "
Boston to Burlington, Vermont, and thence to Ogdensburg, New York	1 "	350 "
Troy to Saratoga	1 "	36 "
New York to Buffalo, (513 miles each)	2 "	1,026 "
	7 "	2,012 "

Five lines, having seven wires and a length of 2,012 miles.

The "House printing telegraph" was invented by Royal E. House, a Pennsylvanian, and patented April 18, 1846.

The first line operating with this instrument was completed in August, 1850, by the Boston and New York Telegraph Company, between those cities. It has been patented in England by Jacob Brett.

The difference between Morse's and House's telegraph is, principally, that the first traces at the distant end what is marked at the other; while House's does not trace at either end, but makes a signal of a letter at the distant end which has been made at the other, and thus, by new machinery, and a new power of air and axial magnetism, is enabled to print the signal letter at the last end, and this at the astonishing rate of sixty or seventy strokes, or breaks, in a second, and at once records the information, by its own machinery, in printed letters. Morse's is less complicated, and more easily understood, while House's is very difficult to be comprehended in its operations in detail, and works with the addition of two more powers—one air, and the other called *axial magnetism*. One is a tracing or writing telegraph; the other, a signal and printing telegraph.

The following are the "House" lines in operation:

The Boston and New York Telegraph Company; two wires; length, 600 miles.

A line is being constructed to connect with the Boston line, running from Springfield, Massachusetts, to Albany, New York, there to inter-

sect the New York and Buffalo line, using the same instruments, extending from New York to Buffalo, a distance of 570 miles.

One wire is now in operation, connecting with Poughkeepsie, Troy, Albany, Utica, Syracuse, Lyons, Rochester, Albion, Lockport, and Buffalo. The same line to continue to St. Louis, Missouri, connecting with Cleveland, Cincinnati, and Louisville, will soon be completed, forming the longest line in the world under the direction of one company, the whole length being 1,500 miles.

The New Jersey Magnetic Telegraph Company, using House instruments, extends from Philadelphia to New York, two wires, 132 miles each. A line also extends south to Baltimore and Washington. The whole length of House lines in the United States is about 2,400 miles.

List of Telegraphs in the United States.

	Wires.	Miles.	Total miles of wire.
New York and Boston Telegraph Co.	3	250	750
Merchants' Telegraph Co., N. Y. and Boston	2	250	500
House's Printing Telegraph	1	250	250
Boston and Portland	1	100	100
Merchants' Telegraph Co., (Boston and Portland)	1	100	100
Portland to Calais	1	350	350
Boston to Burlington, Vt., and thence to Ogdensburg, N. Y.	1	350	350
Boston to Newburyport	1	34	34
Worcester to New Bedford	1	97	97
Worcester to New London	1	74	74
New York, Albany, and Buffalo	3	513	1,539
N. Y. State Telegraph Co., N. Y. to Buffalo	2	550	1,100
Syracuse to Ogdensburg	1	150	150
Troy to Saratoga	1	36	36
Syracuse to Oswego	1	40	40
House Telegraph Co., New York to Buffalo	2	550	1,100
N. Y. and Erie Telegraph, N. Y. to Dunkirk	1	440	440
N. Y. and Erie Railroad Telegraph, New York and Dunkirk	1	460	460
Magnetic Telegraph Co., N. Y. to Washington	7	260	1,820
House Line, New York to Philadelphia	1	100	100
Troy and Canada Junction Telegraph Co., Troy and Montreal	1	260	260
Erie and Michigan Telegraph Co., Buffalo to Milwaukie	2	800	1,600
Cleveland to Cincinnati	2	250	500
Cincinnati to St. Louis, via Indianapolis	1	400	400
Cincinnati to St. Louis, via Vincennes	1	410	410

List of Telegraphs in the United States.

