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COST OF LIVING IN AMERICAN TOWNS.

REPORT OF AN ENQUIRY

BY THE

BOARD OF TRADE

INTO

WORKING CLASS RENTS, HOUSING AND
RETAIL PRICES,

TOGETHER WITH THE

RATES OF WAGES

IN CERTAIN OCCUPATIONS

IN THE PRINCIPAL INDUSTRIAL TOWNS

OF THE

UNITED STATES OF AMERICA.

WITH AN INTRODUCTORY MEMORANDUM AND A COMPARISON OF
CONDITIONS IN THE UNITED STATES AND THE UNITED KINGDOM.

Presented to Parliament by Command of His Majesty.



LONDON:

PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE.

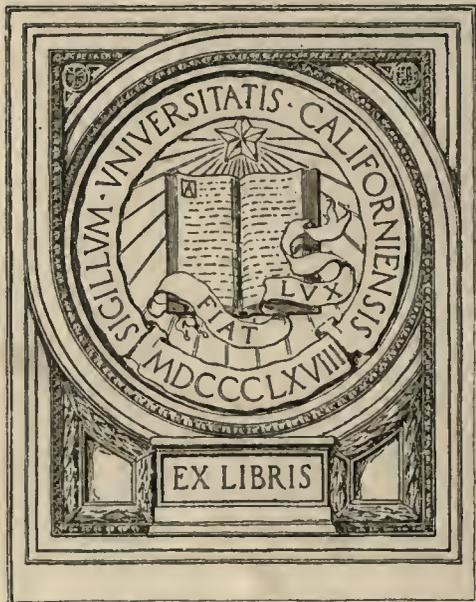
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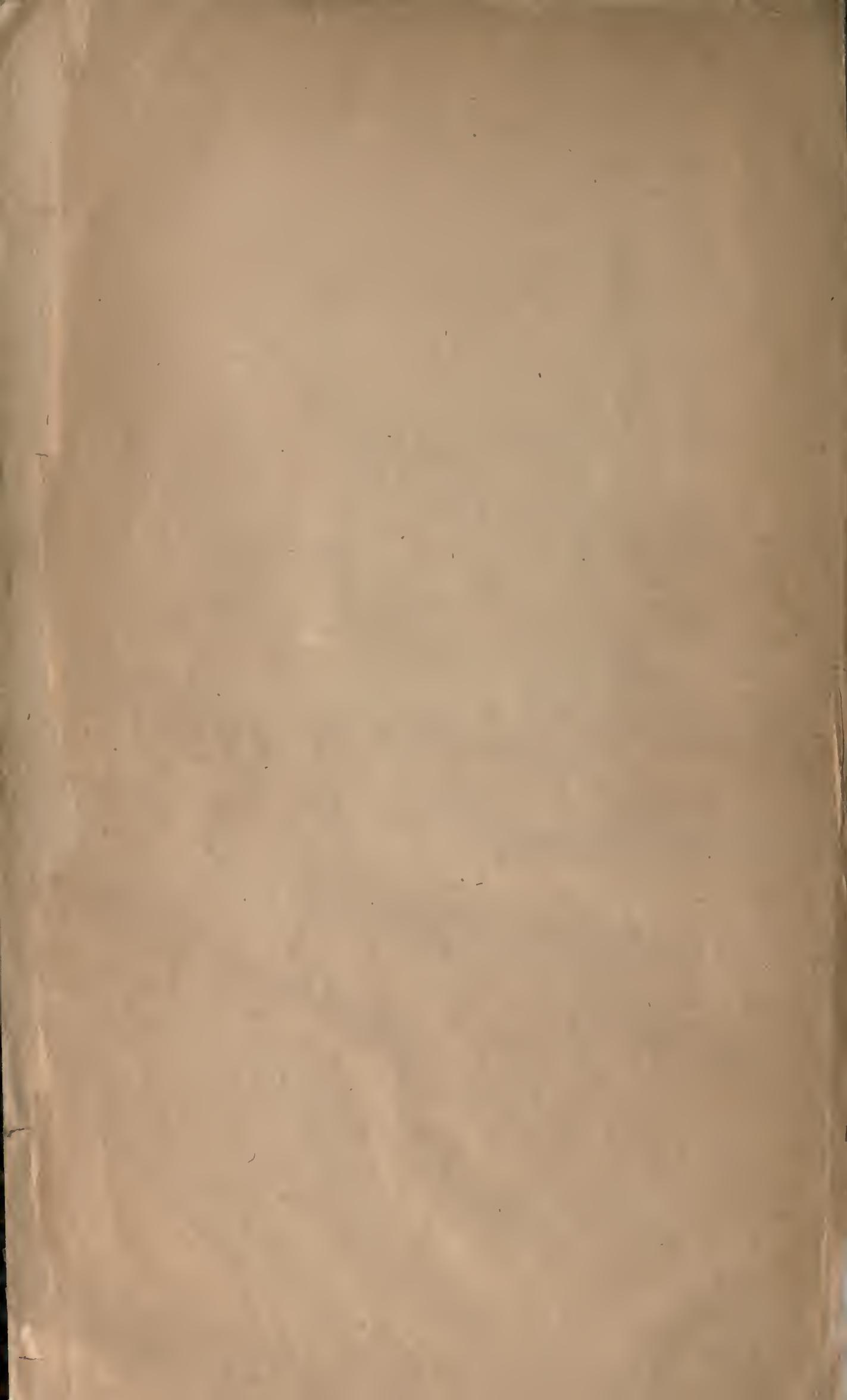
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TO THE PRESIDENT OF THE BOARD OF TRADE.

SIR,

THE volume which I have the honour to submit herewith is the fifth of a series containing the results of an investigation undertaken by the Board of Trade into certain matters affecting the condition of the working classes in industrial towns in various countries.

The present Report refers to the United States of America, and is based upon the results of an enquiry which extended to twenty-eight representative towns in that country.

I have, &c.,

H. LLEWELLYN SMITH.

April, 1911.

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PREFATORY NOTE.

TO THE SECRETARY OF THE BOARD OF TRADE.

SIR,

THE present Report relates to an enquiry into questions affecting the condition of the working classes in certain industrial towns of the United States of America.

The subjects of primary investigation were wages and hours of labour, rents and housing conditions, retail prices of food, and the expenditure of working-class families on food.

As the investigation began in February, 1909, the whole of the statistical data were collected with reference to that date instead of October, 1905, the date to which the enquiry in the United Kingdom related, and subject to slight adjustments it does not appear that the difference in dates affects appreciably the international comparisons which the statistical data are intended to subserve. With this exception the investigation in the United States followed the general lines which were adopted in other countries and which have been fully explained in the earlier Reports of this series.

The towns investigated were 28 in number, and of these all but two lie east of the Mississippi, while one is on the west bank and one on both banks of that river, which thus forms the western limit of the area of investigation. This limit was not fixed arbitrarily, inasmuch as the great industrial and urban developments have for the most part been concentrated in the States east of the Mississippi. The combined area of the States thus situated comprises about one-third of that of the whole of continental United States exclusive of Alaska, and contained in 1910 over three-fourths of a population amounting in that year to about 92 millions. Although thus restricted, the towns investigated were scattered over an area nine times as great as that of the United Kingdom, and, save perhaps in a few of the oldest and most thickly populated States, illustrate a stage of urban development and urban concentration less advanced than has been reached in the United Kingdom.

In the United States as a whole, although the proportion of urban to rural population more than doubled from 1860 to 1900, that of the United Kingdom only increasing by about half during the same period, the proportion was still only about one-third in 1900 in the United States as compared with over two-thirds in the United Kingdom. The basis of comparison is not identical in the two countries, but the figures indicate the broad differences that exist in this respect and are a reminder of the fact that in spite of increasing industrialisation the United States is still primarily a great agricultural community. The percentage of the occupied population in the United States engaged in agriculture, under a less intensive system, is nearly three times as high as in the United Kingdom and, alike on account both of its agricultural and its mineral resources, the United States is still economically one of the most self-contained countries in the world.

It is in the States lying east of the Mississippi that American conditions most nearly approximate to those of the Old World, and are such, therefore, as can be most usefully compared. Even in the restricted area of investigation, however, various circumstances have made the enquiry one into conditions that are in some respects international and continental rather than national in character, especially, in regard to the great area covered, to differences in climate and physical environment which it embraced; to the Federal constitution of the States; to the absence of a common body of labour legislation; and to the cosmopolitan character of the population.

The very large body of immigrants that has arrived in the United States either with a view to permanent settlement or—as is especially the case with much of the more recent immigration—to the accumulation or remittance of savings and to an early return to Europe, is a conspicuous feature of the situation, and this unexampled introduction of

mixed European stocks is also accompanied by the presence of a large native-born coloured population. Thus, from various ethnological causes the present enquiry has been more or less complicated in nearly all the towns investigated and the task of ascertaining what were the facts actually representative of working-class conditions became one of especial difficulty.

Excluding New York, to which for the purposes of this Report a metropolitan position is attributed, the towns visited may be assigned to five geographical groups, viz., six New England, four Other Eastern, six Central, five Middle West, and six Southern towns. The total population of the 28 towns was 15,488,140 in 1910.

As before, the comparison of wages has been restricted to occupations common to all towns, viz., those in the building, engineering and printing trades. The rates of wages ascertained for these trade groups show in general no very marked divergence, and the differences are certainly not greater than those shown to exist as between the towns of England and Wales. It is noteworthy, however, that in some towns, in the Middle West especially, the New York rates are exceeded in certain occupations. Omitting New York the highest general wages levels occur in the Middle West towns, the lowest in the New England group. In regard to the hours of labour the range of divergence is narrow in all the three trades compared.

The predominant type of dwelling in the United States as in the United Kingdom is that accommodating the single family, though the exceptions to this rule are far more numerous in the former country, and in both countries dwellings of four and five rooms are the predominant types. The most fundamental difference between the housing accommodation of the two countries consists in the fact that frame or timber houses are the usual type in the United States, brick-built houses representing predominant types in but few of the towns visited. As between the towns investigated the range of rent levels varies greatly; the predominant rents of New York, taken as 100, exceed those of 19 towns by over 25 per cent., of 11 towns by over 50 per cent., and of one town by 127 per cent. Nevertheless, the New York level on the whole exceeds that of other towns to a far less extent than the London level exceeds that of English provincial towns. After New York the highest level is shown by the towns of the Middle West, the lowest level by the New England towns. In some of the towns a very considerable proportion of the dwellings inhabited by the working classes are owned by their occupiers.

The prices of the principal articles of consumption, like bread, flour, meat, potatoes and sugar, do not vary greatly as between one town and another, and when all food prices are combined in index numbers for the various towns—each article being weighted in order to allow for its relative importance as shown by the normal working-class consumption in the United States—it is found that New York, counting as 100, stands exactly midway between the highest and lowest levels, 109 and 91 respectively. If the towns are grouped geographically the New England and Southern groups show the highest food price levels, the Middle West towns the lowest, the position of the New England towns in regard both to wages and rents being here reversed.

The effect of constructing index numbers for the geographical groups of towns by correlating wages, rents and prices, with a view to arriving at the relative level of "real wages"—*i.e.*, their relative purchasing power, so far as relates to rent and food, is that the Middle West towns take the highest and the New England towns the lowest place.

Owing to the multiplicity of races represented in the budgets of family income and expenditure on food and rent that were collected, it has been found expedient to present the results on a nationality basis, according to the declared country of birth of the head of the family, and accordingly they have been summarised in ten composite budgets, prominence being given to that representing American and British families of the Northern towns.

Although many stages in the process of assimilation of immigrants to a national type are thus included in each nationality group of budgets, characteristic differences of industrial status as between group and group and of domestic habits are manifested. By the budgets as a whole, however, various features are brought into relief, and among these may be mentioned the high level of family income, the large contribution made by the children in the higher income classes, the insignificant earnings of the wives, the considerable expenditure on food, and the large proportion of income remaining after the cost of food and rent has been deducted.

It may be observed that the budgets collected refer to families, and thus to those members of the community who in all cases would rank among its more permanent members and not to the considerable transient population of males either without home ties in their country of origin, or temporarily detached from these. It is only occasionally, when as "roomers" or boarders this element of the population contributes to the family income, that it is reflected in the details of family income and expenditure obtained.

Summarising now the results of the international comparison, it appears that the ratio of the weekly wages for certain occupations in the United States and England and Wales respectively at the dates of the two enquiries is 243 : 100 in the building trades, 213 : 100 in the engineering trades, 246 : 100 in the printing trades and 232 : 100 in all these trades together. Allowing for a slight advance in wages in England and Wales between the dates of the two enquiries the combined ratio would be 230 : 100.

The weekly hours of labour were found to be 11 per cent. shorter in the building trades in the United States than in England and Wales, 7 per cent. shorter in the printing trades, but 6 per cent. longer in the engineering trades, the ratio shown by all the occupations in these three trade groups together being 96 : 100.

Unskilled labour is furnished by the Negro element in the six Southern towns, and the same element is important in a few other towns, but everywhere under urban conditions coloured labour is employed in very restricted fields, and skilled coloured labour is mainly engaged in the service of the coloured community itself. In the few cases in which the wages and hours of labour obtained for individual towns were those for coloured workers, they have been excluded from the calculation of the general predominant figures for the whole field of enquiry and from the index numbers used in the internal and international comparisons.

While in the Southern towns unskilled labour is predominantly coloured, so in the Northern towns is it largely foreign, and the rank and file of many occupations that are least differentiated by skill and command the lowest wages are largely recruited from the newer immigrant races. Thus, while each wage-earning group of the various immigrant nationalities would be found to be representative of many grades and to be highly complex, the proportion of the lower paid classes tends to be greater among those who have arrived during the most recent periods, as among the Southern Italians and the Slavonic peoples, for instance, as contrasted with the Germans and the Irish.

Accompanying this influx of foreign labour, mainly unskilled, and an extensive demand for labour of this description largely usual in a comparatively new country in which the pick and shovel are apt to be more in demand than in an older community, a rapid expansion of manufacturing industries has been taking place, accompanied, with or without the introduction of labour-saving appliances, by a very extensive sub-division of labour. These two influences combined—the large external supply of unskilled labour and the opportunities for its absorption not only in unskilled but in semi-skilled employment—have resulted in an abnormally large proportion of unskilled and semi-skilled to skilled workers in the community as a whole, a fact that would affect appreciably any general "weighted" comparison between the level of wages in the two countries.

As regards rents, the American workman pays on the whole a little more than twice as much as the English workman for the same amount of house accommodation, the actual ratio being 207 : 100 ; the minimum of the predominant range of rents for the United States towns as a whole exceeding by from 50 to 77 per cent. the maximum of the range for towns in England and Wales for dwellings containing the same number of rooms.

The retail prices of food, obtained by weighting the ascertained predominant prices according to the consumption shown by the British budgets, show, when allowance is made for the increase which took place in this country between October, 1905, and February, 1909, a ratio of 138 : 100 for the United States and England and Wales respectively.

One peculiarity shown by the budgets is the comparatively small consumption of baker's bread in the average American working-class family, the consumption being 8¼ lb. weekly per family as against 22 lb. in the United Kingdom, the place of bread being taken in the United States to some extent by rolls, cakes, biscuits, &c., on which the expenditure is about three times as great as that shown in the average British budget.

On the other hand, the consumption of meat is much larger in the United States, and the consumption of vegetables is also larger. The budgets indicate in general that the dietary of American working-class families is more liberal and more varied than that of corresponding families in the United Kingdom.

The comparison of wages, hours of labour, rents and prices in the areas of investigation in the two countries has been made on the bases indicated above, and, as regards prices, on the same assumption as that made in the preceding enquiries, that an English workman with an average family maintained under American conditions the standard of consumption as regards food to which he had been accustomed. Under such conditions the workman's wages would be higher in the United States by about 130 per cent., with slightly shorter hours, while on the other hand his expenditure on food and rent would be higher by about 52 per cent. The detailed figures and argument from which this conclusion is deduced are stated on pages lv to lxxvi of this Report, on which pages are further elaborated the qualifications to which any such comparison is necessarily subject.

The cordial thanks of the Department are due to the various Federal and State authorities consulted, to His Majesty's Diplomatic and Consular representatives in the United States, to the municipal authorities, to the officials and other members of Associated Charities and other philanthropic agencies, to the workers of Social Settlements, to the officials of Employers' and Workers' Associations of various kinds, and to the large number of individual employers, retail tradesmen, house agents and others who gave valuable assistance to the officers of the Department in the course of their enquiries.

I have, &c.,

G. R. ASKWITH.

Labour Department,
Board of Trade,
April, 1911.

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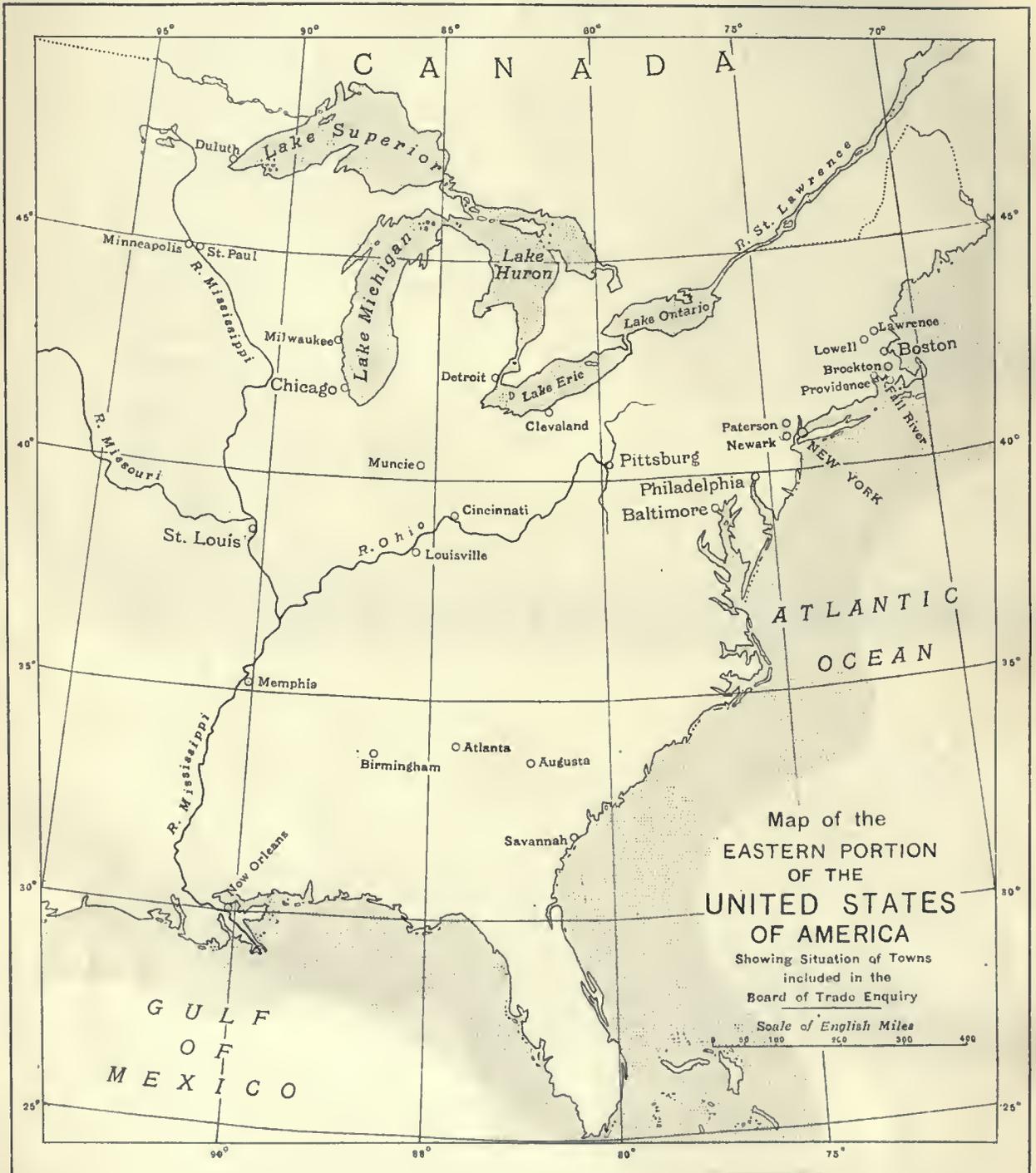
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GENERAL REPORT.

INTRODUCTION.

The present enquiry is the fifth of a series undertaken by the Board of Trade into working-class conditions of life in the more important industrial towns of various countries, and particularly into wages and hours of labour, rents and housing conditions, retail prices of food and the expenditure of working-class families on food. The following Reports have been already published, viz., for the United Kingdom (Cd. 3864) in 1908; for Germany (Cd. 4032) in the same year; for France (Cd. 4512) in 1909; and for Belgium (Cd. 5065) in 1910. The main object of the foreign enquiries has been in all cases identical, namely, to obtain a collection of data comparable with those contained in the Report on the "Cost of Living of the Working Classes" in the United Kingdom.

The methods adopted in the various enquiries, including the collection of the statistical data required as regards wages and hours of labour, rents, prices and family expenditure on food, have been, so far as possible, the same. Nevertheless, in one respect an important difference had to be made, namely, as to the date for which the statistical data were obtained, it being regarded as impracticable, owing to the lapse of time, to retain as the standard date for enquiries made in 1909 the one originally selected—October, 1905. In the United States enquiry, therefore, February, 1909, the month in which the actual investigation began, was adopted as the date to which all particulars as to wages and hours of labour, rents and prices should relate. Certain adjustments have thus been necessary in making international comparisons, and particulars concerning these adjustments will be found in later pages.

Twenty-eight* towns were covered by the enquiry; the geographical group in which each of these towns has been included for the purposes of the present report, the State in which each town is situated and the population of each town according to the Censuses of 1900 and 1910 are shown in the following Table:—

| Town. | State. | Population. | |
|-----------------------|----------------------|-------------|------------|
| | | 1900. | 1910.† |
| New York | New York | 3,437,202 | 4,766,883 |
| New England Towns:— | | | |
| Boston | Massachusetts | 560,892 | 670,585 |
| Brockton | " | 40,063 | 56,878 |
| Fall River | " | 104,863 | 119,295 |
| Lawrence | " | 62,559 | 85,892 |
| Lowell | " | 94,969 | 106,294 |
| Providence | Rhode Island | 175,597 | 224,326 |
| Other Eastern Towns:— | | | |
| Baltimore | Maryland | 508,957 | 558,485 |
| Newark | New Jersey | 246,070 | 347,469 |
| Paterson | " | 105,171 | 125,600 |
| Philadelphia | Pennsylvania | 1,293,697 | 1,549,008 |
| Central Towns:— | | | |
| Cincinnati | Ohio | 325,902 | 364,463 |
| Cleveland | " | 381,768 | 560,663 |
| Detroit | Michigan | 285,704 | 465,766 |
| Louisville | Kentucky | 204,731 | 223,928 |
| Muncie | Indiana | 20,942 | 24,005 |
| Pittsburg | Pennsylvania | 451,512‡ | 533,905 |
| Middle West Towns:— | | | |
| Chicago | Illinois | 1,698,575 | 2,185,283 |
| Duluth | Minnesota | 52,969 | 78,466 |
| Milwaukee | Wisconsin | 285,315 | 373,857 |
| Minneapolis—St. Paul* | Minnesota | 365,783 | 516,152 |
| St. Louis | Missouri | 575,238 | 687,029 |
| Southern Towns:— | | | |
| Atlanta | Georgia | 89,872 | 154,839 |
| Augusta | " | 39,441 | 41,040 |
| Birmingham | Alabama | 38,415 | 132,685 |
| Memphis | Tennessee | 102,320 | 131,105 |
| New Orleans | Louisiana | 287,104 | 339,075 |
| Savannah | Georgia | 54,244 | 65,064 |
| | Total | 11,889,875 | 15,488,140 |

* For statistical purposes the "Twin Cities" of Minneapolis and St. Paul have been treated as one town.

† By the courtesy of the Bureau of the Census of the United States.

‡ Pittsburg and Allegheny.

The total population of the 28 towns above enumerated was thus 11,889,875 in 1900 and 15,488,140 in 1910. Moreover, in various cases, notably in Pittsburg and Birmingham, adjacent districts organically connected with the nominal centre, although outside the area of municipal administration, were also covered by the enquiry, so that the aggregate population to which the particulars obtained relate is somewhat larger than the figure for 1910 stated above.

The towns investigated were chosen because of their representative industrial character or their intrinsic importance, and an attempt was also made to select those that would fall into a few groups framed on broad lines of geographical distribution. Of the 28 towns, 26 lie east of the Mississippi and of the remaining two one is on the west bank and the other on both banks of that river, which thus forms the western limit of the area of investigation. The combined area of the States within this limit of investigation (including Missouri as containing St. Louis) is 1,083,225 square miles, or a little more than a third of the whole of continental United States exclusive of Alaska, while the joint population of the same States in 1910 was 71,749,421 or over three-fourths of the total. The concentration of urban development in these States is very marked, inasmuch as they contained in 1900 all but 29 of the 160 towns of the United States with a population exceeding 25,000. Of the 29 towns lying further west, only Los Angeles (California), Omaha (Nebraska), Denver (Colorado) and San Francisco (California) had at that date a population exceeding 100,000, the largest of the four being San Francisco, with a population of 342,782.

Although thus restricted, the enquiry embraced towns scattered over an area nine times as great as the United Kingdom, and equal to nearly twice the combined areas of the United Kingdom, Germany, France and Belgium, the four countries previously investigated.

Apart from certain areas lying west of the Rockies, the population of the district west of the Mississippi is mainly occupied in agriculture, in stock raising and in mining, as distinct from manufacturing pursuits. Over a great part of this area the normal conditions that are apt to lead to the growth of towns are either absent—much of it being mountainous and otherwise unsuitable for settlement—or have not been reached in the present stage of industrial development of the United States. It is thus in towns lying east of the Mississippi that conditions most approximate to those of the Old World, and, greatly differentiated though many of the conditions are from those prevailing in the United Kingdom or in the European countries already covered by the present series of investigations, it is here, therefore, that they are most comparable.

The present enquiry, although limited geographically as stated, has nevertheless been one made into conditions that from some points of view are international and continental in character rather than national, and among the circumstances that give the field of enquiry these special features, apart from differences of climate and physical environment, are the absence of a common body of industrial legislation among the various States and the cosmopolitan character of the population.

Special reference must be made to the differences in climate since these tend to differentiate the conditions of life and thus the elements of the cost of living. Numerous references to local climatic conditions are contained in the reports on the separate towns, but the variations in this respect may be sufficiently illustrated at this stage by noting that Duluth, the most northerly town investigated, has a climate somewhat resembling that of St. Petersburg with a severe winter and a short hot summer, and a mean annual temperature of about 40° F., while New Orleans, the most southerly town visited, has a mean annual temperature of about 70° F., and lies 1,200 miles distant from Duluth at a point only about 450 miles north of the Tropic of Cancer.

In addition to the great size of the country and the variations in its climatic and geographical conditions, there are other salient features to which it is necessary to direct attention, such as the exceptional range of its natural resources, as illustrated by the vast and varied scope of its agricultural and grazing interests and the extent of its mineral wealth. Few, if any, countries are, indeed, economically more self-contained than is the United States, for, with the exception of coffee and tea, almost every primary commodity in wide consumption is produced within its own borders: cotton, maize, rice, sugar and tobacco, for instance, not less than mineral ores, coal, timber, wheat and beef. Its position as a food-exporting country is, it is true, changing and the migration of a considerable farming element into Canada in recent years may be significant of the approaching exhaustion of its supplies of virgin arable land of great fertility. But, with a population of about 92 millions, the country is still relatively in an early stage of development and is one of extraordinary natural wealth, still possessing, in

spite of the increasing concentration of capital, an exceptional range of opportunities for individual advancement.

The percentage of the occupied population of the United States engaged in agriculture (including forestry) was 35·64 in 1900, as compared with 12·66 in 1901 in the United Kingdom. The fact may also be noted, although under modern industrial conditions it is perhaps losing significance, and although the basis of comparison in the two countries is not identical, that while the proportion of urban to total population in the United States more than doubled from 1860 to 1900 (that of the United Kingdom only increasing some 50 per cent. during the same period), it was still only 33·1 per cent.* in 1900, as compared with 71·3 per cent. in 1901 for the United Kingdom.

One effect of the comparatively recent expansion of the country has been the degree in which development has followed and been affected by artificial means of transport. Ocean and lake ports and river towns are, it is true, still the great centres of population, but railway extension has had a dominating influence in determining the rate and, in many respects, the direction of development. As regards agricultural and grazing occupations, the effect of these essentially modern conditions has been of prime importance, and the steady movement westwards of the centres of these occupations, the concentration of them that has been facilitated, the increasing dependence of large urban areas upon remote centres of food production, and the weakening of the local sense of a healthy inter-action and inter-dependence of urban and rural life have followed with greater rapidity and in earlier stages of urban development than would have been possible in older countries.

Apart from characteristic features of the United States which are closely connected with physical conditions, the most important has still to be mentioned in the complexity of its population. During the century 1800–1900 the total population, both white and coloured, of the United States increased 1,332 per cent. as compared with 156 per cent. for the United Kingdom, the unparalleled immigration movement which in great part explains the high rate of increase in America emanating largely from the United Kingdom itself. Immigration has taken place on a large scale only subsequently to 1820, the total immigration from 1776 to the latter year being estimated at a quarter of a million, while from 1820 to 1910 the total gross immigration figure is returned at nearly 28 millions. As regards the countries of origin some indication of the way in which this great total has been made up is furnished by the following Table :—

Foreign Immigration into the United States, 1820–1910.

| Country of Origin.† | Total Number of Immigrants. | | Maximum in any one Year.‡ | Periods of most active Immigration. |
|-------------------------|-----------------------------|-------------------------------|---------------------------------|---|
| | 1820 to June, 1899. | July, 1899, to June, 1910. | | |
| United Kingdom ... | 6,852,944 | 913,252 | 272,740 (1851) | 1847–56 ; 1863–75 ; 1880–91 ; 1905–10. |
| Germany | 4,991,590 | 360,005 | 250,630 (1882) | 1846–58 ; 1866–74 ; 1880–93. |
| Austria-Hungary ... | 912,345 | 2,260,113 | 338,452 (1907) | 1890–3 ; 1896 ; 1899–1910. |
| Italy | 940,349 | 2,146,012 | 285,731 (1907) | 1882–3 ; 1887–8 ; 1890–3 ; 1896–1910. |
| Russia | 703,107 | 1,688,093 | 258,943 (1907) | 1887–96 ; 1899–1910. |
| Scandinavia | 1,407,931 | 536,475 | 105,326 (1882) | 1869–73 ; 1880–93 ; 1902–7. |
| All other Countries ... | 2,842,069 | 1,340,008 | — | — |
| Total | 18,650,335 | 9,243,958 | 1,285,349 (1907) | — |
| | 27,894,293 | | | |

The successive waves of immigration that have characterised the movement from Europe to the United States are indicated by the last column of the above Table, and the general features of the changes that have been taking place in this movement are also shown in the second and third columns by giving the figures separately for the eleven years 1899–1900 to 1909–10. The preponderating immigration during this period from Austria-Hungary, Italy and Russia, that is from South-Eastern and Eastern, as distinguished from Northern and Western Europe, is clearly brought out.

This change that has taken place in the character of American immigration is still active and the great number of Italian and Slavonic and other Eastern European peoples

* Cities of 8,000 inhabitants and over being regarded as urban in the United States. If the limit be lowered to 4,000 inhabitants the corresponding percentage would be 37·3.

† Cf. Appendix, p. 492.

‡ Calendar year 1851 and years ended June 30th, 1882 and 1907.

arriving in the United States during the year ending June 30th, 1910, is a marked feature of the official returns. During this year the figures for Italians, Southern and Northern, are 192,673 and 30,780 respectively, while those for Slavonic and other Eastern European peoples include Polish 128,348, Croatian and Slovenian 39,562, Greek 39,135, Magyar 27,302, Slovak 32,416, Ruthenian 27,907 and Lithuanian 22,714. The various Hebrew peoples, mainly from Russia, are returned at 84,260. During the year the total arrivals exceeded one million.

As regards the total white population, which numbered 66,809,196 in 1900, it is estimated by the Census Bureau that 31,853,060 were of foreign stock (*i.e.*, arrived or were the descendants of those who arrived in the United States subsequent to 1800); and that thus the native white stock, which was less than $4\frac{1}{2}$ millions in 1800, amounted in 1900 to about 35 millions. On this estimate the total white population in 1900 would have been divided between the descendants of persons living in the United States in 1800 and of persons who became inhabitants of the United States after 1800 up to 1900 in the proportion of about 110 : 100.

The large immigration of the years 1901-10, amounting to nearly 9 millions, but the net total of which is only about 6 millions, the crisis of 1907 and the ensuing depression having driven an unusually large number at least temporarily back to Europe, cannot appreciably alter the proportion of the native stock, and the figures quoted, especially when it is remembered how largely the native has been recruited from allied foreign stock, are sufficient to guard against an exaggerated estimate of the effects of an alien element which, after all, even in great towns where it is most concentrated and bulks largest, rarely predominates in the national life.

The most common custom, even in the case of those races which immigrate with a view to permanent settlement, is for the males to come in advance. To this general rule there is one important exception, namely, that of the Jews. In their case the intention that the new country is also to be the new home has been generally formed at an earlier stage, and with them the unit of arrival is more often the family. The relative fixity of this people is reflected in the large numbers of those who on arrival are complete strangers to the country, the percentage of those landing in 1908 who had been in the United States before being only 1·8, as compared with 8·3 per cent. of the Southern Italians (the only other race of immigrants numbering over 100,000 in 1908), and with 8·1 per cent. of all immigrant aliens. The year mentioned was one of industrial depression in the United States and was characterised by a considerable movement away from the country, to which reference has just been made. But the relative fixity of the Jews was again illustrated, and in a year in which no fewer than 167,000 Italians left, there were less than 8,000 Hebrew emigrants. Internally, and especially as between the graded localities of a great city, the Jewish family is apt to be one of its most mobile units, although, as the above figures show, forming as regards the country at large one of its more permanent factors—a factor, it may be noted, of great and of increasing importance.

The personal ties that the great wave of immigration of recent decades has established between potential immigrants and America are very far-reaching, and this fact is no less conspicuously illustrated in the case of the Jews than in that of any other people. Thus the immigration statistics for 1908 show that in that year no fewer than 93·3 per cent. of the Hebrews were admitted to the United States as going to join relatives and 4·8 per cent. to join friends, leaving only 1·9 per cent. going to join neither friend nor relative. The corresponding figures for the Southern Italians are equally striking, being 94·4, 4·2 and 1·4 per cent. respectively. Both sets of figures may be contrasted with those given for the Bulgarians and Servians as representing a more recent type of immigrant. In their case only 27·5 per cent. were classed as joining relatives, 59·3 per cent. friends and 13·2 per cent. neither. The percentage figures for the Southern Italians are especially significant, because they refer not merely to large aggregates, but also to a class that as a general rule ranks low in industry in the United States. The attractive economic force of the country is clearly shown.

The area of alien settlement in the United States lies chiefly above latitude 38° N. South of this line the coloured element in the more populous States is large, while the alien city element is mainly represented by comparatively small numbers in such industrial centres as Atlanta and Birmingham.

Recent figures of the localisation of the foreign element in the States are not available, but the main lines of movement are well defined. Conspicuous as regards almost every nationality are the capacities for absorption manifested by the chief centres of population—New York and Chicago; and in a lesser degree the attraction exercised for the Slavonic and other peoples by great fields of employment for unskilled labour, as in Pittsburg and its district; while minor movements are illustrated by the large

number of Canadians in New England and in towns not far removed from the borders of the Dominion and by the trend of Scandinavians west and north.

With more particular reference to the towns selected for the present enquiry, apart from New York and Chicago, it may be observed that immigrants from Great Britain and Ireland appear to be scattered over much the same areas, as, for instance, in the New England towns, in Pittsburg and the other towns of the Central group, though less markedly in Detroit, Newark and Paterson. The Irish element appears to be spreading further west in larger numbers, as to St. Louis, and is often relatively a much more important element than the English and Scottish.

This wide diffusion is true also of the Germans, who are found in much the same centres as the English and Irish, yet with a much smaller representation in New England. They are, however, a much more predominant element of the population in Milwaukee, Cincinnati, Louisville, St. Louis, Baltimore, Detroit and Cleveland than the British races, but everywhere tend like the latter to become merged in the American population.

The chief movement of the Scandinavians has been towards the Middle West and to towns such as Minneapolis, St. Paul and Duluth, while the Poles, always excluding the great centres such as New York and Chicago, are found in relatively large numbers in Milwaukee, Detroit and Pittsburg.

Italians and members of the Jewish community appear like the Germans to be very widely scattered, but the presence of a considerable colony of the former at New Orleans, and of smaller numbers in other Southern towns, is a feature that tends to differentiate the movements of this people from those of most other Europeans, and possibly indicates a trend that may have an important influence in the future on the industrial development of the South.

Many questions are raised by this large introduction of foreign peoples, such as the relative rate of natural increase which the new races, and especially the newer immigrants from South-Eastern and Eastern Europe, may display, as compared with that of the American stock; the degree of persistency in industrial and domestic habits that may be maintained; or, on the other hand, the possibility of fusion and its effects upon the future American type. Some of these questions are referred to in the reports on the separate towns, and they are mentioned here merely to indicate some of the further elements closely connected with the composition of the population, and especially with the sources of the large and complex external streams by which it is being recruited, which tend to differentiate the social and industrial conditions of the United States from those of the United Kingdom, and indeed of any single European country.

In the aggregate the immigration of white peoples, both fair whites and dark whites, has been the most important ethnological fact in the experience of the States during the last sixty or seventy years, but the most conspicuous aspect of the race problem is nevertheless found in the presence of a large native coloured population. This people now numbers some ten million, nine million roughly being in the South and one million scattered through the Northern States. The negro is thus mainly a Southern element and in the South he is chiefly a countryman. To a great extent, therefore, he is not a factor with which the present enquiry is directly concerned, and, save in Savannah, Augusta, Atlanta, Birmingham, New Orleans, Memphis, and in a less degree in St. Louis, Louisville and Baltimore, from the point of view of the enquiry the negro is everywhere, even in Philadelphia, one of the minor elements of city life.

As illustrating the continued and increasing concentration of the negro in the South, it may be mentioned that the "centre of population" for the coloured race, which in 1890 was in north-western Georgia, at a point about eighty miles to the north-west of Atlanta, had moved by 1900 11 miles to the south-west just across the State boundary into Alabama. The centre of negro population thus appears to be unaffected by the increase in the urban populations manifested by some of the northern towns.

Three general remarks may be made with regard to the negroes: (1) The progress made by large numbers of them, especially the mulattoes, in education, in industry, in the accumulation of property, in business and in the development of an organised and to a great extent independent industrial and social life, affords a striking manifestation of their receptiveness, of the power and resources of the white American environment and of the forces that have been and are being exercised in their behalf, either under the direction of the whites or under that of the coloured people themselves. To a great extent these forces are educational—notably, among special centres of education, at the Hampton Institute under the direction of Dr. Frissell; at Tuskegee under that of Dr. Booker T. Washington, or, on less industrial lines, at the coloured University of Atlanta, associated with the names of President Ware and Professor Du Bois.

(2) Combined with much friendliness and goodwill the colour line is in general maintained by the whites, the main difference as between North and South being that in

the South, where alone the negroes are found relatively in great numbers, it is accompanied by more formal manifestations and a more rigid social observance.

(3) Although a somewhat greater field of employment is open to the negro in the South than in the North, the industrial difficulty in the South is not so real. The European alien there is so far an exceptional element, and a different status as between white and coloured people is as a general rule accepted. In the North, while it is in general true that the industrial position of the coloured workman tends to be the easier the more the rates of wages which he claims approximate to those of the white man, mere numbers, and the strength of competition as determined by mere numbers, tend to create difficulties which cannot be overlooked. Thus there is a tendency for industrial exclusiveness to become more active as the suspicion spreads that anything of the nature of industrial rivalry may be threatened, and, as things are, the field of employment open to the coloured man, except in so far as he may serve his own community, is very restricted. The conclusion follows that although the mulatto, forming the more progressive section of the coloured people, is relatively far less common in the South than in the North, it is in the South that the greatest channels of successful industrial development on the part of the negro race apparently lie, always provided that there is no great diversion in that direction of immigrant peoples, especially of the "dark" whites, who might enter into more direct competition with the coloured race.

The various points that have been mentioned above indicate differences, some of which will have to be borne in mind even when internal conditions are being studied. A careful analysis of what is meant by "American" will be constantly required, and this analysis will be still more necessary when international comparisons are attempted.

It must be also noted, however, that in some respects and owing to various causes, notably to the great resources of the country, a mental attitude has been created that, in an indefinable but not less real way, appears to minimise even ethnological differences and to have resulted in an outlook that is industrially and even temperamentally "American." One effect of this is that international comparisons on the ordinary basis of earnings not infrequently tend to become inadequate, and that the larger and more difficult problem arises of comparing classes divided not merely by differences in respect of earnings but also by differences in the accepted standards of life.

In the first part of this General Report the results of the enquiry as regards wages and hours of labour, rents, prices and family expenditure on food in the United States will be reviewed, and in the second part an attempt will be made to compare these results with those arrived at in the United Kingdom. Specimens of forms used in the collection of data will be found in Appendix III. on pp. 499-507.

PART I.—REPORT ON CONDITIONS IN THE UNITED STATES.

WAGES.

For the purposes of the present enquiry a large amount of information with regard to wages and hours of labour has been obtained, mainly from individual employers, but including also many particulars received from public authorities and companies as to the rates paid to employes engaged in the public utility services. In some cases trade unions also furnished information as to what were regarded as current local rates, and simultaneously, both from employers and from other sources, much information was obtained on cognate industrial matters, including the different classes and nationalities of wage-earners employed, seasonal variations in employment, holidays, the methods of remuneration and the prevalence of collective or wages agreements. The industries and occupations concerning which particulars as to wages and hours of labour have been obtained have been those that are most widely distributed and those of chief local importance; the former being chosen mainly as affording a basis for internal and international comparisons; the latter as being best calculated to make the investigation of local industrial conditions adequate. The particulars contained in the reports on the various towns thus cover a wide range.

As in the case of the other branches of the enquiry, February, 1909, was taken as the period for which particulars of wages and hours were obtained, and employers were asked to give for the principal classes of adult male labour in their service the predominant earnings or the predominant range of earnings for a full ordinary week, without overtime. In the case of workmen not paid by time, the amount most frequently earned on some other basis—generally piece work—during an ordinary week was obtained.

In all, separate returns of wages and hours were obtained from about 1,300 representative employers, in some cases from those who had but a few wage-earners in their service; in others from the largest firms or companies, employing many thousands.

Collective agreements were found to be in effective operation in a considerable number of cases, and the furtherance of the practice of collective bargaining through the medium of the trade agreement is, it may be observed, one of the accepted principles of the National Civic Federation—an extensive organisation, representative of employers, wage-earners and the general public, that acts primarily as an instrument of industrial conciliation. Among the occupations in which collective agreements were found to be most generally adopted and in most effective operation were those in the brewing trades, in various sections of the building trades—a much more composite group than in England and Wales—and in the printing trades. Among other instances were those of garment workers, teamsters, bakers, the boot and shoe trade in Brockton, the cotton industry in Fall River and certain groups in the stove industry in Detroit. One of the most effective trade union organisations noted appears to have been that of the longshoremens at Duluth.

The sphere of collective agreements is wider than that of what is known as the “closed shop,” that is, centres of employment in which qualified trade unionists, if available, have a right to preferential employment. While shops “closed” under the above conditions to non-unionists are fairly common in a few trades, such as in breweries in Milwaukee, Chicago and Pittsburg; in various branches of the building trade in New York and Chicago; in the boot and shoe factories in Brockton; in newspaper printing offices in New York; and in the woodworking industry in Chicago, shops closed to known unionists are very exceptional.

In organised trades when the “open shop” is maintained—as is the more usual custom—deviation from the trade union rates of wages for the ordinary working day appears to be much less common than the non-recognition of certain other trade union conditions; for instance, as regards the payment of overtime rates and the allocation of work.

A distinctive feature of American trade unionism is the occasional use of the trade union label. This label, which takes, for instance, in the case of the printing trade, the form of a small imprint, and in that of the garment industry of a small stamped and separately numbered tape which is attached to the garment, is used to denote production by labour employed under approved trade union conditions. In those trades the products of which lend themselves to the use of some form of trade union label and in which collective agreements may exist, the latter generally cover a wider field than that through which, if adopted at all, the label itself runs, as in the printing trades and among garment workers—the former illustrating one of the more completely and the latter one of the less completely organised trades. In both of these cases the firms authorised, or desiring, to use the label form a small minority of the trades as a whole. The conditions formulated by two trade unions regarding the use of their label are included in Appendix I. on pp. 439–441.

The total number of trade unionists affiliated to the American Federation of Labour is estimated at about 1,600,000, and those unaffiliated, including the railway workers, at about 900,000, giving a total of trade unionists [of perhaps two-and-a-half millions. Correlative association on the employers’ side—sometimes on the part of individual and separate firms as in the case of the building trades, and sometimes accompanied by great concentrations of capital under single control as in the steel industry—has been mainly the growth of the last ten years.

“Welfare work,” by which is meant voluntary action taken by employers or by those acting on their behalf, is most often directed to the improvement of the conditions under which work is performed, or meals taken, or to the provision of fuller opportunities for the use of leisure. This movement is spreading and is accompanied sometimes by a willingness to make organised relationships with labour, should labour on its side be organised, effective and satisfactory, and sometimes by an unwillingness to enter into such relationships at all, the latter attitude not being necessarily accompanied by the adoption of any practices antipathetic to trade union organisation so far as the acceptance of trade union rates of wages are concerned, or by any desire to restrict the basis of recognised obligations, but to maintain for these a purely voluntary character.

The rough apportionment of the tasks of unskilled labour, on the one hand, to the immigrant classes, largely to those of more recent arrival, and on the other hand, to the coloured race, is a conspicuous feature of the situation, and the absorption in the ranks of the unskilled or semi-skilled of the greater portion of immigrant labour tends to leave skilled labour comparatively unaffected by the competition of foreigners. This fact, combined with the size, wealth and comparatively recent development of the country, tends to maintain the rates for skilled labour at their present high level. In some trades it may even tend to increase these rates, as in the

case of some skilled branches of the building trades that are stimulated by the demand for house accommodation created by the influx of a non-competing foreign element.

Certain special characteristics of the unskilled labour supply itself demand notice, especially the fact that, owing partly to the comparatively modern character of urban development in the United States, and partly to the large influx of labour that is physically sound and morally enterprising, the proportion of deteriorated labour unfit for employment is relatively small.

Further, as a consequence partly of the comparatively rapid industrial development of the country and partly of the scope of its resources, and acting in response to the opportunities which are offered, either in centres where urban industries may be more rapidly expanding, in agriculture or in mining, the mobility of labour is unusually great. In fields of employment that are well-known as centres towards which great numbers of foreigners drift; in which much of the labour is unskilled; in which organised relationships are almost absent; and in which the work is either especially laborious, as in iron and steel works, or especially intermittent, as at the stock yards and packing-houses of Chicago, the constantly changing stream of labour that passes through is a conspicuous feature of the situation. But, in general, there is an unusual degree of movement and restless change.

As regards agriculture, it is pertinent to observe that the recent advances in the prices of commodities have been largely, and so far as the cost of food is concerned mainly, connected with home agricultural produce. Agriculture itself has been increasingly prosperous and the demand for labour and the opportunities offering in this direction are of great importance in connexion with the general economic position of wage-earners, for, in spite of the urban developments of recent years and the expansion of its manufacturing industries, the United States is still primarily a great agricultural community.

Much information is contained in the reports on these separate towns concerning a great variety of occupations, and the foregoing points have been mentioned here because all possess a high degree of importance as affecting and in a measure determining the conditions of labour and the rates of wages which it is able to command.

In order to ascertain the level of wages in the towns investigated taken as a whole it became necessary to choose employments that were most generally distributed, and those that best answer this requirement are the building, engineering and printing trades. The predominant ranges of wages for an ordinary week in February, 1909, in the case of the engineering and printing trades, and for an ordinary week in summer in the case of the building trades, for the whole of the towns investigated, are given in the following Table:—

*Predominant Weekly Wages of Adult Males in certain Occupations in the United States in February, 1909.**

| Occupation. | Number of Towns to which the figures relate. | Predominant Range of Weekly Wages, February, 1909. | Number of Towns in which the Mean Predominant Wage for the given Occupation was | | |
|--|--|--|---|--|--|
| | | | Within the limits of the Predominant Range. | Below the limits of the Predominant Range. | Above the limits of the Predominant Range. |
| <i>Building Trades†:—</i> | | | | | |
| Bricklayers | 25 | 110s. to 125s. | 18 | 4 | 3 |
| Stonemasons | 25 | 96s. 3d. ,, 110s. | 15 | 5 | 5 |
| Stonecutters | 20 | 91s. 8d. ,, 103s. 2d. | 11 | 5 | 4 |
| Carpenters | 28 | 68s. 9d. ,, 90s. | 19 | 4 | 5 |
| Plasterers | 24 | 100s. ,, 119s. 2d. | 17 | 3 | 4 |
| Plumbers | 28 | 87s. 6d. ,, 112s. 6d. | 17 | 6 | 5 |
| Structural Iron Workers | 21 | 93s. 9d. ,, 112s. 6d. | 15 | 3 | 3 |
| Painters | 28 | 65s. ,, 85s. | 22 | 3 | 3 |
| Hod Carriers and Bricklayers' Labourers. | 18 | 50s. ,, 68s. 9d. | 14 | 2 | 2 |
| <i>Engineering Trades:—</i> | | | | | |
| Ironmoulders | 27 | 68s. 9d. to 81s. 3d. | 26 | 0 | 1 |
| Machinists (Fitters and Turners). | 28 | 63s. 4d. ,, 74s. 6d. | 16 | 6 | 6 |
| Blacksmiths | 24 | 67s. 8d. ,, 85s. 4d. | 14 | 5 | 5 |
| Patternmakers | 25 | 74s. 6d. ,, 91s. 8d. | 17 | 4 | 4 |
| Labourers | 22 | 37s. 6d. ,, 43s. 9d. | 15 | 4 | 3 |
| <i>Printing Trades:—</i> | | | | | |
| Hand Compositors (Job Work). | 28 | 68s. 9d. to 81s. 3d. | 21 | 3 | 4 |

* The wages of negroes have been excluded.

† The wages stated for the building trades are for a full week in summer.

Some comment is required in reference to the occupation "machinist." The term is one of wide application and is often applied indiscriminately to slightly skilled or handy men (receiving wages little in excess of those paid to labourers) and to highly skilled men. In the above Table and throughout this Report the word "machinist," without any further description, refers to the skilled man whose work is that of the fitter and turner in the United Kingdom. The sub-division of labour in the United States has proceeded on different lines from that in this country, and the distinction between fitters and turners is not generally recognised there. Owing, however, to the standardisation of much of the machine work in the United States there is considerable opportunity for minute subdivision of labour, and in certain towns there are large numbers of men on machine work who are able to perform efficiently perhaps only a single mechanical operation. By the adoption of this system of intense specialisation it has been possible for many of the greater engineering firms to introduce into their works large proportions of immigrants at a comparatively low rate of wages, and to effect a considerable saving in the cost of production.

The comparatively low wages of carpenters will be noticed, and this is a point worthy of remark, inasmuch as, owing to the prevalence of the frame house, the carpenter is a more important factor than the bricklayer in many of the towns of the United States.

In the above and the following Tables the wages or index numbers, unless otherwise stated, are for white men only. It may be observed that the omission of the rates for coloured men in arriving at the predominant figure in the preceding Table explains the small number of towns, viz. 18, to which the figures given for hod carriers and bricklayers' labourers relate. The Table below contains, however, the index numbers in the other ten towns in those cases in which either the whole or the majority of the labourers employed were coloured. The range of the index numbers for hod carriers and bricklayers' labourers is very wide, reaching from a maximum in St. Louis of 117 (taking New York as 100) to a minimum of 33 in Augusta. In view of such wide variations among the rates in only ten towns it is impossible to give a predominant figure applying to coloured labour alone, but it will be observed from the index numbers that the rates which they earn in the above occupations are, in most cases, fairly comparable with those paid to white men. In the case of engineering, in only six of the towns investigated were the labourers negroes, the six towns being those of the Southern group.

In the skilled branches of the building trades negroes are mostly apt to be bricklayers, plasterers, or carpenters, but nowhere outside the Southern towns were they found in any considerable numbers except in the ranks of unskilled labour, and, apart from the Southern towns, it is only in St. Louis, Louisville, Baltimore, and Philadelphia that they formed either the whole or an appreciable section of the hod carriers and labourers themselves.*

In the following Table the index numbers for the building, engineering and printing trades are given for each of the towns investigated, New York having been taken as 100 :—

Wages Index Numbers.

New York = 100.

| Town. | Building. | | Engineering. | | Printing. |
|----------------------|--------------|--|--------------|----------------------|------------------------------|
| | Skilled Men. | Hod Carriers and Bricklayers' Labourers. | Skilled Men. | Unskilled Labourers. | Hand Compositors (Job Work). |
| New York | 100 | 100 | 100 | 100 | 100 |
| New England Towns :— | | | | | |
| Boston | 91 | 77 | 81 | 102 | 90 |
| Brockton | 88 | 102 | 75 | 97 | 83 |
| Fall River | 83 | 64 | 80 | 85 | 76 |
| Lawrence | 76 | 82 | 78 | 104 | 71 |
| Lowell | 77 | 87 | 68 | 77 | 79 |
| Providence | 79 | 73 | 79 | 90 | 90 |

* An article in the *Southern Workman*, from which extracts have been printed in the Appendix (p. 492), gives some interesting particulars with regard to the general position of the negro as mechanic or artisan in northern towns of the United States.

| Town. | Building. | | Engineering. | | Printing. |
|-----------------------------|--------------|--|--------------|----------------------|------------------------------|
| | Skilled Men. | Hod Carriers and Bricklayers' Labourers. | Skilled Men. | Unskilled Labourers. | Hand Compositors (Job Work). |
| Other Eastern Towns :— | | | | | |
| Baltimore | 87 | 86* | 83 | 86 | 80 |
| Newark | 98 | 93 | 87 | 104 | 94 |
| Paterson | 91 | 73 | 80 | 82 | 86 |
| Philadelphia | 86 | 87* | 85 | 92 | 86 |
| Central Towns :— | | | | | |
| Cincinnati | 94 | 100 | 85 | 95 | 86 |
| Cleveland | 96 | 73 | 86 | 97 | 93 |
| Detroit | 81 | 64 | 80 | 101 | 83 |
| Louisville | 86 | 86* | 83 | 97 | 89 |
| Muncie | 83 | 80 | 81 | 97 | 77 |
| Pittsburg | 98 | 102 | 95 | 90 | 90 |
| Middle West Towns :— | | | | | |
| Chicago | 110 | 93 | 100 | 108 | 100 |
| Duluth | 103 | 98 | 95 | 113 | 95 |
| Milwaukee | 95 | 87 | 83 | 99 | 81 |
| Minneapolis—St. Paul | 97 | 74 | 88 | 109 | 89 |
| St. Louis | 108 | 117* | 89 | 97 | 87 |
| Southern Towns :— | | | | | |
| Atlanta | 79 | 45* | 87 | 70* | 86 |
| Augusta | 73 | 33* | 82 | 60* | 86 |
| Birmingham | 97 | 59* | 94 | 67* | 86 |
| Memphis | 105 | 80* | 96 | 85* | 90 |
| New Orleans | 94 | 87* | 94 | 104* | 90 |
| Savannah | 76 | 50* | 96 | 82* | 79 |

* Except where indicated by an asterisk the index numbers are based on the wages of white men, the asterisk denoting index numbers based on the wages of negroes.

The arrangement in geographical groups in the Table shows no marked and consistent variation as between those groups, with the exception of the towns of the Middle West, in which the index numbers for skilled men in the building trades and for unskilled labourers in the engineering trades are almost uniformly high and form the only trade groups, just as Chicago and Duluth are the only two towns, in which the mean of the five index numbers exceeds that of New York.

In the following Table the index numbers are given for the same trades for each of the geographical groups as a whole, wages in New York being again taken as 100. Index numbers based on wages paid to negroes are excluded from calculations of the group index numbers :—

Wages Index Numbers for Geographical Groups.

New York = 100.

| Geographical Group. | Number of Towns in Group. | Building. | | Engineering. | | Printing. |
|----------------------------|---------------------------|--------------|--|--------------|----------------------|------------------------------|
| | | Skilled Men. | Hod Carriers and Bricklayers' Labourers. | Skilled Men. | Unskilled Labourers. | Hand Compositors (Job Work). |
| New York | 1 | 100 | 100 | 100 | 100 | 100 |
| New England Towns | 6 | 82 | 81 | 77 | 93 | 82 |
| Other Eastern Towns | 4 | 91 | 83* | 84 | 91 | 87 |
| Central Towns | 6 | 90 | 84† | 85 | 96 | 86 |
| Middle West Towns | 5 | 103 | 88‡ | 91 | 105 | 90 |
| Southern Towns | 6 | 87 | — | 92 | — | 86 |

* Based on two towns.

† Based on five towns.

‡ Based on four towns.

Finally, the wages index numbers are given for the population groups as follows :—

Wages Index Numbers for Population Groups.

New York = 100.

| Population Group. | Number of Towns in Group. | Building. | | Engineering. | | Printing. |
|---|---------------------------|--------------|--|--------------|----------------------|------------------------------|
| | | Skilled Men. | Hod Carriers and Bricklayers' Labourers. | Skilled Men. | Unskilled Labourers. | Hand Compositors (Job Work). |
| New York (Population 4,766,883) ... | 1 | 100 | 100 | 100 | 100 | 100 |
| Other Towns with more than 500,000 inhabitants. | 8 | 97 | 84* | 88 | 98 | 89 |
| Towns with from 250,000 to 500,000 inhabitants. | 5 | 92 | 86† | 86 | 100† | 87 |
| Towns with from 100,000 to 250,000 inhabitants. | 8 | 87 | 74† | 83 | 86* | 85 |
| Towns with under 100,000 inhabitants | 6 | 83 | 91† | 85 | 103† | 82 |

* Based on five towns.

† Based on four towns.

It will be observed that, with one exception, the index numbers for skilled men fall in unbroken sequence with the size of the population group, while those for unskilled men are irregular. In no case, however, does the difference between any such group and New York exceed 26 per cent., and on the whole when it is remembered that the rates for New York, although it is by far the greatest port of arrival for immigrants in the whole country, are high, the extent to which the metropolitan range is approximated to and occasionally even exceeded, is more noticeable than the extent to which the ranges in other groups fall away. The figures appear to illustrate a wide diffusion of active industrial life and that great mobility of labour to which reference has been made.

HOURS OF LABOUR.

The hours of labour stated in this Report are, unless otherwise indicated, exclusive of intervals, and relate to a full ordinary week, without overtime. In the case of the building trades and the public utility services the hours were obtained for a full week in summer; in other cases they refer to February, 1909. In the following Table the length of the usual working week in the selected trades is shown :—

*Weekly Hours of Labour of Adult Males in certain Occupations in the United States in February, 1909.**

| Occupation. | Number of Towns to which the figures relate. | Number of Towns in which the usual Hours of Labour per Week (excluding intervals) were | | | | | | |
|--|--|--|----------------|----|----------------|----|----------------|----|
| | | 44 | From 44 to 48. | 48 | From 48 to 54. | 54 | From 54 to 60. | 60 |
| <i>Building Trades† :—</i> | | | | | | | | |
| Bricklayers | 25 | 11 | 2 | 12 | — | — | — | — |
| Stonemasons | 25 | 10 | 1 | 13 | — | 1 | — | — |
| Stonecutters | 20 | 10 | — | 10 | — | — | — | — |
| Carpenters | 28 | 8 | 3 | 12 | 3 | — | 1 | 1 |
| Plasterers | 24 | 12 | 2 | 8 | 1 | 1 | — | — |
| Plumbers | 28 | 9 | 2 | 12 | 2 | 2 | — | 1 |
| Structural Iron Workers ... | 21 | 6 | — | 9 | 1 | 4† | — | 1 |
| Painters | 28 | 8 | — | 17 | 1 | 1 | 1 | — |
| Hod Carriers and Bricklayers' Labourers. | 18 | 4 | 2 | 7 | 1 | 3 | — | 1 |
| <i>Engineering Trades :—</i> | | | | | | | | |
| Ironmoulders | 27 | — | — | — | — | 12 | 11 | 4 |
| Machinists (Fitters and Turners) | 28 | — | — | — | — | 9 | 16 | 3 |
| Blacksmiths | 24 | — | — | — | — | 8 | 13 | 3 |
| Patternmakers | 25 | — | — | — | — | 7 | 15 | 3 |
| Labourers | 22 | — | — | — | — | 4 | 16 | 2 |
| <i>Printing Trades :—</i> | | | | | | | | |
| Hand Compositors (Job Work) | 28 | — | — | 20 | 7 | 1 | — | — |

* The hours of labour of negroes have been excluded.

† The hours of labour stated for the building trades are for a full week in summer.

‡ Detroit, where the hours are 48 and 60, has been included here.

It will be observed that the predominant number of working hours per week in the building trades is from 44 to 48, in the engineering trades from 54 to 60, and among hand compositors on job work 48.

In the building trades the length of the working week is very rarely affected by season, the more usual effect, if any, being not the curtailment of the working day in winter—geographical position generally rendering this unnecessary—but, in the case of those who work more than 44 hours per week, some slight curtailment in the hottest summer months.

It was frequently found that additional time was worked on other week-days in order to obtain a half-holiday on Saturday, but the Saturday half-holiday customary in England, though it is common in the building trades, has not yet established itself generally in the United States.

HOUSING AND RENTS.

For the purposes of the enquiry returns of rents of dwellings in working-class occupation were obtained for February, 1909, mainly from real estate agents and from tenants. A large number of dwellings were also visited, so that first-hand knowledge might be obtained not only as to rents paid but as to the character of the accommodation, including such points as the number and dimensions of rooms and the conveniences provided, and in some measure as to the standard of the homes themselves. Much detailed information on these points is contained in the various town reports.

A great diversity of type is characteristic of the housing conditions in the various towns covered by the enquiry. The widest range of difference may perhaps be illustrated by, on the one hand, the large tenement house of several stories accommodating from two to four families on each floor, and on the other hand by the detached one-floor dwelling of the bungalow type for a single family. The individual types themselves often present very considerable diversity, exact repetition of the identical model being frequently avoided, especially in the towns in which detached and semi-detached houses predominate.

Although there is thus a marked absence of uniformity, the single-family house appears to stand out as the chief predominant type—indisputably in the Southern towns and, accompanied by more composite forms, in most of the others visited. The following are among the towns in which this type is most general:—Philadelphia, Baltimore, Pittsburg, Detroit, Louisville, Muncie and the Southern towns. The single-family house, although relatively less common, is also largely represented in Cleveland, Milwaukee, Minneapolis and St. Paul.

In some towns houses with self-contained dwellings or flats for two families, often on the ground and first floors, are numerous, as in the New England towns (including Boston), Brooklyn (N.Y.), Newark, Paterson, Cleveland, Pittsburg, Chicago, Milwaukee, Duluth, Minneapolis, St. Paul, St. Louis and Savannah. Again, a house designed for three families—an extension of the two-family house—is also often found, trenching in character at times, as does also the four-family house, upon the full tenement house type. The house for three families is perhaps most common in New England, including Boston, but is also found in Newark and Chicago; while houses occupied by three families are common wherever private dwellings have been frequently converted to multiple occupation. Houses containing four, five or six tenements are also common in New England, Cincinnati and Chicago.

Towns in which the large tenement house is a prevailing local type are rare, New York and Cincinnati being the chief instances, the tenement house districts in the former, however, especially as regards the borough of Manhattan, forming in this respect a class apart.

In many other towns the tenement house is found either in the form of a larger type of dwelling designed from the outset for multiple occupation, as frequently in the more central parts of Boston, or, more widely, of houses that were originally designed for the occupation of single families and, with or without suitable adaptation, have fallen into other uses. Almost every large town illustrates this transition, which is generally observable in or near older and more central districts that, still residential in character, have failed to maintain a past standard or, threatened with absorption in a business area, are themselves in a transitional and often in a neglected state. Baltimore, St. Louis, Boston and New York are among the towns that present illustrations of this phase.

The preceding classification gives but a slight indication of the various sub-divisions into which, as determined by age, structure, position, conveniences provided or size of rooms, each main division falls, the nominal types, as mentioned above, necessarily failing

in themselves to indicate the real character of the dwelling. A set of rooms, for instance, in a tenement house in the crowded neighbourhood of a large town, might often be more advantageous as a dwelling than one arranged for a single family in a suburban area, if the former was modern, with modern sanitation and appliances, and the latter old and insanitary, without sewer connexion or direct water supply. Such and allied difficulties arising from differences in the intrinsic value of dwellings, falling sometimes in the same and sometimes in different nominal categories, are, however, inherent in any study of housing conditions. They explain the attempts that are being occasionally made in the United States to arrive at some analytical enumeration of the points that constitute good housing, by consideration of which some approach to a standard of comparison may be arrived at. On the other hand, such a comparison not being available, and dwellings and often districts being among the elements of the social structure of towns that are in a constant state of change, the same difficulty of securing any true presentment of housing conditions that will lend itself to periodical comparison explains, in part, the paucity of official and non-official information that is available with regard to general housing conditions, either as regards rents, the predominant number of rooms per dwelling, or the other elements that help to determine the standard of accommodation provided. When detailed enquiries have been recently made they have nearly always, saving in New York City and Rhode Island, been restricted to special areas of deterioration presenting special problems.

The normal difficulties of standardising dwelling accommodation in the United States are increased by the special importance that attaches there to what is understood by "location," a quality that every town both in the Old and the New World exhibits in some measure, but one which assumes a distinctive character when segregation is apt to follow not only the more usual broad distinctions of class and income but also minor sub-divisions due to race and colour. In general, however, the rental differences due to these forms of segregation are less marked than the differences due to the character and general advantageousness of the dwellings themselves.

The most conspicuous illustration of this is found in the housing conditions of the negroes who, although as a class they generally have to pay somewhat more than the white man for identical accommodation, are found frequently paying a lower range of rent, not because the individual houses occupied by them are more moderately rented and really cheaper, but rather because those which they are able to secure rank often amongst the older, and, more uniformly, among the less desirable properties. Such conditions are illustrated, for instance, in Baltimore or Savannah. When, as in New York City, much the same class of dwellings are in coloured as in white occupation, a somewhat higher level of rent is generally paid by the former class of tenant, even in recognised coloured districts, and always in districts which are still predominantly white.

The nationalities most largely represented among immigrants into the United States in recent years are those among which, in general, the most unsatisfactory housing conditions prevail, partly because as a rule the level of earnings by the chief bread-winners is apt to be lowest; partly because of the numbers of those who come either in advance of their families or temporarily with the object of saving and returning to their native country, and who in both cases, either as "roomers" or boarders, are apt to trench unduly on normal family accommodation; and partly because the housing standards to which they have been accustomed in Europe have often been low. Illustrations of one or more of the various conditions mentioned are common and are found among, for instance, some of the Italian colonies in New York, Chicago and Boston, the Greeks in Lowell, and Poles, Lithuanians and other Slavonic peoples in Pittsburg and Chicago.

A distinct advance in the character of some of the foreign quarters, which tends to result from a longer period of residence, has been frequently noticed, as, for instance, among the Jewish peoples in certain districts in Boston, Philadelphia, Chicago and New York, among Italians in the first-named town and among Poles in Detroit.

In some cases the process of fusion appears almost to have reached completion—as among many of the Irish, the Germans and the Scandinavians. Instances of this are afforded by the absence, in spite of the great number of persons of German origin, of any pronounced German districts in New York or in Milwaukee, and nowhere is an "English" quarter mentioned.

In the tabulation of rentals, the elementary basis of comparison of dwellings afforded by the number of rooms has been necessarily adopted as in the earlier enquiries, although no general figures are available as to the total number of tenements of various sizes in the different towns. Thus, in the selection of rents most usually paid, although there was seldom much difficulty in determining which sizes of dwellings were locally predominant, statistics as to the relative numbers of these more usual types rarely existed.

In New York, Providence and Boston certain figures were indeed available, although in the case of New York they were not comprehensive and in that of Boston not recent.

With regard to the rents most usually paid in each town for dwellings of various sizes, the figures are given in the reports on the various towns and are also contained in the Detailed Statistical Tables on page 398. From the data given in that Appendix, which are based on the rent quotations obtained for over 90,000 working-class dwellings, the following Table has been prepared showing at once the predominant ranges of rents paid for dwellings occupied by wage-earning families in the towns visited, and the prevalence in those towns of dwellings of various sizes. The number of rentals found necessary in order to obtain true predominant rents for any single town ranged from a minimum of something over 600 to a maximum of something over 18,000, but the proportion to total population required and obtained varied considerably from town to town according to the extent to which a general uniformity of conditions was found to prevail over either the whole town or separate working-class areas, and also to some extent according to the organised activity and to the degree of competition prevailing in the local real-estate market. The results obtained for all the towns investigated (with the exception of Duluth, for which the basis of classification used did not lend itself to general tabulation) are embodied in the Table, in the compilation of which rents relating to dwellings occupied by coloured tenants have been excluded:—

Predominant Rents of Working-class Dwellings.

| Number of Rooms per Dwelling. | Number of Towns to which the figures relate. | Predominant Range of Weekly Rents. | Number of Towns in which the Mean Rent is | | |
|-------------------------------|--|------------------------------------|---|--|--|
| | | | Within the limits of the Predominant Range. | Below the limits of the Predominant Range. | Above the limits of the Predominant Range. |
| Three rooms | 18 | 6s. 9d. to 9s. 7d. | 11 | 3 | 4 |
| Four rooms | 27 | 8s. 8d. „ 12s. | 15 | 6 | 6 |
| Five rooms | 24 | 11s. 6d. „ 14s. 11d. | 15 | 5 | 4 |
| Six rooms | 19 | 13s. „ 17s. 4d. | 10 | 4 | 5 |

In the calculation of predominant rents the particulars obtained in connexion with the working-class budgets of family expenditure, which are considered in a later section, have not been used, but it may be observed that the average rent per room shown by the mean of the ranges given in the above Table corresponds almost exactly with the average rent per room for the various nationality groups (exclusive of the Negro groups) into which the budgets, which like the rent figures were obtained over the whole field of enquiry, have been sub-divided (*cf.* p. xlix.). The average rent per room thus given by the above Table is 2s. 7½d. as compared with 2s. 7¾d. as shown by the budgets, and a striking illustration of the general soundness of the above figures appears thus to have been incidentally furnished.

It appears from the Table and from the local particulars printed on page 398 that four-roomed dwellings are predominant types throughout the whole field of enquiry, and, saving in three cases, five-roomed tenements also. The cases in which the range for five rooms is not quoted include, however, Baltimore, a town in which the range of rentals is low and in which six-roomed dwellings form an important class. In the other two instances, namely, Cincinnati and St. Louis, the accommodation ascertained to be usual stops at four rooms, but in these two towns it begins at two rooms, and both, unlike Baltimore, are among the most highly rented places investigated. Cincinnati ranks with New York as one of the typically tenement-house towns, and in its case, as in that of the Metropolis, dwelling construction was largely determined in the past by limits practically imposed by physical conditions. In St. Louis, while rents nominally are relatively high and while demand there has been pressing closely upon supply, structures are more than usually substantial and rooms appear to be above the average in size.

In addition to St. Louis and Cincinnati, the only other towns in which, apart from the rentals paid by coloured tenants, quotations for two-roomed tenements are given as predominant types are Augusta, Boston and Pittsburg.

Although two-roomed dwellings are a predominant type in Augusta, this is explained there, not by the prevalence of a high local level of rentals, as in Cincinnati and St. Louis, but rather, as regards a considerable section of the community, by a low standard of dwelling. The large number of the “poor white” class of workers employed in the cotton mills and the inferior standard of the dwellings generally occupied by these, made unnecessary the rental distinction as between white and coloured, recognised in all the other Southern towns. In Pittsburg and Boston, on the other hand, rents are high and the two-roomed dwellings, in so far as they are in family occupation, are for the most part

taken up by foreigners, and to a considerable extent, especially in Pittsburg, by the poorer and more recent immigrants. In New York two-roomed tenements are local types, especially in the district known as the Lower East Side, rather than general, and for this reason rents have not been quoted for two-roomed tenements for the city as a whole. In Chicago also, the second largest town in America, but one of comparatively low rents, two-roomed tenements are not a common type.

Just as in general the quotation of the rentals of the smaller-sized tenements tends to indicate in the United States a high local level of rents, Augusta being an exception for the reason stated, the absence of such quotations has the opposite significance, and from this point of view the omission of rental quotations for three-roomed dwellings is especially noteworthy. In one-third of the towns the local predominant size of dwellings begins at four rooms, and in only one of these towns, viz., Brockton, where accommodation is of a high standard, and where there is a single staple industry in which high wages are paid, are rents also relatively high. Among the towns in which tenements with as few as three rooms are unusual, and in which the predominant rentals are low, Muncie, Lowell, Fall River, Detroit and Providence range in the order named among the most cheaply rented towns covered by the enquiry. The other towns in which figures for three-roomed dwellings do not appear are Newark, Milwaukee and Lawrence, the whole group being thus widely scattered but unrepresented in the South.

On the other hand the towns in which six rooms are not a predominant type are largely southern and include Augusta, Birmingham, Memphis and New Orleans. Eight towns are without quotations for this size of dwelling, and three of those not yet mentioned are New York, St. Louis and Cincinnati, these forming with Memphis and Pittsburg the most highly rented group of towns covered by the enquiry. In New York the six-roomed dwelling, like that of two rooms, is however a predominant type in certain localities, and for one of the boroughs, the Bronx, a predominant rent range of from 21s. 2d. to 25s. per week for dwellings of this size is quoted in the town report. The other town in which working-class dwellings of six rooms are not common is Louisville—a moderately rented town. Dwellings of more than six rooms are frequently occupied by wage-earning families in Cleveland, Philadelphia and Savannah, and the predominant rents in these cases are quoted in the reports on the separate towns.

As regards the rentals paid by coloured tenants, there were seven towns—the six southern towns and Louisville—in which it was specially desirable to obtain these, and in each case, with the exception of Augusta, separate predominant rents could be shown. In all seven towns coloured tenants were found frequently occupying two-roomed and three-roomed dwellings, but in only three cases were either single rooms or more than three rooms occupied in large numbers. Thus, general predominant figures for negro occupiers are available only in the case of two-roomed and three-roomed dwellings, and these range from 3s. 10d. to 5s. 9d. and from 5s. 9d. to 8s. 8d. per week respectively. A general comparison of the rents paid by negroes with those paid by whites is only possible in the case of three-roomed dwellings, and for this size the predominant rents paid by the latter in the same seven towns were from 6s. 9d. to 9s. 7d. per week, or on an average 13 per cent. higher than the rents paid by coloured tenants. This figure appears at first to conflict with the well-founded conclusion that negroes pay higher rents than whites, but since this applies only to equal accommodation the above comparison is in reality simply an indication of the lower standard of accommodation generally occupied by the coloured population. In every town there are many exceptions to this rule even among the wage-earning members of the negro community, and to some extent the prevalence of a lower standard, certainly as regards the dwelling and perhaps as regards the home, is explained by the fact that the better class of house is often not available for coloured tenants. This disability is, however, not without some compensating advantage to the coloured race, inasmuch as the more thrifty and the more enlightened among them are thereby not infrequently impelled to purchase their own dwellings.

Although everywhere the standard of the dwellings and the homes of the coloured people occasionally reaches or approximates to the highest local standard maintained by the working classes in general, usually the coloured standard is lower whether as reflected by the neighbourhood, by the dwelling or by the home. Like the recent immigrants in many northern towns, the coloured people in the southern towns are apt to be found in neighbourhoods which rank as the less desirable, be it owing to the development of the town and the localization of its industries, to the character of the dwellings or, as frequently happens in the case of low-lying sites, to physical conditions. Thus from various causes the most representative coloured districts in any given town are apt also to be among those that are least eligible, and the members of an already backward race are therefore often still further handicapped by an urban environment that makes neither for advancement nor even self-respect.

As regards the material of which dwellings generally are constructed, the most usual is wood, and though brick is tending to be more used, and, within the radius of the "fire zones," in many towns wooden erections are either forbidden or only sanctioned subject to special structural conditions, "frame" or wooden dwellings are still predominant. These present almost every variety of type, excepting that of the larger tenement house. Some are of a single story, and three stories are rarely exceeded. Brick or stone foundations, with or without cellars, are often found. Many houses, particularly in the South, are built on piles, generally of brick, and verandahs are common, also especially in the South. Whether old or new; for one family or several; wind-proof and well-protected or warped and draughty; equipped with modern appliances for heating and modern sanitary and other conveniences, or providing little besides shelter; whether elaborate in design or of primitive simplicity; and whether detached, semi-detached or, as is less usual, built in rows, the commonest external feature of the frame house, wherever found, is the overlapping weather-board.

