

VIII.—OCCUPATIONS.

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Explanatory.—The Plates treating of occupations, 62–69 inclusive, are based upon the statistics furnished by the United States Census, which relate only to “gainful and reputable” occupations. In this term are included only those which are directly productive of gain, whether in the shape of wages, or other forms of direct compensation or profit. The large numbers of women who are engaged in housework for their own families do not come under this definition; while, on the other hand, women servants engaged in housework for hire are included. All women employed in the field at agricultural labor, whether for wages or not, are included; while the wives and daughters of farmers engaged, for example, in dairying on their own account, are not enumerated.

The distinction thus made by the Census Office, while it may perhaps be considered to some extent an arbitrary one, is, unquestionably, from an industrial point of view, correct; and, moreover, it is one which is capable of sharper limitation than is possible under any other definition.

In General.—The number of persons reported by the census as pursuing gainful and reputable occupations in 1880 was 17,392,099, or $34\frac{68}{100}$ per cent. of the total population. In 1870, the number was 12,505,923, being $32\frac{43}{100}$ per cent. If the number of bread-winners had increased only in the same proportion as the population increased, that is, about 30 per cent., the number would have been, in 1880, 16,257,700. Comparing this with the actual number of bread-winners in 1880, it appears that, in proportion to population, this class has increased not less than $6\frac{97}{100}$ per cent. This may be due in a certain degree to the closer enumeration of 1880, but the fact is unquestionable, that, owing mainly to the extension of the factory system, the increased division of labor, and the opening of wider fields of employment for women, the proportion of those engaged in gainful occupations materially increased during the decade.

In 1870, the number of working males over ten years of age was 10,669,635, or $27\frac{67}{100}$ per cent. of the total population and $74\frac{83}{100}$ per cent. of the number of males over ten years of age.

In 1880, the number was 14,744,942, which was $29\frac{46}{100}$ of the total population and $78\frac{70}{100}$ of all males over ten years of age.

The number of those classed as working females was, in 1870, 1,836,288, being $4\frac{26}{100}$ per cent. of the total population, and $13\frac{55}{100}$ per cent. of the number of females over ten years of age. Similarly, the number in the same class in 1880 was 2,647,157, or $5\frac{28}{100}$ per cent. of the total population, and $14\frac{68}{100}$ per cent. of all females over ten years of age. These figures show an increase in the proportional number of working males in the ratios of 1000 to 1067 and of working females of 1000 to 1190, indicating not only a decided proportional increase in each class, but a much greater increase among females than among males.

Principal Classes of Occupations.—The various occupations included in the above enumeration have been grouped by the Census Office in four general classes, namely: 1. Agriculture. 2. Professional and personal services. 3. Trade and transportation. 4. Manufacturing, mechanical and

mining industries. This classification is not by any means all that could be desired. While from one point of view, it is a natural one, from others it is quite the reverse, and it has the practical disadvantage of failing to afford sharp lines of demarkation between the classes. Thus, of the great class of laborers, a portion, greater or smaller according to the time of the year, are agricultural laborers, and are placed in the first class, while the rest fall in the second class. As a matter of fact, a large number of agricultural laborers, especially in the South, were returned simply as laborers, and hence are incorrectly placed in the second class.

The numbers engaged in each of these four classes in 1870 and in 1880 are presented below, with the percentage which each class made of the total:

CLASSES.	1870.		1880.	
	NUMBER.	PER CENT.	NUMBER.	PER CENT.
Agriculture.....	5,922,471	47	7,670,493	44
Professional, etc., services.	2,684,793	21	4,074,238	23
Trade and transportation.	1,191,238	10	1,810,256	11
Manufactures, etc.....	2,707,421	22	3,837,112	22
		100		100

Increasing the numbers in 1870 proportionally to the increase in population during the decade between 1870 and 1880, the following conditions are developed. In agriculture, the number in proportion to population slightly diminished, in spite of the proportional increase of total occupations, being 996 in 1880 to 1000 in 1870. In the second, third and fourth classes, there was an increase. This increase in the case of the second class, that of personal and professional services, was in the ratio of 1000 to 1167. In the class of trade and transportation, there was an increase from 1000 to 1169, and in that of manufacturing, mechanical and mining industries, from 1000 to 1090. This movement of the population away from agriculture and toward those avocations which presuppose a denser degree of settlement, is in strict accordance with the course of development of the country.