	Wires.	Miles.	Total miles of wire.
Cleveland and Pittsburg	2	150	300
Cleveland and Zanesville	1	150	150
Lake Erie Telegraph Co., Buffalo to Detroit	1	400	400
Cincinnati and Sandusky city	1	218	218
Toledo and Terre Haute	1	300	300
Chicago and St. Louis	1	400	400
Milwaukie and Green Bay	1	200	200
Milwaukie and Galena	1	250	250
Chicago to Galena, Whitewater and Dixon	1	310	310
Chicago and Janesville	1	100	100
Buffalo and Canada Junction Telegraph Co.	1	200	200
New York and New Orleans, by Charleston	1	1,966	1,966
Harper's Ferry to Winchester, Virginia	1	32	32
Baltimore to Cumberland	1	324	324
Baltimore to Harrisburg	1	72	72
York and Lancaster	1	22	22
Philadelphia and Lewistown, Delaware	1	12	12
Philadelphia and New York	6	120	720
Philadelphia and Pittsburg	1	309	309
Philadelphia and Pottsville	1	98	98
Reading and Harrisburg	1	51	51
Troy and Whitehall	1	72	72
Auburn and Elmira	1	75	75
Pittsburg and Cincinnati	2	310	620
Columbus and Portsmouth, Ohio	1	90	90
Columbia and New Orleans	1	638	638
New Orleans to Balize	1	90	90
Cincinnati and Maysville, Kentucky	1	60	60
Alton and Galena	1	380	380
St. Louis and Independence	1	25	25
St. Louis and Chicago	1	330	330
Newark and Zanesville	1	40	40
Mansfield and Sandusky	1	40	40
Columbus and Lancaster, Ohio	1	30	30
Lancaster and Logan	1	26	26
Cincinnati to Dayton	1	100	100
Zanesville and Marietta	1	66	66
Dunkirk, New York, and Pittsburg	1	200	200
Camden and Cape May, New Jersey	1	100	100
Camden and Mount Holly, New Jersey	1	25	25
New York and Sandy Hook	1	80	80
Cleveland and New Orleans, by Cincinnati	1	1,200	1,200
	89	16,735	23,281

The telegraphs in England are the next in importance and extent to those in this country. They were first established in 1845, and there are about 4,000 miles of wire now in operation.

The charge for transmission of despatches is much higher than in America, one penny per word being charged for the first fifty miles, and one farthing per mile for any distance beyond one hundred miles. A message of twenty words can be sent a distance of 500 miles in the United States for one dollar, while in England the same would cost seven dollars.

In June, 1852, the submarine telegraph between Dover and Ostend was completed, and on the 1st of November the first electric communication was established direct between Great Britain and the continent of Europe. By a line of wires between London and Dover, via Doncaster and Canterbury, in connexion with the submarine cable across the straits of Dover, instantaneous communication is obtained between *London*, *Paris*, *Sweden*, *Trieste*, *Cracow*, *Odessa*, and *Leghorn*. The wires are also being carried onward to St. Petersburg; also to India, and into Africa.

A project has been formed for constructing a submarine telegraph between Great Britain and the United States. It is proposed to "commence at the most northwardly point of Scotland, run thence to the Orkney islands, and thence by short water lines to the Shetland and the Feroe islands. From the latter, a water line of 200 miles conducts the telegraph to Iceland, thence to Greenland, and across Davis's straits to Byron's Bay, on the coast of Labrador. The entire length of the line is estimated at 2,500 miles—the submarine portions of it at 1,500 miles; and the expense of this great international work is estimated at £500,000.

Another enterprise has been actually started, with every prospect of consummation. A portion of the line is being prosecuted with vigor, and the company propose transmitting intelligence between the Old and New Worlds in four or five days. A charter has been granted by the British Colonial government, to the "Newfoundland Electric Company," with a capital of £100,000, to construct a line of telegraph from Halifax, N. S., to Cape Race, touching at St. John, crossing the island of Newfoundland to Cape Ray; thence, by a submarine line of 149 miles, to cross the Gulf of St. Lawrence, a landing being made at Cape East, on Prince Edward's island, and, crossing Northumberland straits by another submarine line of ten miles, to land at Cape Torment, in New Brunswick and so on to the boundary of the United States; whence, by an independent line to New York, the connexion is completed. The total distance traversed by this line will be between 1,400 and 1,500 miles, of which 150 are submarine. It is stated that steamers can make ordinary passages between Cape Race, Newfoundland, and Galway, Ireland, in five days.