The exceptions to the general rule that the frame building is the predominant type are usually explained by an abundant local supply of clay suitable for brickmaking; and thus, as regards every class of structure, Philadelphia, Baltimore and St. Louis are mainly brick-built towns. The size of the building unit has for many years had the same result in Manhattan (New York), this borough affording a contrast in this respect with that of Brooklyn, in which frame buildings are still very frequently found.

The standard of accommodation, using this expression in the most comprehensive sense, and not the material used in construction, primarily determines rental value, although, the standard of construction being equal, a frame house would tend to deteriorate more quickly than one built of brick. Thus, the general equivalence of rentals as between brick and frame houses is also partly explained by the usually shorter life of the latter type of dwelling, capital expenditure having to be recouped in fewer years.

Only in a very few towns was water found to be a separate charge to the tenant, and usually a direct supply in the dwelling is provided. The chief exceptions occur in the poorer districts of towns in which a direct supply may be the general rule, and in towns for which a general supply has been as yet only partially installed, as in New Orleans, Louisville and Duluth. Wells, collected rain-water supplies, or hydrants are in such cases the more usual substitutes. In general, the water supply in the towns of the United States may be said to illustrate a widely spread tendency to improve existing housing conditions. In matters affecting the health of the community, including the purity of its water supply and sanitation, administration, although often with much leeway to make up, is in general active and progressive, and the supply of water is itself one of the few public utilities that is almost universally in direct public control and ownership. In a town so vast and so new as Chicago, for instance, with considerable areas covered with an unsatisfactory type of dwelling, the municipal water connexion is almost universal, and water-closets are also nearly general there, though often not inside the dwellings.

As already indicated, the importance of the artificial heating of the dwelling differs greatly in different localities, but even in some southern towns, as in Birmingham, a good deal of coal for heating purposes is consumed. The most common methods of heating are the stove set forward in the kitchen, or, in tenements better equipped, a fixed range, the latter often with arrangements for a hot-water supply. In rooms other than the kitchen, when separate heating is required, ordinary open grates are not infrequent. In smaller dwellings, generally those for one or two families, hot air transmitted to the different rooms from a heater in the cellar appears to be becoming more common, and steam heat by means of radiators is supplied in a considerable number of larger and more modern dwellings. Fuel for heaters is a charge on the tenants, but in tenement houses, as in New York, when steam heat is provided, its cost has to be covered by the payment of a higher rental. Gas is used to some extent for heating purposes, and occasionally, as in Cleveland, natural gas is so used.

As regards housing accommodation in general, there is much evidence of an activity of competition among owners and builders and of a degree of material prosperity that are tending very widely to raise its standard. Thus, although the areas of deterioration and congestion frequently found and the occasional rapidity with which the character alike of buildings and of districts is apt to change for the worse in the racial kaleidoscope of American towns, militate against improvement, the general standard is being distinctly raised. Powerful influences to this end are found in the increasing facilities for transit, including nearly everywhere electric tramway systems, and in some cases in the construction of bridges and tunnels by which physical barriers of the past are being still further overcome. Of the power of these influences New York is itself perhaps at once the most important and the most striking example. But a more fundamental explanation of this improvement is found in the higher standard of demand that

follows from an increasing prosperity. The demand for improved housing itself is, indeed, a natural accompaniment of similar changes that are taking place as regards, for instance, amusements, clothing and food, in all of which a greater variety appears to be resulting from a vast and an increasingly effective demand. In other directions analogous changes are manifest, and just as mansions are becoming more splendid and middle-class homes more replete with comfort, so cottages and smaller homes are becoming more attractive and more convenient. Congested areas of crowded dwellings are, it is true, manifest and glaring exceptions to this rule, while the not infrequent practice of building more flimsily and the large number of dwellings still being erected for three or more families are opposed to it; but the general tendency, especially as regards the dwellings in the occupation of the more skilled workmen, is nevertheless towards a marked improvement.

The predominant rental figures contain an illustration of this tendency to which attention may be drawn, namely, the frequency with which the rental per room, instead of decreasing with the dwellings of larger size (as was found to be almost universally the rule in the corresponding enquiries made in the United Kingdom, Germany, France and Belgium) tends to increase slightly. The Table on page 398 affords several examples of this, as, for instance, in Chicago and Memphis. The new dwellings are apt to contain a larger number of rooms, and, since with newness more conveniences are commonly introduced, the occurrence of equivalent or even higher rentals per room for these larger tenements is explained.

As regards the dimensions of rooms great variations are found, but, on the whole, it would appear that the usual sizes of bedrooms are from 10 to 13 feet in length and from 8 to 12 feet in breadth, while living rooms and kitchens measure from 12 to 15 feet in length and from 10 to 14 feet in breadth. The usual height of rooms is from 8 to 10 feet, but in the Southern towns rooms often exceed 10 feet in height. Verandahs, most frequently along one side of the dwelling, often in effect increase, and pleasingly increase, the floor space available.

Although sites are often sufficiently spacious, gardens for flowers or even vegetables are rarely mentioned in the town reports, save among the Italians, an omission that probably finds a partial explanation in a strenuous industrial life, in a great mobility, and, perhaps even more, in a climate that in many parts is apt to run to extremes of heat and of cold, and thus to make the cultivation of the ordinary garden, as a permanent source of interest or pleasure, more difficult and less suitable than would be the case in a more temperate climate.

In the Table on page 398, the predominant ranges of rentals for the various towns are given separately, and in that on page xxii the predominant ranges for all towns together, and in order to supplement these Tables by a third comparing the rent levels of the various towns between themselves, the following method was adopted. The means of the limits of the predominant range of rents for each class of dwellings given in the Table above (page xxii), were taken as a base and the percentage ratios to these figures of the mean predominant rents in each town were worked out for those sizes of dwellings appearing in the Tables of general predominant ranges, the average of such ratios for any town giving an index number for that town as compared with the corresponding predominant level for all the towns investigated. The resultant index number for New York was then taken as a basis and the index numbers for the other towns were adjusted accordingly. In the following Table the index numbers so calculated are given, showing the relative level of rents in each of the towns investigated as compared with New York, the predominant rents in that town being taken as the base (= 100):—

Rents Index Numbers in Descending Order.
New York = 100.

| Town. | Index Number. | Town. | Index Number. | Town. | Index Number. |
|---|---------------|----------------------|---------------|-------------------|---------------|
| <i>Borough of Manhattan</i> (<i>New York</i>). | 109 | Birmingham | 81 | Lawrence | 64 |
| St. Louis | 101 | Philadelphia | 79 | Cleveland | 64 |
| New York | 100 | Newark | 78 | Paterson | 62 |
| Pittsburg | 94 | Minneapolis—St. Paul | 77 | Providence | 59 |
| Memphis | 93 | Atlanta | 76 | Augusta | 58 |
| Cincinnati | 93 | New Orleans | 72 | Detroit | 57 |
| <i>Borough of Brooklyn</i> (<i>New York</i>). | 88 | Savannah | 71 | Fall River | 55 |
| Brockton | 83 | Louisville | 71 | Baltimore | 54 |
| Boston | 82 | Chicago | 70 | Lowell | 52 |
| | | Milwaukee | 66 | Muncie | 44 |

It will be observed from the above Table that, while the index number for St. Louis is slightly higher than that for New York as a whole, the figure for the great borough of Manhattan, still often regarded as New York proper and still the centre of the most congested areas in the world, is 109, while that for the borough of Brooklyn is 88. Apart from St. Louis, Pittsburg (a rapidly growing industrial centre), Memphis (a city hardly less western than southern in temper and stage of development) and Cincinnati (still somewhat hampered in the development of its housing accommodation by physical conditions), also stand out as towns in which the range of rentals is relatively high. Brockton, the highest among the New England towns, is the centre of a staple industry in which wages and the standard of comfort are not only generally high but more approximately uniform than in most towns. Baltimore and Detroit, with index numbers respectively 46 and 43 per cent. lower than that for New York, are the most important towns included among the more cheaply rented, although the position of Cleveland, Milwaukee and Chicago is not far removed, with index numbers of 64, 66 and 70 respectively. Between New York and Detroit, which ranks as one of the "home cities*" of America, Philadelphia, which is best known by this title, occupies a middle position with an index number of 79.

Although wide differences are thus shown in rents as between town and town, the local variations, apart from the unique position occupied by New York itself, are much less marked when these are grouped in the areas as given on page ix, as the following Table shows:—

Rents Index Numbers for Geographical Groups.

New York = 100.

| Geographical Group. | Number of Towns in Group. | Mean Rents Index Number. |
|----------------------------|---------------------------|--------------------------|
| New York | 1 | 100 |
| New England Towns | 6 | 66 |
| Other Eastern Towns | 4 | 68 |
| Central Towns | 6 | 71 |
| Middle West Towns | 4 | 79 |
| Southern Towns | 6 | 75 |

The lowest index number is that for the New England group, 66, a figure to which that for the Other Eastern towns closely approximates. The six Central towns include Muncie, a small town in which industrial conditions, largely owing to the closing of steel rolling mills, had been recently depressed and in which rents in 1909 were exceptionally low in consequence. Omitting Muncie, the index number of the Central group is 76, or nearly as high as that for the Middle West, the towns in which, with a mean index number of 79, stand out as the most highly rented geographical group of all. The Southern group includes Memphis, a town that is largely dominated by the Western spirit and where rents are high. It differs in tone and character from the other five towns in this group and, excluding Memphis, the mean index number for dwellings in the occupation of whites for the remaining five Southern towns is 72, a figure which still seems a relatively high one for a part of the country in which the temperature is never low and in which shelter is perhaps equally important as a protection from heat as from cold. In these towns, however, homes are generally self-contained and sites relatively liberal, and there is practically no congestion, while the towns themselves are largely representative of the new industrial South.

In spite of the complex and often local causes that help to determine rent levels, when the towns are grouped on the basis of population a general conformity with the rule that the rents of large towns tend to be higher than those of smaller ones is shown, and in this respect the position is illustrated in the following Table:—

Rents Index Numbers for Population Groups.

New York = 100.

| Population Group. | Number of Towns in Group. | Mean Rents Index Number. |
|---|---------------------------|--------------------------|
| New York (Population 4,766,883) | 1 | 100 |
| Other Towns with more than 500,000 inhabitants | 8 | 78 |
| Towns with from 250,000 to 500,000 inhabitants | 5 | 73 |
| Towns with from 100,000 to 250,000 inhabitants | 8 | 69 |
| Towns with under 100,000 inhabitants | 5 | 64 |

* See p. 180.

The general provision of housing accommodation is commercial and often speculative in character, even in those cases where, as often happens on a large scale, dwellings are purchased by working-class owners. There is no municipal provision of dwellings, and the decision on record of the New York Tenement House Commission of 1900, that the proposal for the erection by the municipality of model tenement houses was "unsuited to the conditions which existed in America and especially in New York," and that "the functions of the Municipality might much better be exerted in other directions" appears in practice to have been endorsed widely and applied to all forms of dwelling-houses.

The provision of dwelling accommodation by employers also reaches small proportions, the few instances mentioned, sometimes of a past rather than a present phase, including Pittsburg, Fall River, Lawrence, Atlanta and the Birmingham district. Pullman City, now included in the boundaries of Chicago, has passed into private hands.

Neither are the cases in which housing accommodation has been provided by companies with a quasi-philanthropic object, more appropriate to city development than housing schemes initiated by employers, at all numerous. They were met with practically only in New York, Boston and Providence, and, of the various companies of this description, only the operations of the City and Suburban Homes Company of New York, by which something under a million pounds sterling has been invested in model tenement estates, are at all extensive. The records of the pioneer company formed in New York by Mr. A. T. White and of the Boston Co-operative Building Company are also noteworthy, and in this connexion the small Octavia Hill Association of Philadelphia, which exerts a reformatory influence by means of improvements and management rather than by actual construction, may also be mentioned.

The Census of 1900 gives particulars of the number of dwelling-houses owned by their occupiers either free or encumbered, and the combined percentages ranged at that date, so far as the towns covered by the enquiries are concerned, from a maximum of 39·1 in Detroit to a minimum of 12·1 in New York. In six cases the percentages exceeded 30, namely, in Detroit, as mentioned, with 39·1, 16·6 per cent. being encumbered, Cleveland with 37·4 per cent., 16·1 per cent. being encumbered, Milwaukee with 35·9 per cent., 19·4 per cent. being encumbered, Duluth with 35·7 per cent., 11·5 per cent. being encumbered, Brockton with 33·9 per cent., 23·1 per cent. being encumbered, and Muncie with 32·7 per cent., 14·8 per cent. being encumbered. In fourteen of the towns investigated the numbers of dwelling-houses owned by their occupiers, both free and encumbered, exceeded 20 per cent. and were under 30 per cent.; in eight towns, including five of the six southern towns with large proportions of their population coloured, the combined percentage fell below 20; the remaining three towns being Boston with 18·9 per cent., Fall River with 18·0 per cent., and New York, as mentioned, with 12·1 per cent. It must be observed that the above percentages refer to dwelling-houses of every kind irrespective of the class of occupier, and that it is impossible, therefore, to state to what extent the owners belonged to the wage-earning class. The chief methods by which purchases are arranged are either through the medium of building and loan associations or through the special facilities offered by builders and real estate companies. Building and loan associations are widely scattered throughout the country, and are especially numerous in Philadelphia, but the competing activities of builders and companies, with many variations on the general plan of a percentage payment of the price in cash with first and sometimes second mortgages, and sometimes on a simple plan of payment by monthly instalments, are still more general. As a rule ownership includes the freehold, but in Baltimore the buildings are frequently held alone, the ground rent being a separate and permanent charge. To a less extent a similar practice prevails in Fall River.

As regards foreigners, among those who appear to be the most active buyers of real estate are the Germans, Italians and Jews, but also the Poles in towns such as Detroit and Milwaukee, the Bohemians in Chicago, and the Scandinavians in Duluth and Minneapolis-St. Paul. The great effort made to become house-owners is frequently mentioned in the town reports, a special impulse to incur a present sacrifice being doubtless often found in the confidence with which a future rise in the value of the land is anticipated. When a customary local type of building is for the accommodation of more than a single family, the dwelling is still often purchased by small owners and one or more tenements, as the case may be, are then sub-let. This would be the usual and, indeed, under local conditions, the almost necessary practice in such towns as New York and even Boston, but sub-letting part of what is designed for the accommodation of a single family, or the introduction of a disproportionate number of lodgers and boarders, is also apt to follow on purchase, as among the Poles in Milwaukee. In general it may be observed that the practice of purchasing dwellings by wage-earners in the United States has assumed large

proportions ; that it is regarded as a satisfactory feature of the urban situation ; and that, in spite of the large transient element of the population, it is apparently increasing.

The main source of revenue for municipal expenditure in the United States is derived from taxation on real estate, and as compared with this source other receipts are, as a rule, individually insignificant and even in the aggregate rarely equal it in importance. In this respect Birmingham, among the towns investigated, is an exception, a State Law in Alabama prohibiting the town from levying a tax of more than one per cent. per annum on the assessed capital value of property. In this town, therefore, businesses and professions of all kinds are licensed : hairdressers, for instance, according to the number of their chairs ; banks according to their capital ; and lawyers according to their gross receipts. The licences in this town yield rather more than the ordinary property tax. In general, however, the reverse is the case, although licences of various kinds, including, as a rule, those for the sale of intoxicants, are always considerable sources of revenue. But, again, exceptions must be mentioned with regard to the liquor licence, the adoption of a prohibition policy in various cases eliminating this source of revenue and leading, as had happened in Birmingham from other causes before Alabama became a prohibition State, to a much more comprehensive plan of licensing than had been previously in force. Apart from such exceptional cases as those mentioned, the chief most general supplementary sources of revenue in addition to the real property tax, are personalty, from which working-class tenants are, as a rule, exempt, the liquor licences, water rents and receipts from public service companies and other minor concessions. In New York there is a special tax on bank shares, and in this city and a few others special assessments on property for local improvements are made. There appear to be no Federal grants to local authorities, while subsidies for schools seem to be the most important State assistance given in aid of current municipal expenditure. On the other hand the contribution to the Exchequers of the State and the County (the latter occasionally co-terminous with the town) to meet the comparatively small State and County charges are collected by the municipalities and transferred. Particulars concerning local taxation are contained in several of the town reports.

The tax on real estate is levied on varying bases of assessment, but the principle is always the same, namely, taxation on an assessed capital value and not on the annual rent. In some cases the assessed value taken as the basis of taxation approximates to the actual selling value and in such cases a lower nominal rate per cent. may indicate a higher rate of taxation than in other cases where, although the tax-rate is nominally higher, the basis of assessment is much below current market values.

In practice the percentage of assessed as compared with actual market value ranges from as low as 20 in exceptional cases to what is intended to be the full 100 per cent., and from 60 to 100 per cent. is the most usual basis of assessment. It follows, therefore, that any comparisons of the burden of the property tax as between town and town cannot be made adequately by simply comparing tax-rates. As regards the component parts of the assessed value, namely, the land and "improvements" (or buildings), no analysis is set out in many cases, but New York and Boston are illustrations of towns in which this division is made. In practically all small properties the whole tax, and, with few exceptions, the water dues also are paid by the owner, and working-class rentals are, therefore, as a general rule, subject to no additional direct charge whatever in the form of rate or tax.

RETAIL PRICES.

For the purposes of the enquiry, information as to the prices most usually paid by wage-earning families for a variety of commodities was obtained from representative shops frequented by working-class consumers in different districts of each town. In all, over 1,000 returns containing more than 17,000 quotations of prices at February, 1909, were obtained. From these quotations the predominant ranges for the various commodities throughout the entire field of enquiry are set out in the Table on the following page. Predominant figures for each town are given in the reports on the separate towns, and are also set out in tabular form on pages 399-403.

It will be observed that in the following summary Table the predominant price is expressed by a single amount in one case only—that of cheese ; the ranges quoted both in this Table and in the Tables given for the different towns constantly indicating that not any single figure but a series represents the prices most usually paid—a series to some extent reflecting differences in taste or in spending power of the purchasing classes. Both the general and the town predominant figures are thus necessarily composites, expressing, irrespectively of any possibly concealed differences of quality, simply the actual prices most usually paid. Broadly, an identical price may be assumed to secure an

approximately similar commodity, but sometimes, either as regards towns as a whole or even in quarters of a single town, when position, environment, the class of consumer, or other cause involves some special advantage or disadvantage on one side or the other, and thus a special strength or weakness in competition, the qualitative significance of the price equivalent may be weakened.

In the 28 towns as a whole, however, when the great differences in geographical position, in climate, in distance from the seaboard or from the centres of primary production, are considered, the degree of uniformity prevailing is noteworthy, and is a phenomenon clearly traceable in a great measure to highly organised markets, to an elaborate and efficient system of transport and, as regards certain of the commodities enumerated, to highly centralised wholesale sources of supply. As regards meat, refrigerating cars, and as regards meat, eggs and butter, cold storage conduce to the same end.

The following Table shows the predominant retail prices of certain principal articles of food and of coal and kerosene in February, 1909, for the 28 towns covered by the enquiry considered as a whole :—

Predominant Retail Prices in the United States of America in February, 1909.

| Commodity. | Number of Towns to which the figures relate. | Predominant Range of Retail Prices in February, 1909. | Number of Towns in which the Mean Predominant Price is | | |
|------------------------------------|--|---|--|--|--|
| | | | Within the limits of the Predominant Range. | Below the limits of the Predominant Range. | Above the limits of the Predominant Range. |
| Tea per lb. | 28 | 1s. 8d. to 2s. 3½d. | 19 | 4 | 5 |
| Coffee " | 28 | 10d. ,, 1s. 0½d. | 21 | 1 | 6 |
| Sugar :— | | | | | |
| White Granulated " | 28 | 2¾d., 3d. | 22 | 4 | 2 |
| Brown " | 27 | 2½d., 2¾d. | 21 | 3 | 3 |
| Bacon, Breakfast—Boneless " | 28 | 8½d. to 10d. | 21 | 4 | 3 |
| Eggs per 1s. | 28 | 9 ,, 11 | 19 | 5† | 4† |
| Cheese, American per lb. | 28 | 10d. | 16 | 11† | 1 |
| Butter " | 28 | 1s. 4d. to 1s. 5½d. | 21 | 5 | 2 |
| Potatoes, Irish per 7 lb. | 28 | 5¾d. ,, 8¼d. | 27 | 0 | 1 |
| Flour, Wheaten " | 28 | 11½d. ,, 1s. 1½d. | 26 | 2 | 0 |
| Bread, White per 4 lb. | 28 | 10¾d. ,, 11½d. | 22 | 4 | 2 |
| Milk per quart.* | 28 | 4¼d. ,, 4¾d. | 18 | 4 | 6 |
| Beef per lb. | 28 | 6d. ,, 8d. | 24 | 2 | 2 |
| Mutton or Lamb " | 28 | 6½d. ,, 8¼d. | 24 | 2 | 2 |
| Veal " | 28 | 7d. ,, 8½d. | 23 | 2 | 3 |
| Pork " | 28 | 5¾d. ,, 7¼d. | 24 | 0 | 4 |
| Coal :— | | | | | |
| Anthracite per cwt.* | 16 | 1s. 5½d. ,, 1s. 10½d.‡ | 12 | 2 | 2 |
| Bituminous " | 13 | 11¼d. ,, 1s. 1¼d.‡ | 7 | 3 | 3 |
| Kerosene per gallon.* | 28 | 5½d. ,, 9d. | 27 | 1 | 0 |

* English measure, both here and elsewhere throughout this Report.

† *i.e.*, 5 in which less than 9 eggs for 1s., and 4 in which more than 11 for 1s.

‡ In 10 of these 11 towns the predominant prices were 9d. and 10d.; 9¼d. occurred very seldom.

§ The prices relate to purchases by the ton. Smaller units are not sufficiently frequent to permit the establishment of a predominant range.

The price of *tea* shows a wide range in the different towns, from 1s. 0½d. as a lowest usual price up to 2s. 6d. as a highest. The former price is in no case the sole predominant, and appears in fact only as the lowest figure in the ranges quoted for Lowell and Providence, whereas 2s. 6d. is the actual predominant for Atlanta, Augusta, Cincinnati, Louisville and Muncie. It may probably be assumed, in view of the low price at which it is possible to purchase tea, that did this beverage enter more largely than it does into household consumption a lower general predominant would result than the figure actually quoted, 1s. 8d. to 2s. 3½d.; but an average weekly family consumption of from less than ¼ lb. to a little less than ½ lb. respectively in the lowest and highest income classes in the American-British budget (*see* p. 1), although this is a quantity considerably in excess of a general working-class average for the whole country, still leaves tea among the commodities that rank among the less important from the point of view of family expenditure.

In *coffee* the range in prices, both absolutely and relatively, is much less marked, never falling below 9d., this figure only appearing as the lower predominant price for Baltimore, and never exceeding 1s. 5½d., a maximum that is only reached in the higher

predominant figure in four of the New England towns—Boston, Brockton, Lawrence and Lowell. The predominant range of from 10*d.* to 1*s.* 0½*d.* is the actual predominant in Chicago, Cleveland, Duluth, Memphis, Milwaukee, Philadelphia, St. Louis and Savannah; while in seven cases, including Pittsburg, Cincinnati and New Orleans, 10*d.* is the most usual local price, and in five cases, including New York, it is 1*s.* 0½*d.*

The general uniformity prevailing in the price of *sugar* is a reflection of the extensive control exercised over this particular market by a single company. The predominant prices for white granulated, the kind that is in by far the most general use, are 2¾*d.* and 3*d.* per lb. Brown sugar, when purchased, appears to be often used in cooking and sometimes for making candy. Loaf sugar was still less frequently sold, and for this no predominant price can be quoted.

Bacon is not so extensively consumed as in this country, fresh pork taking relatively a more important place in the family dietary. The comparatively high range for bacon in Chicago—a great centre of its production—of from 9*d.* to 11*d.* per lb. is noticeable. The general predominant range is from 8½*d.* to 10*d.*

Eggs are consumed in America in great quantities, and in February, 1909, when new laid eggs were often very dear—quotations of, for instance, from 7 to 8 per shilling being certainly not above the ranges for that season of the year—storage eggs were those most generally consumed by the working classes. It may be observed that the normal effects of geographical position on price were found to be almost, if not quite, eliminated; the most usual price in Minneapolis—St. Paul, for instance, of from 10 to 12 storage eggs for a shilling, was exactly the same as that being paid in Brockton, Louisville, Memphis and Savannah; while the price of eggs at Duluth of from 8 to 12 for a shilling was identical with that for New York and somewhat lower than that for New Orleans, where 10 for a shilling was the maximum number as a rule procurable.

The *cheese* to which the price quoted in the above Table refers and which has been described throughout the town reports as “American cheese,” in order to distinguish it from cream cheese as understood in this country, is that known as “full cream,” by which is really meant full milk, that is, not skim milk. As will be observed, the most usual price of cheese of this description—10*d.* per lb.—shows great uniformity.

Butter, as in the case of cheese, is a commodity in which the usual prices paid are very regular, and geographical position, again owing to the combined agencies of cold storage and efficient transport, has no appreciable effect on the predominant range, which runs from 1*s.* 4*d.* to 1*s.* 5½*d.* per lb. The highest usual price quoted is included in the wide Pittsburg range of from 1*s.* 3*d.* to 1*s.* 8*d.* per lb., and the lowest is that of from 1*s.* 2*d.* to 1*s.* 4*d.* for Providence.

Potatoes are dear in the United States and the highest prices were quoted in the Southern group of towns (where, however, as compared with sweet potatoes they are of least importance) and in New York and Paterson. They were lowest in the towns of the Middle West, with the exception of St. Louis, in Baltimore, Cincinnati, Detroit and Pittsburg, and in the New England towns, other than Boston. In these 13 towns the extreme range was from 4¾*d.* to 7*d.* per 7 lb. and the predominant range was from 5½*d.* to 7*d.*, as compared with the general predominant of from 5¾*d.* to 8¼*d.* per 7 lb. In the town reports and on the enquiry form potatoes have been described as “Irish”—a recognized term in the United States distinguishing the ordinary “white” potato, wherever grown, from the “sweet” variety.

The brands of *wheaten flour* most usually consumed are western and the market is highly sensitive and highly centralised. The differences in the most usual prices are thus mainly explained partly by local preferences for particular brands and partly by geographical position, great distances from the wheat-growing areas sending prices for the same qualities slightly, but only slightly, upwards. In the group of Middle Western towns the highest usual price never exceeded 1*s.* 0½*d.* per 7 lb., which was approximate to the customary starting point for most of the New England and other Eastern towns, including New York. The general predominant price is from 11½*d.* to 1*s.* 1½*d.* per 7 lb. The most general unit by which wheaten flour was purchased by the working classes was the bag of 24½ lb. (one-eighth barrel). In some cases, however, it was stated that the bag contained only 24 lb., and it was not found possible to distinguish with certainty in which towns a 24-lb. bag was more usual. Accordingly the bag has been taken throughout at its nominal content, viz., 24½ lb., any resultant error being no greater than one farthing on a shilling.

As is clearly shown by the separate town reports *bread* is sold in great variety and ranges, from the big rough rye loaf, as retailed in Jewish quarters in New York at 1½*d.* per lb., and the “half rye” loaf of various sizes and prices, to the pure wheaten loaf.

This also is of many shapes and prices, but apart from the Italian communities, the predominant kind is that retailed at $2\frac{1}{2}d.$ per loaf. It is mainly on this loaf as being the size most generally sold that the predominant price is based. The loaf appears to be very rarely weighed at the time of sale, but, though ranking in a general way as a pound loaf, it fluctuates with the price of wheat and flour, and in February, 1909, generally weighed from 14 to 15 oz. Thus, in that month the predominant price was from $10\frac{3}{4}d.$ to $11\frac{1}{2}d.$ per 4 lb. In spite of a connexion that is manifest between the prices of bread and those of wheat and flour, the high price of the former has to be looked for mainly in circumstances attending the manufacture and distribution of the loaf: in the rate of wages paid; in establishment charges, including those of delivery and of advertisement; in the more frequent distribution through middlemen; and in the range of high total profits involved in the machinery of production and distribution.

It should be observed, however, that bread in the shape of the baker's loaf, like tea, enters relatively to a slight extent into the American working-class dietary and that consequently a high predominant price for bread to that extent loses much of the significance which it possesses in countries in which dietaries are less varied, and in which bread substitutes, either home baked or purchased, are less widely consumed.

The predominant price of *milk* is from $4\frac{1}{4}d.$ to $4\frac{3}{4}d.$ per quart, New York, Cincinnati and Milwaukee having a uniform price of $3\frac{1}{2}d.$, and the six Southern towns one of $6d.$ These were the extreme ranges shown; and among the remaining towns a general uniformity ruled. The importance of milk, on the one hand as a food and on the other as a possible source of infection, is being widely recognized and the town reports contain constant reference to the greater care that is being taken to ensure purity of supply.* To some extent climatic conditions explain this activity just as they help to explain the high predominant price in the Southern towns, since the high temperature reached during several months in the year requires exceptional care to keep milk wholesome. Thus a common municipal requirement is that retailers must keep milk in refrigerated vessels and the sale of milk in bottles was found to be frequent and occasionally compulsory.

Much *condensed milk* is sold, of many brands and in tins of various sizes, the most usual price being $5d.$ per tin, and the most usual gross weight being from 16 oz. to 18 oz., the tin generally weighing a little less than 2 oz. Thus the usual net price of condensed milk may be taken as from $5d.$ to $5\frac{3}{4}d.$ per lb.

There is a great general similarity in the method of cutting up *meat* throughout all the towns investigated, perhaps the most important difference as affecting the range of prices being the occasional inclusion of the fillet in the "sirloin" steak, as in Boston and a few other towns, the form of steak thus resulting corresponding to the porterhouse steak of New York and most other places.

Practically all the meat consumed is home-reared and the great majority of the towns derive the bulk of their supplies of beef, pork, mutton and lamb from Western sources of supply. Owing to the demand for dairy produce, especially milk, dairy farming is much more widely diffused and veal is thus apt to be derived more uniformly and to a greater degree from adjacent areas.

In the country at large veal appears to be the dearest description of meat sold and pork the cheapest, but all meats being alternative articles of consumption great divergence in price is prevented.

The prices for the various cuts in the different towns show a considerable range, but in a few cases, as in that of the chuck roast of beef or short ribs, the uniformity of price prevailing over the great field of enquiry is very noticeable. As regards the cut mentioned, in only three towns—Chicago, Cincinnati and Detroit—did the lowest usual price fall below $5d.$, and only once—at Atlanta—did the highest exceed $7d.$, the most usual maximum being $6\frac{1}{4}d.$ per lb.

General meat prices, as reflected in the index numbers, are highest in the New England towns, where the maximum of 10 per cent. above the New York level is reached at Brockton. New York being taken as 100, the mean of the index numbers for this group of towns is 104. The lowest general index number for meat is shown appropriately by Chicago, where, with the other articles of food for which quotations were obtained selling in general at New York prices, the index number of meat alone is lower than in New York by 20 per cent. In the Middle West towns as a whole, as also, with the exception

* See Appendix, pp. 474-487.

of Pittsburg, in the Central group, meat prices are appreciably lower than in New York, the mean of the index numbers for the former group being the lowest for all the groups at 86. Mutton or lamb—a clear distinction between the two as retailed cannot be drawn—is dear in the Southern towns, but even so the New York index number for meat as a whole is exceeded only by Atlanta, where it stands at 102. The general meat prices at New Orleans are rather low, but the mean index number for the whole Southern group is 96. Baltimore, known as a town that is favourably situated for the supplies of farm produce, has for meat prices the index number 92. Cincinnati, the centre of the pork-packing industry before it shifted westwards to Chicago and beyond, has a general meat index number of 86, and the average price of pork there still ranks among the lowest of all the towns, being grouped in this connexion with Chicago itself, Detroit, Duluth and Minneapolis-St. Paul. Detroit, which ranks as one of the favourably situated towns, has an index number 18 per cent. lower than New York. Only in eight cases is the New York index number for meat exceeded and five out of the eight are in New England, the others being Newark, Pittsburg and Atlanta.

The use of one or the other of the two kinds of *coal*, anthracite and bituminous, appears in the main to follow the geographical situation of the various towns. In most cases only one variety was in general use, viz., anthracite in New York and in all the New England and other Eastern towns investigated and bituminous in the Southern towns, in four of the six Central towns and in St. Louis. In the remaining towns—Chicago, Detroit, Duluth, Milwaukee, Minneapolis-St. Paul and Muncie—both kinds are consumed, anthracite predominating at Duluth and bituminous at Chicago and Muncie. When both kinds are in use the bituminous variety is generally utilised for cooking and anthracite for heating purposes.

The unit of sale varies, but in general the prices of a ton or a half-ton are those which give the local predominant prices, provision for the storage of such quantities being common. The ton itself is generally the short ton of 2,000 lb., but in Baltimore and Philadelphia the use of the long ton of 2,240 lb. is statutory.

Apart from the general differences in price due to kind, anthracite being on the whole roughly one-half to three-quarters dearer than bituminous, the chief differences in the local prices of coal are due to the existence of competitive sources of supply, to distances from the mining centres, and to the existing facilities of transport. The difference in the price of anthracite as between Philadelphia and the towns in Massachusetts (the latter being from 4*d.* to 6*d.* per cwt. in excess), for instance, probably finds its chief explanation in the differences in the cost of freight. In some cases the nearer sources of supply are of rather poor grade coal, as is illustrated by the bituminous variety consumed in St. Louis, where the lowest usual price recorded is from 7*d.* to 9*d.* per cwt., when sold by the ton of 2,000 lb. or by the half-ton. The price in Pittsburg, in close proximity to a coal-mining district, is slightly higher, viz., from 8*d.* to 9½*d.* per cwt., the unit of sale in this case being 50 bushels, or about 34 cwt.; that of Birmingham, near another coalfield, shows another advance to from 9¾*d.* to 1*s.* 0½*d.* per cwt. on sales by the ton, while the maximum for bituminous, when sold by the ton, is 1*s.* 6¼*d.* per cwt., returned by Savannah, where supplies are derived from somewhat distant fields in Tennessee and Alabama. The extremes of the usual prices paid in different towns show less marked variations for anthracite than for bituminous, and when the same size of coal is used there is probably less variation in quality. The predominant ranges per cwt., when the unit of sale is a ton, of the two classes of coal throughout the whole field of enquiry is, for anthracite in 16 towns in which it was generally used, from 1*s.* 5½*d.* to 1*s.* 10½*d.*, and for bituminous in 13 towns from 11¼*d.* to 1*s.* 1¼*d.* per cwt. Purchases in smaller quantities than the ton, such as 25 lb., 80 lb., or the quarter-ton, are not sufficiently specific, nor is the practice of making them sufficiently general to enable any other predominant prices to be stated than those given, although in the reports on the various towns much information is given concerning these smaller units of sale.

Finally, the wide range of the customary prices of *kerosene* must be mentioned—from 5½*d.* to 9*d.* per gallon. The market is one of the most highly centralised in the United States, but independent sources of supply are occasionally available and affect local prices. Apart from such influences and differences in quality, the main explanations of the wide range are the distance from the sources of supply and, retail prices being unregulated, the degree of keenness in competition manifested by local distributors.

Credit is widely given in the United States, a practice that is explained in part by the great extent to which wages are paid either monthly or semi-monthly. The double system of pricing—for “cash” and for “credit”—is, however, not prevalent.

With one important exception, the machinery of retail distribution in the United States is, in general, similar to that which is at the disposal of the working-class customer in this country. The individual shop; the "multiple" or "chain" shop; and the "department store" are all found, and as regards food supplies take this order in importance.

Among the peculiarities of retail trading that are specially noteworthy are the comparative scarcity of the separate baker and the extent to which bread is factory made and either delivered direct to the consumer or retailed by grocers; the modified extension of the department principle in some towns in the shape of stores that, dealing only in foods, sell all varieties—groceries, provisions, dairy produce, meat, bread, fruit and vegetables—and in these cases the comparative unimportance of the grocer and butcher as such; the slight extent to which the public retail market system has developed—Baltimore and New Orleans being the chief exceptions to this rule; and the shops catering especially for some particular immigrant race. Nevertheless, though all these features are interesting as throwing light on differences in national practice, they are either not important or not of first-rate importance as affecting retail prices, and thus the cost of living.

In the towns investigated there was, however, a practical absence of the distributive co-operative store, and in this respect, therefore, a really characteristic difference was found as between the distributive machinery of many English towns and that of the United States. There was a small new co-operative society in Duluth with about 200 members, and one formed by Germans in Lawrence, with 350 shareholders. The general absence of the machinery of co-operative distribution is of special interest, and some of the chief explanations of it lie on the surface, such as the higher general level of earnings maintained, which tends to weaken the attractiveness of co-operation when regarded merely as a means of thrift or saving; the more cosmopolitan character of the population, and its greater mobility and restlessness—each militating against both the spirit and the form of the co-operative movement; and, in general, the active competition maintained among retailers.

With a view to obtaining for each of the towns a general indication of the retail prices of food there as compared with the other towns, a series of index numbers has been constructed, the level of prices in New York being taken as the base (= 100). In order to allow for the varying importance of the different articles, as judged by the normal weekly consumption by a working-class family, recourse was had to "weighting," and for this purpose average quantities were estimated from the budgets of American-British (Northern) families, as being the group which is most suitable for the subsequent international comparison (*cf.* pp. xlv. and lxviii.), and of which the analysis is given on p. 1. The commodities chosen are those most generally consumed and at the same time most measurable.

The following are the quantities consumed weekly, per family, so estimated:—

| | | | |
|-----------------|-------------------|--------------------|------------------------|
| Tea | $\frac{1}{3}$ lb. | Flour, Wheaten ... | $10\frac{1}{4}$ lb. |
| Coffee | 1 " | Bread, White ... | $8\frac{1}{4}$ " |
| Sugar | $5\frac{1}{4}$ " | Milk | $5\frac{1}{3}$ quarts. |
| Bacon | $1\frac{3}{4}$ " | Beef | $6\frac{3}{4}$ lb. |
| Eggs | 22 " | Mutton or Lamb | $1\frac{1}{4}$ " |
| Cheese | $\frac{1}{2}$ lb. | Veal | $2\frac{3}{4}$ " |
| Butter | 2 " | Pork | $2\frac{1}{4}$ " |
| Potatoes | 21 " | | |

It will be noted that, owing to the basis of weighting adopted, the internal price comparisons as between the different towns that follow will not take account of any special characteristics of local consumption that may be shown by the American-British (Southern) group of budgets collected (*see* p. lxxxii.). Although in a few instances these local differences are considerable, this is rarely the case as regards commodities which it is possible to use for the purposes of these comparisons and which enter most largely into working-class dietaries. The most important instances of difference are potatoes, of which, according to the budgets, only half as much is consumed in the Southern as in the Northern towns; fresh milk, of which again less is consumed, the respective quantities being 3 quarts and $5\frac{1}{3}$ quarts weekly, and bacon and pork, of which more is consumed, the respective quantities being about 6 lb. as compared with 4 lb. weekly. On the other hand, considerably less mutton or lamb and veal are consumed in

the South, while the smaller consumption of Irish potatoes and fresh milk is accompanied by a considerably larger consumption of sweet potatoes and condensed milk. The average quantities consumed of tea, eggs, butter, white bread and beef show comparatively slight differences, the quantities being in these cases, however, somewhat greater in the Northern group of towns, while as regards coffee, sugar, cheese and wheaten flour, the differences again being slight, it is in the Southern group that the quantities are somewhat greater. On the whole, the difference in weighting that would have resulted had the quantities shown by the Southern group of budgets been included would have been almost negligible, save perhaps in the cases of potatoes and milk, and the position of the towns in the Table would have been unaltered.* It may be noted that nearly six times as many budgets are included in those of the Northern towns as compared with the Southern, and that the population in the former group of towns is about 17 times as great as that in the latter.

The comparative prices index numbers as based upon the quantities given in the enumeration above are shown in the following Table, the results to the nearest integer being given, and the towns with identical numbers being arranged in their fractional order :—

Food Prices Index Numbers in Descending Order.

New York = 100.

| Town. | Index Number. | Town. | Index Number. | Town. | Index Number. |
|-------------------|---------------|--------------------|---------------|----------------------|---------------|
| Atlanta | 109 | Fall River | 101 | Baltimore | 97 |
| Newark | 106 | Memphis | 101 | Philadelphia | 96 |
| Brockton | 106 | New Orleans | 100 | Duluth | 96 |
| Boston | 105 | New York | 100 | Minneapolis—St. Paul | 95 |
| Lawrence | 105 | Paterson | 100 | Chicago | 94 |
| Savannah | 104 | Cleveland | 99 | Milwaukee | 93 |
| Augusta | 103 | Louisville | 99 | Cincinnati | 92 |
| Birmingham | 102 | Muncie | 98 | Detroit | 91 |
| Pittsburg | 102 | St. Louis | 97 | | |
| Lowell | 102 | Providence | 97 | | |

It will be observed that the total range shown in the Table is from 91 to 109, and that within this range New York, which is taken as 100, thus occupies an exactly middle position. The New England and Southern groups have the highest index numbers, the first twelve towns in the Table with a mean of 104 being, with the exception of Newark and Pittsburg, entirely composed of towns included in one or the other of these

* The formation of a Table of quantities representing the normal weekly consumption by a working-class family drawn from all the budget nationality groups is less instructive and useful, and is complicated by the necessity of "weighting" according to the proportion that each group forms of the total population of the 28 towns investigated. The last official figures for this purpose, based on the country of birth, are moreover those of 1900, and it is well-known that the immigration of the last ten years has appreciably affected the composition of the population of some towns, especially in respect of the number of Italians (included in the South European budget group) and of the Slavonic peoples. It appears, however, that more than two-thirds of the population of the 28 towns investigated are either native-born American, British or Canadian.

Weighting the quantities of each of the budget groups according to the estimated population which would fall into each of such groups but excluding the Jewish and Negro budgets, the following alternative Table of quantities is obtained :—

| | | | | | |
|---------------|---------|-----------------------|---------|-----------------------|------------|
| Tea | 1 lb. | Cheese | 1/2 lb. | Milk | 5 1/3 qts. |
| Coffee | 1 " | Butter | 1 3/4 " | Beef | 6 1/2 lb. |
| Sugar | 5 " | Potatoes | 20 " | Mutton or Lamb | 1 1/4 " |
| Bacon | 1 2/3 " | Flour, Wheaten | 10 " | Veal | 1 " |
| Eggs | 22 " | Bread, White | 8 " | Pork | 2 1/2 " |

The quantities show but slight differences from the Table printed in the text and the characteristic differences that the group budgets themselves reveal are either cancelled or concealed. The prices index numbers for the various towns worked out on the basis of the alternative Table are almost unchanged. In four cases in which the index number is altered—Newark from 106 to 107, Boston from 105 to 106, New Orleans from 100 to 101, and Cincinnati from 92 to 91—the order of the towns as regards prices levels is unaltered. Fractional differences, however, invert the order of New York and Paterson and of St. Louis and Providence, though the index numbers for these towns are unchanged.

groups. Although such a general distribution of the higher ranges is observable, with the towns of the Middle West tending to form a group at the other end of the Table, the general uniformity displayed is more striking than are the differences. Thus, nine of the towns above the 100 level do not exceed 105; two towns besides New York itself are at the 100 point; and nine towns which are under 100 do not fall below 95. Exclusive of Atlanta (which has an index number of 109), the total difference over the whole area covered by the enquiry, in so far as it is reflected in the commodities included, is one of only 15 points.

In the following Table the food prices index numbers are given for the different geographical groups:—

Food Prices Index Numbers for Geographical Groups.

New York = 100.

| Geographical Group. | Number of Towns in Group. | Mean Index Numbers. | | |
|----------------------------|---------------------------|------------------------|-------|-----------|
| | | Food, other than Meat. | Meat. | All Food. |
| New York | 1 | 100 | 100 | 100 |
| New England Towns | 6 | 102 | 104 | 103 |
| Other Eastern Towns | 4 | 102 | 96 | 100 |
| Central Towns | 6 | 99 | 92 | 97 |
| Middle West Towns | 5 | 99 | 86 | 95 |
| Southern Towns | 6 | 106 | 96 | 103 |

Apart from the Southern group the range for food other than meat is very narrow, viz., from 99 to 102. In the Southern group itself, however, milk is the only article uniformly at a higher level than elsewhere, the usual price of 6*d.* per quart found to prevail in every town of this group exceeding by 1½*d.* the highest predominant figure for any other. The index numbers for meat and for all food in the different groups are in conformity with comments already made concerning the price levels of the constituent towns. When the towns are grouped by population, as in the following Table, no consistent variation thus determined is apparent:—

Food Prices Index Numbers for Population Groups.

New York = 100.

| Population Group. | Number of Towns in Group. | Mean Index Numbers. | | |
|--|---------------------------|------------------------|-------|-----------|
| | | Food, other than Meat. | Meat. | All Food. |
| New York (Population 4,766,883) | 1 | 100 | 100 | 100 |
| Other Towns with more than 500,000 inhabitants | 8 | 101 | 92 | 98 |
| Towns with from 250,000 to 500,000 inhabitants | 5 | 99 | 90 | 96 |
| Towns with from 100,000 to 250,000 inhabitants | 8 | 103 | 97 | 101 |
| Towns with under 100,000 inhabitants ... | 6 | 103 | 99 | 102 |

The two groups of least populous towns show the highest index numbers for food prices, the explanation being that ten out of the fourteen towns of which these two groups are formed are either in New England or the South, that is, they fall within one or other of the two geographical groups possessing the highest index numbers.

RENTS AND RETAIL FOOD PRICES COMBINED.

In the following Table the cost of food and rent in the various towns has been expressed by means of a combined index number, New York being taken as 100. In forming this index number allowance had to be made for the relative importance of the two forms of expenditure and this was determined by the general ratio in which these stood in the American-British (Northern) budget, namely as something under three to

one.* In forming the combined index number the nearest integers have been taken and a weight of three for food prices and one for rents has been therefore adopted :—

Combined Rents and Food Prices Index Numbers in Descending Order.

New York = 100.

| Town. | Index Number. | Town. | Index Number. | Town. | Index Number. |
|------------------------|---------------|----------------------|---------------|-------------------|---------------|
| Atlanta | 101 | Savannah | 96 | Cleveland | 90 |
| Brockton | 100 | Lawrence | 95 | Fall River | 90 |
| New York | 100 | New Orleans | 93 | Lowell | 90 |
| Pittsburg | 100 | Cincinnati | 92 | Chicago | 88 |
| Boston | 99 | Louisville | 92 | Providence | 88 |
| Memphis | 99 | Augusta | 92 | Baltimore | 86 |
| Newark | 99 | Philadelphia | 92 | Milwaukee | 86 |
| St. Louis | 98 | Minneapolis—St. Paul | 91 | Muncie | 85 |
| Birmingham | 97 | Paterson | 91 | Detroit | 83 |

In spite of the extra weight allowed for the prices of food, and although Atlanta heads the list both in the above Table and in that based on the relative prices index numbers given on page xxxiv, while Detroit with its combined advantages of low rents and low prices remains at the bottom in both cases, marked differences are nevertheless apparent in the order in which the towns appear in the two Tables. Thus three of the New England towns—Fall River, Lawrence and Lowell—in which the price level was high fall appreciably in the above Table, owing to the lower level of their rents, and a similar shifting of position due to the same cause takes place in the case of Augusta and Muncie. Movements in the opposite direction are also noteworthy, New York changing from the 14th to the 3rd place on the list ; Pittsburg from the 9th to the 4th ; Memphis from the 12th to the 6th ; St. Louis from the 19th to the 8th ; and Cincinnati from the 27th to the 13th place, this movement being explained by the relatively high level of rents prevailing in these towns.

In the following Table the index number combined as in the preceding Table is given for the geographical groups. The somewhat low ranges of food prices in the Central and Middle West towns place these two groups in a slightly more favourable position as compared with the other groups, but otherwise the Table calls for little comment :—

Combined Rents and Food Prices Index Numbers for Geographical Groups.

New York = 100.

| Geographical Group. | Number of Towns in Group. | Mean Index Numbers. | | |
|----------------------------|---------------------------|---------------------|--------------|---------------------------------|
| | | Rents. | Food Prices. | Rents and Food Prices combined. |
| New York | 1 | 100 | 100 | 100 |
| New England Towns | 6 | 66 | 103 | 94 |
| Other Eastern Towns | 4 | 68 | 100 | 92 |
| Central Towns | 6 | 71 | 97 | 90 |
| Middle West Towns | 5 | 79* | 95 | 91 |
| Southern Towns | 6 | 75 | 103 | 96 |

* Mean of index numbers for four towns, Duluth being excluded.

In the above Table, as in that which follows showing the combined rents and food prices index numbers for population groups, New York, owing to the relatively high rents, heads the list, although occupying a middle position in the Table on p. xxxiv, where its order is determined by price levels alone. With the exception of New York the range of the index numbers for rents and food prices combined—from 90 to 93—shows but little variation when the towns are grouped according to population. In the construction of the combined index numbers food prices have been again given a weight of three and rents a weight of one.

* The ratio is almost exactly the same whether regard is had to the budgets of New York only or to the budgets from the towns as a whole.

Combined Rents and Food Prices Index Numbers for Population Groups.

New York = 100.

| Population Group. | Number of Towns in Group. | Mean Index Numbers. | | |
|--|---------------------------|---------------------|--------------|---------------------------------|
| | | Rents. | Food Prices. | Rents and Food Prices combined. |
| New York (Population 4,766,883)... | 1 | 100 | 100 | 100 |
| Other Towns with more than 500,000 inhabitants ... | 8 | 78 | 98 | 93 |
| Towns with from 250,000 to 500,000 inhabitants ... | 5 | 73 | 96 | 90 |
| Towns with from 100,000 to 250,000 inhabitants ... | 8 | 69 | 101 | 93 |
| Towns with under 100,000 inhabitants ... | 6 | 64* | 102 | 93 |

* Mean of index numbers for five towns, Duluth being excluded.

RELATION OF WAGES TO RENTS AND RETAIL FOOD PRICES.

In the two following Tables the mean index numbers for the wages of skilled men in the building, engineering and printing trades, and for rents, food prices and rents and food prices combined, have, for convenience, been brought together for the various geographical divisions and population groups that have been already considered:—

| | Number of Towns in Group. | Mean Index Numbers. | | | | | |
|---|---------------------------|----------------------|--------------|-------------------------|------------------------|--------------|----------------------------------|
| | | Wages (Skilled Men). | | | Rents and Food Prices. | | |
| | | Building. | Engineering. | Printing (Compositors). | Rents. | Food Prices. | Rents and Food Prices Combined.† |
| <i>Comparison by Geographical Groups.</i> | | | | | | | |
| New York ... | 1 | 100 | 100 | 100 | 100 | 100 | 100 |
| New England Towns ... | 6 | 82 | 77 | 82 | 66 | 103 | 94 |
| Other Eastern Towns ... | 4 | 91 | 84 | 87 | 68 | 100 | 92 |
| Central Towns ... | 6 | 90 | 85 | 86 | 71 | 97 | 90 |
| Middle West Towns ... | 5 | 103 | 91 | 90 | 79 | 95 | 91 |
| Southern Towns ... | 6 | 87 | 92 | 86 | 75 | 103 | 96 |
| <i>Comparison by Population Groups.</i> | | | | | | | |
| New York (Population 4,766,883). | 1 | 100 | 100 | 100 | 100 | 100 | 100 |
| Other Towns with more than 500,000 inhabitants. | 8 | 97 | 88 | 89 | 78 | 98 | 93 |
| Towns with from 250,000 to 500,000 inhabitants. | 5 | 92 | 86 | 87 | 73 | 96 | 90 |
| Towns with from 100,000 to 250,000 inhabitants. | 8 | 87 | 83 | 85 | 69 | 101 | 93 |
| Towns with under 100,000 inhabitants. | 6 | 83 | 85 | 82 | 64 | 102 | 93 |

† In the construction of this index number food prices have been given a weight of three and rents a weight of one.

As shown above the figures call for no comment other than has already been made upon the various constituent parts of the Tables, but by combining the mean index numbers of the two main divisions of the Tables—industrial conditions as illustrated by selected wages groups and social conditions as illustrated by selected food prices and rents—it is possible to derive an index number that, so far as this is determined by the element of charges for rent and food, may be said roughly to indicate “real wages,” *i.e.*, the relative purchasing power of workpeople in the different areas and groups. Taking New York as 100 and working out the percentage ratios of the mean index

numbers for wages to those of the mean index numbers for rents and food prices combined, the result is shown in the following Table :—

| | Number of Towns in Group. | Mean Index Numbers. | | |
|---|---------------------------|--|---------------------------------|---|
| | | Wages of Skilled Men in Building, Engineering and Printing Trades. | Rents and Food Prices Combined. | Approximate relative level of "Real Wages." |
| <i>Comparison by Geographical Groups.</i> | | | | |
| New York | 1 | 100 | 100 | 100 |
| New England Towns | 6 | 80 | 94 | 85 |
| Other Eastern Towns | 4 | 87 | 92 | 95 |
| Central Towns | 6 | 87 | 90 | 97 |
| Middle West Towns | 5 | 95 | 91 | 104 |
| Southern Towns | 6 | 88 | 96 | 92 |
| <i>Comparison by Population Groups.</i> | | | | |
| New York (Population 4,766,883) | 1 | 100 | 100 | 100 |
| Other Towns with more than 500,000 inhabitants. | 8 | 91 | 93 | 98 |
| Towns with from 250,000 to 500,000 inhabitants. | 5 | 88 | 90 | 98 |
| Towns with from 100,000 to 250,000 inhabitants. | 8 | 85 | 93 | 91 |
| Towns with under 100,000 inhabitants ... | 6 | 83 | 93 | 89 |

In the population groups the order as determined by the wages index numbers is maintained throughout in the "real wages" column, although the differences from the New York standard are always diminished, the range being from 89 to 100 instead of from 83 to 100, and for the two largest groups of towns showing, as thus measured, no appreciable difference from New York.

In the geographical divisions the position as shown is somewhat different, the rather advantageous price levels of the towns of the Middle West combined with a high level of wages, especially in the building trades, giving an index number for "real wages," as calculated, 4 points higher than that for New York itself. On the other hand, the high prices of the New England group of towns combined with a lower level of wages in the selected trades give a level of "real wages" 15 per cent. lower than that of New York, and 7 points lower than the Southern group of towns—the group which ranks next above that of New England in the order of purchasing power as calculated in the Table. Apart from these two groups the difference from the New York standard does not exceed 5 points. It would be unwise to press the comparisons shown unduly, but the difference of 19 points shown as between the New England group and the towns of the Middle West is considerable, and may probably be taken as an indication of real differences that exist between a centre of industry, such as that of New England, that is now somewhat removed from the main centres of development, and one, such as that of the towns of the Middle West, that is comparatively new and able to benefit more immediately from the great natural resources of the country.

BUDGETS.

One of the most important as also one of the most intricate parts of the enquiry has consisted in the collection and tabulation of particulars as to weekly expenditure for food and rent incurred in wage-earning families. As in the preceding enquiries, the particulars sought were mainly confined to these items of domestic expenditure as being the most recurrent, the most likely to be furnished correctly, and the most pertinent to the main comparative object in view. The only other full particulars obtained were such as were necessary to throw light on the income and composition of the family, including in the last the occupation of the husband and the country of birth of both parents. The "extensive" method of collection, as being the only one practicable, was again adopted, and the attempt was made to obtain a body of returns that would be so far as possible

representative of the various towns covered by the enquiry. The sources through which the actual particulars were obtained were very varied, it being considered that by this means the risks either of bias or of an unbalanced selection would be best avoided. In a few instances in which an exceptional opportunity offered of obtaining returns from some special nationality it was used, even though with regard to the individual town the numbers obtained might be disproportionate.

It is perhaps in connexion with the standard of domestic expenditure that the term "American" is apt to become most ambiguous, not only because of the differences in local conditions due to climate or other natural causes to which reference has been made, but still more because of the racial complexity of the population of the United States. As regards industrial and social conditions the term is indeed regarded by many as being almost meaningless, and because meaningless, misleading. Vivid contrasts are thus apt to be drawn by way of illustration between, on the one hand, the low rate of earnings for unskilled labour, and the frequently low standard of life maintained by this or that class of immigrant, generally recent, or by most of the negro labourers of the South, and on the other hand the position maintained by some class of wage-earner predominantly American, as, for instance, by locomotive engine drivers, compositors or sundry skilled groups of the building trades. Such contrasts are very real, but it may be observed that they are the same in kind, perhaps even in degree, as those presented in older countries by the contrast often manifested there between the position of organised and efficient labour and that which is unorganised and inefficient. In the United Kingdom especially, but also in Germany, France and Belgium, the great mass of labour undifferentiated by any skill is mainly a home product. In the United States, on the other hand, it is mainly either alien or coloured, a more rapid industrial development and a greater range of opportunities for employment having led to the present mixture of races, and to that rough demarcation of different grades of employment between various peoples, native and alien, which is witnessed in the North and which, although not likely to be permanent, is a predominant feature of the situation of the moment.

In the South, generally speaking, a corresponding condition exists as between white and coloured, and one of the most serious questions connected with the position of the negro race is whether in future years the South will desire or be able to attract those European peoples by whom in the North many occupations have been already won from the negro, so far as the service of the vastly larger white community there is concerned, and among whom in the South he would find his most direct and most serious competitors.

Of the varying conditions affecting domestic expenditure to which reference has been made, physical as well as racial, some lie on the surface, such as the different climatic conditions of Duluth and New Orleans, while others are less manifest as, for instance, the differences existing between the conditions of many of the "poor whites" of the South, of newly-arrived Hungarians in Pittsburg, of well-established Scandinavians of the Middle West, or of the great and complex community of Russian Jews in New York, but all alike point to the necessity of some classification of the composite body of returns of household expenditure that has been collected for the enquiry.

Other illustrations of influences making for local or racial differentiation may be mentioned. Fuel, for instance, except for cooking purposes, and warm clothing are of relatively small importance in New Orleans and Savannah, whereas for several months of the year they are matters of prime necessity in Duluth, Boston and Chicago. Food consumption also is apt to be greatly affected both by climate and by race. In the South, for instance, vegetables grow in greater profusion and during a much greater part of the year than in the colder North, and, in spite of cold storage, towns so situated are thus far less dependent for their supplies upon transport. National habits and practices as regards the choice of food are also very tenacious of life, even when transferred to an entirely new country, and for some peoples in the United States the old home and its ways are kept in memory by fresh arrivals who tend to seek their compatriots in the new land. Language also, in spite of the schools and their effect upon the rising generations, is often a bond that tends to maintain the persistence of the national life. In industry, again, partly from a natural grouping of the workers and partly from the convenience that such grouping sometimes has for the employers, similar tendencies are often operative.

Thus for various reasons the budgets have been classified first on the basis of the declared nationality of the husband, although in the case of mixed marriages the importance of the wife in the *ménage* is often predominant, and again on broad geographical lines. It must, however, be borne in mind that many stages in the process of assimilation both of the first and of succeeding generations of immigrants to a national

type are represented, and that thus each ethnological group is itself more or less a composite. Moreover, it cannot be assumed that either as regards the stages of assimilation or in actual numbers the races represented are in their true relative proportions either in respect of the United States as a whole or of the towns investigated.

Although, however, differences exist in this composite national life that tend to blur the picture of the American type, to obscure the significance of the term itself and, for many, even to rob it of any meaning in connexion with industrial and social standards, it is nevertheless necessary to draw attention to the fact that even in relation to the alien peoples of the United States "American" speedily comes to have a meaning of its own. Were there nothing industrially and socially distinctive, the United States would, indeed, cease to exercise its attractive force, and in various ways, and, as regards the mere material standard of comfort, in forms that compare favourably with those that have been left behind, the "Americanisation" of immigrants is apt to begin almost from the moment of their landing.

Thus, although the industrial status of the bulk of Italians, Poles and other Slavonic and allied peoples, as also of the negroes, is different from and lower than that of the bulk of those who are regarded as the true Americans, it is equally true that as measured by the command of material comforts the position of the great bulk even of such races as those mentioned begins at once to be relatively "American" in standard. Even as regards the poorer industrial classes of the United States, as emphatically of the negroes, the term "American" is thus found to have a significance that, covering, it is true, great differences and wide ranges, still represents, even apart from all considerations of political and social environment, something that is not the less definable and real.

The various budgets obtained, numbering 8,080 in all, have been subjected to careful scrutiny, and of the total 464 have been rejected, on the score either of incompleteness, internal inconsistency or other causes. There thus remained 7,616 available for statistical purposes. Of these, 987 budgets were received from the New England group of towns as given on p. ix; 2,128 from the Other Eastern group, including New York; 1,908 from the six towns of the Central group; 1,576 from those of the Middle West, and 1,017 from the Southern group of towns. From budgets thus distributed the particulars contained in the following pages have been obtained.

The budgets comprise no fewer than 28 different nationalities represented in somewhat unequal and irregular proportions, and for the reasons stated, as well as for convenience of analysis, they have been divided into ten groups according to the declared country of birth of the head of the family. The number and percentage of budgets in each of these groups is shown in the following Table:—

I. *Classification of Budgets by Nationalities.*

| | Number of Budgets. | Percentage of Total. |
|---|--------------------|----------------------|
| A. <i>American - British</i> (including American, Irish, English, Scottish, Welsh and Canadian)— | | |
| (1) Northern | 3,215 | 42·2 |
| (2) Southern | 580 | 7·6 |
| (3) (American) Southern (broken families)* | 46 | 0·6 |
| B. <i>German</i> (including a few Dutch, Belgian and Swiss) | 906 | 11·9 |
| C. <i>Scandinavian</i> (including Swedes, Norwegians and Danes) | 335 | 4·4 |
| D. <i>South European</i> (including Italians, Greeks, Spaniards and Portuguese. A few French and Syrian budgets have been included here). | 599 | 7·9 |
| E. <i>Slavonic and allied peoples</i> (including Bohemians, Croats, Hungarians, Galicians, Poles, Lithuanians, Russians, Roumanians and Serbs). | 598 | 7·9 |
| F. <i>Jewish—from all countries</i> (chiefly Russia) | 758 | 9·9 |
| G. <i>Negro</i> — | | |
| (1) Northern Group | 303 | 4·0 |
| (2) Southern Group | 276 | 3·6 |
| Total | 7,616 | 100·0 |

* See page xliv.

The only exceptions to the basis of classification by nationality adopted in the above Table were 74 cases in which, although the head of the family was American-born, the

dietary was strongly characteristic of that of some foreign group. Thus 52 American-born of German extraction, 19 of Bohemian and 3 of Italian were classified respectively as German, Bohemian and Italian budgets.

By "Southern" budgets are to be understood those obtained from the following six towns, out of the 28 investigated:—Atlanta, Augusta, Birmingham, Memphis, New Orleans and Savannah.

In the case of those nationality groups which are not subdivided into Northern and Southern the number of Southern budgets was relatively unimportant and insufficient for independent statistical use.

The distribution of the budgets among the various industrial occupations is shown by the following Table:—

II.—*Classification of Budgets by Occupations.*

| Trade Group. | American-British. A. | German. B. | Scandinavian. C. | South European. D. | Slavonic and allied peoples. E. | Jewish. F. | Negro. G. | Total. |
|--|-------------------------|---------------|---------------------|-----------------------|------------------------------------|---------------|--------------|--------------|
| <i>Building Trades</i> | 627 | 127 | 107 | 55 | 55 | 82 | 94 | 1,147 |
| <i>Metal and Engineering Trades</i> | 875 | 207 | 60 | 52 | 202 | 64 | 46 | 1,506 |
| <i>Textile Trades</i> | 246 | 31 | 1 | 68 | 4 | 6 | 7 | 363 |
| <i>Clothing Trades</i> :— | | | | | | | | |
| Boots and Shoes | 122 | 12 | 13 | 32 | 8 | 35 | 6 | 228 |
| Tailoring | 30 | 20 | 12 | 40 | 53 | 246 | 5 | 406 |
| Hatters, Furriers, &c. ... | 21 | 10 | — | 7 | — | 41 | — | 79 |
| <i>Transport Trades</i> :— | | | | | | | | |
| Railways | 167 | 21 | 13 | 5 | 9 | — | 23 | 238 |
| Tramways and Omnibuses ... | 81 | 13 | 2 | 3 | 5 | 3 | 8 | 115 |
| Carters, Cabmen, Porters ... | 204 | 53 | 21 | 35 | 20 | 15 | 117 | 465 |
| Dock and Riverside Labour ... | 52 | 10 | 14 | 29 | 12 | 2 | 34 | 153 |
| <i>Printing and allied Trades</i> ... | 154 | 22 | 5 | 8 | 10 | 21 | 1 | 221 |
| <i>Food, Drink and Tobacco Trades</i> :— | | | | | | | | |
| Millers, Bakers, Grocers, &c. | 89 | 34 | 16 | 60 | 11 | 28 | 14 | 252 |
| Butchers and Meat Trade ... | 62 | 16 | 5 | 13 | 9 | 8 | 6 | 119 |
| Brewers, Distillers, &c. ... | 75 | 40 | 1 | 9 | 7 | 8 | 7 | 147 |
| Tobacco and Cigars | 34 | 26 | 1 | 3 | 4 | 42 | 1 | 111 |
| <i>Public Utility Services</i> | 149 | 22 | 12 | 31 | 4 | 5 | 26 | 249 |
| <i>Miscellaneous Specified Trades</i> | 386 | 124 | 18 | 40 | 73 | 83 | 81 | 805 |
| <i>General Labourers*</i> | 230 | 77 | 16 | 71 | 86 | 13 | 49 | 542 |
| <i>Occupations not stated or unclassifiable.</i> | 237 | 41 | 18 | 38 | 26 | 56 | 54 | 470 |
| Total | 3,841 | 906 | 335 | 599 | 598 | 758 | 579 | 7,616 |

* The term "labourer" in the United States is not infrequently used to designate an "assistant" or "helper," and many of these would therefore have been transferred to definite trades had the description been more complete.

In the next Table (III.) the proportional distribution of the budgets among the more important groups of occupations is shown for the seven principal nationality groups.

III.—*Percentage Proportion in which certain of the principal Groups of Trades are represented in each Nationality Group.*

| Trade Group. | American-British. A. | German. B. | Scandinavian. C. | South European. D. | Slavonic and allied peoples. E. | Jewish. F. | Negro. G. | Percentage of all budgets in each trade. |
|--|-------------------------|---------------|---------------------|-----------------------|------------------------------------|---------------|--------------|--|
| <i>Building Trades</i> | 16·3 | 14·0 | 31·9 | 9·2 | 9·2 | 10·8 | 16·2 | 15·1 |
| <i>Metal and Engineering Trades.</i> | 22·8 | 22·8 | 17·9 | 8·7 | 33·8 | 8·4 | 7·9 | 19·8 |
| <i>Textile Trades</i> | 6·4 | 3·4 | 0·3 | 11·4 | 0·7 | 0·8 | 1·2 | 4·8 |
| <i>Clothing Trades</i> | 4·5 | 4·6 | 7·4 | 13·2 | 10·2 | 42·5 | 1·9 | 9·4 |
| <i>Transport Trades</i> | 13·1 | 10·7 | 14·9 | 12·0 | 7·7 | 2·6 | 31·4 | 12·7 |
| <i>Printing and allied Trades</i> | 4·0 | 2·4 | 1·5 | 1·3 | 1·7 | 3·7 | — | 2·9 |
| <i>Food, Drink and Tobacco Trades.</i> | 6·8 | 12·8 | 6·9 | 14·2 | 5·2 | 11·3 | 4·8 | 8·3 |
| <i>General Labourers</i> | 6·0 | 8·5 | 4·8 | 11·9 | 14·4 | 1·7 | 8·5 | 7·1 |

The following notes will bring out more clearly the significance of the Tables II, and III.

In the *American-British Group (A)*, out of the total of 627 budgets falling to the building trades, 242 are of carpenters and joiners, a reflection of the large extent to which frame-house construction is still carried on in the United States, and out of 875 in the metal trades 463 are skilled men in the engineering trades—turners and fitters, &c.

Of the textile trades budgets over 60 per cent. are of weavers and spinners in the cotton, woollen and carpet trades, and of those in the clothing trades, 70 per cent. are engaged in boot and shoe making. The occupations connected with transport include 40 per cent. of "teamsters" and 33 per cent. connected with railways as drivers, conductors, &c. Practically half the cabinetmakers and upholsterers found among all the budgets and included in the miscellaneous specified trades are American or of British origin, as are about 60 per cent. of the coach and waggon builders and nearly the same proportion of leather workers and also of the public utility services employees. The whole group shows a marked tendency towards the more skilled trades and occupations.

The *German Group (B)* very closely resembles the American-British (A) in its distribution among the occupations, the textile and food, drink and tobacco trades showing the principal differences. In the former the percentage in the American-British group is double that in the German, and in the latter the position is nearly reversed. Out of 207 set down to the metal trades, 79 are machinists (fitters, turners, &c.), 53 steel workers and iron founders and 28 blacksmiths and boiler-makers.

The proportion of German budgets received from those engaged in the liquor trade, especially in breweries, is high, being about 34 per cent., or 27 per cent. of the whole number of budgets of all nationalities set down to brewing and distilling.

The *Scandinavian Group (C)* is made up of 231 Swedes, 96 Norwegians and 8 Danes. A feature of the occupations in this group of budgets is the fact that 107 or 31.9 per cent. of the total are engaged in the building trades; of these 68 are Swedes and 38 Norwegians, these 106 comprising 47 carpenters and joiners and 29 bricklayers and masons, mostly Swedes. Fourteen lumbermen have also been included here.

Out of 60 metal workers in this group, 44 are returned as machinists and fitters, and 7 are steel workers. In the textile trades the group is practically not represented. Out of 25 engaged in the clothing trades 21 are Swedes, and in the group classed under transport occupations out of 50, 37 are Swedes, chiefly carters and dock hands. Sixteen (10 Swedes and 6 Norwegians) come under the category of general labourers.

The *South European Group (D)* is made up as follows: Italians 468, Greeks 41, Portuguese 40, and Spaniards 3. 26 French budgets and 21 Syrian have been also included here.

The budgets of some of the smaller nationalities are not evenly distributed, the bulk being as a rule confined to one particular occupation, 29 of the Greek out of 41, and 17 of the Syrian out of 21, for instance, being those of textile workers. The Italian budgets are more or less evenly distributed. In the building trades out of 47 Italian budgets, 27 are those of bricklayers and plasterers. Of 48 in the metal trades 13 are those of steel workers, and 20 those of persons working in the engineering and allied trades. 26 boot and shoe makers and 39 tailors account for most of the budgets classified under the clothing trades. The various occupations connected with transport absorb 57 of the budgets, of which more than half are those of carters and porters, while 18 come under dock and riverside labour. The food, drink and tobacco group is largely represented—there being 53 budgets from millers, bakers, confectioners, &c., or 21 per cent. of the total of the budgets of all nationalities represented engaged in these trades. The number of Italian budgets classified under general labour is 66 or 14 per cent. of all the Italian returns.

The Italian gang-labourer and navvy in the United States of America is often either single, or if married has left his wife in his native land, and therefore does not come within the purview of this division of the enquiry, which relates only to workpeople with families.

The *Slavonic and allied peoples Group (E)* is made up of 9 separate nationalities, the principal of which are Poles (199), Bohemians (144), Hungarians (84), Russians (61), Croats (52), Galicians (32) and Lithuanians (22).

The Russians and Galicians form 15.5 per cent. of the whole. The budgets present this characteristic in their occupations, that 63 out of a total of 93 or 68 per cent. are those of steel workers, quarry or general labourers and that the number of those received from really skilled workers amongst the remainder is very small.

Of the other members of the group, 505 in all, 118 or about 23 per cent. were either steel works labourers or general labourers.

In the building trades, all the returns for bricklayers and masons are those of either Poles or Bohemians, and in the other branches the majority are Bohemians.

In the metal trades, the budgets of furnacemen and steel workers are made up of 29 Poles, 15 Bohemians, 15 Hungarians, 13 Galicians, 12 Russians and 8 Croats. The returns for moulders are nearly all of Poles. 22 Bohemians, 10 Croats and 10 Poles make up the bulk of the returns from engineering operatives. The textile trades are almost unrepresented. In the clothing trades group the budgets of 18 Bohemian, 20 Lithuanian and 10 Polish tailors are included. In the occupations connected with transport the number of returns in each sub-division is in about the same proportion as in most of the other national groups. The budgets from Poles predominate, furnishing 22 out of the total of 46. Cabinetmaking is represented by 10 Bohemian and 11 Polish budgets.

The food, drink and tobacco trades are not very strongly represented. Out of a total of 31 budgets, 13 are from Poles, 9 from Bohemians and 7 from Hungarians. The group of budgets of general labourers is made up of 7 Bohemian, 13 Croat, 13 Galician, 6 Hungarian, 30 Polish and 16 Russian.

In the *Jewish Group (F)*, by far the greater proportion of the budgets are provided by natives of Russia (chiefly of Southern Russia); Poland, Germany, Austria and Roumania supply nearly all the rest. Out of 82 engaged in the building trades 29 are plumbers, painters or paperhangers, 31 are carpenters and joiners and 10 bricklayers or masons. In the metal trades the percentage of budgets received from Jews is low and nearly half of them are operatives in engineering works, such as fitters, &c. There are 6 steel workers. Twenty-three per cent. of all the silversmiths, &c., found among the budgets are Jews. In the textile trades budgets the Jew is as little represented as the negro, but in those classed under the clothing trades his preponderance is overwhelming—35 boot and shoe makers, 246 tailors and 41 others, nearly all furriers, making a total of 322 in one group alone, so that 42.5 per cent. of all the Jewish budgets belong to this group of trades, and 45 per cent. of the budgets of all nationalities classed under the clothing trade are Jewish.

In the occupations connected with transport the Jewish budgets number 20, and 15 of these are of carters or "expressmen." In printing and bookbinding the proportion of Jews represented in the budgets is very little below that of the Americans and British. Cabinetmaking is also fairly well represented.

The food, drink and tobacco group of occupations contains 86 Jews, just half of whom are tobacco workers, mostly cigar hands; the proportion of Jewish leather workers in the budgets is also rather high. Only 13 out of a total of 758, or 1.7 per cent. of the total, are placed in the category of general labourers.

About half the budgets of *Negroes (group G)* returned as engaged in the building trades are of bricklayers or masons or their labourers, very largely of the latter. Out of 46 returns from negroes set down to the metal trades 23 are of blastfurnacemen and steel works labourers. The small number of negro budgets representing the textile trades are all those of labourers attached and in the clothing trades those of cobblers and tailors. Two-thirds of the returns classified under the transport trades are of carters or porters, and it is noticeable that 31.4 per cent. of the whole of the negro budgets belong to this group of occupations.

The next Table shows, for the several nationality groups, the number of budgets in each income class, beginning with a total family income of less than £2 and proceeding by increments of £1 to a weekly income of £8 and above. Trial was made of a more extended classification with smaller increments, but it was apparent that the unwieldiness of the resulting Tables would have defeated rather than assisted the object in view. No useful group under 35s. could be formed, and "under £2" was therefore taken as the starting point. In this lowest class, apart from the "broken families," the average family incomes range from 33s. 6½d. in the case of the Southern negroes, with average earnings of the husband at 29s. 2½d., to 37s. 5½d. in the case of the Northern negroes, with average earnings of the husband at 29s. 3½d. In both cases the average earnings of the husbands are the lowest and those of the wives (3s. 7d. and 5s. 7d. per week respectively) the highest, the latter figures being an indication of the extent to which negro women,

who very rarely live in the homes of their employers, are occupied in domestic service. In the Jewish budgets this class "under £2" is but little represented, and there are no Scandinavian budgets in this class.

