# PROGRESS OF THE NATION

1790 то 1890.

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# PROGRESS OF THE NATION.

#### AGGREGATE POPULATION.

The following table shows the aggregate population of the United States at each census from 1790 to 1890, together with the per cent of increase during each decade:

| CENSUS YEARS. | Aggregate population. | Per cent of<br>increase. |
|---------------|-----------------------|--------------------------|
| 1790          | 3, 929, 214           |                          |
| 1800          | 5, 308, 483           | 35, 10                   |
| 1810          | 7, 239, 881           | 36, 38                   |
| 1820          | 9,633,822             | 33. 07                   |
| 1830          | 12, 866, 020          | 33, 55                   |
| 1840          | 17, 069, 453          | 32, 67                   |
| 1850          | 23, 191, 876          | 35.87                    |
| 1860          | 31, 443, 321          | 35, 58                   |
| 1870          | 38 558, 371           | 22. 63                   |
| 1880          | 50, 155, 783          | 30.08                    |
| 1800          | 62 622, 250           | 24. 86                   |

The population of the United States on June 1, 1890, as shown by the general enumeration for all the states and organized territories, was 62,622,250; including 325,464 Indians and other persons in the Indian territory and on Indian reservations and 32,052 persons in Alaska, specially enumerated under the law, the entire population of the country was 62,979,766. In 1880 the population of the United States, exclusive of the population of the Indian territory, Indian reservations, and Alaska, was 50,155,783. The absolute increase of the population in the ten years intervening was 12,466,467, and the percentage of increase was 24.86. In 1870 the population was stated as 38,558,371. According to these figures the absolute increase in the decade between 1870 and 1880 was 11,597,412, and the percentage of increase was 30.08.

Upon their face these figures show that the population increased 869,055 more between 1880 and 1890 than between 1870 and 1880, while the rate of increase apparently diminished from 30.08 to 24.86 per cent. If these figures were derived from correct data, they would be disappointing. Such a reduction in the rate of increase, in the face of the heavy immigration during the past ten years, would argue a diminution in the fecundity of the population, or a corresponding increase in its death rate. These figures are, however, easily explained when the character of the data used is understood. It is well known, the fact having been demonstrated by extensive and thorough investigation, that the census of 1870 was grossly deficient in the southern states, so much so as not only to give an exaggerated rate of increase of the population between 1870 and 1880 in these states, but to affect materially the rate of increase in the country at large.

These omissions were not the fault of the Census Office nor within its control. The census of 1870 was taken under a law which the Superintendent, Francis A. Walker, characterized as "clumsy, antiquated, and barbarous". The Census Office had no power over its enumerators save a barren protest, and even this right was questioned in some quarters. In referring to these omissions the Superintendent of the Tenth Census (1880) said in his report in relation to the taking of the census in South Carolina: "It follows, as a conclusion of the highest authority, either that the census of 1870 was grossly defective in regard to the whole of the state or some considerable parts thereof, or else that the census of 1880 was fraudulent". Those therefore who believe in the accuracy and honesty of the Tenth Census—and that was thoroughly established—must accept the alternative offered by Superintendent Walker, namely, that the Ninth Census was "grossly defective". What was true of South Carolina was also true, in greater or less degree, of all the southern states.

There are, of course, no means of ascertaining accurately the extent of these omissions, but an approximation to it may be obtained by the following method:

It is fair to assume that the rates of increase in population of the southern states between 1860 and 1870 and between 1870 and 1880 were related to one another in a proportion similar to the corresponding rates in the northern states during the same periods. In the term "southern states" is here included the two Virginias, the two Carolinas, Georgia, Florida, Alabama, Mississippi, Louisiana, Texas, Arkansas, Tennessee, and Kentucky. The census of 1870 is known or is suspected to have been deficient in all these states. In the other states and territories there is no suspicion of incompleteness.

The population of the southern states in 1860, 1870, and 1880 was as follows:

| 1860 | <br>10, 259, 016 |
|------|------------------|
| 1870 | <br>11, 250, 411 |
|      | <br>•            |

The population of the other states and territories in 1860, 1870, and 1880 was as follows:

| 1860 | 2  | 1, 184, | 305 |
|------|----|---------|-----|
| 1870 | 97 | 7, 307, | 960 |
| 1880 |    | 4, 898, | 390 |

The rate of increase in these other states and territories was 28.91 per cent between 1860 and 1870, and 27.80 per cent between 1870 and 1880. These two rates are so nearly equal that in extending them to the southern states they may be regarded as identical; in other words, it may be assumed that the rate of increase in the southern states between 1860 and 1870 and between 1870 and 1880 was the same.

Classified as white and negro, the population of the southern states was as follows:

| CENSUS YEARS, | White.                     | Negro. (a)                                |
|---------------|----------------------------|---|
| 1860          | 6, 366, 703<br>7, 067, 213 | 3, 890, 037<br>4, 179, 222<br>5, 057, 035 |

a Includes all persons of negro descent.

The increase of the white population between 1860 and 1880 was 50.67 per cent, or at a uniform rate for each ten years of 22.75 per cent. The increase of the negro population between 1860 and 1880 was 45.44 per cent, or at the rate of 20.60 per cent for each ten years. Applying these rates of increase respectively to the white and negro population in 1860, the white population in 1870 was approximately 7,815,128 and the negro 4,691,385. These results are in excess of the figures as returned by the census of 1870, in the case of the white 747,915, and in the case of the negro 512,163, a total of 1,260,078, which may be assumed as approximately the extent of the omissions by the faulty census of 1870. The total population in 1870 was, therefore, approximately 39,818,449 instead of 38,558,371.

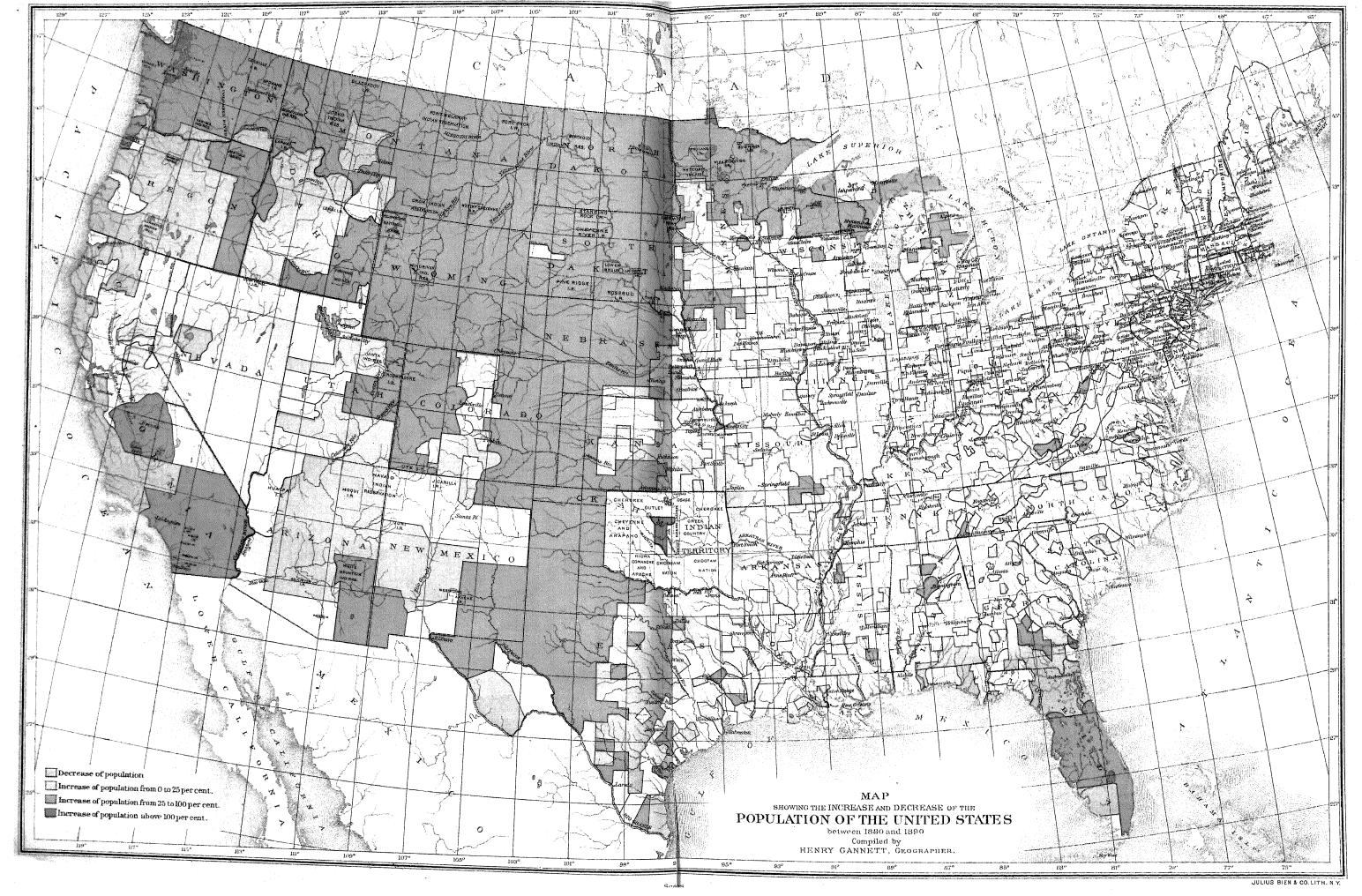
Assuming these figures to represent approximately the true population in 1870, the rates of increase would stand as follows:

|               | PER CENT. |
|---------------|-----------|
| 1860 to 1870  |           |
| 1870 to 1880  | 95 98     |
| 1880 to 1890. | 01 00     |

Omitting from consideration those states in which the census of 1870 is known or is presumed to have been faulty, the rate of increase between 1870 and 1880 in the remaining states has been very nearly maintained in the decade from 1880 to 1890. The census of 1870 is known or is presumed to have been deficient in nearly all the states of the South Atlantic and South Central divisions, while in the North Atlantic, North Central, and Western divisions no evidence of incompleteness has been detected. The population of these three last named divisions in 1870, 1880, and 1890, with the numerical increase and the percentage of increase for the two decades, is set forth in the following table:

| CENSUS YEARS. | Population.                  | INCREASE.                  |                  |  |
|---------------|------------------------------|----------------------------|------------------|--|
|               |                              | Number.                    | Per cent.        |  |
| 1870          | 26, 270, 351                 |                            |                  |  |
| 1880<br>1890  | 33, 639, 215<br>42, 791, 437 | 7, 368, 864<br>9, 152, 222 | 28. 05<br>27. 21 |  |

It will be seen that the numerical increase between 1880 and 1890 exceeded that between 1870 and 1880 by 1,783,358, and that the proportional increase was only 0.84 per cent less.



The following table shows the percentage of increase in total population for each decade since 1790, derived from Table 2, pages 4 and 5, post:

PERCENTAGE OF INCREASE IN TOTAL POPULATION: 1790 TO 1890.

| STATES AND TERRITORIES. | 1880<br>to<br>1890 | 1870<br>to<br>1880 | 1860<br>to<br>1870 | 1850<br>to<br>1860 | 1840<br>to<br>1850 | 1830<br>to<br>1840 | 1820<br>to<br>1830            | 1810<br>to<br>1820 | 1800<br>to<br>1810 | 1790<br>to<br>1800 |
|-------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------------------|--------------------|--------------------|--------------------|
| The United States       | 24.86              | 30.08              | 22. 63             | 35, 58             | 35, 87             | 32. 67             | 33, 55                        | 33, 07             | 36, 38             | 35, 10             |
|                         | 19. 95             | 17.96              | 16, 09             | 22. 81             | 27.00              | 21.99              | 27, 22                        | 24, 95             | 82. 29             | 33.92              |
| Maine                   | 1.87               | 3, 51              | a0, 22             | 7.74               | 16, 22             | 25. 62             | 33, 92                        | 30, 42             | 50. 74             | 57, 16             |
| New Hampshire           | 8.51               | 9,01               | a2, 38             | 2.55               | 11.74              | 5. 66              | 10, 37                        | 13, 78             | 16,64              | 29, 58             |
| Vermont                 | 0.04               | 0,52               | 4, 90              | 0,31               | 7.59               | 4.02               | 18, 94                        | 8, 20              | 41,06              | 80.82              |
| Massachusetts           | 25.57              | 22, 35             | 18, 38             | 23, 79             | 34, 81             | 20, 85             | 16.68                         | 10, 83             | 11.63              | 11, 02             |
| Rhode Island            | 24.94              | 27, 23             | 24,47              | 18. 35             | 35, 57             | . 11,97            | 17.09                         | 7. 91              | 11.30              | 0.43               |
| Connecticut             | 19.84              | 15, 86             | 16, 80             | 24, 10             | 10.62              | 4, 13              | 8. 10                         | 5.04               | 4, 36              | 5.49               |
| New York                | 18.00              | 15.97              | 12, 94             | 25, 29             | 27, 52             | 26, 60             | 39, 83                        | 43.07              | 62.81              | 73.19              |
| New Jersey              | 27.74              | 24, 83             | 34, 83             | 37, 27             | 31.14              | 16.36              | 15, 61                        | 12. 98             | 16.30              | 14.67              |
| Pennsylvania            | 22.77              | 21.61              | 21. 19             | 25.71              | 34.09              | 27.87              | 28.71                         | 29, 31             | 34, 49             | 38. 67             |
| South Atlantic division | 16, 59             | 29. 79             | 9, 11              | 14, 65             | 19, 20             | 7. 67              | 19, 11                        | 14, 43             | 16. 99             | 23, 47             |
| Delaware                | 14, 93             | 17.27              | 11.41              | 22, 60             | 17, 22             | 1.74               | 5, 50                         | 0.10               | 13.07              | 8.70               |
| Maryland                | 11, 49             | 19.73              | 13, 66             | 17.84              | 24. 04             | 5. 14              | 9, 74                         | 7.04               | 11.42              | 6, 82              |
| District of Columbia    | 29.71              | 34.87              | 75, 41             | 45. 26             | 18, 24             | 9, 74              | 20, 57                        | 87, 53             | 70.48              |                    |
| Virginia                | 0.48               | 23, 46             | b23.25             | 12, 29             | 14.67              | 2, 34              | 13, 73                        | 9, 20              | 10.72              | 17.74              |
| West Virginia           | 23, 34             | 39, 92             |                    |                    |                    |                    |                               |                    |                    |                    |
| North Carolina          | 15.59              | 30, 65             | 7, 93              | 14. 22             | 15, 35             | 2, 00              | 15, 52                        | 15.00              | 16, 19             | 21, 42             |
| South Carolina          | 15, 63             | 41, 10             | 0. 27              | 5. 27              | 12, 47             | 2, 27              | 15.60                         | 21, 11             | 20, 12             | 38.75              |
| Georgia                 | 19.14              | 30, 24             | 12,00              | 16, 67             | 31.07              | 33.78              | 51, 57                        | 35, 08             | 55, 17             | 97. 08             |
| Florida                 | 45, 24             | 43, 54             | 33,70              | 60. 59             | 60, 52             | 56, 86             | *****                         |                    |                    |                    |
| North Central division  | 28.78              | 33, 76             | 42, 70             | 68, 35             | 61. 23             | 108.11             | 87.49                         | 192, 99            | 474. 77            | ļ <b>.</b>         |
| Ohio                    | 14.83              | 19, 99             | 13, 92             | 18, 14             | 30, 33             | 62, 01             | 61, 35                        | 151, 90            | 408. 67            | ļ <del></del>      |
| Indiana                 | 10.82              | 17.71              | 24, 45             | 36. 63             | 44. 11             | 99, 04             | 133, 07                       | 500. 24            | 334, 67            |                    |
| Illinois                | 24, 32             | 21.18              | 48, 36             | 101, 06            | 78, 81             | 202.44             | 185, 42                       | 849. 18            | 80% 01             |                    |
|                         |                    | 38. 25             | 58, 06             | i                  | 87.34              | 570.00             | 200.97                        | 84.06              |                    |                    |
| Michigan                | 27. 92             | 24.73              | 1                  | 88.38              | 880.88             | 510.00             | 200.01                        | 64,00              |                    |                    |
| Wisconsin               | 28. 23             |                    | 35, 93             | 154.06             | 000.00             |                    |                               |                    |                    |                    |
| Minnesota               | 66, 74             | 77. 57<br>36, 06   | 155.61             | 2,730.72           | 3) (F OF           |                    |                               |                    |                    |                    |
| Iowa<br>Missouri'       | 17. 68<br>23. 56   | 25. 97             | 76, 91<br>45, 62   | 251, 13<br>73, 30  | 345.85<br>77.75    | 173, 19            | 11,1,03                       | 210, 29            |                    |                    |
| North Dakota }          | c278.41            | d853, 23           | d193, 18           |                    |                    |                    |                               |                    |                    | •••••              |
| Nebraska.               | 134, 06            | 267. 83            | 320, 45            |                    | 1                  |                    |                               |                    |                    |                    |
| Kansas                  | 43. 27             | 173, 35            | 239, 91            |                    |                    |                    |                               |                    |                    |                    |
| South Central division  | 23. 02             | 38, 62             | 11,54              | 34.05              | 42. 24             | 46, 72             | 51. 91                        | 72. 89             | 134.00             | 206, 68            |
| Toutural                | 10.70              | 24.81              | 14 01              | 17.04              | 25, 08             | 10 00              | 21, 94                        | 00.27              | 09 00              | 100.00             |
| Kentucky                | 12.73              | 22. 55             | 14, 31             | 17.64              | 20, 92             | 13, 36             | 61, 29                        | 88.77              | 83, 98             | 199.90             |
| Tennessee               | 14.60              | 26, 63             | 18, 40<br>3, 40    | 10, 68             | 30, 62             | 21, 00             | 142, 01                       | 61. 53             | 147.81             | 105.88             |
| Alabana                 | 19.84              |                    | Ī                  | 24,96              | 1 .                | 90, 86             |                               | 00 NT              | 055 05             | ********           |
| Mississippi             | 13.96              | 36.68              | 4.63               | 80.47              | 61.46              | 174, 96            | 81, 08                        | 80, 07             | 355. 95            | ********           |
| Louisiana<br>Texas      | 10, 01<br>40, 44   | 29, 31<br>94, 45   | 2, 67<br>35, 48    | 36, 74<br>184, 21  | 46, 92             | 03, 35             | 41.08                         | 99. 75             |                    | **********         |
| Oklahoma                | 40, 58             | 05, 05             | 11, 26             | 107, 46            | 115. 12            | 221, 00            | 113, 17                       |                    |                    |                    |
| Western division        | 71.27              | 78, 46             | 60.02              | 246, 15            |                    |                    |                               |                    |                    |                    |
| Montana.                | 237. 49            | 90.14              | ]                  |                    |                    |                    |                               |                    |                    |                    |
| Wyoming                 | 192.01             | 128.00             |                    |                    |                    |                    |                               |                    |                    |                    |
| Colorado                | 112.12             | 387.47             | 16, 30             |                    |                    |                    |                               |                    |                    |                    |
| New Mexico.             | 28.40              | 30. 14             | a1.76              | 51.94              |                    |                    |                               |                    |                    |                    |
| Arizona                 | 47.43              | 318, 72            |                    |                    |                    |                    |                               |                    | ·                  |                    |
| Utah                    | 44.42              | 65.88              | 115, 49            | 253, 89            |                    |                    |                               |                    |                    |                    |
| Nevada                  | a26.51             | 46, 54             | 519, 67            |                    |                    |                    |                               |                    | ļ                  |                    |
| Idaho                   | 158.77             | 117.41             |                    |                    |                    |                    |                               |                    |                    |                    |
| Washington              | 365. 13            | 213, 57            | 106, 62            |                    |                    | 1                  |                               |                    |                    |                    |
| Oregon                  | 79. 53             | 92, 22             | 73, 30             | 294, 65            |                    |                    |                               |                    |                    | l                  |
| California              | 39.72              | 54. 34             | 47.44              | 310.37             |                    | 1                  |                               |                    |                    |                    |
|                         | (701 1N            | OT. UT             | -1.33              | 1710.07            | 1                  |                    | • • • • • • • • • • • • • • • |                    |                    | J                  |

a Decrease.

b Decrease; due to loss of territory. West Virginia having been set off from Virginia December 31, 1862.

e North Dakota and South Dakota combined. Apportioning the population of Dakota territory in 1880, North Dakota increased 305.05 percent, and South Dakota increased 234.60 per cent.
d Dakota territory.