The following table shows the distribution by sex of the persons engaged in the four great classes of occupations, severally, in 1880:

CLASSES.	MALES.		FEMALES.	
	NUMBER.	PER CENT.	NUMBER.	PER CENT.
Agriculture.....	7,075,983	92.3	594,510	7.7
Personal, etc., services....	2,712,943	66.6	1,361,295	33.4
Trade and transportation.	1,750,892	96.7	59,364	3.3
Manufacturing, etc.....	3,205,124	83.5	631,988	16.5

Most of the females engaged in agriculture are found in the cotton states, where, as is stated elsewhere, those of the colored race work very generally in the fields. The largest

proportion of working females is found in the class of personal and professional services. The greater part of those enumerated in this class are domestic servants, laundresses, nurses and boarding-house keepers. Of the large number of females employed in manufactures, the greater proportion are milliners, seamstresses, dressmakers, and cotton-mill operatives.

Distribution by Age and Sex.—The following table shows the number, and proportion by age and sex, of those engaged in gainful avocations, in 1870 and 1880:

CLASSES.	1870.		1880.	
	NUMBER.	PERCENT-AGE OF TOTAL.	NUMBER.	PERCENT-AGE OF TOTAL.
10 to 15 years, male...	548,064	4.38	825,187	4.75
“ “ female..	191,100	1.52	293,169	1.68
16 to 59 years, male...	9,486,734	75.88	12,986,111	74.66
“ “ female..	1,594,783	12.75	2,263,115	13.13
Above 60 years, male..	634,837	5.07	933,644	5.37
“ “ female.	50,405	0.40	70,873	0.41
		100.00		100.00

The above table shows that in every class, with the exception of males between 16 and 59 years of age, there has been an increase relatively to the total number of persons employed. Increasing the number of these classes in 1870 in proportion to the increase in population and comparing them with the numbers in the corresponding classes in 1880, the following results are obtained, showing for each 100 of each class in 1870 (after making the above increase), the number in 1880:

10 to 15 years, males.....	116
“ “ females.....	118
16 to 59 years, males.....	105
“ “ females.....	108
Above 60 years, males.....	113
“ “ females.....	108

In other words, there were, for every 100 males between the ages of 10 and 15 years, employed in 1870, 116 in 1880, the population being supposed to be equal at the two dates; and there was a similar increase in the other classes. The largest increase was among female children between 10 and 15 years of age; the smallest, among males between the ages of 16 and 59 years, who form the great body of bread-winners.

The following table shows the ratio between the number employed and the total population in each class:

CLASSES.	PERCENTAGE EMPLOYED.	
	1870.	1880.
10 to 15 years, males.....	19.3	24.4
“ “ females.....	6.9	9.0
16 to 59 years, males.....	91.0	93.4
“ “ females.....	15.5	16.9
Above 60 years, males.....	63.5	64.3
“ “ females.....	5.3	5.2

This shows that males between the ages of 16 and 59 were very generally employed. The unemployed remainder may be presumed to be made up of students, invalids, paupers and criminals, and those who, having acquired a competency, have retired from active business, though the last mentioned doubtless form but a small proportion.

All Occupations, by States.—The diagram on Plate 69 showing by states the ratio of bread-winners to the aggregate population, exhibits a wide divergence among the different states, the ratios ranging from 27⁸²/₁₀₀ to 56⁸³/₁₀₀ per cent., the average of the whole country being 34⁶⁸/₁₀₀ per cent.

As a rule, the low ratios are found in those states in which agriculture is the predominant industry, and where, owing to the settled conditions of society, the ratio of the adult male element to the total population is not materially greater than the average for the country at large. In these states, also, the class engaged in gainful occupations comprises few besides the adult male element, females thus employed being comparatively few in number. In confirmation of this is the fact that in the twenty states which have less than the average proportion of bread-winners, the percentage of females engaged in gainful occupations is but 10⁶/₁₀₀ per cent. of the total number of females, while in the other states this percentage is 20³/₁₀₀, or nearly twice as great.