IV.—*Number of Budgets in each Income Class by Nationality Groups.*

| Nationality. | Limits of Weekly Family Income. | | | | | | | | |
|---|---------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|--------------|--------------|
| | Under £2. | £2 and under £3. | £3 and under £4. | £4 and under £5. | £5 and under £6. | £6 and under £7. | £7 and under £8. | £8 and over. | All Incomes. |
| A. American-British: | | | | | | | | | |
| (1.) Northern | 67 | 532 | 1,036 | 545 | 437 | 224 | 131 | 243 | 3,215 |
| (2.) Southern | 32 | 116 | 131 | 109 | 80 | 42 | 27 | 43 | 580 |
| (3.) American (Southern) (broken families). | 13 | 7 | 12 | 9 | 4 | 1 | — | — | 46 |
| B. German | 15 | 163 | 246 | 167 | 123 | 60 | 43 | 89 | 906 |
| C. Scandinavian | — | 35 | 89 | 73 | 61 | 28 | 17 | 32 | 335 |
| D. South European | 60 | 195 | 151 | 73 | 50 | 29 | 15 | 26 | 599 |
| E. Slavonic and allied peoples ... | 35 | 182 | 162 | 82 | 59 | 33 | 20 | 25 | 598 |
| F. Jewish | 5 | 119 | 242 | 148 | 88 | 57 | 36 | 63 | 758 |
| G. Negro: | | | | | | | | | |
| (1.) Northern Group | 14 | 115 | 96 | 39 | 20 | 13 | 4 | 2 | 303 |
| (2.) Southern Group | 52 | 90 | 50 | 28 | 18 | 12 | 5 | 21 | 276 |
| Total (All Nationalities) ... | 293 | 1,554 | 2,215 | 1,273 | 940 | 499 | 298 | 544 | 7,616 |
| Percentage of Total... .. | 3·9 | 20·4 | 29·0 | 16·7 | 12·3 | 6·6 | 3·9 | 7·2 | 100·0 |

It will be noticed that the largest group of budgets (29 per cent. of the whole) is that showing an income of £3 but not exceeding £4 a week, and that 66·1 per cent. of the families have a weekly income of £2 but less than £5, and 82·3 per cent. one of under £6 per week.

Forty-six of the American (Southern) budgets in which the family unit was incomplete, with, *e.g.*, husbands sick or dead and elder sons acting as heads of families, have been treated separately (as examples of "broken families"). The lowest income group, under £2 per week, comprising less than 4 per cent. of the budgets, largely represents general and undefined labour.

The detailed examination of the various composite budgets formed by racial grouping, to which reference has been made in the foregoing pages, would hardly be in conformity with the main comparative objects of the present enquiry, and would, moreover, tend to overweight this General Report with detail. It has been necessary, therefore, to select from among the ten composite budgets the one that, as possessing the greatest completeness and relevancy, would lend itself most usefully to analysis. It is evident that the budget marked out for this purpose, both on account of its wider statistical basis and because of the nationalities of which it is composed, is that of the American-British (Northern) group (A. 1). In the following pages, therefore, the contents of this budget are set out and commented upon with some degree of fulness.

In the following Table (V.) the general results of this composite American-British (Northern) Group budget are summarised by income classes, and corresponding Tables for the remaining nine nationality groups—American-British (Southern) Group; the small American (Southern) Group of broken families; German; Scandinavian; South European; Slavonic and allied peoples; Jewish; and Negro (Northern and Southern) Groups—are included in the Appendix to this General Report (pp. lxxxii-xc). Brief supplementary notes have been added in each case. In addition, the detailed Tables of expenditure on food, and, so far as possible, of quantities consumed, relating to these nine groups, are given in the Detailed Statistical Tables (pp. 404-421).

An examination of the various composite budgets will show that they are of unequal coherence and completeness, and this fact has, indeed, been already indicated by the list of nationalities comprised in some of the groups—especially those of the Slavonic and allied peoples and those of Southern Europeans. It will be seen, however, that the various budgets display in their general features broad similarities and broad differences.

V.—Summary of Budgets of American-British (Northern) Group.

| | Limits of Weekly Family Income. | | | | | | | | |
|---|---------------------------------|-------------------|-------------------|--------------------|--------------------|-------------------|-------------------|--------------------|--|
| | Under £2. | £2 and under £3. | £3 and under £4. | £4 and under £5. | £5 and under £6. | £6 and under £7. | £7 and under £8. | £8 and over. | |
| No. of Budgets [Total 3,215]. | 67 | 532 | 1,036 | 545 | 437 | 224 | 131 | 243 | |
| Percentage of total No. of Budgets. | 2·08 | 16·55 | 32·22 | 16·95 | 13·59 | 6·97 | 4·08 | 7·56 | |
| Average No. of Children living at home. | 1·78 | 2·06 | 2·46 | 2·88 | 3·07 | 3·63 | 3·82 | 4·20 | |
| Average No. of Persons living at home. | 3·78 | 4·08 | 4·54 | 5·02 | 5·27 | 5·82 | 6·10 | 6·38 | |
| Average Weekly Earnings of Husband. | £ s. d. 1 13 6½ | £ s. d. 2 7 4½ | £ s. d. 3 2 3½ | £ s. d. 3 10 5½ | £ s. d. 3 18 6½ | £ s. d. 3 18 8 | £ s. d. 4 2 1½ | £ s. d. 4 11 9½ | |
| Average Weekly Earnings of Wife. | 0 1 1 | 0 1 0½ | 0 1 2½ | 0 1 1½ | 0 2 3 | 0 1 3 | 0 1 9½ | 0 1 6 | |
| Average Weekly Earnings of Children— | | | | | | | | | |
| Male | 0 0 3½ | 0 0 11½ | 0 2 2½ | 0 7 7 | 0 12 2½ | 1 4 7½ | 1 12 9 | 3 12 3 | |
| Female | 0 0 6 | 0 0 9 | 0 1 6½ | 0 3 6 | 0 5 10½ | 0 13 8 | 0 15 5 | 1 6 6 | |
| Average Weekly Other Income. | 0 0 7 | 0 0 11 | 0 2 7 | 0 5 9 | 0 8 4½ | 0 10 9 | 0 16 5 | 0 14 9½ | |
| Average Total Income ... | 1 16 0 | 2 11 0½ | 3 9 10 | 4 8 5 | 5 7 3 | 6 8 11½ | 7 8 6 | 10 6 10 | |
| Quantity of Meat, Poultry, and Fish purchased <i>per capita per annum</i> . | lb. 109·25 | lb. 145·08 | lb. 160·11 | lb. 165·15 | lb. 173·58 | lb. 176·33 | lb. 195·42 | lb. 211·90 | |
| Food bill* <i>per capita per week</i> . | s. d. 4 10¾ | s. d. 5 11½ | s. d. 6 9½ | s. d. 7 3 | s. d. 7 8¼ | s. d. 7 10½ | s. d. 8 4¼ | s. d. 9 2½ | |
| Percentage of Family Income spent on:— | | | | | | | | | |
| (1.) Meat (including poultry and fish). | 12·95 | 13·49 | 12·22 | 11·36 | 10·50 | 9·82 | 10·23 | 8·28 | |
| (2.) Food of all kinds* (excluding wine, beer and spirits). | 51·39 | 47·62 | 44·15 | 41·19 | 37·78 | 35·53 | 34·49 | 28·40 | |
| (3.) Rent | 19·53 | 17·74 | 16·66 | 15·34 | 14·04 | 12·01 | 12·04 | 9·91 | |
| (4.) Food* and Rent combined. | 70·92 | 65·36 | 60·81 | 56·53 | 51·82 | 47·54 | 46·53 | 38·31 | |
| Percentage balance after paying for Food* and Rent. | 29·08 | 34·64 | 39·19 | 43·47 | 48·18 | 52·46 | 53·47 | 61·69 | |

* Including meals away from home.

It may be desirable to warn the reader that in all general Tables of food expenditure and food consumption the family, that is, all persons sharing in the family food, irrespective of the age of its members, has, as in the preceding enquiries, been taken as the unit; that the composition of the family in every group tends to vary greatly with income; and that in all cases, although in varying proportions, the supplementary earnings of children and occasionally the "other" sources of income assume large proportions in the higher income classes. The summary Tables, of which the foregoing is a specimen, have been especially compiled to keep these and similar points prominently in view, in order that the budgets may be interpreted always with as full an appreciation as possible of what they do not, as well as of what they do, indicate.

American-British Budget (Northern Group).—The following Tables present the results of an analysis of the budgets of the 3,215 families (Group A. (1)), containing 15,824 persons, the heads of which were born either in the United States, Great Britain, Ireland or Canada. The particulars are derived from the 22 towns which for the purposes of this enquiry have been considered "Northern," and thus exclude those received from the Southern group.

The group to be considered is made up of 2,278 American-born families, 436 Irish, 227 English and Welsh, 189 Canadian (mostly of French descent), and 85 Scottish.

The total number of persons comprised in the group includes 9,003 children (of whom 4,675 are male and 4,328 female) and 466 other relatives and boarders sharing the family food.

The ratio of male to female children is in the case of the American-born families as 1·08 is to 1, and in the case of those born in the United Kingdom as 1·12 is to 1; while among the Canadians the relation is reversed, being as 0·87 is to 1.

The following Table gives the average incomes and detailed expenditure upon food of the families to which the returns relate.

VI. *Weekly Expenditure per Family on Food—American-British (Northern) Group.*

| | Limits of Weekly Family Income. | | | | | | | |
|--|---------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------------|
| | Under £2. | £2 and under £3. | £3 and under £4. | £4 and under £5. | £5 and under £6. | £6 and under £7. | £7 and under £8. | £8 and over. |
| | (1.) | (2.) | (3.) | (4.) | (5.) | (6.) | (7.) | (8.) |
| Number of Budgets | 67 | 532 | 1,036 | 545 | 437 | 224 | 131 | 243 |
| Average Weekly Family Income | £ s. 1 16 | £ s. d. 2 11 0½ | £ s. d. 3 9 10 | £ s. d. 4 8 5 | £ s. d. 5 7 3 | £ s. d. 6 8 11½ | £ s. d. 7 8 6 | £ s. d. 10 6 10 |
| Average Number of Children living at home. | 1·78 | 2·06 | 2·46 | 2·88 | 3·07 | 3·63 | 3·82 | 4·20 |
| Average Number of Persons per Family.* | 3·78 | 4·08 | 4·54 | 5·02 | 5·27 | 5·82 | 6·10 | 6·38 |
| | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. |
| Bread, Wheaten | 1 1½ | 1 5½ | 1 8½ | 1 11½ | 2 0½ | 2 0¾ | 2 4 | 2 7¾ |
| " Rye | 0 1½ | 0 2½ | 0 2½ | 0 1¾ | 0 2 | 0 2¼ | 0 1½ | 0 3½ |
| " Other | — | 0 0¼ | 0 0¼ | 0 0½ | 0 0¼ | 0 1 | 0 0¼ | 0 0½ |
| Flour, Wheaten | 1 6 | 1 3½ | 1 5 | 1 7¾ | 1 10 | 2 2¾ | 2 1½ | 2 2¼ |
| " Rye | — | 0 0¼ | 0 0¼ | 0 0¼ | 0 0¼ | 0 0¼ | 0 0 | 0 0¼ |
| " Buckwheat and other ... | 0 0½ | 0 0½ | 0 0½ | 0 1 | 0 1¼ | 0 1 | 0 0¾ | 0 2 |
| Maize and Maize Meal ... | 0 1¼ | 0 1 | 0 1¼ | 0 1¼ | 0 1¼ | 0 1¾ | 0 1¾ | 0 2 |
| Cakes, Crackers, Doughnuts ... | 0 4½ | 0 7 | 0 10 | 0 11½ | 1 1¼ | 1 3¼ | 1 4½ | 1 7½ |
| Rolls, Buns, Biscuits | 0 2¼ | 0 4¾ | 0 6¾ | 0 6¾ | 0 8¼ | 0 8 | 0 10 | 1 0 |
| Macaroni, Noodles, Spaghetti ... | 0 1½ | 0 1¾ | 0 2½ | 0 2¾ | 0 2¾ | 0 2¼ | 0 3¼ | 0 3 |
| Rice, Barley, Sago, &c. | 0 2¾ | 0 2¾ | 0 3½ | 0 3¾ | 0 4 | 0 4½ | 0 4¾ | 0 4¾ |
| Oatmeal and Breakfast Cereals ... | 0 2½ | 0 3¼ | 0 4¼ | 0 5 | 0 5½ | 0 5¾ | 0 5¾ | 0 6½ |
| Potatoes (Irish) | 1 2¾ | 1 4½ | 1 5¾ | 1 8¾ | 1 9¾ | 1 11¾ | 2 5½ | 2 4 |
| Sweet Potatoes, &c. | 0 0¼ | 0 0½ | 0 1¼ | 0 2 | 0 1¾ | 0 3 | 0 2½ | 0 4¼ |
| Dried Peas and Beans | 0 3¾ | 0 3½ | 0 3¼ | 0 3¾ | 0 4¼ | 0 4¾ | 0 5¼ | 0 4¾ |
| Sweet Corn | 0 1½ | 0 1½ | 0 2 | 0 3¼ | 0 3 | 0 4½ | 0 5 | 0 7 |
| Green Vegetables, &c. | 0 9 | 1 1¼ | 1 5½ | 1 8¾ | 1 10¼ | 2 2 | 2 2¾ | 2 7 |
| Canned Vegetables | 0 4¾ | 0 4½ | 0 6½ | 0 7¾ | 0 9 | 0 9½ | 0 10½ | 0 9½ |
| Beef (fresh and corned) | 2 1¼ | 3 1 | 3 8½ | 4 3½ | 5 0½ | 5 2 | 6 3¼ | 7 0¼ |
| Mutton and Lamb | 0 3¼ | 0 5¾ | 0 7¼ | 0 10¼ | 1 0¾ | 1 4½ | 1 9½ | 1 9¼ |
| Pork (fresh and salt) | 0 10¾ | 1 2¼ | 1 3¼ | 1 3½ | 1 4¼ | 1 8¾ | 1 10½ | 2 1 |
| Bacon, Ham, Brawn, &c. | 0 8½ | 0 10¾ | 1 0½ | 1 3½ | 1 4 | 1 7½ | 1 10½ | 2 2½ |
| Veal | 0 2¾ | 0 3½ | 0 6½ | 0 7 | 0 8 | 0 9½ | 0 9½ | 0 11 |
| Sausage | 0 2 | 0 3 | 0 4 | 0 4¾ | 0 5 | 0 5¼ | 0 7¼ | 0 6¼ |
| Poultry | 0 0¼ | 0 2¾ | 0 5¼ | 0 6¾ | 0 8½ | 0 7¾ | 1 1 | 1 5¾ |
| Fish of all kinds | 0 3¾ | 0 5¾ | 0 7½ | 0 9¼ | 0 8½ | 0 10½ | 0 11½ | 1 1½ |
| Lard, Suet, Dripping | 0 7 | 0 7¾ | 0 8½ | 0 10 | 0 10½ | 1 0¼ | 1 0 | 1 1¼ |
| Butter | 1 4½ | 1 8¼ | 2 3 | 2 9¾ | 3 1½ | 3 6 | 4 0 | 4 2¾ |
| Oleomargarine | 0 0¾ | 0 1 | 0 0¾ | 0 0¾ | 0 1 | 0 1 | 0 1½ | 0 0¾ |
| Olive Oil | — | 0 0½ | 0 0½ | 0 0¾ | 0 1 | 0 1 | 0 1¼ | 0 1¼ |
| Cheese | 0 2¼ | 0 2¾ | 0 4½ | 0 5½ | 0 5¾ | 0 6¾ | 0 7 | 0 8 |
| Milk (fresh) | 1 0½ | 1 4¼ | 1 9 | 1 11½ | 2 2¾ | 2 5¼ | 2 6½ | 2 11¼ |
| Milk (condensed) | 0 3 | 0 4 | 0 4¼ | 0 4¼ | 0 4 | 0 4 | 0 5 | 0 3¼ |
| Eggs | 0 11 | 1 4½ | 1 10 | 2 3½ | 2 5½ | 2 10 | 3 1 | 3 4 |
| Tea | 0 4½ | 0 6½ | 0 7 | 0 9 | 0 9¾ | 0 11½ | 1 0½ | 1 0¼ |
| Coffee | 0 6½ | 0 8½ | 0 11 | 0 11¾ | 1 1 | 1 1½ | 1 1¾ | 1 4½ |
| Cocoa and Chocolate | 0 0¼ | 0 0¾ | 0 1½ | 0 1¾ | 0 2 | 0 2¾ | 0 3½ | 0 3¾ |
| Sugar | 0 10¼ | 0 10¾ | 1 0¾ | 1 4 | 1 4½ | 1 7¼ | 1 9 | 1 8½ |
| Molasses and Syrup | 0 1 | 0 1½ | 0 1¾ | 0 2¼ | 0 2 | 0 2¾ | 0 2¾ | 0 2¾ |
| Vinegar, Pickles, Condiments ... | 0 1 | 0 1½ | 0 2½ | 0 3 | 0 3¼ | 0 4¼ | 0 4½ | 0 5¼ |
| Fruits and Jams | 0 5½ | 0 9¼ | 1 1¾ | 1 6¼ | 1 7¼ | 1 11¾ | 2 1 | 2 3 |
| Other Items | 0 1 | 0 1¼ | 0 1¾ | 0 1¼ | 0 2¼ | 0 2 | 0 3 | 0 2½ |
| Meals away from home | 0 0½ | 0 3½ | 0 8¼ | 0 11¼ | 1 7½ | 1 11 | 2 2 | 4 11¼ |
| Total | 18 6 | 24 3½ | 30 10 | 36 5 | 40 6½ | 45 9¾ | 51 2½ | 58 9 |

* This figure includes boarders and relatives sharing the family food. The total number of these was 466, of whom about one third were sons or daughters of the family. Children whose weekly payments for board and lodging—and not their weekly wages—were furnished, were counted as boarders.

In an even more striking degree than in the case of the European enquiries, although mainly because of the actual amounts of the supplementary earnings and not because of the different proportions in which these stand to the total family income, the higher incomes are due, not so much to increased earnings of the husband as to the contributions of children of wage-earning age. This is made evident from the following figures:—

VII. *Composition of Family Incomes in American-British (Northern) Group.*

| | Limits of Weekly Family Income. | | | | | | | |
|---------------------------------|---------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|--------------|
| | Under £2. | £2 and under £3. | £3 and under £4. | £4 and under £5. | £5 and under £6. | £6 and under £7. | £7 and under £8. | £8 and over. |
| | (1.) | (2.) | (3.) | (4.) | (5.) | (6.) | (7.) | (8.) |
| Average Earnings of Husband ... | £ 1 13 6½ | £ 2 7 4½ | £ 3 2 3½ | £ 3 10 5½ | £ 3 18 6½ | £ 3 18 8 | £ 4 2 1½ | £ 4 11 9½ |
| „ Earnings of Wife. ... | 0 1 1 | 0 1 0½ | 0 1 2½ | 0 1 1½ | 0 2 3 | 0 1 3 | 0 1 9½ | 0 1 6 |
| „ Earnings of Children— | | | | | | | | |
| Under 16 ... | 0 0 3½ | 0 0 5½ | 0 0 10 | 0 1 4½ | 0 1 2 | 0 1 10½ | 0 2 6½ | 0 1 7½ |
| 16 and under 21 ... | — | 0 0 11½ | 0 2 0½ | 0 6 8½ | 0 12 1 | 1 0 5½ | 1 6 10½ | 2 0 1 |
| 21 and over ... | 0 0 6 | 0 0 3½ | 0 0 10½ | 0 3 0 | 0 4 10 | 0 15 11½ | 0 18 9 | 2 17 0½ |
| „ Other Income ... | 0 0 7 | 0 0 11 | 0 2 7 | 0 5 9 | 0 8 4½ | 0 10 9 | 0 16 5 | 0 14 9½ |
| Total ... | 1 16 0 | 2 11 0½ | 3 9 10 | 4 8 5 | 5 7 3 | 6 8 11½ | 7 8 | 10 6 10 |

The average number of children living at home for all income classes shown in the above Table is 2·80.

The difference between the weekly earnings of the husband in the highest and lowest income classes shown in the Table is £2 18s. 3d., whereas the difference between the two extremes of the total family income is £8 10s. 10d., the total earnings of the children in the highest income group exceeding those of the father by 6s. 11½d.

Even so, the scales of the father's earnings are relatively much higher than those shown in any of the preceding enquiries of this series undertaken by the Board of Trade, and it may be convenient, therefore, at this stage to express those given in the Table in the terms of some familiar type of wage-earner. Thus, as compared with New York, and making no allowance for periods of unemployment, the average earnings of the husband as given in column 1 (33s. 6½d.) are almost equivalent to the wages of the lower rated labourers in machine shops; those in column 2 (47s. 4½d.) to those of porters employed on the electric railway; in column 3 (62s. 3½d.) to those of stablemen employed in breweries or of lower rated cabinetmakers; those in column 4 (70s. 5½d.) slightly exceed the rate for hod-carriers; those in columns 5 and 6 (78s. 6½d. and 78s. 8d.) are slightly below the usual rate for painters; the average in column 7 (82s. 1½d.) is slightly in excess of the usual rate for ironmoulders; and the figure in column 8 (91s. 9½d.) corresponds with the lower general ranges for stonemasons and stonecutters.

The proportion of the weekly income of the family supplied by the children begins to be important in the incomes between £4 and £5, when it reaches 12·5 per cent. of the total, rising in the next class to nearly 17 per cent., and passing from 30 to 33 per cent., until in the highest class it accounts for 47·7 per cent. of the total family income. It is noticeable that the average earnings of the wife are never very large, and vary but little.

In the income classes £5 and under £6 and £6 and under £7 (Nos. 5–6) the earnings of the husband are practically the same and, since there is a falling off in the relatively unimportant earnings of the wife, while “other income” shows an increase of only 2s. 4½d., the position of the families with incomes of between £6 and £7 weekly is seen to be almost entirely due to greatly increased earnings of the children.

The average number of children per family in each of the components of the American-British (Northern) group is as follows:—British-born, 3·17; Canadian, 3·04; American, 2·66. The number of children earning and their average earnings show great variations—in the British-born group 28·4 per cent. are earning and the average weekly earnings per male child, both earning and not earning, amount to £1 0s. 1d. and per female child to 9s. 6½d.; for Canadian families 18·4 per cent. are earning and the averages are 10s. 11½d. and 6s. 4d.; and for American, 17·8 per cent. are earning and the averages are 9s. 11d. and 4s. 3d. respectively, or, put in another way, the children of parents born in the United Kingdom earn 29·6 per cent., in Canada 19·5 per cent., and in the United States 15·8 per cent. of the total family incomes as shown by the budgets.

In the British-born families the average earnings of the husbands in the class of incomes between £6 and £7 are 11s. below the previous class, the male children contributing on an average £1 12s. 7d. and the female £1 3s. 6d. each, or a total of £2 16s. 1d. as against £3 1s. 2d. earned by the husband. This is less than the husband's average earnings in the class of incomes between £4 and £5, and in the income class £7 to £8

the husband only averages $2\frac{1}{2}d.$ more than in the class between £5 and £6. Among the Canadian families the two highest income classes are made up in much the same way.

In the American families the husband's earnings do not in any case fall below or even decline to those of a lower income class, but in the class between £6 and £7 the average earnings of husbands are only 2s. $10\frac{1}{2}d.$ higher than in the previous one, and those of the children considerably more than double. Among both Americans and British, however, the importance of the children as supplementary wage-earners in the higher ranges of family income is abundantly manifested.

The percentage of families owning the houses in which they live rises rapidly when the total income reaches £4 weekly, exceeding 35 per cent. in the highest income group but one, and falling somewhat in the highest group, while the average for all the budgets is a fraction below $15\frac{1}{2}$ per cent.

The following Table sets out the results obtained in this group with reference to the question of ownership* :—

VIII. *Percentage of Families owning the Houses they occupy—American-British (Northern) Group.*

| Limits of Weekly Family Income. | | | | | | | | All Incomes. |
|---------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|--------------|--------------|
| Under £2. | £2 and under £3. | £3 and under £4. | £4 and under £5. | £5 and under £6. | £6 and under £7. | £7 and under £8. | £8 and over. | |
| 1.49 | 2.82 | 6.85 | 20.36 | 24.03 | 30.36 | 35.11 | 32.92 | 15.46 |

In all cases of ownership the stated *rental* of a similar house has been credited to the weekly income and debited again as rent paid, this sum to a large extent accounting for the "other income" which, it will be noticed, fluctuates with the percentage of houses owned. The chief other items are payments made either by boarders who shared the family food, or lodgers.

The practice of taking boarders is so frequent that the rejection of all budgets including them would have involved the sacrifice of a large amount of otherwise valuable material. The "other persons," most of whom are boarders, are equivalent to 0.15 persons per family, or about 3 per cent. of the whole. About one-third of those thus reckoned were in fact older children, as to whose earnings particulars were not furnished, but instead the amount paid into the family purse as boarders. The purchase of the house by the tenant, especially in certain towns, and the charges on incomings thus incurred, explain the presence of boarders in many cases, whilst in others boarders perhaps merely supply the means of occupying larger and more comfortable premises—a practice not unknown in London and elsewhere.

It will be observed that in columns 1–5 (Table VII.), comprising 81 per cent. of all the budgets, the "other income" ranges from 7d. to 8s. $4\frac{1}{2}d.$ per week. The highest amount under this heading is shown in column 7, where it is 16s. 5d., equivalent to about 11 per cent. of the total family income. In the largest income-class, that is £3 and under £4, the average amount of "other income" which, as stated above, includes credited rent, is 2s. 7d., equivalent to about $3\frac{1}{2}$ per cent. of the total income. For the whole of the budgets of the American-British (Northern) group the average amount under this heading represented a little over 6 per cent. of the total income, and of this less than one half was derived from boarders.

* The figures for all the national groups are given below :—

| Nationality. | Limits of Weekly Family Income. | | | | | | | | All Incomes. |
|---------------------------------------|---------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|--------------|--------------|
| | Under £2. | £2 and under £3. | £3 and under £4. | £4 and under £5. | £5 and under £6. | £6 and under £7. | £7 and under £8. | £8 and over. | |
| American-British, Northern Group. | 1.49 | 2.82 | 6.85 | 20.36 | 24.03 | 30.36 | 35.11 | 32.92 | 15.46 |
| American-British, Southern Group. | 3.13 | 6.03 | 6.87 | 21.10 | 23.75 | 26.19 | 40.74 | 39.53 | 16.90 |
| American, Southern (broken families). | 15.38 | 14.29 | 16.67 | 22.22 | — | — | — | — | 17.39 |
| German | — | 6.13 | 18.29 | 27.54 | 26.83 | 51.67 | 53.49 | 51.69 | 25.83 |
| Scandinavian | — | — | 11.24 | 19.18 | 45.90 | 42.86 | 58.82 | 50.00 | 26.87 |
| South European | 1.67 | 6.67 | 8.61 | 12.33 | 10.00 | 13.79 | 13.33 | 26.92 | 9.02 |
| Slavonic and allied Peoples. | — | 7.69 | 8.64 | 34.15 | 37.28 | 48.48 | 50.00 | 40.00 | 19.06 |
| Jewish | — | 2.52 | 1.65 | 5.41 | 4.55 | 26.32 | 8.33 | 19.05 | 6.46 |
| Negro, Northern Group ... | — | 5.22 | 10.42 | 25.64 | 25.00 | 30.77 | — | — | 12.21 |
| Negro, Southern Group ... | 1.92 | 7.78 | 32.00 | 42.86 | 72.22 | — | — | 71.43 | 27.17 |

The following Table, extracted from that printed on p. xlv, sets out by income classes the percentage of the weekly income expended on food and rent respectively, the percentage balance remaining after these items have been met, and the average weekly food bill *per capita* :—

IX. *Percentage of Weekly Family Income Expended on Food and Rent—
American-British (Northern) Group.*

| | Limits of Weekly Family Income. | | | | | | | |
|---|---------------------------------|--------------------|-------------------|------------------|-------------------|--------------------|-------------------|-------------------|
| | Under £2. | £2 and under £3. | £3 and under £4. | £4 and under £5. | £5 and under £6. | £6 and under £7. | £7 and under £8. | £8 and over. |
| Percentage of Income spent on Food, excluding wine, beer and spirits. | 51·39 | 47·62 | 44·15 | 41·19 | 37·78 | 35·53 | 34·49* | 28·40 |
| Percentage of Income spent on Rent | 19·53 | 17·74 | 16·66 | 15·34 | 14·04 | 12·01 | 12·04 | 9·91 |
| Total | 70·92 | 65·36 | 60·81 | 56·53 | 51·82 | 47·54 | 46·53 | 38·31 |
| Percentage balance after paying for Food and Rent. | 29·08 | 34·64 | 39·19 | 43·47 | 48·18 | 52·46 | 53·47 | 61·69 |
| Food Bill <i>per capita</i> per week ... | 4 10 $\frac{3}{4}$ | 5 11 $\frac{1}{2}$ | 6 9 $\frac{1}{2}$ | 7 3 | 7 8 $\frac{1}{4}$ | 7 10 $\frac{1}{2}$ | 8 4 $\frac{3}{4}$ | 9 2 $\frac{1}{2}$ |

Despite the considerable rise in the number of persons per family, the fall in the percentage of income spent on food is more or less regular until the highest group is reached. Excluding this the range of difference is 17 per cent., including it 23 per cent.

The weekly balance left for clothing, fire and light, alcoholic drinks, tobacco and all other expenses ranges from 29 per cent. of the income in the lowest class to about 62 per cent. in the highest, with an average for the 3,215 families of a little under 47 per cent.

Combining the second, third and fourth income classes, which together comprise 2,113 families or 65 $\frac{1}{2}$ per cent. of the total, the average income is £3 9s. 10 $\frac{1}{2}$ d.; the average weekly food bill, excluding alcohol, is £1 10s. 7 $\frac{1}{2}$ d., and the average weekly rent 11s. 6d., leaving an average weekly balance for other purposes of £1 7s. 9d. or 6s. 1 $\frac{1}{4}$ d. *per capita*.

Concerning a few of the various items included in "other expenses"—fuel and light and alcoholic drinks—some information was collected on the budget forms, but as regards fuel and to a less extent light, the difficulty of furnishing accurate weekly data made it impossible to derive any useful information from the returns supplied. In the case of beer, cider, spirits, &c., many particulars were also furnished but not such as to yield reliable general figures. A few remarks on the margins of income shown by the budgets are included in Part II of the General Report dealing with international comparisons.

The average number of rooms occupied ranges from 3·73 in the lowest income class to 6·65 in the highest, with an average for the whole group of 4·96, the corresponding numbers of persons per room being 1·01, 0·96 and 0·99 respectively or practically one room to each person in the whole group.

The components of the group show certain differences which are worthy of note. Thus the average weekly food bills *per capita* are 6s. 6d. for the Canadian families, 7s. 3d. for the American, and 7s. 6d. for the British-born, and the weekly rent per family 11s. 10d., 13s. and 13s. 8d. respectively. The average number of persons per family is practically the same for both British-born and Canadians, viz., 5·27 and 5·23 respectively, while for the Americans the figure is 4·78. The average percentage of income spent on food shows little variation, being 39·4 by the British-born, 38·7 by the Americans and 38·2 by the Canadians.

The average number of persons per room for all the British families is 1·04, for all the Canadian 0·99 and for all the American 0·97. The average weekly rent per room paid by the British-born families is 2s. 8 $\frac{1}{2}$ d., by the American 2s. 8d. and by the Canadian 2s. 3d. The average rent per room for the whole group is 2s. 7 $\frac{3}{4}$ d.,* this figure agreeing almost exactly with the general predominant figures as shown on p. xxii.

The following Table shows, for those articles for which the figures were obtained, the average quantities of each consumed. All children living at home, of whatever age, and all other persons sharing the family food have again been included.

* The average rents per room for the other nationality groups are as follows :—

American-British (Southern), 2s. 7 $\frac{1}{4}$ d.; American (Southern), Broken Families, 2s. 1 $\frac{1}{2}$ d.; German, 2s. 7d.; Scandinavian, 2s. 7 $\frac{1}{2}$ d.; South European, 2s. 10d.; Slavonic and allied Peoples, 2s. 6 $\frac{3}{4}$ d.; Jewish, 3s. 2 $\frac{1}{2}$ d.; Negro (Northern), 2s. 6 $\frac{1}{2}$ d.; and Negro (Southern), 2s. 3 $\frac{1}{2}$ d. The relatively high figure for the Jewish group is explained by the large number of Jewish budgets furnished from New York, and the South European figure is similarly affected.

GENERAL REPORT.

X. Weekly Consumption per Family of Certain Articles of Food.—American-British (Northern) Group.

| | Limits of Weekly Family Income. | | | | | | | |
|--|---------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------------------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5. (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and over. (8.) |
| Number of Budgets | 67 | 532 | 1036 | 545 | 437 | 224 | 131 | 243 |
| Average Weekly Family Income | £ s. 1 16 | £ s. d. 2 11 0½ | £ s. d. 3 9 10 | £ s. d. 4 8 5½ | £ s. d. 5 7 3½ | £ s. d. 6 8 11½ | £ s. d. 7 8 6 | £ s. d. 10 6 10 |
| Average Number of Children living at home. | 1·78 | 2·06 | 2·46 | 2·88 | 3·07 | 3·63 | 3·82 | 4·20 |
| Average Number of Persons per Family.* | 3·78 | 4·08 | 4·54 | 5·02 | 5·27 | 5·82 | 6·10 | 6·38 |
| | lb. | lb. | lb. | lb. | lb. | lb. | lb. | lb. |
| Bread, Wheaten | 5·02 | 6·53 | 7·64 | 8·74 | 9·09 | 9·06 | 10·02 | 11·27 |
| „ Rye | 0·65 | 0·96 | 0·87 | 0·74 | 0·85 | 0·96 | 0·68 | 1·51 |
| „ Other | — | 0·05 | 0·13 | 0·16 | 0·10 | 0·38 | 0·12 | 0·21 |
| Flour, Wheaten | 9·52 | 7·94 | 8·99 | 10·51 | 11·77 | 14·10 | 13·47 | 13·80 |
| „ Rye | — | 0·04 | 0·07 | 0·06 | 0·09 | 0·08 | 0·09 | 0·12 |
| „ Buckwheat and other | 0·21 | 0·26 | 0·31 | 0·41 | 0·57 | 0·49 | 0·32 | 0·89 |
| Maize and Muize Meal | 0·88 | 0·68 | 0·73 | 0·81 | 0·93 | 1·00 | 1·23 | 1·27 |
| Cakes, Crackers, Doughnuts | 0·96 | 1·57 | 2·19 | 2·38 | 2·73 | 3·07 | 3·33 | 3·86 |
| Rolls, Buns, Biscuits | 0·80 | 1·37 | 1·80 | 1·95 | 2·26 | 2·24 | 3·01 | 3·80 |
| Macaroni, Noodles, Spaghetti | 0·37 | 0·42 | 0·53 | 0·57 | 0·56 | 0·47 | 0·72 | 0·64 |
| Rice, Barley, Sago, &c. | 0·60 | 0·67 | 0·91 | 0·89 | 0·96 | 1·09 | 1·02 | 1·17 |
| Oatmeal and Breakfast Cereals... .. | 0·77 | 0·96 | 1·23 | 1·40 | 1·48 | 1·56 | 1·59 | 1·67 |
| Potatoes (Irish) | 15·69 | 17·43 | 18·59 | 21·18 | 22·99 | 24·83 | 29·98 | 27·98 |
| Sweet Potatoes, &c. | 0·18 | 0·43 | 1·00 | 1·46 | 1·38 | 1·91 | 1·50 | 2·92 |
| Dried Peas and Beans | 1·38 | 1·24 | 1·11 | 1·27 | 1·35 | 1·60 | 1·70 | 1·54 |
| Beef (fresh and corned) | 3·59 | 5·09 | 6·04 | 6·71 | 7·81 | 7·93 | 9·38 | 10·43 |
| Mutton and Lamb | 0·39 | 0·69 | 0·91 | 1·23 | 1·48 | 2·04 | 2·43 | 2·53 |
| Pork (fresh and salt) | 1·55 | 1·94 | 2·15 | 2·17 | 2·24 | 2·81 | 2·81 | 3·32 |
| Bacon, Ham, Brawn, &c. | 1·04 | 1·26 | 1·46 | 1·83 | 1·81 | 2·26 | 2·53 | 3·06 |
| Veal | 0·38 | 0·46 | 0·80 | 0·91 | 1·00 | 1·15 | 1·23 | 1·33 |
| Sausage | 0·27 | 0·51 | 0·69 | 0·75 | 0·82 | 0·84 | 1·19 | 1·01 |
| Poultry | 0·03 | 0·30 | 0·54 | 0·72 | 0·89 | 0·83 | 1·37 | 1·83 |
| Fish of all kinds | 0·68 | 1·13 | 1·40 | 1·64 | 1·54 | 1·88 | 2·00 | 2·49 |
| Lard, Suet, Dripping | 1·08 | 1·16 | 1·29 | 1·48 | 1·54 | 1·81 | 1·82 | 2·01 |
| Butter | 1·14 | 1·35 | 1·74 | 2·15 | 2·36 | 2·65 | 3·01 | 3·27 |
| Oleomargarine | 0·08 | 0·09 | 0·05 | 0·06 | 0·09 | 0·09 | 0·13 | 0·02 |
| | pints. | pints. | pints. | pints. | pints. | pints. | pints. | pints. |
| Olive Oil | — | 0·03 | 0·03 | 0·04 | 0·05 | 0·05 | 0·08 | 0·09 |
| | lb. | lb. | lb. | lb. | lb. | lb. | lb. | lb. |
| Cheese | 0·24 | 0·31 | 0·45 | 0·56 | 0·60 | 0·69 | 0·73 | 0·82 |
| | qts. | qts. | qts. | qts. | qts. | qts. | qts. | qts. |
| Milk (fresh) | 2·96 | 3·75 | 4·77 | 5·46 | 5·92 | 6·79 | 7·04 | 8·08 |
| | lb. | lb. | lb. | lb. | lb. | lb. | lb. | lb. |
| Milk (condensed) | 0·54 | 0·71 | 0·76 | 0·78 | 0·68 | 0·72 | 0·89 | 0·57 |
| | No. | No. | No. | No. | No. | No. | No. | No. |
| Eggs | 9·03 | 14·49 | 19·90 | 24·09 | 25·34 | 28·88 | 31·53 | 34·39 |
| | lb. | lb. | lb. | lb. | lb. | lb. | lb. | lb. |
| Tea | 0·21 | 0·27 | 0·28 | 0·36 | 0·38 | 0·45 | 0·48 | 0·46 |
| Coffee | 0·63 | 0·77 | 0·93 | 0·99 | 1·07 | 1·09 | 1·10 | 1·38 |
| Cocoa and Chocolate | 0·02 | 0·04 | 0·07 | 0·10 | 0·12 | 0·15 | 0·21 | 0·21 |
| Sugar | 3·56 | 3·78 | 4·45 | 5·67 | 5·81 | 6·81 | 7·20 | 7·28 |
| | pints. | pints. | pints. | pints. | pints. | pints. | pints. | pints. |
| Molasses and Syrup | 0·25 | 0·33 | 0·40 | 0·45 | 0·41 | 0·56 | 0·57 | 0·54 |

* This figure includes boarders and relatives sharing the family food. Cf. Note on p. xlvii.

The following paragraphs contain comments on the consumption of various articles of food, as set out in the above Table.

The particulars given will be found to refer either to the budget group as a whole ; or to the three components of the group—American, British-born or Canadian ; or to the various income classes as set out in the above Table. Occasionally reference will be made

to certain sub-groups formed on the basis of nationality and town into which a large number of the budgets fall. These sub-groups, 37 in number, have been formed whenever in any single town either of the components furnished not less than 25 budgets.

Wheaten Bread.—The consumption of bought wheaten bread, although affording no criterion of the well-being of the family, does in fact rise more or less steadily with income, from 1·3 lb. *per capita* in the lowest income class to 1·8 lb. *per capita* in the highest. The average *per capita* consumption for the whole group is 1·7 lb. weekly.

The components of the group show the following differences. The Americans average rather more than 1·7 lb. *per capita* weekly, the British-born 1·6 lb. and the Canadians 1·4 lb. The smallest quantity of bread *per capita*, accompanying a high consumption of flour, is found in the lowest income class of the British budgets (0·66 lb.) and the largest among the Canadians with incomes between £7 and £8, *viz.* 2·6 lb. *per capita* weekly. The bread consumption of the lowest income class among the Canadians is also relatively high (2·3 lb.).

Rye Bread.—The consumption of rye bread purchased at the bakers is small and somewhat irregular, not averaging on the whole quite 1 lb. per family weekly, and of this 80 per cent is consumed by the American-born families. The *per capita* weekly consumption for the components of the group is as follows—American 0·21 lb. ; British-born 0·13 lb. ; Canadian 0·03 lb. The relatively high figure of the American consumption may probably be explained by the presence among them of families of German or Eastern European descent. Rye bread in this group, as in others, appears to be purchased by families with incomes of every range and its consumption to be entirely a matter of inherited or acquired taste.

Wheaten Flour.—The average consumption of wheaten flour per family is 10·4 lb. weekly or 2·1 lb. *per capita*. The range is very small, from 2·5 lb. *per capita* in the lowest income class to 2·2 lb. in the highest. The differences in the flour consumption of the components of the group are also small. The American returns average 2·1 lb. *per capita* weekly, those of the British-born 2·2 lb. and of the Canadian 1·8 lb.

The consumption of rye and buckwheat flour is almost insignificant.

Adding together the weights of flour and bread of all kinds as given in the budgets, the figure for the whole group is 4·1 lb. *per capita* weekly ; for the Americans 4·2 lb. ; for the British-born 4·0 lb. and for the Canadians 3·4 lb., in the last case nearly $\frac{3}{4}$ lb. below the average of the group. The consumption of both bread and flour shown in the Canadian returns is lower than that of either of the other components.

With regard to bread substitutes, the difference in the movement of the *per capita* expenditure is very marked as compared with that of bread, the latter rising only from 3·57*d.* *per capita* in the lowest income class to 4·97*d.* in the highest ; while the former shows a corresponding movement of from 1·78*d.* *per capita* to 4·93*d.*

The position is set out in the following Table :—

XI.—Average Weekly Consumption and Expenditure per capita on Bread, Flour, Cakes, &c.—American-British (Northern) Group.

| | | Limits of Weekly Family Income. | | | | | | | |
|-----------------------------|-------------|---------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------------|
| | | Under £2. | £2 and under £3. | £3 and under £4. | £4 and under £5. | £5 and under £6. | £6 and under £7. | £7 and under £8. | £8 and over. |
| Bread ... | Consumption | 1·50 lb. | 1·85 lb. | 1·90 lb. | 1·92 lb. | 1·91 lb. | 1·79 lb. | 1·77 lb. | 2·04 lb. |
| | Expenditure | 3·98 <i>d.</i> | 4·87 <i>d.</i> | 5·07 <i>d.</i> | 5·12 <i>d.</i> | 5·10 <i>d.</i> | 4·82 <i>d.</i> | 4·91 <i>d.</i> | 5·61 <i>d.</i> |
| Flour ... | Consumption | 2·58 lb. | 2·02 lb. | 2·07 lb. | 2·19 lb. | 2·36 lb. | 2·52 lb. | 2·28 lb. | 2·32 lb. |
| | Expenditure | 4·90 <i>d.</i> | 3·92 <i>d.</i> | 3·96 <i>d.</i> | 4·18 <i>d.</i> | 4·46 <i>d.</i> | 4·81 <i>d.</i> | 4·34 <i>d.</i> | 4·47 <i>d.</i> |
| Rolls, Cakes, Biscuits, &c. | Consumption | 0·47 lb. | 0·72 lb. | 0·83 lb. | 0·86 lb. | 0·95 lb. | 0·91 lb. | 1·04 lb. | 1·20 lb. |
| | Expenditure | 1·78 <i>d.</i> | 2·88 <i>d.</i> | 3·75 <i>d.</i> | 3·64 <i>d.</i> | 4·08 <i>d.</i> | 3·99 <i>d.</i> | 4·38 <i>d.</i> | 4·93 <i>d.</i> |

Rolls, Cakes, Biscuits and other forms of fancy bread form a constant and important item in the cereal food consumption of American households, amounting to 0·9 lb. *per capita* weekly in this group. The particulars furnished for British-born families show rather more than the average, and those for Canadian little more than half the amount, or 0·5 lb. *per capita* weekly.

Macaroni, Noodles, Spaghetti.—The consumption of these articles per family rises slowly with the income, but the average *per capita* is almost constant throughout, something less than $\frac{1}{10}$ lb. weekly. The differences shown by the components of the group are insignificant.

Rice, Barley, Sago, &c.—There is a small rise in the *per capita* consumption of these articles with the income. The average *per capita* is 0·18 lb. weekly, and again no material departure from the general average is shown by the components of the group.

Oatmeal and Breakfast Cereals.—The average weekly consumption of these articles is almost exactly $\frac{1}{4}$ lb. *per capita* for the whole group, but it is somewhat higher in the middle income class than at either end of the series.

Potatoes are an important constituent of the dietary, showing an average of 21 lb. per family weekly for all budgets together, or 4·3 lb. *per capita*. There is no material difference between the components of the group in their *per capita* consumption.

Dried Peas and Beans (chiefly the small haricot, sometimes known in the United States as "Navy beans") are used in considerable quantity. The American and British-born families use about a quarter of a pound *per capita* weekly, the Canadian 0·4 lb.

Vegetables.—It is not possible even to estimate the quantities consumed, but the expenditure on green vegetables rises steadily with the income from 9d. per family in the lowest income class, to 2s. 7d. in the highest, so that, allowing for different size of family, the expenditure *per capita* is just doubled in the latter class. The expenditure on *Sweet Corn* and *Sweet Potatoes* is somewhat irregular, but tends to rise with the income. The former is sold very largely in the "cob" and the price of both is dependent upon season and locality. The *Canned Vegetables* are chiefly tomatoes, for which 5d. per can, weighing about $2\frac{1}{2}$ lb. gross, or three cans for 1s. 0 $\frac{1}{2}$ d., are very general prices. "String beans," that is French beans canned, are also largely used but cost about double. The American families consume much more sweet potatoes, an acquired taste and a Southern rather than a Northern food, than either the British-born or Canadians. The expenditure *per capita* on sweet corn and fresh and canned vegetables is highest in the American returns and lowest in the Canadian.

The average consumption of *Fresh Milk* is a little over one quart *per capita* weekly, being 56 qts. *per annum* for the whole group. Of the components the American returns show an average of 54 qts., the British one of 61 qts., and the Canadian one of 66 qts.

The average consumption of *Condensed Milk* is for the whole group 0·15 lb. *per capita* per week. For the components the figures show but little difference, although the range within the group is very great. In 14 out of the 37 sub-groups of not less than 25 families each into which, on the basis of nationality and town, the budgets fall, the quantity is 0·10 lb. *per capita* or less; 16 sub-groups use 0·10 lb. and less than 0·20 lb., and in the remaining 7 the consumption ranges from 0·20 lb. to 0·40 lb. *per capita* per week.

The average consumption of *Butter per capita* per week is for the whole group 0·42 lb. The differences between the components are insignificant, the Canadian returns showing a slightly higher consumption than the others. Within the group the range is considerable, from 0·64 lb. as shown by the American returns from Duluth to 0·27 lb. by those of Americans in St. Louis. Out of the 37 sub-groups of more than 25 budgets each, 16 have a consumption of 0·40 lb. and less than 0·50 lb. *per capita* per week.

Lard, Suet and Dripping.—The consumption of these fats averages for the whole group 0·29 lb. *per capita* per week. Of the components the British-born average 0·20 lb.; the Canadians 0·30 and the Americans 0·33.

Cheese.—The average consumption of cheese of all kinds is, for the group, 0·11 lb. *per capita* per week, the Americans and the British-born each showing an average almost equal to that of the group, and the Canadians an average of 0·09 lb.

Eggs.—The consumption of eggs is for the whole group 4·6 *per capita* weekly (237 *per annum*). Of the components the returns from the British-born show an average of 5·1, from the Americans one of 4·4 and from the Canadians one of 4·3 *per capita* weekly; equivalent to 265, 229 and 224 *per annum* respectively. The 37 sub-groups show a very wide range of consumption from 8 eggs *per capita* weekly to 2. In four sub-groups the average is above 7 eggs *per capita* weekly; in two it is practically 7; in ten it is above 5 but less than 6; in ten more it is above 4 and less than 5; in nine it is above 3 but less than 4, and in two only is the average less than 3.

The gross annual consumption of eggs in the United States is very large, and that by the 3,215 families now under consideration, estimated on the basis of the budgets, would itself amount to 312,500 dozens. The total number of eggs produced in the whole of the United States during 1909 is estimated at about 1,400,000,000 dozens.

Coffee, Tea, Cocoa, &c.—Coffee, as contrasted with tea, may be regarded as the national domestic beverage. The average consumption of coffee *per capita* per week is 0·20 lb. for the whole group. Of the components the American returns show a weekly consumption of 0·23 lb. *per capita*, the British 0·12 lb. and the Canadian 0·09 lb. The American budgets obtained in Pittsburg, with 0·31 lb. *per capita* per week, show the largest consumption, followed by six sub-groups of Americans with an average weekly consumption *per capita* of over 0·25 lb. The smallest consumption is shown by British returns from Lowell, viz., 0·03 lb. There are nine sub-groups at the lower end of the scale using less than 0·10 lb. of coffee weekly, and of these only one is American. The 106 American families in Muncie, which often provided the minima in foodstuffs, are 11th on the list in coffee consumption, using 0·23 lb. *per capita* per week, or 0·03 lb. above the average of the whole group, and but little short of the general American average as shown by the budgets.

The average consumption of tea *per capita* per week is, for the whole group, 0·07 lb. Of the components the returns from British-born families show an average of 0·10 lb., from Canadians one of 0·09 lb. and from Americans one of 0·06 lb. The consumption of *cocoa* and *chocolate* relatively to both coffee and tea is very small, about 1 lb. *per capita per annum* for the whole group.

The average weekly consumption of *sugar per capita* is, for the whole group, 1·06 lb. Of the components the American and Canadian returns show an average of 1·03 lb. and those of the British-born 1·13 lb. The range within the group is, as usual, very considerable, viz., from 1·44 to 0·78 *per capita*. Out of the 37 sub-groups of 25 budgets or more, 22 show a consumption of at least 1 lb. *per capita* weekly, and the mean for the remaining 15 sub-groups is 14 oz. *per capita* weekly, or 45·5 lb. *per annum*.

The average consumption of *molasses* and *syrup per capita* per week for the whole group is 0·09 pints.

Meat.—The average consumption of all meat, including poultry and sausage, shown by the budgets, is 14·4 lb. per family weekly, or at the rate of 152 lb. *per capita per annum*; if fish be included the amount is increased to 168 lb. The range of consumption is very great, from 100 lb. in the lowest income class to 192 lb. in the highest. If fish be included these figures become 109 lb. and 212 lb. respectively.

Of the components of the group the Canadian returns show the lowest meat consumption, with 138·75 lb. *per capita per annum* (excluding fish), as against 155·5 lb. and 152 lb. as shown by those of the British-born and of Americans, respectively.

Transport and the refrigerating car tend to weaken the significance of the aggregate consumption figures yielded by the budgets for different areas. For the various geographical groups of towns,* however, the following are the figures of annual consumption *per capita* :—

| | | | | | |
|--|-----|-----|-----|-----|-----------|
| New England Towns | ... | ... | ... | ... | 146·6 lb. |
| Other Eastern Towns (including New York) | ... | ... | ... | ... | 156·0 „ |
| Central Towns | ... | ... | ... | ... | 146·6 „ |
| Middle West Towns | ... | ... | ... | ... | 160·2 „ |

When these aggregate figures are analysed, the most important local differences shown are in the consumption of mutton and lamb, pork, and bacon, ham, &c. Thus, while the consumption of beef is at its lowest in the Central and Middle West groups of towns with percentages to the total meat consumption of 45·0 and 45·1 respectively, and reaches its maximum proportion in the New England towns with 50·7 per cent., the minimum and maximum percentage of mutton and lamb differ much more considerably between the various groups of towns, the respective figures being 4·9 per cent. in the Middle West group and 13·1 in that of New England. Pork, on the other hand, is at its maximum in the Middle West towns with 19·2 per cent. of total meat consumption and at its lowest in the Other Eastern towns (including New York) at 10·7 per cent. The consumption of bacon, ham, &c., is also at its maximum in the Middle West group of towns, where it accounts for 13·6 per cent. of the total meat consumption shown by the budgets, but was at its minimum in the New England towns with 9·9 per cent. Local variations are also great in the cases of veal, sausage and poultry, but these forms of meat enter less into the family dietaries.

* For purposes of comparison the following figures relating to American-British budgets in the Southern towns are appended :—

| | Beef. | Mutton and Lamb. | Pork. | Bacon, Ham, &c. | Veal. | Sausage. | Poultry. | Total. |
|--|-------|------------------|-------|-----------------|-------|----------|----------|--------|
| Annual Consumption <i>per capita</i> lb. | 62·4 | 3·1 | 30·2 | 31·2 | 3·1 | 9·9 | 7·8 | 147·7 |
| Percentage Consumption of each kind of Meat. | 42·3 | 2·1 | 20·4 | 21·1 | 2·1 | 6·7 | 5·3 | 100·0 |

The following Table sets out the quantities and percentages of the different kinds of meat as shown by the budgets derived from the various geographical groups of towns :—

XII.—Consumption of different Kinds of Meat.—By Geographical Groups of Towns.

| | New England Towns. | Other Eastern Towns (including New York). | Central Towns. | Middle West Towns. |
|--|--------------------|---|----------------|--------------------|
| Annual Consumption <i>per capita</i> . | | | | |
| | lb. | lb. | lb. | lb. |
| Beef | 74·4 | 76·4 | 66·0 | 72·3 |
| Mutton and Lamb | 19·2 | 19·2 | 8·3 | 7·8 |
| Pork | 23·4 | 16·6 | 27·0 | 30·7 |
| Bacon, Ham, &c. | 14·6 | 17·7 | 19·2 | 21·8 |
| Veal | 3·6 | 7·8 | 10·9 | 12·5 |
| Sausage | 5·2 | 5·7 | 8·8 | 10·9 |
| Poultry | 6·2 | 12·5 | 6·2 | 4·2 |
| Percentage Consumption of each kind of Meat. | | | | |
| | | | | |
| Beef | 50·7 | 49·0 | 45·0 | 45·1 |
| Mutton and Lamb | 13·1 | 12·3 | 5·7 | 4·9 |
| Pork | 16·0 | 10·7 | 18·4 | 19·2 |
| Bacon, Ham, &c. | 9·9 | 11·3 | 13·1 | 13·6 |
| Veal | 2·5 | 5·0 | 7·5 | 7·8 |
| Sausage | 3·5 | 3·7 | 6·0 | 6·8 |
| Poultry | 4·3 | 8·0 | 4·3 | 2·6 |

The average consumption of beef *per capita per annum* is, for the whole group, 71·7 lb., and the component nationalities show no important deviation from this figure; the returns from the British-born showing an average of 75·9 lb., from the Americans one of 70·3 lb. and the Canadians one of 69·8 lb.

The average consumption of pork, fresh and salt in the whole group is 24·1 lb. *per capita per annum*; of the components the British returns show an average of 19 lb., the American one of 25 lb. and the Canadian one of 34 lb.

The average consumption of bacon *per capita per annum* is, for the whole group, 18·5 lb.; for the components: British-born 19·7 lb., American 18·9 lb., and Canadian 9·4 lb. Combining the figures for pork and bacon, the British returns show a consumption of 38·8 lb. *per capita per annum*, the Canadian 43·1 lb. and the American 43·9 lb., and when thus combined there is but little difference in the consumption shown.

The average consumption of mutton and lamb is only 13·3 lb. *per capita per annum* for the whole group. Of the components, the British-born show an average of 18·9 lb., the American one of 11·6 lb. and the Canadian of 9·4 lb. The range of consumption is very great.

The average consumption of veal for the whole group is 9 lb. *per capita per annum*.

For sausage the average *per capita per annum* is 7·75 lb. The American average is 8·5 lb., showing a slightly larger consumption than the Canadian (7·75 lb.), while that of the British-born falls to 5·8 lb. There are only three town groups of 25 or more budgets in which the consumption of sausage exceeds 15 lb. *per capita per annum* and in 19 such town groups the consumption is 6 lb. or less; in six of these it is below 3 lb.

The relative proportion of each kind of meat to all meat in the whole group is set out below :—

XIII.—Percentage Consumption of each Kind of Meat.—American-British (Northern) Group.

| Beef, fresh and corned. | Mutton and Lamb. | Pork, fresh and salt. | Bacon, Ham, &c. | Veal. | Sausage. | Poultry. | Total. |
|-------------------------|------------------|-----------------------|-----------------|-------|----------|----------|--------|
| 47·1 | 8·8 | 15·8 | 12·2 | 6·0 | 5·1 | 5·0 | 100 |

Among the component nationalities the Canadians, according to the budgets, use the largest proportion of beef, viz., 50·4 per cent., whilst the British-born show a consumption of mutton and lamb much greater than that used by either of the others, viz., 12·2 per cent., as against 7·6 per cent. in the American returns and 6·8 per cent. in the Canadian. There are also great differences in the consumption of pork, which forms 24 per cent. of the whole in the case of the Canadians, 16 per cent. of the Americans and 12 per cent. of the British-born as set out in the budgets.

Fish is of considerable importance in these dietaries, the returns from the British-born showing a consumption of 0·42 lb. *per capita* per week, the Canadian one of 0·33 lb. and the American one of 0·27 lb. If fish be included with meat the average annual consumption of all meat *per capita* for the whole group is, as already stated, raised to 168 lb.

The local figures of quantity of fish consumed reflect mainly differences in the degree of facility with which fish can be obtained, all the towns showing the highest consumption being within easy reach of the Atlantic sea-board. The actual consumption *per capita per annum* as shown by the budgets of the various geographical groups of towns is as follows :—

| | | | | | |
|--|-----|-----|-----|-----|----------|
| New England Towns | ... | ... | ... | ... | 23·9 lb. |
| Other Eastern Towns (including New York) | ... | ... | ... | ... | 22·9 „ |
| Central Towns | ... | ... | ... | ... | 9·4 „ |
| Middle West Towns | ... | ... | ... | ... | 12·0 „ |

The annual *per capita* consumption of and expenditure on all meat and fish and the percentage of income spent on such food is as under in each of the income classes :—

XIV.—*Consumption of and Expenditure on Meat and Fish.—American-British (Northern) Group.*

| | Limits of Weekly Family Income. | | | | | | | |
|--|---------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|--------------|
| | Under £2. | £2 and under £3. | £3 and under £4. | £4 and under £5. | £5 and under £6. | £6 and under £7. | £7 and under £8. | £8 and over. |
| Annual Consumption <i>per capita</i> . | 109 lb. | 145 lb. | 160 lb. | 165 lb. | 174 lb. | 176 lb. | 195 lb. | 212 lb. |
| Weekly Expenditure <i>per capita</i> . | 1s. 2¾d. | 1s. 8¼d. | 1s. 10½d. | 2s. 0d. | 2s. 1¾d. | 2s. 2d. | 2s. 6d. | 2s. 8¼d. |
| Percentage of income ... | 12·95 | 13·49 | 12·22 | 11·36 | 10·50 | 9·82 | 10·23 | 8·28 |

The predominant range of consumption of all meat, poultry and fish *per capita per annum* is from 140 lb. to 190 lb., 23 local nationality sub-groups of at least 25 budgets each, comprising 2,201 families, falling within this range. The corresponding predominant range excluding fish and poultry may be taken as from 120 lb. to 160 lb. *per capita per annum*.

The consumption of meat of all kinds as shown by the budgets is in general high and much above European standards. As a rule nationality and occupation greatly influence the figures, and locality has been seen to be not without its effects, but when it is considered that in the lowest income class of the group of budgets under consideration the purchase of all meat and fish is 109 lb. *per capita per annum* (notwithstanding the fact that out of 119 children only two are earning and the remainder are of low average age), while it approaches double this figure in the highest income class, it is obvious that meat is regarded as a very important feature of the family dietary.

A general tendency for food consumption *per capita* to rise with income is shown in the budgets, but in this there is no regularity. On the whole it is more marked as regards the first three income classes, that is, for those earning up to and under £4 per week, but even in these classes in some commodities as, for instance, pork, bacon and ham, sugar, lard, suet and dripping and coffee, it is hardly apparent in the budgets. As regards the total meat consumption itself it is only in the classes with family earnings averaging less than £4 per week that the consumption tends to move consistently with income.

In addition to the large meat consumption, one of the most striking features of the American-British budgets is the great variety of food consumed and the relatively small proportion which the family food bill bears to total income.

PART II.—COMPARISON OF WAGES, HOURS OF LABOUR, RENTS AND RETAIL FOOD PRICES IN THE UNITED STATES WITH THOSE IN ENGLAND AND WALES AND OF BUDGETS IN THE UNITED STATES WITH THOSE IN THE UNITED KINGDOM.

An attempt must now be made to compare the statistical data collected in the United States with regard to wages and hours of labour, rents, retail prices and household expenditure, with similar data relating to this country.

The method of index numbers furnishes the most suitable device by which these summary comparisons can be made and it will be again used. Attention must, however, again be drawn to the imperfections of a method which, because necessarily limited to the

presentation of purely statistical data, is unable to reflect those elements of the problem concerning which a corresponding body of data may not be available or which cannot be statistically measured or described. The following illustrations may be mentioned of factors relevant to such a comparison in regard to which a merely numerical statement of international conditions is apt to fall short of completeness: (a) as regards wages and hours, possible differences in the continuity of employment and the strenuousness of the service demanded; (b) as regards rents, the relative standard of dwelling accommodation provided; (c) as regards prices, the qualities of goods which a given expenditure secures; and (d) as regards family food expenditure, differences in national habit and taste and in the conditions of supply. To some extent such shortcomings will be indicated in the following pages. Although the limitations of the real significance of statistical comparisons and the fact that they can rarely, save when dealing with the simplest and most concrete phenomena, convey more than approximate truths, must, therefore, be always borne in mind, such comparisons are nevertheless of great and proved value.

WAGES.

Just as for the purposes of internal comparisons of wages and hours of labour it was necessary to choose occupations that were followed most universally, so is it in respect to international comparisons, and, as in the preceding foreign enquiries, the building, engineering and printing trades have been chosen for this purpose. Roughly speaking, these three trades represent in both countries those which rank among the more highly organised and the more highly skilled, and, although the position of the wage-earner in the first mentioned is probably relatively somewhat stronger in the United States than in England and Wales, owing to the more rapid expansion that is taking place in the former country, the three trades do not appear to occupy a substantially higher relative position in the economy of that country than they do in this; nor does it appear that the selection of their predominant rates for purposes of international comparison is less suitable than in the other foreign enquiries undertaken by the Board of Trade.

The predominant weekly wages in the United States in the three trade-groups above mentioned, as represented by the towns selected for investigation, have been given for February, 1909, on page xvi, and the corresponding particulars for England and Wales for October, 1905, will be found on page xxxiii. of the Report on "Cost of Living of the Working Classes" in the United Kingdom. Bringing together the data for the two countries we have the following comparisons:—

Predominant Weekly Wages of Adult Males in certain Occupations in England and Wales and in the United States.

| Occupation. | Predominant Range of Weekly Wages. | | Ratio of Mean Predominant Wage in the United States (February, 1909) to Mean Predominant Wage in England and Wales (October, 1905) taken as 100. |
|--|---|---------------------------------|--|
| | England and Wales (October, 1905). | United States (February, 1909). | |
| <i>Building Trades* :—</i> | | | |
| Bricklayers | 37s. 6d. to 40s. 6d. | 110s. to 125s. | 301 } 285 |
| Stonemasons | 37s. 2d. ,, 39s. 4d. | 96s. 3d. ,, 110s. | |
| Carpenters... .. | } 36s. 2d. ,, 39s. 4d. | 68s. 9d. ,, 90s. } | 210 |
| Joiners | | | 210 |
| Plasterers | 36s. 6d. ,, 41s. 8d. | 100s. ,, 119s. 2d. | 280 |
| Plumbers | 35s. 4d. ,, 39s. 9d. | 87s. 6d. ,, 112s. 6d. | 266 |
| Painters | 31s. 6d. ,, 37s. 6d. | 65s. ,, 85s. | 217 |
| Hod Carriers and Bricklayers' Labourers. | 24s. 4d. ,, 27s. | 50s. ,, 68s. 9d. | 231 |
| <i>Engineering Trades :—</i> | | | |
| Fitters | 32s. to 36s. | } 63s. 4d. to 74s. 6d. } | 203 |
| Turners | 32s. ,, 36s. | | 203 |
| Smiths | 32s. ,, 36s. | 67s. 8d. ,, 85s. 4d. | 225 |
| Patternmakers | 34s. ,, 38s. | 74s. 6d. ,, 91s. 8d. | 231 |
| Labourers | 18s. ,, 22s. | 37s. 6d. ,, 43s. 9d. | 203 |
| <i>Printing Trades :—</i> | | | |
| Hand Compositors (Job Work)... | 28s. to 33s. | 68s. 9d. to 81s. 3d. | 246 |
| Arithmetic Means† ... | { The Building Trades 243 { The Engineering Trades 213 { All above Occupations 232 | | |

* The wages stated for the building trades are for a full week in summer in both countries.

† In arriving at the trade and general index numbers, bricklayers and stonemasons have been regarded as one occupation and carpenters and joiners and fitters and turners as two respectively, as in the earlier foreign enquiries.

The level of wages in the building trades was the same in England and Wales in 1909 as in 1905, but the rates in the engineering trades had been raised by about $1\frac{1}{2}$ per cent. between October, 1905 and February, 1909, and those of compositors by about $2\frac{1}{2}$ per cent. The effect of these changes would be to lower the mean ratio for the trades represented in the above Table from 232 : 100 to 230 : 100.

In the building trades the rates for the United States are based upon actual returns from employers, but many of these returns embody the locally accepted standard rates in this relatively highly organised group. In so far as this is the case the standard would generally represent the maximum of a group of trades that is one of the most highly paid in the United States, and departures from it would be to a point below rather than one above the rates quoted. Various circumstances are tending, however, to maintain the strong position of wage-earners in these trades, especially the rapid increase of population and the accompanying expansion of towns, resulting from a great volume of immigration that is composed in general of a class of labour that does not enter the skilled branches of the building trades to any considerable extent.

The exceptionally high rates for bricklayers deserve notice, and it may be observed that the relative importance of this class of artisan is somewhat over-weighted in the index number for the building trade group, even though combined with that for stonemasons. In England the bricklayer is numerically more important in the building trades than in the United States, partly because of the greater extent to which timber and, in the case of large structures, iron and steel are used in the latter country. Although it might thus seem that influences are at work tending to weaken the economic position of the bricklayer in the United States, these influences are more or less counteracted by the fact that the bricklayer is almost entirely a town product, since the recruiting ground provided by the rural districts and by the small centres of population in England is relatively unimportant in the United States, owing to the great predominance there of frame buildings.

While the position of the bricklayer is thus different in the United States and although as a class he is relatively far less important numerically than the much lower paid carpenter, it will be observed that the building trade group as a whole commands a high range of wages, the arithmetic mean of the index numbers for the group being 243 as compared with 213 in the engineering trades.

In the case of the engineering trades the English wages are the standard time rates recognised by the unions concerned, the American ranges, on the other hand, being based, in the absence of standard rates, on returns obtained from employers of actual earnings in an ordinary week, and consequently the two sets of figures are not strictly comparable. It has been already pointed out that in this group of trades the lines of demarcation between the skilled fitters and turners classed as machinists in the United States and the less skilled or semi-skilled machinists engaged on minutely sub-divided tasks are often loosely drawn. The labour employed in the latter case is frequently composed of the newer immigrant classes and the rates paid to men who may still be roughly classed as machinists are not infrequently lower than those quoted in the Table, which are for the skilled mechanic only.

In the printing trades the rates for hand compositors engaged on job printing are given. The American figures represent predominant time rates ascertained to be paid in practice, while those for England and Wales are, as in the case of the engineering trades, the standard time rates recognised by the trade unions.

In no case in the Table are the comparative ranges seriously complicated by the distinction as between time and piece rates, and in the case of the building trades and of the printing trades not at all. Neither are the comparisons invalidated by differences in the character of the work done by those who fall into similar classes in the two countries.

It will be seen that in the building trades the mean of the predominant range in the United States is in no case less than double that of the corresponding English grade of wage-earner. For the whole group the ratio is 243 : 100. In the engineering trades the index numbers are in no case less than double the English figure, and the combined ratio is 213 : 100. For the compositors the ratio is 246 : 100, as compared with 232 : 100 for all the occupations included in the Table. It will be remembered that each of these ratios is subject to slight modification in view of the different dates to which the returns relate, the extent of such modification being indicated in the paragraph immediately following the Table above.

The question arises as to whether any such ratio as that given above fairly represents the level of wages for adult males in the towns investigated in the United States as compared with that of the towns covered by the corresponding enquiry in England and Wales; or whether a ratio based upon the same occupations as have been used in the

preceding international comparisons is one that may either exaggerate or minimise the existing differences. While the combined ratio yielded by the figures in the above Table appears to give an approximately correct general indication of the relative rates of remuneration for town occupations as between the two countries, so far as they can be determined within the limits of the present enquiry, the comparative figures appear to be somewhat weighted in favour of the United States and should not be pressed to an undue extent. It must be remembered that for the reasons stated above the position of the building trades in the United States involves the selection of a group of occupations for comparative purposes that is probably slightly favourable to the United States, and the whole basis of comparison is not a very wide one. The proportion of unskilled or of semi-skilled labour employed in industry in the United States is greater than in this country and it may be noted that this fact would affect the comparison of trades as a whole, while it is clear that, in order to ascertain the comparative level of wages in the two countries—taking into account the proportions employed at high and low rates in both cases—a general census of wages would be required.

Although the proportion of those who may be roughly classed as the unskilled or semi-skilled in comparison with the skilled workers is greater in the United States than in England and Wales, it should be observed that the evidence of the town reports indicates that the proportion of men in the community who in an industrial classification would fall below any of these three classes as representing a class of relatively unemployable labour, be it through premature deterioration or through old age, is smaller than in this country. The comparatively recent character of American urban development and a rapid growth of population, largely due to the influx of those in the prime of life or who, having passed the more uncertain years of childhood, have not yet reached their prime, are the main general considerations that underlie the above conclusion.

HOURS OF LABOUR.

The usual hours of labour in February, 1909, in the various branches of the selected trades—building, engineering and printing—in the towns investigated in the United States, have been set out in the first part of the General Report on page xix. The following Table summarises the averages of the predominant hours of labour in England and Wales and in the United States for the different trades compared :—

Weekly Hours of Labour of Adult Males in certain Occupations in England and Wales and in the United States.

| Occupation. | Average Hours of Labour per week (excluding intervals). | | Ratio of Average Hours of Labour in the United States (February, 1909) to those in England and Wales (October, 1905) taken as 100. |
|--|---|------------------------------------|--|
| | England and Wales (October, 1905). | United States (February, 1909). | |
| <i>Building Trades* :—</i> | | | |
| Bricklayers | 53 | 46 | 87 |
| Stonemasons | 52 | 46½ | 89 |
| Carpenters | 53 | 47¾ | 90 |
| Joiners | | | 90 |
| Plasterers | 53 | 46¼ | 87 |
| Plumbers | 53½ | 47½ | 89 |
| Painters | 53½ | 47½ | 89 |
| Hod Carriers and Bricklayers' Labourers. | 52½ | 48¾ | 93 |
| <i>Engineering Trades :—</i> | | | |
| Fitters | 53 | 56¼ | 106 |
| Turners | 55 | | |
| Smiths | 53 | 56 | 106 |
| Patternmakers | 53 | 56½ | 106 |
| Labourers | 53 | 56¼ | 106 |
| <i>Printing Trades :—</i> | | | |
| Hand Compositors (Job Work) ... | 52½ | 49 | 93 |
| Arithmetic Means ... | { The Building Trades 89 { The Engineering Trades 106 { All above Occupations 96 | | |

* The hours of labour stated for the building trades are for a full week in summer in both countries.

In the United States the length of the working week in the building trades does not, as a rule, vary between summer and winter, and when there is any seasonal curtailment it is nearly always during the height of the summer when leisure is most welcome and not in the winter because the hours of light are too few for a full day's work. Thus it is occasionally found that the working weeks in the hottest summer months are slightly shorter than during the rest of the year.

No adjustment of the figures shown in the above Table is required to allow for the difference of date to which they refer, since changes in the hours of labour in the building and engineering trades and for compositors in England and Wales between the dates of the two enquiries amounted in each case to less than $\frac{1}{2}$ per cent. The index numbers arrived at in respect of the trades enumerated may, therefore, be accepted without modification.

It will be seen that the average hours of labour per week range in the different occupations in the building trades from 52 to $53\frac{1}{2}$ in England and Wales, and from 46 to $48\frac{3}{4}$ in the United States. The weekly working time in England and Wales averages about 6 hours longer than in the United States in the case of skilled men, but only $3\frac{3}{4}$ hours longer in the case of hod carriers and bricklayers' labourers. The arithmetic mean of the index numbers in the whole group of building trades is 89, showing a working week in summer about 11 per cent. shorter than in England and Wales.

As regards the engineering trades, the hours are distinctly longer in the United States than in the building trades in that country, ranging from a minimum of 54 hours to a maximum of 60, the average being about nine hours per week longer than the average in the building trades. As compared with England and Wales the average hours in the engineering trades are also somewhat longer—by 3 or $3\frac{1}{4}$ hours per week—the English average being 53, and the ratio of average hours in these trades in the United States to that in England and Wales 106 : 100.

Among compositors the American working week is on an average about $3\frac{1}{2}$ hours shorter than in England and Wales, the average hours being 49 as compared with $52\frac{1}{2}$, and the corresponding ratio 93 : 100.

The average of the index numbers given in the last column of the Table is 96, showing that in respect of the three groups of trades combined the hours in the United States are about 4 per cent. shorter than in England and Wales.

The question again arises as to whether the combined ratio thus obtained is one from which a general conclusion can be drawn as to the hours of labour in the two countries, and in this case there is little doubt that the percentage figure is somewhat low for the United States. Although in a general survey it is probable that the respective levels shown in the above Tables might be somewhat unduly favourable to the United States, the comparison as between the three selected trade-groups themselves is a fair one, and it therefore provides a basis of calculation of the hourly rate of wages similar to that which has been made in the preceding foreign enquiries. Thus for the trades under consideration, the weekly wages for the United States as compared with England and Wales being approximately as 230 : 100 (regard being had to the different dates of enquiry), and the hours of the usual working week being as 96 : 100, it follows that the average hourly earnings of the American workmen are, to those of English workmen in the same trades, approximately as 240 : 100. In the building trades the ratio is as 273 : 100 and in the printing trades it is 258 : 100, while in the engineering trades it falls to 198 : 100.

HOUSING AND RENTS.

Although the predominant type of working-class dwelling in both the United States and in England and Wales is that accommodating the single family, the exceptions to this prevailing rule are far more numerous in the former country, and the scale upon which the tenement house provision made in the greater part of the City of New York departs from the more common practice is without counterpart in England and Wales. In addition to New York, in which exceptional conditions prevail and in which over considerable areas an exceptional measure of congestion exists, there are a few other towns in which dwellings occupied by three or more families are conspicuous types, as against the noteworthy instances offered in this country by the central parts of London and by Plymouth and Devonport; while houses constructed for two families, corresponding to those characteristic of Newcastle and the Tyne district, are common over a wide area of the United States.

While the classes of dwellings in the occupation of the working classes in the United States are thus considerably more composite than in England and Wales, the difference

in the material of which they are constructed is still greater, frame or timber houses being the more usual type in the former country. Brick-built houses have been seen to be the chief local types in only a few towns, including Philadelphia and Baltimore, although they predominate in the central parts of some others, including the borough of Manhattan (New York) and Boston. Partly owing to the increasing cost of timber and to the fire-prevention clauses of municipal by-laws, brick-built dwellings are also in general tending to become relatively more numerous, but, as stated, up to the present time the frame house is the more usual type. This difference from English conditions affects, however, relative durability more than either convenience, comfort or rentals.

In the absence of any more satisfactory basis of comparison of housing accommodation, the simplest interpretation of standard has been again adhered to in the number of habitable rooms, and although in a few cases the accommodation provided by some local type of dwelling caused slight difficulty in enumeration, the basis adopted has generally been found convenient and free from ambiguity. In one respect it proved favourable to the United States, inasmuch as sculleries, which were not counted as rooms, are common in English dwellings but exceptional in American. As compared on the basis of the number of habitable rooms, however, it would seem from the following Table, showing the number of towns in which predominant rentals for dwellings of certain sizes were procured, that on the whole the accommodation provided in the American home is somewhat more liberal than in that of England and Wales.

Table showing the numbers of towns in England and Wales and the United States from which sufficient numbers of returns of rents for workmen's dwellings of 1, 2, 3, 4, 5, 6, 7 and 8 rooms were obtained to enable predominant rents for each class of dwelling to be stated.

| Country. | Number of Rooms per Dwelling. | | | | | | | | Number of Towns Investigated. |
|--------------------------|-------------------------------|----|----|----|----|----|----|----|-------------------------------|
| | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | |
| England and Wales | 1 | 19 | 44 | 73 | 68 | 30 | — | — | 73 |
| United States* | — | 5 | 19 | 28 | 25 | 20 | 3 | 1 | 28 |

* Dwellings occupied by coloured tenants are excluded.