The thirteen original states, which comprise practically the North Atlantic and South Atlantic divisions, were, to a great extent, settled communities at the time of the First Census, in 1790, and their rate of increase in the early decades, though in certain cases considerable, was in no case excessive. In certain cases, indeed, it was very small, as in Rhode Island, Connecticut, Delaware, and Maryland.

These two groups of states, from the time of the earliest records, have been the sources of supply for a great westward migration. Their children have peopled the great interior valley and the mountains of the west. They have swarmed from the Atlantic coast to the prairies, plains, mountains, and deserts by millions during the last century. The extent of this movement can not be estimated, but some idea of it may be obtained from the fact that in 1880, out of 22,000,000 persons born in the Atlantic states, over 3,000,000 were found living in other states entirely to the westward.

In the North Atlantic division this draft has been in great part made good, especially during the past forty years, by foreign immigration, which has thus replaced to a great extent the original stock. Such is not the case, however, with the South Atlantic states, which, owing in part to climatic conditions and in part to the presence of the negro race, have received insignificant foreign immigration.

In the North Central, South Central, and Western divisions the rate of increase was at first very large, and gradually diminished as the population increased in number and approximated settled conditions.

The general law governing the increase of population is that, when not disturbed by extraneous causes, such as wars, pestilences, immigration, emigration, etc., increase of population goes on at a continually diminishing rate. The operation of this law in this country has been disturbed in recent years by the civil war, which, besides the destruction of a vast number of lives, decreased the birth rate materially during its progress. It was followed by an increased birth rate, as is invariably the case under similar circumstances. The normal rate of increase has been, and is, greatly disturbed also by immigration, and it is difficult to estimate the effect of this upon our rate of increase.

Throughout the whole table, in nearly every state, there is distinctly traceable the result of the late civil war upon the rate of increase between 1860 and 1870. It is, however, much more marked in the southern than in the northern states, showing how much more severely these states were strained by the conflict.

The table on the preceding page, showing the percentages of increase in population by states and territories from 1790 to 1890, is supplemented in the case of a few states and territories by the following table, in which are given, in addition to the results of the United States censuses of 1880 and 1890, the results of state censuses taken in 1885, with the exception of Michigan, the census of that state having been taken in 1884:

|                         | POPULATION. |               |             | INCRE        | EASE.        | PER CENT OF INCREASE. |              |
|-------------------------|-------------|---------------|-------------|--------------|--------------|-----------------------|--------------|
| STATES AND TERRITORIES, | 1890        | 1885          | 1880        | 1885 to 1890 | 1880 to 1885 | 1885 to 1890          | 1890 to 1885 |
| Colorado                | 412, 198    | 243, 910      | 194, 327    | 168, 288     | 49, 583      | 69, 00                | . 25, 5      |
| Dakota (a)              | 511, 527    | 415, 610      | 135, 177    | 95, 917      | 280, 433     | 23, 08                | 207, 4       |
| Florida                 | 391, 422    | 342, 551      | 269, 493    | 48, 871      | 73, 058      | 14, 27                | 27. 1        |
| Iowa                    | 1, 911, 896 | 1, 753, 980   | 1, 624, 615 | 157, 916     | 120, 365     | 9, 00                 | 7. 9         |
| Kansas                  | 1, 427, 096 | 1, 268, 530   | 996, 096    | 158, 566     | 272, 434     | 12. 50                | 27, 3        |
| Massachusetts           | 2, 238, 943 | 1, 942, 141 . | 1,783,085   | 296, 802     | - 159, 056   | 15, 28                | 8.9          |
| Michigan                | 2, 093, 889 | 1, 853, 658   | 1, 636, 937 | 240, 231     | 216, 721     | 12.96                 | - 13. 2      |
| Minnesota               | 1,301,826   | 1, 117, 798   | 780, 773    | 184, 028     | 337. 025     | 16, 46                | 43.1         |
| Nebraska                | 1,058,910   | 740, 645      | 452, 402    | 318, 265     | 288, 243     | 42.97                 | 63. 7        |
| New Jersey              | 1, 444, 933 | 1, 278, 033   | 1, 131, 116 | 166, 900     | 146, 917     | 13, 06                | 12. 9        |
| New Mexico              | 153, 593    | 134, 141      | 119, 565    | 10, 452      | 14, 576      | 14, 50                | 12. 1        |
| Oregon                  | 313, 767    | 194, 150      | 174, 768    | 119, 617     | , 19,382     | 61. 61                | . 11.0       |
| Rhode Island            | 345, 506    | 304, 284      | 276, 581    | 41, 222      | 27, 753      | 13, 55                | 10. 0        |
| Washington              | 349, 390    | 129, 438      | 75, 116     | 219, 952     | 54, 322      | 169. 93               | 72. 3        |
| Wisconsin               | 1, 686, 880 | 1, 563, 413   | 1, 315, 497 | 123, 467     | 247, 916     | 7.90                  | 18.8         |

a North Dakota and South Dakota combined for 1890; Dakota territory in 1880 and 1885.

In comparing the results of these state censuses with those of the United States censuses, it must be understood that the state censuses were taken under different authority, by different machinery, and by different methods from those employed in the United States censuses.

In the state of Kansas the course of the population can be traced even more closely than in the other states represented in the preceding table. Since 1885 this state has taken a census each year, the results of which are shown in the accompanying statement, together with the United States censuses of 1880 and 1890:

| 1880. | United States  | census | 996, 096      |
|-------|----------------|--------|---------------|
| 1885. | State census . |        | 1, 268, 530   |
| 1886. | State census . |        | . 1, 406, 738 |
| 1887. | State census . |        | 1, 514, 578   |
| 1888. | State census . |        | 1.518.552     |
| 1889. | State census.  |        | 1, 464, 914   |
| 1890. | United States  | census | 1, 427, 096   |

In the principal tables the states and territories are grouped as North Atlantic, South Atlantic, North Central, South Central, and Western divisions. This grouping is a natural one, and by the aid of it certain characteristic features in the development of the states are brought out. The North Atlantic division is primarily a manufacturing section. As a necessary result of the predominance of manufacturing, there is a great development of urban population. Indeed, more than half of the inhabitants are grouped in cities.

The predominant industry of the North Central division is agriculture, although in many of these states manufactures are now acquiring prominence. The industries of the South Atlantic and South Central divisions are still almost entirely agricultural, while in the Western division the leading industries are agriculture, mining, and grazing.

In the course of the settlement and development of a country the industries commonly follow one another in a certain order. After the hunter, trapper, and prospector, who are commonly the pioneers, the herdsman follows, and for a time the raising of cattle is the leading industry. As settlement becomes less sparse, this is followed by agriculture, which in its turn, as the population becomes more dense, is succeeded by manufactures, and, as a consequence, the aggregation of the people in cities. All stages of this progress are seen in this country.

In Maine, New Hampshire, and Vermont the rate of increase between 1870 and 1880 was not quite maintained during the past decade, probably due to a large migration of the farming population to the far west, while manufactures had not assumed great prominence. In Vermont there has been only a trifling increase of population.

In the other states of this division, with the exception of Rhode Island, viz, Massachusetts, Connecticut, New York, New Jersey, and Pennsylvania, manufactures have assumed so great prominence that they have not only sufficed to maintain the former rate of increase but even to increase it. The rate in Massachusetts has increased from 22.35 to 25.57 per cent; in Connecticut from 15.86 to 19.84; in New York from 15.97 to 18.00; in New Jersey from 24.83 to 27.74, and in Pennsylvania from 21.61 to 22.77. It will be seen, furthermore, that this augmentation of the rate of increase is greater in the more easterly states than in the three westerly ones above mentioned, owing to the relatively greater development of manufacturing industries.

Turning to the table on the preceding page, showing the results of the state censuses, it appears that during the first half of the last decade the rate of increase in Massachusetts was below the average of the decade, being only 8.92 per cent, while in the last half it was much greater, or 15.28 per cent. The case is somewhat similar in Rhode Island, although not in so marked a degree, the rates of increase between 1880 and 1885 and between 1885 and 18 0 being, respectively, 10.04 and 13.55 per cent. In New Jersey the rate of increase seems to have been maintained quite uniformly throughout the decade.

In the North Central group of states various conditions prevail. In Ohio, Indiana, Iowa, and Missouri, and in Illinois, if the city of Chicago be dropped from consideration, the rate of increase has declined decidedly. In Ohio it has fallen from 19.99 to 14.83 per cent; in Indiana from 17.71 to 10.82; in Iowa from 36.06 to 17.68; in Missouri from 25.97 to 23.56 per cent, in spite of the rapid growth of St. Louis and Kansas city, and in Illinois, dropping Chicago from consideration, from 14.89 to 5.90 per cent. In these states the agricultural industry, which is still the prominent one, has begun to decline, owing to the sharp competition of western farms. The farming population has migrated westward, and the growth of manufactures is not yet sufficiently rapid to repair these losses. The southern portions of Michigan, Wisconsin, and Minnesota are under similar conditions, but the northern parts of these states, lying upon the frontier of settlement, have filled up with sufficient rapidity to repair wholly or in part the losses of the southern parts. Michigan increased at the rate of 38.25 per cent between 1870 and 1880, while between 1880 and 1890 the rate was but 27.92 per cent. The increase between 1880 and 1890 was cut into unequal parts by the state census taken in 1884. In the first four years of the decade the increase was 13.24 per cent, while in the last six years it was 12.96 per cent. As the rate of increase in this state is declining, the state census taken in 1884 corroborates the United States census of 1890. In Wisconsin the last decade shows an increase of 28.23 per cent, as against an increase of 24.73 per cent in the decade from 1870 to 1880. The state census of Wisconsin, taken in 1885, cuts the decade into two equal parts, and shows an increase during the first half of 18.85 per cent and during the second half of but 7.90 per cent.

Minnesota increased 77.57 per cent between 1870 and 1880 and 66.74 per cent between 1880 and 1890, the numerical increase being over half a million in the past decade. The state census, taken in 1885, shows that the bulk of this increase occurred between 1880 and 1885. The numerical increase during the first five years was 337,025, and the rate of increase 43.17 per cent, while during the last half of the decade the numerical increase was 184,028, and the rate of increase 16.46 per cent.

During the past ten years the population of Dakota, considering the two states of North Dakota and South Dakota together, has increased from 135,177 to 511,527, or 278.41 per cent; Nebraska from 452,402 to 1,058,910, or 134.06 per cent, and Kansas from 996,096 to 1,427,096, or 43.27 per cent. This increase has not, however, continued uniformly throughout the decade. In 1885 Dakota contained 415,610 inhabitants, or more than four-fifths of its present population. Nebraska contained 740,645 inhabitants in the same year, thus dividing the numerical increase quite equally between the two halves of the decade, but leaving the greater percentage of increase in the first half. In the same year Kansas by its state census had 1,268,530 inhabitants, showing that nearly two-thirds of

the numerical gain was acquired during the first half of the decade. The industries of these states are almost purely agricultural, and are largely dependent on the supply of moisture, either in the form of rain or by irrigation. Through these states passes what is known as the sub-humid belt, a strip of country several degrees in width, in which during rainy years there is an abundance of moisture for the needs of crops, while in the years when the rainfall is below the average the supply is deficient. In this region little provision has been made for artificial irrigation, the settlers having thus far been content to depend upon rainfall. Into this region settlers flocked in large numbers in the early years of the decade, drawn thither by the fertility of the land and by the fact that for a few years the rainfall had been sufficient for the needs of agriculture. During the past two or three years, however, the conditions of rainfall have materially changed. It has fallen decidedly below the normal, and the settlers have thereby been forced to emigrate. Thousands of families have abandoned this region and gone to Oklahoma and the Rocky Mountain region. This migration is well shown in the progress of Kansas, as indicated by its annual censuses. These censuses show a rapid increase in population from 1880 up to 1887; 1888 shows but a slight increase over 1887, while 1889 shows a reduction in the population, leading up to the further reduction shown by the United States census in 1890.

Throughout the South Atlantic and South Central states the rate of increase has diminished, and in most of these states it has diminished materially. A certain reduction in the percentage of increase, especially in the eastern part of this region, was to have been expected, due not only to the operation of general laws but also to the fact that there has been considerable migration from the states east of the Mississippi river to the westward, and but little immigration. Taken together, however, these two causes by no means account for the reduction in the rate of increase in these states. The real cause is to be found, as was stated early in this discussion, in the imperfections of the census of 1870. These imperfections resulted in giving a comparatively low rate of increase between 1860 and 1870, and an exaggerated increase between 1870 and 1880. The following table, showing the rates of increase during the last three decades in these states, illustrates the imperfections of the census of 1870:

|                | PER CENT OF INCREASE. |              |              |  |  |
|----------------|-----------------------|--------------|--------------|--|--|
| STATES.        | 1800 to 1870          | 1870 to 1880 | 1880 to 1890 |  |  |
| Virginia       | a4.44                 | 23, 46       | 9.48         |  |  |
| North Carolina | 7.93                  | 30, 65       | 15. 59       |  |  |
| South Carolina | 0.27                  | 41. 10       | 15.63        |  |  |
| Georgia        | 12,60                 | 30. 24       | 19, 14       |  |  |
| Alabama        | 3.40                  | 26, 63       | 19.84        |  |  |
| Mississippi    | 4.63                  | 36, 68       | 13, 96       |  |  |
| Louisiana      | 2. 67                 | 29.31        | 19. 01       |  |  |
| Kentucky       | 14.31                 | 24. 81       | 12, 73       |  |  |
| Tennessee      | 13, 40                | 22, 55       | 14.60        |  |  |

a Of Virginia and West Virginia together.

It is but reasonable to suppose that in these states, which were rayaged by war from 1861 to 1865, the rate of increase in the decade which includes the war period should be less than a normal one. Of all these states Virginia, whose soil was the principal theater of the war, must have suffered most severely, and during the period in question it increased at the rate of but 4.44 per cent. Next to Virginia, Tennessee suffered most severely, and yet it increased 13.40 per cent. On the other hand, North Carolina, which suffered less severely, gained but 7.93 per cent, and South Carolina, which suffered less in comparison with Virginia, apparently remained at a standstill as regards population. Georgia gained 12 per cent, while Alabama gained but 3.40 per cent, Louisiana 2.67 per cent, and Mississippi 4.63 per cent, although they were comparatively remote from active operations, and suffered relatively little from the ravages of war. On the other hand, those states which suffered the most severely from the war made during the decade from 1870 to 1880 the smallest proportion of gain of the southern states, whereas the reverse should have been the case. Thus Virginia gained 23.46 per cent, Kentucky 24.81, and Tennessee 22.55, while the states that were farther removed from active operations were North Carolina, which gained 30.65; South Carolina, 41.10; Georgia, 30.24; Alabama, 26.63; Mississippi, 36.68, and Louisiana, 29.31 per cent. These startling discrepancies were due, first, to the imperfections of the census of 1870, which, as has been demonstrated, were greatest in South Carolina, Mississippi, Louisiana, Alabama, Georgia, and North Carolina, although they were not by any means wanting in Virginia, Kentucky, and Tennessee; and, second, in part, to migration of the negro population from South Carolina and other recent slave states.

The industries of these two sections are almost purely agricultural. During the past ten years manufactures have obtained a slight footing and mining has made considerable growth in the mountain regions, but these causes have thus far produced but a comparatively trifling movement of population. The urban population, although great in proportion to that which existed formerly, is very small in proportion to the rural population of the region.

During the first half of the last decade Florida had a rapid growth. The population between 1880 and 1885 nereased 73,058, or at the rate of 27.11 per cent. This rapid growth, however, received a serious check in 1887 and 1888 by an epidemic of yellow fever and by severe frosts. The growth since 1885 has, therefore, been comparatively slow.

Arkansas has continued to grow at a rapid rate, having increased 40.58 per cent in the last ten years. Texas also has increased with great rapidity, the numerical increase of its population being 643,774, or 40.44 per cent.

In the Western division the conditions of growth have been varied. In the earlier years of the decade the discovery of valuable silver and copper mines in the mountains of Montana, in the neighborhood of Butte, drew to that state a large immigration, which engaged not only in mining, but in developing the agricultural resources. Wyoming has continued to grow with accelerated rapidity.