Those states which have a high ratio of bread-winners, differ in the cause of these high proportions and in the composition of the classes of workers. Where manufacturing is a leading industry, as in most of the North Atlantic states, the proportion of bread-winners is swollen by the large numbers of women and children employed in factories and as household servants, milliners, dressmakers, and in other avocations accompanying dense settlement. In the cotton states of the South the proportion is greatly increased by the general labor of the colored women and children in the fields. In the newer states and territories of the West (with the exception of Utah and New Mexico) the proportion of workers is exceptionally large, the excess being due almost entirely to the preponderance of the male sex, which here greatly outnumbers the female.

Distribution of Male Bread-Winners.—Distinguishing the workers as males and females, it is seen that the highest proportions of the former are found in the Southern states, contrary, perhaps, to the

generally received opinion. In all the states in which cotton is the leading crop, from North Carolina around the Gulf to Texas and Arkansas, with the sole exception of Florida, the proportion of working males to the whole number of males above ten years of age, exceeds 80 per cent. The highest proportion in the country, with the exception of Arizona, is found in Alabama, where no less than 89 per cent. of all males over ten years of age, are engaged in gainful avocations. This is owing to the almost universal employment in the fields, not only of adults, but of all children whose labor is of any value.

In the northeastern portion of the country is found a second area, where for very similar reasons the proportion of male workers is high. This comprises the manufacturing states of New Hampshire, Massachusetts, Rhode Island and Connecticut. The high proportion in this area is produced by the employment of children in manufacturing establishments.

In the Northern Central section, where comparatively little labor is carried on by males under age, the proportion of workers is slightly below the average of the country.

Distribution of Female Bread-Winners.—The proportion of females engaged in gainful occupations differs much more widely in the different states than that of males.

As in the case of the latter, the highest proportion is found in the cotton states, where women, especially of the colored race, work very generally in the fields. In South Carolina 35 per cent. of all females over ten years of age are workers, in Georgia, Mississippi and Louisiana, 29 per cent., and in Alabama 28 per cent.

These proportions are surprising, when contrasted with those in the manufacturing states of New England. The highest percentage found in any state in this section, namely, in Rhode Island, where manufactures employing women are relatively most numerous, is but 26, while in Massachusetts it is 23, and in Connecticut 19 per cent.

In the Northern Central group of states, where the principal gainful occupations are those relating to agriculture, the work is done almost entirely by men, the proportion of women ranging from 6 to 10 per cent. only.

Throughout the Western group of states the proportion is low, a condition due jointly to the small proportion of women in the community, and to the fact that avocations suitable for the female sex are not extensively followed, the main industries being mining and the

branches of manufactures connected with it, agriculture and stock-raising.

The Rate of Increase of Bread-Winners.—The diagram on Plate 63 illustrating the rate of increase of bread-winners between 1870 and 1880, in comparison with that of population, shows that in thirty-five of the states and territories bread-winners increased more rapidly than population, while in but twelve was the reverse the case.

In the North Atlantic group of states there has taken place, in every state, a gain in the number of bread-winners relative to the population; also, in the South Atlantic group, with the exception of Virginia, and in the Southern Central group, with the exception of Mississippi and Tennessee. The relative losses in these three states are doubtless due to the fact that fewer children labor in the fields than ten years ago, owing to an improvement in material conditions.

In the Northern Central group, a relative decrease occurred only in Ohio, Nebraska and Kansas. In Ohio the decrease is due to the cause given above, while in the cases of Nebraska and Kansas, this decrease is produced by the influx of families, in the place of the solitary ranchman, thus increasing the population, while relatively diminishing the proportion of bread-winners. To the last mentioned cause, also, is to be attributed the decreased proportion in Montana, Wyoming, Arizona, Nevada, Idaho and Washington. In several of these territories the decrease has been relatively very great. Increasing the number of bread-winners in 1870 by the ratio of increase in population between 1870 and 1880, the two will stand as follows: In Wyoming each 10,000 in 1870 was reduced to 5,866 in 1880; in Idaho to 6,586, and in Nevada to 8,176.