In both countries the dwelling of four rooms is the only type found in every case, though that of five rooms is in both cases very general. On the other hand, the six-roomed dwelling is relatively far more represented in the American returns, 71 per cent. of the American towns showing a predominant rental for dwellings of this size, as compared with only 41 per cent. of the towns in England and Wales. Moreover, in the United States a predominant figure is shown in no town for single-roomed dwellings as compared with one in England and Wales, viz., London, while predominant figures for two rooms are shown in only five American towns, or 18 per cent. of the whole, as compared with 19 towns, or 26 per cent. of the whole, in England and Wales. Predominant rentals for three-roomed dwellings are shown in 68 per cent. of the American towns visited, and in 60 per cent. in the case of England and Wales. While, therefore, the dwellings of larger size are more frequent in the United States, and those of smaller size are slightly less frequent, and while the single-roomed dwelling is in no case a common type, in both countries the point of concentration is greatest in the four-roomed and five-roomed dwellings, and in both cases, therefore, these may be regarded as the more predominant types.

As regards the size of rooms, comparison has been found to be impossible, though the measurements ascertained by the investigators seemed to indicate that except in New York, where rooms are apt to be exceptionally small, the more general dimensions of rooms in the American towns were somewhat greater than those usual in English towns. Any difference in the size of rooms does not, however, account for the difference in predominant rentals as between the two countries, which, as will be seen below, shows an excess of something over 100 per cent. in the more usual rents paid in the United States as compared with England and Wales. In the following Table the predominant rents for dwellings of three, four, five and six rooms in the United States, as given in the Table on p. xxii, are set out in comparison with those given for England and Wales in the Report on "Cost of Living of the Working Classes" in the United Kingdom (Cd. 3864, p. xiv.).

Predominant Rents of Working-class Dwellings in England and Wales and in the United States.

| Number of Rooms per Dwelling. | Predominant Range of Weekly Rents. | | Ratio of Mean Predominant Rent in the United States to that in England and Wales, taken as 100. |
|-------------------------------|------------------------------------|----------------------|---|
| | England and Wales. | United States. | |
| Three rooms | 3s. 9d. to 4s. 6d. | 6s. 9d. to 9s. 7d. | 198 |
| Four rooms | 4s. 6d. „ 5s. 6d. | 8s. 8d. „ 12s. | 207 |
| Five rooms | 5s. 6d. „ 6s. 6d. | 11s. 6d. „ 14s. 11d. | 220 |
| Six rooms | 6s. 6d. „ 7s. 9d. | 13s. „ 17s. 4d. | 213 |
| Arithmetic Mean | ... | ... | 209 |

It will have been seen from the earlier part of this Report that American working-class tenants are liable to no direct taxation, the tax on real estate, which forms the main source of municipal revenue, being always, and the water rate in nearly every case, paid by the landlord, whatever the ultimate incidence of these charges may be. From the tax on personalty working-class tenants are, as a rule, exempt. In the United States, as in England and Wales, therefore, the rent paid by them is, as regards rates and taxes, an inclusive charge, and to this extent comparison on the basis of expenditure is free from complication.

In this comparison of rents, weekly figures have been quoted, but it should be observed that in the United States rents are generally paid monthly and not weekly.

The differences shown throughout the Table are great and the most usual minimum figure in the United States exceeds the maximum in England and Wales for dwellings of the same size in no case by less than 2s. 3d. per week, and in one case by 5s. 3d.

It will be observed that the ratios of the mean predominant rents in the United States towns are considerably higher as compared with England and Wales in the case of dwellings of larger size, the mean of the ratios for five-roomed and six-roomed dwellings being 216·5 as compared with 202·5 for those of three and four rooms. The disparity is apparently connected with the tendency to which attention has been drawn for the standard of accommodation in the United States to improve markedly, especially in the case of dwellings occupied by the more highly paid industrial classes, and for the modern dwellings to be not only more highly rented but to contain more rooms.

A further basis of comparison of rents as between the two countries is afforded by taking the mean of the various predominant ranges and comparing the average rent per room for the whole series. By this method the weekly rent per room in the United States is found to be 2s. 7½d.,* as compared with 1s. 3d. in England and Wales, equivalent to a ratio of 210 : 100.

In the above comparisons the several predominant rents stated are founded in each case neither on all the towns visited nor on the same towns, since ranges of dwellings of the various sizes shown in the Table were not obtainable in all towns. An alternative comparison may be made by re-working all the index numbers for the rents of the American towns to the basis used for the towns of England and Wales, viz., rents in the Middle Zone of London, that is, a very extended area, the inner boundaries of which are about two miles from the centre of London and the outer limits about four miles from that centre. This has been done in the following Table:—

Rents Index Numbers in Descending Order.
London (Middle Zone) = 100.

| Town. | Index Number. | Town. | Index Number. | Town. | Index Number. |
|-------------------|---------------|----------------------|---------------|-------------------|---------------|
| New York | 160 | Philadelphia | 127 | Cleveland | 102 |
| St. Louis | 159 | Minneapolis—St. Paul | 123 | Paterson | 99 |
| Pittsburg | 151 | Atlanta | 122 | Providence | 96 |
| Memphis | 150 | New Orleans | 115 | Detroit | 94 |
| Cincinnati | 145 | Savannah | 114 | Augusta | 93 |
| Brockton | 136 | Chicago | 114 | Fall River | 90 |
| Boston | 132 | Louisville | 113 | Baltimore | 85 |
| Birmingham | 130 | Milwaukee | 108 | Lowell | 84 |
| Newark | 128 † | Lawrence | 106 | Muncie | 71 |

* Cf. pp. xxii. and xlix.

The mean index number on the above basis (of the rents of the Middle Zone of London) for all the towns investigated in England and Wales is 56·2; for the above American towns 116·6. The ratio of the American to the English mean is thus 207 : 100, about the same as the mean ratio of the predominant rents for each class of dwelling and as that obtained by comparing the general average per room as given above. This ratio will be taken as representing the level of rents for working-class urban dwellings in the United States as compared with the level of such rents in England and Wales.

Although a difference is shown in the above Table amounting to no less than 89 points, the high prevailing range is a marked feature of the Table and in only eight cases, including none of the larger towns save Detroit and Baltimore, does the rents index number fall below that of the Middle Zone of London. New York heads the list with an index number of 160, and the separate figure for the borough of Manhattan, 175, would show a still higher excess over that of the Middle Zone of London. The corresponding figure for Brooklyn is 141. Applying the comparison to Philadelphia and Baltimore, two towns in which the housing conditions approximate somewhat closely to those of England and Wales, inasmuch as the more usual type of working-class dwelling is for single families and brick-built, the ratios show that in the former town the tenant might expect to have to pay 27 per cent. more rent than in the Middle Zone of London; whereas in Baltimore, well-known as one of the cheaper towns of the States, he would probably pay 15 per cent. less.

The three zones into which London was divided show, however, a range of from 86 in the case of the Outer Zone, including certain areas of Greater London lying outside the County, to 118 in that of the Central Zone, the Middle Zone being taken as 100. These three zones were again sub-divided and the parts show a range from a minimum of 79 in certain outlying north-eastern parts—largely residential industrial neighbourhoods and “dormitories” for London itself—to a maximum of 125 in the western portion of the Central Zone. A further basis of comparison is thus afforded, and Muncie is the only American town in which rents were found to fall below any portion of the whole of the London area, while in ten towns at the other end of the scale the range of rentals exceeded those of the most expensively rented district of London, that is, the western portion of the Central Zone, by from 2 points in the case of Philadelphia to 35 points in that of New York as a whole, or 50 points in that of the borough of Manhattan.

With regard to the other towns in England and Wales, Croydon and Plymouth and Devonport, with index numbers of 81, and Newcastle-on-Tyne with one of 76, are the solitary examples out of the 73 towns in which rents were investigated in which the index numbers exceed those for the lowest-rented town in the United States Table, and Muncie, with the exceptionally low index number of 71, is the only town in which the level falls below those of the English towns just mentioned. In order to illustrate other important English comparisons that may be made with the United States figures, some of the index numbers for the great centres of population in England and Wales may be quoted, such as Liverpool 65, or just under half the Boston figure; Manchester and Salford 62, a little less than half that of Philadelphia; Birmingham, Bradford and Cardiff 59; Leeds and Nottingham 56; Sheffield 55; Bristol 53, or about 38 per cent. lower than that of Baltimore; and, finally, the index number for Hull, Leicester, Norwich and Preston, which is 48, or just half the representative figure for Providence.

The explanation of the higher rentals in the American towns investigated must be looked for in various directions, but principally in the higher cost of building as expressed by labour and materials, in the more generous allowance of ground space per dwelling, except in congested areas, in the more modern character of a greater proportion of the fittings and conveniences of the dwelling, as illustrated by the more frequent provision of bathrooms, in a higher general level of material prosperity that is able effectively to demand such increasing variety and completeness of accommodation, and in the shorter life that is expected from the individual dwellings.

From what has been said as to the modern character of much of the accommodation provided in American dwellings it follows that the elementary requirements of water and of a water-carriage sewerage system are, as in this country, generally found. The

exceptions rarely appertain to towns as a whole, pronounced sanitary defects being more common in particular quarters of towns, sometimes consisting of older and deteriorated properties, as in part of St. Louis, and sometimes in newer districts of the more rapidly extending cities where building has outrun the sewerage and water systems of the locality, as in parts of Duluth.

Save in such exceptions as those mentioned, especially in respect to the greater extent to which houses in multiple occupation are found, and in the unusual extent to which, in some foreign districts largely frequented by more recent immigrants, the boarder or the lodger class tends to create overcrowded conditions, the greatest comparative defects of the American dwelling and of its surroundings are largely normal to an earlier stage of urban development, and consist not in their internal arrangements and sanitary standard but in an external bareness frequently noticeable; in the absence of gardens even when, as is common, building plots are spacious; in unmade roads, and in an irregular and ragged development that impresses, even more than in England and Wales, often with a sense of incompleteness and sometimes with that of private carelessness and administrative neglect.

The rental figures obtained in the United States are, as stated, for February 1909 and the question arises as to how far these may be comparable with the rentals for England and Wales collected for October, 1905. No exact answer can be given to this question, but there is a considerable amount of evidence to show that if the American figures had been collected for February, 1907, that is for a period two years earlier than that actually selected, they would have shown in many places a somewhat higher level, inasmuch as the industrial depression which followed the financial crisis of October, 1907, and continued throughout the following year led to a decline on the levels reached during the preceding period of prosperity and active immigration. Taking into account the further fact that, even in the United States, rents do not move on a large and general scale rapidly, it seems highly improbable that any possible variations due to the different dates at which the particulars were collected in the two countries would affect appreciably the general comparisons presented. It is believed, therefore, that for practical purposes the ratio given above of 207 : 100 may be taken as representing with approximate accuracy the level of rents paid by the working classes in the United States and England and Wales respectively.

RETAIL FOOD PRICES.

The predominant prices paid in February, 1909, for various articles of food by the working classes in the 28 towns investigated in the United States have been set out in the Table on page xxix. In certain cases, including the principal articles of consumption, and representing about 61 per cent. of the cost of all articles that enter into the ordinary household expenditure for food in the American-British (Northern) Budget and about 66 per cent. for those enumerated in that of the United Kingdom, a comparison is possible as between American and English prices.

In some cases the rise in the prices of articles which it is thus possible to compare, including that which has taken place in the period subsequent to February, 1909, has attracted much attention in recent years both in the United States and in many other countries, and the percentage increase in several of the commodities in the United States has been very marked. Various explanations of this increase are offered, some internal and others of more general significance, but it would be irrelevant to attempt to discuss in this Report either their individual or their relative importance. It is, however, pertinent to draw special attention to the general tendency that has been manifested in the United States for prices of agricultural food produce to advance rapidly from the comparatively low level that prevailed in that country even ten years ago.

In most of these cases internal conditions have made the range of prices of meat and dairy produce in the United States somewhat higher than that of England and Wales, but the most significant fact with regard to the relative prices of meat as between the two countries is not so much that they are now, on the whole, very slightly higher than in England, but that there has been a large advance from the relatively low level at which they stood only a few years ago. It is with this low internal level of comparatively recent years that domestic comparisons in the United States are almost invariably and naturally made.

The comparisons of retail prices of food as between the United States and England and Wales, made possible by the present enquiry, are set out in the following Table :—

Predominant Retail Prices in England and Wales and in the United States.

| Commodity. | Predominant Range of Retail Prices. | | Ratio of Mean Predominant Price in the United States (February, 1909) to that in England and Wales (October, 1905), taken as 100. |
|---------------------------|---|---|---|
| | England and Wales (October, 1905). | United States (February, 1909). | |
| Sugar per lb. | 2d. | 2 $\frac{3}{4}$ d., 3d. | 144 |
| Cheese " | 7d. | 10d. | 143 |
| Butter " | 1s. to 1s. 1d.* | } 1s. 4d. to 1s. 5 $\frac{1}{2}$ d. | 126 |
| | 1s. 2d.† | | |
| Potatoes per 7 lb. | 2 $\frac{1}{2}$ d. to 3 $\frac{1}{2}$ d. | 5 $\frac{3}{4}$ d. ,, 8 $\frac{1}{4}$ d. | 233 |
| Flour " | 8d. ,, 10d. | 11 $\frac{1}{2}$ d. ,, 1s. 1 $\frac{1}{2}$ d. | 139 |
| Bread per 4 lb. | 4 $\frac{1}{2}$ d. ,, 5 $\frac{1}{2}$ d. | 10 $\frac{3}{4}$ d. ,, 11 $\frac{1}{2}$ d. | 223 |
| Milk per quart. | 3d. ,, 4d. | 4 $\frac{1}{4}$ d. ,, 4 $\frac{3}{4}$ d. | 129 |
| Beef per lb. } | 7 $\frac{1}{2}$ d. ,, 8 $\frac{1}{2}$ d.‡ | } 6d. ,, 8d. | 104 |
| | 5d. ,, 6d.* | | |
| Mutton " | 7 $\frac{1}{2}$ d. ,, 9d.‡ | } 6 $\frac{1}{2}$ d. ,, 8 $\frac{1}{4}$ d. | 116 |
| | 4d. ,, 5d.* | | |
| Pork " | 7 $\frac{1}{2}$ d. ,, 8 $\frac{1}{2}$ d. | 5 $\frac{3}{4}$ d. ,, 7 $\frac{1}{4}$ d. | 81 |
| Bacon " | 7d. ,, 9d. | 8 $\frac{1}{2}$ d. ,, 10d. | 116 |

* Colonial or Foreign.

† Danish.

‡ British or Home-killed.

The predominant prices in the above Table for England and Wales are taken from the Table on p. xxiii. of the Report on "Cost of Living of the Working Classes" in the United Kingdom. In the case of beef and mutton it has been again thought sufficient, as in the other foreign enquiries, to take the mean of the predominant prices of "British or home-killed" and "Colonial or foreign" meat as being typical of the prices paid by the British working classes; the exact proportion of "Colonial or foreign" meat consumed by the working classes is not known, but it almost certainly exceeds 40 per cent. The price of "Colonial or foreign" butter has been combined with that of "Danish."

It is not possible to bring up to date the individual English prices stated in the foregoing Table, but records of retail prices in London are available and form a sufficient index of the general course of prices in this country. So far as the items shown above are concerned, the retail prices in London in February, 1909, as compared with October, 1905, showed an advance of 10 per cent. in the price of cheese, 17 per cent. in flour, 8 per cent. in bread, 6 per cent. in British beef and 12 per cent. in foreign beef; the prices of potatoes, milk, foreign mutton and pork were the same at the two periods, while those of sugar, butter, British mutton and bacon were respectively 7, 2, 7 and 3 per cent. lower at the later date.

Taken as a whole, these figures, after due allowance for the varying degrees of importance of the articles included has been made, indicate that retail food prices were 3 or 4 per cent. higher in England and Wales in February, 1909, than they were in October, 1905.

An examination of the Table shows that the prices in the United States that most nearly approximate, at the respective dates to which the prices apply, to those of England and Wales relate to beef, mutton, bacon and pork, which were, respectively, in the first case 4 per cent., in the next two cases 16 per cent. higher and in the last case 19 per cent. lower than in this country, pork thus affording a solitary example in the Table of a lower price level in the United States. In regard to the other items, a great disparity is shown, as a rule, as between American and English prices, the general features of which are unaffected by any difference that may be traceable to the different period to which the actual figures of the Table refer. The greatest differences are shown in the case of potatoes (which were the same price in London in February, 1909, as in October, 1905), and bread (which was 8 per cent. dearer), American prices being in both these cases more than double those of England and Wales. As will be seen later, the consumption of potatoes per family, as shown by the American budgets, is somewhat greater than that shown by the budgets of the United Kingdom, and the difference in price has, therefore, an increased effect upon family expenditure. In the case of bread, the effect is not so great, inasmuch as the average consumption of bread in the shape of the bought

loaf is not much more than a third of that shown in the budgets collected in the United Kingdom ($8\frac{1}{4}$ lb. as compared with 22 lb.), the difference in price being thus, in the case of the American consumer, of correspondingly diminished importance. The quantities are, indeed, such as to leave the average total weekly expenditure for baker's bread, without taking into account bread substitutes, at a somewhat lower figure in the American budget than in that of the United Kingdom, in spite of the fact that the price of bread is more than double.

The five items not as yet referred to—sugar, cheese, flour, milk and butter—show excesses ranging from 44 down to 26 per cent. Had the figures for both countries been given for February, 1909, the differences shown would have been slightly greater in the case of sugar and butter; less in the case of cheese and flour, and unaltered in the case of milk. In the last case, therefore, the difference in favour of England and Wales may be put at 1*d.* per quart or 29 per cent.

The other items in which relative prices were unaltered as between October, 1905, and February, 1909, were potatoes, for which the mean price per 7 lb. in the United States was 7*d.* as compared with 3*d.* in England and Wales or an excess of 133 per cent.; and pork, for which the mean prices were $6\frac{1}{2}$ *d.* in the United States and 8*d.* in England and Wales or an advantage to the American consumer in this case of 19 per cent.

In the comparisons made so far no account has been taken of the difference in the quantities of the various commodities that are consumed, either in an average working-class family in the same country or in similar families in both countries.

Internal comparisons in the cost of living in the United Kingdom were arrived at by comparing the cost, in the various towns investigated, of maintaining what had been found by investigation to represent, as regards food, an average standard of living in British working-class families. Thus, the measurable quantities that made up this standard having been ascertained and local predominant prices having been obtained, variations in the local cost of living were calculated by seeing how much it would cost in the different towns investigated to purchase the quantities of meat, bread, butter, sugar, &c. included in the average budget.

Within the borders of a single country in which approximately similar habits of housekeeping prevail, and in which approximately similar commodities are consumed and procurable, this method answers well. It becomes, however, less satisfactory when applied to different countries, partly because the range of comparable commodities tends to be narrowed down; because national differences in the practice of housekeeping, as, for instance, in marketing, in cooking and in thriftiness, tend to obscure the issue; and because the assumption, well founded in the case of a single country, that general domestic housekeeping habits will as a rule persist no matter in what town the family is living, becomes weaker when different countries are concerned. It is obvious, for instance, that, when a person changes one country for another, even though the same commodities may be obtainable in both countries, differences in local custom, in climate, in the varying importance or attractiveness of alternative commodities, and in other ways, may affect domestic habits and weaken the power or the desire to adhere to a past dietary.

Thus, if the quantities shown in the average British working-class dietary be taken and the question be asked what would it cost the same family to maintain the same dietary in another country, it is clear that the influence of environment and the tendency to conform to changed conditions cannot be allowed for in the answer. The test is insular in character and to that extent defective. On the other hand, if predominant prices have been obtained for the two countries under comparison, and the problem be to determine what it would cost an average family in one country to maintain an accepted standard of living at the prices prevailing in another country, the hypothetical basis of any such calculation is manifest. Defects and limitations of this kind are, in fact, inherent in any attempt to compare international and to some extent even internal local conditions as regards industrial and social standards, and they are indicated here in order that the following comparisons may be interpreted and applied with as clear a conception as possible of the assumptions they involve and the elements of the problem of adjustment and adaptation to which they necessarily fail to give due weight.

The following Table shows the comparative cost in the two countries of the articles in the average British budget for which comparative prices can be given and the adjustment which the difference of date requires. The adjustment has been made by applying to the costs stated (in the penultimate column of the Table) for each commodity the percentage changes indicated for that commodity on page lxiv.

Cost of the Average British Working-man's Budget (excluding commodities for which comparative prices cannot be given) at the Predominant Prices paid by the Working Classes of (1) England and Wales and (2) the United States.

| Commodity. | Quantity in Average British Budget. | Predominant Range of Retail Prices. | | Cost in Pence of Quantity in Column 2. | |
|--------------------------------|---|-------------------------------------|---------------------------------|--|----------------|
| | | England and Wales (October, 1905). | United States (February, 1909). | England and Wales. | United States. |
| Sugar | 5½ lb. | 2d. per lb. | 2¾d., 3d. per lb. | 10¾ | 15¼ |
| Cheese | ¾ lb. | 7d. per lb. | 10d. per lb. | 5½ | 7½ |
| Butter | 2 lb. | 1s. 1¼d. per lb.* | 1s. 4d. to 1s. 5½d. per lb. | 26½ | 33½ |
| Potatoes | 17 lb. | 2½d. to 3½d. per 7 lb. | 5¾d. ,, 8¼d. per 7 lb. | 7¼ | 17 |
| Flour | 10 lb. | 8d. ,, 10d. per 7 lb. | 11½d. to 1s. 1½d. per 7 lb. | 12¾ | 17¾ |
| Bread | 22 lb. | 4½d. ,, 5½d. per 4 lb. | 10¾d. ,, 11½d. per 4 lb. | 27½ | 61¼ |
| Milk | 5 qts. | 3d. ,, 4d. per qt. | 4¼d. ,, 4¾d. per qt. | 17½ | 22½ |
| Beef | 4½ lb. | 6¾d. per lb.† | 6d. to 8d. per lb. | 30½ | 31½ |
| Mutton | 1½ lb. | 6¾d. per lb.† | 6½d. ,, 8¼d. per lb. | 9½ | 11 |
| Pork | ½ lb. | 7½d. to 8½d. per lb. | 5¾d. ,, 7¼d. per lb. | 4 | 3¼ |
| Bacon | 1½ lb. | 7d. ,, 9d. per lb. | 8½d. ,, 10d. per lb. | 12 | 14 |
| Total Cost of the Above | | | | 163½ | 234½ |
| Index Numbers { | England and Wales, Oct., 1905 ; United States, Feb., 1909 | | | 100 | 143 |
| Adjusted for Feb., 1909 | ... .. |  |  | 100 | 138 |

* Mean of Colonial or "Foreign" and Danish.

† Mean of British or Home-killed and of Foreign or Colonial.

According to the Table it appears that the English housewife would have had to pay 234½d. at American prices for the same quantities of those articles of food which cost at English prices in October, 1905, 163½d., or as adjusted to the prices of February, 1909, about 169½d.; her weekly expenditure in the United States would thus be raised on the adjusted prices about 5s. 5d. per week, or 38 per cent. Of this total increase, however, about 2s. 7½d. is due to the much higher price of baker's bread in the United States, an item that, as has been seen, does not enter largely into the workman's budget in that country. The explanation of more than half of the balance of the difference is found in the comparative costs of potatoes, in which the excess in the United States would be equivalent to an expenditure of about 9¾d. per week, and of butter, in which the corresponding excess would be about 7½d. per week. Allowing for the adjusted prices as between the two countries, beef, mutton, pork and bacon combined would have cost about 1½d. more in the United States.

The list of commodities is not exhaustive, but on the basis of comparison adopted it is sufficiently complete to give a fairly accurate indication of the difference in the cost of food in the two countries, although the over-weighting of the comparative index numbers by bread is in itself a defect.

The most important of the items omitted is tea, which is dearer in the United States than in England—1s. 8d. to 2s. 3½d. per lb. in February, 1909, as compared with 1s. 4d. to 1s. 8d. in October, 1905—but which is supplanted there, as in Germany, France and Belgium, by coffee as the customary domestic beverage. Coffee, for which no predominant price is available for England, is relatively cheap in the United States as compared with tea, the predominant price being from 10d. to 1s. 0½d. per lb. It has, therefore, been thought fairer to omit tea in arriving at a comparative cost at American prices of the average British budget. The other most important items omitted are fish and vegetables, for neither of which can any useful basis of comparison be obtained, and eggs, which have been also regarded as non-comparable because of the variety of brand and quality. In the articles omitted there is, however, nothing that further weakens the figures given in the Table, and the ratio of 138 : 100 will, therefore, be taken as giving, with reasonable accuracy, the ratio of the cost of food in the average British working-man's budget at American prices, as compared with its cost at English prices in February, 1909.

The above index numbers represent the change in family expenditure that would result if either in the United States or in England an average British workman's family continued to purchase the main articles of food to which it was accustomed, and paid American prices for them, leaving out of question either the power or the desire to adjust expenditure to any new channels by which changed price conditions might be accompanied.

Useful and suggestive though the above index numbers are, it is highly important, as has been already emphasized, to realise exactly what they mean and the limitations of their meaning. Their significance will be made more evident if the converse calculation is set out, namely, as to what the average American workman, as reflected in the budgets analysed on pages xlv-lv, would have to pay if he purchased the commodities set out in the above Table, in the quantities shown to be ordinarily consumed in the United States, at English prices as compared with American. This question is answered in the following Table :—

Cost of the Average American Working-man's Budget (excluding commodities for which comparative prices cannot be given) at the Predominant Prices paid by the Working Classes of (1) England and Wales and (2) the United States.

| Commodity. | Quantity in Average American* Budget. | Predominant Range of Retail Prices. | | Cost in Pence of Quantity in Column 2. | |
|--|---------------------------------------|-------------------------------------|---------------------------------|--|----------------|
| | | England and Wales (October, 1905). | United States (February, 1909). | England and Wales. | United States. |
| Sugar | 5½ lb. | 2d. per lb. | 2¾d., 3d. per lb. | 10½ | 15 |
| Cheese | ½ lb. | 7d. per lb. | 10d. per lb. | 3½ | 5 |
| Butter | 2 lb. | 1s. 1¼d. per lb.† | 1s. 4d. to 1s. 5½d. per lb. | 26½ | 33½ |
| Potatoes | 21 lb. | 2½d. to 3½d. per 7 lb. | 5¾d. ,, 8¼d. per 7 lb. | 9 | 21 |
| Flour | 10¼ lb. | 8d. ,, 10d. per 7 lb. | 11½d. to 1s. 1½d. per 7 lb. | 13¼ | 18¼ |
| Bread | 8¼ lb. | 4½d. ,, 5½d. per 4 lb. | 10¾d. ,, 11½d. per 4 lb. | 10¼ | 23 |
| Milk | 5⅓ qts. | 3d. ,, 4d. per qt. | 4¼d. ,, 4¾d. per qt. | 18¾ | 24 |
| Beef | 6¾ lb. | 6¾d. per lb.‡ | 6d. ,, 8d. per lb. | 45½ | 47¼ |
| Mutton | 1¼ lb. | 6¾d. per lb.‡ | 6½d. ,, 8¼d. per lb. | 8 | 9¼ |
| Pork | 2¼ lb. | 7½d. to 8½d. per lb. | 5¾d. ,, 7¼d. per lb. | 18 | 14¾ |
| Bacon | 1¾ lb. | 7d. ,, 9d. per lb. | 8½d. ,, 10d. per lb. | 14 | 16¼ |
| Total Cost of the Above | | | | 177¼ | 227¼ |
| Index Numbers { England and Wales, Oct., 1905; United States, Feb., 1909 | | | | 100 | 128 |
| Adjusted for Feb., 1909 | | | | 100 | 125 |

* i.e. American-British (Northern).
 † Mean of Colonial or "Foreign" and Danish.
 ‡ Mean of British or Home-killed and of Foreign or Colonial.

The total cost of the average food budget at English prices adjusted to February, 1909, is about 182½d., or 3s. 8¾d. less than that for the same articles and quantities if bought at American prices.

In comparing the quantities shown in the second column in the two Tables, it will be observed that the only considerable differences shown are in the case of bread, beef and pork; while as between the last and penultimate columns in the two Tables, there is, save in the three cases mentioned, a striking uniformity, either in the amounts themselves or in the ratios, or in both of these.

In the case of bread the amount consumed by the average British family cost about 2s. 5¾d. at adjusted English prices and 5s. 1¼d. at American prices, whereas the amount consumed by the average American family costs only about 11d. at adjusted English prices and 1s. 11d. at American prices—a difference on the last amount of 3s. 2¼d.

In addition to the omission from the Table of tea, coffee, fish, vegetables and eggs, for the various reasons stated, the most important additional item which cannot be compared but which enters appreciably into the American average budget is that of bread substitutes in the shape of cakes, biscuits, rolls, &c. These represent nearly 4½ per cent. of the average total expenditure on food, and *per capita* an expenditure about three times as great as shown in the average British budget.

The ratio of the total cost of the articles of food enumerated in the Table at American prices to their cost at English prices is 128 : 100, or, adjusted to February, 1909, as in the preceding Table, as 125 : 100 as compared with 138 : 100 in the case of the quantities of the same articles as specified in the British budget when a similar calculation is made.

Of the two ratios, that framed upon the constituent quantities of the average British budget may be regarded as more directly concerning the working-class consumer in this country, and 138 : 100 will, therefore, as already stated, be taken as representing from his point of view the relative levels of the cost of food in the United States and in England and Wales in February, 1909.

BUDGETS.

In Part I. of the General Report and on pages lxxxix-xc and 404-423 particulars are given of certain composite budgets constructed from the returns of household income and expenditure obtained in the towns investigated. The analyses there shown have proceeded always on the basis of race or nationality and in four cases on that of area, a broad sub-division as between North and South having been made in the case of the American-British budgets (including those of American-born families and families of which the heads were born in the United Kingdom and Canada) and the Negro budgets. In addition to these four groups other composite budgets were given for German, Scandinavian, South European and Slavonic groups, as well as for families which, as regards wage-earners, were representative of the Jewish communities, this budget being derived mainly from the budgets of Russian Jews and others of Eastern Europe. A small group of American (Southern) budgets was added, illustrative of the circumstances of "broken families." (*See* p. xliv.)

The task of obtaining an adequate representation of the habits of domestic expenditure over so varied a field as that indicated above has been accomplished completely neither in any single case nor with an equal degree of completeness in all cases. The results for the various income classes in each group, however, show a general coherence as regards, for instance, the average earnings of husbands and the supplementary earnings of children, the average rents paid per family and amount spent on food, and the percentages of total expenditure spent on these two items, indicating that approximately correct general results have been in all cases obtained.

The warning given in the preceding Reports of this series must, however, be repeated, that any figures derived from the general averages of the various composite budgets would be misleading as regards both internal conditions and international comparisons.

In the collection of the various series of budgets, both in the United Kingdom and in foreign countries, no limit of income was fixed, and, while budgets were especially sought and always obtained in by far the largest numbers from families that might be termed normal, the returns from families in which the supplementary earnings were large were accepted if in other respects they were consistent, and represented working-class conditions. In spite of the care exercised in the collection of data, it cannot be assumed that the budgets show the various income classes in their correct proportions in any of the countries investigated. The statistical basis for determining those proportions does not, indeed, exist, and thus, as between country and country, recourse has necessarily been had to a basis of comparison that is, after all, more instructive than general comparisons would be—were such available—namely, that of selected representative income classes.

The composite nationality budget groups furnished by the American enquiry are, however, relevant in different degrees to what has been already described as one of the main objects of the present enquiry, namely, the comparison of conditions between the United Kingdom and the United States, and in the following pages reference will be made almost solely to the American-British (Northern) budget of which special mention has been already made. This budget is based upon returns obtained from the whole field of enquiry, exclusive of the six southern towns; it is based upon the largest body of data and thus from this point of view is the most reliable and satisfactory; and at the same time it represents sections of the population of the United States whose dietaries are likely to be most comparable with those of the home population. The actual composition of this budget, afterwards referred to as the American budget, both as regards nationalities and occupations, has been already described and various further analytical particulars concerning it are also given in Part I. of this General Report.

When, however, the task of comparison is thus narrowed as between the budgets for the United Kingdom and this American group, difficulties supervene that have been either absent or less serious in the case of the preceding Board of Trade enquiries, since the comparison of a series of classes formed on the basis of a common range of income is impossible. In the case of Germany, France and Belgium the classes with incomes under 25s. and of 40s. or over per week were omitted in the international comparisons, the classes selected for this purpose being those with incomes of 25s. and under 30s.; of 30s. and under 35s.; and of 35s. and under 40s.

While, however, in the United Kingdom about 70 per cent. of all the budgets collected were of families with incomes less than 40s. per week, of those collected in the

United States for all nationalities (and not for the American budget alone, in which the corresponding figure is a little over two per cent.) less than four per cent. fell within this range, and while in the United Kingdom about half the budgets were of families with incomes under 35s. per week, in the United States the number falling beneath this figure is almost negligible, comprising only 1·4 per cent. of the whole and therefore too small a number to form a separate income class. The difference, if not of standard at least of nominal range of income, as between the two countries, and not only as regards the American budget itself, is manifest, and although it cannot be concluded on the basis of this negative evidence that incomes of less than 35s. per week are insufficient to maintain an ordinary family under American urban conditions, it is at least probable that families maintaining a position of independence upon an income below this sum are exceptional. It may be noted in this connexion (1) that in the recent enquiry into the standard of living of working-class families in New York City, made under the Russell Sage Foundation, the opinion (from the American standpoint) is expressed that an average of less than 48s. per week does not provide the necessary minimum for a normal family of five living in that city; and (2) that, as appears on page xvi, the predominant ranges of wages throughout the whole field of the present enquiry for hod carriers and bricklayers' labourers were from 50s. to 68s. 9d. per week; and those for labourers in the engineering trades from 37s. 6d. to 43s. 9d. per week. In the American budget it will be observed that the average weekly income per family in the lowest income class, "under £2," is 36s.

The points in connexion with which budget comparisons have been especially attempted in the previous investigations have been (a) as regards the percentage of income spent on all food (exclusive of alcohol); (b) the percentage of income spent on similar items of food in both countries; and (c) the quantities consumed and amounts spent on similar items. The pages immediately following will be concerned with these three bases of comparison.

The percentage spent on food in the various income classes in the United Kingdom ranges from 67·35 to 57·01, or from 66·18 to 61·04 if we exclude the lowest income class (under 25s.) and the highest income class (40s. and over), which, although numerically the most important among the budgets collected, comprises the largest proportion of supplementary wage-earners.

The figures for the United States are very different and range, for the eight income classes into which the budgets have been divided, from 51·39 to 28·40 per cent., or from 47·62 to 37·78, omitting the lowest income class and the three highest classes in which (as in the highest income class in the United Kingdom), the supplementary wage-earner is largely represented. The comparative position may be set out in tabular form as follows:—

Expenditure on Food.

| Limits of Weekly Family Income. | Average Weekly Family Income. | Average Number of Children living at home. | Expenditure on Food (excluding Wine, Beer and Spirits). | |
|---------------------------------|-------------------------------|--|---|-----------------------|
| | | | Average Amount. | Percentage of Income. |
| United Kingdom. | | | | |
| 25s. and under 30s. ... | 26s. 11¼d. | 3·3 | 17s. 10¼d. | 66·18 |
| 30s. " 35s. ... | 31s. 11¼d. | 3·2 | 20s. 9¼d. | 65·04 |
| 35s. " 40s. ... | 36s. 6¼d. | 3·4 | 22s. 3½d. | 61·04 |
| United States. | | | | |
| £2 and under £3 ... | 51s. 0½d. | 2·06 | 21s. 3¼d. | 47·62 |
| £3 " £4 ... | 69s. 10d. | 2·46 | 30s. 10d. | 44·15 |
| £4 " £5 ... | 88s. 5d. | 2·88 | 36s. 5d. | 41·19 |
| £5 " £6 ... | 107s. 3d. | 3·37 | 40s. 6½d. | 37·78 |

A point in the foregoing Tables which at once attracts attention is the much greater difference that is shown between the various family incomes in the two countries than between the amounts actually spent on food, and consequently the much greater margin of income available in the American group after expenses for all food (other than alcohol) have been met.

Before attempting to examine the significance of this point, it will be convenient to proceed to the second and third of the three bases of comparison noted on the preceding page, namely, the proportionate amounts spent on similar items of food, and actual consumption. In comparing the proportionate expenditure on various items of food in the two countries, and ascertaining thereby in which direction in every 100 shillings spent purchases are similar and dissimilar in the two countries, a general comparison of the percentage of the total family food bill spent per family and *per capita* on the articles that make up the domestic food budget has been prepared and is shown in the following Table. The particulars are for 1904 and 1909, respectively, and in the interval price levels have changed slightly (compare p. lxiv.). There is, however, no reason to suppose that the respective percentages shown would have been appreciably affected thereby.

Percentage per Family of Total Food Bill and Proportions per Capita spent on Certain Articles.

| Food Items. | Per Family. | | | Per Capita. | | |
|--|-------------------------------------|-------------------------------------|--|-----------------------|----------------------|--|
| | United Kingdom, 1904 (5.6 persons). | United States, 1909 (4.92 persons). | Difference [(+) or (-) in United Kingdom]. | United Kingdom, 1904. | United States, 1909. | Difference [(+) or (-) in United Kingdom]. |
| Bread and Flour... .. | 15.92 | 10.66 | + 5.26 | 2.84 | 2.17 | + 0.67 |
| Cakes, Biscuits, Rolls, Buns, &c. | 1.83 | 4.37 | - 2.54 | 0.33 | 0.89 | - 0.56 |
| Meat, Bacon and Fish | 28.43 | 28.03 | + 0.40 | 5.08 | 5.70 | - 0.62 |
| Eggs | 4.44 | 6.00 | - 1.56 | 0.79 | 1.22 | - 0.43 |
| Fresh Milk | 5.65 | 5.42 | + 0.23 | 1.01 | 1.10 | - 0.09 |
| Cheese | 2.41 | 1.17 | + 1.24 | 0.43 | 0.24 | + 0.19 |
| Lard, Suet, Dripping | 1.99 | 2.27 | - 0.28 | 0.36 | 0.46 | - 0.10 |
| Butter | 9.44 | 7.46 | + 1.98 | 1.68 | 1.52 | + 0.16 |
| Potatoes | 4.07 | 4.72 | - 0.65 | 0.73 | 0.96 | - 0.23 |
| Other Vegetables and Fruits (including Dried Fruit). | 5.09 | 12.18* | - 7.09 | 0.91 | 2.47* | - 1.56 |
| Tea | 5.00 | 1.98 | + 3.02 | 0.89 | 0.40 | + 0.49 |
| Coffee and Cocoa | 1.39 | 3.09 | - 1.70 | 0.25 | 0.63 | - 0.38 |
| Sugar | 4.35 | 3.44 | + 0.91 | 0.78 | 0.70 | + 0.08 |
| Jam, Treacle and Syrup | 2.40 | 0.47* | + 1.93 | 0.43 | 0.10* | + 0.33 |
| Pickles and Condiments | 1.20 | 0.70 | + 0.50 | 0.21 | 0.14 | + 0.07 |
| Other Items† | 6.39 | 8.04 | - 1.65 | 1.14 | 1.63 | - 0.49 |
| | 100.00 | 100.00 | — | 17.86 | 20.33 | - 2.47 |

* *Jam* has been grouped with fruits in the American budgets, but the consumption of jam in the United States is not large.

† Including meals away from home.

It will be observed that the average number of persons in the American budgets is 0.68 less than in those of the United Kingdom. Exact comparison in respect to age and proportionate contribution made to the family income by the children as between the American budgets and those of the United Kingdom is not possible, but the data available show that in these respects there is a general similarity. The actual amounts spent on food *per capita* in each income class in the two sets of returns are as follows:—

Average Food Bill per Capita.

| United Kingdom. | | United States. | |
|---------------------------------|-------------------------------|---------------------------------|-------------------------------|
| Limits of Weekly Family Income. | Average Food Bill per Capita. | Limits of Weekly Family Income. | Average Food Bill per Capita. |
| Under 25s. | 2s. 9 $\frac{3}{4}$ d. | Under £2. | 4s. 10 $\frac{3}{4}$ d. |
| 25s. and under 30s. | 3s. 4 $\frac{1}{2}$ d. | £2 and under £3. | 5s. 11 $\frac{1}{2}$ d. |
| 30s. " 35s. | 4s. 0d. | £3 " £4. | 6s. 9 $\frac{1}{2}$ d. |
| 35s. " 40s. | 4s. 1 $\frac{1}{2}$ d. | £4 " £5. | 7s. 3d. |
| 40s. and over. | 4s. 7 $\frac{3}{4}$ d. | £5 " £6. | 7s. 8 $\frac{1}{4}$ d. |
| | | £6 " £7. | 7s. 10 $\frac{1}{2}$ d. |
| | | £7 " £8. | 8s. 4 $\frac{3}{4}$ d. |
| | | £8 and over. | 9s. 2 $\frac{1}{2}$ d. |

Reverting to the preceding Table, it will be observed that marked and important instances of divergent proportions spent on the different items as between the two sets of budgets are found, on the one hand, in the cases of bread and flour and tea, in which much larger percentages are shown as being spent in the British home, and, on the other hand, in those of vegetables and fruit, cakes and rolls, &c., and coffee, in which a lower percentage is spent. Genuine differences in national habits are thus reflected, more bread and fewer bread substitutes being consumed in the United Kingdom than in the United States; tea and not coffee being the British national domestic beverage; and canned vegetables entering much less into the national dietary in this country than in the United States. If the percentages of bread, flour and bread substitutes be added together the total is 17.75 for the British and 15.03 for the American budget, showing an excess of only 2.72 in the former case.

A few other differences may be noted. Thus in every 100s. expended for food as shown by the budgets for the United Kingdom, nearly 2s. more would be spent in butter, about 1s. 3d. more in cheese, and about 11d. more in sugar. On the other hand, according to the American budgets the total expenditure on eggs of 6 per cent. represents an excess of about 1s. 7d. But, with the possible exception of bread and flour and vegetables and fruits, the general similarities shown in the two sets of percentages are far more striking than the differences. In the case of fresh milk and meat of all kinds, including fish, the percentages are almost identical; for the last item about 28s. in every 100s. being absorbed in both series of budgets. When the various meats are analysed certain differences in relative quantities consumed appear, although as regards beef, the most important item of all, the proportions are very similar, that is, something less than one-half of all meat in both cases. The consumption of mutton and lamb (in the United States the distinction between mutton and lamb is not consistently made in the retail trade) shows on the other hand a great difference, a much larger proportion being consumed in the United Kingdom than in the United States. The general quality of mutton is markedly superior in this country. Bacon accounts for about 17 per cent. of the meat consumption as shown in the budgets collected in the United Kingdom, and pork for only 6 per cent.; whereas in the American budgets the proportions are reversed, being 12 per cent. for bacon, ham, &c., and 16 per cent. for pork, or for the two items combined about 23 per cent. and 28 per cent. in the respective countries. Other meat, including tinned meats, tripe, &c., thus accounts for something over 10 per cent. in the budgets of the United Kingdom. In the American budget the analysis shows for veal and sausage 6 and 5 per cent. respectively in each case of all meat consumed, and for poultry—an item that in earlier investigations has appeared appreciably only in the French working-class dietaries—approximately 5 per cent.

In general, however, as regards the direction in which that part of the family income which is spent on food is concerned, a marked similarity of general practice is shown as between the United States and the United Kingdom.

Finally, the more difficult and more important comparison must be attempted of absolute and not relative consumption of different articles of food, or, when quantitative comparison is impossible, of the actual amount spent. It is in this connexion that the disparities in total family income in the two countries present special difficulty, since the most instructive comparisons would necessarily be as between groups of families with approximately similar incomes.

There are, it is true, two income classes included in the budgets of the two countries in which the average incomes are almost the same. In the United Kingdom the families with incomes of 35s. and under 40s., and those with 40s. and over per week, with average incomes of 36s. 6¼d. and 52s. 0½d. respectively, compare very closely so far as these averages are concerned with those in the two lowest income classes in the American budgets, namely 36s. and 51s. 0½d.

The adoption of these two classes, and these two alone, for detailed comparison is open, however, to serious drawbacks. In the first place, in the case of the United Kingdom, the two classes of families with the highest incomes would have been chosen and in the United States the two lowest income classes, one very small, comprising only 67 budgets and largely composed of general labourers and workpeople of indefinite occupations, and the other showing an average for the husband's earnings that still leaves it, as a whole, within the range of the remuneration of unskilled labour. Further, a comparison based solely on these two sets of budgets would be inadequate owing to the composition of the families in the various classes, those in the United Kingdom having an average of 3.4 and 4.4 children living at home, yielding in the former class some, and in

the latter large, supplementary earnings, while those in the United States have averages of 1.78 and 2.06 children, with the father in both classes practically the sole support of the family.

The inadequacy of a comparison based solely on the above income classes is brought out more clearly in the following Table showing the composition of the above families and the average weekly expenditure on food per family and *per capita*.

Table I.

| | (A) | | (B) | |
|--|-----------------|----------------|-----------------|----------------|
| | United Kingdom. | United States. | United Kingdom. | United States. |
| Limits of Weekly Family Income ... | 35s. to 40s. | Under 40s. | 40s. and over. | 40s. to 60s. |
| Average Weekly Family Income ... | 36s. 6¼d. | 36s. | 52s. 0½d. | 51s. 0½d. |
| Average No. of Persons per Family | 5.4 | 3.78 | 6.4 | 4.08 |
| Average Weekly Expenditure for all Food (exclusive of alcohol) per Family. | 22s. 3½d. | 18s. 6d. | 29s. 8d. | 24s. 3½d. |
| Ditto <i>per capita</i> | 4s. 1½d. | 4s. 10¼d. | 4s. 7¼d. | 5s. 11½d. |

It will be observed that the amounts spent on food in the American families, although considerably less in both cases, provide for a greater weekly expenditure *per capita* of 9¼d. and 1s. 3¾d. in the two income classes.

In the above cases the selected families have total weekly incomes that are approximately equal, but a more suitable basis of comparison of food consumed in the two countries is provided by certain income classes in which the amount actually spent on food weekly is almost the same. A table corresponding to the preceding one is given, illustrating some of the points of similarity and dissimilarity in the families that can be compared on this basis.

Table II.

| | (C) | |
|--|-----------------|----------------|
| | United Kingdom. | United States. |
| Limits of Weekly Family Income ... | 40s. and over. | 60s. to 80s. |
| Average Weekly Family Income ... | 52s. 0½d. | 69s. 10d. |
| Average No. of Persons per Family ... | 6.4 | 4.54 |
| Average Weekly Expenditure for all Food (exclusive of alcohol) per Family. | 29s. 8d. | 30s. 10d. |
| Ditto <i>per capita</i> | 4s. 7¼d. | 6s. 9½d. |

Finally it is possible to select for the purposes of a similar comparison families in which there is the same approximation in the amount spent on food after allowance has been made for the difference in prices in the two countries as indicated by the index numbers given on page lxvi, namely, 100 for England and Wales and 138 for the United States. According to this ratio it may be assumed that the expenditure of 20s. on food in a British workman's family can be compared appropriately with one of about 27s. 6d. in an American family for similar purposes, so as to see under these circumstances also what each family secures for its money. Such a comparison can be made of the following income classes concerning which particulars corresponding to those given in the two preceding Tables are appended.

Table III.

| | (D) | | (E) | |
|--|-----------------|----------------|-----------------|----------------|
| | United Kingdom. | United States. | United Kingdom. | United States. |
| Limits of Weekly Family Income ... | 25s. to 30s. | 40s. to 60s. | 35s. to 40s. | 60s. to 80s. |
| Average Weekly Family Income ... | 26s. 11¼d. | 51s. 0½d. | 36s. 6¼d. | 69s. 10d. |
| Average No. of Persons per Family | 5.3 | 4.08 | 5.4 | 4.54 |
| Average Weekly Expenditure for all Food (exclusive of alcohol) per Family. | 17s. 10¼d. | 24s. 3½d. | 22s. 3½d. | 30s. 10d. |
| Ditto <i>per capita</i> | 3s. 4½d. | 5s. 11½d. | 4s. 1½d. | 6s. 9½d. |

In the following Table the international comparisons of food expenditure, concerning which the preceding Tables have given necessary preliminary information, are shown by means of ratios *per capita* of the quantities of certain articles of food consumed by average workmen's families in the United States and in the United Kingdom, the income classes selected for the purpose being those referred to above and described in the three preceding Tables. In two classes of food in which quantities cannot be given the comparative amounts expended are shown instead. In all cases throughout the Table the United Kingdom bases are taken as 100.

Table showing, per capita, the quantities of, or amounts spent on certain articles of food consumed by workmen's families in the United States (American-British—Northern Group), as compared with the United Kingdom, the families being chosen for comparison as stated.

United Kingdom = 100.

| Commodity or Group of Commodities. | Comparison of families in which the total family income is approximately similar. (Table I. above.) | | Comparison of families in which the total amount spent on food is approximately similar. (Table II. above.) | Comparison of families in which the total amount spent on food is approximately similar, allowance being made for the percentage difference in retail prices as between the United States and England and Wales. (Table III. above.) | |
|-------------------------------------|---|-----|---|--|-----|
| | (A) | (B) | (C) | (D) | (E) |
| <i>Quantities :—</i> | | | | | |
| Bread and Flour | 73 | 66 | 67 | 69 | 72 |
| All Meat and Fish | 123 | 151 | 165 | 195 | 178 |
| Eggs | 108 | 139 | 172 | 216 | 197 |
| Fresh Milk | 82 | 93 | 107 | 126 | 109 |
| Cheese | 43 | 50 | 63 | 62 | 71 |
| Butter and Animal Fats | 115 | 103 | 110 | 136 | 128 |
| Potatoes | 141 | 137 | 132 | 143 | 139 |
| Sugar | 98 | 89 | 93 | 107 | 102 |
| <i>Expenditure :—</i> | | | | | |
| Other Vegetables and Fruit * | 238 | 261 | 320 | 483 | 357 |
| Tea, Coffee, Cocoa, &c. | 92 | 108 | 122 | 139 | 133 |

* Fresh, dried and canned fruit. In the United States, including a small quantity of sweet potatoes and jam.

In spite of the different bases upon which the above pairs of income classes in the two countries have been selected for comparison and of the fact, already indicated, that they are to some extent unsuitable for comparison, a marked uniformity in the general results is shown in the consumption *per capita*, which is the basis of comparison it is necessary to adopt in all cases. The differences shown are nearly always those of degree and not of direction. Thus, even in the lowest income class of the American budgets compared in Column A., the consumption of certain commodities is always higher than that shown in the British budgets with which they can be compared; while other foods, even in the highest American income classes included in the Table (in Columns C. and E.), show a consumption that is always lower. The most striking examples of the former characteristic are seen in meat and fish, in which the American consumption *per capita* ranges from an excess of 23 per cent. to one of 95 per cent.; in eggs, in which the corresponding excess ranges from 8 per cent. to 116 per cent.; and potatoes, in which the excess is comparatively uniform throughout, ranging from 32 to 43 per cent. On the other hand, a smaller consumption of bread and flour is always shown in the American budgets, and almost uniformly, the range being only from 27 per cent. to 34 per cent. less. Much the same general results are shown in the case of cheese, in which the consumption is only something over half as much in the American families as in those of the United Kingdom, the figures showing a difference of from 57 per cent. to 29 per cent. Fresh milk and sugar are the only articles in which consumption is sometimes more and sometimes less in the American families, the variation shown being in the case of fresh milk from 18 per cent. less to 26 per cent. more, and in that of sugar from 11 per cent. less to 7 per cent. more.

In the classes of commodity in which the comparison has to be made on a basis of expenditure and not of quantity, uniform excess in the United States is shown in the case of vegetables and fruit. In this group of items, which includes canned vegetables, so largely consumed in the United States, the amount spent exceeds by 138 to 383 per cent. that spent by the average families in the United Kingdom with which comparisons are made. The amounts spent on tea, coffee, etc., in the two countries are relatively uniform, being never more than 8 per cent. less or 39 per cent. more in one country than the other.

On the whole, the above figures do but illustrate analytically the general fact that the dietary of the average American family is more varied and more liberal than that of families that as nearly as possible correspond to them in the United Kingdom. The comparative percentages of the Table are indeed the corollary of the figures given on page lxx, from which it appears that the amount spent, *per capita*, on food in the average American family begins at a figure a little higher than that at which the British maximum stops; and that the mean of the average food bill *per capita* of the second, third and fourth British income classes is 3s. 10d. *per capita*, and that of the second, third and fourth American income classes 6s. 8d.

In the same way the comparative percentages shown in the above Table may be equally regarded as a corollary of the great difference shown in the range of nominal earnings and of family incomes as between the two countries, for, as has been seen, even though expenditure on food is more liberal in the United States, the percentage of the total income available for other purposes is, without exception, even in the lowest income class shown in the American budgets, higher than that shown by any class in the British series. Thus the food bill takes relatively a more subordinate place in the American working-class household. It is still a main item of expenditure but is of less preponderating importance than in the British budgets, and a much greater margin of income available for all other purposes results.

As regards the other composite national budgets, while the constituent elements of their dietaries, had any of these been selected for comparison, would, to some extent, have reflected racial characteristics, the proportion of food expenditure to total family income would have been found to be roughly similar, the maximum percentage thus absorbed in no case exceeding that shown in the American budget in any of the income classes used in the preceding Tables I.—III. by more than 1·27 per cent. This excess was shown by the Jewish budget in the "£3 and under £4" income class, but in most cases, both in this class and in the classes "under £2" and "£2 and under £3," such differences as were shown were generally small minus quantities as compared with the American budget itself.

Thus the comparison of the British with the American budget has not involved the selection for comparative purposes of a group that differs fundamentally from others not so used. The main constituents of all these other groups have been set out in the Appendices, and show that in every direction, as revealed by the present enquiry, food requirements, as regards the necessaries of life and in many income classes as regards also the fringe of its luxuries, are met with comparative ease.

At this point the strict international comparison necessarily stops, since the complete comparative basis provided by the budgets goes no further than income and cost of food. As regards rent, it has been seen that roughly this item costs something more than twice as much in the United States as in England and Wales, but as to the remaining charges on family income, such as clothing, fuel and light, beverages (other than coffee, etc.), tobacco, insurance, recreation and holidays, etc.—the necessary data for international comparison are wanting. The margin of income shown in the American budgets is, however, so large, when rent and food have both been allowed for, as to call for some slight further analysis to the end that even though statistical comparison be impossible the real significance of this margin may be more clearly apprehended.

As regards some of the classes of supplementary expenditure mentioned above, there is sufficient evidence to show the general relationship to income that they would bear in the United States as compared with this country. Thus for some months in the year over a great part of the field of enquiry fuel is a heavier charge than in England and Wales, owing partly to the lighter structure of the houses, but mainly to the greater severity of the climate. No exact figure as to this excess in comparative cost can, however, be mentioned. On the other hand it may be noted that the methods of heating generally adopted, although less hygienic than the open fire-place, are more efficient, that the American dwelling is kept at a higher temperature in cold weather than in England and that all rooms are more uniformly heated. Gas, again, is generally dearer in America than in this country, but in spite of this, both for cooking and lighting, it is very extensively used, suggesting, since petroleum is a cheaper illuminant, a voluntary preference on the part of the consumer.

The item of clothing raises wider and more difficult questions of comparison, and particulars that have been obtained go to show that while higher prices have, as a rule, to be paid in the United States than in the United Kingdom for woollen and worsted fabrics of similar quality, a very large domestic supply of articles of wearing apparel of most descriptions is available there of standard sizes, that are, for the most part, on sale at prices either not much higher or not higher than in this country, although often less durable. It is evident, however, that the practice of buying clothes that are

expected and intended to last for a single season only and not for two or more is much more common than in this country. In this respect an analogy may be traced to a national characteristic, noticeable not only in respect to clothing but also as regards houses in their inferior durability and, as regards machinery, in the greater rapidity with which it is either worn out or discarded. In all of these directions there appears to be a half-conscious discernment of what is regarded as "economy in spending," which, while savouring sometimes of extravagance, tends at the same time, as regards machinery, to secure the maximum of at least temporary efficiency, and as regards clothing, as also of food, the maximum of freshness and satisfaction. In more immediate connexion with the question of expenditure on clothing the general practice among men of wearing overalls during work and of not appearing in the streets in working clothes is noteworthy, and is one explanation of the impression that is widely given that a larger proportion of the community is well-clad than in this country.

In connexion with the consumption of beverages other than coffee, tea and alcoholic drinks, the great quantity of iced drinks of various descriptions consumed may be mentioned, and ice itself, mainly for the preservation of foods, is a weekly item of expenditure in the summer months in practically every household, while an ice box is a common possession and an ice-cream freezer by no means rare in working-class homes. While, therefore, ice ranks as a small distinctive charge on income, it affords one of the numerous illustrations of an expenditure that, regarded as necessary, secures at the same time its own return in comfort and satisfaction. Much tobacco is consumed and the number of cigar-ends thrown away which no one takes the trouble to pick up is one of the trifles that is noticeable.

Travelling to and from work for short distances is more expensive in America than in England, $2\frac{1}{2}d.$ being the usual minimum on tramways, and reduced tickets for workmen being very rarely issued. Thus, if the cars have to be used at all, the double journey nearly always costs $2s. 6d.$ per week. On the other hand, it rarely costs more, the uniform fare adopted for long and short distances generally taking the wage-earner as far as he is likely to travel. Holidays, recreation and sundries, together with savings, come more avowedly and more completely within the region of the voluntary use of any margin of income that may be available than do the previous items, and the amounts are therefore, even more elastic and indeterminable.

In some measure the preceding sentences will explain the value to the household of the margin of income shown after charges for food and rent have been met. Apart, perhaps, from the lowest range of urban incomes—those roughly amounting, as shown by the budgets, to less than £95 a year—a more liberal standard of living than that observed in the United Kingdom is clearly indicated. To no inconsiderable extent the adoption of this standard and the higher expenditure it involves are, however, almost necessary, very much as the standard of a locality or of a class has to be roughly observed in this country by those of its members who move freely in it, and, conforming to its atmosphere, themselves help to create that atmosphere. In this connexion a suggestive analogy may be drawn between the relative position as regards the standard of expenditure of an agricultural labourer living in an English village and that of the mechanic of the neighbouring market town, or, again, between the position of the latter and that of his fellow craftsman working in London. In all three cases the necessity and the opportunities for spending differ both in kind and degree. Roughly, similar analogies hold as between urban conditions of working-class life in this country and in the United States. More money is spent as a matter of course in the latter country and to some extent, as has been suggested, this higher expenditure, apart from any differences in price or rent levels, is almost if not quite obligatory; but, on the other hand, in various material ways, greater satisfaction and more comforts are secured. Thus the habit of spending is more active than in this country, and while the national characteristic of a greater extravagance and even of a greater wastefulness often emerges, the correlative fact must be also noticed that for those who desire it and exercise the necessary strength of will and foresight, saving is also easier because of the larger income at disposal.

The significance of the general statistical comparisons set out in earlier pages becomes now more apparent. It has been seen that the food of the average English family would cost about 38 per cent. more in the United States, and that the rent would be as 207 : 100.

The cost of food and rent combined (allotting weights of four and one respectively, these weights being those derived from the British budgets) would therefore be 52 per cent. greater in the United States than in England and Wales ; but these heavier relative charges on working-class income have been accompanied by weekly wages in American towns as indicated by the three trade-groups—building, engineering and printing—which are as 230 : 100.

Thus, according to this ratio, the money earnings of the workman in the United States are rather more than $2\frac{1}{4}$ times as great as in England and Wales, and, since there is no proof that employment is more intermittent in the United States than in this country, a much greater margin is available, even when allowance has been made for the increased expenditure on food and rent.

It is with the real significance of this margin that the preceding paragraphs have been concerned. The margin is clearly large, making possible a command of the necessaries and conveniences and minor luxuries of life that is both nominally and really greater than that enjoyed by the corresponding class in this country, although the effective margin is itself, in practice, curtailed by a scale of expenditure to some extent necessarily and to some extent voluntarily adopted in accordance with a different and a higher standard of material comfort.

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APPENDICES TO GENERAL REPORT.

I.—INDEX NUMBERS OF WAGES, RENTS AND RETAIL FOOD PRICES.*

(A.) Towns grouped Geographically.

| Town. | Wages. | | | | | Rents. | Food Prices. | Rents and Food Prices Combined.† |
|--------------------------|--------------|--|--------------|----------------------|------------------------------|--------|--------------|----------------------------------|
| | Building. | | Engineering. | | Printing. | | | |
| | Skilled Men. | Hod Carriers and Bricklayers' Labourers. | Skilled Men. | Unskilled Labourers. | Hand Compositors (Job Work). | | | |
| New York | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| New England Towns : | | | | | | | | |
| Boston | 91 | 77 | 81 | 102 | 90 | 82 | 105 | 99 |
| Brockton | 88 | 102 | 75 | 97 | 83 | 83 | 106 | 100 |
| Fall River | 83 | 64 | 80 | 85 | 76 | 55 | 101 | 90 |
| Lawrence | 76 | 82 | 78 | 104 | 71 | 64 | 105 | 95 |
| Lowell | 77 | 87 | 68 | 77 | 79 | 52 | 102 | 90 |
| Providence | 79 | 73 | 79 | 90 | 90 | 59 | 97 | 88 |
| Mean | 82 | 81 | 77 | 93 | 82 | 66 | 103 | 94 |
| Other Eastern Towns : | | | | | | | | |
| Baltimore | 87 | 86‡ | 83 | 86 | 80 | 54 | 97 | 86 |
| Newark | 98 | 93 | 87 | 104 | 94 | 78 | 106 | 99 |
| Paterson | 91 | 73 | 80 | 82 | 86 | 62 | 100 | 91 |
| Philadelphia | 86 | 87‡ | 85 | 92 | 86 | 79 | 96 | 92 |
| Mean... .. | 91 | 83 | 84 | 91 | 87 | 68 | 100 | 92 |
| Central Towns : | | | | | | | | |
| Cincinnati | 94 | 100 | 85 | 95 | 86 | 93 | 92 | 92 |
| Cleveland | 96 | 73 | 86 | 97 | 93 | 64 | 99 | 90 |
| Detroit | 81 | 64 | 80 | 101 | 83 | 57 | 91 | 83 |
| Louisville | 86 | 86‡ | 83 | 97 | 89 | 71 | 99 | 92 |
| Muncie | 83 | 80 | 81 | 97 | 77 | 44 | 98 | 85 |
| Pittsburg... .. | 98 | 102 | 95 | 90 | 90 | 94 | 102 | 100 |
| Mean | 90 | 84 | 85 | 96 | 86 | 71 | 97 | 90 |
| Middle West Towns : | | | | | | | | |
| Chicago | 110 | 93 | 100 | 108 | 100 | 70 | 94 | 88 |
| Duluth | 103 | 98 | 95 | 113 | 95 | § | 96 | § |
| Milwaukee | 95 | 87 | 83 | 99 | 81 | 66 | 93 | 86 |
| Minneapolis—St. Paul ... | 97 | 74 | 88 | 109 | 89 | 77 | 95 | 91 |
| St. Louis | 108 | 117‡ | 89 | 97 | 87 | 101 | 97 | 98 |
| Mean | 103 | 88 | 91 | 105 | 90 | 79 | 95 | 91 |
| Southern Towns : | | | | | | | | |
| Atlanta | 79 | 45 | 87 | 70‡ | 86 | 76 | 109 | 101 |
| Augusta | 73 | 33‡ | 82 | 60‡ | 86 | 58 | 103 | 92 |
| Birmingham | 97 | 59‡ | 94 | 67‡ | 86 | 81 | 102 | 97 |
| Memphis | 105 | 80‡ | 96 | 85‡ | 90 | 93 | 101 | 99 |
| New Orleans | 94 | 87‡ | 94 | 104‡ | 90 | 72 | 100 | 93 |
| Savannah | 76 | 50‡ | 96 | 82‡ | 79 | 71 | 104 | 96 |
| Mean | 87 | — | 92 | — | 86 | 75 | 103 | 96 |

* For details of wages, rents and prices on which these index numbers are based, see pp. 395-403.

† In the construction of this index number food prices have been given a weight of three and rents a weight of one.

‡ This index number relates to the wages of negroes and has not been utilised in the computation of group averages.

§ Cannot be stated. See p. xxii.

I.—INDEX NUMBERS OF WAGES, RENTS AND RETAIL FOOD PRICES.*

(B.) Towns grouped according to Population.

| Town. | Population in 1910. | Wages. | | | | | Rents. | Food Prices. | Rents and Food Prices Combined.† |
|--|---------------------|--------------|---|--------------|----------------------|------------------------------|--------|--------------|----------------------------------|
| | | Building. | | Engineering. | | Printing. | | | |
| | | Skilled Men. | Hod-Carriers and Brick-layers' Labourers. | Skilled Men. | Unskilled Labourers. | Hand Compositors (Job Work). | | | |
| New York | 4,766,883 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | |
| Other Towns with more than 500,000 inhabitants : | | | | | | | | | |
| Chicago | 2,185,283 | 110 | 93 | 100 | 108 | 100 | 70 | 94 | 88 |
| Philadelphia | 1,549,008 | 86 | 87‡ | 85 | 92 | 86 | 79 | 96 | 92 |
| St. Louis | 687,029 | 108 | 117‡ | 89 | 97 | 87 | 101 | 97 | 98 |
| Boston | 670,585 | 91 | 77 | 81 | 102 | 90 | 82 | 105 | 99 |
| Cleveland | 560,663 | 96 | 73 | 86 | 97 | 93 | 64 | 99 | 90 |
| Baltimore | 558,485 | 87 | 86‡ | 83 | 86 | 80 | 54 | 97 | 86 |
| Pittsburg | 533,905 | 98 | 102 | 95 | 90 | 90 | 94 | 102 | 100 |
| Minneapolis-St. Paul... | 516,152 | 97 | 74 | 88 | 109 | 89 | 77 | 95 | 91 |
| <i>Mean</i> | | 97 | 84 | 88 | 98 | 89 | 78 | 98 | 93 |
| Towns with from 250,000 to 500,000 inhabitants : | | | | | | | | | |
| Detroit | 465,766 | 81 | 64 | 80 | 101 | 83 | 57 | 91 | 83 |
| Milwaukee | 373,857 | 95 | 87 | 83 | 99 | 81 | 66 | 93 | 86 |
| Cincinnati | 364,463 | 94 | 100 | 85 | 95 | 86 | 93 | 92 | 92 |
| Newark | 347,469 | 98 | 93 | 87 | 104 | 94 | 78 | 106 | 99 |
| New Orleans | 339,075 | 94 | 87‡ | 94 | 104‡ | 90 | 72 | 100 | 93 |
| <i>Mean</i> | | 92 | 86 | 86 | 100 | 87 | 73 | 96 | 90 |
| Towns with from 100,000 to 250,000 inhabitants : | | | | | | | | | |
| Providence | 224,326 | 79 | 73 | 79 | 90 | 90 | 59 | 97 | 88 |
| Louisville | 223,928 | 86 | 86‡ | 83 | 97 | 89 | 71 | 99 | 92 |
| Atlanta | 154,839 | 79 | 45‡ | 87 | 70‡ | 86 | 76 | 109 | 101 |
| Birmingham | 132,685 | 97 | 59‡ | 94 | 67‡ | 86 | 81 | 102 | 97 |
| Memphis | 131,105 | 105 | 80‡ | 96 | 85‡ | 90 | 93 | 101 | 99 |
| Paterson | 125,600 | 91 | 73 | 80 | 82 | 86 | 62 | 100 | 91 |
| Fall River | 119,295 | 83 | 64 | 80 | 85 | 76 | 55 | 101 | 90 |
| Lowell | 106,294 | 77 | 87 | 68 | 77 | 79 | 52 | 102 | 90 |
| <i>Mean</i> | | 87 | 74 | 83 | 86 | 85 | 69 | 101 | 93 |
| Towns with under 100,000 inhabitants : | | | | | | | | | |
| Lawrence | 85,892 | 76 | 82 | 78 | 104 | 71 | 64 | 105 | 95 |
| Duluth | 78,466 | 103 | 98 | 95 | 113 | 95 | § | 96 | § |
| Savannah | 65,064 | 76 | 50‡ | 96 | 82‡ | 79 | 71 | 104 | 96 |
| Brockton | 56,878 | 88 | 102 | 75 | 97 | 83 | 83 | 106 | 100 |
| Augusta | 41,040 | 73 | 33‡ | 82 | 60‡ | 86 | 58 | 103 | 92 |
| Muncie | 24,005 | 83 | 80 | 81 | 97 | 77 | 44 | 98 | 85 |
| <i>Mean</i> | | 83 | 91 | 85 | 103 | 82 | 64 | 102 | 93 |

* For details of wages, rents and prices on which these index numbers are based see pp. 395-403.

† In the construction of this index number food prices have been given a weight of three and rents a weight of one.

‡ This index number relates to the wages of negroes, and has not been utilised in the computation of group averages.

§ Cannot be numbered. See p. xxii.

I.—INDEX NUMBERS OF WAGES, RENTS AND RETAIL FOOD PRICES.*

(C.) Towns arranged Alphabetically.

| Town. | Wages. | | | | | Rents. | Food Prices. | Rents and Food Prices Combined.† |
|--------------------------|--------------|--|--------------|----------------------|------------------------------|------------|--------------|----------------------------------|
| | Building. | | Engineering. | | Printing. | | | |
| | Skilled Men. | Hod Carriers and Bricklayers' Labourers. | Skilled Men. | Unskilled Labourers. | Hand Compositors (Job Work). | | | |
| Atlanta | 79 | 45‡ | 87 | 70‡ | 86 | 76 | 109 | 101 |
| Augusta | 73 | 33‡ | 82 | 60‡ | 86 | 58 | 103 | 92 |
| Baltimore | 87 | 86‡ | 83 | 86 | 80 | 54 | 97 | 86 |
| Birmingham | 97 | 59‡ | | 67‡ | 86 | 81 | 102 | 97 |
| Boston | 91 | 77 | 81 | 102 | 90 | 82 | 105 | 99 |
| Brockton | 88 | 102 | 75 | 97 | 83 | 83 | 106 | 100 |
| Chicago | 110 | 93 | 100 | 108 | 100 | 70 | 94 | 88 |
| Cincinnati | 94 | 100 | 85 | 95 | 86 | 93 | 92 | 92 |
| Cleveland | 96 | 73 | 86 | 97 | 93 | 64 | 99 | 90 |
| Detroit | 81 | 64 | 80 | 101 | 83 | 57 | 91 | 83 |
| Duluth | 103 | 98 | 95 | 113 | 95 | § | 96 | § |
| Fall River | 83 | 64 | 80 | 85 | 76 | 55 | 101 | 90 |
| Lawrence | 76 | 82 | 78 | 104 | 71 | 64 | 105 | 95 |
| Louisville | 86 | 86‡ | 83 | 97 | 89 | 71 | 99 | 92 |
| Lowell | 77 | 87 | 68 | 77 | 79 | 52 | 102 | 90 |
| Memphis | 105 | 80‡ | 96 | 85‡ | 90 | 93 | 101 | 99 |
| Milwaukee | 95 | 87 | 83 | 99 | 81 | 66 | 93 | 86 |
| Minneapolis—St. Paul ... | 97 | 74 | 88 | 109 | 89 | 77 | 95 | 91 |
| Muncie | 83 | 80 | 81 | 97 | 77 | 44 | 98 | 85 |
| New Orleans | 94 | 87‡ | 94 | 104‡ | 90 | 72 | 100 | 93 |
| New York | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Newark | 98 | 93 | 87 | 104 | 94 | 78 | 106 | 99 |
| Paterson | 91 | 73 | 80 | 82 | 86 | 62 | 100 | 91 |
| Philadelphia | 86 | 87‡ | 85 | 92 | 86 | 79 | 96 | 92 |
| Pittsburg | 98 | 102 | 95 | 90 | 90 | 94 | 102 | 100 |
| Providence | 79 | 73 | 79 | 90 | 90 | 59 | 97 | 88 |
| St. Louis | 108 | 117‡ | 89 | 97 | 87 | 101 | 97 | 98 |
| Savannah | 76 | 50‡ | 96 | 82‡ | 79 | 71 | 104 | 96 |

* For details of wages, rents and prices on which these index numbers are based see pp. 395-403.

† In the construction of this index number food prices have been given a weight of three and rents a weight of one.

‡ This index number relates to the wages of negroes.

§ Cannot be stated. See p. xxii.

II.—BUDGETS.*

(A. 1.) AMERICAN-BRITISH (NORTHERN) GROUP.

| | Limits of Weekly Family Income. | | | | | | | |
|---|---------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-------------------------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5. (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and over. (8.) |
| No. of Budgets [Total 3,215]. | 67 | 532 | 1,036 | 545 | 437 | 224 | 131 | 243 |
| Percentage of Total No. of Budgets. | 2·08 | 16·55 | 32·22 | 16·95 | 13·59 | 6·97 | 4·08 | 7·56 |
| Average No. of Children living at home. | 1·78 | 2·06 | 2·46 | 2·88 | 3·07 | 3·63 | 3·82 | 4·20 |
| Average No. of Persons living at home. | 3·78 | 4·08 | 4·54 | 5·02 | 5·27 | 5·82 | 6·10 | 6·38 |
| Average Weekly Earnings of Husband. | £ s. d. 1 13 6½ | £ s. d. 2 7 4½ | £ s. d. 3 2 3½ | £ s. d. 3 10 5½ | £ s. d. 3 18 6½ | £ s. d. 3 18 8 | £ s. d. 4 2 1½ | £ s. d. 4 11 9½ |
| Average Weekly Earnings of Wife. | 0 1 1 | 0 1 0½ | 0 1 2½ | 0 1 1½ | 0 2 3 | 0 1 3 | 0 1 9½ | 0 1 6 |
| Average Weekly Earnings of Children— | | | | | | | | |
| Male | 0 0 3½ | 0 0 11½ | 0 2 2½ | 0 7 7 | 0 12 2½ | 1 4 7½ | 1 12 9 | 3 12 3 |
| Female | 0 0 6 | 0 0 9 | 0 1 6½ | 0 3 6 | 0 5 10½ | 0 13 8 | 0 15 5 | 1 6 6 |
| Average Weekly Other In- come. | 0 0 7 | 0 0 11 | 0 2 7 | 0 5 9 | 0 8 4½ | 0 10 9 | 0 16 5 | 0 14 9½ |
| Average Total Income... | 1 16 0 | 2 11 0½ | 3 9 10 | 4 8 5 | 5 7 3 | 6 8 11½ | 7 8 6 | 10 6 10 |
| Quantity of Meat, Poultry, and Fish purchased <i>per</i> <i>capita per annum.</i> | lb. 109·25 | lb. 145·08 | lb. 160·11 | lb. 165·15 | lb. 173·58 | lb. 176·33 | lb. 195·42 | lb. 211·90 |
| Food bill† <i>per capita per</i> <i>week.</i> | s. d. 4 10¼ | s. d. 5 11½ | s. d. 6 9½ | s. d. 7 3 | s. d. 7 8¼ | s. d. 7 10½ | s. d. 8 4¼ | s. d. 9 2½ |
| Percentage of Family In- come spent on :— | | | | | | | | |
| (1.) Meat (including poultry and fish). | 12·95 | 13·49 | 12·22 | 11·36 | 10·50 | 9·82 | 10·23 | 8·28 |
| (2.) Food of all kinds† (excluding wine, beer and spirits). | 51·39 | 47·62 | 44·15 | 41·19 | 37·78 | 35·53 | 34·49 | 28·40 |
| (3.) Rent | 19·53 | 17·74 | 16·66 | 15·34 | 14·04 | 12·01 | 12·04 | 9·91 |
| (4.) Food† and Rent combined. | 70·92 | 65·36 | 60·81 | 56·53 | 51·82 | 47·54 | 46·53 | 38·31 |
| Percentage balance after paying for food and rent. | 29·08 | 34·64 | 39·19 | 43·47 | 48·18 | 52·46 | 53·47 | 61·69 |

For details relating to this group of budgets corresponding with the details given for the other budget-groups on the following pages, *see* General Report, pp. xlv–lv.

* For full details of expenditure on and consumption of food *see* pp. 404–423.

† Including meals away from home.