The census of Colorado in 1880 was taken on the top wave of a mining excitement, which had filled its mountains with miners, prospectors, and speculators, increasing its population enormously, especially in the mountainous country. The census of the state taken in 1885 was, on a superficial view, very surprising. It showed that most of the mining counties had lost population during the five years preceding. This loss was, however, more than made up by the growth of its cities and its agricultural counties. The census of 1890 shows still further reduction of population in the mining regions of the state, and on the other hand an extraordinary development of its urban population and its farming element. New Mexico, Arizona, and Utah show rates of increase which are small when the sparsely settled condition of these territories is considered, while Nevada shows an absolute diminution in population of 16,505, or 26.51 per cent, leaving it with a population less than that of any other state. This condition of things is a natural result of the failure of the Comstock and other mines, work upon which has practically ceased. Idaho has increased its population 153.77 per cent. Its prosperity is mainly due to its mines, although people are now turning to agriculture in considerable numbers.

The growth of Washington has been phenomenal, the population in 1890 being nearly five times that of 1880. As is shown by the state census taken in 1885, this growth has been almost entirely during the last five years of the decade. The inducements which have attracted settlers are in the main its fertile soil and ample rainfall, which enable farming to be carried on without irrigation over almost the entire state. The growth of Oregon, though less rapid, has been at a rate of 79.53 per cent during the past decade. The numerical increase has been 138,999, of which over four-fifths have been acquired during the past five years. The additions to its population are mainly in the valleys of the Columbia and Willamette rivers.

California, which increased 54.34 per cent during the decade from 1870 to 1880, has maintained during the past decade a rate of increase of 30.72 per cent. This increase, though widespread throughout the state, has been most marked in its great cities and in the southern part.

The following table shows the relative rank in population of the states and territories in 1890 and in 1880:

| 1890               | 1880               | 1890                     | 1880                     |
|--------------------|--------------------|--------------------------|--------------------------|
| 1 New York.        | 1 New York.        | 20 Nebraska.             | 26 Minnesota.            |
| 2 Pennsylvania.    | 2 Pennsylvania.    | 27 Macyland.             | 27 Maine.                |
| 3 Illinois.        | 3 Ohio.            | 28 West Virginia.        | 28 Connecticut.          |
| 4 Ohio.            | 4 Illinois.        | 29 Connecticut.          | 20 West Virginia.        |
| 5 Missouri.        | 5 Missouri.        | 30 Maine.                | 30 Nebraska.             |
| 6 Massachusetts.   | 6 Indiana.         | 31 Colorado.             | 31 New Hampshire.        |
| 7 Texas.           | 7 Massachusetts.   | 32 Florida.              | 32 Vermont.              |
| 8 Indiana.         | 8 Kentucky.        | 33 New Hampshire.        | 33 Rhode Island.         |
| 9 Michigan.        | 9 Michigan.        | 34 Washington.           | 34 Florida.              |
| 10 Jowa.           | 10 Iowa.           | 35 Rhode Island.         | 35 Colorado.             |
| 11 Kentucky.       | 11 Texas.          | 36 Vermont.              | 36 District of Columbia. |
| 12 Georgia.        | 12 Tennessee.      | 37 South Dakota.         | 37 Oregon.               |
| 13 Tennessee.      | 13 Georgia.        | 38 Oregon.               | 38 Delaware.             |
| 14 Wisconsin.      | 14 Virginia,       | 39 District of Columbia. | 39 Utalı.                |
| 15 Virginia.       | 15 North Carolina. | 40 Utah.                 | 40 Dakota.               |
| 16 North Carolina. | 16 Wisconsin.      | 41 North Dakota.         | 41 New Mexico.           |
| 17 Alabama.        | 17 Alabama.        | 42 Delaware.             | 42 Washington.           |
| 18 New Jersey.     | 18 Mississippi.    | 43 New Mexico.           | 43 Nevada.               |
| 19 Kansas.         | 19 New Jersey.     | 44 Montana.              | 44 Arizona.              |
| 20 Minnesota.      | 20 Kansas.         | 45 Idaho.                | 45 Montana.              |
| 21 Mississippi     | 21 South Carolina. | 46 Oklahoma.             | 46 Idaho.                |
| 22 California.     | 22 Louisiana.      | 47 Wyoming.              | 47 Wyoming.              |
| 23 South Carolina. | 23 Maryland.       | 48 Arizona.              | a.º                      |
| 24 Arkansas.       | 24 California,     | 49 Nevada.               | ,                        |
| 25 Louisiana.      | 25 Arkansas.       |                          |                          |

It will be seen that, as in 1880, New York still heads the list, and is followed by Pennsylvania. Ohio and Illinois have exchanged places. Of the other changes in the list the most marked are those of Texas, which rises from No. 11 to No. 7; Kentucky, which drops from 8 to 11; Minnesota, which rises from 26 to 20; Nebraska, which rises from 30 to 26; Maryland, which drops from 23 to 27; Colorado, which rises from 35 to 31; Vermont, which drops from 32 to 36; Washington, which rises from 42 to 34; Delaware, which drops from 38 to 42; Nevada, which drops from 43 to 49, and Arizona, which drops from 44 to 48. The average change in rank is 2.2 places.

## PROGRESS OF THE NATION: 1790 TO 1890.

The accompanying series of maps of the United States, showing the density of the population, is intended to exhibit the increase and the movement of population from the date of the First Census, in 1790, through ten decades, to 1890. Of these maps, the first nine, up to and including that of 1870, are reproductions from the "Statistical Atlas of the United States", published in 1874. The earlier ones are on the same scale as those of the atlas; the later ones are reduced in scale.

The method by which these maps have been constructed is that used for the atlas above referred to, and is explained in that work. This explanation is here reproduced, with such changes and modifications as appear to be necessary.

These maps, one for each census, show the density of population, that is, the number of individuals to a square mile, arranged within certain groups.

The general method of preparing these maps has been uniform, and is as follows: the county has been taken, in general, as a unit. Its population, at the period to which the map refers, having been ascertained, the population of all cities of 8,000 inhabitants or more, existing within it, has been deducted therefrom, the population of such cities being represented by circles of solid color, separate from the other population, which latter has been regarded, for the purposes of illustration, as rural population uniformly spread over the surface of the county. The rural population has been divided by the area of the county in square miles, the quotient representing the average density of settlement.

In cases, however, where the county was of unusual extent, or there was reason to believe that its density differed greatly in different parts, the county has been no longer taken entire, but has been examined by sections, even sections as small as its townships or other civil divisions. The number of counties thus broken up for the purpose of comparison would naturally vary greatly. In some census years, as in the case of the later ones, it would amount to several hundred; in others, particularly the earlier ones, to scarcely as many score.

The average density of each county, or part of a county, having been thus ascertained, the sections so taken have been grouped according to five degrees of density, as explained in the legends accompanying the maps. The general plan of grouping has been to make as many large groups as could be made without merging any appreciable proportion in groups of a markedly different grade: thus, if a single county of small extent belonging to group 3. should be surrounded by many counties of group 4 or of group 2, it would not be preserved distinct, but would take the shading of its general section, either 2 or 4, as the case might be. If, however, a county of group 4 or 5 should appear among counties of group 1 or 2, the distinction would be regarded of sufficient importance to be maintained. Again, a county whose average density brought it within group 4 might be found with counties of group 3 on one side and of group 5 on the other, appearing thus to belong to a group distinct from both, yet an examination into the density of its constituent townships might, and generally would, develop the fact that those parts of the county which bordered on group 3 were really of that grade, while the parts bordering on group 5 belonged in that class. In such a case, the division of the county by a central line, and the throwing of parts on the one side and on the other, into the adjacent groups, would not only dispense with the necessity for preserving a small separate group upon the map, but would even more correctly represent the facts of the case than would be done by representing the entire county as of group 4. Again, a tier of counties along a river or a railroad might yield a quotient showing an average population of only 30 to a square mile, and thus appear to belong in group 3, whereas an examination of the townships composing the county might show that, for a few miles back from the river, the density was much greater; while in the portion farthest away from the river the density was much less than the average, thus splitting the county, perhaps, into two groups, viz, 4 and 2.

The county, and, in some cases, the township, has been adopted as a unit, not with a view to representing separately each such subdivision, for this the scale of the map would not permit, but for the sake of more definitely determining the true line of demarcation between large groups.

Such being the system and the scope of the illustrations under consideration, it is proposed briefly to discuss the increase and movement of population from 1790 to 1890. It should be remembered throughout that the maps do not profess to exhibit settlements which do not reach an average of 2 to the square mile for a tract large enough to be clearly shown to the eye on the scale employed. It follows that the outside line of color indicates the limits of population of 2 or more to the square mile, the petty population that lies beyond being made up of the solitary ranchman, trapper, or fisherman, or of mining parties, lumber camps, and the like. This line, which limits the average density of 2 to a square mile, is considered as the limit of settlement—the frontier line of population.

POPULATION OF THE UNITED STATES

excluding Indiana not taxed.

Compiled from the Returns of Population at the First Census 1790.

NOTE

An inspection of the maps relating to the earlier census years will show that the progress of population westward across the Appalachian system has taken place, in the main, along four lines. The northernmost of these, which was the first to be developed, runs through central New York, following up, generally, the Mohawk river. This line has, throughout our history, been one of the principal courses of population in its westward flow. The second crosses southern Pennsylvania, western Maryland, and northern Virginia, parallel to and along the course of the upper Potomac. The third runs through Virginia, passing southwestward down the great Appalachian valley, crossing thence over into Kentucky and Tennessee. South of this, the principal movement westward has been around the end of the Appalachian chain, through Georgia and Alabama.

Let us consider the results of measurement and computations as to the extent of this line of settlement, and as to the space which it incloses on the different maps.

#### 1790.

The First Census of the United States, taken as of the first Monday in August, 1790, under the provisions of the second section of the first article of the Constitution, shows the population of the thirteen states now existing and of the unorganized territory to be, in the aggregate, 3,929,214.

This population is distributed almost entirely on the Atlantic seaboard, extending from the eastern boundary of Maine nearly to Florida, and in the region known as the Atlantic plain. Only a very small proportion of the inhabitants of the United States, not, indeed, more than 5 per cent, is found west of the system of the Appalachian mountains. The average depth of settlement, in a direction at right angles to the coast, is 255 miles. The densest settlement is found in eastern Massachusetts, Rhode Island, and Connecticut, and about New York city, whence population has extended northward up the Hudson, and is already quite dense as far as Albany. The settlements in Pennsylvania, which started from Philadelphia, on the Delaware, have extended northeastward, and form a solid body of occupation from New York, through Philadelphia, down to the upper part of Delaware.

The Atlantic coast, as far back as the limits of tide water, is well settled at this time from Casco bay southward. to the northern border of North Carolina. In what is now the "district of Maine", sparse settlement extends along: the whole seaboard. The southern two-thirds of New Hampshire and nearly all of Vermont are covered by population. In New York, branching off from the Hudson at the mouth of the Mohawk, the line of population follows up a broad gap between the Adirondacks and the Catskills, and even reaches beyond the center of the state. occupying the whole of the Mohawk valley and the country about the interior New York lakes. In Pennsylvania population has spread northwestward, occupying not only the Atlantic plain, but, with sparse settlements, the region traversed by the numerous parallel ridges of the eastern portion of the Appalachians. The general limit of settlement is, at this time, the southeastern edge of the Allegheny plateau, but beyond this, at the junction of the Allegheny and Monongahela rivers, a point early occupied for military purposes, considerable settlements exist which were established prior to the war of the Revolution. In Virginia settlements have extended westward beyond the Blue Ridge, and on the western slope of the Allegheny mountains, though very sparsely. From Virginia, also, a narrow tongue of settlement penetrates into the "Kentucky country", which is almost as populous as Vermont or Georgia, and down to the head of the Tennessee river in the great Appalachian valley, where the "state of Franklin" has been for four years a political unit. In North Carolina the settlements are abruptly limited by the base of the  $\Lambda_1$  palachians. The state is occupied with remarkable uniformity, except in its southern and central portion, where population is comparatively sparse. In South Carolina, on the other hand, there is evidence of much natural selection, apparently with reference to the character of the soil. Charleston is now a city of considerable magnitude, and about it is grouped a comparatively dense population; but all along a belt running southwestward across the state, near its central part, the settlement is very sparse. This area of sparse settlement joins that of central North Carolina, and runs eastward to the coast, near the junction of the two states. Further westward, in the "up country" of South Carolina, the density of settlement is noticeable, due to the improvement in soil. At this date settlements are almost entirely agricultural, and the causes for variation in their density are general ones. The movements of population at this epoch may be traced in almost every case to the character of the soil, and to facility of transportation to the seaboard; and, as the inhabitants are dependent mainly upon water transportation, we find the settlements also conforming themselves very largely to the navigable streams.

Outside the area of continuous settlement, which we have attempted to sketch, is found a number of smaller settlements of greater or less extent. The principal of these lies in the northern part of what is now known as the "territory south of the river Ohio", and comprises an area of 10,900 square miles. Another, in western Virginia, lies upon the Ohio and Kanawha rivers, and comprises 750 square miles. A third, in the southern part of the "territory south of the river Ohio", upon the Cumberland river, embraces 1,200 square miles.

In addition to these, there is a score or more of small posts, or incipient settlements, scattered over what is an almost untrodden wilderness, such as Detroit, Vincennes, Kaskaskia, Prairie du Chien, Mackinac, and Green Bay, beside the humble beginnings of Elmira and Binghamton, in New York, which, even at this time, lie outside the body of continuous settlement and embrace about 1,000 square miles.

Following the line which limits this great body of settlement in all its undulations, we find its length to be 3,200 miles. In this measurement no account has been made of slight irregularities, such as those in the ordinary

meanderings of a river which forms the boundary line of population; but we have traced all the ins and outs of this frontier line, which seem to indicate a distinct change in the settlement of the country for any cause, whether of progression or of retrogression. Thus the area of settlement is the area embraced between the frontier line and the coast, diminished by such unsettled areas as may lie within it, and increased by such settled areas as lie without it. These are not susceptible of very accurate determination, owing to the fact that our best maps are, to a certain extent, incorrect in boundaries and areas; but all the accuracy required for our present purpose can be secured. The settled area of 1790, as indicated by the line traced, is 226,085 square miles. The entire body of continuously settled area lies between 31° and 45° north latitude and 67° and 83° west longitude.

Outside of this body of continuous settlement are the smaller areas mentioned above, which, added to the main body of settled area, give as a total 239,935 square miles, the aggregate population being 3,929,214, and the average density of settlement 16,38 to the square mile.

The "district of Maine" belongs to Massachusetts. Georgia extends to the Mississippi river. Kentucky and Tennessee are known as the "territory south of the river Ohio", and Ohio, Indiana, Illinois, Michigan, Wisconsin, and a part of Minnesota, as the "territory northwest of the river Ohio". Spain claims possession of Florida, with a strip along the southern border of Georgia, and all of the region west of the Mississippi river.

#### 1800.

At the Second Census, that of 1800, the frontier line, as it appears on the map, has been rectified, so that while it embraces 282,208 square miles, it describes a course, when measured in the same manner as that of 1790, of only 2,800 lineal miles. The advancement of this line has taken place in every direction, though in some parts of the country much more markedly than in others.

In Maine and New Hampshire there is apparent only a slight northward movement of settlement; in Vermont, on the other hand, while the settled area has not decidedly increased, its density has become greater. Massachusetts shows but little change, but in Connecticut the settlements along the lower course of the Connecticut river have appreciably increased.

In New York settlement has poured up the Hudson to the mouth of the Mohawk, and thence, through the great natural roadway, westward. The narrow tongue, which before extended out beyond the middle of the state, has now widened until it spreads from the southern border of the state to Lake Ontario. A narrow belt of settlement even stretches down the St. Lawrence, and along all the northern border of the state, to Lake Champlain, completely surrounding what may be characteristically defined as the Adirondack region.

In Pennsylvania settlements have extended up the Susquehanna and joined the New York groups, leaving, as yet, an unsettled space in the northeast corner of the state, which comprises a body of rugged mountain country. With the exception of a little strip along the western border of Pennsylvania, the northern part of the state, west of the Susquehanna, is as yet entirely without inhabitants. Population has streamed across the southern half of the state, and settled in a dense body about the forks of the Ohio river, where we note the beginning of Pittsburg, and thence extended slightly into the "territory northwest of the river Ohio".

In Virginia we note but little change, although there is a general extension of settlement, with an increase in density, especially along the coast. North Carolina is now almost entirely covered with population; the mountain region has, generally speaking, been nearly all reclaimed to the service of man. In South Carolina there is a general increase in density of settlement, while the southwestern border has been carried down, until now the Altamaha river is its limit. The settlements in northern Kentucky have spread southward across the state, and even into Tennessee, forming a junction with the little settlement, noted at the date of the last census, on the Cumberland river. The group thus formed has extended down the Ohio, nearly to its junction with the Tennessee and the Cumberland, and across the Ohio river, where we note the beginning of Cincinnati. Other infant settlements appear at this date. On the east side of the Mississippi river is a strip of settlement along the bluffs below the Yazoo bottom. Above this, on the west side, we note the beginning of St. Louis, not at this time within the United States, and across the river an adjacent settlement in what is now known as Indiana territory, while all the pioneer settlements previously noted have grown to a greater or less extent.

From the region embraced between the frontier line and the Atlantic must be deducted the Adirondack tract, in northern New York, and the unsettled region in northern Pennsylvania, already referred to; so that the actual area of settlement, bounded by a continuous line, is to be taken at 271,908 square miles. All this lies between 30° 45′ and 45° 15′ north latitude, and 67° and 88° west longitude.

To this should be added the aggregate extent of all settlements lying outside of the frontier line, which collectively amount to 33,800 square miles, making a total area of settlement of 305,708 square miles. As the aggregate population is 5,308,483, the average density of settlement is 17.36.

The infant settlements of this period have been much retarded at many points by the opposition of the Indian tribes; but in the neighborhood of the more densely settled portions of the northern part of the country these obstacles have been of less magnitude than farther south. In Georgia, especially, the large and powerful tribes of Creeks and Cherokees have stubbornly opposed the progress of population.