The following is a list of lines now in operation or construction in *Canada:*

	Miles.
The Montreal Telegraph Company's line extending from Quebec to the suspension bride at Niagara Falls	155
British North American Electric Telegraph Association, from Quebec to New Brunswick frontier	220
Montreal and Troy Telegraph Company, from Montreal to New York State line	47
Bytown and Montreal Telegraph Company	115
Western Telegraph Company, from Hamilton to Port Sarnia, at the foot of Lake Huron	143
Niagara and Chippewa line	14
Brantford to Simcoe and Dover	33
Kingston to Hamilton	256
Total length in Canada	983

In Prussia the wires are generally buried about two feet below the surface, and carried through rivers in flexible pipes. About 1,700 miles of telegraphic lines are in operation.

In France there are about 750 miles; and in Germany about 3,000 miles have been completed.

In Austria, Saxony, Bavaria, Tuscany, Holland, Italy, Spain, and Russia, great progress has already been made in establishing lines of telegraph, and communication will soon be had between the capitals of all the states in Europe.

In India, a line has been laid between Calcutta and Kedgeree, 71 miles, and an extensive system is projected for that country. The following details respecting the telegraph in India is given for the instruction and encouragement of those interested in the construction of lines through somewhat similar regions in our own country.

From Calcutta to Rajmoole, the conductor is laid under ground, in a cement of melted resin and sand. From that village to Kedgeree, it is carried over ground on bamboo poles, fifteen feet high, coated with coal-tar and pitch, and strengthened, at various distances, by posts of willow, teak, and iron-wood. The bamboo posts are found to resist storms which have uprooted trees, the growth of centuries. Though the bamboo soon decays, yet its amazing cheapness makes the use of it more economical than that of more durable and costly materials. The branch road from Bishlopore to Moyapore passes through a swamp; the country is little less than a lake for five months. The conductor runs on the foot-paths between the island villages, and, for some miles, crosses rice swamps, creeks, and ponds, on which no road or embankment exists. The most difficult and objectionable line was selected to test the practicability of carrying the conductors through swampy ground, and it has been perfectly successful. The Huldee river crosses the Kedgeree line half way, and varies in breadth from 4,200 to 5,800 feet. A gutta percha wire, secured in the angles of a chain cable, is laid across and under this river; and the chain is

found to afford perfect protection from the grapnels of the heavy native boats which are constantly passing up and down.

The over-ground lines differ totally from those in use in England and America, or any other country, in this important respect. No wire is used. Instead of wire, a thick iron rod, from three to five-eighths of an inch in diameter, weighing one ton to a mile, is adopted; the heaviest wire elsewhere used being only 250 pounds to the mile. The advantages of these substantial rods are these: They possess a complete immunity from gusts of wind, or ordinary mechanical violence. If accidentally thrown down, they are not injured, though passengers, bullocks, buffaloes, and elephants may trample on them. Owing to the mass of metal, they give so free a passage to the electric currents, that no insulation is necessary. They are extended from bamboo to bamboo without any protection, and they work without interruption through the hardest rains. The thickness of the wire allows of their being placed on the post without any occasion for the straining and winding apparatus, whereas the tension of wires exposes them to fracture, occasions expense in construction, and much difficulty in repairs. The thick rods also admit of rusting without danger, to an extent which would be destructive to a wire. And, lastly, in considering repairs, the rods are but little more costly than small wire, and the welding occasions no difficulty.

The importance of this discovery of the superiority of *rods* over *wire* will be fully appreciated in a country like India, where the line must often run through a howling wilderness, tenanted by savage beasts, or more savage men. The lines must therefore protect themselves, and this is secured by the use of thick rods.

The expense of this experimental line was about $200 a mile. The pecuniary returns were originally calculated at about $90 a month; but they have been more than three times that amount.

CONCLUSION.