(A.2.) AMERICAN—BRITISH (SOUTHERN) GROUP.

| | Limits of Weekly Family Income. | | | | | | | |
|---|---------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------------------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5. (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and over. (8.) |
| No. of Budgets [Total 580] | 32 | 116 | 131 | 109 | 80 | 42 | 27 | 43 |
| Percentage of total No. of Budgets ... | 5.52 | 20.00 | 22.59 | 18.79 | 13.79 | 7.24 | 4.66 | 7.41 |
| Average No. of Children living at home | 1.81 | 2.33 | 2.68 | 3.07 | 3.43 | 3.92 | 4.11 | 4.04 |
| " " Persons " " | 3.84 | 4.42 | 4.84 | 5.16 | 5.60 | 6.09 | 6.48 | 6.37 |
| Average Weekly Earnings of Husband ... | £ s. d. 1 10 9½ | £ s. d. 2 3 2 | £ s. d. 3 1 5½ | £ s. d. 3 12 9 | £ s. d. 4 4 3 | £ s. d. 4 9 9 | £ s. d. 4 7 3 | £ s. d. 6 3 0½ |
| " " " Wife | 0 2 8 | 0 2 7 | 0 1 11 | 0 2 7 | 0 2 1 | 0 1 8 | — | 0 2 9½ |
| " " " Children— | | | | | | | | |
| Male ... | 0 0 2 | 0 1 7 | 0 2 10 | 0 5 11 | 0 10 8½ | 1 1 2 | 1 14 0 | 2 8 1 |
| Female ... | 0 0 9½ | 0 1 5 | 0 2 1 | 0 2 4½ | 0 3 11½ | 0 6 9 | 0 9 4 | 0 5 5 |
| " Other Income | 0 0 2½ | 0 1 1½ | 0 2 3 | 0 4 1 | 0 6 11 | 0 8 11 | 0 17 10 | 1 4 6½ |
| Total Income | 1 14 7½ | 2 9 10½ | 3 10 6½ | 4 7 8½ | 5 7 11 | 6 8 3 | 7 8 5 | 10 3 10½ |
| Quantity of meat poultry and fish purchased <i>per capita per annum</i> . | lb. 106.44 | lb. 127.71 | lb. 147.52 | lb. 160.42 | lb. 164.84 | lb. 174.77 | lb. 182.52 | lb. 227.76 |
| Food bill* <i>per capita per week</i> | s. d. 4 3½ | s. d. 5 4 | s. d. 6 7 | s. d. 6 11 | s. d. 7 2½ | s. d. 7 2 | s. d. 7 7½ | s. d. 9 1½ |
| Percentage of Family Income spent on:— | | | | | | | | |
| Meat (including poultry and fish) ... | 12.16 | 12.20 | 11.85 | 11.01 | 10.34 | 10.10 | 9.65 | 8.63 |
| Food of all kinds* (excluding wine, beer and spirits). | 47.81 | 47.23 | 45.12 | 40.64 | 37.40 | 34.01 | 33.34 | 28.47 |
| Rent | 12.33 | 12.45 | 14.03 | 13.86 | 12.71 | 12.34 | 11.47 | 9.56 |
| Food* and Rent combined | 60.17 | 59.68 | 59.15 | 54.50 | 50.11 | 46.38 | 44.81 | 38.03 |
| Percentage balance after paying for food and rent. | 39.83 | 40.32 | 40.85 | 45.50 | 49.89 | 53.62 | 55.19 | 61.97 |

* Including meals away from home.

This Table shows the results of an analysis of the budgets of 580 families (533 American, 43 British-born and 4 Canadian) derived from six Southern towns, as follows:—Atlanta (58); Augusta (118); Birmingham (83); Memphis (135); New Orleans (104); Savannah (82). The total number of persons represented is 2,985 of whom 922 are male and 815 female children and 93 "other persons" sharing the family food. The ratio of male to female children is as 1.13 is to 1.

It will be noticed that the children's earnings begin to be important in the incomes between £5 and £6, in which they constitute 13.6 per cent. of the total; the proportion is 21.8 per cent. in the next class, 29.2 in the £7 and under £8 class, 26.2 per cent. in the highest class, and 14.8 per cent. for all budgets.

The percentage of families owning their houses is, for the whole group, 16.9 per cent.; the variations within the group are very great. The number of rooms occupied per family averages 4.3, and the average number of persons per room 1.2.

The average consumption of purchased *wheaten bread* is for the whole group 7.4 lb. per family or 1.44 lb. *per capita* weekly. The consumption *per capita* in the towns which comprise the group exhibits very great extremes, e.g., Americans in Augusta, 0.29 lb.; in Birmingham, 0.31 lb.; in Atlanta, 0.45 lb.; in Memphis, 1.38 lb.; in Savannah, 1.61 lb.; and in New Orleans, 4.48 lb.; British-born, in New Orleans, 1.60 lb. It may be noted that the budgets of Americans in Augusta show an average weekly income *per capita* of 16s. 8½d., and those of Americans in New Orleans one of 16s. 1½d., while those of British-born in New Orleans show an income *per capita* of 11s. 8d. The consumption of *rye bread* is small, barely exceeding ¼ lb. per family weekly for the whole group, while that of "other bread" is almost negligible. The average weekly consumption of *wheaten flour* per family is 13.36 lb. or 2.59 lb. *per capita* for the whole group. The British-born in New Orleans are shown as using 0.26 lb. flour *per capita* weekly, the Americans in Birmingham as using 4.45 lb.; the Americans in New Orleans 0.62 lb.; in Savannah 1.56 lb.; in Atlanta 3.76 lb.; in Augusta 3.67 lb.; and in Memphis 2.62 lb.

The average consumption of *all bread* and *all flour* for the group is 4.19 lb. *per capita* weekly, but there is considerable irregularity as between the various income classes; the minimum is in the lowest income class, viz., 3.32 lb., and the maximum of 4.85 lb. in the classes £3 and under £4 and £7 and under £8.

The average weekly consumption of *maize* and *maize meal* per family for the whole group is 4.93 lb. or 0.96 lb. *per capita*. The consumption of *cakes, crackers* and *doughnuts* shows a progressive rise with the income and an average of 1.56 lb. per family for the whole group; that of *rolls, buns* and *biscuits* is 0.53 lb. per family weekly.

The consumption of *rice, barley, oatmeal, &c.*, is 4.35 lb. per family per week as compared with 2.22 lb. in the Northern group. The budgets from Savannah show an average of nearly 2 lb. *per capita* per week, or more than twice the average of any other town in this group.

The average consumption of *potatoes (Irish)* is 10.3 lb. per family per week, which is less than half the consumption shown by the Northern Group. *Sweet potatoes* appear to be almost as important an article of diet as Irish potatoes, the average consumption being 7.9 lb. per family per week.

The average consumption of *all meat*, including *sausage* and *poultry* but excluding *fish*, is 14.5 lb. per family weekly or 146.5 lb. *per capita per annum*. The consumption *per capita* in the eight income classes is as follows:—No. 1, 95.9 lb.; No. 2, 116.2 lb.; No. 3, 137.8 lb.; No. 4, 144.4 lb.; No. 5, 153.1 lb.; No. 6, 163.8 lb.; No. 7, 167.8; No. 8, 210.3 lb. *Beef, pork* and *bacon* form 84.0 per cent. of the total consumed.

The percentage of income spent on *meat of all kinds, poultry* and *fish*, ranges from 12.3 per cent. in the 2nd. income class to 8.6 in the highest class, with an average for the whole group of 10.6 per cent.

The consumption of *butter* shown by this group is somewhat less than that in the Northern Group, viz.: 1.9 lb per family per week as against 2.1 lb. The range by income classes is very great, from a little over ¼ lb. in the lowest class to nearly 3½ lb. in the highest class. A large consumption of *lard, suet* and *dripping* is an important feature of these Southern budgets, 3.2 lb. being used per family per week, as compared with 1.4 lb. in the Northern Group.

The budgets show a low consumption of *fresh milk* as compared with the Northern Group, and a correspondingly high consumption of *condensed milk*, the figures being 2.9 qts. and 1.5 lb. per family per week respectively, while for the Northern Group they are 5.3 qts. and 0.7 lb.

(A. 3.) AMERICAN (SOUTHERN)—BROKEN FAMILIES.

| | Limits of Weekly Family Income. | | | | | | | |
|--|---------------------------------|-----------------------------|-----------------------------|-----------------------------|-------------------------------|-------------------------------|-----------------------------|-------------------------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5. (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and over. (8.) |
| No. of Budgets [Total 46]... .. | 13 | 7 | 12 | 9 | 4 | 1 | 0 | 0 |
| Percentage of total No. of Budgets ... | 28·26 | 15·22 | 26·09 | 19·56 | 8·70 | 2·17 | | |
| Average No. of Children living at home | 2·46 | 3·00 | 3·00 | 3·78 | | | | |
| " " Persons " " | 3·46 | 4·29 | 4·17 | 4·89 | | | | |
| Average Weekly Earnings of Husband ... | £ s. d. | £ s. d. | £ s. d. | £ s. d. | | | | |
| " " " Wife or | 0 11 6½ | 0 6 10 | 0 9 9 | 0 3 8½ | | | | |
| " " " Widow. | | | | | | | | |
| " " " Children— | | | | | | | | |
| " " " Male ... | 0 3 6 | 1 12 0½ | 1 6 3 | 2 2 11 | Not sufficiently represented. | Not sufficiently represented. | Not represented. | Not represented. |
| " " " Female ... | 0 12 3½ | 0 7 9 | 1 6 4½ | 0 11 1 | | | | |
| " " " Other Income | 0 5 7½ | 0 2 11½ | 0 12 2 | 1 10 9½ | | | | |
| Total Income | 1 12 11½ | 2 9 7 | 3 14 6½ | 4 8 6 | | | | |
| Quantity of meat, poultry and fish purchased <i>per capita per annum</i> . | lb. | lb. | lb. | lb. | | | | |
| | 99·48 | 102·28 | 196·14 | 238·26 | | | | |
| Food bill* <i>per capita per week</i> | s. d. | s. d. | s. d. | s. d. | | | | |
| Percentage of Family Income spent on:— | | | | | | | | |
| Meat (including poultry and fish) ... | 10·65 | 9·96 | 12·60 | 15·31 | | | | |
| Food of all kinds* (excluding wine, beer and spirits). | 52·09 | 42·46 | 42·99 | 49·86 | | | | |
| Rent | 16·18 | 18·01 | 12·17 | 12·43 | | | | |
| Food* and Rent combined | 68·27 | 60·47 | 55·16 | 62·29 | | | | |
| Percentage balance after paying for food and rent. | 31·73 | 39·53 | 44·84 | 37·71 | | | | |

* Including meals away from home.

This group is composed of 46 American families, in which the head of the family is deceased or away from home, and which are supported mainly by the earnings of either the children and the wife or widow; 35 of these budgets are from Augusta and New Orleans.

The group contains 71 male and 69 female children. Thirty-five males and 40 females are under 16 years of age and of these seven of each sex are earning. Of the 16 male and 19 female children over 16 but under 21 years of age, 15 males and 16 females are earning, while of the 20 male and 10 female children of and over 21 years of age, 17 males and all the females are earning.

The income of the group is made up as follows:—Earnings of wives or widows 14·5 per cent.; of male children 42·2 per cent.; of female children 25·7 per cent.; the balance of 17·6 per cent. consisting of allowances from absent husbands and from relatives, receipts from boarders, credited rent of houses owned and other small receipts.

Of the wives or widows 6 work in cotton mills and earn an average of 25s. 6d. weekly; 6 are washerwomen with an average of 16s. weekly; 3 are seamstresses, earning an average of 25s. weekly and one earns a like amount by dressing ladies' hair. The remaining 30 do not work for wages.

The occupations of the male children are not so fully given, but of 39 at work 9 are cotton mill workers, with average earnings of 16s. 4d. weekly; 3 are railway employees, earning an average of 37s. 6d.; 3 are telephone clerks with an average weekly wage of 34s.; 2 are merchants' clerks, averaging 68s. weekly; 2 woodworkers, averaging 53s., and one a machinist who returns his weekly earnings at 104s. Of the female children 10 are cotton mill workers, earning an average of 25s. 2d., and 2 are dressmakers, earning 37s. 6d. each weekly, while the occupations of 21 others are not stated though their earnings average 21s. 4d. weekly.

The dietaries of these families show no difference from those of complete families as regards the relative proportions of the various foodstuffs, and the figures of *per capita* consumption show that the smaller number of persons to be provided for (4·15 as against 5·15 persons per family) more than compensates for the lowness of the income consequent on the absence of husbands' earnings. The following figures show the consumption *per capita per week* of some of the principal articles of food for the Broken Families and for the complete Southern American-British Families:—

| | Broken Families. | Complete Families. |
|--------------------------|------------------|--------------------|
| All Bread | 2·10 lb. | 1·52 lb. |
| " Flour | 2·80 lb. | 2·67 lb. |
| Potatoes (Irish) | 1·97 lb. | 2·00 lb. |
| " (Sweet) | 1·39 lb. | 1·54 lb. |
| All Meat and Fish | 3·39 lb. | 3·06 lb. |
| Butter | 0·36 lb. | 0·36 lb. |
| Fresh Milk | 0·61 qts. | 0·68 qts. |
| Eggs... .. | 3·29 eggs. | 3·52 eggs. |

One town group of 17 families, with an average of 3·9 persons in each and an average income of 17s. 4d. *per capita* weekly, consumes 177 lb. of all meat, poultry and fish *per capita per annum*. Another town group of 18 families, with an average of 4·2 persons in each, and an average income of 14s. 2d. *per capita* weekly, consumes 180 lb. *per capita per annum*. The quantity of fish used by both groups is practically the same, but the former consumes 12½ lb. of poultry *per capita per annum* and the latter none; the former also consumes 152 lb. of meat and sausage, as against 168 lb. *per capita per annum* by the latter.

(B.) GERMAN GROUP.

| | Limits of Weekly Family Income. | | | | | | | |
|--|---------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------------------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5. (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and over. (8.) |
| No. of Budgets [Total 906] ... | 15 | 163 | 246 | 167 | 123 | 60 | 43 | 89 |
| Percentage of total No. of Budgets ... | 1.66 | 17.99 | 27.15 | 18.43 | 13.58 | 6.62 | 4.75 | 9.82 |
| Average No. of Children living at home | 1.73 | 2.26 | 2.44 | 2.88 | 3.38 | 3.73 | 3.72 | 4.65 |
| " " Persons " " | 3.67 | 4.27 | 4.54 | 5.01 | 5.47 | 5.95 | 5.86 | 6.72 |
| Average Weekly Earnings of Husband ... | £ s. d. 1 10 5 | £ s. d. 2 6 2 | £ s. d. 3 0 8½ | £ s. d. 3 7 6½ | £ s. d. 3 12 7½ | £ s. d. 3 11 0½ | £ s. d. 3 16 3 | £ s. d. 4 2 0½ |
| " " " Wife ... | — | 0 1 5 | 0 0 10 | 0 1 8½ | 0 1 11 | 0 0 6½ | 0 0 10 | 0 2 1 |
| " " " Children— | | | | | | | | |
| Male ... | — | 0 1 9½ | 0 2 10 | 0 7 8½ | 0 17 7 | 1 11 1 | 1 19 2½ | 4 6 2 |
| Female ... | 0 3 10½ | 0 0 2½ | 0 1 3½ | 0 4 9 | 0 8 7½ | 0 11 10 | 1 0 6 | 1 14 9 |
| " Other Income ... | 0 1 9 | 0 1 3½ | 0 3 6½ | 0 6 4 | 0 6 8 | 0 13 10 | 0 10 7½ | 0 11 2½ |
| Total Income ... | 1 16 0½ | 2 10 10½ | 3 9 2½ | 4 8 0½ | 5 7 5 | 6 8 4 | 7 7 5 | 10 16 3 |
| Quantity of meat, poultry and fish purchased <i>per capita per annum</i> . | lb. 138.06 | lb. 146.95 | lb. 169.88 | lb. 170.66 | lb. 169.73 | lb. 183.66 | lb. 185.69 | lb. 190.63 |
| Food bill* <i>per capita per week</i> ... | s. d. 5 1 | s. d. 5 8½ | s. d. 6 9 | s. d. 6 10½ | s. d. 7 1 | s. d. 7 11½ | s. d. 8 0½ | s. d. 8 3½ |
| Percentage of Family Income spent on:— | | | | | | | | |
| Meat (including poultry and fish) ... | 13.83 | 13.88 | 13.08 | 11.73 | 10.54 | 10.50 | 9.46 | 7.47 |
| Food of all kinds* (excluding wine, beer and spirits). | 50.98 | 47.95 | 44.29 | 39.16 | 36.13 | 36.90 | 31.92 | 25.73 |
| Rent ... | 19.21 | 16.58 | 15.45 | 14.63 | 13.23 | 11.37 | 9.74 | 7.94 |
| Food* and Rent combined ... | 70.19 | 64.53 | 59.74 | 53.79 | 49.36 | 48.27 | 41.66 | 33.67 |
| Percentage balance after paying for food and rent. | 29.81 | 35.47 | 40.26 | 46.21 | 50.64 | 51.73 | 58.34 | 66.33 |

* Including meals away from home.

This group is composed of 906 families, living in 19 towns, the largest numbers of budgets being from Chicago (174), Pittsburg (132), New York (86), Cleveland (78), Milwaukee (71), Detroit (64), St. Louis (57), Newark (54) and Philadelphia (53). In all 4,584 persons are included, of whom 1,404 are male and 1,285 female children and 107 "other persons" sharing the family food. The ratio of male to female children is 1.09 to 1.

In the lowest income class the husband's earnings form 84.4 per cent. of the total family income, in the highest barely 38 per cent. The wife's earnings are small throughout, while the children provide from 10.75 per cent. of the family income in the lowest class to 56 per cent. in the highest. The "other income," which is very largely the credited rent of houses owned, averages 6 per cent.

The percentage of families owning their houses is, for the whole group, 26, but in each of the last three income classes it is over 50. The average number of rooms occupied per family is 4.71, the average number of persons per room being 1.1.

Though the consumption of *wheaten bread* tends to rise with the income, this rise is fluctuating and irregular. The average for the whole group is 1.33 lb. *per capita* weekly, the minimum being 1.15 lb. in the 6th. income class, and the maximum 1.40 lb. in the 2nd. The consumption of *rye bread*, which stands to that of *wheaten* as 1 is to 1.66, is characteristic and illustrates the survival of a national taste in a foreign land. The average consumption for the whole group is a little over ¾ lb. *per capita* weekly; in the highest class a trifle less than ½ lb. and in the lowest a trifle more than 1 lb. The consumption of "*other bread*" is small and very irregular, not averaging ¼ lb. *per family* weekly, though in Class 5 it approaches ½ lb.

The average consumption of *wheaten flour* is 9.2 lb. *per family* and 1.82 lb. *per capita* weekly for the whole group, the maximum *per capita* being 2.6 lb. in Class 1 and the minimum 1.72 lb. in Class 4. The consumption of *rye flour* and *buckwheat flour* is small. The weekly consumption *per capita* of *all bread and flour* is 4.11 lb. The maximum is 4.94 lb. in Class 1 and the minimum 3.71 lb. in Class 8.

The average consumption of *maize and maize meal* is 0.63 lb. *per family* weekly. The average consumption of *cakes, crackers and doughnuts* *per family* is about ½ lb. weekly *per capita*, and this is likewise the average consumption of *rolls, buns and biscuits*. There is a certain uniformity in the consumption *per family* of *rice, barley, sago, &c.*, the variation from the average of 1 lb. weekly being very small. The average weekly consumption of *oatmeal and breakfast cereals* *per family* is practically 1 lb.

The weekly average consumption of *Irish potatoes* is 23.4 lb. *per family* or 4.6 lb. *per capita*. The range *per capita* is between 3.1 lb. in the 1st. income class and 5.1 lb. in the 7th. class. The average weekly consumption of *sweet potatoes* is 1 lb. *per family*.

The average consumption of *all kinds of meat*, including *sausage* and *poultry* but excluding *fish*, is 15.4 lb. *per family* weekly or 158.6 lb. *per capita per annum*, the lowest average consumption being 132 lb. in the 1st. income class and the highest 178 lb. in the 8th. class. Of the meat consumed 42.5 per cent. is *beef*, 18.0 per cent. *pork*, 10.1 per cent. *veal*, 8.7 per cent. *bacon* and *ham*, 7.7 per cent. *sausage*, 7.2 per cent. *mutton*, and 5.8 per cent. *poultry*. The annual consumption of *fish per capita* averages for the whole group 12.2 lb., ranging from 5.7 lb. in the lowest to 15.1 lb. in the 7th. income class. The average consumption of *all meat, poultry and fish per capita per annum* is 170.8 lb., and the range is from 138 lb. in the lowest to 191 lb. in the highest income class.

The average annual consumption of *lard, suet and dripping* is 15 lb. *per capita*, being 13.9 lb. in the highest income class and 20.3 lb. in the lowest. The amount of *butter* consumed *per family* rises more or less steadily with the income, the average of the group being 18.4 lb. *per capita per annum*; in the lowest income class it is 12 lb. *per capita* and in the highest 24½ lb. The average consumption of *cheese* for the whole group is nearly 36 lb. *per family* or a little over 7 lb. *per capita per annum*. The average consumption of *fresh milk per capita per annum* is 60 qts., being 48½ qts. in the lowest income class and 63 qts. in the highest. The use of *condensed milk* is very irregular; the average is a little less than 5½ lb. *per capita per annum*, being 7½ lb. in the 2nd. income class and only 2½ lb. in the highest class. The weekly family average of *eggs* consumed is 21.5 or 221 eggs *per capita per annum*. In the lowest class the number is 142 and in the highest 304.

The consumption of *tea* is small, viz., 8.8 lb. *per family per annum* or 1¾ lb. *per capita*. The annual consumption of *coffee per capita* is 13.7 lb., the families in the lowest income class consuming 14.2 lb. and those in the highest 14.3 lb.

Of *sugar* 43 lb. *per capita* are consumed annually on the average of the whole group. The variations from this average are small, 39.7 lb. being consumed in the lowest income class and 42.8 lb. in the highest, while in the 7th. class the average is 47.3 lb.

(C.) SCANDINAVIAN GROUP.

| | Limits of Weekly Family Income. | | | | | | | |
|--|---------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------------------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5. (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and over. (8.) |
| No. of Budgets [Total 335] | 0 | 35 | 89 | 73 | 61 | 28 | 17 | 32 |
| Percentage of total No. of budgets ... | | 10.45 | 26.57 | 21.79 | 18.21 | 8.36 | 5.07 | 9.55 |
| Average No. of Children living at home | | 2.06 | 2.54 | 3.04 | 3.59 | 3.78 | 4.23 | 3.69 |
| " " Persons " " | | 4.09 | 4.60 | 5.15 | 6.02 | 5.89 | 6.35 | 6.00 |
| Average Weekly Earnings of Husband ... | | £ s. d. 2 10 3 | £ s. d. 3 3 1½ | £ s. d. 3 10 10½ | £ s. d. 3 15 4 | £ s. d. 4 13 3 | £ s. d. 5 1 8 | £ s. d. 4 2 10½ |
| " " " Wife ... | | 0 0 5 | 0 1 6½ | 0 1 0½ | 0 1 2½ | — | — | 0 1 5½ |
| " " " Children— | | | | | | | | |
| Male ... | | 0 0 7 | 0 0 11½ | 0 5 10 | 0 7 1 | 0 15 1½ | 0 19 9½ | 3 12 8½ |
| Female... .. | | — | 0 1 5½ | 0 4 7½ | 0 7 2½ | 0 8 4 | 0 10 8 | 1 6 0 |
| " Other Income | | 0 0 8 | 0 2 5½ | 0 5 11 | 0 16 0 | 0 11 8 | 0 15 6 | 1 3 3 |
| Total Income | | 2 11 11 | 3 9 6½ | 4 8 3½ | 5 6 10 | 6 8 4½ | 7 7 7½ | 10 6 3½ |
| Quantity of meat, poultry and fish purchased <i>per capita per annum</i> . | | lb. 157.25 | lb. 160.99 | lb. 152.31 | lb. 151.11 | lb. 162.81 | lb. 162.97 | lb. 189.59 |
| Food bill* <i>per capita per week</i> | | s. d. 6 1¼ | s. d. 6 7¼ | s. d. 6 10½ | s. d. 6 7¼ | s. d. 7 5 | s. d. 7 7½ | s. d. 8 7½ |
| Percentage of Family Income spent on:— | | | | | | | | |
| Meat (including poultry and fish) ... | | 14.61 | 11.87 | 10.80 | 10.49 | 9.33 | 8.55 | 7.07 |
| Food of all kinds* (excluding wine, beer and spirits). | | 48.50 | 43.75 | 40.09 | 37.25 | 34.08 | 32.89 | 25.11 |
| Rent | | 18.19 | 15.22 | 14.03 | 14.00 | 12.20 | 12.64 | 8.82 |
| Food* and Rent combined | | 66.69 | 58.97 | 54.12 | 51.25 | 46.28 | 45.53 | 33.93 |
| Percentage balance after paying for food and rent. | | 33.31 | 41.03 | 45.88 | 48.75 | 53.72 | 54.47 | 66.07 |

* Including meals away from home.

This group is composed of 335 families, of which 231 are Swedish, 96 Norwegian and 8 Danish, derived from 16 towns. These families contain a total of 1,760 persons, of whom 506 are male children and 529 female children and 55 "other persons" sharing the family food. The ratio of male to female children is as 1 is to 1.05. More than one-third (viz., 84) of the Swedish budgets were obtained from Minneapolis—St. Paul; 24 were from New York and the same number from Duluth, 22 from Boston, 17 from Chicago and 16 from Providence; of the Norwegian budgets 51 were obtained from Minneapolis—St. Paul and 16 from Chicago. The bulk of the budgets (67 per cent. of the total) represent incomes between £3 and £6. There are no families with incomes of less than £2 per week. The percentage of the total family income earned by the husband for the whole group is 71.7 as compared with 96.8 in the lowest income class, 72.6 in the 6th. class and 40.2 in the highest class. The contributions of the children to the family income are small in classes 2 and 3, while in the highest class they form no less than 48 per cent. of the total family income or an average of £4 18s. 8½d. per family. In this class 66 per cent. of the male children and 45 per cent. of the female children are wage-earners. The children's earnings begin to be important in the 4th. class, and in the 6th. and 7th. classes they form 18.3 and 20.6 per cent. respectively of the total. The wives' earnings are unimportant. The "other income," most of which is derived from the credited rent of houses owned, ranges from 1.3 per cent. to 11.3 per cent.

The percentage of families in this group owning their houses is 26.9, but in each of the last four income classes it is well over 40.

The average number of rooms occupied per family is 5, and the average number of persons in each family amounts to 5.25.

The consumption of bought *wheaten bread* is small, the average for the group being 0.60 lb. *per capita* weekly, the Scandinavian families as a rule baking a very large proportion of their bread at home. *Rye bread* is consumed to a less extent than wheaten bread, the general average being 0.43 lb. *per capita* weekly. "*Other bread*" is only consumed in three income classes, and in these the quantity is negligible.

As the practice of home-baking is general among Scandinavian families, the amount of *wheaten flour* purchased is large, the average consumption per family weekly for the whole group being 12.8 lb. or 2.43 lb. *per capita*. The Scandinavians are the largest consumers of *rye flour*, *buckwheat flour* and "*other flour*" shown by the budgets, the average weekly combined consumption per family being 2.48 lb.; the maximum consumption is 4.16 lb. in the 6th. income class, and the minimum 1.47 in the 7th. class. The weekly consumption of *all bread* and *flour* per family rises more or less regularly from 16.14 lb. in the lowest income class to 26.11 lb. in the highest, or 3.95 lb. and 4.35 lb. *per capita* respectively, the general average being 3.95 lb. These figures apparently bear no relation to income, however, the high consumption in class 8 being more than counterbalanced by the greater number of adults contained therein.

The consumption of *cakes, rolls, biscuits, &c.*, amounts to 3.25 lb. weekly per family, and is most conspicuous in the 7th. and 8th. income classes, for which the figures are 4.72 and 4.89 lb. respectively.

The average weekly consumption of *Irish potatoes* per family is 22.0 lb., equal to 4.18 lb. *per capita*.

The average consumption of *all meat*, including *sausage* and *poultry* but excluding *fish*, is 14.4 lb. per family weekly or 142.9 lb. *per capita per annum*. The quantities in income classes 2-7 only range from 136.8 lb. to 144.4 lb. *per capita per annum*. In the highest class the quantity is 167 lb., an increase no doubt due to the higher average age of the children. 41.5 per cent. of the meat consumed is *beef* and 19.0 per cent. *pork*. The average annual consumption of *fish* is 17.3 lb. *per capita*.

As regards the remaining foodstuffs consumed by Scandinavian families, the consumption of *butter, fresh milk* and *eggs* is the most characteristic feature. The consumption of *butter* amounts to 2.88 lb. per family per week, or 28.5 lb. *per capita per annum*, as compared with 21.6 lb. *per annum* in the American-British Northern Group. The minimum is found in the lowest income class (22.9 lb.) and the maximum in the 7th. class (31.2 lb.). This group of budgets shows a higher consumption of *fresh milk* than any other, the average being 8.3 qts. per family per week, or 82 qts. *per capita per annum*. The minimum consumption is 75 qts. *per capita* in the 2nd. income class, and the maximum 90 qts. in the 7th. class. The weekly family average consumption of *eggs* is 25.8 or 255 eggs *per capita per annum*. The quantity per family rises steadily as the income increases, ranging from 17.8 to 35.6 eggs weekly.

(D.) SOUTH EUROPEAN GROUP.

| | Limits of Weekly Family Income. | | | | | | | |
|--|---------------------------------|--------------------------|--------------------------|-------------------------|--------------------------|--------------------------|--------------------------|----------------------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5 (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and Over. (8.) |
| No. of Budgets [Total 599] | 60 | 195 | 151 | 73 | 50 | 29 | 15 | 26 |
| Percentage of total No. of Budgets ... | 10.02 | 32.55 | 25.21 | 12.19 | 8.35 | 4.84 | 2.50 | 4.34 |
| Average No. of Children living at home | 2.33 | 2.85 | 2.93 | 3.66 | 3.82 | 4.55 | 4.41 | 4.54 |
| " " Persons " " | 4.33 | 4.92 | 5.09 | 5.96 | 6.14 | 6.90 | 6.60 | 7.27 |
| Average Weekly Earnings of Husband ... | £ s. d. 1 10 7 | £ s. d. 2 3 11½ | £ s. d. 2 15 10 | £ s. d. 2 18 4½ | £ s. d. 3 5 10½ | £ s. d. 3 6 5 | £ s. d. 3 10 1½ | £ s. d. 4 6 8½ |
| " " " Wife ... | 0 1 6½ | 0 1 4½ | 0 2 0½ | 0 6 5 | 0 6 6 | 0 2 10 | 0 6 4½ | 0 8 10 |
| " " " Children— | | | | | | | | |
| Male ... | 0 0 7½ | 0 1 6 | 0 3 11 | 0 11 10 | 0 16 5½ | 1 6 7 | 1 12 1 | 2 18 0 |
| Female ... | 0 0 3 | 0 1 0 | 0 2 6 | 0 2 8 | 0 8 8 | 0 14 7 | 1 6 4 | 0 11 9½ |
| " Other Income | 0 0 9½ | 0 2 2½ | 0 4 5½ | 0 8 9½ | 0 8 11½ | 0 17 3½ | 0 13 0 | 1 5 10 |
| Total Income | 1 13 9½ | 2 10 0½ | 3 8 9 | 4 8 1 | 5 6 5½ | 6 7 8½ | 7 7 11 | 9 11 2 |
| Quantity of meat, poultry and fish purchased <i>per capita per annum</i> . | lb. 86.42 | lb. 103.43 | lb. 126.67 | lb. 152.88 | lb. 142.32 | lb. 168.79 | lb. 182.52 | lb. 176.54 |
| Food bill* <i>per capita per week</i> | s. d. 3 10 | s. d. 4 10 | s. d. 5 11½ | s. d. 6 8 | s. d. 7 2½ | s. d. 7 11½ | s. d. 7 11½ | s. d. 8 1½ |
| Percentage of Family Income spent on :— | | | | | | | | |
| Meat (including poultry and fish) ... | 10.49 | 10.92 | 10.72 | 12.33 | 9.53 | 10.95 | 9.97 | 8.34 |
| Food of all kinds* (excluding wine, beer and spirits). | 49.07 | 47.55 | 44.05 | 45.11 | 41.46 | 42.88 | 35.48 | 30.98 |
| Rent | 19.67 | 17.51 | 15.48 | 13.32 | 12.84 | 12.29 | 10.03 | 10.54 |
| Food* and Rent combined... .. | 68.74 | 65.06 | 59.53 | 58.43 | 54.30 | 55.17 | 45.51 | 41.52 |
| Percentage balance after paying for food and rent. | 31.26 | 34.94 | 40.47 | 41.57 | 45.70 | 44.83 | 54.49 | 58.48 |

* Including meals away from home.

This group is composed of 599 families, of which 468 are Italian, 41 Greek, 40 Portuguese, 26 French, 21 Syrian and 3 Spanish. The budgets were obtained from 20 different towns, three in the South. The Italian budgets were obtained mainly from New York (110), New Orleans (57), Philadelphia (55), Boston (49), Providence (40), Chicago (34), St. Louis (29), Newark (27) and Pittsburg (18). Of the Greeks 40 are from Lowell; of the Portuguese 18 from Providence and 17 from Fall River; of the French 15 from New Orleans; and of the Syrians 20 from Lawrence. 58 per cent of the total number show incomes of between £2 and £4. These 599 families contain 3,219 persons, of whom 984 are male and 932 female children and 123 "other persons" sharing the family food. The ratio of male to female children is as 1 to 0.95. The average number of children living at home is 3.2 for the whole group.

The percentage contribution of the husband to the family income ranges from 45.4 per cent. in the highest income class to 90.5 per cent. in the lowest class. The children's earnings begin to be important in the 4th. class, where they form 16.5 per cent. of the total income, and reach their highest point in the 7th. class, in which they form 39.5 per cent. The earnings of the wife form 4.2 per cent. of the total income. The "other income" from class 4 upwards is an important item, especially in the highest class, where it forms 13.5 per cent. of the total family income. This portion of the family income is derived chiefly from boarders and the credited rent of houses owned, the latter item being particularly important in the highest income class. The returns for Greek and Syrian families show a remarkably large number of boarders, the average amounting to about 1 per family.

The percentage of families owning their houses in this group is 9. The average number of rooms occupied per family is 3.82, this being an average of 1.4 persons per room.

The usual kind of *wheaten bread* bought by the Italian families is a special "Italian" bread, which is generally sold at a cheaper price than the ordinary wheaten bread consumed by the American-born section of the population. The quantity purchased, as shown by the budgets for the whole group, is large, and home-baking as a rule does not appear to be much practised; the average is 2.41 lb. *per capita per week*.

The budgets show only a small consumption of *rye bread* and "*other bread*," although in the case of New York the quantity amounts to 0.8 lb. *per capita per week*.

The average quantity of *wheaten flour* consumed *per capita per week* is 1.49 lb. while the average consumption of *all bread and flour per capita per week* by income classes is 4.17 lb.

The consumption of *cakes, rolls, biscuits, &c.*, amounts to 2.65 lb. per family per week, as against 4.43 lb. consumed in the American-British Northern Group. A large consumption of *macaroni, spaghetti, &c.*, is an important characteristic of the Italian budget. The average amount used per family weekly is 5½ lb. for the whole group. The highest average (8.0 lb. per family) is found in income class No. 5, and the lowest (3.7 lb.) in class No. 1.

The general average consumption of *Irish potatoes* is low, amounting to 10.4 lb. per family or 1.94 lb. *per capita per week*. The budgets of Portuguese families in Providence and Italian families in Chicago show the highest averages, viz., 3.3 lb. and 3.0 lb. *per capita* respectively. The budgets show a large consumption of *dried peas and beans*, the average for the whole group being 2.5 lb. per family per week.

The budgets in this group show a comparatively low consumption of *meat*. The average consumption of *all meat*, including *sausage and poultry* but excluding *fish*, is 11.0 lb. per family weekly or 106.6 lb. *per capita per annum*, the minimum being 69.5 lb. in the lowest income class and the maximum 146.5 lb. in class 7. Of the meat consumed 39.7 per cent. is *beef*, 19.5 per cent. *mutton*, 12.5 per cent. *veal* and 10.0 per cent. *pork*. The average quantity of *fish* amounts to 2.3 lb. per family per week or 22.2 lb. *per capita per annum*. The highest consumption is 52.0 lb. *per capita per annum* by the Portuguese families in Providence.

The average consumption of *butter* is 0.72 lb. per family per week for the whole group and rises irregularly from 0.15 lb. in the lowest income class to 1.81 lb. in the highest. The Greek families show much the highest average (2.92 lb. per family). The consumption of *olive oil* amounts to 1.22 pints per family per week. In the Portuguese budgets, however, it does not appear at all. The consumption of *cheese* is almost exactly 1 lb. per family per week. Imported cheese, the price of which is nearly double that of the ordinary American cheese, is generally bought.

The weekly average amount of *fresh milk* consumed is 5.4 qts. per family. The quantity rises rapidly from 3.2 qts. in the lowest income class to 9.5 qts. in the highest class.

(E.) SLAVONIC AND ALLIED PEOPLES GROUP.

| | Limits of Weekly Family Income. | | | | | | | |
|--|---------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5. (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and over. (8.) |
| No. of Budgets [Total 598] | 35 | 182 | 162 | 82 | 59 | 33 | 20 | 25 |
| Percentage of total No. of Budgets ... | 5·85 | 30·43 | 27·09 | 13·71 | 9·87 | 5·52 | 3·35 | 4·18 |
| Average No. of Children living at home | 1·86 | 2·30 | 2·77 | 3·05 | 3·49 | 4·36 | 4·50 | 4·56 |
| " " Persons " " | 3·86 | 4·34 | 5·05 | 5·61 | 6·27 | 7·09 | 6·85 | 6·76 |
| Average Weekly Earnings of Husband ... | £ s. d. 1 13 8½ | £ s. d. 2 6 5 | £ s. d. 2 16 7 | £ s. d. 3 1 2½ | £ s. d. 3 1 1 | £ s. d. 3 9 3½ | £ s. d. 4 9 7½ | £ s. d. 3 16 10 |
| " " " Wife ... | 0 0 5½ | 0 1 9 | 0 1 11 | 0 2 5½ | 0 2 7½ | 0 1 0 | 0 1 2 | 0 0 6 |
| " " " Children— | | | | | | | | |
| Male ... | 0 0 5½ | 0 0 9 | 0 3 10½ | 0 7 4 | 0 17 8 | 1 2 8 | 1 10 6 | 3 7 5 |
| Female ... | 0 0 4 | 0 0 4 | 0 1 5 | 0 3 1½ | 0 9 4 | 0 18 4½ | 0 12 7½ | 2 6 5 |
| " Other Income | 0 0 6 | 0 1 11 | 0 5 7 | 0 14 1 | 0 16 0 | 0 18 8½ | 0 14 6½ | 0 13 5½ |
| Total Income | 1 15 5½ | 2 11 2 | 3 9 4½ | 4 8 2½ | 5 6 8½ | 6 10 0½ | 7 8 5½ | 10 4 7½ |
| Quantity of meat, poultry and fish purchased <i>per capita per annum</i> . | lb. 128·39 | lb. 153·14 | lb. 172·43 | lb. 185·90 | lb. 191·57 | lb. 188·45 | lb. 204·10 | lb. 195·73 |
| Food-bill* <i>per capita per week</i> | s. d. 4 6 | s. d. 5 5½ | s. d. 6 2½ | s. d. 6 5½ | s. d. 6 8 | s. d. 6 9 | s. d. 8 5½ | s. d. 8 5 |
| Percentage of Family Income spent on:— | | | | | | | | |
| Meat (including poultry and fish) ... | 13·34 | 13·77 | 13·74 | 12·71 | 12·55 | 11·84 | 10·42 | 7·46 |
| Food of all kinds* (excluding wine, beer and spirits). | 49·12 | 46·37 | 45·10 | 41·03 | 39·12 | 36·87 | 39·02 | 27·78 |
| Rent | 17·29 | 15·87 | 14·35 | 12·80 | 10·90 | 9·57 | 10·33 | 8·50 |
| Food* and Rent combined | 66·41 | 62·24 | 59·45 | 53·83 | 50·02 | 46·44 | 49·35 | 36·28 |
| Percentage balance after paying for food and rent. | 33·59 | 37·76 | 40·55 | 46·17 | 49·98 | 53·56 | 50·65 | 63·72 |

* Including meals away from home.

This group is composed of 598 families, of which 199 are Polish, 144 Bohemian, 84 Hungarian, 61 Russian, 52 Croatian, 32 Galician, 22 Lithuanian 2 Roumanian and 2 Servian, derived from 20 different towns. The bulk of the Polish budgets are from Detroit (29), Milwaukee (29), New York (29), Pittsburg (29), St. Louis (19), and Boston (13); of the Bohemian budgets, 87 are from Chicago, 25 from Cleveland and 15 from Baltimore; 34 of the Hungarian, 47 of the Russian and all the Croatian and Galician budgets are from Pittsburg; and 20 of the Lithuanian are from Baltimore. Of the total number of budgets in this group, 207 were obtained from Pittsburg. The 598 families contain a total of 3,112 persons, of whom 914 are male and 823 female children and 183 "other persons" sharing the family food. The ratio of male to female children is as 1 is to 0·90.

The husband's earnings form 95 per cent. of the total family income in the lowest income class; after that the percentage falls rapidly to 53 in the 6th class, rises to 60 in the 7th class, and then falls again to 38. For the whole group the percentage is 70. The children's earnings are not important until the 5th class is reached, where they form 25 per cent. of the total income. In the highest class the percentage is 56, and for the whole group, 18. The wives' earnings as wage-earners are unimportant. The "other income," which is derived chiefly from boarders and the credited rent of houses owned, forms nearly 10 per cent. of the total income, and is most important in classes 5 and 6, in which the number of boarders is highest. The percentage number of houses owned is high in the last five income classes, ranging from 34 in the 4th. to 50 in the 7th. For the whole group the figure is 19.

The average number of rooms occupied per family is 3·96, and the average number of persons per room 1·3.

The consumption of *wheaten bread* purchased at bakers' shops is 6·3 lb. per family or 1·22 lb. *per capita* weekly. The quantity of *rye bread* used is almost exactly equal to that of *wheaten bread*, viz., 1·20 lb. *per capita* weekly. Neither in the case of *wheaten bread* nor in that of *rye* does the consumption appear to bear any relation to the amount of income. The average quantity of *wheaten flour* consumed per family per week amounts to 9·1 lb. for the whole group. The consumption rises rapidly from 4·7 lb. in the lowest class to 13·8 lb. in the 7th. class and falls to 8·9 lb. in the highest class. The combined quantity of *rye flour*, *buckwheat flour* and "other flour" amounts to 1·6 lb. per family weekly. By far the largest consumption is shown by the Bohemian budgets. The consumption of *all bread and flour* is 4·51 lb. *per capita* weekly.

The average expenditure on *green and canned vegetables* is much lower than in the American-British Northern Group (1s. 2½d. as against 2s. 3½d. per family per week).

The average consumption of *all meat*, including *sausage* and *poultry* but excluding *fish*, amounts to 15·8 lb. per family per week or 158·3 lb. *per capita per annum*, the minimum being 122·3 lb. in the lowest income class and the maximum 181·5 lb. in the 7th. class. Of the meat consumed 36·7 per cent. is *beef*, 23·0 per cent. *pork*, and 11·8 per cent. *sausage*. *Pork*, *bacon*, *ham* and *sausage* together form 44·3 per cent. of the total quantity of meat consumed. The largest consumption of meat is shown by the Lithuanian families in Baltimore and by the Hungarian and Croatian families in Pittsburg.

As regards the remaining foodstuffs no striking difference in the general averages for the group from the American standard of living is observed except in the case of *butter*. The consumption of *butter* amounts to 0·98 lb. per family per week as against 2·05 lb. in the American-British Northern Group. This deficiency is only partly made up by the use of other fats. The quantity of *butter* rises rapidly from 0·36 lb. per family in the lowest group to 2·10 lb. in the highest. The quantity consumed by the Lithuanian families is less than ¼ lb. per family per week.

The expenditure on *meals away from home* is unusually high in the 7th. and 8th. income classes, amounting to 6s. 9½d. and 10s. 1¾d. per family per week respectively.

(F.) JEWISH GROUP.

| | Limits of Weekly Family Income. | | | | | | | |
|--|---------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------------------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5. (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and over. (8.) |
| No. of Budgets [Total 758] | 5 | 119 | 242 | 148 | 88 | 57 | 36 | 63 |
| Percentage of total No. of Budgets .. | 0.66 | 15.70 | 31.92 | 19.53 | 11.61 | 7.52 | 4.75 | 8.31 |
| Average No. of Children living at home | | 2.45 | 2.79 | 3.36 | 4.10 | 4.71 | 4.28 | 4.93 |
| " " Persons " " | | 4.50 | 4.88 | 5.49 | 6.19 | 6.88 | 6.25 | 7.11 |
| Average Weekly Earnings of Husband ... | | £ s. d. 2 9 6½ | £ s. d. 2 19 9½ | £ s. d. 3 7 0½ | £ s. d. 3 14 8 | £ s. d. 3 10 4 | £ s. d. 4 5 1 | £ s. d. 4 10 6½ |
| " " " Wife ... | | 0 0 10½ | 0 1 4½ | 0 0 8½ | 0 1 10½ | 0 3 1 | 0 2 5 | 0 2 4 |
| " " " Children— | | | | | | | | |
| Male ... | | 0 0 4½ | 0 3 5½ | 0 8 9 | 0 18 11½ | 1 6 10 | 1 14 4½ | 3 9 1 |
| Female ... | | 0 0 7 | 0 2 1½ | 0 7 11 | 0 8 7½ | 0 18 7 | 1 1 2 | 1 9 8½ |
| " Other Income | | 0 1 1 | 0 2 0 | 0 3 5 | 0 2 5½ | 0 8 9½ | 0 4 6½ | 0 9 1½ |
| Total Income | | 2 12 5½ | 3 8 9 | 4 7 10 | 5 6 7 | 6 7 7½ | 7 7 7 | 10 0 9½ |
| Quantity of meat, poultry and fish purchased <i>per capita per annum</i> . | | lb. 145.86 | lb. 173.94 | lb. 190.79 | lb. 181.43 | lb. 186.52 | lb. 198.59 | lb. 217.26 |
| Food bill* <i>per capita per week</i> | | s. d. 5 6½ | s. d. 6 4½ | s. d. 7 1½ | s. d. 6 11 | s. d. 7 6½ | s. d. 8 1 | s. d. 8 11½ |
| Percentage of Family Income spent on:— | | | | | | | | |
| Meat (including poultry and fish) ... | | 13.82 | 13.88 | 14.20 | 12.65 | 12.15 | 10.45 | 9.73 |
| Food of all kinds* (excluding wine, beer and spirits). | | 47.49 | 45.42 | 44.61 | 40.20 | 40.71 | 34.28 | 31.83 |
| Rent | | 21.53 | 18.40 | 17.15 | 14.77 | 12.58 | 12.91 | 10.48 |
| Food* and Rent combined | | 69.02 | 63.82 | 61.76 | 54.97 | 53.29 | 47.19 | 42.31 |
| Percentage balance after paying for food and rent. | | 30.98 | 36.18 | 38.24 | 45.03 | 46.71 | 52.81 | 57.69 |

* Including meals away from home.

This group is composed of 758 Jewish families from all countries, but chiefly from Russia. The budgets were obtained from 16 different towns, including New York (271), Chicago (95), Baltimore (68), Boston (54), Newark (48), St. Louis (46), Pittsburg (36), Cleveland (35), Philadelphia (31) and Brocton (26). These 758 budgets contain a total of 4,152 persons, of whom 1,417 are male and 1,446 female children and 87 "other persons" sharing the family food. The ratio of male to female children is as 1 to 0.81.

The bulk of the budgets (67 per cent. of the total) show incomes of between £2 and £5, and there are only 5 budgets with incomes under £2. The contribution of the husband towards the family income ranges from 94 per cent. of the total income in the lowest class to 45 per cent. in the highest class. The children's earnings begin to be important in class 4, where they form 19 per cent. of the family income, but the general percentage is 24. The earnings of the wife are not important in any income class. The "other income," which is derived chiefly from boarders and the credited rent of houses owned, is lower in this group of budgets than in any other. It is only important in the 6th. and 8th. income classes, in which it amounts to 8s. 9½d. and 9s. 1½d. respectively. These classes also have the highest percentages of houses owned, the figures being 26 per cent. in the former class and 19 in the latter. For the whole group the percentage number of houses owned is only 6. The average number of rooms occupied per family is 4.5, equivalent to an average of 1.2 persons per room.

The most noticeable peculiarities of the Jewish dietary as shown by these budgets are the total abstinence from *pig's flesh*, the large quantity of *poultry, fish, fresh milk, eggs and rye bread* consumed, and the comparatively small consumption of *flour, potatoes, sausage, lard, suet and dripping and condensed milk*. The average quantity of *wheaten bread* amounts to 7.7 lb. per family or 1.41 lb. *per capita* weekly. *Rye bread* is consumed to a somewhat greater extent than *wheaten bread*, the average quantity being 8.3 lb. per family or 1.52 lb. *per capita* weekly. The quantity of *rye bread* tends to fall as the income rises, while in the case of *wheaten bread* the figures move in the opposite direction.

Home-baking appears to be little practised among Jewish families, the average consumption of *wheaten flour* per family per week amounting only to 5.0 lb. for the whole group. The average consumption of *all bread and flour* amounts to 22.0 lb. per family or 4.01 lb. *per capita* weekly.

The quantity of *cakes, rolls and biscuits* consumed is very large, the average quantity per family per week amounting to 7.5 lb., as compared with 4.4 lb. in the American-British Northern Group.

The weekly average consumption of *Irish potatoes* is 15.4 lb. per family and 2.80 lb. *per capita*. *Sweet potatoes* are very little used in this group, except by the Jewish families in Baltimore.

The average consumption of *all meat*, including *sausage and poultry* but excluding *fish*, amounts to 15.7 lb. per family per week, or 148.9 lb. *per capita per annum*, the extremes being 119.7 lb. in the second income class and 183.7 lb. in the eighth. Of the meat consumed 65.0 per cent. is *beef*, 19.8 per cent. *poultry*, 8.0 per cent. *veal*, 4.0 per cent. *mutton*, and 3.2 per cent. *sausage*. The consumption of *fish* is very high, amounting to 3.5 lb. per family per week or 32.9 lb. *per capita per annum*.

Lard, suet and dripping are not used at all by the great majority of families in this group, the average consumption per family weekly for the whole group amounting only to 0.37 lb.

The average quantity of *fresh milk* consumed amounts to 8.1 qts. per family or 1.48 qts. *per capita* weekly. Only a very small quantity of *condensed milk* is consumed by these families, the average being 0.15 lb. per family per week. A large consumption of *eggs* is one of the chief peculiarities of the budgets in this group. The average quantity per family rises rapidly from 16.7 eggs per week in the lowest income class to 44.8 in the highest. For the whole group the average is 27.5 eggs per week.

¶ The average expenditure on *meals away from home*, as shown by the budgets, is higher in this group than in any other. In the first 3 income classes it is comparatively unimportant, but in the highest class it amounts to 6s. 2½d. per family weekly. For the whole group the average is 2s. 1½d.

(G. 1.) NEGRO (NORTHERN) GROUP.

| | Limits of Weekly Family Income. | | | | | | | |
|--|---------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-------------------------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5. (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and over. (8.) |
| No. of Budgets [Total, 303] | 14 | 115 | 96 | 39 | 20 | 13 | 4 | 2 |
| Percentage of total No. of Budgets ... | 4.62 | 37.96 | 31.68 | 12.87 | 6.60 | 4.29 | 1.32 | 0.66 |
| Average No. of Children living at home | 2.07 | 2.22 | 2.91 | 3.16 | 3.70 | 4.16 | | |
| " " Persons " " | 3.93 | 4.30 | 5.01 | 5.31 | 6.05 | 6.62 | | |
| Average Weekly Earnings of Husband ... | £ s. d. 1 9 3½ | £ s. d. 1 19 8 | £ s. d. 2 7 10½ | £ s. d. 2 18 7 | £ s. d. 2 14 6 | £ s. d. 3 7 7½ | | |
| " " " Wife ... | 0 5 7 | 0 5 6 | 0 9 3 | 0 9 2 | 0 8 4 | 0 8 11½ | | |
| " " " Children— | | | | | | | | |
| " " " Male ... | 0 0 9 | 0 1 0½ | 0 4 7½ | 0 8 9 | 0 17 11 | 1 13 11½ | | |
| " " " Female ... | 0 1 9½ | 0 0 6½ | 0 1 4 | 0 2 3½ | 0 8 7½ | 0 6 2 | | |
| " " Other Income | 0 0 0½ | 0 2 9½ | 0 5 4 | 0 9 3½ | 0 17 8½ | 0 11 4 | | |
| Total Income | 1 17 5½ | 2 9 6½ | 3 8 5 | 4 8 1 | 5 7 1 | 6 8 0½ | | |
| Quantity of meat, poultry and fish purchased <i>per capita per annum</i> . | lb. 128.54 | lb. 153.19 | lb. 181.43 | lb. 209.04 | lb. 181.58 | lb. 186.11 | | |
| Food bill* <i>per capita per week</i> | s. d. 4 0¼ | s. d. 5 9¾ | s. d. 5 7½ | s. d. 6 3½ | s. d. 6 7½ | s. d. 5 11 | | |
| Percentage of Family Income spent on:— | | | | | | | | |
| Meat (including poultry and fish) ... | 13.35 | 14.14 | 15.16 | 14.66 | 12.94 | 11.02 | | |
| Food of all kinds* (excluding wine, beer and spirits). | 42.15 | 43.91 | 41.11 | 37.96 | 37.46 | 30.56 | | |
| Rent | 20.76 | 18.75 | 18.79 | 16.06 | 15.60 | 12.88 | | |
| Food* and Rent combined | 62.91 | 62.66 | 59.90 | 54.02 | 53.06 | 43.44 | | |
| Percentage balance after paying for food and rent. | 37.09 | 37.34 | 40.10 | 45.98 | 46.94 | 56.56 | | |

* Including meals away from home.

This group of 303 negro families is derived from the following towns: Baltimore (133), Louisville (44), New York (38), Cincinnati (25), Philadelphia (18), Cleveland (16), Boston (15) and St. Louis (14). These budgets contain a total of 1,486 persons, of whom 393 are male and 444 female children and 47 "other persons" sharing the family food. The ratio of male to female children is as 1 is to 1.13.

In none of the income classes represented do the husband's earnings form less than 50 per cent. of the total family income. On the whole the percentage declines as the income rises. The children's earnings begin to be important in the 5th. class, in which they form 25 per cent. of the total income. For the whole group the average amount earned per child-earner is 17s. 8½d. per week, as compared with 31s. 1½d. in the American-British Northern Group. The proportion of the family income earned by the wife is relatively high, but decreases as the income rises from 14.9 per cent. in the lowest class to 7.0 per cent. in the 6th. class. For the whole group the percentage is 11.2. The "other income" is most important in class 5, in which it form 17 per cent. of the total family income.

The percentage of families owning their houses is 7 for income classes 1, 2 and 3 combined, but for classes 4, 5 and 6 it is 26.

The average number of rooms occupied per family is 4.72, giving an average of almost exactly one person per room.

The chief points of difference between the dietaries of negro and white families in the Northern group of towns are a smaller consumption on the part of the negroes of *bakers' bread, cakes, rolls, biscuits, etc., Irish potatoes, beef, butter, cheese, fresh milk and eggs*, and a larger consumption of *maize meal, sweet potatoes, pig-meat, sausage, poultry, fish, lard, suet and dripping*.

The amount of *wheaten bread* purchased per family per week amounts to 4.69 lb., equal to 0.96 lb. *per capita*. *Rye bread* and "other bread" in these families are practically not consumed at all. *Wheaten flour* is used largely for home-baking. The average quantity consumed per family per week is 10.81 lb., equal to 2.20 lb. *per capita*. The budgets show no consumption of *rye flour*, little of *buckwheat* and "other flour." The average quantity of *all bread and flour* consumed *per capita per week* is 3.22 lb., rising from 2.68 lb. in the lowest income class to 4.07 lb. in the 6th. class.

Maize and *maize meal* form a much more important article of diet in the negro than in the white budget. The average quantity consumed weekly per family amounts to 3.04 lb. In the 1st. and 6th. income classes the quantity consumed is larger than that of wheaten bread. The average weekly consumption of *cakes, rolls, biscuits, &c.*, is 1.4 lb. per family, as compared with 4.4 in the American-British Northern Group. The quantity per family rises from 0.60 lb. in the lowest class to 2.37 lb. in the 5th. class.

The average consumption of *Irish potatoes* is 2.83 lb. *per capita* weekly. In the American-British Northern Group the corresponding figure is 4.30 lb. The average quantity of *sweet potatoes, &c.*, consumed per family weekly rises rapidly from 2.9 lb. in the lowest class to 10.3 lb. in the 6th. class, with an average of 5.5 lb. for the whole group.

The average consumption of *all meat*, including *sausage* and *poultry* but excluding *fish*, amounts to 14.0 lb. per family per week or 147.9 lb. *per capita per annum*, the lowest figure being 97.6 lb. in the 1st. income class, and the highest 175.8 lb. in the 4th. class. Of the meat consumed 30.2 per cent. is *beef*, 21.8 per cent. *bacon, ham, &c.*, 17.3 per cent. *pork*, 11.0 per cent. *poultry*, 8.3 per cent. *sausage*, 8.2 per cent. *mutton* and 3.2 per cent. *veal*.

The consumption of *fish* amounts to 2.82 lb. per family per week, or 29.9 lb. *per capita per annum*.

The average weekly quantities of *lard, suet and dripping* and of *butter* consumed per family amount to 2.01 lb. and 1.14 lb. respectively. The corresponding figures for the American-British Northern Group are 1.44 lb. and 2.05 lb. *Cheese* is not eaten to any great extent in any income class, the highest consumption amounting to 0.39 lb. per family weekly in income class No. 5. The small quantities of *milk* and *eggs* consumed are the most salient features of the remaining portion of the negro budget. The average weekly quantity of *fresh milk* consumed per family is 2.56 qts.; no great deviation from this average is shown by the separate income classes except in the case of the lowest class, in which the quantity amounts to only 0.89 qts. The average number of *eggs* consumed per family per week is 10.5. Much the lowest consumption is shown in class No. 1 (5.8), the next lowest being 8.9 in class No. 2.

(G. 2.) NEGRO (SOUTHERN) GROUP.

| | Limits of Weekly Family Income. | | | | | | | | |
|--|---------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------------|-------------------------------|----------------------|---------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5. (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and over. (8.) | |
| No. of Budgets [Total 276] ... | 52 | 90 | 50 | 28 | 18 | 12 | 5 | 21 | |
| Percentage of total No. of Budgets ... | 18·84 | 32·61 | 18·12 | 10·14 | 6·52 | 4·35 | 1·81 | 7·61 | |
| Average No. of Children living at home... | 1·79 | 1·83 | 2·10 | 3·21 | 2·78 | | | 4·10 | |
| " " Persons " " ... | 3·79 | 3·90 | 4·20 | 5·29 | 4·83 | | | 6·10 | |
| Average Weekly Earnings of Husband ... | £ s. d. 1 9 2½ | £ s. d. 1 19 5½ | £ s. d. 2 6 6 | £ s. d. 3 1 4 | £ s. d. 3 15 4½ | | | £ s. d. 4 9 8 | |
| " " " Wife ... | 0 3 7 | 0 5 9 | 0 8 6½ | 0 9 1 | 0 8 7 | | | 0 12 3 | |
| " " " Children— | | | | | | Not sufficiently represented. | Not sufficiently represented. | | |
| " " " Male ... | 0 0 5 | 0 2 2 | 0 9 3½ | 0 6 11½ | 0 12 7½ | | | | 2 11 3½ |
| " " " Female ... | 0 0 2½ | 0 0 3 | 0 0 8½ | 0 3 5 | 0 0 4 | | | | 1 0 3½ |
| " " Other Income ... | 0 0 1½ | 0 1 8½ | 0 4 1 | 0 7 1 | 0 11 0 | | | 1 5 1 | |
| Total Income ... | 1 13 6½ | 2 9 4 | 3 9 1½ | 4 7 10½ | 5 7 11 | | | 9 18 7 | |
| Quantity of meat, poultry and fish purchased per capita per annum. | lb. 131·20 | lb. 152·98 | lb. 170·92 | lb. 178·88 | lb. 212·47 | | | lb. 264·63 | |
| Food bill* per capita per week ... | s. d. 3 11¼ | s. d. 5 1¼ | s. d. 6 1½ | s. d. 6 4 | s. d. 7 2¼ | | | s. d. 8 7¼ | |
| Percentage of Family Income spent on :— | | | | | | | | | |
| Meat (including poultry and fish) ... | 13·52 | 12·24 | 11·02 | 12·41 | 10·41 | | | 9·40 | |
| Food of all kinds* (excluding wine, beer and spirits). | 44·50 | 40·44 | 37·27 | 38·18 | 32·18 | | | 26·43 | |
| Rent ... | 13·80 | 11·45 | 12·39 | 11·57 | 11·31 | | | 9·19 | |
| Food* and rent combined ... | 58·30 | 51·89 | 49·66 | 49·75 | 43·49 | | | 35·62 | |
| Percentage balance after paying for food and rent. | 41·70 | 48·11 | 50·34 | 50·25 | 56·51 | | | 64·38 | |

* Including meals away from home.

This group is composed of 276 Negro families from six Southern towns, viz., New Orleans (75), Memphis (50), Savannah (50), Atlanta (42), Augusta (38), Birmingham (21). These 276 budgets contain a total of 1,218 persons, of whom 320 are male and 326 female children and 32 "other persons" sharing the family food. The male and female children are in almost exactly equal proportion.

In income classes 1-5 the earnings of the husband form much the most important part of the total family income, the percentage contribution ranging from 87 per cent. of the total family income in the lowest class to 70 per cent. in the 5th. In the 3rd., 4th., and 5th. classes the percentages are very nearly equal. In the highest class, which was derived mainly from Memphis, the contribution from other sources is very large and the husbands' earnings only form 45 per cent. of the total income. The children's earnings begin to be important in the 3rd. class, in which they form 14 per cent. of the total family income. In the 4th. and 5th. classes the figure remains almost stationary, but in the highest class it rises to 36. The wives' earnings are an important item in these budgets, forming slightly over 10 per cent. of the total family income for the whole group. The "other income," which is derived almost entirely from the credited rent of houses owned, forms nearly 8 per cent. of the total family income for the whole group, and is highest in class 8, where it forms nearly 13 per cent.

The percentage number of houses owned is low in classes 1 and 2, but the figure for all the other classes combined is exactly 50 per cent.

The average number of rooms occupied per family is 3·74, and the average number of persons per room 1·2.

The most marked differences between the dietary of Negro families in Southern towns and that of white families in the same towns, as shown by the budgets, consist in the smaller quantities of *baker's bread*, *Irish potatoes*, *butter*, *fresh milk* and *eggs*, and the larger quantities of *maize meal*, *rice* and *fish* consumed by the Negro families. Most of the *wheaten bread* consumed by these families, with the exception of those in New Orleans, is baked at home. The quantity of *wheaten bread* purchased at bakers' shops only amounts to 3·7 lb. per family and 0·84 lb. per capita weekly. *Rye bread* and "other bread" are practically not used. The average quantity of *wheaten flour* consumed in the whole group amounts to 9·9 lb. per family and 2·25 lb. per capita weekly. The weekly consumption of *all bread* and *flour per capita* is 3·24 lb. The figure for the whole group of the Southern white families is 4·19 lb.

Maize and *maize meal* are important articles of diet in the Southern towns. The average weekly consumption for the whole group amounts to 6½ lb. per family. Of *rice*, *barley*, *sago*, &c., 3½ lb. are consumed per family per week. The average family consumption of *Irish potatoes* amounts to 5·4 lb. (1·23 lb. per capita) weekly, as compared with 10·3 lb. in the Southern white families. *Sweet potatoes*, &c., are consumed to a greater extent than *Irish potatoes*, especially in the highest income class, the general average consumption being 1·35 lb. per capita weekly.

The average consumption of *all meat*, including *sausage* and *poultry* but excluding *fish*, amounts to 13·0 lb. per family per week or 152·8 lb. per capita per annum. 36·7 per cent. of this meat is *beef* and 43·1 per cent. pig-meat of all kinds. *Sausage* and *poultry* are consumed to a much less degree, while *mutton* and *veal* are practically not used. The average consumption of *beef* amounts to 4·75 lb. per family per week or 56·0 lb. per capita per annum; the corresponding figures for *pork*, *bacon*, &c., are 5·59 lb. and 65·8 lb., the maximum consumption being in the 8th. income class (73 lb. per capita per annum), and the minimum in the 5th. class (47 lb. per capita per annum). *Poultry* is used chiefly by families within the higher ranges of income. *Fish* is largely consumed, the average weekly quantity amounting to 1·91 lb. per family, while the annual consumption per capita is 22·5 lb.

Butter is consumed to a much less extent than *lard*, *suet* and *dripping*. The average weekly quantity is 1 lb. per family for the whole group, and rises from 0·49 lb. in the lowest income class to 1·77 lb. in the highest class. The consumption of *lard*, *suet* and *dripping* ranges from 1·99 lb. per family per week in the lowest income class to 4·12 lb. in the highest, with an average for the whole group of 2·57 lb.

The weekly quantity of *fresh milk* consumed per family is 0·74 qts. in the lowest income class, 1·56 qts. in the 3rd. class, and 3·09 qts. in the highest class. The corresponding figures for the Southern white group of budgets are 1·22, 2·84, and 5·50 qts. *Condensed milk* is largely consumed by these families. The average weekly consumption per family rises from 0·81 lb. in the lowest income class to 1·73 lb. in the highest class.

The average number of *eggs* consumed per capita per annum is 58 in the lowest income class and 216 in the highest. The corresponding figures for the Southern white group of budgets are 78 and 256.

UNITED KINGDOM—CONDENSED BUDGETS.

Average Weekly Expenditure on Food and Consumption of certain Articles of Food by Workmen's Families in the United Kingdom, 1904.

| | Limits of Weekly Family Income. | | | | |
|--|---------------------------------|---------------------|---------------------|---------------------|----------------|
| | Under 25s. | 25s. and under 30s. | 30s. and under 35s. | 35s. and under 40s. | 40s. and over. |
| Number of Returns | 261 | 289 | 416 | 382 | 596 |
| Average Weekly Family Income | s. d. 21 4½ | s. d. 26 11¾ | s. d. 31 11¼ | s. d. 36 6¼ | s. d. 52 0½ |
| Average Number of Children living at home | 3·1 | 3·3 | 3·2 | 3·4 | 4·4 |
| | EXPENDITURE. | | | | |
| | s. d. | s. d. | s. d. | s. d. | s. d. |
| Bread and Flour | 3 0½ | 3 3¾ | 3 3½ | 3 4¼ | 4 3¾ |
| Meat (bought by weight)* | 3 2¾ | 4 1¾ | 5 1¾ | 5 5 | 7 2¼ |
| Other Meat (including fish)... .. | 0 7½ | 0 8¾ | 0 10 | 1 0 | 1 4 |
| Eggs | 0 5¾ | 0 8½ | 0 11 | 1 0 | 1 4¾ |
| Fresh Milk | 0 8 | 0 11¾ | 1 3¼ | 1 4¼ | 1 7¾ |
| Cheese | 0 4¾ | 0 5½ | 0 6 | 0 6 | 0 8 |
| Animal Fats† | 1 8 | 2 1 | 2 4½ | 2 6¼ | 3 8¼ |
| Potatoes | 0 8¾ | 0 9¾ | 0 10½ | 0 10¼ | 1 1¾ |
| Vegetables and Fruits | 0 4¾ | 0 7 | 0 10 | 0 11¾ | 1 3¾ |
| Farinaceous Foods other than bread and flour.‡ | 0 4½ | 0 5 | 0 6 | 0 5¾ | 0 7 |
| Tea, Coffee, Cocoa, &c. | 0 11¼ | 1 2½ | 1 4¼ | 1 5½ | 1 10½ |
| Sugar | 0 8 | 0 10 | 0 10¾ | 0 11¼ | 1 3 |
| Other Items § | 1 1 | 1 4½ | 1 7¾ | 1 10½ | 2 6¼ |
| Meals away from home | 0 1¼ | 0 2½ | 0 4 | 0 6¾ | 0 9 |
| Total Expenditure on Food | 14 4¾ | 17 10¼ | 20 9¼ | 22 3½ | 29 8 |
| | CONSUMPTION. | | | | |
| Bread and Flour lb. | 28·44 | 29·97 | 29·44 | 29·99 | 37·76 |
| Meat of all kinds (including an allowance for fish) | 6·42 | 7·57 | 8·66 | 9·25 | 11·87 |
| Eggs No. | 6·2 | 8·7 | 11·3 | 12·0 | 16·3 |
| Fresh Milk pints | 5·54 | 7·72 | 9·85 | 10·34 | 12·63 |
| Cheese lb. | 0·67 | 0·70 | 0·79 | 0·77 | 1·02 |
| Animal Fats† „ | 2·05 | 2·47 | 2·67 | 2·87 | 3·96 |
| Potatoes „ | 14·05 | 15·84 | 16·11 | 15·87 | 19·93 |
| Sugar „ | 3·87 | 4·62 | 4·79 | 5·21 | 6·70 |

* Including bacon.

† Butter, margarine, lard, suet and dripping.

‡ Rice, tapioca, oatmeal.

§ Currants, raisins, jam, marmalade, treacle, syrup, pickles, condiments and "other items."

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TOWN REPORTS.

NEW YORK CITY.

New York, the largest city of the New World, is situated at the south-eastern corner of the State of the same name. Philadelphia lies 90 miles by rail to the south-west; Boston 234 miles to the north-east; Buffalo, on Lake Erie, the second largest city in the State, 440 miles to the north-west; while Pittsburg and Chicago to the west are distant respectively 439 and 908 miles. The last-named city can be reached in 18 hours by the best trains and, in general, New York, with the possible exception of Chicago, has at its disposal the completest railway service in the States.

Manhattan, or New York proper, as it is still apt to be regarded, was the scene of the original settlement from Europe in the 17th century, and the first City Charter under English law dates from 1665, when the population was about 1,500. New York has thus a history which stretches back some 250 years, and of this history Manhattan has been the focussing point. As the city exists to-day, Manhattan is one of its five constituent boroughs, but the selection of the name of "New York" for the whole city is a recognition of the greater distinction of the history of Manhattan itself, and of its present supremacy.

Brooklyn, on the Long Island shore, the other great borough, became part of the city on January 1st, 1898, and was also first settled in the 17th century. In 1816 it was first incorporated as a village, and it was not until 1834, when the population was about 30,000, that it was raised to the rank of a "city." From 1854-1896 seven other towns, with an aggregate estimated population of about 114,000, had been annexed to Brooklyn prior to the absorption of the whole in the greater unit of New York.

The other boroughs—the Bronx, Queens, on Long Island, and Richmond—derive their importance rather from what they may become than from what they either are or have been. They are, with the exception of the southern districts of the Bronx which, separated only by the Harlem River, lie adjacent to Manhattan and are in effect a northern continuation of that borough, still comparatively undeveloped, and although containing less than one-seventh of the population of New York, they comprise between them about 227 square miles, or more than two-thirds of its total area. Even these figures do not indicate the extent of the undeveloped areas of the city, since much of Brooklyn, which itself contains about 78 square miles, is, apart from its marsh lands consisting of some 17 square miles, still open country.

The absorption of the Bronx, the only borough of the five on the mainland, but separated from Manhattan "Island" only by a narrow river, began in 1874, when the population of some 35,000, scattered in 50 villages, became part of the then City of New York. Further absorptions took place in 1895 and in 1898.

The place of most note in Queens County, now coterminous with the borough of that name, was Long Island City, incorporated in 1871, but for the most part the new borough is still a collection of isolated towns and villages with much open ground, including some 12 square miles of marsh land.

The borough of Richmond is to-day even a more rural community than Queens, and the fact that it is an island—it is the Staten Island of the maps—which it takes twenty minutes to reach from Manhattan, will probably make it one of the last parts of the city to increase in population rapidly.

The climate which New York enjoys, in spite of occasional blizzards in the late winter, heat waves in the summer, and a liability to sudden changes of the thermometer, is one of its great natural assets. The mean temperature is about 52 degrees Fahrenheit, the coldest months being January, February and December, when the mercury generally drops to zero, and when the mean is apt to be just about freezing point. March also is a cold month, with a recorded mean temperature for 39 years of 37.2 degrees. June, July and August are the hottest months of the year, when the mean shade temperature ranges

from 70 to 75 degrees. Somewhat more than half the possible hours of sunshine are enjoyed, and even in January and December, when the total number of hours is lowest, this ratio is almost maintained.

The natural conditions of abundant sunshine and clean and wholesome air, although often sacrificed in other ways, are not fouled by smoke, hard anthracite coal being almost exclusively burnt.

The great waterway of the Hudson, the channel of the East River opening up into the lower reaches of Long Island Sound, and the proximity of the open Atlantic are further natural safeguards against the risks of a congested population which all great urban centres incur, and to some of which certain areas of New York itself have been and are notoriously subjected.

The City of New York, as it exists to-day, comprises within its great area of 327 square miles a very varied territory—secluded bays as well as crowded pleasure resorts; miles of piers, but also many miles of open shore and river bank; natural woodland and quiet villages, as well as the most highly priced building sites and the most congested urban areas in the world.

Of this great municipality—more than two-and-a-half times the size of the County of London—Manhattan is, as stated, still the centre, and had it not been for the chance that the Hudson river divides the States of New York and New Jersey the area of the city would presumably have been still further extended, so as to embrace a collection of cities and districts in the neighbouring State—Jersey City, Hoboken and others—that are as truly parts of the organic whole of New York as are Brooklyn and Long Island City.

The most important transitional change of the moment is, indeed the linking-up of Manhattan with its surrounding areas, whether these lie in the State of New York or that of New Jersey. The process is, it may be noted, at once accentuating and relieving some of the problems with which the City of New York is confronted. It is facilitating extension and development, but also concentration; it is increasing the power of movement outwards, but also inwards. The human tide both ebbs and flows, and many are fearing that in new forms the problem of congestion will still persist.

Meanwhile New York grows apace, and not only in population and in wealth, in the extent of its banking operations and of its manufactures, as a great centre of distribution, and as the chief port of entry from Europe alike of commodities and of persons, but also in letters, in its press, in music and in the drama it has assumed a position that is in essence metropolitan.

The growth of many of the cities of the Middle West is, it is true, considerably more rapid than is that of New York, and the remoteness of the city from the great centres of primary production is probably destined to be a permanent handicap. To some extent this is counteracted by the railway system of which New York is a point of great concentration; by the Erie Canal, which establishes a direct connexion with the Great Lakes and thus with the agricultural States of the Middle West and North; and by the ramifications of the financial, manufacturing and commercial interests which are concerned with the continued prosperity of New York. But the centre of population in the United States has been moving slowly westwards, and the trend of manufacture is towards the centre of production of raw material and of food. Should these two great tendencies become more marked, or should the influx of immigrants be checked either by restrictive legislation or by other causes, it is improbable that the rate at which New York has been expanding will continue, and ultimately its position in the States is not unlikely to be challenged. But meanwhile it is supreme and is growing at a pace that if continued will make it in a few years the greatest city in the world.

The population of the area included in the present city of New York increased from about 80,000 in 1800 to nearly 700,000 in 1850, and in 1910 it exceeded $4\frac{3}{4}$ millions. From 1850 the increase has been continuous in every borough, and, while the greatest rate of increase is shown by the comparatively new district of the Bronx, by far the greatest actual increase took place in Manhattan and Brooklyn, the former increasing more than fourfold in the 60 years 1850-1910, and the latter nearly twelvefold.

The following Tables give the figures of population, as returned at the Federal Censuses of 1870-1910, for the area at present comprised in the City of New York and for each of the constituent boroughs :—

| Year | Population. | Increase. | Percentage Increase. |
|----------------|-------------|-----------|----------------------|
| New York City. | | | |
| 1870... .. | 1,478,103 | — | — |
| 1880... .. | 1,911,698 | 433,595 | 29·3 |
| 1890... .. | 2,507,414 | 595,716 | 31·2 |
| 1900... .. | 3,437,202 | 929,788 | 37·1 |
| 1910... .. | 4,766,883 | 1,329,681 | 38·7 |
| Manhattan. | | | |
| 1870... .. | 942,292 | — | — |
| 1880... .. | 1,164,673 | 222,381 | 23·6 |
| 1890... .. | 1,441,216 | 276,543 | 23·7 |
| 1900... .. | 1,850,093 | 408,877 | 28·4 |
| 1910... .. | 2,331,542 | 481,449 | 26·0 |
| The Bronx. | | | |
| 1870... .. | 37,393 | — | — |
| 1880... .. | 51,980 | 14,587 | 39·0 |
| 1890... .. | 88,908 | 36,928 | 71·0 |
| 1900... .. | 200,507 | 111,599 | 125·5 |
| 1910... .. | 430,980 | 230,473 | 114·9 |
| Brooklyn. | | | |
| 1870... .. | 419,921 | — | — |
| 1880... .. | 599,495 | 179,574 | 42·8 |
| 1890... .. | 838,547 | 239,052 | 39·9 |
| 1900... .. | 1,166,582 | 328,035 | 39·1 |
| 1910... .. | 1,634,351 | 467,769 | 40·1 |
| Queens. | | | |
| 1870... .. | 45,468 | — | — |
| 1880... .. | 56,559 | 11,091 | 24·4 |
| 1890... .. | 87,050 | 30,491 | 53·9 |
| 1900... .. | 152,999 | 65,949 | 75·8 |
| 1910... .. | 284,041 | 131,042 | 85·6 |
| Richmond. | | | |
| 1870... .. | 33,029 | — | — |
| 1880... .. | 38,991 | 5,962 | 18·1 |
| 1890... .. | 51,693 | 12,702 | 32·6 |
| 1900... .. | 67,021 | 15,328 | 29·7 |
| 1910... .. | 85,969 | 18,948 | 28·3 |

The figures show that the position occupied by Manhattan among the other boroughs, as measured by population, is less preponderating than formerly, and the explanation of this is found in the increasing absorption of land there for non-residential purposes ; in the higher value of land ; in the relatively small amount of land still available for building ; and in a competition of other areas that is increasing as these become more accessible.