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During the decade Vermont, formed from a part of New York, has been admitted to the Union; also Kentucky and Tennessee, formed from the "territory south of the river Ohio"; Mississippi territory has been organized, having, however, very different boundaries from what is known later as the state of that name; while the "territory northwest of the river Ohio" has been divided and Indiana territory organized from the western portion.

#### 1810.

In the decade from 1800 to 1810 we note great changes, especially the extension of the sparse settlements of the interior. The hills of western New York have become almost entirely covered with population, which has spread along the south shore of Lake Erie well over into Ohio, and has effected a junction with the previously existing body of population about the forks of the Ohio river, leaving unsettled an included heart-shaped area in northern Pennsylvania, which comprises the rugged country of the Appalachian plateau. The occupation of the Ohio river has now become complete, from its head to its mouth, with the exception of small gaps below the mouth of the Tennessee. Spreading in every direction from the "dark and bloody ground" of Kentucky, settlement covers almost the entire state, while the southern border line has been extended to the Tennessee river, in what is now known as Mississippi territory. In Georgia settlements are still held back by the Creek and the Cherokee Indians, although in 1802 a treaty with the former tribe relieved the southwestern portion of the state of their presence, and left the ground open for occupancy by the whites. In Ohio settlements, starting from the Ohio river and from southwestern Pennsylvania, have worked northward and westward, until they cover two-thirds of the area of the state. Michigan and Indiana are still virgin territory, with the exception of a little strip about Detroit, in the former, and two small areas in the latter, one in the southeastern part of the territory extending along the Ohio river, and one in the southwestern part extending up the Wabash from its mouth to and including the settlement at Vincennes. St. Louis, from a fur-trading post, has become an important center of settlement, population having spread northward above the mouth of the Missouri and southward along the Mississippi to the mouth of the Ohio. On the Arkansas, near the mouth, is a similar body of settlement. The transfer of the territory of Louisiana to our jurisdiction, which was effected in 1803, has brought into the country a large body of population, which stretches along the Mississippi river from its mouth nearly up to the northern limit of what is now known as the "territory of Orleans" and up the Red and Washita rivers, in general occupying the alluvial regions. The incipient settlements noted on the last map in Mississippi have effected a junction with those of Louisiana, while in what is now the lower part of Mississippi territory a similar patch appears upon the

In this decade large additions have been made to the territory of the United States, and many changes have been effected in the lines of interior division. The purchase of Louisiana has added 1,124,685 square miles, an empire in itself, to the United States, and has given to us absolute control of the Mississippi and its navigable branches. Georgia, during the same period, has ceded to the United States about two-thirds of her territory. The state of Ohio has been formed from a portion of what previously was known as the "territory northwest of the river Ohio". Michigan territory has been erected, comprising at this time the peninsula north of Ohio and the lower part of Indiana territory and south of the straits. Indiana territory has become restricted in its limits to the following boundaries: Lake Michigan and Michigan on the north, Ohio on the east, the Ohio river on the south, and Illinois on the west, with a detached area on Lake Superior. Illinois territory comprises all territory west of Lake Michigan and Indiana, north of the Ohio, and east of the Mississippi. The "territory of Orleans", which lies west of the Mississippi, has been carved out of the Louisiana purchase. The remainder of the territory acquired from France is known by the name of "Louisiana territory".

At this date the frontier line is 2,900 miles long, and includes between itself and the Atlantic 408,895 square miles. From this must be deducted several large areas of unsettled land: first, the area in northern New York, now somewhat smaller than ten years before, but still by no means inconsiderable in extent; second, the heart-shaped area in northwestern Pennsylvania, embracing part of the Allegheny plateau, in size about equal to the unsettled area in New York; third, a strip along the western part of Virginia, extending from the Potomac, southward, taking in a part of eastern Kentucky and southwestern Virginia, and extending nearly to the border line of Tennessee; fourth, a comparatively small area in northern Tennessee, upon the Cumberland plateau. These tracts together comprise 26,050 square miles, making the actual area of settlement included within the frontier line 382,845 square miles. All this lies between latitude 29° 30′ and 45° 15′ north, and between the meridians of 67° and 88° 30′ west.

Beyond the frontier there are, in addition to the steadily increasing number of outposts and minor settlements, several considerable bodies of population, which have been above noted. The aggregate extent of these, and of the numerous small patches of population scattered over the west and south, may be estimated at 25,100 square miles, making the total area of settlement in 1810, 407,945 square miles, the aggregate population being 7,239,881, and the average density of settlement 17.75 to the square mile.

Between 1800 and 1810 the principal territorial changes have been as follows: Ohio has been admitted, and the territories of Illinois and Michigan have been formed, the former from part of Indiana territory and the latter from parts of Indiana territory and the "territory northwest of the river Ohio".

#### 1820.

The decade from 1810 to 1820 has witnessed several territorial changes. Florida at this date (1820) is a blank upon the map. The treaty with Spain to transfer Florida to the United States is signed, but the delivery has not yet taken place. Alabama and Mississippi, made from Mississippi territory, have been organized and admitted as states. Indiana and Illinois appear as states, with restricted limits. The "territory of Orleans", with somewhat enlarged boundaries, has been admitted as a state and is known as Louisiana. The "district of Maine" has also been erected into a state. Arkansas territory has been cut from the southern portion of the territory of Louisiana. The Indian territory has been constituted to serve as a reservation for the Indian tribes. Michigan territory includes all territory east of the Mississippi and north of Illinois, Indiana, and Ohio. That part of the old Louisiana territory remaining, after cutting out Arkansas and the Indian territory, has received the name of "Missouri territory".

Again, in 1820, we note a great change in regard to the frontier line. It has become vastly more involved and complex, extending from southeastern Michigan, on Lake St. Clair, southwestward into Missouri territory; thence, making a great semicircle to the eastward, it sweeps west again around a body of population in Louisiana, and ends on the Gulf coast in that state. The area included by it has immensely increased, but much of this increase is balanced by the great extent of unsettled land included within it.

Taking up the changes in detail, we note, first, the great increase in the population of central New York, a belt of increased settlement having swept up the Mohawk valley to Lake Ontario, and along its shore nearly to the Niagara river. A similar increase is seen about the forks of the Ohio river, while in northern Pennsylvania the unsettled region on the Appalachian plateau has sensibly decreased in size. The unsettled area in western Virginia and eastern Kentucky has very greatly diminished, population having extended almost entirely over the Allegheny region in these states. The little settlements about Detroit have extended and spread along the shore of Lake Erie, until they have joined those in Ohio. The frontier line in Ohio has crept northward and westward, leaving only the northwestern corner of the state unoccupied. Population has spread northward from Kentucky and westward from Ohio into southern Indiana, covering sparsely the lower third of that state. The groups of population around St. Louis, which at the time of the previous census were enjoying a rapid growth, have extended widely, making a junction with the settlements of Kentucky and Tennessee, along a broad belt in southern Illinois; following the main water courses, population has gone many scores of miles up the Mississippi and the Missouri rivers. The settlements in Alabama, which, up to this time, had been very much retarded by the Creeks, have been rapidly reinforced and extended, in consequence of the victory of General Jackson over this tribe and the subsequent cession of portions of this territory. Immigration to Alabama has already become considerable, indicating that in a short time the whole central portion of the state, embracing a large part of the region drained by the Mobile river and its branches, will be covered by settlements, to extend northward and effect a junction with the Tennessee and Kentucky settlements, and westward across the lower part of Mississippi, until they meet the Louisiana settlements. In Georgia the Cherokees and the Creeks still hold settlement back along the line of the Altamaha river. There are, however, scattered bodies of population in various parts of the state, though of small extent. In Louisiana we note a gradual increase of the extent of redeemed territory, which appears to have been limited almost exactly by the borders of the alluvial region. In Arkansas the settlements, which we saw in 1810 near the mouth of the Arkansas river, have extended up the bottom lands of that river, forming a body of population of considerable size. Beside these, a small body is found in the southern central part of the state, at the southeastern base of the hill region, and another in the prairie region in the northern part.

The frontier line now has a length of 4,100 miles, embracing an area, after taking out all the unsettled regions included between it, the Atlantic, and the Gulf, of 504,517 square miles, all lying between 29° 30′ and 45° 30′ north latitude, and between 67° and 93° 45′ west longitude. Outside the frontier line are some bodies of population on the Arkansas, White, and Washita rivers, in Arkansas, as before noted, as well as some small bodies in the northwest. Computing these at 4,200 square miles in the aggregate, we have a total settled area of 508,717 square miles, the aggregate population being 9,633,822, and the average density of settlement 18.94 to the square mile.

#### 1830.

In the decade from 1820 to 1830 other territorial changes have occurred. In the early part of the decade the final transfer of Florida from Spanish jurisdiction was effected, and it became a territory of the United States. Missouri has been carved from the southeastern part of the old Missouri territory, and admitted as a state. Otherwise the states and territories have remained nearly as before. Settlement during the decade has again spread greatly. The westward extension of the frontier does not appear to have been so great as in some former periods, the energies of the people being mainly given to filling up the included areas. In other words, the decade from 1810 to 1820 seems to have been one of blocking out work which the succeeding decade has been largely occupied in completing.

During this period the Indians, especially in the south, have still delayed settlement to a great extent. The Creeks and the Cherokees in Georgia and Alabama, and the Choctaws and the Chickasaws in Mississippi, occupy

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large areas of the best portions of those states, and successfully resist encroachment upon their territory. Georgia, however, has witnessed a large increase in settlement during the decade. The settlements which have heretofore been staid on the line of the Altamaha have spread westward across the central portion of the state to its western boundary, where they have struck against the barrier of the Creek territory. Stopped at this point, they have moved southward down into the southwest corner, and over into Florida, extending even to the Gulf coast. Westward they have stretched across the southern part of Alabama, and joined that body of settlement which was previously formed in the drainage basin of the Mobile river. The Louisiana settlements have but slightly increased, and no great change appears to have taken place in Mississippi, owing largely to the cause above noted, viz, the occupancy of the soil by Indians. In Arkansas the spread of settlement has been in a strange and fragmentary way. A line reaches from Louisiana to the Arkansas river and up that river to the state line, where it is stopped abruptly by the boundary of the Indian territory. It extends up the Mississippi, and joins the great body of population in Tennessee. A branch extends northeastward from near Little Rock to the northern portion of the state. All these settlements within Arkansas territory are as yet very sparse. In Missouri the principal extension of settlement has been in a broad belt up the Missouri river, reaching to the state line, at the mouth of the Kansas river, where quite a dense body of population appears. Settlement has progressed in Illinois, from the Mississippi river eastward and northward, covering more than half of the state. In Indiana it has followed up the Wabash river, and thence has spread until it reaches nearly to the north line of the state. But little of Ohio remains unsettled. The sparse settlements about Detroit, in Michigan territory, have broadened out, extending toward the interior of the lower peninsula, while isolated patches have appeared in various other localities.

Turning to the more densely settled parts of the country, we find that settlement is slowly making its way northward in Maine, although discouraged by the poverty of the soil and the severity of the climate. The unsettled tract in northern New York is decreasing, but very slowly, as is also the case with the unsettled area in northern Pennsylvania. In western Virginia the unsettled tracts are reduced to almost nothing, while the vacant region in eastern Tennessee, on the Cumberland plateau, is rapidly diminishing.

At this date, 1830, the frontier line has a length of 5,300 miles, and the aggregate area now embraced between the ocean, the Gulf, and the frontier line is 725,406 square miles. Of this, however, not less than 97,389 square miles are comprised within the included vacant tracts, leaving only 628,017 square miles as the settled area within the frontier line, all of which lies between latitude 29° 15′ and 46° 15′ north, and between longitude 67° and 95° west.

Outside the body of continuous settlement are no longer found large groups, but several small patches of population appear in the states of Ohio, Indiana, and Illinois, and in Michigan territory, aggregating 4,700 square miles, making a total settled area, in 1830, of 632,717 square miles. As the aggregate population is 12,866,020, the average density of settlement is 20.33 to the square mile.

#### 1840.

During the decade ending in 1840 the territory of Michigan has been divided; that part east of Lake Michigan and north of Ohio and Indiana, together with the greater part of the peninsula between Lakes Superior and Michigan, has been created into the state of Michigan, the remainder being known as Wisconsin territory. Iowa territory has been created out of that part of Missouri territory lying north of the Missouri state line and east of the Missouri river, and Arkansas has been admitted to the Union.

In 1840 we find, by examining the map of population, that the process of filling up and completing the work blocked out between 1810 and 1820 has been carried still further. From Georgia, Alabama, and Mississippi the Cherokee, Creek, Choctaw, and Chickasaw Indians, who, at the time of the previous census, occupied large areas in these states, and formed a very serious obstacle to settlement, have been removed to the Indian territory, and their country has been opened up to settlement. Within the two or three years which have elapsed since the removal of these Indians the lands relinquished by them have been entirely taken up, and the country has been covered with a comparatively dense settlement. In northern Illinois, the Sac and Fox and Pottawatomie tribes having been removed to the Indian territory, their country has been promptly taken up, and we now find settlements carried over nearly the whole extent of Indiana and Illinois, and across Michigan and Wisconsin as far north as the forty-third parallel. Population has crossed the Mississippi river into Iowa territory, and occupies a broad belt up and down that stream. In Missouri the settlements have spread northward from the Missouri river nearly to the boundary of the state, and southward till they cover most of the southern portion, and make connection in two places with the settlements of Arkansas. The unsettled area found in southern Missouri, together with that in northwestern Arkansas, is due to the hilly and rugged nature of the country, and to the poverty of the soil, as compared with the rich prairie lands all around. In Arkansas the settlements remain sparse, but have spread widely away from the streams, covering much of the prairie parts of the state. There is, beside the area in northwestern Arkansas just mentioned, a large area in the northeastern part of the state, comprised almost entirely within the alluvial regions of the St. Francis river, and also one in the southern portion, extending over into northern Louisiana, which is entirely in the fertile prairie section. The fourth unsettled region lies in the southwestern part of the state.

In the older states we note a gradual decrease in the unsettled areas, as in Maine and New York. In northern Pennsylvania the unsettled section has nearly disappeared. A small portion of the unsettled patch on the Cumberland plateau still remains. In southern Georgia the Okefenokee swamp and the pine barrens adjacent have thus far repelled settlement, although population has increased in Florida, passing entirely around this area to the south. The greater part of Florida, however, including nearly all the peninsula and several large areas along the Gulf coast, still remains without settlement. This is due in part to the nature of the country, being alternately swamp and hummock, and in part to the hostility of the Seminole Indians, who still occupy nearly all of the peninsula.

The frontier line in 1840 has a length of 3,300 miles. This shrinking in its length is due to its rectification on the northwest and southwest, owing to the filling out of the entire interior. It incloses an area of 900,658 square miles, all lying between latitude 29° and 46° 30′ north, and longitude 67° and 95° 30′ west. The vacant tracts have, as noted above, decreased, although they are still quite considerable in Missouri and Arkansas. The total area of the vacant tracts is 95,516 square miles. The settled area outside the frontier line is notably small, and amounts, in the aggregate, to only 2,150 square miles, making the entire settled area 807,292 square miles in 1840. The aggregate population being 17,069,453, the average density is 21.14 to the square mile.

#### 1850.

Between 1840 and 1850 the limits of our country have been further extended by the annexation of the state of Texas and of territory acquired from Mexico by the treaty of Guadalupe Hidalgo. The states of Iowa, Wisconsin, and Florida have been admitted to the Union, and the territories of Minnesota and Oregon have been created. An examination of the map shows that the frontier line has changed very little during this decade. At the western border of Arkansas the extension of settlement is peremptorily limited by the boundary of the Indian territory; but, curiously enough also, the western boundary of Missouri puts almost a complete stop to all settlement, notwithstanding that some of the most densely populated portions of the state lie directly on that boundary.

In Iowa settlements have made some advance, moving up the Missouri, the Des Moines, and other rivers. The settlements in Minnesota at and about St. Paul, which appeared in 1840, have greatly extended up and down the Mississippi river, while other scattering bodies of population appear in northern Wisconsin. In the southern part of the state settlement has made considerable advance, especially in a northeasterly direction, toward Green Bay. In Michigan the change has been very slight.

Turning to the southwest we find Texas, for the first time on the map of the United States, with a considerable extent of settlement; in general, however, it is very sparse, most of it lying in the eastern part of the state, and being largely dependent upon the grazing industry.

The included unsettled areas now are very small and few in number. There still remains one in southern Missouri, in the hilly country; a small one in northeastern Arkansas, in the swampy and alluvial region; and one in the similar country in the Yazoo bottom lands in western Mississippi. Along the coast of Florida are found two patches of considerable size, which are confined to the swampy coast regions. The same is the case along the coast of Louisiana. The sparse settlements of Texas are also interspersed with several patches devoid of settlement. In southern Georgia the large vacant space heretofore noted, extending also into northern Florida, has disappeared, and the Florida settlements have already reached southward to a considerable distance in the peninsula, being now free to extend without fear of hostile Seminoles, the greater part of whom have been removed to the Indian territory.

The frontier line, which now extends around a considerable part of Texas and issues on the Gulf coast at the mouth of the Nueces river, is 4,500 miles in length. The aggregate area included by it is 1,005,213 square miles, from which deduction is to be made for vacant spaces, in all, 64,339 square miles. The isolated settlements lying outside this body in the western part of the country amount to 4,775 square miles.

It is no longer by a frontier line drawn around from the St. Croix river to the Gulf of Mexico that we embrace all the population of the United States, excepting only a few outlying posts and small settlements. We may now, from the Pacific, run a line around 80,000 miners and adventurers, the pioneers of more than one state of the Union soon to arise on that coast. This body of settlement has been formed, in the main, since the acquisition of the territory by the United States, and, it might even be said, within the last year (1849–1850), dating from the discovery of gold in California. These settlements may be computed rudely at 33,600 square miles, making a total area of settlement of 979,249 square miles, the aggregate population being 23,191,876, and the average density of settlement 23.68 to the square mile.