The balance of the appropriation of 1850 was drawn from the treasury on the 4th of September last. It is believed that the additional sum of $25,000 will be required to complete all the purely statistical portions of the work and prepare the same for the press, and to pay the expenses of superintending the printing of the first volume, and preparing the second volume in the manner proposed in my former report, and superintending to its completion the whole work, the sum of $25,000 additional will be required to pay all expenses and complete the work by the close of the next fiscal year.

The more particular the analysis of the returns of the Seventh Census, the more interesting do they appear, and the more confident are we of their general correctness and reliability. There is no question but they present the most ample materials for representing, with almost perfect accuracy, the social, civil, and physical condition of the American people. While, in the minutiæ of some small details, ingenuity may discover discrepancies in these returns, as in all others, they present

such an array of facts and body of accurate information relating to our people and country, as exists respecting no other nation. While the savans of the old world are digging into the ruins of cities, removing mountains of sand, and excavating subterranean temples, to discover the most feeble rays pointing out the history of nations of antiquity, we possess, respecting our own, archives, of which the like would be sought for in vain in any other country, and which furnish every facility for us to know ourselves, and to transmit our true history to posterity.

The importance of statistical investigations and publications cannot be more strongly illustrated than by the examples of those nations of the Old World where the power existed in the throne to admit of their continuance, or suspend their development, as policy, in view of the existing state of the country, would seem to dictate. Statistical researches instituted by Louis XIV. after the treaty of Ryswick, were annihilated in France when it was necessary to smother the revelations of her decay, as they would be illustrated, during the war of the Spanish succession, and the disasters of Hochstadt and Ramillies. The same result was exhibited a century after, when the statistical investigation re-established by the First Consul in 1802, after the peace of Amiens, were not allowed to exist, to make manifest the condition of the country after the catastrophe at Leipzig.

With reference to the present progress of statistical science in Europe, a late French writer, Moreau de Jonnes, remarks that, "A profound peace, whose duration is unexampled, has caused an admirable emulation to spring up among all the nations of Europe, which, to repair the misfortunes occasioned by their former numerous wars, and to attain to greater prosperity, have ardently employed themselves in the cultivation of *statistics*, which is the basis of enterprise, and from the registers of which they obtain instruction in those things affecting the welfare of the state and people." One of the best illustrations of the truth of his remarks is furnished by the National Statistical Congress proposed to be held at Brussels in September of 1853. These illustrations serve to show the value and moral force of statistical revelations, and the duty of a self-governed people, like ours, to sustain them, and to demand a proper publication of their developments; and that it should form a work easily comprehended in all its parts—one not exclusively for the learned, but adapted to the wants of all who would wish to consult it.

The preparation of such a work is not only within the compass of possibility, but, with the means possessed, can be readily accomplished by industry and a reasonable amount of ability. That the expense necessarily attending the publication has been generally exaggerated, will appear from an examination of the correspondence relating thereto, which has been transmitted to you. Many great men, as Lavoisier, Vauban, Necker, and Young, for want of better means than they possessed, have made use of much more imperfect data than ours, to arrive, approximately, at the truth; and the character of their data, imperfect as it was admitted to be, did not intimidate them from making use of the materials they possessed, nor deter their governments from adopting their deductions. Of these permit me to present but one illustration—that exhibited by Lavoisier, to whom a committee of the National Assembly in France applied, in 1790, for information to enable

them to prepare, in accordance with the directions of that body, a rational basis for the establishment of taxes. To meet the wishes of the committee, and to form his calculations respecting the quantity of land cultivated, and the quantities of production and consumption, this learned man used, as a means of arriving at the desired facts, the number of ploughs which was supposed to exist in each commune. The results thus arrived at were adopted, and subsequent revelations, made upon more sufficient data, exhibited to them a close and wonderful approximation to the truth. Our materials present no such hypothetical character, but are deemed generally accurate and reliable, and are of a character to warrant their publication.

Respectfully submitted.

I have the honor to be, your obedient servant,

JOS. C. G. KENNEDY.

Hon. ALEX. H. H. STUART,
Secretary of the Interior.