In spite of the strength of these influences it is, however, improbable that the position maintained by Manhattan among the other boroughs of the city will be greatly altered for some time to come, and still less that it will be threatened. To a great extent it concentrates the controlling forces of the city—financial, commercial, manufacturing, social and governmental—and, roughly, its position as contrasted with that of the other

boroughs may perhaps be compared with that filled by London north of the Thames in relation to the south. Almost every feature which the outside world associates with New York is in Manhattan—Wall Street, for instance, Broadway, Fifth Avenue and Central Park. Near the southern end is found that new but already well-known cluster of amazing buildings which, purely utilitarian in design and purpose and forming here and there forbidding *cañons* of masonry, have grouped themselves into an unconsidered and unforeseen grandeur of mass and outline, and are a concrete demonstration of the great place that Manhattan has secured for itself in finance, in commerce and in industry.

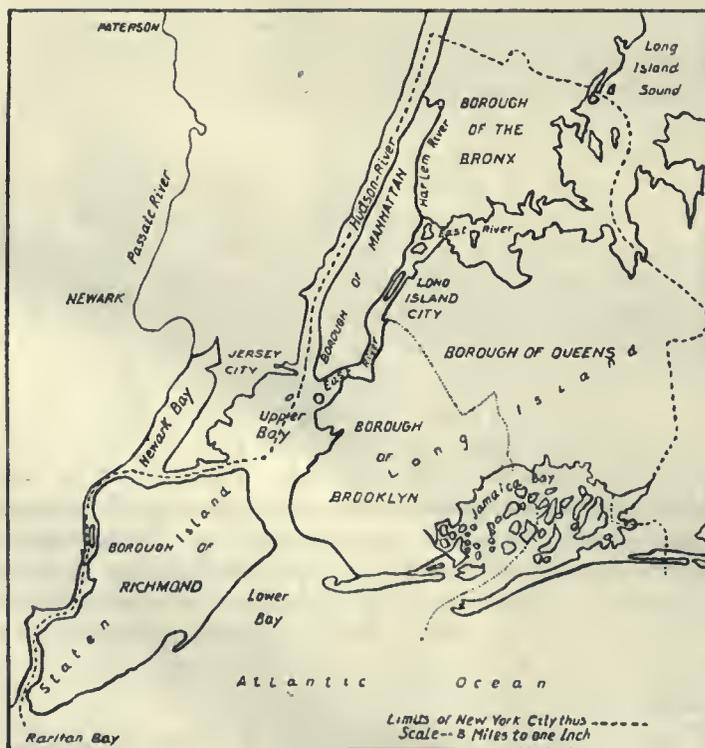
Manhattan is also the point at which most of the great volume of ocean and coastwise traffic converges; Brooklyn playing in this respect a *rôle* that is second in importance even to that of Jersey City and Hoboken on the New Jersey side of the Hudson. As compared with the other boroughs, the railway facilities of Manhattan are also incomparably more important, and recent great engineering achievements tunnelling the Hudson are making them increasingly so.

Finally, Manhattan affords by far the most extensive field of employment. The chief centres of wholesale trade are there, while south of Fourteenth Street are concentrated half the factories of New York.

In this last fact is found the chief explanation of the congested districts for which Manhattan is notorious, for although the motives that lead their occupants to fill these crowded areas are highly complex, the dominant explanation is found in the industrial opportunities which living in them secures.

Although to a great extent a "dormitory" for Manhattan, Brooklyn also plays an important part as a centre of employment. The United States Navy Yard is there, and along the East River are many large industrial enterprises. In some districts centres of the distinctive factory industries of New York are also forming, as notably of the clothing trade in the Jewish settlement at Brownsville. But, in general, the tendency has been for industries needing relatively little space and much labour to be concentrated in the lower sections of Manhattan, and for the large works and for less "intensive" industries to be established elsewhere, for the present chiefly in Brooklyn. Queens is in this connexion relatively unimportant, in spite of the industrial character of Long Island City, and so also are the boroughs of the Bronx, which is, however, the centre of the piano industry, and Richmond.

The following outline map shows the relative positions of the five constituent boroughs of the city:—



The foreign elements entering into the population of New York reflect the normal complexity of most American cities not situated in the South or Far West; but the fact that the very large majority of the total number of American immigrants land at New York makes the question of the alien assume special prominence there. This is illustrated not so much by the fact that the cosmopolitanism of the city is greater than that of many others, but rather by the great size of a few of its foreign quarters and by the part which New York plays as a channel through which year by year great numbers of aliens pass. For many the port of arrival is also the place of settlement. But whether they pass on, or linger, or stay, whether the main movement is further inland or, as in the exceptional winter of 1907-8, largely eastwards to Europe, the conditions of many sections of New York are in various ways inevitably affected by the arrival and departure, migration and settlement, year by year of great masses of aliens.

The character of the immigration has changed in recent years, the movement from Ireland and Germany, although still considerable, being now much less marked than that from the countries of Southern and Eastern Europe, which, first becoming important towards the end of the 19th century, is still in full flood. During the years 1904-8 nearly 1,600,000 immigrants, according to the Report (1909) of the State Commission of Immigration, gave New York State as their destination, and of this number the following races were represented by 20,000 and upwards:—

| | | | |
|------------------------|---------|------------------------|--------|
| Italian (South) | 434,178 | Italian (North) | 48,853 |
| Hebrew | 403,772 | Magyar | 38,944 |
| German | 105,988 | Greek | 37,552 |
| Polish | 105,573 | Slovak | 22,357 |
| Irish | 75,532 | Scotch | 22,252 |
| English | 69,911 | French | 21,532 |
| Scandinavian | 51,816 | | |

Of the total number of immigrants about twice as many males as females came, and about four-fifths of the total arrivals were between the ages of 14 and 44, a range that has to be borne in mind in interpreting the vital statistics of America.

As regards occupations, about half a million of the immigrants were described as labourers, including about 200,000 farm labourers and 300,000 others. Of those of both sexes returned as following other callings, it is significant, in view of the magnitude of the garment industry in the City of New York, that tailoring is responsible for over 81,000. Other trades that are conspicuous in the returns are carpenters (34,280) and shoemakers (25,258); 188,243 were returned as servants, and 421,119, mainly women and children, as of no occupation. The number of labourers is large, but in view of the fact that immigration is regarded as having affected the rates of skilled labour throughout the country to so much less a degree than those of the unskilled, the great variety of skilled occupations in the returns, represented often by considerable numbers, is somewhat unexpected.

In 1900, unfortunately the last year for which these figures are available, out of the 98 per cent. of white population of New York City, 36·7 per cent. were foreign-born and 39·9 per cent. American-born of foreign parents (*i.e.* having one or both parents foreign-born), leaving 21·4 per cent. American-born of American-born parents.

Of the foreign-born population in 1900, 25·4 per cent. were born in Germany, 21·7 per cent. in Ireland, 12·2 per cent. in Russia, 11·5 per cent. in Italy, 9·3 per cent. in Austria-Hungary and 7·1 per cent. in Great Britain.

The figures of recent immigration quoted above will give some rough indication of the changes that the Census of 1910 is likely to show in such figures as those quoted for 1900.*

The concentration of much of the manufacturing and commercial activity of New York below Fourteenth Street, and the tendency thus caused for population to concentrate upon the more adjacent areas have been already mentioned. These economic influences, with others concurrent, although being counteracted to some extent by the disadvantages of congested areas, and by the steady increase in the facilities offering by which people can circulate from district to district, are becoming more marked year by year. The chances of employment are, however, only one among many circumstances that determine the character of a district, and they are themselves largely due to anterior influences

* The vital statistics of Connecticut for 1908 recently published are relevant to this point, and these show, *e.g.*, that the percentage of births, when both parents were foreign, increased during the decade 1899-1908 from 41·7 to 52·9, while that for births when both parents were American-born fell from 40·4 to 33·4. During the same decade the number of Italian parents nearly quadrupled. In 1899 Irish births exceeded those of any other foreign nationality, but in 1908 they were third on the list.

often traceable to the chances of historical localisation, and also largely to geographical and physical characteristics. In the case of Manhattan, special force attaches to the influence of physical formation, since a city with its heart at the end of a narrow strip of land surrounded on three sides by broad, and, until 1883, when the "Old" Brooklyn Bridge was built, by unbridged rivers, was clearly destined, if it grew and prospered, to be confronted by the problem of congestion in some greatly accentuated form. To what may, under the circumstances, be called the natural risks of growth and prosperity have been added those arising from the necessity, unexampled and unforeseen, of assimilating the masses of people who poured into the city. To a great extent these have been foreign immigrants, but room has had to be made also for a domestic inward drift, and to this double stream, accompanied by the natural increase of its own population, is mainly due the problem of congestion, which remains the most distinctive social fact in the urban life of New York.

The chief centres of congestion are in some of the lower wards of Manhattan. In 1900, *e.g.*, the Census figures showed four contiguous wards with a total area of 611 acres and more than 450 persons to the acre. The maximum density shown by any ward at that date was 653.4, and the average for the borough 147.2. Counts for individual tenement-house blocks naturally reach much higher figures. Thus, the results of a count of the tenement-house population made by the Tenement House Department in the autumn of 1902 showed for the Tenth Ward, which had the highest figures of density in 1900, no fewer than six blocks with a population of more than 1,000 to the acre. Out of the 48 blocks in the ward, more than half had a density of over 600 to the acre. The variations shown by the different blocks is noticeable even in such a crowded area as this, the range being from 228 persons to the acre to a maximum of 1,089. Even such a figure as the last fails to represent the point that has been occasionally reached, and the Federation of Churches has on record counts of special blocks made in 1905 that showed 1,672 (in a notorious block since greatly improved), 1,456 and 1,422 persons to the acre.

In the districts in which these blocks are found the streets are not narrow, but, even remembering that the above figures are exceptional, and that some allowance might be made for a share of the street area, they are of an appalling character. Conditions are, it is true, tending to mitigate the pressure upon this quarter of the city, but it is still excessive, and explains a recent expression of opinion in the Federation of Churches Bulletin, June 4, 1909, that "the horror of herding people together, a thousand to the acre, is one of New York's most disgraceful mal-adjustments of to-day."

The districts of exceptional congestion are highly localised, being all within about two miles of the southern end of the borough. A map of Manhattan shows at this part a curving easterly projection, and it is here, where the borough is about $2\frac{1}{2}$ miles in width, in the heart of the district known as the "Lower East Side," that these most crowded areas are found. The dominating people segregated here is Jewish, and mainly Russian. Bordering it on the west, encroaching it to the north and along 11th Street, having already pressed through to the East River, are large and complex Italian colonies. In some parts of this area the Italians may be said to be taking possession, partly from force of numbers, but partly also from the fact that the Jews prosper more quickly and move. On the whole the increase in the number of Italians in the lower parts of Manhattan is probably a sign of less rather than of greater economic strength.

It is noteworthy that the whole of the district to which reference has been made is within walking distance of the pier at which immigrants land from Ellis Island. It is thus the district which most readily offers in a strange land an environment that is not strange, but one in which faces, language, customs, shops, places of religious worship, associations of many kinds, often friends, relatives and old neighbours, can be most quickly reached. Geographical position again affords much of the clue to the special forms which these localities have taken. In the past Irish and Germans have in their turn taken much the same road, and on the western side there is a district still largely occupied by the poorer Irish.

The abnormal density of the population in the Lower East Side has been emphasised because it is the dominating fact affecting the local life in its every phase. It would be very misleading to conclude, however, that, although so crowded, the picture is unrelieved; that the neighbourhood is one from which those living there are anxious to escape; that the general death-rate is excessive; or that it is just a "poor" neighbourhood, lacking colour, animation and brightness. The reverse is the case, and on the surface the impression often conveyed by it is indeed stimulating rather than depressing. Poverty is not much in evidence; shops are bright; there is no lack of places of amusement; restaurants of some pretension are not hard to find; a street organ attracts a larger crowd of children than would be seen in a Whitechapel (London) street, dancing

with the same zest and skill. Groups in a local playground on a summer's day impress the onlooker not with a sense of squalor and neglect, but with evidences of the exercise of much parental care.

The general impression conveyed is one of movement, and movement is a characteristic note of the district. Some are tied to it; others, who could quit if they would, stay on from one or more of the many attractions that it offers, and these include most of the organised amenities of the city. Others, however, leave it, and, accompanying the permanence of the general characteristics of the area, the dominating fact is change. In its major human elements, it is rather as a stream than a pool that it can be best understood. It is no more stagnant than is New York itself. Thus, it does not lack life and interest. It is almost too full of these. But it is without nature; without any chance of repose and quiet; the air is stale; rents are high; and rooms are generally small and often dark. Next to the central fact of congestion, it is the interior planning of the great bulk of the dwellings of the people that appals. But even as regards these, though in the aggregate they include perhaps the worst variety of human habitation that has ever been constructed on a large scale in a great city, it would again be unjust to conclude that even the worst types of housing provision of the district were accompanied by no redeeming features. To a considerable extent material well-being has overcome the normal obstacles to decent living created by the dwellings. It was, it is true, possible and easy in the course of the present enquiry to enter dwellings in which, whether the structure itself or the position of the occupiers was considered, the conditions prevailing were deplorable. But the more usual experience was to be impressed by the decency and comfort of the individual home.

To a more detailed description of the housing conditions it will be necessary to return in a later section. Here it is only desired to emphasise the complexity of this whole district—"abysmal" as it has been described as to its planning and structures; so essentially "alive" as to its people.

The Jewish district of the Lower East Side is the largest and the most generally recognized, but others exist in various parts of the city, in some cases representing merely the overflow from this, in others the settlements of its more prosperous members. Of the latter the Jewish districts in the borough of the Bronx are the best illustration, and of the former the overflow into Williamsburg in Brooklyn, following on the completion of the Williamsburg Bridge in 1903, or the flight over wide intervening areas and the establishment in Brownsville, also in Brooklyn, of the new, remote and distinctively Jewish quarter there. In all there are at least six well-defined Ghettos in the City of New York.

The Italian districts near the Jewish Ghetto of the Lower East Side display similar characteristics, so far as the dwellings are concerned, and somewhat similar ones as regards their complexity. Segregation here runs less exclusively on the lines of race and religion, and more on those of smaller areas of origin. And there is an even greater mobility, although in the case of the Italians it is, as has been stated, more exclusively industrial and economic than social in its origin. The class of the general labourer is much in evidence, and, although the standard of different streets and areas varies more than it does in the Jewish quarter, the general impression is probably well founded that the level of well-being is somewhat lower. A general indication of this may perhaps be found in the increasing number of Italian women who undertake home work in the clothing trades, and in one district it is among the Italians that a considerable amount of child labour is employed in the homes on artificial flower making.

Although, in spite of the great influx of recent years, the number of Italians in New York is considerably less than that of the Jews, the number of colonies they have formed is greater, the explanation of this being largely due not simply to the segregating instincts of the race, and the rapidity with which they follow up new fields of employment, but to the minuter sub-divisions, mainly on the lines of the districts or places of origin, into which they tend to group themselves. In some cases a single Italian district can be thus sub-divided by those who are able to penetrate beneath an apparent uniformity of type. In others, an isolated colony may be found, as in some outlying quarter of the Bronx, where a feast day, with the accompanying procession, illuminations and religious services, may reveal, even to the outsider, the tiny, distant area from which the great majority of those around him have been drawn.

In the case of the Italians the largest solid colony of to-day—the typical "Little Italy" of New York—represents an overflow from the older centre and is found to the north-east of Central Park above 98th Street, lying east of Lexington Avenue. It lies towards the north of what is known as the Great East Side—the vast tenement-house area lying roughly between the East River and Third Avenue. The position of Little Italy may be cited as one of several illustrations that New York presents of the influence of contour upon the character of districts. Here the land slopes towards the river east

of Second Avenue, and also drops away after 85th Street has been passed, going north, and it is in the hollow thus formed that this great Italian colony has grown up—a relatively poor district in a part of the city that is relatively undesirable and inconvenient.

Apart from the Jews and Italians, there are no well-defined foreign districts of first-rate importance or of great magnitude. In the case of the above races segregation really means that in their own districts they form the overwhelming majority of the population. In other instances there are districts in which some section of foreigners may be especially in evidence, as, for instance, the Bohemians, the Germans, or the Irish. But, with the possible exception of the Bohemians, there are now no large areas other than those occupied by the Jews and Italians that are occupied by particular races. Such other instances of well-defined segregation as exist are small, and generally of numerical unimportance, such as that of the Chinese off Chatham Square, or of the Syrians found still further to the south of Manhattan. The Negro districts are also relatively unimportant, although well defined. They are widely scattered, but in Manhattan it is not until the neighbourhood of 59th Street, west of Ninth Avenue, is reached that any large coloured colony is found. The best known are those occupying West 61st to 64th Streets, west of Amsterdam Avenue, and certain streets further north in Harlem. In Brooklyn there is at least one distinct coloured district, but the negroes living in the Bronx are more scattered. The Negro population of New York, in spite of the industrial barriers that exist there, although less composite than the native-born white American population, or even the more recent groups of European immigrants, yet contains within itself most of the elements—professional, trading and industrial—that go to make up the life of other and more normally situated communities.

The Negro wage-earners, like the great majority of those of every other race in New York, are mainly tenement-house dwellers, and it may be noted here that in no case does type of dwelling differentiate races. These may be indicated by locality, by number of rooms occupied, and by other of the various factors that make up the standard of the home, but the general type of dwelling is almost all-prevailing—that of some form of tenement house.

Instances of segregation of various degrees of importance have been mentioned in the foregoing paragraphs, but the composite character of most districts has been also emphasised. Other than the few nationalities that have been mentioned, it would be difficult, if not impossible, to indicate definite localities inhabited by this or that race, and none would be harder to find than that occupied exclusively by the "American" working man. In a few cases, in addition to differences of race, special influences making for segregation intervené, as, for instance, in those of the Irish and the Italians, whom industrial competition, as well as differences of temperament, tends to keep apart. But, in general, fusion—of which New York is only one of the hundred ethnological laboratories that America is providing—is probably a far greater force even in New York itself than permanence and separateness of type. As a small but instructive illustration of the composite groups that are living side by side, the following Table taken from the Report of the City and Suburban Homes Company (1909) may be cited:—

Nationalities of Tenants of Three Estates of the City and Suburban Homes Company.

| Nationality. | Estate 1. | Estate 2. | Estate 3. |
|--|-----------|-----------|-----------|
| American | 240 | 171 | 94 |
| Austrian | 6 | 2 | 13 |
| Bohemian | 7 | — | 17 |
| Canadian | 2 | 3 | 2 |
| Danish | 17 | 2 | 2 |
| Dutch | 4 | 1 | 1 |
| English | 47 | 30 | 5 |
| Finnish | 6 | — | 1 |
| French | 11 | 15 | 9 |
| German | 222 | 40 | 153 |
| Hebrew | 7 | — | — |
| Hungarian | 69 | 1 | 159 |
| Irish | 73 | 62 | 14 |
| Norwegian | 7 | — | — |
| Scotch | 11 | 18 | 3 |
| Swedish | 75 | 14 | 17 |
| Swiss | 10 | 5 | 1 |
| Others (including Alsatian, Armenian, Assyrian, Belgian, Cuban, Greek, Hindn, Italian, Polish, Roumanian, Russian, Servian and Spanish). | 8 | 7 | 17 |

Attention has been already directed to the fact that in the Ghetto of the Lower East Side, in spite of the congestion, the death-rate is not excessive. In this is found a tribute not only to the hygienic practices of the Jewish people, but also to the general health administration of the city. The Department primarily responsible is that of Health, but important supplementary influences are those of the Department of Education, through the indirect influence exercised by the schools, the Department of Street Cleansing, the Tenement House Department, and, in the campaign against tuberculosis to which much attention is now being directed, the Department of Public Charities (as controlling the public hospitals of the city). In addition, there has been active co-operation with various voluntary bodies.

The general mortality tables indicate a marked improvement in the health conditions of New York in recent years, and the rates for typhus, scarlet, malarial and typhoid fevers, small-pox, measles, diphtheria and croup are among those that show the most appreciable declines. On the other hand, the figures for cancer and pneumonia are less satisfactory. The death-rate from pulmonary tuberculosis in recent years has ranged from 2.10 to 2.44 per 1,000 of population, the average for 1898-1907 being 2.24, as compared with 2.76 for the previous decade. Reference will be made later to the very active anti-tuberculosis campaign that is being carried on.

The course of infantile mortality has been irregular. The figures are based upon the number of births actually reported, and the rates are therefore somewhat exaggerated. In 1907, for example, 120,722 births were reported throughout the city, whereas in the opinion of the Department of Health a truer figure would have approximated to 130,000.

The number of births recorded is being gradually made more complete, but it is admitted that a considerable number still escape registration. Thus a comparison of the rate for the Greater City in 1898, when the figure given was 24.1 per 1,000 of population, with that for 1907, when it was 28.2, the highest recorded, may reflect not so much an actual increase in the rate, although this too may have resulted from the character of recent immigration, as more effective administration. The same consideration would apply to the separate figure for Manhattan and the Bronx, which is given as 29.2 for 1907.

Subject to these qualifications, the recorded birth-rates per 1,000 of population and the infantile mortality rate per 1,000 births recorded are shown, for the years 1903-7, in the following Table, which also presents the death-rates per 1,000 of population for the same period. The birth and death rates relate to New York City as a whole, the infantile mortality rates to Manhattan and the Bronx only:—

| Year | Birth-rate recorded per 1,000 of Population. | Death-rate per 1,000 of Population. | Infantile Mortality per 1,000 Births recorded. |
|-------------|--|-------------------------------------|--|
| 1903 | 25.1 | 18.0 | 144 |
| 1904 | 25.5 | 20.0 | 155 |
| 1905 | 25.8 | 18.3 | 154 |
| 1906 | 26.9 | 18.4 | 149 |
| 1907 | 28.2 | 18.5 | 143 |

Although the ratio of native to foreign-born females is estimated at roughly seven to four, the number of children born to native-born mothers as recorded was 38,361, and to foreign-born mothers 82,361. These figures have led to the insertion on the authority of the Bureau of Records of the Department of Health of a significant calculation which goes to show (statistical accuracy is not claimed) that the birth-rate for the foreign-born is between three and four times as high as that for the native-born. "It is obvious," the comment of the Bureau runs, "that the foreign mothers are not shirking the responsibilities of sex, while the native-born mothers are willing and anxious to forego to a considerable extent the honours, pride, and happiness of motherhood." The argument is emphasized by reference to two blocks, one predominantly Italian in which the birth-rate was 47 per 1000, and another predominantly Jewish in which the rate was 43.7.

The anti-tuberculosis campaign, to which reference has been made, is being carried on in many cities in America, and nowhere with more vigour than in New York. For this great local activity there are perhaps definite local explanations, especially the congested conditions under which large numbers of the people are living, and the character of the dwellings. The absence of the open grate is another source of danger, and the whole position is complicated by the presence of large numbers of foreigners, some especially ignorant of hygienic rules, and all having to learn the use of a dietary that is to some extent new, and to adapt themselves to a fresh environment, to a different climate, and in most cases to a more strenuous life.

Compulsory notification of tuberculosis was partially introduced in 1894, and was extended in 1897. At the present time it is estimated that in Manhattan and the Bronx 90 per cent. of the recognised cases are reported. Special tuberculosis dispensaries have been established, either by the City or by philanthropic bodies, and the whole of Manhattan is now divided up into districts, cases being referred to the local dispensaries for treatment and supervision. The Department of Health acts as a clearing house and over-lapping is to a great extent avoided. During 1907, 5,870 new patients were examined at the various dispensaries in Greater New York. Nurses are attached to these and many patients are visited in their own homes, 6,801 such visits being paid in 1907. There is power of compulsory removal, and during 1907 35 cases of pulmonary tuberculosis "were removed to Riverside Hospital by force as being nuisances and dangerous to those about them." Various other provision is made and other methods are adopted: the free examination of sputum; the free disinfection of rooms; the enforcement of the regulations forbidding spitting in public places; in addition to educational measures of various kinds, such as the delivery of lectures, the issue of leaflets and exhibitions.* The last exhibition was held in the winter of 1908 and was widely advertised. A comprehensive series of lectures was arranged, and the exhibition, which was attended by large numbers, became an important vehicle of propaganda. The opening meeting, at which the Mayor of New York and the President of the Board of Health took part, was also the annual meeting of the Charity Organisation Society, and the occasion may be cited as illustrating the constructive policy that characterises much of the work of the Associated Charities of America.

The key-note of most that is being attempted in connexion with tuberculosis is prevention, and preventive effort, as distinguished from that which is primarily curative or remedial, is characteristic of much that is being attempted in New York in the domain of social amelioration generally. Apart from administrative municipal effort, notably through the medium of the Health, Education and Tenement House Departments, perhaps the branch of the Charity Organisation Society for the Improvement of Social Conditions is at once the most important and the most characteristic. Of this branch the two chief divisions are (1) the Tenement House Committee formed to improve the condition of tenement houses, mainly by securing proper legislation and by the enforcement of existing laws; and (2) the Committee for the Prevention of Tuberculosis, formed to aid in every way the movement for the prevention of this disease. Preventive social effort takes, however, manifold forms, as in the promotion of savings and the granting of loans; in benefit societies; in the provision of education and special training; in the direct attempt to improve social conditions; and in the establishment of social settlements, clubs, libraries, reading-rooms and museums. It is noteworthy that the various agencies thus classified and grouped under the general heading of "Preventive Social Work" take up some seventy pages in the New York Charities Directory for 1909, a little volume in which the long enumeration of agencies—philanthropic, educational, religious and administrative—considered relevant to such a directory cover some 650 pages. Among the preventive agencies two characteristic ones may be mentioned: the Industrial Removal Office and the Educational Alliance. The former was established to relieve the Jewish congestion in New York and, in general, to diffuse the Jewish population widely throughout the States. During the first seven years of its operation since its foundation in 1900, nearly 41,000 persons have been sent to no fewer than 1,000 cities and towns in all parts of the country. The Alliance has much the same general objects in view—the assimilation and Americanisation of the Jewish people—and the distinctive methods adopted are industrial training and general education in English, in American history, &c. The classes for adults in English, held in connexion with the Baron de Hirsch Fund, are attended by very large numbers. The general aim of "Americanisation" is also prominent in much that is undertaken by the Social Settlements which have so multiplied in the United States during the last twenty years, and which are in most cases found in, or in close proximity to, foreign districts. About sixty have been established in New York City. The New York Federation of Churches also owes much of its vitality to the same great influence—the immense civic and racial problem presented by the necessity of assimilating year by year a large and complex population.

Although the various centres of preventive work are absorbing much thought and effort, organisations that have curative and remedial ends in view are far more numerous and their general classification falls much into line with that which would be adopted for older communities. Thus, the directory to which reference has been made enumerates agencies for the care and relief of needy families in their own homes, be it by material relief, by the provision of employment, by nursing and the care of the sick, or in other

* See Appendix, pp. 488-491.

ways ; relief for destitute, neglected and delinquent children ; relief in permanent and temporary homes for adults ; relief for the sick, and relief for the defective. Many hundreds of agencies are enumerated, some almost entirely voluntary in character, working through the medium of the home, and others, both voluntary and "official," through institutions.

In Manhattan and the Bronx the Charity Organisation Society is itself the chief co-ordinating centre. Among other agencies that may be mentioned is "The New York Association for Improving the Condition of the Poor," primarily eleemosynary in character, but, like the Charity Organisation Society itself, developing, as, for instance, through the New York Milk Committee, on constructive lines. The United Hebrew Charities is the chief centre for work, very varied in character, among the Jewish poor. In Manhattan and the Bronx this exists as a separate organisation, but in Brooklyn the corresponding agencies are affiliated to what is there the chief centre, namely, the Brooklyn Bureau of Charities.

The Provident Loan Society, with loans in 1908 averaging £5 15s. 7*d.* and reaching to the number of nearly 300,000, the Children's Aid Society, the branches of the Society of St. Vincent de Paul and other activities connected with various religious bodies, the numerous hospitals and homes—municipal, subsidised and entirely voluntary, and the societies formed in the special interests of this or that nationality are among the other organisations or groups of agencies that illustrate the great field that has to be covered by charitable and cognate effort. The contrasts in life presented by New York, although perhaps not so complete as those, for instance, of London or Paris, are nevertheless vivid and exacting, and in the aggregate the practical response made on behalf of those who are the more necessitous or helpless, or who are themselves, although free from criminality, harmful elements in society, is not unworthy of a great and wealthy community.

On the side of public administration those Departments which are the most relevant to this enquiry—Education, Health, in which the sense of collective responsibility finds perhaps its most striking manifestations, and Housing—have been already mentioned. On the whole municipal effort is confined to those matters—communication, drainage, health, the protection of life and property, and education—over which public control is regarded as almost essential under modern urban conditions. Thus none of the larger public utilities, save water, are municipal, gas, electric light, telephones, the surface car system and the elevated railways being all in the hands of private corporations, subject to such public control as is exercised through the conditions laid down when the various concessions were granted, and to the thoroughness with which these conditions are enforced ; and also as regards gas, electric lighting and transit facilities, to the powers exercised by the Public Service Commission.

The latter body, the outcome of various stages in the direction of public control dating from as far back as 1859, was created by the State legislature in 1907 ; and its main function may be described as that of securing for the public efficient and co-ordinated service on the part of those corporations with which it is concerned. The powers of the Commission are most important in connexion with rapid transit facilities. In these great extensions are contemplated, and as regards administration concern questions which are perhaps at the moment, with the exception of finance, more vital to the development and unity of New York than any other. In this respect, therefore, the task of co-ordination is of first-rate importance, and since no fresh scheme of underground or elevated railway service can be adopted without the sanction of the Public Service Commission, it is on this body that the extension of existing facilities to a great extent depends.

As regards municipal control the "Subway," which is the underground railway of New York, occupies a middle position. This electric system, which began to run in 1904, and is the most used of all the crowded transit facilities in New York, traverses the whole length of Manhattan, bifurcating at 104th Street to Bronx Park. To the South the very heart of the City is served, and since 1908 the line has been carried by a tunnel under the East River to Flatbush Avenue in Brooklyn. The longest distance traversed is about 15 miles, and the uniform fare is 2½*d.* Between 96th Street and Brooklyn Bridge Station the line is doubled for an express service.

The law requires a minimum speed of 30 miles per hour for the express trains, and the average speed of the whole service in 1907 was 17.66 miles per hour, as compared with 14.75 miles on the Manhattan elevated railways, and 7.08 on the Manhattan surface cars. Thus, relative rapidity of travel as well as the course taken by the Subway increases its importance to the community.

For this great undertaking, for which the sanction of the State legislature had to be obtained, corporate bonds to the amount of about £10,000,000 have been already issued. The whole contract for construction, equipment and operation was taken over by the lessees, now the Inter-Borough Rapid Transit Company, to whom the Subway is rented. Extensions have been sanctioned both to the North in the Bronx, and to the South along Fourth Avenue in Brooklyn.

It may be noted that the public motor-omnibus service is in an early and apparently inactive stage of development in New York, a cumbrous and relatively expensive five-penny service in Fifth Avenue, along which no tram line is allowed, being the chief instance of this means of locomotion.

Among the striking undertakings of the city the bridges take a leading place, and those constructed over the East River are famous. The Brooklyn Bridge, opened in 1883, has been followed by the Williamsburg Bridge, opened at the end of 1903, and by the Queensborough Bridge, opened in 1909. The Manhattan Bridge crossing the river only a few hundred yards north of the old Brooklyn Bridge is nearly completed.

The Brooklyn and Williamsburg bridges are most used, and the former, traversed by Elevated Railway, surface cars, vehicles and pedestrians, is daily the scene of great congestion. This is largely owing to the fact that the Manhattan side is at present a terminus for the enormous volume of traffic converging there; but the new Manhattan Bridge and a project now approaching completion, by which these two bridges and the Williamsburg Bridge will be made parts of a loop system, are expected to give considerable relief.

Queensborough Bridge when opened was not linked with any transit system whatever, but this comparative waste of a great enterprise is not likely to continue for long, and the effect of this bridge in opening up extensive areas in the borough of Queens is destined to be of great importance.

These three bridges, the subway tunnel to Brooklyn, and the two tunnels already completed under the Hudson River, are still supplemented by ferry services both to Brooklyn and Queens and to the New Jersey side. But bridges and tunnels are already, and are destined to be still more completely in the future, the chief channels of inter-communication between Manhattan, the other boroughs, and New Jersey. It is by them that physical unity is being completed and the area of development extended. In the same way the use of the Belmont tunnel under the East River at 42nd Street, constructed but so far unused because of legal obstacles, and the completion of the great enterprise of the Pennsylvania Railroad Company, by which its whole system will be not only brought into direct communication with Manhattan but also with Long Island, may possibly still further tend to ease the congestion of Manhattan and will certainly hasten the development of outlying districts.

Of the great thoroughfares in Manhattan, Broadway alone traverses the whole borough. From the southern end it runs due north for more than two miles as far as East 10th Street, but from that point for more than three miles to West 79th Street it trends in a north-westerly direction, thus breaking a scheme of rectangular planning otherwise almost unrelieved. Fifth Avenue, starting at the south end from Washington Square, about two miles from the Battery, almost bisects Manhattan, and streets lying on either side are distinguished as "East" and "West" accordingly. At first commercial in character, with a sprinkling of the older hotels and flanked by two or three of the most select residential streets in New York, the Avenue, always retaining an air of structural distinction, soon becomes one of the chief centres of the garment industry. Factories, offices and warehouses are numerous here, and in the dinner hour the employees of the neighbourhood, mainly Jewish men, throng the pavements. Above 23rd Street the character changes, and the beginning of that part which forms the best-known shopping street in New York, and thus in America, is reached. Hotels, restaurants, clubs, churches, public and other buildings are numerous in this section of the Avenue. At and facing Central Park a long range of private mansions begins. Above Central Park the Avenue is still mainly residential in character, but on a less imposing and increasingly modest scale, and further north houses in multiple occupation are reached.

The lateral streets occur at intervals of 200 feet, and, including the street spacing, about twenty of the building "blocks" thus formed go to the mile. The regular planning of the streets begins about two miles north of the Battery, and the three to eight mile distances from the Battery itself are reached at 24th, 44th, 63rd, 83rd, 102nd and 121st Streets. To the city boundary at the north of the Bronx the distance is nearly 16 miles.

Most of the lateral streets in Manhattan are 60 feet in width from building to building, with pathways 15 feet wide, but at irregular intervals twenty of them, like most of the Avenues, are 100 feet in width, and these become in almost every case important thoroughfares for shopping and other purposes.

The other Avenues of Manhattan, most of them important centres of retail trade, run parallel to Fifth Avenue. To the north, across the Harlem River, the borough of the Bronx at first maintains much of the character of that part of Manhattan from which it is divided by the river, and Third Avenue itself is directly continued in the northern borough.

While the extension of Manhattan has necessarily proceeded in a northerly direction, Brooklyn from the outset has had much greater room for expansion, and its comparative freedom from physical barriers has been an important contributory cause of the relatively uncongested conditions that prevail there. From the business centre of Brooklyn, focussing in Fulton Street and round the City Hall, the great thoroughfares can radiate freely to the north and south and to the east.

The public parks and open spaces of New York City cover nearly 8,000 acres, and the enumeration, large and small—some being really only city squares—includes over 100 names. Central Park in Manhattan, Prospect Park in Brooklyn, Forest Park in Queens and the Bronx, the Van Cortland and the Pelham Bay Parks in the Bronx are the largest. Foresight in park provision has been best exemplified in the last-named borough, which contains three of the largest and most beautiful parks and more than half the park area of the whole city. Manhattan, although possessing the famous Central Park with 843 acres and having a few more acres of park land than Brooklyn, has in view of its great population the most inadequate provision, and the need of open spaces there would be far more urgent were it not for the insular formation of the borough. South of Central Park, which begins at a point nearly five miles from the Battery, the most important open space is a little park of some 21 acres at Battery Point abutting on the Hudson and East rivers. Apart from this no open space in this area, which as has been seen covers the most thickly populated section of the city, is more than eleven acres in extent, and such small open spaces as exist are few in number.

A few playgrounds are maintained and these, although falling behind the high standard set by the model system of Chicago, and lacking the distinctive public halls of those admirable centres, are greatly used. Special provision is made for the children, and at one playground visited in the course of this enquiry on a hot Saturday morning the seats thronged by adults, the enclosure and equipment of gymnastic apparatus for the boys, the reserve for girls with its equipment, and the roofed-in construction for children—with dolls-house, sand-heap and other attractions—were noteworthy features. For the children an attendant was in general charge.

The foregoing are under the Park Department of the City, but in the more crowded parts some supplementary provision is made by the Board of Education in the form of vacation playgrounds, afternoon playgrounds for mothers and babies and evening roof playgrounds. In all, for the season of 1908, some ninety centres of these various descriptions were provided. Similar provision is also made by a few of the Social Settlements, but when all is said, the streets both in Manhattan and Brooklyn bear daily witness to the undue importance which these still retain as substitutes for open spaces.

Other forms of public provision are the New York public library, based on four great benefactions, with numerous branches in Manhattan, the Bronx and Richmond; the Brooklyn public library, and the Queens Borough public library; baths—floating and interior; a municipal lodging house; a few markets—mainly wholesale; nine recreation piers, retained and opened for this use from May to September by the Department of Docks and Ferries, and a municipal ferry to Staten Island. Public conveniences are still conspicuous by their absence, there being only some fifteen in the whole city.

As regards the government of the City of New York, the form and constitution are, like those of the majority of American cities, determined by the State legislature. The Charter under which the present city exists dates from 1902, and by this Charter and by supplementary and amending legislation, the modes of election or appointment of city representatives and executive officers, and the various departments of city government and their powers are determined.

The Board of Aldermen is the chief representative body and consists of a President elected on a general ticket, of 73 members elected for the various aldermanic districts of the city, and of the Borough Presidents—an office that is distinctive of the New York municipal constitution. Although the Board is regarded as the body in which the legislative power remaining with the City is vested, the Mayor of New York has the power either of suspensory, or, in the case of the granting of a concession, absolute veto over

its decisions. Its spending power is also mainly subject to the recommendations of a much smaller body called the Board of Estimate and Apportionment. This latter Board is at present composed of the Mayor, the Comptroller—the head of the Department of Finance, the President of the Board of Aldermen and the Borough Presidents. The first three are elected by the whole constituency and the rest by the respective boroughs—all for a period of four years. Voting power on the Board is unequal, the chief members casting three votes each, the Presidents of the Boroughs of Manhattan and Brooklyn two votes each and the other Presidents one vote each.

The central figure of the Executive of the City is the Mayor, and in his office great powers, not only legislative, largely through the power of the veto, but also of nomination and removal, are vested.

The scheme of government as regards the whole City includes a series of Departments, the heads of most of which are Commissioners appointed and removable by the Mayor. Among other Departments to which this arrangement applies are those of the Police, Water Supply, Gas and Electricity, Bridges, Parks (with three Commissioners), Public Charities, Fire, Docks and Ferries, Taxes and Assessments, and Tenement House.

The Department of Health is presided over by a Board of three—the Commissioner of Health appointed by the Mayor, the Police Commissioner and the Health Officer of the Port—the last appointed by the Governor and Senate of the State. The Department is divided into two Bureaus—Sanitary and Registration—and the Superintendent of the great organisation modestly described by the former title is the Chief Executive Officer of the whole.

The Public Education system is again exceptional, general control being vested in a Board consisting of 46 members appointed by the Mayor for a five years term, one-fifth retiring annually. The chief control of the actual administration is in the hands of a Board of Superintendents—the Chief and eight Associates—themselves appointed by the General Board, but the vast system requires much devolution and an elaborate organisation. On July 31st, 1908, there were 490 Elementary Schools and 19 High Schools under the control of the Board. The average daily attendance at all schools during the years 1907–8 was 545,098, and the total expenditure for school purposes, including new buildings, for the year ending July 31st, 1908, was £7,857,962.

A distinctive feature of New York government consists in its recognition of a certain degree of borough autonomy, the whole of the City being divided up into 25 Local Improvement Districts, the “local board” for which consists of the Aldermen resident therein and the President of the borough within which they fall. It is through the medium of its President that the borough as a municipal unit finds its chief political recognition. The powers alike of the local boards and of the Presidents themselves are concerned mainly with the maintenance and improvement of streets and roads and the system of drainage and sewerage, and in the issue of building permits. In the latter function responsibility is shared with the Tenement House Department, to which plans of tenement houses have also to be submitted for approval. Local expenditure is subject to various constitutional checks that have not always in practice been found to work well. The Borough Presidents report to the Mayor of New York, but are removable not by him but by the Governor of the State.

In 1908 the total appropriation of the City Budget was nearly £30,000,000. Current expenditure is met to a great extent by temporary loans raised on “revenue bonds,” payable in the current or succeeding year, but in the long run and apart from this device the main income is derived from the taxation of real estate. Among other sources of income, the following may be mentioned: taxation of certain forms of personal property, special taxes on bank shares, special assessments for local improvements, State subsidy for schools, licences, and water, pier, Subway and other rents. Roughly, about three-fourths of the total expenditure is ultimately met by the taxation of real estate.

The basis of assessment of this is market value, and in New York, with perhaps greater completeness now than elsewhere, an analysis of the assessment is made as between land and “improvement” (or building) values. The relation between the two varies greatly in different parts of the city, as, for instance, between Lower Broadway and some outlying section of Queens or the Bronx, and whereas in the latter districts the value of the improvements might easily exceed by many times the value of the land, on some sites of the former district it would be practically impossible, no matter what the height or what the elaborateness of the structure, to erect a building of a value equal to that of the land. In 1909 the general percentage of land value to total assessed value of ordinary real estate in Manhattan was 66·4 as compared with 47·2 in Brooklyn.

Assessments are made annually, and the real estate market is taken as the chief guide. In the assessment of buildings figures per square foot of floor surface are adopted as "factors" of cost, and these figures, necessarily different for different classes of buildings, and ranging from about 4s. 2d. to 41s. 8d. per square foot, give by the simple method of calculation adopted an approximation to the total figure of assessable value required. For the purpose of this calculation it is essential that particulars both as regards the size of the building plot and class of structure, including the number of floors, should be available, and for the general task of assessment accurate maps under constant revision.

The "factor" or basis for calculating the value of buildings for assessment purposes naturally varies greatly for different classes of property, but as an illustration it may be mentioned that in one thickly-populated district tenement houses in its better localities, with dwellings letting at from 16s. 8d. to 20s. 10d. per month per room, were assessed at from 5s. 5d. to 5s. 10d. per square foot of their floor surface. Thus, disregarding, as is done in practice, spaces left vacant for light and air, if such a dwelling in this district was five stories high, 60 feet deep, and occupied a building plot 25 feet wide, the assessed value per square foot would have to be multiplied by 60 by 25 by 5 to get the assessable value of the building, which would thus in the above instance be from £2,031 to £2,187 10s.

Exemptions include federal and municipal property, churches, hospitals, &c., and the total values thus omitted in 1909 were put at £270,000,000. The figures are large, but those for the total assessment are still more imposing, as the following Table shows:—

Assessed Value of Real Estate in the City of New York (1909).

| | | | | £ |
|------------|-----|-----|-----|----------------------|
| Manhattan | ... | ... | ... | 961,342,976 |
| The Bronx | ... | ... | ... | 96,396,668 |
| Brooklyn | ... | ... | ... | 282,252,050 |
| Queens ... | ... | ... | ... | 64,190,126 |
| Richmond | ... | ... | ... | 13,980,618 |
| Total | ... | ... | ... | <u>1,418,162,438</u> |

Assessment values have, it may be noted, no legal validity save for taxation purposes, and the ratio of assessment to actual selling value in New York would vary in different parts of the city, largely according as market values were stationary or not. The general ratio can, however, probably be approximately stated as 85 per cent.

The tax-rate, which varies slightly between borough and borough because they are situated in different counties, and because the relatively small county expenses are a county charge, was, in 1909, for Manhattan and the Bronx 1.68 per cent. of the assessed values, and for Brooklyn 1.74 per cent.

The assessment of personal property is admittedly incomplete and inaccurate, and the valuation for 1909 was about £92,000,000. Seventy-five per cent. of the property assessed as personal is in the borough of Manhattan.

Public municipal indebtedness is limited by a general provision of the Constitution of the State of New York to 10 per cent. of the assessed value of real estate, and, as at present calculated, the city has in recent years approached the limit thus imposed.

OCCUPATIONS, WAGES AND HOURS OF LABOUR.

Like many other cities of the first magnitude, New York is a large centre of manufacture, but, important as its occupations falling under this general heading are, its leading characteristic even as a centre of employment is found rather in its commercial and trading supremacy than in its productive enterprises. As a great emporium, the city of New York is unrivalled in America, but some of its most important industries find their chief explanation in the ordinary demands of a vast population and in the structural requirements of a great and expanding community. With the exception of the garment industry, New York is the centre of no other of great magnitude which produces for a wide outside market; and trade and transportation—the occupations provided largely by a great port and a great railway and commercial centre—absorb, as is indeed a common experience, by far the greatest single aggregate of the occupied classes.

Some conception of the magnitude of New York as a sea-port may be derived from the following summary, relating to the years 1905-9 :—

| Year ended June 30th. | Tonnage Entered and Cleared in the Foreign Trade. | Value of Imports. | Value of Exports. | Number of Passengers arriving at the Port. |
|-----------------------|---|-------------------|-------------------|--|
| | Tons. | £ | £ | |
| 1905 | 18,942,380 | 141,589,428 | 109,317,918 | 939,504 |
| 1906 | 20,390,953 | 152,989,755 | 126,491,732 | 1,068,847 |
| 1907 | 21,855,946 | 177,853,532 | 130,822,887 | 1,263,042 |
| 1908 | 24,094,744 | 143,378,320 | 146,054,774 | 843,597 |
| 1909 | 24,395,136 | 162,356,030 | 126,508,225 | 894,577 |

Since 1900, as is shown by the Table on page 3, the City of New York has grown rapidly, and the expansion will doubtless be reflected when the occupation figures of the Census of 1910 are available, but there is no reason to suppose that the relative extent of the respective fields of employment is inaccurately indicated by the results of the Census of 1900. The following Table is therefore given, showing in large groups the number of persons of 10 years of age and over engaged in occupations in the City of New York in 1900, the last year for which complete occupation figures are available :—

Number of Persons of 10 years of age and over engaged in Occupations in New York City in 1900.

| Occupations. | Males. | Females. | Total. |
|--|-----------|----------|-----------|
| Building | 98,877 | 407 | 99,284 |
| Metalworking and Engineering | 58,775 | 1,790 | 60,565 |
| Textile | 7,592 | 11,112 | 18,704 |
| Leather | 4,055 | 656 | 4,711 |
| Boot and Shoe Making | 12,241 | 1,046 | 13,287 |
| Hat and Cap Making | 2,619 | 1,379 | 3,998 |
| Other Clothing | 61,994 | 80,542 | 142,536 |
| Woodworking and Furnishing | 21,100 | 1,111 | 22,211 |
| Paper and Printing | 29,186 | 8,753 | 37,939 |
| Glass | 2,211 | 83 | 2,294 |
| Food, Drink and Tobacco | 45,155 | 8,435 | 53,590 |
| Other Manufacturing and Mechanical Pursuits | 75,789 | 17,221 | 93,010 |
| Trade and Transportation | 405,675 | 65,318 | 470,993 |
| Labourers (not otherwise specified) | 98,531 | 1,714 | 100,245 |
| Professional, Domestic and Personal Service and Agricultural Pursuits. | 178,671 | 167,870 | 346,541 |
| All Occupations | 1,102,471 | 367,437 | 1,469,908 |

Probably the industry that will be found to have made the largest advance will prove to be the garment industry, of which New York, although steadily pressed by the increasing competition of Chicago and other places, remains by far the chief centre in America. It may be noted that in this industry, in which wages enter largely as an element of the cost of production, and in which, therefore, an abundant supply of suitable labour is a prime condition of expansion, the City of New York is especially favoured as being the port of arrival for the vast majority of immigrants from Europe.

As measured by the value of their products, the following are some of the other more important manufactures : printing and publishing ; tobacco, cigars and cigarettes ; bread and other bakery products ; malt liquors ; foundry and machine shop products ; millinery and lace goods ; fur goods ; musical instruments ; and there are very large single establishments for sugar refining, copper smelting and refining, and petroleum refining.

As New York City is the chief point of disembarkation for the whole country, its industrial population naturally reflects much of the cosmopolitanism of the American population, and reference has been already made to some of the larger foreign districts of the city. No recent figures are, however, available to show in which trades the various nationalities are mainly absorbed, and in this respect the Census figures for 1900 are less instructive than in the general indication they give of the relative magnitude of the occupations, since changes in the nationalities employed are apt to proceed more rapidly

than those affecting the relative importance of occupations or industries themselves. But, remembering that such changes are in active progress and that this constant tendency to an alteration in the *personnel* of the rank and file of industry is one of the characteristic industrial phenomena of America, the following figures may still be usefully given. For the reasons mentioned they will illustrate in some cases rather the racial complexity of the occupied classes in the City of New York than their relative numerical importance :—

Number of Males of 10 years of age and over engaged in certain Occupations in New York City in 1900, classified according to Parent Nativity.

| Occupations. | Number of Persons of Native Parentage. | Number of Persons having either both parents born as specified or one parent born as specified and one parent native. | | | | | | Total. |
|---|--|---|----------|----------------|--------|-------------------------------------|---|--------|
| | | Germany. | Ireland. | Great Britain. | Italy. | Russia, Austria-Hungary and Poland. | Scandinavian and Other Countries, including Persons of Mixed Foreign Parentage. | |
| Masons (brick and stone) ... | 1,542 | 2,087 | 4,656 | 1,448 | 2,319 | 229 | 632 | 12,913 |
| Carpenters and Joiners ... | 5,182 | 7,623 | 4,970 | 2,792 | 1,305 | 2,583 | 5,449 | 29,904 |
| Plasterers ... | 376 | 510 | 1,847 | 501 | 428 | 97 | 260 | 4,019 |
| Plumbers and Gas and Steam Fitters. | 3,163 | 3,463 | 6,342 | 1,351 | 189 | 862 | 1,244 | 16,614 |
| Painters, Glaziers and Varnishers | 4,536 | 8,597 | 4,111 | 2,022 | 750 | 4,021 | 3,098 | 27,135 |
| Machinists ... | 3,315 | 5,375 | 2,999 | 1,913 | 295 | 801 | 2,543 | 17,241 |
| Tailors ... | 627 | 9,372 | 1,143 | 444 | 4,843 | 36,735 | 2,930 | 56,094 |
| Boot and Shoe Makers and Repairers. | 607 | 2,716 | 1,164 | 379 | 4,206 | 2,480 | 689 | 12,241 |
| Piano and Organ Makers ... | 266 | 1,704 | 192 | 101 | 191 | 157 | 311 | 2,922 |
| Upholsterers ... | 349 | 1,538 | 346 | 174 | 32 | 529 | 373 | 3,341 |
| Printers, Lithographers and Pressmen. | 5,322 | 5,694 | 4,923 | 1,951 | 401 | 1,252 | 1,978 | 21,521 |
| Bookbinders .. | 680 | 1,137 | 746 | 284 | 123 | 387 | 310 | 3,667 |
| Bakers ... | 479 | 7,606 | 807 | 307 | 643 | 1,532 | 686 | 12,060 |
| Tobacco and Cigar Factory Operatives. | 404 | 3,773 | 201 | 321 | 518 | 4,965 | 1,507 | 11,689 |
| Steam Railway Employees ... | 3,465 | 1,695 | 4,339 | 776 | 333 | 357 | 866 | 11,831 |
| Street Railway Employees ... | 1,429 | 1,231 | 3,718 | 333 | 51 | 158 | 455 | 7,375 |
| Engineers and Firemen (not locomotive). | 3,791 | 3,092 | 5,930 | 1,526 | 193 | 258 | 1,789 | 16,579 |
| Draymen, Hackmen, Teamsters, &c. | 10,659 | 13,055 | 19,367 | 2,117 | 1,486 | 1,543 | 2,836 | 51,063 |
| Labourers (not specified) ... | 10,043 | 12,517 | 39,807 | 2,290 | 22,690 | 6,319 | 4,865 | 98,531 |

Particulars are given in the Table on pages 22–23 as to the length of the working week in various industries, and the predominant range under normal conditions is shown to be from 44 to 54 hours. In the building trades a 44-hour week is generally recognised, that is, eight hours on the first five days in the week and a half-day on Saturday. Apart from this important group of trades a short working Saturday is exceptional, but, with a working week of varying length, the following are instances of other trades in which or in sections of which the Saturday half-holiday is recognised: clothiers' cutters and trimmers; cigarmakers; lithographers; carriage builders; and wire workers. By some firms the half-holiday is observed in the summer months but not at other times of the year, the hotter weather and seasonal depression not infrequently tending to coincide. Longshoremen, when engaged by the day or week, when the regular day is from 7 a.m. to 6 p.m., including an interval of one hour, and teamsters are instances of occupations in which a comparatively long working day prevails, while the employees of the Consolidated Gas Company, with their day and night shifts of 12 hours, including one hour for meals, and half a day off when the shift is changed fortnightly, may be mentioned as illustrating a still longer working week.

The holidays generally observed are some six or eight in the year, the most usual being—New Year's Day, Memorial Day (falling in May), Independence Day (July 4), Labour Day (the first Monday in September), Thanksgiving Day (a day in November

proclaimed annually by the President of the United States) and Christmas Day. Less generally recognised are Lincoln's birthday (February 12) and Washington's birthday (February 22). The gradual change in the character of Labour Day may be noted, the tendency being for it to become less of a day of demonstration or of propaganda and more of an ordinary holiday, when wage-earners hardly less than others participate in the usual attractions or avail themselves of the opportunities for rest that offer.

As regards the method of remuneration a clear general distinction between time and piece rates is difficult to draw owing to the normal tendency of the former to be based on measured output and of the latter to conform approximately to the time required in execution. In some occupations, such as certain branches of the garment industry, the adoption of a "time-task" system may obliterate any essential distinctions between the two methods of payment, but, in general, payment appears to be by time rather than by piece. Among piano workers and cigarmakers, however, piece work is the more generally accepted method. The same plan is also adopted by some sections of book-binders, woodworkers and coopers; among a few printers, and in various sections of the garment industry, as often among machine operators, pressers and finishers. The building trades and foundries and machine shops are instances of fields of employment in which, while there is scope for the adoption of either method, wages are almost always calculated by time. The "premium" system appears to be unrecognised.

In spite of the fact that the organisation of labour is to some extent handicapped by the position of New York as the port of arrival of great numbers of immigrants year by year, the trade unions are on the whole able to maintain a considerable degree of effectiveness. To some extent this is probably explained by the exceptional importance of maintaining labour organisations at as high a level of efficiency as possible in a market that might easily if neglected become one of the most disorganised in the country. But the normal difficulty of the situation is lessened—(1) by the fact that the more skilled and thus, *cæteris paribus*, the more highly organised trades are not those which are most affected by the labour that arrives from Europe, and, (2) probably to a still greater extent and certainly more fundamentally by the general prosperity of the city, by its rapid expansion, by the number and variety of its enterprises, both public and private, by the fluid character of much of its own population, and thus by its power to absorb year by year large numbers of new comers. In its activity, growth and prosperity are thus found the main explanations, alike of the frequently high prevailing rates of wages, and of a degree of strength maintained by its labour organisations which, under the conditions involved by a community so vast and so cosmopolitan, is noteworthy.

Naturally the strength maintained is not uniform; the building and printing trades may be mentioned as among the most completely organised large groups, and the garment workers as a great industry in which active organisations are able to secure the adhesion of but a small percentage of the total occupied. It is noteworthy that the strikes among tailors which have come to be regarded as almost annual occurrences usually take place among the unorganised section of the trade—a phenomenon which is explained by trade unionists as being due to the inferiority of the conditions under which non-members work.

Save for the existence of the United Hebrew Trades—an association of nearly 50 different unions, or branches of unions, and claiming a total affiliation of some 28,000 members—the trade unions in the City of New York are grouped on the customary plan laid down by the American Federation of Labour. Thus each trade has its own office or address, and in the large unions with various branches or "locals," an office which in relation to these branches is itself a centre. These various local units are grouped into what constitutes the real urban unit—"The City Central," which is itself affiliated to the national and international organisation known as the American Federation of Labour. To this Federation the United Hebrew Trades already mentioned are also affiliated.

The local trade unions were somewhat weakened by the depression of 1907 and 1908, but in September of the latter year the total membership was 239,538, of whom 7,135 were women. The total membership is scattered through 704 organisations. This large number is to some extent explained by the sectional organisation that takes place either on the basis of a particular locality, largely that of the borough, or on the basis of nationality. Thus, as illustrating the latter point, among composers, one of the most

effectively organized of all the groups, there are in addition to the English-speaking societies, including the branch of the International Typographical Union known as "Big Six," with its membership of over 6,000, separate societies or branches for the Yiddish, Hungarian, Bohemian and Italian printers.

Figures are furnished to the State Department of Labour and are published, but always in a form that makes it impossible to connect particulars with any individual organisation. The number and membership of different societies in the main groups in September, 1908, were as follows:—

*Number and Membership of Labour Organisations in the City of New York
in September, 1908.*

| Group of Trades. | Number of Organisations. | Number of Members. | |
|--|--------------------------|--------------------|----------|
| | | Males. | Females. |
| Building, &c. | 217 | 84,175 | — |
| Transport | 76 | 30,228 | 16 |
| Clothing and Textiles | 79 | 20,381 | 2,701 |
| Metal, Machinery and Shipbuilding | 75 | 13,889 | — |
| Printing, Bookbinding, &c. | 37 | 20,276 | 994 |
| Woodworking and Furniture | 42 | 7,954 | 40 |
| Food and Drink | 33 | 9,858 | — |
| Theatres and Music... .. | 13 | 11,138 | 1,148 |
| Tobacco | 13 | 5,330 | 2,150 |
| Restaurants, Trade, &c. | 22 | 4,514 | 15 |
| Public Employment | 47 | 12,759 | 11 |
| Stationary Engine Men | 28 | 8,422 | — |
| Miscellaneous | 22 | 3,479 | 60 |
| Total | 704 | 232,403 | 7,135 |

The principle of the joint trade agreement is widely recognised, and although necessarily limited in its application not only to the trades that are organised on both sides, but also often to sections only of such trades, it is taking its place as one of the most important ways in which industrial peace may be either restored or maintained. The creation of a Trade Agreement section of the National Civic Federation, of which the headquarters are in New York, and the recent appointment at the head of this section of one of the best known and most respected trade unionists in America, is significant in this connexion, as is also the importance given to the collection of such agreements by the Bureau of Mediation and Arbitration, a branch of the State Department of Labour in which this responsibility is vested.

The scope of the agreements necessarily varies, but in addition to such points as wages, hours and working rules, the question of union preference is generally dealt with, while the machinery is frequently provided for the settlement of disputes and, according to the requirements and character of the trade, also the question of apprenticeship.

Among the trades or occupations in which, or in important sections of which, written and formal agreements are in effective operation may be mentioned:—the building trades, printing trades, moulders, coopers, bakers and confectioners, garment workers, portable hoisting engineers and teamsters.

Probably the most important body of ordinary trade agreements exists in the building trades, their special interest being due to the superior agreement by which their effectiveness is being ensured, and by which even in sections of the trade in which no agreement may exist, industrial peace is being maintained.

The superior agreement is known as the Joint Arbitration Plan between the Building Trades Employers' Association and the Unions of the Building Trades of the City of New York. The inception of the Plan is traced to the unsettlement which prevailed in these trades prior to 1903, and to the formation then of a general association of building trade employers. In New York, as in most other American cities, these trades are more sub-divided than in England, and at the present time the Board of Governors of the Association in New York is composed of representatives of at least 32 allied associations.

Prior to 1903 organisation on the side of wage-earners was more complete and more concentrated than on that of employers, and the normal effect of more united action on the part of the latter has followed.

The Plan of Arbitration was originally enforced by a lock-out, and was thus in a sense compulsory, but two years after its acceptance a joint conference was held at which the Plan was considered and amended, since when it may be regarded as a voluntary agreement. According to the rules of the Plan all disputes in trades in which trade agreements exist shall, if not otherwise adjusted, be at once referred to a General Arbitration Board, and all disputes in trades which have no agreements shall be similarly referred. Many hundreds of such disputes have been thus adjusted, and in the demarcation of work as between different sections of the trade, and thus in the removal of the vexed question of "overlapping," much has also been effected by the present machinery.

The employers who are parties to the Arbitration Plan and to an agreement under it agree to employ members of trade unions only, and individual action—be it a strike against a member of the Association or a lock-out by such a member—is prohibited. The keynote of the Plan is a complete and representative organisation on both sides, combined responsibility, and, if necessary, united action.*

The following figures of female employment are drawn from the same source as those given on page 17 for males, and the comments given there apply both as to the significance and as to the limitations of the particulars given.

Numbers of Females of 10 years of age and over engaged in certain Occupations in New York City in 1900, classified according to Parent Nativity.

| Occupations. | Numbers of Persons of Native Parentage. | Number of Persons having either both parents born as specified, or one parent born as specified and one parent native. | | | | | | | Total. |
|---------------------------------------|---|--|----------|----------------|--------|-------------------------------------|---|---------|--------|
| | | Germany. | Ireland. | Great Britain. | Italy. | Russia, Austria-Hungary and Poland. | Scandinavian and Other Countries, including Persons of Mixed Foreign Parentage. | | |
| Tailoresses | 612 | 3,568 | 756 | 124 | 3,831 | 5,500 | 678 | 15,069 | |
| Seamstresses | 1,982 | 3,112 | 3,338 | 572 | 1,015 | 6,600 | 1,489 | 18,108 | |
| Dressmakers | 6,174 | 8,252 | 11,624 | 2,009 | 1,498 | 3,762 | 4,195 | 37,514 | |
| Milliners | 1,360 | 2,063 | 1,590 | 440 | 97 | 1,236 | 865 | 7,651 | |
| Laundresses | 4,089 | 2,882 | 6,618 | 423 | 299 | 589 | 1,202 | 16,102 | |
| Artificial Flower Makers | 117 | 433 | 195 | 25 | 301 | 488 | 112 | 1,671 | |
| Boxmakers (Paper) | 582 | 717 | 1,008 | 100 | 136 | 353 | 198 | 3,094 | |
| Bookbinders | 902 | 670 | 1,791 | 254 | 34 | 90 | 345 | 4,086 | |
| Tobacco and Cigar Factory Operatives. | 127 | 463 | 423 | 28 | 663 | 4,592 | 141 | 6,437 | |
| Servants and Waitresses | 16,637 | 18,639 | 43,767 | 3,123 | 790 | 10,244 | 10,763 | 103,963 | |

An important change in female employment that has been taking place in recent years has been the increasing number of Italians who have been entering the tailoring trade. This movement has been marked both among male and female Italians, and has been accompanied by a drift away from the trade of considerable numbers of Jews, also of both sexes. But the displacement of Jewish women and girls by the Italians has been the most well-defined change, and a trade union official went so far as to assert that "without a doubt in New York City to-day there are a hundred Italian women and girls to one Jewess, who a few years ago practically controlled the women's branches of the clothing industry." It is by the Italian women that nearly all the finishing homework is now done.

As between "home" and "factory" the normal tendency is that when all parts of a commodity can be made by a machine the factory generally monopolises the work. Thus, in the ready-made tailoring most of the operations are carried on in the factory, while bespoke work, which is widely scattered throughout the city, is much more frequently a home industry. In this branch of the trade most women, often

* For text of the Plan of Arbitration see Appendix, pp. 441-3. The text of agreements in the New York printing trade is also given on pp. 430-6.

German, are employed in making vests, coats and trousers being mainly made by men. Blouses which can be made mostly on the machine are mainly factory products, as also are ready-made dresses, waists and skirts. Homework in the dressmaking trades, again widely scattered, is mainly custom work, and is followed by various nationalities—Italians, Germans, Jews, etc., but more American women are said to be found among dressmakers than in any other women's industry. The bespoke tailor-made ladies' garments are also said to be for the most part home or "tenement house" products, and their manufacture is frequently connected with a workroom attached to a shop.

Underwear or white-work, and aprons, which can be completed on the machine, are other instances of industries in which there is now little inducement, unless in times of exceptional pressure, to send the material out to the home. On the other hand both feather making and artificial flowers illustrate opposite conditions. In both these cases the operatives are mainly Italian women and girls, the former industry being localised mainly in "Little Italy" on the Upper East Side, and the latter, in which some French are also engaged, being found rather in the Lower West Side. A special inspection by factory inspectors in 1907 of children working in tenements in two Italian streets in this district showed that, out of 90 found engaged more or less intermittently on homework, 84 were employed in artificial flower making.

Cigarette making is also to a considerable extent a female home industry, and is largely a Jewish occupation localised in the Lower East Side.

The regulation of homework, which in the City of New York is defined as "tenement made articles," is vested in the Bureau of Factory Inspection of the New York State Department of Labour. Upon this Bureau devolves the duty of registration, licensing, inspection and enforcement. Employers giving out work are required to keep a register of the names and addresses of persons so employed, and before giving out the work to ascertain from the office of the Commissioner of Labour whether or not the house at the address in question is licensed. A list of licensed tenement houses is published frequently, and that for July, 1909, contained several thousand addresses, besides some 400 in respect of which licences had been refused, practically always on sanitary grounds, and about the same number in respect of which licences had been cancelled or revoked. Almost all the licensed houses are in Manhattan and Brooklyn, and the greatest number are in the former borough. The list of homeworkers, which is unlikely to be complete, contains a total of a little less than 19,000 names. The plan of licence and inspection, reinforced by favourable economic tendencies—especially the increasing sectionalism of the work and the greater use of power—have by common consent greatly ameliorated the conditions of tenement house employment, and it is claimed by some whose sympathies are with the operatives that the old-fashioned "sweatshop" has been abolished. But it is also contended that as regards the long hours and the pressure the old conditions are tending to be reproduced in some of the workshops, especially in those of the garment industry itself, in which a task system of remuneration is being adopted.

In a prosperous, growing, and to a great extent new community, such as is the City of New York, in which the prevailing standard of expenditure is high; in which, as will be seen, house-room is expensive; in which considerable sections of workers are strengthened by effective trade union action; in which the prevailing minimum for unskilled labour is from 37s. 6d. to 50s. per week, and which is itself, moreover, the chief radiating point for half a continent still in the early stages of an immense development, it is natural to expect that the predominant rates of wages will be relatively high, and in many trades relatively uniform. And this is the case.

But, also, in a great and complex community such as New York, with an almost constant infusion of the "greener" element seeking its market in strange and, for a time at least, adverse surroundings; with the inevitable element of the relatively inefficient that great cities in America, as in Europe, tend to attract and to hold; and with that minority of families which, handicapped by misfortune, by vice, by sickness or by other causes, bulks large in great communities, it is inevitable that the annual earnings of the chief breadwinner, and even of the whole family, should in many instances fall to a low and insufficient level. The number and activity of the various charitable agencies at work, to which reference has been made, are themselves reminders of the prevalence and even of the serious numbers of these "poor" members of the community. But the larger facts and the predominant characteristics of the industrial situation are otherwise, and, in as far as these are indicated

by prevailing rates of wages, are reflected in the following Table, in which the predominant weekly wages and hours of labour of adult males in certain principal occupations in February, 1909, are given :—

Predominant Weekly Wages and Hours of Labour of Adult Males in the Principal Occupations in February, 1909.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|--|---|-------------------------------------|
| <i>Building Trades :—</i> | | |
| Bricklayers | 128s. 4d. | 44 |
| Stonemasons | 91s. 8d. to 100s. 10d. | 44 |
| Stonecutters | 91s. 8d. ,, 114s. 7d. | 44 |
| Carpenters | 103s. 2d. ,, 114s. 7d. | 44 |
| Plasterers | 126s. 1d. | 44 |
| Plumbers | 114s. 7d. | 44 |
| Structural Iron Workers | 103s. 2d. | 44 |
| Painters | 80s. 3d. | 44 |
| Hod Carriers and Bricklayers' Labourers | 68s. 9d. | 44 |
| Plasterers' Labourers | 74s. 6d. | 44 |
| <i>Foundries and Machine Shops :—</i> | | |
| Ironmoulders | 81s. 3d. | 54 |
| Machinists | 66s. 8d. to 81s. 3d. | 54 |
| Blacksmiths | 90s. to 112s. 6d. | 54 |
| Patternmakers | 90s. ,, 112s. 6d. | 54 |
| Labourers | 33s. 9d. to 50s. | 54 |
| <i>Tailoring Trades :—</i> | | |
| Cutters | 83s. 4d. to 100s. | 48 to 54 |
| Trimmers | 75s. to 83s. 4d. | 48 ,, 54 |
| Machine Operators | 58s. 4d. to 104s. 2d. | 52 ,, 59 |
| Pressers | 50s. ,, 75s. | 52 ,, 59 |
| <i>Woodworking and Furnishing Trades :—</i> | | |
| Cabinetmakers | 62s. 6d. to 75s. | 53 to 59 |
| Polishers | 58s. 4d. ,, 75s. | 53 ,, 59 |
| Varnishers | 45s. 10d. ,, 62s. 6d. | 59 |
| Upholsterers | 50s. to 75s. | 59 |
| Labourers | 37s. 6d. | 53 to 59 |
| <i>Piano Making :—</i> | | |
| Woodworking Machinists | 62s. 6d. to 83s. 4d. | 54 |
| Bellymen | 75s. to 91s. 8d. | 54 |
| Action Regulators | 75s. ,, 83s. 4d. | 54 |
| Polishers | 75s. ,, 81s. 3d. | 54 |
| Varnishers | 62s. 6d. to 75s. | 54 |
| <i>Printing and Bookbinding Trades :—</i> | | |
| Newspaper— | | |
| Compositors, Hand and Machine | { Day work ... 116s. 8d. to 125s. Night work ... 129s. 2d. | 48 48 |
| Book and Job— | | |
| Hand Compositors | 87s. 6d. | 48 |
| Machine Compositors | 95s. 10d. | 48 |
| Pressmen { Cylinder Presses | 100s. | 48 |
| { Small Presses | 75s. | 48 |
| Bookbinders | 75s. to 87s. 6d. | 48 |
| <i>Brewing* :—</i> | | |
| Cellar and Kettle Men | 75s. | 54 |
| Wash-house Men | 66s. 8d. | 54 |
| Route Drivers | 75s. | 62 |
| Stable Men | 62s. 6d. | 62 |
| <i>Cigarmaking :—</i> | | |
| Cigar-makers | 45s. 10d. to 66s. 8d. | 44 to 54 |
| Packers | 75s. to 83s. 4d. | 44 ,, 54 |
| <i>Transport Trades :—</i> | | |
| Longshoremen | 1s. 3d. per hour. | — |
| Regular Labourers | 54s. 2d. to 62s. 6d. | 60 |
| General Drivers, Teamsters— | | |
| One horse | 50s. ,, 54s. 2d. | Variable. |
| Two horses | 54s. 2d. ,, 62s. 6d. | „ |

* In addition to the money wages, free beer is allowed.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|---|------------------------------|---|
| <i>Public Services:—</i> | | |
| Street Construction, Paving and Cleaning— | | |
| Paviors | 125s.*; 125s.† | 48 |
| Paviors' Labourers and Rammers | 100s.*; 100s.† | 48 |
| Road Menders | 50s.*; 37s. 6d. to 43s. 9d.† | 48 |
| Road Sweepers | 62s. 6d.* | 48 |
| Drivers | 64s. 1d.* | 48 |
| Water Works (Municipal)— | | |
| Labourers | 50s. | 48 |
| Gas Works (Company)— | | |
| Gas Stokers | 80s. 6d. to 87s. 6d. | 77 |
| Labourers | 52s. 6d. ,, 59s. 6d. | 77 |
| Electric Light Works (Company)— | | |
| Wiremen | 62s. 6d. | 54 |
| Wiremen's Helpers | 50s. | 54 |
| Meter Testers | 68s. 9d. | 48 |
| Electric Railways (Companies)— | | |
| Motormen—1st year | 62s. 6d. to 75s. | 60 |
| After 1st year | 75s. to 87s. 6d. | 60 |
| Conductors‡—1st year | 50s. ,, 52s. 6d. | 60 |
| 2nd year | 50s. ,, 56s. 3d. | 60 |
| 3rd „ | 52s. 6d. to 60s. | 60 |
| After 3rd year | 55s. to 62s. 6d. | 60 |
| Guards§—1st year | 45s. | 60 |
| After 1st year | 47s. 6d. to 50s. | 60 |
| Electric Tramways (Company)— | | |
| Daily Rate of Wages. | | |
| Motormen—1st year | 8s. 4d. to 9s. 5d. | } 10 hours per day ; 6 or 7 days per week. |
| 2nd year | 8s. 4d. ,, 9s. 10d. | |
| 3rd „ | 8s. 9d. ,, 10s. 3d. | |
| After 3rd year | 9s. 2d. ,, 10s. 10d. | |
| Conductors—1st year | 8s. 4d. ,, 9s. | |
| After 1st year | 8s. 4d. ,, 10s. 3d. | |

* Municipal employees.

† Correspond to Guards in this country.

‡ Contractors' men.

§ Correspond to Porters in this country.

With regard to the rates quoted for the building trades, it may be noted that in some branches these tend to vary slightly as between borough and borough, but in three cases only is this different rating recognised by the trade unions, namely, in those of the carpenters, painters and plumbers. When such differences exist the rates for Queens and Richmond boroughs are always slightly lower than any of the others; thus in these boroughs the rate for carpenters is 4s. 2d. per day lower than in Manhattan and 2s. 1d. lower than in the Bronx or Brooklyn, and the rate for plumbers 2s. 1d. per day lower than in the other three boroughs.

In the rates accepted and certified by the Municipal Board of Estimate and Apportionment the city has been regarded as a unit since 1907, local differences of the kind just mentioned not being recognised, and it may be noted that under present conditions, with the inter-communication between out-lying parts becoming more complete and the homogeneousness of the city increasing, the differences themselves are tending to lose their past validity.

Among ironmoulders about 1,600 men were working under trade agreements in Manhattan and Brooklyn, and about an additional 1,400, representing in all perhaps 75 per cent. of those employed in New York and vicinity, under an agreement that establishes the nine hours working day. The closed shop agreement was in operation in about six shops. The rates for machinists quoted in the Table are for inside workers. There is very little piece work, but complaint was made of the competition of the newly arrived immigrant.

In the New York ready-made clothing trade the more general practice adopted by manufacturers is to put out the whole or the greater part of the work to sub-contractors. Direct employment is said to be on the increase, but at present the characteristic method when the material has been prepared by the cutters and trimmers is for all later processes to be executed by middlemen. The main explanation of this extensive devolution is economic, for by it the so-called manufacturer is left comparatively free to concentrate attention on his function as distributor, and is relieved of the task of finding, selecting and controlling by far the greater part of the labour he requires. As one result of this

plan, although some of the New York clothing manufacturers rank as the largest in America, great factories are the exception.