#### 1860.

Between 1850 and 1860 the territorial changes noted are as follows: the territory of New Mexico has been created, and the territory south of the Gila river, which has been acquired from Mexico by the Gadsden purchase (1853), has been added to it; Minnesota has been admitted as a state; Kansas and Nebraska territories have been formed from parts of Missouri territory; California and Oregon have been admitted as states, while in the unsettled parts of the Cordilleran region two new territories (Utah and Washington) have been formed out of parts of that terra incognita which we bought from France as a part of Louisiana, and of that which we acquired by conquest

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from Mexico. At this date we note the first extension of settlements beyond the line of the Missouri river. The march of settlement up the slope of the Great Plains has begun. In Kansas and Nebraska population is now found beyond the ninety-seventh meridian. Texas has filled up even more rapidly, its extreme settlements reaching to the one hundredth meridian, while the gaps noted at the date of the last census have all been filled by population. The incipient settlements about St. Paul in Minnesota, have grown like Jonah's gourd, spreading in all directions, and forming a broad band of union with the main body of settlement down the line of the Mississippi river. In Lowa settlements have crept steadily northwestward along the course of the drainage, until the state is nearly covered. Following up the Missouri population has reached out beyond the northern border of Nebraska territory. In Wisconsin the settlements have moved at least one degree farther north, while in the lower peninsula of Michigan they have spread up the lake shores, nearly encircling it on the side next Lake Michigan. On the upper peninsula the little settlements which appeared in 1850 in the copper region on Keweenaw point have extended and increased greatly in density as that mining interest has developed in value. In northern New York there is apparently no change in the unsettled area. In northern Maine we note, for the first time, a decided movement toward the settlement of its unoccupied territory in the extension of the settlements on its eastern and northern border up the St. John river. The unsettled regions in southern Missouri, northeastern Arkansas, and northwestern Mississippi have become sparsely covered by population. Along the gulf coast there is little or no change. There is to be noted a slight extension of settlement southward in the peninsula of Florida.

The frontier line now measures 5,300 miles, and embraces 1,126,518 square miles, lying between latitude 28° 30′ and 47° 30′ north, and between longitude 67° and 99° 30′ west. From this deduction should be made on account of vacant spaces, amounting to 39,139 square miles, found mainly in New York and along the Gulf coast. The outlying settlements beyond the one hundredth meridian are now numerous. They include, among others, a strip extending far up the Rio Grande in Texas, embracing 7,475 square miles (a region given over to the raising of sheep), while the Pacific settlements, now comprising two sovereign states, are nearly three times as extensive as at 1850, embracing 99,900 square miles. The total area of settlement in 1860 is thus 1,194,754 square miles, the aggregate population being 31,443,321 and the average density of settlement 26.32 to the square mile.

#### 1870.

During the decade from 1860 to 1870 a number of territorial changes have been effected in the extreme west. A great tract stretching into Arctic regions and containing few people was purchased in 1867 from Russia and is called Alaska. Arizona, Colorado, Dakota, Idaho, Montana, Nevada, and Wyoming have been organized as territories. Kansas, Nebraska, and Nevada have been admitted as states. West Virginia has been cut off from the mother commonwealth and made a separate state.

In 1870 we note a gradual and steady extension of the frontier line westward over the great plains. The unsettled areas in Maine, New York, and Florida have not greatly diminished, but in Michigan the extension of the lumber interests northward and inward from the lake shore has reduced considerably the unsettled portion. On the upper peninsula the settlements have increased somewhat, owing to the discovery of the rich iron deposits destined to play so important a part in the manufacturing industry of the country.

Settlement has spread westward to the boundary of the state in southern Minnesota, and up the Big Sioux river in southeastern Dakota. Iowa is entirely reclaimed, excepting a small area of perhaps 1,000 square miles in its northwestern corner. Through Kansas and Nebraska the frontier line has moved steadily westward, following in general the courses of the larger streams and of the newly constructed railroads. The frontier in Texas has changed but little, that little consisting of a general westward movement. In the Cordilleran region settlements have extended but slowly. Those upon the Pacific coast show little change, either in extent or in density. In short, we see everywhere the effects of the war in the partial arrest of the progress of development.

The settlements in the west, beyond the frontier line, have arranged themselves mainly in three belts. The most eastern of these is located in central Colorado, New Mexico, and Wyoming, along the eastern base of and among the Rocky mountains. To this region settlement was first attracted in 1859 and 1860 by the discovery of mineral deposits, and has been retained by the richness of the soil and by the abundance of water for irrigation, which have promoted the agricultural industry.

The second belt of settlement is that of Utah, settled in 1847 by the Mormons fleeing from Illinois. This community then differed, and still differs, radically from that of the Rocky mountains, being essentially agricultural, mining having been discountenanced from the first by the church authorities, as tending to fill the "Promised land" with Gentile adventurers, and thereby imperil Mormon institutions. The settlements of this group, as seen on the map for 1870, extend from southern Idaho southward through central Utah, and along the eastern base of the Wahsatch range to the Arizona line. They consist mainly of scattered hamlets and small towns, about which are grouped the farms of the communities.

The third strip is that in the Pacific states and territories, extending from Washington territory southward to southern California and eastward to the system of "sinks", in western Nevada. This group of population owes its existence to the mining industry. Originated in 1849 by a great immigration movement, it has grown by successive impulses as new fields for rapid money getting have been developed. Latterly, however, the value of this region to the agriculturist has been recognized, and the character of the occupations of the people is undergoing a marked change.

These three great western groups comprise nine-tenths of the population west of the frontier line. The remainder is scattered about in the valleys and the mountains of Montana, Idaho, and Arizona, at military posts, isolated mining camps, and on cattle ranches.

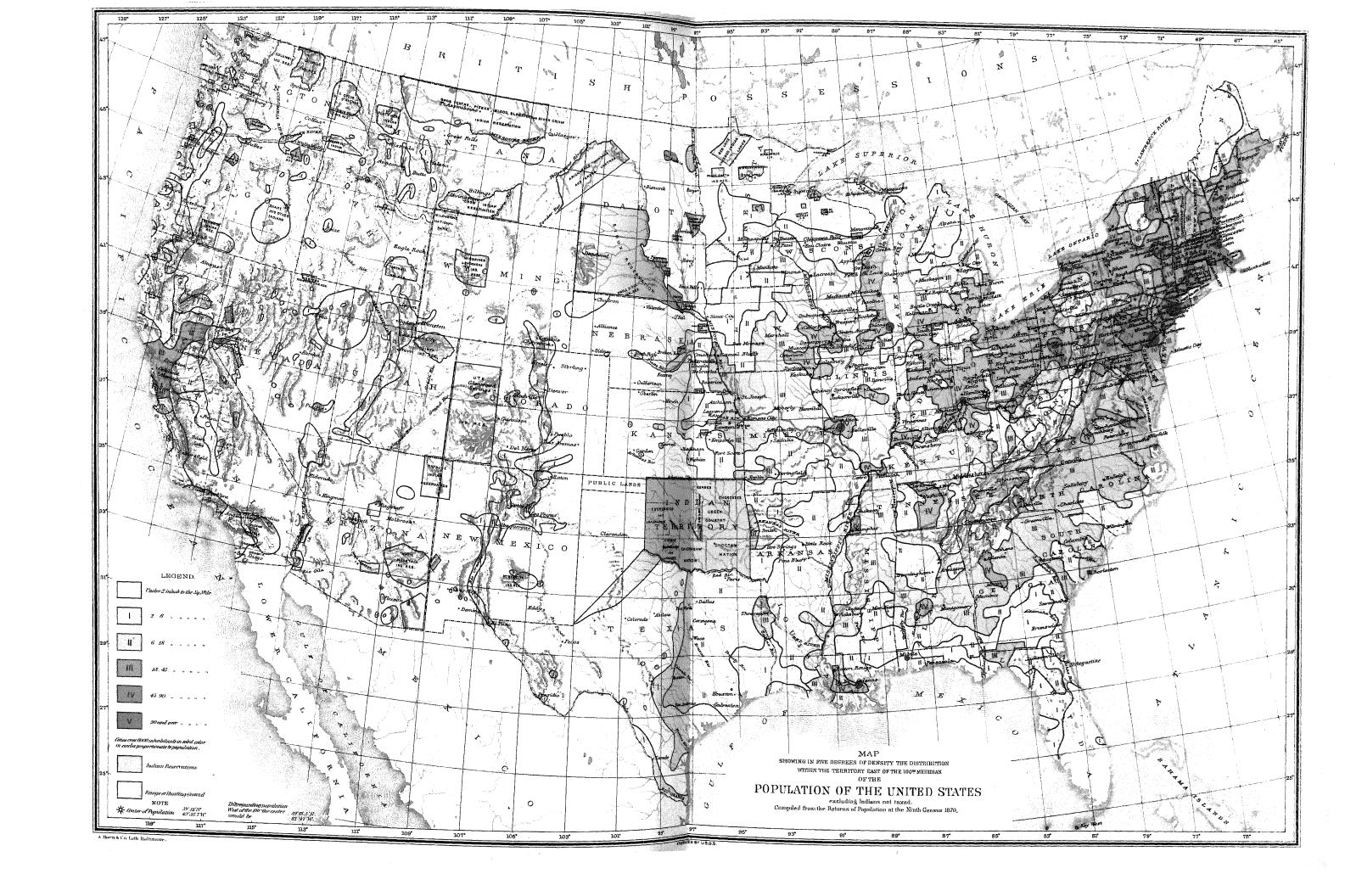
The frontier line in 1870 embraces 1,178,068 square miles, all between 27° 15′ and 47° 30′ north latitude, and between 67° and 99° 45′ west longitude. From this, however, deduction is to be made of 37,739 square miles on account of interior spaces containing no population. To what remains we must add 11,810 square miles on account of settled tracts east of the one hundredth meridian, lying outside of the frontier line, and 120,100 square miles on account of settlements in the Cordilleran region and on the Pacific coast, making the total area of settlement for 1870 not less than 1,272,239 square miles, the aggregate population being 38,558,371, and the average density of settlement 30.31 to the square mile.

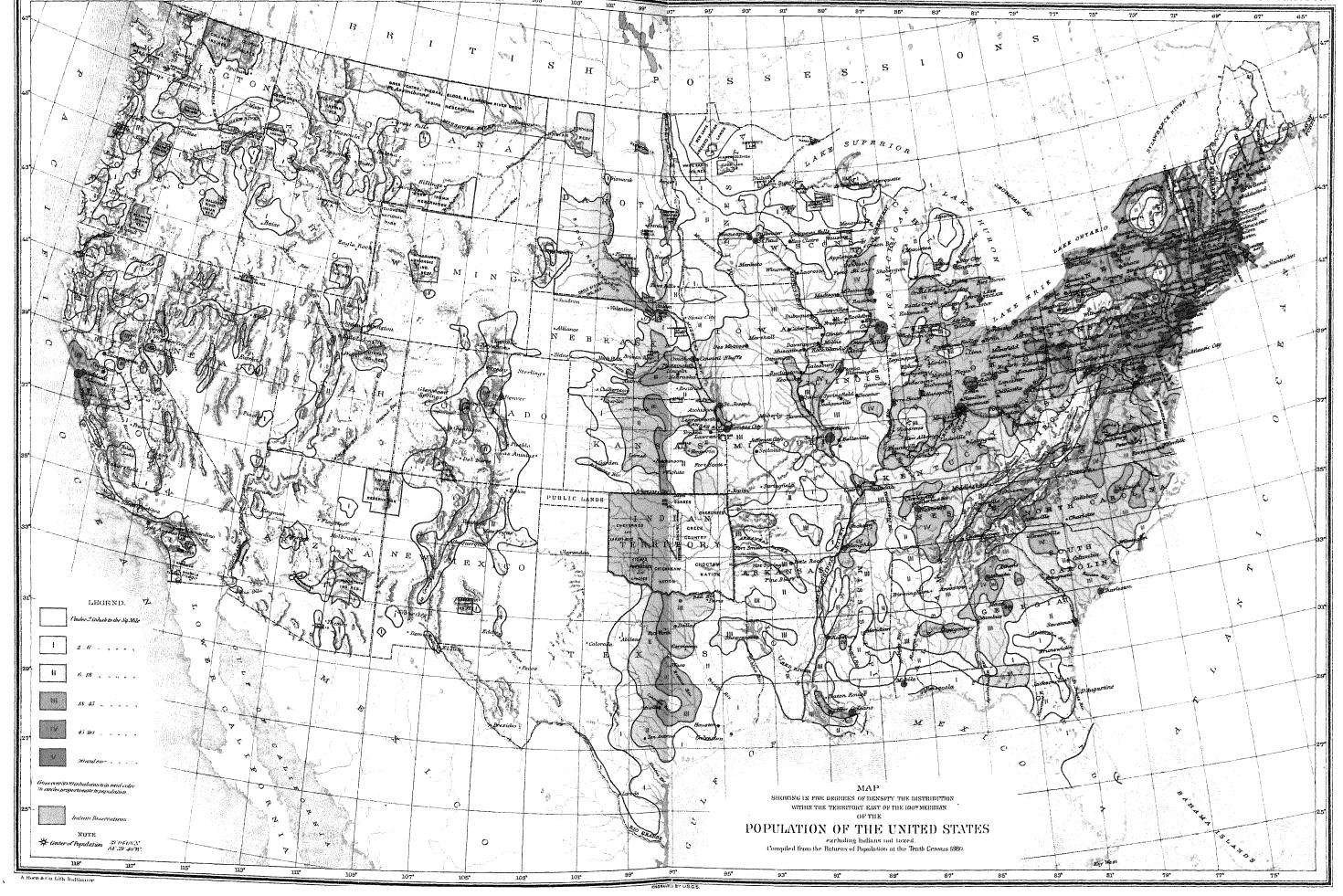
1880.

In 1880 we find that during the decade Colorado has been added to the sisterhood of states. The first point that strikes us in examining the map showing the areas of settlement at this date, as compared with previous ones, is the great extent of territory which has been brought under occupation during the past ten years. Not only has settlement spread westward over large areas in Dakota, Nebraska, Kansas, and Texas, thus moving the frontier line of the main body of settlement westward many scores of miles, but the isolated settlements of the Cordilleran region and of the Pacific coast show enormous accessions of occupied territory.

The migration of farming population to the northeastern part of Maine has widened the settled area to a marked extent, probably more than has been done during any previous decade. The vacant space in the Adirondack region of northern New York has been lessened in size, and its limits have been reduced practically to the actual mountain tract. The most notable change, however, in New England and the middle states, including Ohio and Indiana, has been the increase in density of population and the migration to cities, with the consequent increase of the urban population, as indicated by the number and the size of the spots representing these cities upon the map. Throughout the southern states there is to be noted, not only a general increase in the density of population and a decrease of unsettled areas, but a greater approach to uniformity of settlement throughout the whole region. The unsettled area of the peninsula of Florida has decreased decidedly, while the vacant spaces heretofore seen along the upper coast of Florida and Louisiana have entirely disappeared. Although the Appalachian Mountain system is still distinctly outlined by its general lighter color on the map, its density of population more nearly approaches that of the country on the east and on the west. In Michigan there is seen a very decided increase of the settled region. Settlements have not only surrounded the head of the lower peninsula, but they leave only a very small body of unsettled country in the interior. In the upper peninsula the copper and the iron interests, and the railroads which subserve them, have peopled quite a large extent of territory. In Wisconsin the unsettled area is rapidly decreasing as railroads stretch their arms out over the vacant tracts. In Minnesota and in eastern Dakota the building of railroads, and the development of the latent capabilities of this region in the cultivation of wheat, have caused a rapid flow of settlement, and now the frontier line of population, instead of returning to Lake Michigan, as it did ten years ago, meets the boundary line of the British possessions west of the ninety-seventh meridian. The settlements in Kansas and Nebraska have made great strides over the plains, reaching at several points the boundary of the humid region, so that their westward extension beyond this point is to be governed hereafter by the supply of water in the streams. As a natural result, we see settlements following these streams in long ribbons of population. In Nebraska these narrow belts have reached the western boundary of the state at two points: one upon the South Platte and the other upon the Republican river. In Kansas, too, the settlements have followed the Kansas river and its branches and the Arkansas nearly to the western boundary of the state. Texas also has made great strides, both in the extension of the frontier line of settlement and in the increase in the density of population, due both to the building of railroads and to the development of the cattle, sheep, and agricultural interests. The heavy population in the prairie portions of the state is explained by the railroads which now traverse them. In Dakota, beside the agricultural region, in the eastern part of the territory, we note the formation of a body of settlement in the Black Hills, in the southwest corner, which, in 1870, was a part of the reservation of the Sioux Indians. This settlement is the result of the discovery of valuable gold deposits. In Montana there appears a great extension of the settled area, which, as it is mainly due to agricultural interests, is found chiefly along the courses of the streams. Mining has, however, played not a small part in this increase in settlement. Idaho, too, shows a decided growth from the same causes. The small settlements which, in 1870, were located about Boise city, and near the mouth of the Clearwater, have now extended their areas to many hundreds of square miles. The settlement in the southeastern corner of the territory is almost purely of Mormons, and has not made a marked increase.

Of all the states and territories of the Cordilleran region Colorado has made the greatest stride during the decade. From a narrow strip of settlement, extending along the immediate base of the Rocky mountains, the belt has increased so that it comprises the whole mountain region, beside a great extension outward upon the plains. This increase is the result of the discovery of very extensive and very rich mineral deposits about Leadville, producing a "stampede" second only to that of 1849 and 1850 to California. Miners have spread over the whole





mountain region, till every range and ridge swarms with them. New Mexico shows but little change, although the recent extension of railroads in the territory and the opening up of mineral resources promise in the near future to add largely to its population. Arizona, too, although its extent of settlement has increased somewhat, is but just commencing to enjoy a period of rapid development, owing to the extension of railroads and to the suppression of hostile Indians. Utah presents us with a case dissimilar to any other of the territories—a case of steady, regular growth, due almost entirely to its agricultural capabilities, as was noted previously. This is due to the policy of the Mormon church, which has steadily discountenanced mining and speculation in all forms, and has encouraged in every way agricultural pursuits. Nevada shows a slight extension of settlement due mainly to the gradual increase in the agricultural interest. The mining industry is probably not more flourishing at present in this state than it was ten years ago, and the population dependent upon it is, if anything, less in number. In California, as the attention of the people has become devoted more and more to agricultural pursuits, at the expense of the mining and cattle industries, we note a tendency to a more even distribution of the inhabitants. The population in some of the mining regions has decreased, while over the area of the great valley, and in the fertile valleys of the coast ranges it has increased. In Oregon the increase has been mainly in the section east of the Cascade range, a region drained by the Des Chutes and the John Day rivers, and by the smaller tributaries of the Snake, a region which, with the corresponding section in Washington territory, is now coming to the front as a wheat producing district. In most of the settled portions here spoken of irrigation is not necessary for the cultivation of crops, and consequently the possibilities of the region in the direction of agricultural development are very great. In Washington territory, which in 1870 had been scarcely touched by immigration, we find the valley west of the Cascade mountains tolerably well settled throughout, while the stream of settlement has poured up the Columbia into the valleys of the Wallawalla and the Snake rivers and the great plain of the Columbia, induced thither by the facilities for raising cattle and by the great profits of wheat cultivation.