Other Western states and territories, to which emigration was very rapid during the decade, show the opposite result. Thus Colorado, with great accessions of population, gained heavily in bread-winners, the proportional figures being as 10,000 is to 11,815. The explanation of this, as of the like cases of Utah, Dakota and Oregon, is that immigration consisted very largely of males. This was notably the case in Colorado, where the large influx of male population was due to mining developments at Leadville and other points.

The Four Principal Classes, by States.—There is a great preponderance in the North Atlantic group (Maine excepted) of persons employed in manufactures, and in

personal and professional services. In the Western group, as a whole, manufacturing and mining industries are at the front, at the expense of agriculture, while personal and professional services are only second in importance. In all the other sections agriculture is the leading occupation.

The following table shows the percentage which the number in each class of occupations forms of the total number employed:

STATES AND TERRITORIES.	PERCENTAGE OF TOTAL OCCUPATIONS.			
	Agriculture.	Professional and Personal Services.	Trade and Transportation.	Manufacturing, Mechanical and Mining Pursuits.
North Atlantic Group.				
Maine.....	36	20	13	31
New Hampshire.....	31	20	8	41
Vermont.....	46	24	8	22
Massachusetts.....	9	24	16	51
Rhode Island.....	9	21	13	57
Connecticut.....	18	21	13	48
New York.....	20	29	18	33
New Jersey.....	15	28	17	40
Pennsylvania.....	21	31	12	36
South Atlantic Group.				
Delaware.....	33	32	9	26
Maryland.....	28	31	15	26
District of Columbia.....	2	60	15	23
Virginia.....	51	30	6	13
West Virginia.....	61	18	6	15
North Carolina.....	75	14	3	8
South Carolina.....	75	16	4	5
Georgia.....	72	18	4	6
Florida.....	64	20	7	9
Southern Central Group.				
Alabama.....	77	16	3	4
Mississippi.....	82	12	3	3
Louisiana.....	57	27	8	8
Texas.....	69	19	7	5
Arkansas.....	83	9	4	4
Tennessee.....	66	21	5	8
Kentucky.....	62	20	6	12
Northern Central Group.				
Ohio.....	40	25	10	25
Indiana.....	52	22	9	17
Illinois.....	44	23	13	20
Michigan.....	42	25	10	23
Wisconsin.....	47	23	9	21
Minnesota.....	52	23	10	15
Iowa.....	57	20	10	13
Missouri.....	51	21	12	16
Kansas.....	64	17	8	11
Nebraska.....	59	19	10	12
Dakota.....	49	24	11	16
Western Group.				
Montana.....	21	31	12	36
Wyoming.....	19	45	17	19
Colorado.....	13	25	15	47
New Mexico.....	35	47	8	10
Arizona.....	15	37	15	33
Utah.....	36	28	10	26
Nevada.....	13	32	14	41
Idaho.....	25	25	8	42
Washington.....	43	22	11	24
Oregon.....	40	25	9	26
California.....	21	32	15	32

This distribution of occupations is still more fully shown in the maps and diagrams upon Plates 64-67.

Agriculture.—The first of these, Plate 64, relating to agricultural occupations, shows that, in proportion to the total number of persons ten years of age and over, the number employed in this class of occupation is highest in the cotton states, nine of which stand together at the head of the list. Next to

them, follow the border states of the Northern Central group, mingled with the remaining states of the South Atlantic and Southern Central groups.

Near the middle of the list are the great grain states of the Mississippi Valley, while the manufacturing states of the North Atlantic group, with the mining states and territories, show the smallest proportion of persons engaged in agriculture.

It is probable that the number of this class is somewhat understated, owing to the fact that in many sections agricultural laborers have been returned by the enumerators simply as "laborers," in consequence of which they have been thrown into the class of "personal and professional services," which has thus been unduly swollen.