The normal discrepancy between weekly rates and annual earnings, common to many trades, is apt to be of special importance in the garment industry, subject as it is not only to the more cyclical variations in trade activity but to recurring seasonal changes. It may be noted that irregularity of employment does not uniformly or even necessarily indicate a lowering of the weekly average, and that as against the slack seasons of enforced idleness may often be set the periods of lengthened working weeks—in some trades with earnings increased by the payment of overtime rates. The question is not infrequently also complicated by intervening periods of voluntary idleness, and by temporary changes of employment. But in general a weekly rate has to be discounted before the true yearly earnings can be calculated from it. In the garment industry the following extracts from notes made with reference to individual firms visited will serve to indicate the complexity of this question of annual earnings. “A very high quality of ladies’ coats and mantles made. Cutters’ rates 100s. to 108s. 4d. per week; high in this kind of work because they do not get regular work all the year The trade is very seasonal—six months very busy and six months slack. Very high earnings are made (with overtime) in the season by operators.” “Ladies’ cloaks and skirts, good quality. Dull season in May, June and July, and December and January. Operators, according to the books, make £8 6s. 8d. to £12 10s. in busy weeks during the season.” “Work does not stop entirely in the dull seasons but earnings are about half the predominant rates for two months in the year.” “Machine operators earn 75s. to 150s. per week in the busy season, four months of the year; 41s. 8d. to 50s. another four months, and 25s. to 33s. 4d. in the slackest season.” “Hours 7 to 12 and 1 to 6. Saturday 1 to 4. In summer on Saturdays 7 to 12. Work steady for eight months. April to June rather slack, but September to October especially, when work is for about two-and-a-half to three days per week.”

Among the machine operators the workers are mostly Jewish men, and the cloak-makers form the most strongly organised section; but even among them not more than 20 per cent. are supposed to be in the trade union. Piece work is the most common method of remuneration, and the basis of negotiation for fixing rates in a trade in which changes are constant and the scope for variation great is the Shop Committee.

The reliable quotation of rates of wages is made difficult owing to the frequent practice of the men paying their own helpers. Economically machine operators are thus often sub-contractors on a small scale, working themselves and employing others, and are not simply wage-earners. The earnings on piece work show great disparity, reflecting the scope there is for variation due to the amount of work to be done and to differences in individual skill and aptitude.

Many finishers are women and girls, whose earnings range from about 16s. 8d. to 50s., the more usual rate being from 33s. 4d. to 41s. 8d. per week. In one workshop, in which trousers were being made on a plan so highly sectionalised that each garment went through some 24 pairs of hands and about half the finishing was put out, female inside workers receiving 3d. per pair were said to be earning 33s. 4d. per week.

By some companies engaged on coastwise traffic, longshoremen are paid 1s. 0½d. per hour, but 1s. 3d. is the more generally recognised rate of the Port.

On street construction work men engaged on wood and asphalt roadways are paid at considerably lower rates than the grades quoted in the Table—from 62s. 6d. to 75s. per week for the more skilled men, and from 43s. 9d. to 62s. 6d. for others being quoted.

With regard to tramway employees it may be mentioned that in Manhattan, where a “pay as you enter” car is being introduced, in which, while the task of seeing that the fares are paid is simpler, the earning power of the car is said to be greater, wages are paid at the rate of 7½d. per day higher than those paid on the older and for the present more usual type of car. On these the conductor still collects, handles and registers the fares, and does not simply manipulate the receptacle into which in the new cars the coin has to be dropped by the passenger.

HOUSING AND RENTS.

The number of families per dwelling-house of every description in Manhattan, according to the Census of 1900, was 4·9, or nearly double the number shown anywhere else in the United States. The exceptional character of the housing conditions thus revealed is much less marked for the other populous boroughs, the corresponding figures for Brooklyn being 2·2 and for the Bronx 2·1. But New York as a whole, for which the figure is 2·9, is to a great extent a city of tenement-house dwellers.

Figures are not available to show with exactitude either the number of persons housed in tenements or the accommodation they secure, and did official returns exist the calculation would still be complicated owing to the comprehensiveness in New York of the term "tenement house," since according to the Tenement House Law all "apartment houses" (*anglice* flats), even those of the most expensive type, are, if occupied by three or more families, "tenements."

It may be noted, however, that in the Census made by the Tenement House Department in 1902, 380,618 "apartments" or sets of rooms were scheduled in Manhattan, of which about 12 per cent. were rented at 24s. per week and upwards, while in Brooklyn out of 143,131 "apartments" scheduled about 3½ per cent. were thus rented. Thus at that time in these two boroughs there were roughly about 475,000 of the more cheaply rented tenements.

Up to the end of 1908 plans for 21,761 buildings containing 253,255 tenements had been filed under the new Tenement House Law. The large expenditure in recent years on "apartment houses" makes it very probable that considerably more than 12 per cent. should be deducted from this total to allow for the more expensive types of dwelling. In forming a general estimate, a further deduction would also have to be made for demolitions and reconstructions of older properties, and on the other hand a slight addition for tenement house properties constructed before 1902 in the three boroughs not included in the Tenement House Census of that year. Taking these various considerations into account it is improbable that the number of tenements that may roughly be considered to be in working-class or similar occupation falls far short of 700,000. It may be noted that the number of houses of this description, that is of which the average rental of tenements is less than 24s. per week, and thus of those which according to the regulations are supposed to be inspected monthly, is estimated at about 68,000. Thus whatever the exact numbers may be, it is clear that the tenement house provision made in New York and what is known as the tenement house problem are of vast dimensions.

In no borough in accessible districts is the single-family house occupied by wage-earners to an extent which affects the general situation, and the only type of dwelling affording accommodation for less than three families that will demand special comment is the two-family house of Brooklyn.

There is little doubt that a demand for small self-contained houses at a moderate rental exists, but under present conditions it is practically ineffective. "If single-family houses for wage-earners existed," said an estate agent in the Bronx, "I could rent a hundred to-day. But it is a demand that cannot be met, even at a rental of thirty or thirty-five dollars a month" (28s. 10d. or 33s. 8d. a week).

In this connexion an experiment in Brooklyn of the "City and Suburban Homes Company" will be noted (*vide* pp. 40, 41), but it is in the borough of Queens that the chief hope lies of securing a large extension of this form of housing provision for wage-earners. Even there successful development on these lines is contingent on the provision of more efficient transit facilities. At least one important scheme is, however, already in contemplation there that includes such accommodation and that may have an important influence on the form of building extension destined to take place in that borough.

The two-family house at Brooklyn to which reference has been made is a distinct and locally important type. In some districts the occupiers are, to a considerable extent, wage-earners, but the rapid construction of houses of this description which is proceeding in some of the outlying districts is still mainly for middle rather than working-class occupation. The houses are usually 2 or 2½ stories high, the former with a cellar for heaters, coal storage, &c.; the latter with a basement containing a parlour and kitchen, and generally let with the ground floor. In the two-story and cellar houses the ground floor would often contain five rooms and a bathroom, and the first floor, six rooms and a bathroom, and the rent, varying with the style of dwelling and situation, might be for the smaller sets of rooms from 16s. 4d. to 24s. per week, and for the larger from 18s. 3d. to 26s. 5d.

It follows from the foregoing that in the only boroughs in which at the present time there is a large population—in Manhattan, the Bronx and Brooklyn—the wage-earners live, as a general rule, in tenement houses of one description or another.

The type of tenement dwelling found in New York varies greatly, differing according to period of construction and according to locality. Thus, as regards Brooklyn certain broad local differences may be distinguished in the smaller number of stories, the larger number of frame houses, and of houses erected for private use that have been

diverted, often illegally, to multiple occupation that are found there—features that illustrate, as regards the more central parts of that borough, its slower rate of development and transition. As regards the Bronx, distinctive features are found in the comparative absence there of tenements containing two or even three rooms, and the relatively large number of tenements called by the superior title “flat,” illustrating the more uniformly high level of well-being maintained among wage-earners in that borough. Finally, as regards Manhattan, with the exception of certain areas in the Lower South West Side, certain general characteristics illustrate the greater concentration of population there, and the higher value of its land, such as the greater size of the unit of construction, the greater number of “rear houses,” the more solid grouping, especially in the Lower East Side, of that particular type of dwelling for which New York is notorious, and up to the present time the risk that has been run of prolonging, if not perpetuating, the evil of congestion by the relatively rapid construction of the larger type of modern tenement house.

The tenement house in New York dates back for many decades, and the general lines of its evolution have been determined by commercial considerations and by that pressure of population upon a limited area to which reference has been already made.

The normal risks of the situation resulting from physical conditions, and, until comparatively recent years, from the restricted mobility of occupiers were greatly accentuated by an artificial convention which fixed, in building plots that were as a rule a hundred feet deep, the common width at twenty-five feet. The ingenuity of architects and builders was thus constantly being directed to the problem of turning to the most effective use sites that were admirable for self-contained dwellings with small gardens, but which became exceedingly ill-adapted to the requirements of a large and rapidly increasing industrial population. The rectangular symmetry of the plan upon which by far the greater part of Manhattan was laid out, as far back as 1807, made the repetition of types the more inevitable when once those were discovered that seemed sufficiently suitable and proved profitable.

Differences from period to period turned partly on size, but perhaps equally on the attention given to ventilation and light, and it is noticeable that as devices were adopted by which these two last advantages were, or were believed to be, secured, the depth and height of the building tended to increase.

Amongst the earliest and simplest types was a double-fronted dwelling with two sets of apartments on each floor of four rooms each, running *en suite* from street to yard. Thus each tenement not in a corner plot contained two rooms dependent on borrowed light, and when constructed with nothing but a door through which this light could come, it is clear that the accommodation it offered was of a low order. When, further, the conveniences were placed in the yard, generally one to two families, and when rear houses, generally with two tenements of two rooms on each floor, were constructed at the end of the plot, often built back to back with other rear houses occupying a corresponding position as regards the front houses built on the opposite side of the block, the general housing conditions apt to result had many undesirable features.

When, however, as is now often found, the type of dwelling above mentioned, without a rear house, has the water-closet with an outer window, and when large windows open between the interior or “dark” and the exterior rooms, dwellings are found that are superior in some essential respects to later types and even to some that are being built at the present time. For, when judged by the New York standard, this older type has the great merit, apart from the risk of overcrowding of the individual tenement, of being incompatible with an abnormal congestion of population.

One such house of five stories visited on the East Side, with its solid brickwork and good plumbing, and with two rooms out of the four of fair size (14 feet 6 inches by 11 feet 2 inches and 14 feet 6 inches by 10 feet 6 inches), gave much more desirable accommodation, even though it had a four-storied rear house behind it, than many much more modern dwellings that were seen, conformity with the existing regulations being compatible with the evasion of a larger number of the canons of good housing than the above dwelling displayed.

Varieties of air shaft help to distinguish the dwellings that followed the block type, the first being generally roofed in, and most of them difficult of access for cleaning and inadequate both for lighting and for ventilation.

The earlier forms were small, but the shaft, when once open at the top, soon expanded lengthwise and became a distinctive feature of probably one of the worst types of dwelling that has ever been designed and constructed on a large scale in modern urban communities. Its introduction made it possible to construct a considerably deeper house than formerly, and although this had the incidental advantage of eliminating the “rear house” on these

particular sites the remedy was worse than the disease. A depth of not less than 90 feet out of the 100 was sometimes occupied by the dwelling, which usually contained four tenements on each floor, two of four rooms in the front and two of three rooms at the back. The stairs and hallways were in the centre of the building and were thus entirely dependent upon borrowed or artificial light, and were difficult to ventilate. Water-closets were in the hall outside the tenements, one being shared by two families. Bathing facilities were not provided, but cold water was laid on to each tenement.

The most characteristic and the most objectionable feature of these dwellings was the shaft to which reference has been made—an indentation on either side of the building some 50 or 60 feet in length, and usually for the greater part of the distance only 28 inches wide. The only point at which this width was greater was for about 16 to 18 feet at the centre where the windows of the water-closets were constructed, and here the shaft was about six feet in width.* It will be observed, therefore, that it is upon the narrow part of the shaft that the windows of living or bedrooms open, and that thus, since on one floor of a pair of typical houses there are fourteen rooms, the outlook for ten of these is upon a slit not more than twice 28 inches in width. When it is further remembered that the houses are usually constructed of five, six or sometimes seven stories, and that the shaft is therefore often some sixty or more feet in height, the full demerits of this design begin to be appreciated. In duplicated dwellings of this description, six stories in height, the windows of sixty rooms and twenty-four water-closets would look out upon a single shaft. The following official comment upon the construction just described is extracted from the First Report of the Tenement House Department (1902-3):—

“The ostensible purpose of the shaft is to provide light and air to the five rooms on each side of the house which get no direct light and air from the street or yard; but as the shafts are narrow and high, being inclosed on all four sides, and without any intake of air at the bottom, these rooms obtain, instead of fresh air and sunshine, foul air and semi-darkness. Indeed, it is questionable whether the rooms would not be more habitable and more sanitary with no shaft at all, depending for their light and air solely upon the front and back rooms, into which they open; for each family, besides having the foul air from its own rooms to breathe, is compelled to breathe the emanations from the rooms of some eleven other families. Nor is this all; these shafts act as conveyers of noise, odours and disease, and when fire breaks out serve as inflammable flues, often rendering it impossible to save the buildings from destruction.”

The foregoing type of house was first constructed about thirty years ago, and up to the passing of the present Tenement House Law of 1901, was the predominant type of tenement house being erected in Manhattan.

Although so faulty in design that houses of this type meet with almost universal condemnation, and although few features of a dwelling can be more repellent than one of their neglected and littered shafts, it is upon these shafts, upon the darkened and ill-ventilated rooms and interior stairways, and upon the congestion which these dwellings promote, that fair hostile criticism chiefly concentrates. In several respects undesirable features of the original designs can be mitigated as, for instance, by the construction of interior windows between outer and interior rooms, or, as is compelled by the administration, by the insertion of glass windows opening on the hallways to ensure better lighting.

In general, in these dwellings as in others, a sanitary standard is now maintained that, although it may be said to have been forced perhaps upon owners, and certainly upon the administration, by the very magnitude and urgency of the problem with which they were and are confronted, and by the grave risks of disease and epidemic that would speedily follow from neglect or slackness, is creditable to all concerned.

Other earlier types of dwellings will be indicated in a later page where reference is made to concrete illustrations of dwellings visited in connexion with this enquiry. For the most part further essential differences will, however, be found to consist rather in matters of arrangement in detail than in general structure. There is great variety in plan, in the number of stories and the number of tenements on each floor, in the depth of the building, and to a less extent in the number of rooms per tenement, but such differences always derive much of their importance from the way in which they react on the essential requirements to which reference has been made, that is, as to whether they do or do not help to minimise congestion and to secure the maximum of sunlight, fresh air and breathing space possible.

* In shape the plan of these buildings is not unlike a dumb-bell, and “dumb-bell” has thus come to be the name by which the type is known.

Reference may now be made to the most important step directly connected with the housing question that has so far been taken, by which it was hoped that the evils of congestion would be mitigated and the maximum of hygienic provision possible be secured.

The opinion is general that housing conditions in New York ten years ago were far worse than they are to-day, and supported by the steady rise in the standard of an effective demand, by active competition between different and sometimes newly developed areas, and by a hastened centrifugal movement, the chief legislative instrument by which this improvement has been secured has been the Tenement House Act of 1901.

Although some of the provisions of the Act are somewhat specious in character, and although it has to be borne in mind that many of the conditions imposed can only be regarded as desirable when compared with others anterior that were particularly undesirable, the passing of the Act was nevertheless a great achievement and indicated a considerable advance in public opinion on housing matters.

The following selection from contrasts drawn between the old and the new conditions secured by the Act will serve the double purpose of indicating still further, not only the seriousness of some of the defects which were checked, but also the narrow limitations that New York conditions still continue to impose upon dwelling construction. Thus, instead of 75 per cent. of other than corner sites not more than 70 per cent. could be occupied by the building; instead of there being no limit to the height of buildings in narrow streets, this height was limited to one-and-a-half times the width of the street; instead of having yards 10 feet deep the minimum depth was raised to 13 feet; instead of air shafts 28 inches wide courts which could in no case be less than 6 feet in width were required.

Cellars were now defined as stories more than half below the level of the kerb of the street, and basements as those partly but not more than half below this level. The occupation of one tenement on a cellar floor is, it may be noted, legal, but the occupier must be a janitor, and, if the tenement is in the front part of the building, the ceiling must be not less than 4 feet 6 inches above the kerb level of the street.

The minimum floor space for any living room was fixed at 70 square feet, and in every tenement one room had to be not less than 120 square feet in size; bedrooms could no longer be passage rooms, and for each tenement a private water-closet had to be provided. Rear houses could no longer be constructed.

Rear houses are, it may be noted, the New York substitute for courts and alleys. In the English sense these are non-existent and they are, indeed, incompatible with the rectangular block planning adopted. But a rear house, double-fronted, of four or five stories, is in essence a court of little dwellings vertically instead of horizontally arranged.

The conditions laid down by the Act for the avoidance of risk from fire are of great value, and, in the opinion of some, constitute its most useful features. By these conditions, *inter alia*, staircases and stair-halls must be constructed of fireproof material throughout; the first tier of beams must be of iron or steel with fireproof flooring, and every tenement must have direct access to a fire-escape stairway at an angle of not more than 60° with a drop ladder from the lowest balcony of sufficient length to reach a safe landing place beneath. Fire-escapes are a conspicuous feature in every tenement-house street in which there are both front and back tenements, and indicate at once the general character of the housing accommodation it contains. It is laid down that access to the fire-escapes must not be obstructed in any way and the enforcement of this regulation constitutes one of the constantly recurring difficulties of the administration; room space being often so restricted that the little balcony from which the fire-escape starts becomes a tempting place on which to put some box or other possession not liable to injury from exposure to the weather. Bedding is often aired there and in the heat of the summer the balconies themselves are constantly slept on. But misuse of this kind—if it be misuse—detracts but little from the general merits of the fire-prevention clauses of the Act.

The passage space made necessary by the well-intentioned condition that bedrooms were not to be passage-rooms has been an important contributory influence tending to restrict the size of separate rooms in the new tenements to the legal minimum and, especially in Manhattan, to increase the size of individual buildings as a whole—tendencies that indicate two of their greatest defects.

From the outset, largely owing to the value of land there, those New Law houses erected in Manhattan have been mainly of six stories, and the tendency to build to this size soon made itself felt, although not to the same extent, in the Bronx.

Conditions laid down in the new Act for the prevention of fire tended, it may be noted, to fix the *maximum* height at six stories save in the form of expensive "apartment houses," since buildings of more than this height have to be of fire-proof

construction throughout, and are thus much more costly. Apart from the limitation thus imposed, however, the tendency towards the erection of the larger type of tenement house, and thus the recovery in floor space of what was lost in courts, has made itself felt and is one of the considerations tending to modify the satisfaction felt at first when the Act of 1901 came into operation, and the confidence with which the multiplication of what are known as the New Law houses was regarded. Only in a very limited and strictly relative sense would this type of house be now described as an "unqualified success," to quote from the First Report of the Tenement House Department, where, reflecting the same satisfaction, we also read that in the Lower East Side it was "a Sunday diversion of the people to take their families and friends to see the new houses and to wonder at and admire the light rooms, the bath tubs, and the other improvements."

In the Third Report a new note and one of warning makes itself heard; it is pointed out that there is no legal limitation upon the number of families who may occupy any floor of a tenement house. "From this freedom there has been evolved an almost unlimited number of arrangements, so that as many as four apartments [*i.e.* tenements] have been provided on each floor of a house 25 feet wide and as many as eight on each floor of a house 50 feet wide. The occupation of these buildings by so many families on a floor, however, is by no means desirable, for they are so planned as to comply with the bare letter of the law, providing only such accommodations as are legally indispensable, and necessitating unabating vigilance to secure their maintenance in conformity with the requirements of the statutes."

In the Fourth Report (1907-8), it is stated "that the erection of tenement houses in excess of four stories in height outside of the borough of Manhattan, except in rare instances, is considered to be wholly unwarranted and prejudicial to the best interests of the City." There is a reference to the "cheap and medium grade of five and six-storied tenements which have proven to be so harmful and obnoxious." But it is also pointed out that "notwithstanding the experience of Manhattan, some of the other boroughs are threatened with a similar affliction through a continuance by many large operators of the same policy of heedless and greedy construction."

Up to the present time, however, the difference in the type of new dwelling maintained between Manhattan and Brooklyn is very marked, since, while in the former borough from 1902-8 80.51 per cent. of the new tenements were six stories in height, and no fewer than 99.73 per cent. were five stories and upwards, in the latter borough only 6.13 per cent. were of five or more stories. The corresponding percentage in the Bronx was 62.98.

It is obvious, however, that under the present Act, in those districts in which circumstances might further the construction of the larger type of new buildings, existing congestion might be rather intensified than counteracted, or that new congested areas might even be created.

The administration of the law is placed in the hands of the Tenement House Department, the magnitude of the housing problem in New York having been held to justify the creation of this special branch of the administration, in spite of some overlapping of functions thereby involved.

The two main tasks of the Department are connected (1) with existing dwellings—"to maintain in a safe and sanitary condition the tenements of the city"; and (2) to see that new dwellings conform to the new law—"to supervise the erection of tenements."

The staff included in 1909 a Commissioner, two Deputy Commissioners and about 300 Inspectors of various grades.

Although the number of Inspectors seems large, and although in the new buildings erected under improved conditions, in the alterations to old ones, in the removal of nuisances and in other more indirect ways much good work has been accomplished, experience has proved that the ground is far from being adequately covered. This partial failure has followed in a degree from the magnitude of the task, from its delicacy, from the latent hostility which the Department has often had to encounter, from a certain timidity that has resulted, from the form of legal procedure adopted when action is taken and from the inadequacy of the funds appropriated to the services of the Department. Very much of the Inspectors' time has been taken up in enforcing, and in endeavouring to enforce, compliance with notices served for violation in the case of old buildings. Often these have been ineffectual for a long period—even for years, and in these and other ways a formidable list of shortcomings has resulted, including, especially in Brooklyn, many cases of non-compliance with the law in the case of new buildings themselves.

According to the last Report of the Department, although more than 230,000 orders of various kinds had been complied with during 1908, at the end of the year more than 85,000 violations were pending. In a recent sympathetic but critical report on the

administration of the Department, prepared by the Bureau of Municipal Research, in which it is said that over 66,000 violations were pending on 1st May, 1909, it is stated with special reference to the infrequent inspection of tenements subject to monthly visits, and to the admission that complete inspection of these had not been made as often as once a year, that this failure to cover the ground is due in large part to "the vast accumulation of uncomplained-with violations."

Though the aggregate defect which such figures and statements imply is very large, the measure of excellence that New York housing conditions now display—bad though these conditions still often are—is under the circumstances perhaps more striking than their shortcomings, and signs of improvements that are being gradually effected in a situation of unparalleled difficulty and seriousness meet the observer on every hand.

In New York, where rents are relatively high, where the size of rooms is apt to be small and where a large and cosmopolitan population converges, a certain amount of overcrowding is almost inevitable. The legal minimum air-space is laid down at 400 cubic feet for each adult and 200 cubic feet for each child occupying any room, but save in gross departures from these modest requirements that may happen to be discovered the law is not enforced. No general statistics are available bearing on this question, but there is a consensus of opinion that the risks are more often incurred among foreigners, especially the later immigrants, and among the lower classes of the coloured population. Among the former the Italians are especially mentioned, and their clannishness, the large numbers that have arrived in most recent years, the low hygienic standard with which many of them are at first content, form *a priori* grounds for thinking that the charges are not without foundation. On the other hand, the ease and rapidity with which many of them move either according to the season, or from district to district, or even from America to Italy, make it probable that crowded conditions are among the elements of impermanency that characterise so many of the social conditions of the United States. Large masses of the foreign immigrants, others as well as Italians, are indeed like an industrial army on the march, moving as units or in detachments from place to place. Thus in certain districts and periods such an evil as that of overcrowding is apt to become excessive and even threatening in its extent, but it is also specially apt to alter both in area and in intensity, and, even if available, general statistics could give, especially perhaps for such a centre as New York, but a momentary picture of conditions unusually liable to change.

The following figures may be quoted from the recent careful study of a small selection of New York families made under the auspices of the Russell Sage Foundation under the direction of a representative Committee and edited by Professor Chapin. The 318 families used in the final comparisons in this study each consisted of four or more persons and had incomes ranging from £125 to £229 a year. Among these, all families occupying less than four rooms, or if occupying more than three rooms showing a ratio of more than $1\frac{1}{2}$ persons per room, were regarded as living under overcrowded conditions. On this basis, which is of course arbitrary and goes considerably beyond the legal standard, 160 families out of the 318—which were representative of some eight national groups—were so described. It should be noted that the enquiry, although not confined to these, concentrated most of its attention on families with both parents living and having from two to four children, and with incomes not exceeding £229 a year.

Among the particulars of domestic expenditure furnished in connexion with the present enquiry the number of rooms occupied was obtained and the results show, for 64 families in which the head of the family was either English, Scotch or Welsh, an average of 1.05 persons of all ages per room; for 149 American families, 1.12 persons; for 271 Jewish families, 1.23 persons; for 86 German families, 1.24 persons; for 87 Irish families, 1.26 persons; and for 110 Italian families, 1.60 persons per room.

Although the tenement house is the prevailing type of dwelling in New York, enough has been said to indicate that the appearance, structure and surroundings of these dwellings differ greatly in different parts of the city.

As regards the streets, the greatest differences are those existing between the smaller thoroughfares in the older and more central parts of Manhattan and Brooklyn and the wider and more systematic block-planning found a little farther out. But nowhere are streets really narrow or tortuous. Most of the streets in the more crowded areas of Manhattan are asphalted.

Brooklyn as compared with Manhattan is somewhat amorphous, and even in some of the more central parts untidy streets and houses proclaim districts of which the destiny is still undetermined. In this neighbourhood the business and non-residential area is extending. Residentially, the general tendency, especially for that part of the borough lying west of Prospect Park, is to become increasingly industrial in character, although the recognised

feature of Brooklyn—a great intermingling of streets of different status—still holds good even in the more central parts, and although a few districts in that part of the city occupied by a relatively wealthy class are maintaining their past character.

Probably the largest area occupied by a uniformly industrial class is that lying to the north of the Brooklyn Broadway—Jews and Italians and others nearer the river and largely German-Americans and others farther east. The character of much of this district has been affected by the Williamsburg Bridge and by the fact that it lies *vis-à-vis* across the East River to the most congested portions of Manhattan. It is across this area in Brooklyn that the centrifugal movement from Manhattan and the flight to Brownsville, already mentioned as a comparatively new Jewish district, has taken place.

As regards the material of which dwellings are composed, the generic differences are as between brick, often painted and often with a good deal of stone-work introduced, and frame, and it is very significant that whereas in almost the whole of Manhattan frame houses are rare exceptions, in Brooklyn they are common even in the older and more central parts. Again, a more formative period in urban development is illustrated. Not a few of these frame houses are of a poor type, but others are well-constructed and in good order, and rows of them, often three stories in height with two families on a floor, constructed on the block system with tenements of four rooms running through from front to rear, are among the characteristic types of Brooklyn tenement houses. Generally, whether brick or frame, bare barrack-like structures are the exception in New York.

Something has been already said with reference to the complex considerations external to itself that go to make up the advantageousness or disadvantageousness of a dwelling—such as nearness to or distance from the place of employment, convenient shops, schools or open spaces.

In this respect the whole city may be regarded as a unit offering as compared with rural areas its own aggregate of advantages and disadvantages, and under existing conditions the rapid increase in its population is a sufficient demonstration of its attractive power. But the sub-divisions of this great unit are of infinite variety, and while as regards the ultimate effect of locality on the nominal range of working-class rentals the uniformity is more striking than the differences they present, the real differences, could they be adequately measured, would be found to be far greater. Race segregation tends to divide the city to some extent into areas that are at any given moment practically non-competing, with the general result, however, not so much that rents differ to any very great extent from district to district for tenements of the same nominal size, but rather that the less desirable areas and structures are apt to be occupied, apart from the coloured race, by some of the less indigenous populations. When, as a result of this segregation, some particular area becomes the scene of a demand that is, in relation to the city, exaggerated, artificial and abnormal, then local and abnormal rent conditions result. But, as has been said, the most manifest effect of this is not so much the payment of abnormally high rentals, although this also occurs when favourable economic conditions are taken advantage of, as differences in the class of accommodation which is tolerated. To some extent this is due to timidity, to ignorance of conditions prevailing elsewhere, and to lack of enterprise; but to some extent also to custom, to the "herding instinct," and to a certain liking that comes for areas full of jostling crowds, of bustle and animation, where shops that suit are close at hand, and where the employer or sub-contractor more habitually seeks his labour supply.

But, although every area thus tends to have some compensation for whatever may be its special drawbacks, the inferiority of the actual accommodation often secured by the poorer alien classes in the crowded districts is an outstanding fact of the situation, and affords one of the numerous illustrations of the ways in which immobility, ignorance and relative poverty are often handicapped. It may be noted, however, that were it possible on a large scale to provide a superior class of accommodation in the more crowded and poorer down-town quarters of the city, very many of those at present living there would be immediately driven out by the rents that would be demanded. Nor is it, from the general point of view, an altogether undesirable feature of the situation that the outward pull on the central and more congested population should make itself vigorously felt.

As regards the internal differences of the dwellings, these vary hardly less than do those which are mainly questions of environment. It may be noted that a considerable amount of whitewashing and repainting appears to be done and done frequently, not on liberal but on effective lines. It is done cheaply; it is not durable, but it makes for a cleanly appearance, while the smallness of the rooms tends to foster if not a positive tidiness, as on board ship, at least the negative virtue of avoiding the accumulation of useless belongings.

Among the poorest, although not the darkest or least hygienic type of dwelling that New York contains, may perhaps be singled out a two or three-roomed apartment on the

top floor of a four-storied rear house of an old description. Such a dwelling, especially if built back to back with a similar building, would have no through ventilation unless, as is sometimes found, a rough window had been broken through between the two houses in the partition walls of the stairways. The inner room or rooms would be mere cupboards with borrowed light. Cold water, probably at a small sink in the living room, would be almost the sole "improvement" supplied. The water-closet might be in the yard, more probably in the corridor or, as often now under the present law, entered directly from the tenement but still shared with one other family living on the same floor, and having corresponding means of entry from their own tenement. The outlook of the one light room would be on a narrow backyard and on the back windows of the tenement house facing on the street—that is, of the "front" house. The yard on washing days might be the drying ground for some 16 to 20 families, and from all the lower windows as from the yard itself the suspended linen would block out most of the strip of sky visible at other times. Such tenements as those described would rent in the Lower East Side and a little northwards (and it is there that they are most often found) at from 6s. 9d. to 8s. 8d. per week.

From such tenements an improving standard may be traced till it reaches among small tenements excellent accommodation, with steam heat, hot and cold water supply, cooking range, bathroom, wash tubs, private water-closet, dumb waiter or service lift, speaking tube, electric bells and automatic switch for opening the street door.

From a hygienic point of view steam heat is not above suspicion, and many excellent tenements are without it; when such have neither it nor a hot water supply, a set range with hot water fittings is very frequently provided. Gas is generally laid on and is much used for cooking, especially in the summer, and in the steam-heated apartments all through the year. "Quarter" (= shilling) meter slot machines are in common use. For fuel, still required in the great majority of cases, bins—or compartments—for individual tenants are very frequently provided in the basement. They are locked and for many, probably for most, tenants the ton of coal is or could be the unit of purchase.

The provision of wash tubs has been mentioned; and these, single or double, are a common feature of the New York tenement. They are inconspicuous, and when not in use can generally be covered and converted to either sideboard or table purposes. Provision for drying linen varies, a clothes-line stretched from the window to the long poles that are so common a feature along the back yards of New York tenement houses being by far the commonest method. The lines, doubled, are worked on pulleys and manipulated from the windows. A substitute for the poles is now very occasionally found in expanding and contracting rods attached to the balcony of the individual tenement. Roof lines are much less common than the poles, but are, for instance, the only form of open-air drying allowed in the well-managed dwellings of the City and Suburban Homes Company, where also lines across the courts—insanitary, unsightly and illegal, but constantly found even in New Law houses—are strictly forbidden. Steam-heated dryers in the basements are also provided in some of the dwellings of the Company just mentioned, but these are at present exceptional luxuries.

It will be evident that the completeness with which what are often referred to as "all improvements" are found in the individual tenement will vary greatly, and thus also the rents. It will suffice in this place to state that, when really provided, tenements of more than five rooms will be, over almost the whole of New York, rented at more than 24s. a week, and thus fall beyond the range of dwelling that is in general occupied by wage-earning families. In the newer dwellings of the City and Suburban Homes Company, which represent the high-water mark of excellence yet reached by small working-class apartments, four rooms are rented at from 16s. 10d. to 22s. 1d. per week.

Two negative characteristics which, in addition to rentals, roughly differentiate dwellings in the occupation of wage-earners from others, are the absence of lifts other than the small service lifts already mentioned, and the fact that so far they are not fitted with electric light.

Although, as has been indicated, it is easy to discover housing areas in which the accepted standard is low and appears to be stationary, the general fact is undeniable that a better supply and an effective demand are making themselves felt in ways that probably more than any other influence are ultimately destined to hasten on the improvement of housing conditions in New York. On the side of supply are the new districts, the competition of which is measurably increasing in intensity year by year; the owners who feel the pressure of this competition; the New Law buildings which, whatever their defects, are undeniable improvements on the worst earlier types, with their tiny rooms, borrowed lights and defective sanitary arrangements; the improvements in the older buildings

that are being steadily enforced by the administration ; and the example of such undertakings as those of the City and Suburban Homes Company. As regards demand, the depression and the immigration to Europe in 1908, following on extensive speculative building, brought about a change in the relationship of landlord and tenant that at any rate for the moment conduces to the same end, as do the more permanent influences of invention, advertisement and the various efforts that are being made to extend the knowledge of hygienic conditions. Finally, in effective combination with all such influences is the high standard of material well-being that is in general maintained in New York.

The following particulars of notes made on individual dwellings visited in the course of the present enquiry are inserted by way of illustration of types and conditions to which more general reference has been made.

Lower East Side :—(1)—Five-storied rear house built back-to-back. Two rooms. Cold water. Water-closet now in corridor. Very small, dirty, corner air-shaft of oldest pattern. Occupier Jewish costermonger. Rent 6s. 9d. per week. Ten apartments in all ; range of rental 5s. 9d. to 7s. 8d. per week.

(2)—Back tenement of three rooms in tenement house of dumb-bell shape. Range with hot-water fittings supplied. Water-closet in passage. Dimensions :—kitchen 12 feet by 10 feet 6 inches ; bedrooms 12 feet by 10 feet and 8 feet by 8 feet 6 inches ; height 9 feet 8 inches. Kitchen and one bedroom with window on narrow shaft. In Jewish occupation. Rent 13s. 6d. per week.

Front four-roomed tenement also in Jewish occupation. Dimensions :—living room 10 feet by 11 feet 6 inches ; kitchen 10 feet by 11 feet 6 inches ; two bedrooms 8 feet 6 inches by 8 feet ; height 9 feet 8 inches. Windows of kitchen and bedrooms looking on filthy narrow shaft. Water-closet in passage. Rent 15s. 5d. per week.

(3.)—Two-roomed tenement. Dimensions :—16 feet 6 inches by 12 feet by 8 feet 5 inches and 7 feet by 8 feet 8 inches by 8 feet 5 inches. Window in second room looking on new square shaft as ordered by Tenement House Department. Occupier Jewish machinist. Husband, wife and one child. Fair comfort. Rent 9s. 7d. per week. Range of rent of other tenements 8s. 2d. (top floor) to 10s. 7d. per week. The building is an old-fashioned five-storied block house, formerly four rooms through, but each side now divided into two two-roomed tenements. Thus four families on each floor.

(4.)—Three light rooms, including one at corner with three windows. Occupier Russian metal worker. Rent 15s. 5d. per week.

(5.)—Rear house off one of the principal streets. Two stories. Two two-roomed tenements on each floor. On ground floor—(i) Bootmaker. Not self-supporting. Earnings put at 25s. per week. Child asleep in small dark room with many flies swarming on its face. Linen far from clean. (ii) Widow. Both apartments squalid. Rents 7s. 8d. and 8s. 8d. per week. On first floor—(i) Tailor (ill), wife and three children. Rooms bare. (ii) Woman and son. Rooms comfortable. Rents 9s. 7d. and 8s. 7d. per week. Water-closet on stairs, one for two families. Occupiers Russians. On the first floor of the same house fronting the street a prosperous Russian dressmaker was occupying an excellent tenement of six rooms (one used for business) at a rent of 42s. 4d. per week.

(6.)—On third floor. Four rooms and bathroom. Small rooms. Occupier Russian pocket-book maker. Three in family. Rent 17s. 4d. per week. In same house on fourth floor, five rooms and bathroom. Russian family. Invalid wife. Fairly comfortable. Rent 21s. 2d. per week.

(7.)—Five-storied New Law 25-family house. Hot water supply. Range supplied. Twenty tenements of four rooms and five of three rooms, total occupants 124. Seventeen tenements with bathroom. Rents, four rooms from 15s. 5d. to 22s. 1d. and three rooms from 12s. 6d. to 13s. 6d. per week, according to floor and position.

(8.)—Rear house, two rooms. Dimensions :—15 feet by 11 feet by 8 feet and 9 feet by 8 feet by 8 feet. Cold water supply to wash tub and sink. Gas. Range and gas-cooking bracket supplied by tenant. Water-closet, one for two families. Rent 9s. 2d. per week.

(9.)—Rear house, ground floor. Three rooms, two dark. Mess indescribable. Husband, wife and four children. Rent 7s. 8d. per week.

(10.)—Rear house, first floor. Three rooms. Cold water supply to wash tub. Range bought by tenant. Water-closet on landing. Rooms tidy. Woman and child. Rent 7s. 8d. per week.

(11.) Two rooms. Dimensions :—kitchen 15 feet by 14 feet by 8 feet ; bedroom with borrowed light 9 feet 6 inches by 8 feet 6 inches by 8 feet. Water-closet on stairway. Rent 7s. 8d. per week.

(12.)—On top floor of five-storied New Law house in one of the most crowded and best known streets of the Lower East Side. Five rooms and bathroom. Hot water supply. Comfortable. Russian family. Rent 25s. per week.

(13.)—In tenement house of five-and-a-half stories. Four back rooms. Small. Rather untidy. Russian family from East End of London five years ago. Two years there. Husband (painter), wife and seven children. Bedding on balcony and two children sleeping there. Rent 17s. 4d. per week.

South West Side :—(1.)—Large New Law house, built two years previously. Three-roomed tenement. Cold water. Private water-closets. Weekly rents, two at 10s. 7d., four at 11s. 1d., four at 11s. 6d., one at 12s., one at 12s. 6d., one at 13s., five at 13s. 6d., one at 13s. 11d., ten at 14s. 5d., one at 14s. 11d. and two at 15s. 5d.

(2.)—In Italian district, near Washington Square. Two rooms on the third floor front of 18-family house. Husband, wife and six children. Rooms bare. One almost entirely taken up by the bed. Rent 10s. 1d. per week.

(3.)—In old private house with three stories and basement. Two rooms; one large, 13 feet by 15 feet by 10 feet. Cold water, sink and water-closet on landing. Rent 9s. 7d. per week.

(4.)—In old private house. Four rooms on ground floor; one 12 feet by 12 feet by 10 feet; two dark, and one really a big cupboard. Cold water supply. Water-closet in yard. Rent 13s. 6d. per week. On first floor for five rooms the rent was 15s. 5d. per week.

(5.)—On ground floor of old house of two-and-a-half stories. Four rooms. Water-closet in little garden. Greenery; occupier proud of it. Rent 16s. 4d. per week.

(6.)—Old house. Two rooms (one very small) and alcove, let as three rooms. Rent 9s. 7d. per week. In the same house two back rooms. Rent 7s. 8d. per week. Occupiers Italians.

In passing eastwards from the district in which the above dwellings are situated (the only one in Manhattan in which any considerable number of small houses are found) a marked contrast in the prevailing type appears. The large tenement houses are no longer the exception but become the predominant type, and, while buildings are more elaborate, more ornate and more modern, the sense of comparative openness is lost. There is less sky, less freshness, more congestion. It is the beginning of the transition from the Lower West to the Lower East Side.

North of 14th Street :—(1.) Five-storied house. Two families to floor. Block plan. No shaft, but well built and in good order. Private water-closet now, with window on yard. Dimensions of tenement on second floor: living room (two windows to street) 14 feet 6 inches by 11 feet 2 inches; two bedrooms (dark, with interior windows 3 feet by 5 feet to living room and kitchen) 8 feet 5 inches by 8 feet; kitchen (with two windows on yard) 14 feet 6 inches by 10 feet 6 inches. Rents per week, mainly according to floor—five at 15s. 5d., two at 17s. 4d., two at 16s. 4d. and one at 14s. 5d. per week. Occupiers—Americans and mixed.

In the rear, four-storied house. One tenement of three rooms on each floor. Rents 7s. 8d. to 11s. 6d. per week. Size of building lot 25 feet by 100 feet.

(2.) Three rooms back. Dimensions: kitchen (windows on yard) 10 feet 2 inches by 13 feet; bedrooms 10 feet by 12 feet and 7 feet 6 inches by 8 feet (windows on slit shaft). Cold water only. Water-closet on corridor. Room full of furniture and ornaments. Occupier Bohemian. Rent 8s. 8d. per week. Front apartment, with three rooms, looking on slit shaft. Rent 11s. 1d. per week.

(3.) In large New Law house for 30 families. Three rooms. Hot water supply. Rooms bare. Occupier, Russian carpenter and family. Rent 12s. 6d. per week. Another tenement of four rooms, hot water supply and bath. Jewish. Comfortable. Rent 15s. 5d. per week.

In Little Italy :—(4.) (a.) New Law house. Hot water supply for half day. Rents per week. Four rooms, front. One tenement at 11s. 1d., and four tenements at 12s. Three rooms, front. One tenement at 10s. 7d., and four tenements at 11s. 6d. Three rooms, back. Eleven tenements at 7s. 3d. to 10s. 1d. Three rooms, looking on court. Five tenements at 7s. 8d. to 8s. 2d. The slight difference in the rents of the tenements with the front outlook as between three and four rooms is noticeable. Letting in this house had been difficult.

(b.) Three rooms at back of ground floor of 24-family house. Cold water. Water-closet in corridor. Gas (quarter meter). Dimensions: 11 feet by 10 feet; 10 feet by 10 feet; 6 feet 6 inches by 8 feet 6 inches; height 9 feet 6 inches. Coal bin in cellar. Husband

barber. Wife and two young children. Rent 6s. 3d. per week. A 6 feet open shaft in this house; very dirty at foot, as also was yard behind house. Cleaned twice a week, but said to be littered at once. Complaint by janitress of tenants who "will throw things out to save bringing them down." Dumb waiter provided, but broken and not used.

(c.) In 115th Street. Three-storied brick house. Three rooms. Dimensions: kitchen 12 feet by 13 feet; bedrooms 9 feet by 8 feet and 7 feet by 8 feet (no bed); height 9 feet. Cold water supply and water-closet on corridor, one for two families. Two dark rooms. Oilcloth on floor. Pictures on walls, and general air of care and comfort in kitchen. All rooms clean. Coal bin in cellar. Buy by ton or half ton, or by 4d. a pail "if short of money." Used quarter meter for gas. Husband, rag dealer. Rent 9s. 7d. per week.

In this house, six rooms deep, four tenements of three rooms on each floor. Two front at 9s. 7d. and two back at 7s. 8d. per week. Building on 25 feet front lot. Building depth 63 feet.

(d.) Three-roomed tenements, front. Cold water supply. Water-closet in corridor, one for two families. Rent 10s. 7d. per week. For back apartments of same size, 9s. 7d.

(e.) Three-roomed tenements. Cold water. Wash tub. Water-closet on corridor. Dimensions: 11 feet 2 inches by 12 feet 6 inches; 12 feet 2 inches by 13 feet 4 inches; 9 feet 6 inches by 8 feet 5 inches; height 8 feet 9 inches. Rent 9s. 2d. per week. Back rooms: 10 feet 2 inches by 14 feet 6 inches; 9 feet 7 inches by 9 feet 3 inches; 9 feet 6 inches by 8 feet 3 inches. Plenty of furniture. Untidy. Cheerful. Making macaroni for home consumption. Italian. Rent 7s. 8d. per week.

The above two tenements illustrate the sub-division of single six-roomed through apartments into two of three each. The alteration is comparatively easy if the water-closet is on the landing. In that case there is little to do besides closing the inner door of the middle pair of rooms and putting in an extra sink. The alteration is still simpler if the sink is also on the landing.

(5.) Four rooms in New Law house. Living room 12 feet by 12 feet by 9 feet. Two bedrooms and kitchen, very small. In avenue with elevated railway. Rent lower in consequence, 12s. 6d. per week.

(6.) Four rooms in model dwelling. Fair sized kitchen. Hot and cold water. Steam heat. Gas (slot meter). Husband (waiter) and wife. One lodger. Rent 23s. 4d. per week.

(7.) In 20-family house, dumb-bell shape. Hot water ranges supplied. Wash tubs. Water-closets in yard. Clean and in good order. Cisterns in separate frost-protected chamber. Three and four rooms. Of the three-roomed tenements, two rooms, and of the four-roomed tenements, three rooms looking on to narrow shaft.

Dimensions of the four-roomed tenements: good front room 11 feet 8 inches by 15 feet; kitchen 8 feet by 11 feet; bedrooms (two) 8 feet by 9 feet; height 9 feet 2 inches. Tenants coloured. Rent according to floor; of four-roomed tenement (front), 12s. 6d. to 14s. 5d.; of three-roomed tenement (back), 9s. 7d. to 11s. 6d. per week.

(8.) Five-storied tenement house, built about fifteen years ago. Five-roomed tenement, with bath and steam heat, built through from front to back. Dimensions: 8 feet 6 inches by 14 feet 6 inches; 8 feet 6 inches by 10 feet; 8 feet 6 inches by 11 feet; 10 feet 6 inches by 12 feet; 8 feet 6 inches by 10 feet; height, 9 feet. Occupiers of all nine houses (70 apartments), American, Irish and German. Rent per week—ground floor, 19s. 3d.; first floor, 23s. 1d.; second floor, 22s. 1d.; third floor, 21s. 2d.; fourth floor, 20s. 2d.

(9.) In New Law house for 30 families. Five rooms and bathroom on second floor. Hot water supply. Dimensions, exclusive of private hallway: living room 12 feet 9 inches by 11 feet; kitchen 12 feet by 7 feet; parlour or bedroom 11 feet by 12 feet 6 inches; bedrooms 11 feet 6 inches by 10 feet 6 inches, and 10 feet 6 inches by 7 feet 6 inches; bathroom 6 feet by 4 feet; height 9 feet 1 inch. Husband Irish, carpenter; wages 91s. 8d. a week. Wife (despondent) and five children. No signs of want, but many of unsatisfactory home. Rooms bare of furniture. Rent 19s. 3d. per week. The whole house was divided into three, four and five-roomed tenements. Rents 11s. 6d. to 12s. 6d., 13s. 11d. and from 16s. 4d. to 19s. 3d. per week respectively.

(10.) Six-roomed tenement with bathroom, in house about 20 years old. Four rooms looking on narrow shaft. Hot water supply. Dimensions: 9 feet 6 inches by 12 feet 8 inches; 8 feet 8 inches by 8 feet 7 inches; 10 feet 4 inches by 10 feet 6 inches; 7 feet by 10 feet 6 inches; 13 feet by 13 feet; 12 feet by 9 feet; bathroom 4 feet by 4 feet 6 inches; height 9 feet. Occupiers, husband (barber), wife, four children and one lodger. Coloured. Rent 22s. 1d. per week.

The Bronx:—(1.) Five rooms and bathroom. Cold water flat. Block or "railroad" type. Dumb waiter. Bathroom and water-closet built out and entered from kitchen. Two entrances to tenement from public corridor. Rooms *en suite*. Dimensions: parlour (two windows on street) 11 feet 6 inches by 13 feet 9 inches; two bedrooms (curtained windows, on narrow shaft) 8 feet 6 inches by 12 feet 6 inches and 7 feet 1 inch by 10 feet; dining room (window on same shaft) 11 feet 6 inches by 13 feet; kitchen 11 feet 6 inches by 14 feet 6 inches. Comfortable rooms. Many pictures. Occupier, German painter, thirty years in America. Three in family. Rent 16s. 4d. per week.

(2.) Large New Law house in Italian quarter. Hot water supply in winter and "once a week" in summer. Three-roomed tenement. Dimensions: kitchen 15 feet by 9 feet; two bedrooms 9 feet by 8 feet; height 9 feet. Husband (labourer, not strong), wife and five children. Rent 8s. 8d. per week. Big cellars for coal. All compartments locked. Italian bakery in cellar. Clean, white loaves; 1s., 8d., 3d., and under.

(3.) In four-storied house, with shops on ground floor in Italian quarter. Two families on floor. Four-roomed tenement front to back. Cold water supply. Wash tubs. Water-closet on corridor. Dimensions: kitchen 14 feet by 11 feet 9 inches; two bedrooms 8 feet by 8 feet, both with borrowed light; sitting room 15 feet by 11 feet 9 inches; height 9 feet 6 inches. No carpets, as usual. Tidy, comfortable and fairly clean. Husband (labourer in ice works, earning 9s. 5d. a day), wife and four children, one of the last a machinist out of work. Rent 12s. 6d. per week.

(4.) Frame tenement house. Four rooms (two dark) and bath. Cold water. Wash tubs. Private water-closet. Rent 11s. 6d. per week.

(5.) Attractive new house. 31 families. Steam heat. Bathrooms. Occupiers, Americans and some Jews. Rent three-roomed tenement, 14s. 5d. to 15s. 4d.; four rooms, 17s. 4d. to 21s. 2d.; five rooms, 21s. 2d. to 24s. per week.

(6.) Six-roomed back tenement in New Law House. Steam heat. Hot water supply. Dimensions: kitchen 8 feet by 11 feet; dining room 10 feet 6 inches by 12 feet; drawing room 10 feet 6 inches by 12 feet; three bedrooms 7 feet by 12 feet; 7 feet 5 inches by 11 feet; 8 feet 6 inches by 9 feet 6 inches; height, 9 feet 2½ inches. Comfortable, but, as often in houses of this type, rooms very small. Passages would add something to floor space of apartment. Rent (dropped from 24s. in 1908) 21s. 2d. per week.

(7.) Five rooms and bathroom in back tenement in New Law house. Steam heat. Dimensions (without passages): kitchen 7 feet 3 inches by 10 feet 7 inches; dining room 10 feet 6 inches by 12 feet; parlour 10 feet by 12 feet; bedrooms 7 feet 3 inches by 11 feet, and 8 feet by 9 feet 1 inch; height 9 feet 3 inches. Occupier, American, eleven years in New York; motor man, leaving for New England for farm. Rent 19s. 3d. per week. In the same house, a front six-roomed tenement, with bath, was 27s. 11d. per week. Two years previously, 30s. 9d.

Brooklyn:—(1.) In a central area likely to be absorbed for business uses: four rooms in a four-storied brick tenement house. Cold water supply. Water-closet in yard. Irish-American occupier, waiter. Rent 13s. 6d. per week.

(2.) In a similar district. Two rooms in a two-storied rear frame house, old. Dimensions: 12 feet by 12 feet, and 6 feet 6 inches by 6 feet 6 inches; height 8 feet. Occupiers, coloured longshoreman and wife. Rent 6s. 3d. per week.

(3.) In a central district mainly occupied by Irish and Italians. Two rooms in three-storied tenement house. Cold water supply. Water-closet in cellar, in fair order (two for six families). Dimensions: kitchen 12 feet by 14 feet; bedroom 8 feet 6 inches by 9 feet 6 inches; height 8 feet. No yard. Occupied by Italians. Rent 6s. 9d. per week.

(4.) Three rooms on second floor of a three-storied frame house. Cold water. Water-closet in yard. Rent 10s. 1d. per week.

(5.) In a convenient district, two New Law brick dwellings, with hot water supply. Five rooms and bathroom. Ten at 14s. 5d. per week, twenty-five at 15s. 5d., five at 16s. 4d., ten at 19s. 3d., four at 20s. 2d. and thirty at 21s. 2d.

(6.) Four rooms on third floor of three story and basement re-modelled brick house. Dimensions: kitchen 10 feet by 13 feet; bedrooms 10 feet by 14 feet; 5 feet by 10 feet; 5 feet by 8 feet. Good cupboards. Large corridor. Wash tub and sink in kitchen. Cold water. Rent 13s. 6d. per week. Rent of first floor and basement, four rooms and bath, 15s. 5d.; of second floor, three rooms, alcove and bath, 14s. 5d. Size of building lot 18 feet by 33 feet. Depth of yard, with shed at end, 62 feet. The especial advantage of this kind of dwelling is the comparative privacy secured.

(7.) Four-roomed tenement on the third floor of a converted house. The tenement contained scullery, with sink and wash tub; water-closet (with skylight); two good cup-

boards and broad landing. Dimensions : living room 10 feet by 6 feet by 15 feet ; bedrooms (three) 10 feet 6 inches by 18 feet ; 6 feet 6 inches by 14 feet ; 7 feet by 8 feet, the last with borrowed light only ; scullery 6 feet by 2 feet 6 inches ; height 8 feet 9 inches. Rooms bare, but no sign of want. Occupiers, Italians, who had landed eight days previously, including a young cabinetmaker, who had obtained trial employment at 37s. 6d. a week. Rent 15s. 5d. per week. The basement and first floor (eight rooms) were let at 28s. 10d. per week, and the second floor (four rooms and scullery) for 15s. 5d. Size of building plot 20 feet by 45 feet.

(8.) Although the large tenement house is not characteristic of Brooklyn, a considerable number are found there, including some of the least desirable types. Thus, in one case, a building of five stories, with four families on each floor, had three of the four rooms looking out on a shaft only three feet in width, and two of these rooms only 7 feet square. The water-closets were in the corridors (one for two families), and were in bad order. Altogether, this dwelling represented one of the worst specimens seen anywhere. It was mainly in Italian occupation, and in this sorry building, as often elsewhere, the neighbourliness of the occupants was a conspicuous feature.

(9.) A four-roomed second floor tenement in a three-story and basement double-fronted frame house. Cold water supply. Wash tub and sink in kitchen. Closet on landing (one for two families), and vent shaft. Dimensions : parlour, with two windows overlooking street, 11 feet 6 inches by 15 feet ; bedroom (leading from parlour, with window in partition wall) 8 feet 6 inches by 13 feet 6 inches ; second bedroom (*en suite*, leading to kitchen, and again with window in partition wall) 8 feet 6 inches by 8 feet ; kitchen, with two windows overlooking yard, 11 feet 6 inches by 17 feet ; height, 9 feet 6 inches. Rent 12s. 6d. per week. Rent of first and third floors 11s. 6d. Building plot 25 feet by 55 feet. Complete plot 25 feet by 100 feet.

(10.) *In Brownsville.* In four-storied 16-family New Law house. Five rooms and bath on second floor. Set range and hot water fittings. Gas. Dimensions : kitchen 8 feet by 13 feet ; living room 11 feet by 11 feet ; dining room 11 feet by 13 feet ; bedrooms 7 feet 6 inches by 9 feet, and 7 feet by 10 feet ; height 9 feet 6 inches. Husband a fur worker, earning 70s. 10d. a week ; one son telegraph employee earning 66s. 8d. ; and another, in a looking-glass shop, earning 50s. Husband employed in Manhattan. When busy, as at the time of visit, has to leave home at 5 a.m., and does not get back till 11 p.m. Anxious to live again in Manhattan, but wife hopes to stop at Brownsville. Jewish. Evident comfort. Rent 12s. 6d. a week.

(11.) *In Brownsville.* Five rooms and bathroom in three-storied frame house. Ground floor. Clean. Rent 13s. 6d. per week. On second floor the owner was living. Rent of third floor, 14s. 5d. Two years ago this last tenement was let at 17s. 4d., now considered fortunate to get 14s. 5d. But the rent movement (July, 1909) was again tending upwards.

In this and some other more scattered sections of Brooklyn, a tendency to offer tenements for less money in winter than in summer was apparent. Travelling in the cold season is less agreeable, and this is probably the main explanation of the tendency, but in the less thickly built areas themselves wintry weather is apt to make itself felt more than elsewhere, especially when window fittings, &c., are, as is often the case, defective. "Freezing in winter" was the comment of an American living somewhat out of his environment in a showy but badly constructed two-family house in 43rd Street.

Thus the power of the crowded parts of Manhattan to attract, to which reference has been made, is doubtless much stronger in winter than in the heat of the summer. In August the contrast in favour of many parts of Brooklyn or of the Bronx is to the outsider incalculable. But in January even to him it is not so manifest.

In some newer districts a three-storied house with shop on the ground floor and two families above is becoming common and is suspected of representing an attempt at evasion of the Tenement House Act. This would result if, the structural conditions for a tenement house not having been observed, the space behind the shop was used as a dwelling.

(12.)—A five-roomed tenement on the top floor of a three-story and cellar building. Cold water supply. Set range and boiler. Sink. Laundry tubs. Cupboards. Private water-closet. Dimensions : parlour (with two windows on street) 10 feet 6 inches by 14 feet 6 inches ; bedroom with borrowed light from parlour 9 feet by 10 feet ; living room or kitchen (with two windows on yard) 10 feet 6 inches by 13 feet ; bedroom with window on yard 6 feet 6 inches by 10 feet ; bedroom with window on street 6 feet 6 inches by 10 feet 6 inches. Occupier an American carpenter. Rent 13s. 6d. per week.

Although one bedroom was "dark" and the other two small, the tenement had a comfortable appearance and was one of many illustrations of the very great disparity

often presented between the accommodation secured by the more or less well-to-do wage-earner and others less favourably situated. This is much more striking than differences in rental. The ground floor of the above house was let for 13s. 6d. and the second floor was 15s. 5d. per week.

(13.) A five-roomed tenement *en suite* in a four-story and cellar double-fronted tenement house containing seven families and one shop. Cold water supply. Sink and wash tub. Coal bin in cellar. Dumb waiter (used). Water-closet on landing (one for two families), ventilated by shaft 1 foot by 3 feet 3 inches. Dimensions:—living room, two windows on street, 11 feet 6 inches by 15 feet 6 inches; bedroom (with window on shaft 1 foot 3 inches deep by 7 feet in length) 8 feet 6 inches by 9 feet; second and third bedrooms (with windows on same shaft) 6 feet by 7 feet 6 inches and 8 feet 6 inches by 9 feet; kitchen (with two windows on yard and fire escape) 11 feet 6 inches by 16 feet; height of rooms 9 feet 10 inches. Occupiers Americans. Elderly mother born in New York and two children earning form household. Evident comfort. Rent 12s. 6d. per week. Size of building lot 25 feet by 60 feet and of complete lot 25 feet by 100 feet.

(14.) A better tenement of the same class of occupation, with living room, dining room, kitchen and three bedrooms, bathroom, and small private hall, was rented at 19s. 3d. per week. Two of the bedrooms had only borrowed light and the third was the small typical "hall room," but the tenement gave the impression of considerable comfort and the information that such were preferred to the ordinary types of New Law houses excited no surprise.

(15.) Four-storied brick tenement houses. Shops on ground floor. Five-roomed tenements with bathrooms. Hot water. Fixed ranges. Eight tenements let at 13s. 6d. per week, eight at 14s. 5d., twelve at 15s. 5d. and two at 16s. 4d. per week.

The examples given in the preceding pages, although by no means exhaustive, are representative, but apart from certain particulars with regard to New Law houses—a very complex group—no statistics are available as to the relative frequency either of the above or of other types. Even as regards the New Law houses such statistics as the number of stories or even the number of families on each floor give but little insight into the real character of the dwelling. The interpretation of any rental figure has been seen, indeed, to involve a consideration of many conditions affecting the character of the tenement—not only as regards locality, type of street, &c., but also as to the position in the building, such as whether front or back or rear; the size of rooms; whether or not there is a bathroom—now very generally provided in new tenements of four rooms and upwards; and what other "improvements" are provided. All such conditions, combined in great variety, necessarily affect the real value of tenements, as also does the prevalence or absence of "overcrowding." Roughly, this last element may probably be said to be connected with large national groupings and would thus be one among many considerations that increase the difficulty of appraising the home standard and of interpreting the significance of general rental figures for this great and cosmopolitan city.

For the purpose of this enquiry rentals of over 18,000 different tenements on as representative a basis as possible of the class in the occupation of wage-earners were obtained for February, 1909—mostly in Manhattan, the Bronx, and Brooklyn. Separate figures for the predominant rentals which they yield are shown in the following Table: for the Lower East side of Manhattan, that is for the part lying south of 14th Street and east of Broadway, to which reference has been frequently made, for the rest of Manhattan, the large sub-divisions of which—South-West, East, West and North—display little variation in nominal predominant rentals, for the Bronx, for Brooklyn and for the whole of New York City.

It will be noted that only three, four and five-roomed tenements are given in all cases and, although general figures cannot be given, it is certain that these are the predominant sizes and that tenements of two and six rooms are relatively exceptional and local.* The elimination of the single-room tenement and the fact that two rooms are not predominant everywhere are also noteworthy features of the housing conditions of a city so highly rented and, in many parts, so closely built as New York. It will be remembered, however, that in general the size of the rooms is small and that, for instance, "three rooms" are apt to have a total floor-space of not much more than 300 square feet and a cubic measurement not much above 2,700 feet and sometimes considerably less.

* In 1907 and 1908 in the plans filed with the Tenement House Department, out of 58,843 tenements of *all descriptions* (cf. p. 25) 80·4 per cent. were of from three to five rooms, only 2·8 were under three rooms, 10·2 were of six rooms and 6·6 above that number.

The following Table shows the predominant weekly rents in February, 1909, of dwellings in the occupation of working-class families in the boroughs of Manhattan, the Bronx and Brooklyn, and in New York City as a whole :—

Predominant Weekly Rents of Working-class Dwellings.

| | Two rooms. | Three rooms. | Four rooms. | Five rooms. | Six rooms. |
|----------------------|---------------------|----------------------|----------------------|----------------------|------------------|
| Manhattan : | | | | | |
| Lower East Side | 6s. 9d. to 10s. 1d. | 10s. 7d. to 14s. 5d. | 15s. 5d. to 17s. 4d. | 21s. 2d. to 25s. | — |
| Other Districts ... | 6s. 9d. ,, 9s. 7d. | 9s. 7d. ,, 13s. 6d. | 14s. 5d. ,, 17s. 4d. | 16s. 4d. ,, 24s. | — |
| Manhattan as a whole | 6s. 9d. ,, 9s. 7d. | 9s. 7d. ,, 14s. 5d. | 14s. 5d. ,, 17s. 4d. | 16s. 4d. ,, 25s. | — |
| The Bronx ... | — | 9s. 7d. ,, 14s. 5d. | 13s. 6d. ,, 17s. 4d. | 17s. 4d. ,, 21s. 2d. | 21s. 2d. to 25s. |
| Brooklyn ... | — | 8s. 8d. ,, 12s. 6d. | 11s. 6d. ,, 13s. 6d. | 14s. 5d. ,, 17s. 4d. | — |
| New York City ... | — | 9s. 7d. ,, 13s. 6d. | 12s. 6d. ,, 16s. 4d. | 15s. 5d. ,, 21s. 2d. | — |

Rent is usually paid monthly in advance, and written contracts are the exception. The relationship of landlord and tenant is apt to vary, not only, as everywhere, according to the way that each regards his obligations, but according to the fluctuations of a somewhat sensitive market. Thus, whereas in 1906 in the Lower East Side it had been difficult to secure rooms, and real estate agents had their waiting lists, in 1909 conditions had changed. Rents had frequently declined there and tenants rather than landlords were often in the stronger position. The changed relationship, which was the sequel and in part the result of the depression of 1907–8, was noticeable in many directions and in the Bronx, for instance, in 1909 the practice of giving a month of free occupancy to new tenants was common.

In all cases rent includes water-rate and taxes. The former is based on a scale which varies chiefly with width of building plot and number of stories, families, baths and water-closets. Thus for a 25-foot front dwelling of five stories the minimum rate would be 50s. per annum. For each additional family above one the extra charge is 4s. 2d. and for every additional bath and water-closet above one, an extra charge of 12s. 6d. and 8s. 4d. respectively.

The facilities for tramway and railway transit provided in New York, although extensive, are inadequate. The almost invariable charge is 2½d., never less, save across the rivers by ferry or bridge, and rarely more. Both in Manhattan and Brooklyn an elaborate system of transfer tickets is in operation on the various surface lines, and although not so liberal in Manhattan as formerly, making it difficult, for instance, to know how to avoid a 5d. fare in going from the Middle East to the Upper or Lower West Side, and although in both boroughs the validity of the tickets issued is not easily mastered, the transfer system cheapens locomotion very perceptibly.

The convergence of many tramway lines upon, and thus the grouping of termini in, the lower section of Manhattan, is a defect of the New York system that is being mitigated, particularly by the Subway (*vide* p. 11). Apart from the Subway, it is to be noted that the customary charge of 2½d., although it will generally carry a passenger to, will never take him beyond the Manhattan termini either at the Battery or at Brooklyn Bridge. It may be stated, however, that the prevailing daily expense for those who have to travel to or from their work is 5d., or 2s. 6d. a week, and the vast daily movement, especially towards Lower Manhattan, shows that great numbers incur at least this weekly charge.

Apart from the public authorities, general responsibility for the New York tenement house devolves on three parties, landlord, tenant and janitor—the last named being a distinctive New York figure. The duties, often undertaken by a woman, are not those of a doorkeeper, as the name suggests, but are concerned mainly with the execution of small necessary repairs, with the cleaning of the public portions of the dwelling, and, apart from structural requirements, with its sanitary condition. Actual duties vary greatly with the size and character of the house, and in cases of steam-heated apartments, or when there is a hot water supply, the janitor has to be something of an engineer. He rarely collects rents, but a good janitor must be a good letting agent. He is in constant communication with the tenants, and his influence, as affecting the cleanliness of the home and its surroundings, may be almost as important as the discharge of his more definite duties. This is, for instance, the case as regards the collection of refuse which, under an ordinance of seven or eight years ago, has to be divided into three classes—ashes, garbage and dry rubbish, such as paper, clothes, &c., which can be placed in a bag or made into a bundle. Responsibility for compliance with the ordinance is placed on the janitor, who has in his turn to bring the necessary influence to bear on the tenants. Although janitors

are inclined to resent this particular obligation, tenants are now becoming used to the requirements, and on the whole the plan is said to be working well. Collection of refuse by the authorities appears to be systematic and satisfactory. The remuneration of the janitor varies with the duties, but the most common starting point is a tenement rent-free. A Janitors' Society has been formed especially for the East Side janitors and the membership is mainly Jewish. The objects are partly educational, and it is instructive to note that in the list of subjects taught to members, including, for instance, "The Requirements of the City Departments—Health, Street Cleansing, Fire and Tenement House," in "Plumbing" and in "Fire Drills," "English" and "Citizenship" are also mentioned.

Although the janitor is a very common representative of the owner of the building, the owner himself is often found living there, for small owners of tenement house property are numerous in New York. Among Jews and Italians especially this is a favourite form of investment and speculation, although the speculative element received a check in the depression of 1907-8 and in the concurrent and subsequent fall in the value of real estate in some tenement house districts.

It is to the landlord that the law in general looks for compliance with its requirements, and it is partly on this account that the character of the tenants and of the personal influence that can be brought to bear upon them, be it that of a good janitor, of a considerate small resident landlord, or that exercised through the efficient organisation of a great corporation, assumes special importance.

Working-class ownership of dwellings is the exception. In 1900 only 12·1 per cent. of the total number of homes in New York City were owned by their occupiers, the percentages in the constituent boroughs being: Manhattan and the Bronx 5·9, Brooklyn 18·0, Queens 36·4 and Richmond 36·7. It must be remembered that these figures relate to the population as a whole and not to the working classes alone, and that considerably more than half the total population was living in Manhattan and the Bronx.

There are no municipal dwellings in New York, and the vastly greater proportion of its housing accommodation has been provided on ordinary commercial lines.

A few tenements, some 4,100, have, however, been provided at various dates by individuals or corporations inspired primarily by the desire to improve the housing conditions of the city. The pioneer in housing reform in New York is Mr. A. T. White, and the first of three blocks of model dwellings erected by him in Brooklyn was completed in 1877, the last in 1890. All were built at a time when land was comparatively cheap, but in the liberal planning of their enclosures they are almost unique in New York, and in the absence of dark rooms and in their well-ventilated outside staircases they present further admirable features still contrasting vividly with the structures with which New York abounds. They include about 500 dwellings, are self-contained, and are popular. Rents are payable weekly in advance and range from 5s. 10d. to 10s. 5d. for two rooms, and from 7s. 11d. to 14s. 7d. for three rooms.

Altogether thirteen sets of model buildings, nine of them in Manhattan, were erected before the New Law of 1901. They contain in all about 2,300 tenements, and more than half are either owned or managed by the City and Suburban Homes Company—now by far the most important corporation erecting or managing model dwellings in New York. Subsequent to 1901 less model building has been carried out, but in the later period the same Company has exercised a still more predominant influence, since eight out of the thirteen buildings that have been put up under the New Law, containing about two-thirds of the accommodation provided, are owned by it, while eleven of the buildings are under its management. The excellent dwellings now known as the "Avenue A. Estate" with 542 tenements, and the building known as "The Tuskegee," perhaps the only new erection devoted from the first to the accommodation of coloured people, are among the more notable undertakings of this Company, of which Mr. White is a Director and Dr. E. R. L. Gould the President.

The total amount invested by this Company in model tenement estates is £956,424; the total rent collected for the year ending April 30, 1909, was £73,617 from the Company's properties and £53,051 from managed properties, with an average percentage of loss from bad debts of only 0·26 per cent. Interest at the rate of 4 per cent. is being paid, and under the terms of the Company's charter, the maximum is fixed at a cumulative dividend of 5 per cent.

A subordinate activity of the Company consists in the provision of dwellings for single families on a small suburban estate at Homewood in Brooklyn. On this estate 248 houses, detached and in rows, have been erected, and of the former about 100 have been sold. Of these about half have been fully paid for, the average price being £792. At least 10 per cent. of the purchase price must be paid in cash, the purchaser—who receives a deed to his house—giving back a 20 years' instalment mortgage for the

difference. Purchasers have to take out a life insurance policy for approximately two-thirds of the original mortgage indebtedness. For a purchaser aged 30 this indebtedness for principal and interest on a house costing £792 amounts to £5 2s. 2d. and the insurance premium to about 13s. 9d. monthly. Taxes, water-rate and fire insurance represent about 18s. 9d. per month. In the aggregate, therefore, without allowances for upkeep and repairs, the fixed charges would approximate to about 4s. 6d. a day for a period of about 20 years, when they would automatically drop to about 18s. 9d. per month, leaving the occupier the owner of a house and a paid-up life insurance policy of £417. These houses contain eight rooms and bathroom and are built on plots of land 30 feet by 100 feet.

Smaller houses in rows with six rooms and bathroom are rented at 18s. 3d. or 19s. 3d. per week. The car fare is 2½d., and it takes 35 minutes to reach the terminus on the Manhattan side of Brooklyn Bridge.

As regards lodging houses, apart from the Municipal Lodging House already mentioned and from the ordinary commercial ventures, the best known provision is that of Mills' Hotels. In two of these, with numerous conveniences and advantages such as reading and writing rooms, baths, &c., more than 2,000 rooms are available at 10d. per night. The range of charge for lodging houses is in general from 5d. to 2s. 1d. per night, and 7½d. is the most usual. The charges for a bed in the Salvation Army Workingmen's Hotels are 5d. and 7½d.

A "furnished room" is apt in New York as elsewhere to represent an unsatisfactory and expensive form of housing provision, and its frequent characteristics have been described in a booklet issued by the City and Suburban Homes Company as consisting of "a dirty carpet, unclean bedding, absence of hot water, meals in the sleeping room or in the nearest restaurant in all weathers, no privacy, and no comfort." In a house visited in Brooklyn to which the foregoing would apply fairly well, the weekly charge for a small "hall" bedroom was 6s. 3d. and for larger rooms 10s. 5d. The occupants of the house were mainly Irish of both sexes.

RETAIL PRICES.

In general in New York the consumer enjoys, or can enjoy, the normal advantages that accrue when competition is active, when demand is extensive and varied, when sales are large and turnover rapid, and when therefore a body of distributors sufficiently large to affect prices is able to work on a small margin of profit. As regards clothing, groceries and provisions, these circumstances have special weight, and in all branches of retail distribution of articles in more general consumption influences are at work tending to equalise prices, and thus to prevent great local differences of range. Some of these influences, it may be noted, make for the centralisation of retail trade, such as catalogues, advertisement, free delivery, the telephone and, as regards communication only, postal facilities together with the increased accessibility of great shopping centres and more rapid locomotion; while others rather equalise the facilities afforded to different districts, such as the increasing number of "chain stores" or "multiple shops," and of branch establishments, but from all alike the consumer stands to gain. It is probable that such influences are more uniformly operative as regards prices than qualities, but ignoring this point, and remembering the limitations and exceptions that exist (mainly connected with the wholesale sources of supply), it is necessary to emphasise the general fact that New York possesses a vast and on the whole effective system of competitive retail distribution.

As regards food, the machinery through which this system operates most widely is the local or "neighbourhood" store for groceries, provisions, bread and often milk, and the local butchers; but the "department store" and the "chain store" are also among the controlling influences. Both of these are important in New York, the former rather because of the amount of trade which they secure and the extrinsic attractions which they offer than because their prices are particularly low; the latter because they are cheap, and because in them the policy of "cutting" prices is more systematically adopted. One of the latter firms, with branches now widely scattered throughout the city, started in 1883 with a single shop and has now about 200.

Co-operative distribution has established no foothold.

A common appendage to the grocers' or, sometimes, the butchers' shop is a permanent fruit and vegetable stall, often elaborately and tastefully arranged, which flanks the entrance to the main establishment and, it may be noted, often encroaches on the public footway in so doing. These subsidiary establishments in the very great majority of cases are conducted by Italians. They pay rent to the shop-keeper, who thus secures for his own customers the convenience of what is, to all intents and purposes, another department. A corresponding annexe to the saloon is also common, but this is usually a shoeblacking establishment, although very occasionally a fruit stall may be also seen.

Shops giving prominence to "delicatessen" are common, and are tending to compete with the ordinary retailer, since in addition to their distinctive wares they are selling more groceries. In one such establishment in 10th Avenue, for instance, bread, biscuits, jams, cheese, eggs and tea, with canned food of all descriptions were among the articles stocked, and "groceries and delicatessen" is a notice sometimes seen. From the grocery the "delicatessen" shops are still, however, mainly distinguished by their stock of cooked meat, fish, sausages, &c., prepared in various ways and ready for eating.

Occasionally a shop exclusively for the sale of coffee and tea is seen.

Apart from the "department stores," the so-called private "market," an establishment at which most food requirements can be met, and which has become the most common form of shop in Boston and some other cities, is exceptional, not being found save in some of the less central districts, and there only occasionally. Butchers' and fishmongers' shops are, however, sometimes called "markets." The retail markets in the ordinary English sense of the word are not important in New York, and in Manhattan the best known is situated near the business part of the city, and is used by the middle-class rather than by the wage-earning consumer.

Street markets are not uncommon and the "push cart" is frequently seen, especially in the foreign quarters. Push cart hawkers have to take out a yearly licence costing 16s. 8d. In some districts they have been forbidden in the streets and relegated to the arches under the tracks of the New York Central Railway from 110th to 115th Streets. Here a large open push-cart market, largely Italian, has rapidly formed; the same feature is common in the Lower East Side, and in Brownsville a market of this description was noted, illustrating the readiness with which in a comparatively new district the old form of dealing made its appearance. Such markets are indeed sporadic in many quarters of the city. Apart from fruit and sweet-stuffs, food did not, however, appear to be often offered for sale, the chief wares being dry goods and fancy articles of various kinds.

As regards the methods of sale, credit is common, often for a weekly account, and is given specially by the local or "neighbourhood" stores. The individual connexion which these establish and the extended credit which it is known will often be allowed if required, are attractions with which the strictly cash business of the "chain store" or "department store" cannot compete.

Trading stamps are somewhat extensively used but are not likely to be a permanent institution, and are already considered by some to be losing their popularity. They are a form of advertisement, and one that is believed to retain custom in a special way. They necessarily, and this is perhaps their best feature, go hand in hand with a system of cash payments. The common feature of the system is the issue of stamps by the dealer proportionate to the amount spent. The usual basis is ten stamps per one dollar (4s. 2d.) purchase, but the variations are numerous, and individual firms frequently make it a feature of their advertisements to offer extra stamps for some specified short period, or for articles of which they wish for the moment to push the sales. A large firm in Manhattan, with a view partly to advertisement, and partly in order to equalise the business pressure of the day, was offering double the number of stamps, that is twenty instead of ten, on all purchases made before noon.

The stamps issued must be placed in a book provided by the trading stamp company, and a full book holds 990 stamps, so that if it has been filled on the ordinary basis of ten stamps per dollar (4s. 2d.) it represents the expenditure of 99 dollars. Such books can be sold to dealers for about two dollars, but usually they are "redeemed" on presentation at a depot at which the "premiums" offered for the stamps are on view. These depots are establishments at which a considerable variety of articles, useful and ornamental, for the home are kept, and in which the filled-up book of stamps is the recognised medium of exchange, everything being priced per "book," one, two or more. Ultimately it is upon the somewhat slender thread of the attractiveness of these premiums that the trading stamp system depends.