The length of the frontier line in 1880 is 3,337 miles. The area included between the frontier line, the Atlantic and the Gulf coast, and the northern boundary is 1,398,940 square miles, lying between 26° and 49° north latitude and 67° and 102° west longitude. From this must be deducted, for unsettled areas, as follows:

|           | SQUARE MILES. |
|-----------|---------------|
| Maine     | 12,000        |
| New York  | 2,200         |
| Michigan  |               |
| Wisconsin |               |
| Minnesota | 34,000        |
| Florida   | •             |

making a total of 89,400 square miles, leaving 1,309,540 square miles.

To this must be added the isolated areas of settlement in the Cordilleran region and the extent of settlement on the Pacific coast, which amount, in the aggregate, to 260,025 square miles, making a total settled area of 1,569,565 square miles. The population is 50,155,783, and the average density of settlement 31.96 to the square mile.

## 1890.

This census completes the history of a century; a century of progress and achievement unequaled in the world's history. A hundred years ago there were groups of feeble settlements sparsely covering an area of 239,935 square miles, and numbering less than 4,000,000. The century has witnessed our development into a great and powerful nation; it has witnessed the spread of settlement across the continent until not less than 1,947,280 square miles have been redeemed from the wilderness and brought into the service of man, while the population has increased and multiplied by its own increase and by additions from abroad until it numbers 62,622,250.

During the decade just past a triffing change has been made in the boundary between Nebraska and Dakota by which the area of Nebraska has been slightly increased. Dakota territory has been cut in two and the states of North Dakota and South Dakota admitted. Montana, Wyoming, Idaho, and Washington have also been added to the sisterhood of states. The territory of Oklahoma has been created out of the western half of the Indian territory, and to it has been added the strip of public land lying north of the panhandle of Texas.

The most striking fact connected with the extension of settlement during the past decade is the numerous additions which have been made to the settled area within the Cordilleran region. Settlements have spread westward up the slope of the plains until they have joined the bodies formerly isolated in Colorado, forming a continuous body of settlement from the east to the Rocky mountains. Practically the whole of Kansas has become a settled region, and the unsettled area of Nebraska has been reduced in dimensions to a third of what it was ten years ago. What was a sparsely settled region in Texas in 1880 is now the most populous part of the state, while settlements have spread westward to the escarpment of the Staked Plains. The unsettled regions of North Dakota and South Dakota have been reduced to half their former dimensions. Settlements in Montana have spread until they now occupy one-third of the state. In New Mexico, Idaho, and Wyoming considerable extensions of area are to be noted. In Colorado, in spite of the decline of the mining industry and the depopulation of its mining regions, settlement has spread, and two-thirds of the state are now under the dominion of man. Oregon and Washington

show equally rapid progress, and California, although its mining regions have suffered, has made great inroads upon its unsettled regions, especially in the south. Of all the western states and territories Nevada alone is at a standstill in this respect, its settled area remaining practically the same as in 1880. When it is remembered that the state has lost one-third of its population during the past ten years, the fact that it has held its own in settled area is surprising until it is understood that the state has undergone a material change in occupations during the decade, and that the inhabitants, instead of being closely grouped and engaged in mining pursuits, have become scattered along its streams and have engaged in agriculture.

Settlement is spreading with some rapidity in Maine, its unsettled area having dwindled from 12,000 to about 4,000 square miles. The unsettled portion of the Adirondack region in New York has also diminished, there being now but 1,000 square miles remaining. The frontier has been pushed still farther southward in Florida, and the unsettled area has been reduced from 20,800 to 13,000 square miles.

Lumbering and mining interests have practically obliterated the wilderness of Michigan and have reduced that of Wisconsin to less than one-half of its former area. In Minnesota the area or the wild northern forests has been reduced from 34,000 to 23,000 square miles. The population is 62,622,250, and the average density of settlement 32.16 to the square mile.

## VACANT SPACES ON THE DENSITY MAP.

Within the settled portions of the United States are several areas which, for various reasons, have thus far remained unsettled. There are also areas which, though long ago, perhaps early in our history, were occupied by inhabitants, and which now remain sparsely settled, notwithstanding the vast increase of population in the general regions in which they are situated. The former have been enumerated above. It may be instructive to glance at them in detail, in order to discover the reasons why settlement has passed them by.

The northern portion of Maine, comprising 4,000 square miles, is practically without settlement. The only inhabitants of this region are the occupants of logging camps, who remain there only in the winter, and a handful of enterprising summer tourists. The country is a dense forest, mainly level, but diversified here and there by hills, which in a few instances rise to the dignity of mountains. It is traversed by numerous small streams, strung upon which are many lakes and lakelets, the whole forming a most complicated system of water communication, navigable, however, only by canoes, owing to numerous falls and rapids.

The climate is severe, and this, added to the poverty of the soil and the labor involved in clearing it for agriculture, has prevented its occupation, while rich farming lands can be obtained under liberal homestead laws in the west. Another, and slightly more remote, cause has operated, to a considerable extent, in preventing the spread of settlement in this state. This is the decline in shipbuilding, especially of wooden vessels—a business in which this state was largely interested. This has not only checked the general prosperity of the state, but has injured the lumber business greatly. During recent years there has been a slight movement into this region. A line of settlement has extended up the eastern border of the state, and this is now spreading very gradually westward. It is safe to predict, however, that not until all that part of the prairie country which lies east of the limit of the arid region shall have been settled will population move decidedly toward this section.

A second section which has thus far defied settlement is the Adirondack region. This presents very serious obstacles to settlement—so serious that the central portion of it remains today without inhabitants. It consists of scattered groups of mountains, standing in short ranges or ridges. These mountains rise to heights of 4,000 to 5,000 feet, a few peaks exceeding the latter figures. The valleys are all at a considerable elevation. On the east the mountains descend abruptly to Lakes George and Champlain; on the west, they fall off into a sort of plateau, extending toward the St. Lawrence and Lake Ontario. On the north and south the ridges fall off gradually to the lower country. The whole region is densely covered with forests. It is watered by numerous mountain torrents, while the valleys and the plateau on the west are dotted with numberless lakes and ponds. The elevation and the consequently severe climate of the valleys, and the country immediately adjacent, are such as to discourage, if not to preclude, agriculture.

Elsewhere in the Appalachian region there are no unsettled areas of sufficient magnitude to be represented on our map, although in many localities the population is very sparse. In Pennsylvania the narrow ridges of this system are covered with coal and iron miners; in Virginia the grain fields extend to and over their summits; in North Carolina and Tennessee the high mountains are without settlements, owing to their rugged character and their great elevation. But these areas, although large in the aggregate, are severally very small.

In northern Wisconsin the case is not dissimilar to that of northern Maine. This is a region of heavy forest, lying far to the north, under a severe climate. Settlement has, to a certain extent, passed it by, following westward the belt of open, fertile prairie. But, on the other hand, immigration to this state is still going on; the lumber business, which is here the pioneer of settlement, is being actively prosecuted, and every year settlement is closing in upon this vacant space, and its area is constantly and rapidly diminishing.

The unsettled portion of Minnesota is under conditions somewhat similar. The prairie portion of the state is now occupied, and settlements have encroached heavily upon the region of forests. The northern part of this unsettled region, unlike Wisconsin, is not occupied by forests, but is covered with a scrubby growth of hackmatack and other brush. A large proportion of the surface is occupied by lakes and swamps.

A large proportion of the area of the peninsula of Florida is practically without settlement. This appears to be due in part to the direction of the general movement of population, which has been westward from Georgia and the Carolinas; in part to the want of good harbors, and other inducements to settle upon the coast, and thus to create starting points for the settlement of the interior; but also, and very largely, to the fact that a considerable portion of the area is swampy and difficult of access, and, consequently, remote from markets.

The peninsula is underlaid mainly by a limestone formation, geologically very recent. Its surface consists largely of hummocks and ridges, alternating with belts and patches of swamp and myriads of swampy lakes. The Everglades, which occupy an immense area in the southern portion of the peninsula, seem to be a culmination of the general characteristics of the peninsula, and the following description of them, from the pen of Professor E. A. Smith, illustrates the extreme of these characteristics:

The Everglades, which form so singular and unique a feature of Florida, may be described, in general terms, as consisting of a shallow lake of vast extent, occupying a basin or depression in the limestone of the country. From surveys recently made, it is known that the whole bed of the Everglades has considerable elevation above the sea, so that the draining of this area is merely a question of time and expense. All the streams which flow from the Everglades are interrupted by falls or rapids. The Caloosahatchee is navigable by steamers to within 10 miles of Lake Okeechobee, where the rapids begin.

The water over the Everglades varies in depth from 6 inches to as many feet, and teems with aquatic and semi-aquatic grasses and other plants. From this maze of water and vegetation rise innumerable islands, containing from 1 to 100 acres of land. These islands are covered with a growth of cypress, sweet bay, crab wood, mastic, cocoa palms, cabbage palmetto, and live and water oaks, beneath which bloom flowers in almost endless variety. Notwithstanding the shallowness of the water in the Everglades, and the profuseness of the vegetation growing in it, it is comparatively pure and clear, and abounds in fish, turtles, and alligators. Bears, panthers, wild-cats, and deer inhabit the islands.

Lake Okeechobee is about 50 miles long from northwest to southeast, and about 20 miles broad, and from 8 to 20 feet deep. Its northeastern and eastern shores are skirted with a low hummock of red bay, live oak, water oak, and other timber; its western and southwestern shore with a dense growth of saw grass.

The ake has no visible outlet, except as its waters soak through the Everglades, and the lands around the lake can never be made available till the waters are lowered by artificial canals.

Having thus gone through the successive census years, tracing the course of the outside line of population and estimating the settled area inclosed between this line and the ocean, let us now go back to 1790, and follow out the movement of population along the several degrees of latitude, to note the relative rapidity and steadiness of advance within each belt of territory. Owing to the difficulty of locating with precision the numerous small patches of population in the Pacific states and territories up to and including 1870, the computations shown in the following table are restricted to the country east of the one hundredth meridian up to that period. The figures for 1880 and 1890 are for the whole country.

Before the results of such computations can be satisfactorily stated, an explanation must be given of the method followed.

First. The successive parallels are taken as the central lines of zones half a degree wide; and where any parallel passes through vacant spaces, any body of population lying within a quarter degree, upon either side thereof, is referred thereto, after being reduced to the width of half a degree in latitude. Where a solid body of population lies close up against a parallel on one side, however, no reduction is made on account of the absence of population on the other side. The only important exception to the rule is in the case of the thirty-fourth parallel, where, after crossing the ninety-fourth meridian, it runs through the southern portion of the Indian territory, shortly above the northern line of Texas. As the absence of population as known to the census (Indians in tribal relations not being recognized by the census law) from the line of this parallel in this part of its course is the result of express exclusion by treaty stipulations the population just below is not referred to it.

Second. The starting point on the coast is taken, not from the extreme end of any cape or promontory upon which the parallel may chance to emerge from the Atlantic, but from the average projection of the coast line in the general neighborhood of the parallel. In the case of Long Island, the eastern half was taken to fill up the western end of the sound, and the forty-first parallel was assumed, for the purposes of these conjutations, to begin with 73° west longitude.

Third. The northern lakes and all considerable bays were omitted from consideration, as also the British possessions when crossed by the parallels under measurement.

Fourth. All spaces vacant of population were skipped, the same rule being adopted for measuring and referring to parallels spaces which are not directly upon any parallel, as in the case of the populated areas lying above or below a parallel when passing through vacant spaces.

The result of the application of these rules to our measurements is to give the populated areas along each parallel either in one continuous body or in several groups, as population is broken by foreign territory, by lakes or bays, or by large vacant spaces. Consolidating all such, however, and reducing all the populated spaces on each parallel to a continuous line, we have the following as the breadth of the settled area in miles along the successive parallels at each census from 1790 to 1890:

EXTENT OF SETTLED AREA: 1790 TO 1890.

|     | -   |   |   |    |   |
|-----|-----|---|---|----|---|
| - 1 | - A | D | ш | es | ì |

| DEGREE OF NORTH LATITUDE. | 1790                                    | 1800  | 1810           | 1820 | 1830  | 1840   | 1850   | 1860   | 1870   | 1880   | 1890   |
|---------------------------|---|-------|----------------|------|-------|--------|--------|--------|--------|--------|--------|
| 0                         |   |       |                |      |       |        |        |        |        | 97     | 270    |
| 8,                        | . <b></b>                               | :•    | :<br>. <b></b> |      |       |        |        |        |        | 56     | 600    |
| 7                         |   |       |                |      |       |        | 79     | 131    | 209    | 291    | 940    |
| 0                         | · • • • • • • • • • • • • • • • • • • • |       | ·              | <br> | 15    | 20     | 50     | 125    | 230    | 385    | 1.300  |
| 5                         | 30                                      | 317   | 392            | 302  | 392   | 421    | 437    | 521    | 858    | 940    | 1,568  |
| <b>L</b>                  | 226                                     | 252   | 279            | 279  | 299   | 308    | 404    | 731    | 777    | 874    | 1, 450 |
| 3                         | 339                                     | - 355 | 425            | 425  | 485   | 792    | 816    | 1 001  | 1, 137 | 1. 156 | 1.428  |
| 2                         | 234                                     | 375   | 568            | 581  | 691   | 963    | 984    | 1 143  | 1, 248 | 1.316  | 1 785  |
| t                         | 238                                     | 306   | 471            | 548  | 663   | 1,013  | 1, 107 | 1 277  | 1,325  | 1.375  | 2,080  |
| )                         | 358                                     | 371   | 584            | 613  | 912   | 1.134  | 1, 140 | 1, 220 | 1, 252 | 1, 376 | 2,120  |
| )                         | 270                                     | 456   | 505            | 888  | 1,038 | 1,043  | 1.043  | 1, 168 | 1. 224 | 1, 397 | 2, 100 |
| 3                         | 425                                     | 560   | 707            | 831  | 871   | 1.020  | 1,032  | 1 141  | 1 193  | 1, 278 | 2, 035 |
| ·····                     | 344                                     | 606   | 706            | 746  | 797   | 902    | 1, 018 | 1. 018 | 1, 134 | 1, 260 | 1. 910 |
| ·                         | 462                                     | 533   | 682            | 751  | 878   | 1, 034 | 1.057  | 1.057  | 1. 057 | 1.057  | 1, 456 |
| 5                         | 384                                     | 395   | 391            | 575  | 961   | 976    | 1,030  | 1. 030 | 1. 030 | 1:000  | 1,425  |
| <b>.</b>                  | 302                                     | 327   | 362            | 616  | 707   | 916    | 938    | 938    | 938    | 938    | 1, 310 |
| 1                         | 175                                     | 192   | 230            | 328  | 554   | 815    | 989    | 1. 105 | 1, 055 | 1.156  | 1, 450 |
| 3                         | 30                                      | 114   | 227            | 597  | 742   | 763    | 929    | 1 023  | 1.008  | 1, 109 | 1, 357 |
|                           | 10                                      | 25    | 240            | 357  | 634   | 678    | ~ 860  | 983    | 991    | 1.053  | 1 062  |
| )                         | ********                                |       | 150            | 180  | 323   | 373    | 725    | 785    | 785    | 799    | 840    |
| )                         |   |       |                |      |       | 30     | 255    | 372    | 372    | 414    | 427    |
|                           |   |       |                |      |       | 20     | 80     | 102    | 140    | 188    | 244    |
| •                         |   |       | <br>           |      |       |        |        | 25     | 25     | 47     | 186    |
| ) <b></b>                 |   |       |                |      | !     |        | 1      | 65     | 65     | 65     | 65     |

In all this discussion regarding the population and the area of the United States, Alaska is intentionally omitted.

#### THE SETTLED AREA IN 1890.

In the following tables are presented the results of computations relating to the density of the rural, as distinguished from the urban, population at the census of 1890, in comparison with the corresponding results of previous enumerations. In this discussion it is to be understood that all cities of 8,000 inhabitants or more are taken out of consideration, and, as explained previously, in connection with the density maps, the deduction of the population of cities sometimes brings the county into a lower population group than at the preceding census, notwithstanding the actual increase of population in both rural and urban parts. Thus we may suppose a county, with an area of 400 square miles, to have had in 1880 a population of 20,000, and its county town 6,500 inhabitants. The county would therefore, if treated as a whole, fall into group 4; that is, the group having a density 45 to 90 to the square mile. In 1890, however, we will suppose the population to have increased to 24,000, of which 8,500 are now found in the county town, which thereupon becomes a city within our definition, and is therefore excluded from the mass of population. The county then sinks into class 3; that is, the group having between 18 and 45 inhabitants to the square mile. Such cases are, of course, few in number. The lowest grade of settlement taken for this discussion is that which contains a population of 2 to the square mile. All the region outside this line may be regarded as practically unsettled territory, peopled, if at all, by a few scattering graziers, wandering prospectors, lumbermen, or hunters.

For purposes of discussion this region may be divided, according to density of population, into five groups corresponding to those upon the general density maps. These groups are as follows:

- 1. A population of from 2 to 6 to a square mile.
- 2. A population of from 6 to 18 to a square mile.
- 3. A population of from 18 to 45 to a square mile.
- 4. A population of from 45 to 90 to a square mile.
- 5. A population of 90 or more to a square mile.

Of these groups of population of different density, as they may be called, the first three indicate a predominantly agricultural condition. Speaking broadly, agriculture in the United States is not carried to such a point as to afford employment and support to a population in excess of 45 to a square mile; and, consequently, the fourth and fifth groups do not appear with us, except as trade and manufactures arise and the classes rendering personal and professional services are multiplied.