Personal and Professional Services.—In proportion to the number of inhabitants ten years of age and upward, the District of Columbia, which ranks lowest in agricultural pursuits, leads all the states and territories, in the numbers engaged in professional and personal services. Following in almost unbroken line, are the states and territories of the Western group, with the exception of Oregon, Washington and Utah, which have large agricultural interests. About the middle of the list are the North Atlantic states, interspersed with those of the Northern Central group, while, as a rule, the Southern states show the smallest proportions. In absolute numbers of those engaged in personal and professional services, the most populous states of course stand first, and the states stand throughout, nearly in the order of their population.

Trade and Transportation.—The third class, that of trade and transportation, has its greatest development, in proportion to the population over ten years of age, in the most sparsely settled states and territories of the West and the North Atlantic states. Next in importance are the Northern Central states, while the Southern states, which are largely self-supporting, and have comparatively slight means of public conveyance, bring up the rear.

Manufactures, Mechanics and Mining.—In the fourth class, that of manufactures, mechanics and mining, Rhode Island stands first in proportion to the number of inhabitants above ten years of age, while following it, come Massachusetts, Connecticut, New Hampshire, New Jersey and Pennsylvania, interspersed with the principal mining states and territories, and the cotton states are last. In absolute numbers, New York, as in all the other classes except agriculture, is in the lead, while the other Northern states follow, the larger proportion of this class in the manufacturing states being offset by the greater population in the Mississippi Valley.

Occupations in Cities.—The diagram on Plate 63 shows that the ratio of the total number engaged in gainful occupations to the total population, in fifty principal cities, is far above the average of the whole country. The lowest ratio here presented, that of Allegheny City, Pa., is 32.99 per cent., and the highest, that of Lowell, Mass., is 50.08, the average for these cities being but little, if any, below 40 per cent., while the average of the country at large is but 34.68 per cent. This is due not only to the larger percentage of working males found, as a rule, in cities, but to the fact that it is in cities that women and children find most of the avocations which are suited to them.

Relations of Nativity to Occupations.—The following table exhibits the nativity of those engaged in gainful occupations, both the total number of each nationality, and the percentage which each bears to the total number of bread-winners:

NATIONALITY.	NUMBER.	PERCENTAGE OF TOTAL.
United States.....	13,897,452	79.91
Ireland.....	978,854	5.63
Germany.....	1,033,190	5.94
Great Britain.....	466,505	2.68
Scandinavia.....	205,595	1.18
British America.....	351,103	2.02
Other Countries.....	459,470	2.64
		100.00

The following table shows the proportions of the different nationalities engaged in the

four principal classes of occupations, expressed in percentages of the total number of each nationality:

NATIONALITY.	Agriculture.	Personal and Professional Services.	Trade and Transportation.	Manufacturing, etc.
United States.....	49	22	10	19
Ireland.....	14	43	14	29
Germany.....	28	21	15	36
Great Britain.....	22	17	12	49
Scandinavia.....	45	26	8	21
British America.....	21	26	9	44

It appears that of the natives, very nearly one-half are engaged in agricultural pursuits, nearly one-fourth in personal and professional services, one-tenth in trade and transportation, and nearly one-fifth in manufactures, etc. A comparison of the native and the foreign elements presents the following results: First, in no other nationality is the proportion of agriculturists so high as among the native population, the only one approaching it being the Scandinavian. Secondly, the proportion of natives engaged in manufactures is smaller than of any other nationality. The Irish appear to be exceptionally averse to agricultural pursuits, while they appear, as laborers, most largely in the class of personal and professional services. The Germans are engaged most extensively in the class of manufactures, and to a considerable degree in farming. Of the natives of Great Britain, nearly one-half are engaged in manufactures; the Scandinavians are distributed not very differently from our native population; and the British Americans, which name may be held as being practically synonymous with "French Canadians," are principally employed in manufactures.

This distribution of occupations among the foreign element is coincident with, and mutually explanatory of, the movement of this element toward cities, indicated in the concluding remarks on the foreign element, in the chapter on Population (pages 50-51). Coming, in general, from the densely populated countries of the old world, immigrants naturally make the nearest approach possible to their former surroundings, and continue to follow that class of occupations to which they have been most accustomed.