Of the agricultural groups, the first represents a very sparse population, such as in our western country might be sustained by the grazing industry, without any cultivation of the soil; and accordingly we find this group at the present time mainly represented in the states and territories of the far west. The poorest tillage regions also sink into this group, and hence we find not inconsiderable portions of some of the older states in this class. In 1790, however, No. 1 was the largest single group in what is now Maine, in New York, Pennsylvania, South Carolina, and in what is now the state of West Virginia.

The second group—6 to 18 inhabitants to the square mile—indicates almost universally the existence of defined farms or plantations and the systematic cultivation of the ground, but this either in an early stage of settlement or upon more or less rugged soil. Thus we find this group still large in many of the western and southwestern states and in the mountainous regions of the Atlantic slope. In 1790, however, this group far exceeded in area Nos. 3, 4, and 5 combined.

The third group—18 to 45 inhabitants to the square mile—almost universally indicates a highly successful agriculture. Here and there the presence of petty mechanical industries raises a difficult farming or planting region into this group, but in general, where manufactures exist at all, they induce a population of 45 or more to the square mile.

We should therefore expect to find, as is the case, No. 3 the predominant group in northern New England, in the southern states, and, of the northern central states, Illinois, Michigan, Wisconsin, Iowa, Missouri, and Kansas. In 1790, No. 3 was the largest single group in Delaware, Maryland, Massachusetts, New Hampshire, New Jersey, and Virginia (exclusive of what is now West Virginia).

The fourth group almost universally indicates the existence of commercial and manufacturing industry and the multiplication of personal and professional services. Massachusetts, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Ohio, and Indiana are the states in which this group is found in excess of any other. In none of these states was this group in excess in 1790. Two of them, Ohio and Indiana, can searcely be said to have been settled at all (Marietta, Ohio, having been founded in 1788, while in Indiana there were but two or three small settlements, the remains of French occupation). In New York and Pennsylvania, at that date, group 1 was predominant.

The fifth group represents a very advanced condition of industry, as this degree of settlement is only reached where manufacturing and trading cities are numerous. At the First Census only a few counties, and even at the Eleventh Census less than 25,000 square miles, were found populated to this extent. In Rhode Island and the District of Columbia alone is this degree of density found in excess of every other.

Having thus sought to give a general, but necessarily somewhat vague, impression of the meaning of these groups of population, the following tables are presented with a view of illustrating the present status of our population in regard to extent and density of settlement.

The following table presents the areas in square miles of the total settled area and of the different groups of settlement at the date of each census:

| -   | Total area of                                   | BROUP 1.                      | GROUP 2.                    | окогр 3,                        | GROUP 4.                        | GROUP 5,                             |  |
|---|---|-------------------------------|-----------------------------|---------------------------------|---------------------------------|--------------------------------------|--|
| CENSUS YEARS.   | settlement: 2 or<br>more to the<br>square mile. | 2 to 6 to the<br>square mile. | 6 to 18 to the square mile. | 18 to 45 to the<br>square mile. | 45 to 90 to the<br>square mile. | 90 or more to<br>the square<br>mile. |  |
| 1790  | 239, 935  | 83, 436                       | 83, 346                     | 59, 282                         | 13,051                          | 820                                  |  |
| 1800  | 305, 708  | 81.010                        | 123, 267                    | 82,504                          | 17, 734                         | 1,193                                |  |
| 1810  | 407, 945  | 116, 629                      | 154, 419                    | 108, 155                        | 27, 490                         | 1,243                                |  |
| 1820  | 508, 717  | 140, 827                      | 177, 153                    | 150,390                         | 39, 004                         | 1, 343                               |  |
| 1830  | 632, 717  | 151, 460.                     | 225, 894                    | 186, 503                        | 65, 446                         | 3,414                                |  |
| 1840  | 807, 292  | 183, 607                      | 291, 819                    | 241, 587                        | 84, 451                         | 5,828                                |  |
| 1850  | 979, 240  | 233, 697                      | 294, 698                    | 338, 796                        | 100, 794                        | 11, 264                              |  |
| 1800  | 1, 194, 754                                     | 260, 866                      | 353, 341                    | 431, 601                        | 134,722                         | 14, 224                              |  |
| 1870  | 1, 272, 239                                     | 245, 897                      | 363, 475                    | 470, 529                        | 174, 036                        | 18, 302                              |  |
| 1880  | 1, 569, 565                                     | 384, 820                      | 373, 890                    | 554, 300                        | 231, 410                        | 25, 145                              |  |
| 1890  | 1, 947, 280                                     | 592, 037                      | 393, 943                    | 701, 845                        | 235, 148                        | 24,307                               |  |
| Marine of the first commence and another section and the first of the |   | 1                             |                             |                                 | L                               | 1                                    |  |

Notwithstanding the constant passage of territory from lower into higher groups by reason of increase in the number of inhabitants, the lower groups have been so rapidly increased by settlement of new territory that they have increased in every case, except that in 1800 and 1870 slight diminutions are noted in group 1. In 1890 a triffing reduction is seen in the highest group. This is doubtless an indirect result of the rapid development of cities in the territory falling into this group, as each city, upon reaching a population of 8,000, is subtracted from the population of its county, thereby materially reducing the apparent density of the population of the county. To a certain extent the case is similar in the next group, that of 45 to 90 inhabitants to a square mile, which during the past decade increased in area but 3,738 square miles.

It will be noted that the settled area has constantly and rapidly increased, but by no means at a uniform rate or at rates proportional to the increase of population. The following table shows the rates of increase of the settled area and of the population placed in juxtaposition:

|               |               |              | PER CENT OF INCREAS |             |  |
|---------------|---------------|--------------|---------------------|-------------|--|
| CENSUS YEARS. | Settled area. | Population.  | Sottlod area        | Population. |  |
| 1790          | 239, 935      | 3, 920, 214  |                     |             |  |
| 1800          | 305, 708      | 5, 308, 483  | 27, 41              | 35. 10      |  |
| 1810          | 407, 945      | 7, 230, 881  | 33, 44              | 30, 38      |  |
| 1820          | 508, 717      | 0, 633, 822  | 24, 70              | 361, 07     |  |
| 1830          | 632,717       | 12, 866, 020 | 24.38               | 33, 55      |  |
| 1840          | 807, 202      | 17, 069, 453 | 27, 50              | 32.67       |  |
| 1850          | 979, 249      | 23, 191, 870 | 21,30               | 95, 87      |  |
| 1800          | 1, 194, 754   | 31, 443, 321 | 22, 01              | 33, 58      |  |
| 1870          | 1, 272, 239   | 38, 558, 371 | 0,49                | 22. 66      |  |
| 1880          | 1 569, 565    | 50, 155, 783 | 23, 37              | 30 08       |  |
| 1890          | 1,947,280     | 62, 622, 250 | 24, 06              | 24.86       |  |

In 1890 the population was nearly 16 times as great as in 1790, while during the century the settled area was increased only about eightfold. In general, the increase of population has gone on at a much more rapid rate than that of settled area.

During the decade from 1880 to 1890 the inroads upon the unsettled region have been unprecedented in amount, not less than 377,715 square miles having been redeemed, exceeding by 80,380 square miles the area settled between 1870 and 1880.

The following table shows the percentage of the area of each group of population of the total area of settlement at each census. The total for each census year equals 100 per cent in all cases.

| CENSUS YEARS. | group 1.   | GROUP 2,   | окопр 3.   | unorp 4.   | овогр 3  |
|---------------|--|--|--|--|--|
| 1790          | 34. 77 20. 50 28. 59 27. 08 23. 94 22. 74 23. 87 21. 83 10. 83 24. 52 30. 40 | 34, 74 40, 32 87, 85 34, 82 35, 70 36, 15 90, 00 20, 57 28, 57 23, 82 20, 23 | 24, 71<br>26, 00<br>20, 51<br>30, 50<br>20, 48<br>29, 03<br>34, 00<br>30, 13<br>36, 98<br>36, 98 | 5, 44<br>5, 80<br>0, 74<br>7, 07<br>10, 34<br>10, 40<br>10, 20<br>11, 28<br>13, 68<br>14, 74<br>12, 08 | 0, 34<br>0, 39<br>0, 31<br>0, 37<br>0, 54<br>0, 72<br>1, 15<br>1, 16<br>1, 44<br>1, 60 |

The following table presents in detailed form, by states and territories, the extent of settled area and the area in each of the density groups:

AREAS IN SQUARE MILES OF THE DIFFERENT GROUPS OF SETTLEMENT IN 1890.

|                               | Total area of                                   | GROUP 1.                   | GROUP 2.                    | GROUP 3.                        | GROUP 4.                        | GROUP 5.                                |
|-------------------------------|---|----------------------------|-----------------------------|---------------------------------|---------------------------------|---|
| STATES AND TERRITORIES.       | settlement: 2 or<br>more to the<br>square mile. | 2 to 6 to the square mile. | 6 to 18 to the square mile. | 18 to 45 to the<br>square mile. | 45 to 90 to the<br>square mile. | 90 or more<br>to the<br>square<br>mile. |
| The United States             | 1, 947, 280                                     | 592, 037                   | . 393, 043                  | 701, 845                        | 235, 148                        | 24, 807                                 |
| North Atlantic division       | 156, 682  | 11, 759                    | 10,099                      | 45,788                          | 69,267                          | 19,824                                  |
| Maine                         | 25, 729   | 9, 624                     | 6, 596                      | 6, 703                          | 2,806 1                         |   |
| New Hampshire                 | 8, 828  | 708                        | 886                         | 5, 245                          | 1,989                           |   |
| Vermont                       | 9, 135  |                            | 730                         | 7, 487                          | 918                             |   |
| Massachusetts                 | 8, 040  | (                          |                             | 959                             | 4,149                           | 2,932                                   |
| Rhode Island                  | 1,085   |                            |                             |                                 | 320                             | 768                                     |
| Connecticut                   | 4,845   |                            |                             |                                 | 4,072                           | 77:                                     |
| New York                      | 46, 580   | 1, 427                     | 1,887                       | 13,172                          | 28, 266                         | 1, 828                                  |
| New Jorsey                    | 7, 455  |                            |                             | 1,550                           | 3, 055                          | 2, 850                                  |
| Pennsylvania                  | 44, 985   |                            | ·····                       | 10,617                          | 23, 692                         | 10, 676                                 |
| South Atlantic division       | 255, 450  | 19, 854                    | 55, 585                     | 143,962                         | 35, 152                         | 897                                     |
| Delaware                      | 1,960   |                            |                             | 810                             | 1, 150                          |   |
| Maryland                      | 9,860   |                            |                             | 2, 900                          | 6, 123                          | 83                                      |
| District of Columbia          | 60  |                            |                             |                                 |                                 | 6                                       |
| Virginia                      | 40, 125   |                            | 3,109                       | 29, 895                         | 7, 121                          |   |
| West Virginia                 | 24, 645   |                            | 9, 190                      | 11, 766                         | 3, 689                          |   |
| North Carolina                | 48, 580   |                            | 6,313                       | 38,060                          | 4, 207                          |   |
| South Carolina                | 30, 170   |                            | 369                         | 23, 560                         | 6, 241                          |   |
| Georgin                       | 58, 980<br>41, 070                              | 1, 166<br>18, 688          | . 16, 153<br>20, 451        | 35, 040<br>1, 931               | 6, 621                          |   |
| orth Central division         | 636, 570  | 119, 529                   | 144,736                     | 270, 084                        | 99, 589                         | 2, 63                                   |
| Ohio                          | 40,760  | 110,020                    | 144,100                     | 1, 616                          | 37, 744                         | 1,40                                    |
| Indiana                       | 35, 910   |                            | •••••                       | 12, 484                         | 23, 426                         | 1,20                                    |
|                               | 56,000  |                            |                             |                                 | 23, 420<br>14, 110              |   |
| Illinois                      | 57, 430   | 12,349                     | 10.051                      | 41,890                          | 13, 806                         | 78                                      |
| Michigan                      | 51, 148   | 8,410                      | 13, 651<br>14, 360          | 16, 844<br>20, 672              | 7, 802                          | 40                                      |
| Minnesota                     | 56, 259   | 9,871                      | 25, 766                     | 20, 622                         | 1,002                           |   |
| Iowa                          | 55, 475   | 0,011                      | 4, 246                      | 50, 167                         | 1,062                           |   |
| Miasouri                      | 68, 735   |                            | 14,892                      | 52, 705                         | 1,030                           | 4                                       |
| North Dakota                  | 26, 973   | 17,835                     | 9,138                       | 02,100                          | 1,000                           |   |
|                               | 43, 848   | 19, 343                    | 23, 150                     | 1, 355                          |                                 |   |
| South Dakota                  | 63, 061   | 26, 801                    | 17, 040                     | 19, 220                         |                                 |   |
| Nobraska<br>Kansas            | 80, 071   | 24,020                     | 22, 493                     | 32, 449                         | 1,109                           |   |
| outh Central division         | 431, 795  | 67,863                     | 107, 251                    | 225, 137                        | 31, 140                         | 90                                      |
| Kentucky                      | 40,000  |                            | 1,643                       | 25, 149                         | 12, 491                         | 71'                                     |
| Tennossee                     | 41,750  |                            | 4, 114                      | 24, 985                         | 12,651                          |   |
| Alabama                       | 51, 540   |                            | 9, 472                      | 37, 717                         | 4, 851                          |   |
| Mississippi                   | 46, 340   |                            | 10,007                      | 35, 502                         | 831                             |   |
| Louislann                     | 45, 420   | 7,608                      | 18, 490                     | 18, 319                         | 816                             | 187                                     |
| Texas                         | 150, 810  | 59,755                     | 40, 313                     | 50, 742                         |                                 |   |
| Oklahoma                      | 2, 890  | (                          |                             | 2,890                           |                                 |   |
| Arkansas                      | 53, 045   |                            | 28, 212                     | 29, 833                         |                                 |   |
| Testern division              | 466, 783  | 373, 532                   | 76, 272                     | 16, 929                         | ,                               | 5                                       |
| Montana                       | 46,796  | 45,941                     | 855                         |                                 |                                 |   |
| Wyoming                       | 22, 852   | 22, 852                    |                             |                                 |                                 |   |
| Colorado                      | 68, 492   | 57, 810                    | 9,439                       | 1, 248                          |                                 |   |
| New Mexico                    | 45, 589   | 35, 625                    | 9,964                       |                                 |                                 |   |
| Arizona                       | 24, 645   | 24, 645                    |                             |                                 |                                 |   |
| Utah                          | 27, 580   | 20, 421                    | 5, 70 L                     | 1, 458                          |                                 |   |
| Nevada                        | 11, 948   | 10,022                     | 1,208                       | 718                             |                                 |   |
|                               | 39, 143   | 37, 283                    | 1,910                       |                                 |                                 |   |
| Idaho                         |   |                            |                             |                                 |                                 | 1 .                                     |
|                               | 36, 945   | 22, 202                    | 18, 461                     | 1,282                           |                                 |   |
| Idaho<br>Washington<br>Orogon |   | 22, 202<br>39, 124         | 18,461<br>5,018             | 1,282<br>2,047                  |                                 |   |

Up to and including 1880 the country had a frontier of settlement, but at present the unsettled area has been so broken into by isolated bodies of settlement that there can hardly be said to be a frontier line. In the discussion of its extent and its westward movement it can not, therefore, any longer have a place in the census reports.

## DENSITY OF POPULATION.

The following statement shows the gross area (land and water surface) which the country, exclusive of Alaska, had at the date of each census, from 1790 to 1890:

|      | SQUARE MILES. |      | BOT ARE MILES. |
|------|---------------|------|----------------|
|      | 007 011       | 1850 | g, 080, 959    |
| 1790 | 0.04          | 1860 | 9, 025, 600    |
| 1800 | 827, 844      | 1000 | 3, 025, 600    |
| 1810 | 1, 999, 775   | 1870 | 3, 025, 600    |
| 1820 | 1,999,775     | 1880 |                |
| 1830 | 0.050.010     | 1890 | 3, 625, 600    |
| 1840 | 2, 059, 043   |      |                |

At the time of the first two censuses the United States comprised only the territory between the Atlantic ocean and the Mississippi river. In 1803 the enormous area of the Louisiana purchase was added, which, as it was entirely unsettled at that time, reduced the number of inhabitants to the square mile to a little more than one-half what it was previously. In 1821 the purchase of the Floridas from Spain increased our territory by nearly 60,000 square miles. Between 1840 and 1850 the acquisition of territory from Mexico under the treaty of Guadalupe Hidalgo, and in 1853 by the Gadsden purchase, made a vast increase of territory, which again reduced the average number of inhabitants to the square mile. The last acquisition of territory, that of Alaska, contaming nearly 600,000 square miles, was made in 1867.

Notwithstanding these great acquisitions of territory (excluding Alaska), which have increased our domain from 827,844 to 3,025,600 square miles, the density of population (see page xxxv) has increased from 4.89 to 21.31 inhabitants to the square mile within the century.

The following table shows for 1890 the gross areas (land and water surface) of states and territories in square miles:

| STATES AND TERRITORIES. | Gross area. | Water<br>surface. | Land<br>surface.    | STATES AND TERRITORIES.             | Споминачи.       | Water<br>aurtice. | land<br>microscope                           |
|-------------------------|-------------|-------------------|---------------------|-------------------------------------|------------------|-------------------|--|
| Total                   | 3,025,600   | 55, 600           | 2, 970, 000         | Nebraska                            | 77, 510          | 670               | ÇII, MA                                      |
|                         |             |                   |                     | Novada                              | 140, 700         | 11141             | 11994, 744                                   |
| Alabama                 | 52, 250     | 710               | 51, 540             | New Hampshire                       | 0, 1995          | 300               | \$\$ \$45.15                                 |
| Arizona                 | 113, 020    | 100               | 112,020             | New Jersey                          | 7, 815           | સાધ               | 1, 1,30                                      |
| Arkansas                | 53, 850     | 805               | 53, 045             | Now Mexico                          | 192, 580         | Ege               | 1 (C.), 4 (4)                                |
| California              | 158, 360    | 2,380             | 155, 980            | Now York                            | 49 170           | 1, 550            | 47, 63                                       |
| Colorado                | 103, 925    | 280               | 103, 645            | North Carolina                      | 5 <u>%, 9</u> 50 | u, uyu            | 4 m 1496                                     |
| Connecticut             | 4, 990      | 145               | 4, 845              | North Dakota                        | 70, 795          | thia              | \$10 <b>1</b> 865                            |
| Delaware                | 2,050       | 90                | 1, 960              | Ohio                                | 41, ada          | 300               | 40 714                                       |
| District of Columbia    | 70          | 10                | 60                  | Oklahoma (a)                        | 30, 636          | 200               | ite, mag                                     |
| Florida                 | 58,680      | 4,440             | 54, 240             | Oregon                              | 90, 630          | 1, 470            | NA Seac                                      |
| Georgia                 | 59, 475     | 495               | 58, 080             | Pennsylvania                        | 45, 215          | 230               | 44, 000                                      |
| Idaho                   | 84, 800     | 510               | 84, 290             | Rhode Island                        | 1, 250           | 165               | 1 1446                                       |
| Illinois                | 56, 650     | 650               | 56,000              | South Carolina                      | 30, 570          | 400               | 30, 171                                      |
| Indiana                 | 36, 350     | 440               | 35,910              | South Dakota                        | 77, 050          | Sirii             | 70. 2656                                     |
| Indian territory        | 31, 400     | 400               | 31,000              | Tennessee                           | 42, 050          | 300               | 41, 730                                      |
| Iowa                    | 56, 025     | 550               | 55, 475             | Texas                               | 265,780          | 3,490             | 202, 230                                     |
| Kansas                  | 82,080      | 380               | 81,700              | Utah                                | 84, 970          | 2, 310<br>2, 780  | 82 190                                       |
| Kentucky                | 40, 400     | 400               | 40,000              | Vermont                             | 0, 505           |                   | 1  |
| Louisiana               | 48, 720     | 3, 300            | 45, 420             | Virginia                            | 42, 450          | 430               | <b>9.</b> 103                                |
| Maine                   | 33, 040     | 3, 145            | 29, 805             | Washington                          |                  | 2, 325            | 40, 125                                      |
| Maryland                | 12, 210     | 2, 350            | 9, 860              | Wost Virginia                       | 60, 180          | 2, 300            | લીતી, અકલા                                   |
| Massachusetts           | 8, 315      | 275               | 8, 040              | Wisconsin                           | 24,780           | 135               | 31, 8145                                     |
| Michigan                | 58, 915     | 1, 485            | 57, 430             | Wyramina                            | 50, 040          | 1, 500            | 84, 480                                      |
| Minnesota               | 83, 365     | 4, 160            | 79, 205             | Wyoming                             | 97 890           | 315               | u7, 575                                      |
| Mississippi             | 46, 810     | 470               | 46, 340             | Dolaria                             |                  |                   | 1  |
| Missonri                | 69, 415     | 680               | 68, 735             | Delaware bay                        | 620              | ago               | <br> <br>  * * * * * * * * * * * * * * * * * |
| Montana                 | 146, 080    | 770               | 08, 735<br>145, 310 | Raritan bay and lower New York bay. | 100              | 100               | **********                                   |

a Including Cherokee country and No Man's Land.

The following table shows the density of population, or number of inhabitants per square mile (land surface only), of each state and territory at each census. The areas and the population of Alaska and the Indian territory are not considered in computing density.

DENSITY OF POPULATION AT EACH CENSUS: 1790 TO 1890.

| STATES AND TERRITORIES.  | 1890       | 1880       | 1870       | 1860       | 1850   | 1840    | 1830   | 1820    | 1810                                    | 1800                                    | 1790                                    |
|--|------------|------------|------------|------------|--------|---------|--------|---------|---|---|---|
| The United States  | 21, 31     | 17. 29     | 13.30      | 10.84      | 7. 93  | 8. 43   | 6, 35  | 4. 91   | 3, 60                                   | 6. 61                                   | 4.89                                    |
| North Atlantic division  | 107. 37    | 89, 52     | 75, 89     | 95, 37     | 53.23  | 41,72   | 34. 20 | 26, 88  | 21: 51                                  | 16, 26                                  | 12, 14                                  |
| Maine  | 22. 11     | 21,71      | 20, 97     | 21.02      | 19,51  | 16.79   | 13, 36 | 9. 08   | 7, 65                                   | 5. 08                                   | 3, 23                                   |
| New Hampshire  | 41.81      | 38. 53     | 35, 35     | 36, 21     | 35, 31 | 31. 60  | 29, 91 | 27. 10  | 23, 82                                  | 20.42                                   | 15, 70                                  |
| Vermont  | 36. 39     | 36.38      | 36, 19     | 34, 49     | 34.39  | 31.96   | 30, 72 | 25. 83  | 23, 85                                  | 16, 91                                  | 9.35                                    |
| Massachusetts  | 278, 48    | 221, 78    | 181, 26    | 153, 12    | 123.70 | 91. 75  | 75.92  | 65. 07  | 58.71                                   | 52, 59                                  | 47.11                                   |
| Rhode Island   | 318, 44    | 254.87     | 200.33     | 160.94     | 135.99 | 100. 30 | 80.58  | 76, 51  | 70.90                                   | 63, 71                                  | 63, 43                                  |
| Connecticut  | 154, 03    | 128, 52    | 110.93     | 94.97      | 76.53  | 63.98   | 61.44  | 56.79   | 54,00                                   | 51.81                                   | 49.13                                   |
| New York   | 125. 95    | 106.74     | 92.04      | 81.49      | 65,04  | 51.01   | 40, 29 | 28. 81  | 20.14                                   | 12. 37                                  | 7.14                                    |
| New Jersey   | 193, 82    | 151. 73    | 121.54     | 90, 15     | 65. 67 | 50. 07  | 43, 03 | 37, 21  | 32.94                                   | 28. 32                                  | 24, 70                                  |
| Pennsylvania   | 116. 88    | 95. 21     | 78.20      | 64, 60     | 51.39  | 38, 32  | 29. 07 | 23, 29  | 18.01                                   | 13. 39                                  | 9.00                                    |
| South Atlantic division  | 32, 98     | 28, 28     | 21.79      | 19. 97     | 17.42  | 14. 61  | 13.57  | 14. 28  | 12.48                                   | 10, 66                                  | 8.6                                     |
|  |            |            |            | Í          | (      |         |        | 37.12   | 37.08                                   | 32, 79                                  | 30, 18                                  |
| Delaware   | 85, 97     | 74.80      | 63.78      | 57.25      | 46.70  | 39.84   | 39.16  |         | 1                                       | 34. 64                                  | 32. 20                                  |
| Maryland   | 105, 72    | 94. 82     | 79.20      | 69.68      | 59.13  | 47.67   | 45.34  | 41. 31  | 38, 59                                  | 156, 59                                 |   |
| District of Columbia   | 3, 839, 87 | 2, 960, 40 | 2, 195, 00 | 1, 251. 33 | 861,45 | 485. 69 | 442.60 | 367. 10 | 266, 92                                 | 130.59                                  | 11.5                                    |
| Virginia   | 41, 27     | 37.70      | 30.53      | 24, 65     | 21.95  | 19. 14  | 18.70  | 16.44   | 15, 05                                  | 15, 58                                  | 11.0                                    |
| West Virginia  | 30.95      | 25, 09     | 17.04      |            |        |         | 7 70   | 10 15   | 11 10                                   | 0.01                                    | 8.1                                     |
| North Carolina   | 33, 30     | 28, 81     | 22.05      | 20.43      | 17.89  | 15.51   | 15.19  | 13, 15  | 11, 43                                  | 9.84                                    | 1                                       |
| South Carolina   | 38. 16     | 33.00      | 23. 39     | 23, 32     | 22.16  | 19.70   | 19, 26 | 16.66   | 13.76                                   | 11.45                                   | 8.20                                    |
| Georgia  | 31.15      | 26, 15     | 20.08      | 17.93      | 15, 36 | 11.72   | 8.76   | 5.78    | 4.28                                    | 2.76                                    | 1.40                                    |
| Florida  | 7.22       | 4.97       | 3,46       | 2.59       | 1.61   | 1,00    | 0,64   | ,       |   | ļ                                       |   |
| North Central division   | 29, 68     | 23. 04     | 17.23      | 12.07      | 7. 17  | 4.45    | 2.14   | 1.14    | 0, 39                                   | 0. 20                                   |   |
| Ohio   | 90. 10     | 78.46      | 65.39      | 57.40      | 48, 59 | 37. 28  | 23, 01 | 14, 26  | 5, 66                                   | 1.11                                    |   |
| Indiana  | 61. 05     | 55. 09     | 46.80      | 37.61      | 27, 52 | 19.10   | 9.55   | 4.10    | 0.68                                    | 0.03                                    |   |
| Illinois   | 68, 33     | 54, 96     | 45.36      | 30, 57     | 15. 20 | 8.50    | 2.81   | 0. 99   | 0, 09                                   |   |   |
| Michigan   | 36, 46     | 28.50      | 20.62      | 13.04      | 6, 92  | 3.70    | 0, 23  | 0.06    | 0. 10                                   |   |   |
| Wisconsin  | 30.98      | 24. 16     | 19, 37     | 14.25      | 5, 61  | 0.51    |        |         |   |   |   |
| Minnesota  | 16.44      | 9, 80      | 5. 55      | 2. 17      | 0.04   |         |        |         | <br>                                    | .<br>                                   |   |
| Iowa   | 34.46      | 29, 29     | 21, 52     | 12, 17     | 3.46   | 0, 21   |        |         | <br>                                    |   |   |
| Missouri   | 38, 98     | 31.55      | 25, 04     | 17. 20     | 9, 92  | 5,58    | 2, 13  | 1.01    | 0. 32                                   | ,,                                      |   |
| North Dakota   | 2, 60 )    |            |            |            | 1      |         |        |         |   |   |   |
| South Dakota   | 4. 28      | a0.92      | α0.10      | a0, 06     |        |         | ••••   |         |   |   | • • • • • • •                           |
| Nebraska   | 13. 78     | 5.94       | 1.61       | 0, 08      |        |         |        |         |   |   |   |
| Kansas   | 17, 47     | 12, 19     | 4.46       | 0.85       |        |         |        |         | <br>                                    | <u> </u>                                |   |
| Transas  | 11.41      | 12, 10     | 31.40      | 0.00       |        |         |        |         |   |   |   |
| South Central division   | 18. 94     | 16, 51     | 11.91      | 10.68      | 7.05   | 8, 69   | 5, 93  | 3. 97   | 2, 30                                   | 1, 94                                   | 0.68                                    |
| Kentucky   | 46.47      | 41.22      | 33. 03     | 28. 80     | 24,56  | 19.50   | 17. 20 | 14. 10  | 10.16                                   | 5.52                                    | 1.84                                    |
| Tennessee  | 42.34      | 36. 94     | 30.14      | 26.58      | 24. 02 | 19, 86  | 16.33  | 10. 13  | 0.27                                    | 2, 53                                   | 0.88                                    |
| Alabama:   | 29.36      | 24.50      | 19.34      | 18, 71     | 14.97  | 11.46   | 6.01   | 2.48    |   | [                                       |   |
| Mississippi  | 27.83      | 24, 42     | 17.87      | 17.08      | 13.00  | . 8.11  | 2, 95  | 1, 63   | 0.48                                    | 0.24                                    |   |
| Louisiana  | 24.63      | 20. 69     | 16.00      | 15, 59     | 11.40  | 7.76    | 4.75   | 3. 37   | 1.69                                    |   |   |
| Texas  | 8. 52      | 6.07       | 3. 12      | 2, 30      | 0.81   |         |        |         |   |   | · • • • • • • • • • • • • • • • • • • • |
| Oklahoma   | 1.59       |            |            |            |        |         |        |         |   |   |   |
| Arkansas   | 21, 27     | 15. 13     | 9.13       | 8, 21      | 3.96   | 1.84    | 0.57   | 0. 27   |   |   |   |
| Western division   | 2. 58      | 1.50       | 0.84       | 0. 53      | 0. 16  |         |        |         |   |   |   |
| Montana  | 0.91       | 0.27       | 0.14       |            | [      |         |        |         | · • • • • • • • • • • • • • • • • • • • | • |   |
| Wyoming  | 0, 62      | 0.21       | 0.09       |            |        |         |        |         | <b></b>                                 |   |   |
| Colorado   | 3.98       | 1.87       | 0.38       | 0.33       |        |         |        |         |   |   |   |
| New Mexico   | 1.25       | 0.98       | 0.75       | 0,36       | 0. 29  |         | <br>   |         |   |   |   |
| Arizona  | 0, 53      | 0.36       | 0, 09      |            |        |         |        |         |   |   |   |
| Utab   | 2, 53      | 1.75       | 1.06       | 0, 18      | 0.05   |         |        |         |   |   |   |
| Nevada   | 0.42       | 0.57       | 0, 39      | 0.06       |        |         |        |         |   |   |   |
| Idaho  | 1,00       | 0.39       | 0.18       |            |        |         |        |         | . <b></b>                               |   |   |
| Washington   | 5, 22      | 1.12       | 0. 36      | 0.06       |        |         |        |         |   |   |   |
| Oregon   | 3, 32      | 1.85       | 0, 96      | 0, 55      | 0.05   |         |        |         |   |   |   |
| California   | 7.75       | 5, 54      | 3.59       | 2, 44      | 0, 59  |         |        |         | <br>                                    |   |   |
| TATILITIES AND ADDRESS OF THE PARTY OF THE P | 1.10       | 0.02       | 0.00       | M 27       |        |         | ,      |         | 1                                       | 1                                       |   |

α Dakota territory.

The above table shows that, with the exception of the District of Columbia, which is in effect a municipality, the most densely settled state is Rhode Island, and next to that Massachusetts. In these states the density of population is as great as in many of the most densely settled European states. Indeed the entire North Atlantic

division of states, which is pre-eminently the manufacturing section of the country, contains an average of over 100 inhabitants to the square mile. The South Atlantic and South Central divisions, which are pre-eminently farming regions, are much less densely peopled. The scattered character of the population of the western states and territories is illustrated by the low density of population.

#### CENTER OF POPULATION.

By the Eleventh Census the center of population in 1890 was in the following position:

| Latitude | $39^{\circ}$ | 11' | $56^{\prime\prime}$ |
|----------|--------------|-----|---------------------|
|          |              |     |                     |

In ten years the center of population has moved westward 53' 13", or about 48 miles, and northward 7' 48", or about 9 miles. It rests now in southern Indiana, at a point a little west of south of Greensburg, the county seat of Decatur county, and 20 miles east of Columbus, Indiana.

The closeness with which the center of population, through such rapid westward movement as has been recorded, has clung to the parallel of 39° of latitude can not fail to be noticed. The most northern point reached was at the start in 1790; the most southern point was in 1830, the preceding decade having witnessed a rapid development of population in the southwest, Alabama, Arkansas, Mississippi, and Louisiana having been admitted as states and Florida annexed and organized as a territory. The extreme variation in latitude has been less than 19 minutes, while the hundred years of record have accomplished a movement of longitude of over 9 degrees. Assuming the westward movement to have been uniformly along the parallel of 39° of latitude, the westward movement of the several decades has been as follows: 1790–1800, 41 miles; 1800–1810, 36 miles; 1810–1820, 50 miles; 1820–1830, 39 miles; 1830–1840, 55 miles; 1840–1850, 55 miles; 1850–1860, 81 miles; 1860–1870, 42 miles; 1870–1880, 58 miles, and 1880–1890, 48 miles, a total westward movement of 505 miles. The sudden acceleration of movement between 1856 and 1860 was due to the transfer of a considerable body of population from the Atlantic to the Pacific coast, 12 individuals in San Francisco exerting as much pressure at the then pivotal point, viz, the crossing of the eighty-third meridian and the thirty-ninth parallel, as 40 individuals at Boston.

The center of population is the center of gravity of the population of the country, each individual being assumed to have the same weight. The method of determination used, in order that the result might be comparable with that obtained in 1880, was in brief as follows:

The population of the country was first distributed by "square degrees", as the area included between consecutive parallels and meridians has been designated. A point was then assumed tentatively as the center, and corrections in latitude and longitude to this tentative position were computed. In this case the center was assumed to be at the intersection of the parallel of 39° with the meridian of 86° west of Greenwich. The population of each square degree was assumed to be located at the center of that square degree, except in cases where it was manifest that this assumption would be untrue, as, for instance, where a part of the square degree was occupied by the sea or other large body of water, or where it contained a city of considerable magnitude which was situated "off center". In these cases the position of the center of the population of the square degree was estimated as nearly as possible. The distance of each such center of population of a square degree, whether assumed to be at the center of the square degree or at a distance from the center, from the assumed parallel and from the assumed meridian, was then computed. The population of each square degree was then multiplied by its distance from the assumed parallel of latitude, and the sums of the products, or moments, north and south of that parallel were made up. Their difference, divided by the total population of the country, gave a correction to the latitude. In a similar manner the east and west moments were made up, and from them a correction in longitude was obtained.

In 1790 the center of population was at 39° 16.5′ north latitude and 76° 11.2′ west longitude, which a comparison of the best maps available would seem to place about 23 miles east of Baltimore. During the decade from 1.790 to 1800 it appears to have moved almost due west to a point about 18 miles west of the same city, being in latitude 39° 16.1′ and longitude 76° 56.5′.

From 1800 to 1810 it moved westward and slightly southward to a point about 40 miles northwest by west of Washington, being in latitude 39° 11.5′ and longitude 77° 37.2′. The southward movement during this decade appears to have been due to the annexation of the territory of Louisiana, which contained quite extensive settlements.

From 1810 to 1820 it moved westward and again slightly southward to a point about 16 miles north of Woodstock, Virginia, being in latitude 39° 5.7′ and longitude 78° 33′. This second southward movement appears to have been due to the extension of settlements in Mississippi, Alabama, and eastern Georgia.

From 1820 to 1830 it moved still westward and southward to a point about 19 miles southwest of Moorefield, in the present state of West Virginia, being in latitude 38° 57.9′ and longitude 79° 16.9′. This is the most decided southward movement that it has made during any decade. It appears to have been due in part to the addition of Florida to our territory and in part to the great extension of settlements in Alabama, Louisiana, Mississippi, and Arkansas, or generally, it may be said, in the southwest.