In the sale of goods English weights and measures are generally used, and for many articles the pound, the yard and the quart, the last equivalent to $1\frac{2}{3}$ English pints, are the customary units.

As regards foods the tendency to sell by can, box, basket, packet or package, without any specified weight, demands notice, if only because of the difficulty thus created of expressing purchases of food in terms of quantity. The present tendency is explained partly by general considerations such as advantageonsness to the manufacturer and dealer, or often the convenience to the latter and to the consumer, but it is receiving a great impetus from the provisions of the National Pure Food Law passed by Congress in 1906, and since then adopted by various State Legislatures, including that of New York itself.

According to this law, if an article is sold by weight or measure and in package form the terms of the weight or measure must be "plainly and correctly stated on the outside of the package," and the risk of infringement is naturally being avoided by the omission of a statement of weight or measure altogether. Thus, in the case of canned tomatoes, which vary greatly in quality, the former 2 lb. tin has become "No. 2" and the gallon tin "No. 10"; the sale of tins of biscuits of specified weights has almost ceased, and in general the custom previously widely adopted, as in the case of many table cereals, preserves, sauces, sardines and pickles, has been greatly extended. Opinion is still divided, as it was when the law was being passed, as to whether the enforcement of a statement of weight or measure would have increased or diminished the usefulness of an Act that admittedly contains many admirable provisions.

The view that the present tendency is disadvantageous to the consumer is clearly reflected in reports of the City of New York Bureau of Weights and Measures. Inspection to see that there is "fair" dealing as regards quantities devolves upon this Bureau, and as to quality, in so far as this is connected with the sanitary fitness of foods and their freedom from adulteration, upon the Department of Health.

The Bureau of Weights and Measures reported 44,753 investigations in 1908 and 1,115 offenders, including 337 grocers, 297 butchers, 151 coal dealers, 38 ice dealers, 36 fish dealers and 35 "delicatessen" shops. Most violations are found in the poorer shopping districts of the city. Altogether it is considered that some 40,000 shops and other places, in addition to coal, ice and hawkers' carts using scales or measures, are subject to the inspection of this Bureau, the staff of which includes 18 inspectors. Of the traders of the city some 8,000 were regarded as "suspects" needing special vigilance in 1908. The penalty for using false instruments is 25 dollars (£5 4s. 2d.) and for giving short weight or measure 10 dollars (£2 1s. 8d.). It is suggested that the power to publish the names of second offenders should be given to the Bureau.

The Department of Health reported a total of over 900,000 food inspections of all kinds made during 1907. The quantity (in lb.) of foodstuffs returned as condemned and destroyed were: meat, poultry and game 2,974,948; fruit 7,540,516; vegetables 2,558,025; groceries and canned goods 382,795; fish 297,561; and eggs (for six months) 52,750. In every important class of food by far the greatest amount is condemned before it reaches the centres of retail distribution—as at slaughter-houses, &c. in the case of meat, or on vessels or wharves or at railway depots in the case of fruit and vegetables.

Increasing attention is being given to the inspection of milk inside the city and of sources of supply outside. For dairies, creameries and milk shops "score cards"* have been recently adopted, calling for more definite and specific information than formerly and tending to eliminate the personal equation of the individual inspector, to secure more accurate returns, and to make them more uniformly fair.

In the course of the official inspections made during 1907 out of 8,880 samples taken for analysis 552 were found to be adulterated. As milk is retailed in New York by very large numbers of small shops and is kept by many rather to secure other custom than as a direct source of profit, the task of its inspection in New York is one of special difficulty.

Groceries and other Commodities.

Much cereal food is consumed, but *bread* as such does not occupy a place of exceptional importance in the domestic budget. Wheaten bread is most usually consumed, the ordinary loaf ranking as 1 lb., but scaling as a rule from even weight to 2 oz. below this. Thus the common price of 2½d. was usually paid in February, 1909 for a loaf of from 14 to 16 oz. Bread thus retailed is generally made at large factories, from where it is delivered daily or twice daily to grocery shops. Stale loaves are returnable and are then sold more cheaply.

Bread is also sold at the shops of the smaller bakers and is then generally slightly heavier, but the convenience of buying bread where other commodities can be also purchased appears to be one of the main explanations of the strong position maintained by the ordinary "neighbourhood store" as the retailer of bread. There is no official price or weight of bread, but the latter varies according to the market price of flour. Thus, in June, 1909, when the price of flour was rising, particulars were furnished of fresh scaling instructions sent out by one baking and retailing firm to its various branches. According to these instructions the dough was to scale from 17 to 19 oz. for

* See Appendix, pp. 484-7.

the various qualities of $2\frac{1}{2}d.$ loaf that were being made, representing a drop of about one oz. in the ordinary $2\frac{1}{2}d.$ family loaf from a previous scale that had been in operation for about a year. Dough for a wheaten loaf sold at $2d.$ was to scale 15 oz. and 5 lb. of dough were to be used to make 36 bread rolls. For rye bread made of wheaten and rye flour, in the proportion of about two to one, 20 oz. of dough was the weight for the $2\frac{1}{2}d.$ loaf. Altogether the instructions covered bread of eight different weights and five different prices. Although appreciably heavier loaves were being sold at this particular bakery, the opinion was expressed that the usual weight in June was about 14 oz. for the wheaten $2\frac{1}{2}d.$ loaf, representing a drop of one oz. from the mean of the weights that were found to be predominant in February. But it is also clear that by those who looked for it somewhat cheaper bread could be bought.

Among the more distinctive forms in which bread is sold are the Italian loaves, always wheaten and often large—one of oval shape measured in a private dwelling was 29 by $8\frac{3}{4}$ by 5 inches and had cost 1s. $3d.$ —and the “rough rye” bread on sale in the Jewish districts. This is baked in large flat loaves and is retailed in sections at $1\frac{1}{2}d.$ per lb. Breadmaking at home is a practice still occasionally adopted—by some Italians, for instance, who are also said to prepare the dough and send it out to be baked, and who also often make their own macaroni.

Many brands and qualities of wheaten *flour*, mainly Western, are sold. The bag of $24\frac{1}{2}$ lb., or one-eighth of the customary barrel, is a frequent unit of sale, but smaller quantities are also sold as, for instance, a bag of $3\frac{1}{2}$ lb. (for $6\frac{1}{2}d.$). Flour is one of the commodities in general consumption particularly susceptible to the fluctuations of a highly sensitive market of which the headquarters are in the Middle West.

A great variety of allied foods is consumed and the following prices may be quoted:—corn (maize) meal $1\frac{1}{2}d.$ to $2\frac{1}{2}d.$ per lb.; oatmeal $2d.$ per lb.; rice from $3d.$ to $4d.$ per lb.; lima beans $4d.$ per lb.; spaghetti $5d.$ to $6d.$ per lb.; macaroni (domestic) $4d.$ and (imported) $6d.$ per lb.; and buckwheat $6\frac{1}{2}d.$ to $8d.$ per 3 lb. In the season fresh corn (maize) cobs, a sprinkling from and reminder of the vast crop which the country produces, are obtainable and furnish an excellent dish. A price noted in August was from two to four cobs, according to size, for $2\frac{1}{2}d.$

Coffee, which is much more extensively consumed than *tea*, is also the cheaper beverage, and the prices of both have remained stationary for some years. While the predominant price of coffee stands out clearly at 1s. $0\frac{1}{2}d.$ per lb. it is worth noting that 1 lb. of an excellent drinking coffee could be obtained from shops that admittedly rank as among the best in New York for $9d.$ or 5 lb. for 3s. $6\frac{1}{2}d.$

White granulated *sugar* is used far more than any other variety and is frequently sold in $3\frac{1}{2}$ -lb. packets for $8\frac{1}{2}d.$ The predominant price per lb. is from $2\frac{1}{2}d.$ to $3d.$

Eggs are largely consumed. Great supplies come from the West and market conditions have been greatly affected by cold storage, one effect of which is to diminish the seasonal fluctuations in price. The existence in New York of a trade union of egg inspectors with some 300 members is significant. When these men are employed by the retailer, as is done to some extent, inspection paid for at the rate of $7\frac{1}{2}d.$ a case of 30 dozens practically enables the dealer to reclassify his eggs and sell grades if he chooses, with a guarantee that all are good.

The *cheese* in most general consumption is the American “full cream” as distinguished from the skimmed milk cheese, and the predominant price of $10d.$, quoted in the Table below, refers to this variety. An American-made Swiss cheese, sold at about the same price, is bought by the Italians, but the cheeses more usually consumed by them are imported Parmesan, Swiss, &c., and range in price from 1s. $3d.$ per lb. upwards. Thus, in an Italian shop the following prices were quoted:—American $10d.$ per lb., Swiss 1s. $5d.$, and Parmesan 1s. $8d.$ A cheap food known as “pat” cheese, made of sour milk and sold in broken lumps like curds, is largely consumed by the Jews and others, and ranges in price from $3d.$ to $5d.$ per lb.

Oleomargarine is very rarely retailed, partly because of a tax of $5d.$ a lb., partly because of a municipal licence of 25s. a year that has to be taken out, and partly because of a strict code of State regulations as to its manufacture and sale. These were amended, but strengthened rather than weakened, in 1909. The preparation and sale of oleomargarine in imitation of butter is forbidden. It is anticipated by some that the tendency for the price of butter and lard to increase may lead to fresh attempts on the part of those interested in the manufacture and sale of oleomargarine to obtain some abatement of the existing regulations.

Potatoes are rather expensive and ranged upwards from 1*d.* per lb. in February, 1909. Sweet potatoes are a seasonal vegetable, coming in at the beginning of August. Previous to that date they are in the market but come from further South and are dearer. During the full season, which lasts till the beginning of November, they come largely from the State of New Jersey, and when most abundant are only slightly more expensive than the white or Irish potatoes. Thus at the end of August at a shop in the Bronx about 7 lb. of sweet potatoes were being sold for 8½*d.* and the same quantity of Irish potatoes for 7½*d.* Sweet potatoes are of considerable food value, but it is in the South rather than in the North that they figure as a really important article of consumption.

Some other summer prices of vegetables may be quoted :—Onions 5¼*d.* a quart ; string beans 3¾*d.* to 5¼*d.* a quart ; and tomatoes 7¾*d.* for two quarts ; and of fruits, apples 5¼*d.* to 6¼*d.* a quart ; white grapes 5*d.* and small black grapes 2½*d.* per lb. ; peaches (small) three for 2½*d.*, and bananas ½*d.* each.

As already stated, *milk* is very largely sold by the grocers "loose," that is, not in bottles. The main official objection to this method of distribution is not so much on the score of quality, which cannot be assumed to be poor because of a relatively low price, as on sanitary grounds. Milk kept in the small shop, albeit in the authorised refrigerated receptacle, is apt to reach too high a temperature ; the constant opening, which, for a 17-quart can, for instance, would mean some 20 to 30 times, is undesirable, and it is more difficult to keep milk and vessels clean.

The milk sold in New York comes from a great radius—some from as far as Ohio, and reference has been already made to the efforts that are being made, both within and without the city area, to ensure purity of supply. The ordinary price of milk delivered in bottles in February was 4¾*d.* a quart, while the predominant price as sold to wage-earning families, which would be mainly determined by the price for milk sold loose and not delivered, was 3½*d.* per quart. It is asserted that a Milk Exchange in practice fixes the price paid to the producers, and that the average thus paid during 1908 and 1909 to producers in the State was 2*d.* per quart, or a price that is said to yield little or no profit to the dairy farmer. If this statement be correct it would explain how it is possible for milk to be retailed in this city at a price that is relatively cheap. In November, 1909, the price of milk delivered in bottles was raised to 5½*d.* per quart.

Anthracite *coal* is consumed. It is sold by the short ton of 2,000 lb., and the standard prices observed for February were 27*s.* 1*d.* per short ton for the size known as "nut" and 20*s.* 10*d.* for a smaller variety known as "pea" coal. The price per short ton for nut size is reduced to 25*s.* in April in nearly every year, and from then onwards is raised 5*d.* monthly till September, when the maximum is again reached. One object of this arrangement is to help to equalise demand throughout the year. For the bushel of 80 lb. the price most generally paid was 1*s.* 0½*d.* The retailing of small quantities has passed to a great extent to hawkers and to the "cellar store" dealers. Most of these are Italians, and a seasonal change of occupation is secured by the sale and delivery of ice in the summer ; "ice, coal and wood" is a common notice. A small charge is sometimes made for delivery, and the convenience of actual delivery in the dwelling of small quantities sometimes leads to the disuse of the bin in the cellar, and thus the avoidance of the trouble of carrying coal upstairs. Wood for fuel is frequently collected, largely from the *débris* of dismantled buildings, and those observed doing this appeared as a rule to be foreigners and generally Italians.

When there is no steam heat the rigorous cold of some of the winter months makes the charge for fuel a heavier one than in England.

The difficulty of weighing coal appears to mark it out as one of the commodities in which the consumer, perhaps more often the small consumer, is especially apt to suffer from unfair or ignorant dealing. In 1907, when the Bureau of Weights and Measures paid special attention to this trade, 2,382 investigations are reported as having discovered 1,230 offenders, mainly amongst the small dealers, of whom there were some 2,500 in the city, for selling coal in unauthorised measures or selling by weight without weighing. Nearly all of those against whom complaints were lodged were foreigners. The cases of serious shortage in complete loads numbered 67 out of 729 re-weighed, and the average shortage was 127¾ lb. per ton ; of the 729 loads re-weighed 314 were found to be of even weight, and 184 over weight, the average over weight being 37 lb. per ton.

Coke is little used, a fact that is explained by the large production of water gas in New York—some nine-tenths of all the gas produced.

The increasing consumption of gas for cooking, especially in summer, has been already noticed. The legal charge for gas over the greater part of New York is 3s. 4d. per 1,000 cubic feet. It is estimated that the number of consumers of gas for all purposes in June, 1907, in Greater New York was 997,752, and of this large total all but 48,165 were in the boroughs of Manhattan, Brooklyn and the Bronx. Considerably more than half of the total were in Manhattan itself.

Retailers of *kerosene* have to take out a licence costing 41s. 8d. per year.

The following Table shows the predominant prices paid by the working classes of New York in February, 1909, for certain commodities of general consumption :—

Predominant Prices paid by the Working Classes in February, 1909.

| Commodity. | Predominant Price. |
|------------------------------------|---------------------|
| Tea per lb. | 1s. 5½d. to 2s. 1d. |
| Coffee " | 1s. 0½d. |
| Sugar— | |
| White Granulated " | 2½d. to 3d. |
| Brown " | 2½d. „ 3d. |
| Bacon, Breakfast—Boneless " | 10d. |
| Eggs per 1s. | 8 to 12 |
| Cheese, American per lb. | 10d. |
| Butter " | 1s. 4d. to 1s. 5½d. |
| Potatoes, Irish... .. per 7 lb. | 7d. „ 9¼d. |
| Flour, Wheaten—Household " | 1s. 0½d. „ 1s. 0¾d. |
| Bread, White per 4 lb. | 10d. „ 11½d. |
| Milk per quart | 3½d. |
| Coal, Anthracite :— | |
| Nut per cwt. | 1s. 6¼d.* |
| Pea " | 1s. 2d.* |
| Coal sold by the bushel " | 1s. 5½d.† |
| Kerosene per gallon | 7¼d. to 7¾d. |

* By the ton of 2,000 lb.

† By the bushel of 80 lb.

Meat.

Most of the meat consumed in New York is Western-reared, and a considerable proportion—probably largest in the case of beef and smallest in that of veal—is also Western-dressed. Thus much of the meat described as “city-dressed” has also a Western origin, and, in meat as in cereals, the dependence of this great urban community for sustenance upon domestic, albeit distant, centres of production is an outstanding fact of the situation.

The following are the numbers of animals slaughtered in the West and East Side slaughter-houses in Manhattan in 1907 :—Cattle 488,846 ; sheep and lambs 1,495,940 ; calves 283,075 ; and hogs 867,916. The figures, except those for hogs, are swollen by the Jewish demand for “kosher” meat, and by the greater ease with which orthodox requirements as to the interval between killing and consumption can be met when the delay involved in the transport of carcasses over great distances is avoided. The sale of horseflesh for human food is prohibited by the Sanitary Code of the city.

Joints are purchased less extensively than in England, a practice that is explained not only by the desire to buy quantities that involve less trouble and less knowledge of cooking in their preparation, but also by a climate in which for a considerable portion of the year meat will not remain good for long unless very carefully kept, and when the appetite is more apt to demand freshness and variety in diet. The charge that American housekeeping is “wasteful” and that “chops and steaks” are so largely bought simply because housewives do not know “how to roast” are not the sole explanations of domestic habits that as regards the purchase and preparation of meat are so widely adopted and so frequently condemned.

The prices quoted for brisket in the following Table are for the plain as distinguished from the “fancy” cut of that name. The latter is without bone and without fat, and is sold at about 8d. per lb. The better parts of the flank are sold as steaks at 6d. or 6¼d. per lb., while cheaper parts are sold at 4d. or 5d. per lb. for boiling or for soup. The sirloin steak in New York does not include the fillet or tenderloin, the inclusion of this forming the porter-house steak, and yielding a cut that is from 2d. to 2½d. per lb. dearer than the sirloin itself.

Poultry is consumed in large quantities, and enters especially into the Jewish dietary. Prices quoted in the Lower East Side in the summer of 1909 of 10*d.* per lb. for fowls and 11*d.* for chickens were stated to be from 1*d.* to 1½*d.* in excess of the usual range.

Most of the fish consumed in New York is received from fishing grounds lying, except for halibut, either to the north or to the south, but a few varieties of deep-sea fish are caught locally—weak fish, the more expensive blue fish, sea bass, common mackerel, &c. The prices of these range from 5*d.* to 10*d.* per lb. Mackerel, much dearer than formerly, are now sold by the piece at from 6*d.* to 7½*d.* per lb. Some varieties of clams and many oysters come from neighbouring parts of Long Island.

As regards fish brought from a distance, fresh cod sold at from 5*d.* to 6*d.* a lb., haddock at from 4*d.* to 6*d.* and halibut at from 8*d.* to 10*d.*, are the more important varieties. Of salt and smoked fish may be mentioned cod, costing from 6*d.* to 7*d.* and hake and pollack (often sold for cod) costing from 5*d.* to 6*d.* per lb.

During the summer of 1909 the price of meat advanced somewhat. Pork appears to have been especially dear, and the quotation of 10*d.* per lb. for fresh loin in September was singled out at a large shop as being significant of the exceptional conditions of the market.

The following are the predominant prices of various cuts of meat in New York in February, 1909 :—

Predominant Prices paid by the Working Classes in February, 1909.

| Description of Cut. | Predominant Price per lb. |
|-------------------------------------|-----------------------------|
| Beef :— | |
| Roasts—Round... .. | 8 <i>d.</i> |
| " Ribs prime | 8 <i>d.</i> |
| " Ribs second cut | 7 <i>d.</i> |
| " Chuck or short ribs | 5 <i>d.</i> to 7 <i>d.</i> |
| Steaks—Round | 8 <i>d.</i> " 10 <i>d.</i> |
| " Sirloin... .. | 9 <i>d.</i> " 10 <i>d.</i> |
| Shin without bone | 5 <i>d.</i> " 6 <i>d.</i> |
| Flank | 4 <i>d.</i> " 6½ <i>d.</i> |
| Plate, Brisket... { Fresh | 4 <i>d.</i> " 6 <i>d.</i> |
| { Salt or corned | 3½ <i>d.</i> " 4 <i>d.</i> |
| Mutton or Lamb :— | |
| Leg | 6½ <i>d.</i> to 8 <i>d.</i> |
| Breast | 4 <i>d.</i> " 5 <i>d.</i> |
| Loin | 8 <i>d.</i> " 11 <i>d.</i> |
| Chops | 10 <i>d.</i> " 11 <i>d.</i> |
| Shoulder | 5 <i>d.</i> " 8 <i>d.</i> |
| Neck | 4 <i>d.</i> " 6 <i>d.</i> |
| Veal :— | |
| Cutlets | 11 <i>d.</i> |
| Rib chops | 8 <i>d.</i> to 10 <i>d.</i> |
| Loin chops | 9 <i>d.</i> " 10 <i>d.</i> |
| Breast | 6 <i>d.</i> " 8 <i>d.</i> |
| Neck | 6 <i>d.</i> " 7 <i>d.</i> |
| Pork :— | |
| Fresh—Loin | 6½ <i>d.</i> to 7 <i>d.</i> |
| " Spare rib | 4½ <i>d.</i> " 5 <i>d.</i> |
| " Shoulder | 6 <i>d.</i> " 6½ <i>d.</i> |
| " Chops | 7 <i>d.</i> to 8 <i>d.</i> |
| Corned (wet salt or pickled) | 7 <i>d.</i> " 8 <i>d.</i> |
| Dry salt | 7 <i>d.</i> |
| Ham | 7 <i>d.</i> to 8 <i>d.</i> |
| Shoulder, salt or smoked | 5 <i>d.</i> " 6½ <i>d.</i> |

ATLANTA.

Atlanta, the capital of the State of Georgia, is so situated as to be within comparatively easy reach of the ports both on the Gulf of Mexico and on the south-east Atlantic coast. This position has proved of great commercial importance. In addition to being a railway centre marking the intersection of several lines communicating with the South, the South-East and the Middle West, Atlanta presents many features in its appearance and in its activities which suggest a metropolis. No competing city lies within a radius of many miles, and it is therefore the centre on which practically the whole of the financial, commercial and administrative business of a very large area converges. Besides being the capital Atlanta is also the largest city of Georgia.

Owing to its varied industrial and commercial activities, and the wide social range which its citizens represent, Atlanta has the appearance of being larger and more influential than would be inferred from its population, which in 1910 numbered 154,839. The following Table shows the population of the city as returned at each of the Federal Censuses of 1870-1910 :—

| Year. | Population. | Increase. | Percentage Increase. |
|------------------------------------|-------------|-----------|----------------------|
| 1870 | 21,789 | — | — |
| 1880 | 37,409 | 15,620 | 71·7 |
| 1890 | 65,533 | 28,124 | 75·2 |
| 1900 | 89,872 | 24,339 | 37·1 |
| 1910 | 154,839 | 64,967 | 72·3 |

In 1900 the area of the city was $10\frac{3}{4}$ square miles. On 1st January, 1906, a new ward containing a population of about 8,000 was taken into the city limits, and on 1st January, 1909, further territory consisting of about 12 square miles was added to the city area, the extent of which is now about 24 square miles.

There has been practically no immigration into Atlanta in recent years, the Census of 1900 showing that only 2·7 per cent. of the white population were foreign-born and only 5·0 per cent. had foreign-born parents. The proportion of persons of negro descent was not so great as in some southern cities, but was very considerable, being nearly 40 per cent. A cleavage exists between the two racial elements in the population which is evident in many aspects of the social and industrial life of the city. Everywhere the distinction of colour is rigidly observed, and racial feeling shows itself to as marked an extent in Atlanta as in any other city of the South. This feeling is probably the resultant of many forces, some of which are without doubt economic in their character. The negroes form, broadly speaking, the class of unskilled workers, whose interests seldom, in any city, coincide exactly with those of the classes above, and the line between skilled and unskilled labour being always obscurely drawn, the encroachment of the one class of workers upon the field of the other is almost everywhere a fertile source of dispute and jealousy. In Atlanta, however, these industrial differences exist between two races, one of which is held to be much the social inferior of the other, and a bitterness is apt to ensue, and the quarrel to be magnified, to an extent which would be unlikely were the personal elements simpler. The social separation of the two races is everywhere emphasised—in the tramcars, in the churches and the theatres, at the baseball ground and even in the public parks and libraries; and in all cases the negro is either excluded or made to occupy a position of marked inferiority. Much of this reaction against the negro is merely an expression of the soreness left by the Civil War, and of the no less painful period of "reconstruction" which followed. The feeling is, however, held by many to be cumulative, and in Atlanta, where the new industrial development of the South is active, where new industrial conditions and relationships are being shaped and where, therefore, the new *post-bellum* relationship between the two races is less effective and less understood, the difficulties of the situation are more than usually marked. Though the spectacle is not rare, the position of a white man and a negro working side-by-side at the same or similar occupations is obviously fraught with unpleasant possibilities in the shape of industrial friction. The social separation, therefore, tends to bring about an economic separation also, and this again, by marking off a definite class of negro occupations, has the effect of making the social differences themselves still wider.

As is well known, Atlanta was almost wholly destroyed by fire during the Civil War. Like many such calamities the disaster has given no occasion for ultimate regrets. The rebuilding of the city was carried on with vigour, and the growth of population has since been rapid. In appearance the city is very modern and in many ways suggests the North rather than the South. It is claimed that this outward appearance of brisk activity and enterprise accurately expresses the business spirit of the city, and that while the native of Atlanta is a true Southerner, holding fast by Southern traditions and ideals, he takes the greatest pride in being progressive and enterprising. Much is said to be due to climate, which having regard to latitude—which is that of Fez in Morocco—is cool. The city stands on a plateau, 1,050 feet in height, which is formed by the eastern slope of the Alleghany Mountains, and to this situation are due the comparatively cool summers. In Atlanta the business man's day begins early, before 9 o'clock in the morning, and seldom ends before 6 in the evening. The siesta observed in some Southern cities, where business is suspended between two and four in the afternoon, is not known, luncheon being usually taken early, seldom after two o'clock.

The centre of the city is occupied by the principal shopping thoroughfares and by a number of very tall buildings in which most of the commercial and financial business of the city is transacted. The city is supposed to be laid out on a regular plan having as its features concentric circles joined by radii, but it is very difficult to discern any such plan in actuality. Two or three of the main streets are long and straight, but otherwise there is little regularity. Some of the residential districts of Atlanta are very attractive. As a rule there is an abundance of trees, while the Southern style of domestic architecture is distinguished by a pleasing freshness and light elegance. There is no other city or town near Atlanta competing with it as a residential centre for its wealthiest citizens, and Peachtree Street, a long, handsome and fashionable thoroughfare, contains a number of residences both expensive and tasteful. In strong contrast to the well-kept appearance of the Peachtree Street quarter of the city, however, are two industrial districts, one near the large cotton mill in the south of the city, and the other near the cotton and furniture factories of the north-east. These bear evidence to Atlanta's character as a manufacturing city, as distinct from its importance as a commercial and administrative centre. The city here has an untidy and depressing appearance; the houses are for the most part poor and often squalid, and the roads are rough and ill-paved. The arresting features in these districts are the factories and railway sidings: the dwelling houses are merely incidental, grouped about on plots wherever there is room. The coal used in Atlanta is a soft bituminous product chiefly from the Alabama fields. This yields a good deal of smoke, which is accountable for much of the dirt in the manufacturing portions of the city.

In the city as a whole the streets are of fair width. The main streets are laid with asphalt or stone setts, while the less frequented and residential thoroughfares are macadamised or not paved at all. There are a few parks or open spaces, the best of which are restricted to white people, but the city cannot be said to be well provided for in this respect. The parks are not easily accessible, except by car, to the great bulk of the working-class population.

Atlanta possesses a complete and efficient trolley car system. Within the city itself and for some distance beyond there is a uniform fare of $2\frac{1}{2}d.$ The pleasant little town of Decatur, some six or seven miles from Atlanta, can be reached for this fare. Buckhead and Eastpoint are also about the same distance from Atlanta and within the $2\frac{1}{2}d.$ zone. The farthest point accessible by trolley car is Marietta, a small town about 20 miles distant, from which the line of the Alleghany range can be seen. The fare to this terminus is $1s. 5\frac{1}{2}d.$ The car lines, as well as the gas and electric lighting undertakings, are controlled by private enterprise.

The water supply, taken from the Chattahoochee River, is owned by the city. A minimum charge of $2s. 6d.$ per month is made for every house supplied, this entitling the user to 5,000 gallons, a quantity not often exceeded by working-class households. For each additional 833 gallons $5d.$ is charged. A modification of the charges is made where there are two or more dwellings under one roof, each let at not more than $5s. 9d.$ per week: the whole building is then charged as one house, the limitation as regards quantity still, of course, applying. This is of some importance in considering the subject of working-class housing in the city.

The sanitary administration of Atlanta is under the care of a Board of Health consisting of the Mayor and of citizens elected by, but not from, the City Council, one citizen being elected for each of the nine wards. About half of the members of the Board are usually medical practitioners. The Board maintains two departments, the Health Department and the Sanitary Department. The first is in charge of a medical man and is concerned with the isolation of infectious diseases, the remedying of various defects in houses, and the supervision of slaughter-houses and dairies. The Sanitary Department is in the

charge of a chief Sanitary Inspector, and is concerned mainly with the removal of house garbage, the cleansing of streets, &c. and the supervision of houses with regard to nuisances arising more particularly from filth and neglect than from defects of drainage, &c. There is no regular system of house inspection, and in the poorer districts of the city broken pipes, sodden earth and accumulations of rubbish give evidence here and there of insufficient supervision.

Some indication of the health of the city is furnished by the following statistics, in regard to which it must be remembered that about 40 per cent. of the population consisted of coloured persons :—

| Year. | Race. | Number of Deaths. | Number of Deaths under One Year. | Number of Deaths from Tuberculosis. |
|-------------|--------------|-------------------|----------------------------------|-------------------------------------|
| 1904 | White ... | 1,053 | 198 | 115 |
| | Coloured ... | 1,253 | 261 | 165 |
| 1905 | White ... | 1,128 | 232 | 108 |
| | Coloured ... | 1,206 | 240 | 171 |
| 1906 | White ... | 1,182 | 192 | 111 |
| | Coloured ... | 1,299 | 217 | 161 |
| 1907 | White ... | 1,275 | 220 | 114 |
| | Coloured ... | 1,258 | 207 | 114 |
| 1908 | White ... | 1,076 | 164 | 113 |
| | Coloured ... | 1,031 | 190 | 114 |

Owing to doubt in regard to the aggregate population figures, the rates yielded by the various numbers in the above Table are not very conclusive. It is clear, however, in view of the fact that the negroes constitute only about 40 per cent. of the total population, that the mortality among the coloured race is very much heavier than among the white, and the infantile mortality is probably very excessive. In studying the mortality figures for the negroes and whites respectively, however, it must be remembered that there is not merely a difference of race, but also, on a general view, an important difference of economic standing, the coloured section of the population being almost identical, as mentioned above, with the unskilled labouring class, whose low standard of living is the result, in part at least, of a condition of relative poverty, and is not wholly due to any disregard of the laws of decency and health peculiar to the race. Vital statistics relating almost solely to the lower section of the population in a large city would always compare unfavourably with those for the more prosperous section, or for the city as a whole.

Some account of the system of local taxation in Atlanta may be usefully given. There are two taxing authorities, namely, the city, which is concerned almost solely with its own finance, and the county, which collects on behalf of the State as well as itself. Both authorities levy a tax on real and personal property. Realty is charged nominally on its full value, personalty on the basis of 60 per cent. of its value as declared in the statements required of the tax-payers. In the city the realty which was assessed in 1908 amounted to £35,178,414, and the personalty to £5,995,717. It will easily be inferred that in practice the incidence of the tax on realty is much heavier than on personalty. Not only is personalty taxed on a lower basis of assessment and subject to a number of statutory exemptions, *e.g.*, bonds of the United States Government, but it is clear that the ease with which personal property can be under-valued or concealed has a very powerful effect on the yield of the taxes, and places real property in a relatively unfavourable position. This relative disadvantage at which real property stands must have an important effect upon rentals, since an investor would certainly take into consideration the fact that real property cannot, and personal property can, to some extent at least, escape, and he would not select the former unless he saw his way clear to a return that would compensate him for this difference. The rate of tax on property levied by the city in 1908 was $1\frac{1}{4}$ per cent.

The city taxes also comprise an annual tax for sanitary purposes of 12s. 6d., levied on each house, and paid as a rule, in the case of working-class property, by the landlord. There is a poll or street tax of 4s. 2d. payable by all men between 21 and 50 years of age, except those who are infirm, those who served in the Confederate Army, those at present serving as soldiers and those professionally engaged as clergymen or preachers. There is also an elaborate code of licence duties for businesses of various kinds.

In the county a combined property tax is levied for State and county purposes, the rates being 0.5 per cent. for the State and 0.65 per cent. for the county. Realty is assessed at the full declared value as for the city; personalty is charged at three-fourths

of the amount assessed by the city, *i.e.* $\frac{3}{4}$ of 60 per cent. of the declared value. The city assessment is taken in both cases as the basis for the county assessment, though the collection of the two sets of taxes is kept quite distinct.

Though there is no statutory exemption for personal property below a certain value, in practice persons of very small means are not assessed, and it is probable that as regards the bulk of the working classes the only tax *directly* borne by them is the poll tax, and even as regards this tax there are, without doubt, a number of evasions, especially among the poorer coloured people. A person owning house property, however, no matter how small his total means, would be assessed.

The authority for poor relief in Georgia is the County. Fulton County—in which Atlanta is situated—maintains a poor farm seven miles from the city. Relief is in practice confined to the aged, though any person showing himself or herself to be without means would be relieved. Relief consists of food, clothing and shelter at the farm. There is nothing disciplinary in the treatment, the mode of relief being roughly analogous to that of charitable almshouses. Some of the women sew and some of the men work in the garden. Practically all the vegetables, etc., required by the institution are grown on the farm, but not by the labour of the inmates; the labour principally employed is that of coloured women convicts. The number relieved remains pretty constantly at about 75—men and women. Though the treatment is liberal, and practically no stigma attaches to the recipient of relief, but little imposition is found in practice to occur. Outdoor relief is not given in those counties where a poor farm is maintained; where deemed advisable it is usually forthcoming from the private charities of the city. In Atlanta there is an Associated Charities Bureau working on lines very similar to those followed by the Charity Organisation Society in this country. This has various activities touching the life of the poor, and is by far the most important and wisely administered agency in the city for the relief of destitution and distress. In the neighbourhood of the cotton mill in the south of the city is a small social settlement whose leaders are engaged in an unobtrusive but useful work among the mill operatives, most of whom are of the "Poor White" class.

Mention must be made of the fact that in Georgia the sale of intoxicants is prohibited by State law. In some cities of the State the enforcement of the law is very lax, and probably nowhere is it entirely effective. In Atlanta, however, a tolerable degree of rigour exists, especially with regard to the coloured population and the poorer classes generally. The well-to-do sections of the population who desire liquors have no difficulty in importing whatever they want from dealers in other States where prohibition does not obtain, this inter-State traffic being safeguarded by Federal law; but it is probable that this practice is not common among the poorer classes. Local opinion as to the moral value of prohibition differs greatly, but there seems to be a general agreement that in Atlanta it has resulted in a marked diminution of drunkenness among those who stand in the greatest need of this sort of safeguard. With the prohibition law the "saloon" has not, however, entirely disappeared. It still remains both for the coloured and white people, selling, however, only "near beer," a beverage with so small a percentage of alcohol that it is permitted by law to be sold as non-intoxicating. In appearance and taste it resembles the genuine article. Probably some surreptitious trade in stronger drinks goes on in some of these "near beer" saloons, but vigilant control is exercised by the police over the "coloured" saloons. The Southern white man everywhere shows great nervousness about the negro who has a fondness for whisky.

Atlanta is the seat of an important coloured University. The fees are very moderate, and most of the students partly pay their expenses by doing work on the college grounds. The University has a faculty consisting of both coloured and white professors, and differs from the better known institutions of Hampton and Tuskegee by the smaller emphasis which it lays upon manual and industrial training. Atlanta University stands rather for culture than for technical instruction, and has for one of its chief aims the training of those who are themselves to take the lead in the movement for higher education among the negroes. Most of the graduates become teachers or enter the professions.

There is also in the city a large and well-equipped Technical School for white students.

OCCUPATIONS, WAGES AND HOURS OF LABOUR.

The native of Atlanta commonly attributes the prosperity of his city to the variety of its interests and manufactures. This variety is chiefly due to the geographical position occupied by the city, the metropolitan character of which has already been described.

The following Table, based on the Federal Census of 1900, shows the distribution of the working population among various occupational groups :—

Number of Persons of 10 years of age and over engaged in Occupations in Atlanta in 1900.

| Occupations. | Males. | Females. | Total. |
|---|--------|----------|--------|
| Building | 2,193 | 3 | 2,196 |
| Metalworking and Engineering... | 1,265 | 1 | 1,266 |
| Cotton | 430 | 480 | 910 |
| Other and not specified Textile... | 133 | 120 | 253 |
| Boot and Shoe Making | 202 | 1 | 203 |
| Clothing | 208 | 1,705 | 1,913 |
| Woodworking and Furnishing | 530 | 8 | 538 |
| Paper and Printing | 386 | 203 | 589 |
| Food, Drink and Tobacco | 473 | 72 | 545 |
| Other Manufacturing and Mechanical Pursuits ... | 1,399 | 73 | 1,472 |
| Trade and Transportation | 11,238 | 1,023 | 12,261 |
| Labourers (not otherwise specified) | 2,702 | 70 | 2,772 |
| Professional, Domestic and Personal Service and } Agricultural Pursuits. | 4,712 | 11,170 | 15,882 |
| All Occupations | 25,871 | 14,929 | 40,800 |

An interesting feature of the above Table, and one which is important as indicating the character of the city, is the large number engaged in professional, domestic and personal service. This represents nearly 39 per cent., a proportion the significance of which is best understood when it is compared with the number similarly employed in some purely manufacturing city. In Fall River, for example, the number included in 1900 in the occupational group mentioned represented less than 10 per cent. of all workers.

Among the large number of manufactures in Atlanta the following are of special importance: cotton yarns and cloth, chiefly of the cheaper grades, overalls, furniture, bedsteads, spring mattresses, carriages, machinery and various manufactures of iron, fertilisers and chemicals, confectionery and medicines. Cotton manufacture is represented in Atlanta by two very large mills, which had their origin as country mills, but have now been absorbed by the city. The cotton industry derives importance also from a considerable number of mills outside but in the neighbourhood of the city. These, though not urban, have been taken into consideration in ascertaining wages; and as they are typical of the cotton mills which are scattered over so large an area in the South they may be briefly described.

The mill village is frequently very isolated and is usually a self-contained little community. All the cottages are owned by the proprietor of the mill and are occupied only by his workpeople and their families. The village shop also is often the property of the mill owner, the use of money being reduced to a minimum by the customers having the cost of their purchases set off against their wages. The operatives' cottages, with the deep porches typical of the South, are usually attractive in appearance, and the general aspect of the whole village is picturesque. Inside, the houses are fairly commodious, and, as a rule, there is plenty of ground available for those who are willing to till it outside the long hours of work. The working force of the cotton mills in and around Atlanta is composed almost entirely of the native or "Poor White" element. Between these "Poor Whites" and the negroes there is little sympathy, and the latter are only employed in the yard and in a very few distinct departments, where they do not as a rule come into contact with the white operatives. In the mill village the negroes have their own quarter, and as a rule their shanties compare very unfavourably in appearance and accommodation with the cottages of the whites. This description of the mill villages only applies to those at a distance from a city, and it is not to be taken as true of the clusters of cottages around the two cotton mills in Atlanta itself. Certainly, the merit of picturesqueness can no longer be claimed for these; as regards one of them, indeed, the cottages are of marked ugliness. The self-contained character of the settlement has also, to a large extent, been lost.

The "Poor White" class, as that term is applied to the white people of the South who drift into the cities and the cotton mills from the country districts, form a fairly distinct element in the population. Whatever their potentialities may be, and it is sometimes claimed that they are great, they bear at the present time, as represented by the

operatives in the cotton industry, all the marks of a previous generation which was unable, as a poor and non-slave-holding class, to command the respect of either the white or the coloured people. Many of them have come from the hilly regions in the north of the State and the Carolinas, and their exclusiveness and somewhat suspicious turn of mind give evidence as much of a solitary life among the mountains as of their unfortunate social position. The men belonging to this class of "Poor White" as a rule can easily be identified by their tall and gaunt appearance, their high cheek bones and their lank black hair and sallow complexion. Usually their families are large. Their children are sent to work early; as soon, in fact, as the law permits, or evasion seems safe. But little ambition is shown to educate children to occupy positions superior to those of their parents, and without doubt the presence of young children in the mills—sometimes a matter of considerable scandal—has in the past been due much more to the people themselves than to any special preference on the part of the employers for immature labour. Generally speaking, it is not usual for a married woman whose husband is at work to seek employment also in the mills, though many instances occur where a woman will prefer to work in the mill, and to employ someone to attend to her home and children, rather than concern herself with house-work. Among the women of the "Poor White" class around Atlanta there are, indeed, few signs of house pride. In most homes the furniture is scanty and poor, but even so it is seldom arranged with an eye to securing the best effect. The neat white and green cottages of the country mills invite an internal cleanliness and tidiness that is seldom forthcoming from the tenants. Probably the poor appearance of the homes is also largely due to the disposition which the people show to move from one locality, or one mill, to another at short intervals. This vagrant tendency is the cause of a good deal of inconvenience to the mill-owners, but it appears to be deeply rooted and it asserts itself often in spite of special inducements made to the operative to remain.

So far as could be observed, the mill owners were usually fairly solicitous for the well-being of their workpeople, and much is doubtless done by the better employers to relieve cases of distress and to make the lives of their employees as comfortable as their economic position permits. The proprietor of one small mill always insisted that the doffing boys should spend the intervals between their rounds out-of-doors, forbidding them to stay in the mill in their idle moments. Reading was allowed but was restricted to approved boys' books, which were supplied by the employer, in the hope that they would take the place of more sensational literature. The same employer made it a condition that every family coming to work in his mill should buy a cow, the money for the purpose being advanced on very easy terms, and the grazing being found free. He held it of the greatest importance that a family with children should have a good supply of milk. These may be small matters, but they indicate the spirit governing the dealings of the better disposed employers with their workpeople.

The mill operatives do not show a strong tendency to organise into effective unions, even where, as in the case of Atlanta itself, the operatives of one mill are not isolated from those of another. About twelve or fourteen years ago a strike occurred at one of the large mills in Atlanta owing to the employment of some coloured women in one of the departments, and largely through the efforts of a somewhat gifted organiser, a printer by trade, a Union was formed. The strike was successful and the Union continued for a few years. A second but ill-advised strike occurred as the result of some other dispute, and this ended disastrously for the workers. The Union then disappeared and no other organisation has since arisen.

The cotton industry in and around Atlanta is confined almost entirely to knitting yarns, plain and coarse goods such as duck, sail cloth and sacking. Most of the looms used are self-acting, one of the two large mills in the city having only looms of this kind. One weaver usually attends to about sixteen or twenty 36-inch looms. The frame and ring spinners are mostly women, and to some extent minors of both sexes. The usual earnings of the spinners for a full week are from 20s. 10d. to 25s. There is no system of factory inspection in Georgia. The sanitary arrangements are within the purview of the local sanitary authorities, and in the city the supervision from this source is presumably sufficient. The country mills, however, are seldom or never visited by a public official, and the arrangements with regard to light, ventilation and sanitation are good or not according to the enlightenment of the employer. The safety appliances around the machinery and the safeguards against fire are periodically inspected by officials of the insurance companies with which the employer may have protected himself.

The fertiliser industry in Atlanta has arisen in response to the demand coming from the cotton areas of the South. The factories in the city and neighbourhood are for the most part branches of larger concerns, including some of the Chicago meat companies.

The labour employed is, with the exception of the supervisors and a few professional men, almost entirely that of unskilled coloured men.

The building trades are on the whole effectively organized. In all the branches the minimum rates of pay agreed to by the unions appear to be either paid or exceeded. About three-quarters of the bricklayers are coloured men, but the majority of the carpenters are whites. In these two trades separate unions or "locals" exist for each race. Nominally the same rates of wages are paid for both white and coloured labour in these trades in Atlanta, but most employers maintain that the average efficiency of the coloured workmen is less than that of the white, and that the predominant wages of the two classes of workmen therefore differ slightly in favour of the white. One large employer, however, held that the mulatto as a bricklayer had a value exceeded by no one, and in his own case the highest paid workmen were the "near whites," as the octoroons and others of mixed blood are often locally called. Among the coloured people themselves, even those who are intelligent and well educated, the view is commonly held that discrimination is shown against the coloured artisan, and that though his work may be better than that of his white colleague his wages are less, solely on account of the fact that he is coloured. Casual instances which appeared at first sight to be conclusive were occasionally cited, but no convincing evidence that this practice existed on a considerable scale was forthcoming. Such evidence, it is clear, would be very difficult to obtain, turning as it does upon the value of the individual workman to his employer. Upon that subject no one but the employer himself could speak authoritatively, and the employer who confessed to discriminating between his workmen solely on account of their colour would be possessed of an exceptional degree of candour. Generally the charge is made by the coloured people and repudiated with some indignation by the white employers.

With regard to other branches of the building trades it may be mentioned that plumbers are practically all white and plasterers practically all coloured.

In the machine shops the skilled labour employed is white. The machinists are well organized so far as the railway shops and the smaller repair shops are concerned, but in the large machine manufacturing shops a good deal of non-union labour is employed. The ironmoulders are well organized in the stove manufacturing shops, but not in the machine shops; in the former they work under a trade agreement. The blacksmiths are strongly organized.

The printing trades are well organized in the newspaper offices, and in most of the job offices, though two firms of considerable size and importance employ non-union labour. The Typographical Union is probably the strongest in the city as regards membership. Agreements are made with the employers, providing among other matters for the arbitration of all disputes.

Other important trade unions, besides those mentioned, which have agreements are those of the coppersmiths and tinsmiths, the tailors and the garment workers.

The following Table shows the predominant weekly wages and hours of labour for adult males in various occupations. The particulars relate to white men, except as regards bricklayers and plasterers, who are mainly coloured, and as regards first-coat varnishers in the furniture trade, furnacemen and mixers in fertiliser manufacture, paviors, scavengers, road sweepers and unskilled labourers generally, almost all of whom are coloured men.

Predominant Weekly Wages and Hours of Labour of Adult Males in the Principal Occupations in February, 1909.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|--|---------------------------|-------------------------------------|
| <i>Building Trades:—</i> | | |
| Bricklayers | 90s. to 101s. 3d. | 54 to 60 |
| Carpenters | 61s. 11d. to 75s. | 54 „ 60 |
| Plasterers | 90s. | 54 |
| Plumbers | 90s. | 54 |
| Structural Iron Workers | 90s. to 101s. 3d. | 54 |
| Painters | 61s. 11d. to 68s. 9d. | 54 to 60 |
| Hod Carriers, Bricklayers' and Plasterers' Labourers | 30s. „ 31s. 3d. | 60 |
| <i>Foundries and Machine Shops:—</i> | | |
| Ironmoulders (not including Stove Moulders) ... | 62s. 6d. to 79s. 11d. | 59 to 60 |
| Machinists | 61s. 6d. „ 81s. 3d. | 59 „ 60 |
| Patternmakers | 68s. 9d. „ 86s. 1d. | 59 „ 60 |
| Labourers | 27s. 6d. „ 31s. 3d. | 59 „ 60 |

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|---|---------------------------|-------------------------------------|
| <i>Stove Works :—</i> | | |
| Stove Moulders... .. | 104s. 2d. | 51 to 54 |
| Stove Mounters... .. | 83s. 4d. | 51 „ 54 |
| Labourers | 31s. 3d. to 43s. 9d. | 54 |
| <i>Gins and Agricultural Implements—Woodworking Department :—</i> | | |
| Carpenters | 56s. 3d. to 68s. 9d. | 59 to 60 |
| Painters | 43s. 9d. „ 62s. 6d. | 59 „ 60 |
| Labourers | 25s. „ 31s. 3d. | 59 „ 60 |
| <i>Cotton Industry :—</i> | | |
| Picking Room Hands | 25s. to 30s. | 60 to 66 |
| Card Grinders | 31s. 3d. „ 41s. 8d. | 60 „ 66 |
| Slasher Tenders | 37s. 6d. „ 45s. | 60 „ 66 |
| Loom Fixers | 43s. 9d. | 60 „ 66 |
| Weavers | 37s. 6d. to 41s. 8d. | 60 „ 66 |
| Slubbers | 31s. 3d. „ 37s. 6d. | 60 „ 66 |
| Labourers | 25s. „ 31s. 3d. | 60 „ 66 |
| <i>Furniture Making :—</i> | | |
| Cabinetmakers | 45s. 10d. to 50s. | 60 |
| Machine Woodworkers | 43s. 9d. „ 50s. | 60 |
| First-coat Varnishers | 33s. 4d. to 36s. 6d. | 60 |
| Second-coat Varnishers and Polishers | 43s. 9d. „ 47s. 11d. | 60 |
| Labourers | 31s. 3d. | 60 |
| <i>Fertiliser Manufacture :—</i> | | |
| Acid Chamber Men | 51s. 1d. to 72s. 11d. | 84 |
| Furnace Men | 39s. 5d. „ 51s. 1d. | 84 |
| Mixers | 33s. 9d. „ 43s. 9d. | 60 |
| Labourers | 27s. 6d. „ 31s. 3d. | 60 |
| <i>Printing and Bookbinding Trades :—</i> | | |
| Newspaper— | | |
| Hand Compositors—Night work | 83s. 4d. to 91s. 8d. | 48 |
| Machine Compositors—Night work | 100s. „ 125s. | 48 |
| Book and Job— | | |
| Hand Compositors | 75s. | 48 to 54 |
| Machine Compositors | 93s. 9d. to 100s. | 48 „ 54 |
| Bookbinders | 70s. 10d. | 54 |
| <i>Baking :—</i> | | |
| First Hands | 66s. 8d. to 83s. 4d. | 58 to 60 |
| Second Hands | 50s. | 58 „ 60 |
| Labourers | 20s. 10d. to 31s. 3d. | 58 „ 60 |
| <i>Public Services :—</i> | | |
| Street Construction, Paving and Cleaning (Municipal)— | | |
| Paviors | 37s. 6d. | 51 |
| Paviors' Labourers | 31s. 3d. | 51 |
| Road Menders | 50s. | 51 |
| Scavengers | 27s. 6d. | 57 |
| Road Sweepers—Machine | 31s. 3d. | 57 |
| Drivers | 39s. 7d. | 51 |
| Water Works (Municipal)— | | |
| Labourers | 25s. to 31s. 3d. | 60 |
| Gas Works (Company)— | | |
| Gas Stokers | 42s. | 84 |
| Labourers | 27s. 6d. to 38s. 6d. | 60 to 84 |
| Electric Light and Power Works (Company)— | | |
| Linemen | 72s. 11d. | 53 |
| Wiremen | 68s. 9d. | 60 |
| Electricians | 68s. 2d. | 56 |
| Stokers | 33s. 2d. | 56 |
| Labourers | 28s. 4d. to 37s. 6d. | 53 to 60 |
| Electric Tramways (Company)— | | |
| Motormen and Conductors | 73s. 4d. | 80 |

Taking wages at New York as the base, = 100, in each case, the wages index numbers for Atlanta are—building trades, skilled men 79, hod carriers and bricklayers' labourers (negroes) 45; foundries and machine shops, skilled men 87, unskilled labourers (negroes) 70; printing, hand compositors (job work) 86.

It has already been stated that there is no system of factory inspection in force in Atlanta. In 1908 a committee, consisting of the Health Officer, the Building Inspector and a number of women, was appointed by the Mayor to investigate "The alleged failure of employers of women and children to furnish proper sanitary service and sufficient heat." In addition to the exact terms of reference the committee took within the scope of its investigation a number of other subjects such as "welfare work," protection from fire, etc. As regards protection from fire, the committee found that 804 women out of a total of 3,083 employed in the 50 establishments covered by the investigation were inadequately provided for in the event of an outbreak.

The daily hours of work for women were found to be as follows:—Printing and overall establishments $8\frac{1}{2}$, hat and millinery establishments 9, shirt, paper-box, candy and cracker establishments 10, laundries $10\frac{1}{2}$, textile mills 11. These figures were exclusive of intervals for meals, &c.

As regards sanitation the committee found that in the 50 establishments 34 of the sanitary conveniences were more or less unsatisfactory. Electric or belt fans were found to be provided in 19 factories, while iced or ice-cooled water was provided by all. In five establishments separate rest or lunch rooms were provided for the employees. The two telephone companies, each employing a large number of girls and women, served hot coffee, and furnished a stove for the heating or preparation of lunches, as well as a dining room.

Among the recommendations of the committee was one urging the passage of a State Birth Registration Act which incidentally throws light on a common local view with regard to the law relating to the employment of children: "While we were unable to prove definitely that the State law regarding the employment of child labour was being violated we were extremely doubtful whether certain children observed were of legal age for employment. We were assured that their parents had filed affidavits to that effect, but we feel that we have reason to urge the passage of this law." The committee also recommended the appointment of a paid inspector for shops, public buildings and factories.

It may be added that the legislation in regard to the employment of children in manufacturing establishments in Georgia provides that no child may be employed who is under ten years of age. A child upwards of ten years of age may be employed if its father is dead or incapacitated and the earnings of the child are necessary for the support of the family. Any child upwards of twelve years of age may be employed provided that such child spends not less than 90 days in the year in school. Children fourteen years of age may be employed unconditionally. Although educational restrictions are imposed upon the employment of children, education is not compulsory. Free schools exist both for the white and the coloured population, but attendance at them is optional. Among those who have most to gain from the schools there is the least appreciation of them. While most of the city children of school age are nominally in attendance, the duty of sending them rests lightly upon many of the parents, and there is a good deal of irregularity.

HOUSING AND RENTS.

In Atlanta working-class houses exhibit very great variety in appearance, size and general desirability. It is seldom that a line of more than half a dozen houses quite uniform in structure is found. Local sentiment, in fact, is strongly against rigid uniformity, and the half-contemptuous expression "candy house" is sometimes to be heard applied to a dwelling that is too much like its neighbours on either side.

Working-class dwellings are scattered throughout the whole of the city. With the exception of the two cotton mill colonies, and a district lying in the north-west of the city, there is no area of considerable size that can be regarded as exclusively working class. Similarly there are no large districts occupied by coloured people. Portions of certain streets and clusters of houses here and there can be pointed to as accommodating only coloured occupants, but in no case would it be necessary to traverse more than a few yards in order to come again to the dwellings of the other race. In many cases the wife or daughter of a coloured workman will be employed as a servant or washer-woman by some white family, and as by long established custom, going back to the slavery days, a coloured servant never "sleeps in," common considerations of convenience have led to the servants usually having their dwellings not far from their employers' residences. Consequently there are few parts of the city without their little groups of coloured shanties.

The standard of housing among the negroes is in general much lower than among the whites. This is not entirely accounted for by the fact that the former occupy on the whole a lower economic and material position. It remains true even when the

comparison is made between workmen of similar grades and earnings. There are, of course, exceptions to this general rule. In many instances a negro home represents a high degree of cleanliness and comfort, and there are many houses occupied by white people where the opposite is true. The broad fact certainly emerges, however, that the desire for spacious and healthy dwellings is not yet common to the negroes as a class. In this connexion some allowance must be made for the fact that even where a negro family desires to rent a modern and well-equipped dwelling it is not always easy to do so. Property owners are generally averse from allowing dwellings to pass from the occupancy of white to that of coloured families. Such a change is final and irretrievable, and as a rule takes place only in the case of property which for some reason or other is deteriorating and cannot continue in the hands of the whites. The difficulty has its bright side for the coloured people, since escape lies through the purchase or building of houses by negroes themselves, and it is said that in the case of the better class negro workmen thrift has been largely encouraged by this fact.

The typical dwellings of the coloured people contain two or three rooms. Local custom calls the whole building under a single roof a "house," and according to this definition the two-roomed dwelling is usually only half a house. It has its own separate entrance, however, and according to English usage should be described as semi-detached. It consists of one story, built of wood on brick piles. As a rule in the case of two-roomed dwellings there is no entrance lobby, the front room being entered direct from the street. A water supply is seldom provided in the house. A standpipe is placed in the yard and usually serves a number of dwellings. The sanitary conveniences are also grouped together in the yard and shared in common by several tenants. The yards attached to a group of these dwellings are not as a rule fenced off. In many instances the houses look as though built upon a piece of waste land, with all its inequalities unlevelled, and the yards of the houses are often not to be distinguished from the surrounding plots. The practice of building these little "shacks" on brick piles dispenses with the need for a specially prepared foundation.

The three-roomed dwelling shows greater variety, but usually is similar to the type previously described, with a small separate kitchen added. It is with houses of this type, however, poor as they sometimes are, that the first attempts at some exterior attraction in the shape of a stoop or porch, and some additional convenience inside, such as a hall or passage, are to be seen. In many cases, but by no means in all, a water supply is provided in the house. Gas fixtures and an indoor sanitary convenience are rare.

Four-roomed houses for coloured people of the working class are not typical. They are to be found, of course, but they are usually scattered, and in the occupation of families which, for some reason or other, are exceptional.

In Atlanta the flat or tenement system prevails only to a negligible extent. Practically all the white families live in houses which are detached or semi-detached. These consist in most cases only of one story, and are invariably built of wood. Though age or neglect has in many instances given a sordid and untidy air to the property, yet generally speaking the houses—even the small three-roomed cottages—are attractive in appearance with their double gables and spacious porches.

The plans of the three-roomed cottages form the basis of the plans for all the remaining types of working-class dwellings. There are two very common arrangements. In the first the house is detached and has two rooms facing the street with an entrance door between, and one room in the rear, the latter being the kitchen, which as a rule is of fair size, say 12 feet square, and is commonly used in part as a living room. With two rooms in the rear this type becomes a very popular four-roomed dwelling, the second room at the back being used as a dining room. A five-roomed house follows still the same plan; in this case there are three rooms on one side of the passage or hall and two rooms, possibly with a bathroom, on the other side. In the six-roomed house there are three rooms on each side of the central passage.

A second type of three-roomed house is built either on the semi-detached principle, in which case each dwelling is known as a half-house, or, less frequently, in short terraces when it is known as a "tenement." In either case the general plan of the house is the same, the rooms being arranged three deep from front to back. As a rule, in the case of the small three-roomed houses there is no hall or entrance passage.

There is also a second popular type of four-roomed house. In this the entrance passage is not in the middle of the house but at the side. Only one room—the parlour—faces the street. Behind this is a bedroom and behind this again is a kitchen sharing with a small dining room the width of the house.

Most of the working-class houses, single-storied and detached, would probably be spoken of in England as bungalows. The style of building lends itself to great variation as regards those details of construction that make for good appearance and convenience. Inside they are usually fairly spacious and convenient as one-family houses, and if they often appear somewhat frail and lightly put together, they are probably all that is required by the climate. The heating of the dwellings is not a problem as in the case of the working-class homes in the cities of the Northern States. The deep porch or verandah found in almost all but the very poorest houses, where the whole family may be seen sitting in the warm evenings, is a much more valued adjunct to the house than elaborate heating arrangements.

In the aggregate, a considerable number of six-roomed houses are of two stories. These have three rooms on each floor but are not a predominant type and need not be specially described.

Bathrooms are not common in houses of working-class character. The arrangements with regard to water supply and drainage vary with locality. Within the city limits which existed up to 1st January, 1909, probably 80 per cent. of the houses are supplied with water from the mains, but taking the city with its present boundaries as a whole about 66 per cent. of the houses are so supplied; the remainder derive their supplies from wells. The sanitary system of the city is for the most part water-carriage. There are, however, about 8,500 conveniences on the dry system out of a total of about 30,000.

The predominant rentals of working-class dwellings occupied by coloured and white people respectively were as follows. The figures stated include an allowance in respect of the charge for water, which usually amounted to about 7*d.* per week (*see p. 49*).

Predominant Rents of Working-class Dwellings.

| Number of Rooms per Dwelling. | Predominant Weekly Rents. |
|-------------------------------------|---|
| Two rooms—Coloured tenants ... | 3 <i>s.</i> 10 <i>d.</i> to 4 <i>s.</i> 10 <i>d.</i> |
| Three rooms— { Coloured tenants ... | 5 <i>s.</i> 9 <i>d.</i> „ 7 <i>s.</i> 3 <i>d.</i> |
| { White tenants ... | 5 <i>s.</i> 9 <i>d.</i> „ 8 <i>s.</i> 3 <i>d.</i> |
| Four rooms—White tenants .. | 8 <i>s.</i> 2 <i>d.</i> „ 12 <i>s.</i> 7 <i>d.</i> |
| Five rooms—White tenants ... | 12 <i>s.</i> 0 <i>d.</i> „ 17 <i>s.</i> 11 <i>d.</i> |
| Six rooms—White tenants ... | 17 <i>s.</i> 11 <i>d.</i> „ 19 <i>s.</i> 10 <i>d.</i> |

The ranges quoted above are in all cases intermediate. Accommodation can be obtained at rentals above or below the limits indicated, the entire range of rentals being very wide. All that is signified by the American term “location” has almost as powerful an influence in determining rents as the number of rooms or nominal accommodation.

The level of rents at New York being represented by 100, the rents index number for Atlanta is 76.

RETAIL PRICES.

There does not appear to be in Atlanta any one well recognised shopping centre for the white working-class people. The largest shops in the city are near the centre, but such shops are not generally for the sale of food; they are rather the large dry goods, tailoring and furniture establishments. The working-class housewife appears as a general rule to do her marketing near her home, and most of the trade with the poorer classes is done by the somewhat small local shops, rather than by large central shops working entirely on a cash basis, such as are found in some cities.

For the coloured people, however, there is a well recognised shopping thoroughfare—Decatur Street—and on Saturday nights this is closely crowded with coloured people of the poorer class. The negro has not yet proved himself to be a successful shop-keeper, and in this street practically all the shops, though doing a trade exclusively among the coloured people, are nevertheless kept by whites, a large proportion of whom appear to be Jews and other foreigners from Europe. Interspersed with the shops are several saloons and moving picture theatres for coloured people. Apart from the shops in this street there are comparatively few shops having an exclusively coloured custom, for the coloured people are not segregated in large colonies, and retail shops are among the few places where the coloured people and the whites may both appear on something like equal terms.

Groceries and other Commodities.

Among the working classes, white granulated is almost the only kind of *sugar* in ordinary use. The price varies considerably with the quantity taken; at one shop, for example, 1 lb. cost 4*d.*, 2 lb. cost 7½*d.* and 16 lb. 4*s.* 2*d.* 4 lb. for a quarter-dollar (1*s.* 0½*d.*) is a very usual price.

In addition to, or as a substitute for, ordinary *bacon*, unsmoked dry-salted pork called "white meat" is largely used. It is cooked in the same way as ordinary bacon.

"Renovated" *butter*, that is, re-churned butter, has a sale among the working classes. It is about $2\frac{1}{2}d.$ per lb. cheaper than the ordinary or "Creamery" butter. Margarine has practically no sale.

In regard to *bread* a uniform price of $2\frac{1}{2}d.$ per loaf obtains, but great variation is found in the weight of the loaves. In February, 1909, the maximum weight was 16 oz., and 12 to 16 oz. may be regarded as the limits within which the weight usually varied.

Milk is usually sold at $6d.$ per quart. At some dairies the practice prevails of selling a certain number of tickets for a dollar (4s. $2d.$), each ticket entitling the customer to a stated quantity of milk. The city regulations prescribe that all milk for sale must be kept at or below a temperature of 50° F. Every dairy must have a licence from the Board of Health. Two inspectors are employed to visit all dairies that supply milk to the city, and one inspector is employed to visit retail shops, to take samples and see that the regulation regarding temperature is being complied with. The bulk of the city's milk supply comes from an area within seven or eight miles of the city, and it is said that none comes from a distance of more than fifty miles.

Bituminous *coal* of the quality usually preferred by the working classes is sold retail at an almost uniform price of 18s. $9d.$ per ton of 2,000 lb., or 5s. $2\frac{1}{2}d.$ per quarter-ton. Superior qualities are sold at 20s. $10d.$ and 22s. $11d.$ per short ton. A considerable quantity of coal is hawked through the streets or sold at some grocery shops at 1s. $0\frac{1}{2}d.$ per bushel of about 80 lb. The coal is mainly from the fields of Kentucky, Alabama and Tennessee.

Coke is not used to a very large extent. It is sold at grocery shops and also by hawkers at from $5d.$ to $6\frac{1}{2}d.$ per bushel of about 80 lb. Wood in four feet lengths is sold at 20s. $10d.$ per cord.

The following Table shows the predominant prices for various articles in February, 1909:—

Predominant Prices paid by the Working Classes in February, 1909.

| Commodity. | Predominant Price. |
|-------------------------------------|---|
| Tea per lb. | 2s. 6d. |
| Coffee " | 1s. $0\frac{1}{2}d.$ |
| Sugar, White Granulated " | $3\frac{1}{2}d.$ to $3\frac{3}{4}d.$ |
| Bacon, Breakfast—Boneless " | 10d. to 1s. $0\frac{1}{2}d.$ |
| Eggs per 1s. | 10 |
| Cheese, American per lb. | 10d. to 1s. $0\frac{1}{2}d.$ |
| Butter " | 1s. 3d. ,, 1s. $5\frac{1}{2}d.$ |
| Potatoes, Irish per 7 lb. | $8\frac{1}{4}d.$ |
| Flour, Wheaten — Household " | $11\frac{1}{2}d.$ to 1s. $0\frac{3}{4}d.$ |
| Bread, White per 4 lb. | 10d. ,, 1s. $1\frac{1}{4}d.$ |
| Milk per quart | 6d. |
| Coal, Bituminous per cwt. | 1s. $0\frac{1}{2}d.*$; 1s. $2d.†$; 1s. $5\frac{1}{2}d.‡$ |
| Kerosene per gallon | 9d. |

* By the ton of 2,000 lb. † By the quarter-ton of 500 lb. ‡ By the bushel of 80 lb.

Meat.

There is no public market in Atlanta where meat is sold, and, as is usual in American cities, the sale of meat in the butchers' shops or "markets"—to use the American term—is combined with the sale of various other articles of food, usually canned goods, provisions and vegetables. Often grocery shops and meat "markets" form one establishment, groceries being sold at one counter and meat at another. The butcher's shop, with joints exposed to the outer air, so familiar in England, does not exist. Until the time of sale meat is not usually taken from the cold chest.

Practically all the meat sold in Atlanta is Western-dressed or chilled, and, on the whole, prices are fairly uniform. Among the negroes fresh pork is very popular. Wet salt pork and salt or "corned" beef are practically unknown. Dry salt pork is sold not only at the butchers' but also at the grocery and provision shops. Ham is sold sliced more often than whole.

The following Table shows the most usual prices for various cuts of meat :—

Predominant Prices paid by the Working Classes in February, 1909.

| Description of Cut. | Predominant Price per lb. |
|------------------------------|---------------------------|
| Beef :— | |
| Roasts—Round | 7½d. |
| „ Ribs prime | 7½d. |
| „ Ribs second cut | 6¼d. to 7½d. |
| „ Chuck or short ribs | 5d. „ 7½d. |
| Steaks—Round | 7½d. |
| „ Sirloin | 7½d. to 10d. |
| Flank | 3¾d. „ 5d. |
| Plate, Brisket—Fresh | 3¾d. „ 5d. |
| Mutton or Lamb :— | |
| Leg | 10d. |
| Breast | 6¼d. |
| Loin | 10d. |
| Chops | 10d. to 1s. 0½d. |
| Shoulder | 6¼d. „ 8¾d. |
| Neck | 5d. |
| Veal :— | |
| Cutlets | 10d. to 1s. 0½d. |
| Rib chops | 10d. |
| Loin chops | 10d. |
| Breast | 5d. to 7½d. |
| Pork :— | |
| Fresh—Loin | 7½d. to 8¾d. |
| „ Spare rib | 6¼d. „ 7½d. |
| „ Shoulder | 6¼d. „ 7½d. |
| „ Chops | 7½d. „ 10d. |
| Dry salt | 6¼d. „ 7½d. |

Prices at New York being taken as the base, = 100, in each case, the index number for the price of meat at Atlanta is 102, for other food it is 112 and for food prices as a whole 109. For rents and food prices combined the index number is 101.

AUGUSTA.

The city of Augusta, in the State of Georgia, is situated on the River Savannah, and is 132 miles distant from the port of Savannah at its mouth. The history of the city goes back to the year 1736, when a fort and town were erected by General Oglethorpe. Being at the head of the navigable portion of the river, it was, prior to the introduction of railroads, the natural emporium for trade over a very wide area, skins, tobacco and cotton being successively the staple articles of commerce. To-day the city ranks as the second largest inland cotton market in the world, the receipts of cotton for 1907 exceeding 360,000 bales.

The manufacture of cotton began locally in 1846 with the construction of a canal for the purpose of utilising the water power of the river. Owing to the close proximity of the cotton fields, to the cheap water power (obtainable at a cost of 22s. 11d. per horse power per annum), to the excellent transport facilities by river and railway and also to the abundant supply of cheap white labour in the agricultural districts of the vicinity, Augusta has since become the greatest cotton mill centre in the Southern States and it is commonly spoken of as "the Lowell of the South." Inventive genius has also contributed to this result, for Augusta was the home of Eli Whitney, the inventor of the cotton-gin, which revolutionised the method of handling the great staple crop of the South and made possible the later industrial developments. The first machine for cleaning wool from burrs was also invented by a resident in the vicinity, John Schley, and was first operated in a neighbouring mill. Cotton manufacture is carried on in Augusta in nine mills employing 4,394 operatives in 1908, and in four other mills in the immediate vicinity giving employment to 2,175 operatives, making the total number of operatives at the thirteen mills 6,569. Two of the Augusta mills, employing 850 and 900 operatives respectively, are large modern buildings situated on open ground, and well equipped with the latest machinery.

Seven railway systems enter Union Station and connect Augusta with all parts of the country. One of the companies, the Georgia Railroad Company, constructs in its local shops all the railway carriages and wagons required for the system, besides executing repairs to the rolling stock generally, whilst two other companies also have repair shops at Augusta. Altogether over 1,100 men are employed in railway construction and repair work. Lumber and woodworking mills, brickmaking plants and several boiler and machine shops represent the remaining industrial activities of any importance.

Augusta has the unique reputation of being a health resort as well as a cotton manufacturing centre, for lying in latitude $33^{\circ}29'$ N., it enjoys a semi-tropical climate with an average temperature of 49° F. in winter and 80° in summer, and in the former season it attracts many visitors from northern cities.

The city, which covers an area of $4\frac{3}{4}$ square miles, has a modern and pleasing aspect; it is compact and laid out in broad streets on a rectangular plan, and trees have been plentifully planted along the side walks. The main business thoroughfare, Broad Street, is nearly three miles long and has a width of 120 feet, allowing ample room for a double stream of traffic on each side of the electric car lines in the centre. At the heart of the business centre stands a marble monument commemorating distinguished generals of the Southern Army and in the vicinity of this monument are many fine blocks of offices, five and six stories high, built of light or dark coloured brick, and several banks constructed of white stone. The two largest official buildings are the Post Office and the County Court House, both imposing structures of stone. Running parallel with Broad Street is the principal residential boulevard, in which the finest of the churches are situated. Large and handsome residences, mainly of wood, with more or less ornate verandahs, give a picturesque appearance to this street.

The southern bank of the river is lined with cotton warehouses, whilst the cotton factories lie close to the canal which crosses the city diagonally.

Two suburbs occupy the slopes of the adjoining hills, one North Augusta on the northern bank of the Savannah, in the State of South Carolina, and the other Summerville to the west of the city. Both these suburbs are mainly occupied by the business and professional classes of Augusta, and by wealthy residents from other States, particularly in the case of Summerville. Electric cars connect these suburbs with the heart of the city.

The following Table shows the population of Augusta as recorded in the Census Reports for the period 1870-1910 :—

| Year. | Population. | Increase. | Percentage Increase. |
|-------------|-------------|-----------|----------------------|
| 1870 | 15,389 | — | — |
| 1880 | 21,891 | 6,502 | 42·3 |
| 1890 | 33,300 | 11,409 | 52·1 |
| 1900 | 39,441 | 6,141 | 18·4 |
| 1910 | 41,040 | 1,599 | 4·1 |

According to the results of the Census of 1900, 50·6 per cent. of the total population were American-born whites and 46·9 per cent. belonged to the negro race. Only 2·4 per cent. of the population were foreign-born whites, and only about one-tenth of the American-born whites were of foreign parentage, for Augusta has experienced no wave of European immigration like the cities of the Northern States. At the time of the construction of the local canal a considerable number of Irish immigrants were imported as navvies, and it is noteworthy that their descendants are to-day chiefly found in the ranks of skilled labour, though many are engaged in various professions and in trade. A small number of Germans, English, Greeks and Jews complete the total of those who do not belong to some older Southern stock.

The relations existing between the white and coloured races and the degree of development reached by the negro are vividly illustrated in the daily life of the city. Separate streets and districts for habitation, separate seats in cars, separate educational and religious institutions all emphasise the sharp social division of the races. Nevertheless, Augusta offers the negro population important opportunities of advancement, of which many have taken advantage. Economic conditions, such as the high rate of interest on borrowed capital, which is usually 7 per cent., and the inability on the part of employers, particularly in the building trades, to pay the high rates of wages obtaining in northern cities, have operated in favour of coloured labour by throwing open to it certain skilled and semi-skilled occupations, the remuneration in which is considerably higher than that paid for unskilled labour. Although it not infrequently happens that men of both races are engaged upon the same piece of work, there is little active industrial competition between them.

Educational and religious influences are also a powerful factor in promoting the advance of the negroes, who possess local leaders and institutions of exceptional merit. The most noteworthy of the latter are the Haines Normal and Industrial Schools, comprising kindergarten, elementary and high schools, and also a manual training department where instruction is given in carpentry, joinery, cabinetmaking, printing, bookbinding and needlework. In the high school, mathematics, science and modern languages form part of the curriculum. The Paine Institute is principally engaged in preparing students for the ministry. The general appearance of the children in the coloured schools bears evidence of parental care and of a commendable standard insisted upon by the teachers. Thrift amongst the negroes takes the form of a strong local insurance society maintained and administered exclusively by themselves. A large number are also purchasing their own homes, many of which are equal in accommodation and convenience to those occupied by more highly-paid white workmen. The coloured community produces not only its own teachers, ministers and tradesmen, but also its own doctors and lawyers.

No reliable vital statistics exist for the city. Prior to 1905 no systematic record of births and deaths was kept, and the Board of Health Report for 1904 states that up to that time all the work of the kind consisted of the registration of deaths obtained from the burial certificates filed by the keepers of the several cemeteries. Even the present system of requiring doctors to notify the Board of births does not, the report states, yield satisfactory results, owing to laxity in reporting cases and to the fact that many of the poorer people employ neither doctor nor qualified midwife at births but trust to nature and casual help, with the result that many births are not notified. Successive recent reports comment on the high rate of mortality amongst the negroes, which is represented as being almost double that amongst the whites, and attribute it to ignorance and poverty ; but they also point out that this mortality has steadily decreased during the past decade, since the negro families, almost without exception, are living better than ever before, and are more willing to co-operate with the health officers in carrying out the sanitary regulations.

The progressive negro doctors of the city are also stated to have aided the work of the Health Department in every way and to be largely responsible for the reduction of the death-rate amongst their own race.

Such figures as are available indicate that the rate of mortality from tuberculosis, like the mortality rate in general, is specially high amongst the coloured population, though the tendency appears to be downward. The Anti-Tuberculosis Society and the Associated Charities are making combined efforts to educate the community in combating this disease; they are doing useful work in this direction in the schools, particularly those of the coloured population, and are about to erect a sanatorium for the separate treatment of consumptives.

The only municipal enterprises, in addition to street cleaning, are the water supply and the supply of water power to factories by means of the canal. The gas works, electric light and power works and tramways belong to companies, while works of street construction and paving are done by contractors. The drinking water for the city is obtained from the river and passed through mechanical gravity filters. There are no cities on the river above Augusta to contaminate the water supply. The price of gas for lighting is 6s. 3d. per 1,000 cubic feet, and for cooking 4s. 2d. per 1,000 cubic feet. Slot-meters have been introduced both for lighting and for use with gas cookers, 166 $\frac{2}{3}$ and 250 cubic feet respectively being supplied for 1s. 0 $\frac{1}{2}$ d.

The Tramway Company maintains an excellent urban and inter-urban service on ten lines. A uniform fare of 2 $\frac{1}{2}$ d. is charged on the urban system and workmen's tickets are not issued. An inter-urban line runs from the centre of the city to Aiken, in South Carolina, some 23 miles distant, connecting the intermediate mill towns and winter resort hotels.

There are seven elementary schools for white children and four for coloured children, and in each case the staff consists of a male principal and female assistants. No fees are charged, but all children, save those of indigent parents, have to purchase the books required for instruction. Attendance is not compulsory; it is estimated that 60 per cent. of the white children of school age and 50 per cent. of the coloured are enrolled. The most recently built school for white children cost nearly £21,000 and is thoroughly efficient in structure and equipment; instruction in cooking is given to the girls. The children of this school are mainly from the homes of the better class mill workers and show an admirable standard as regards clothing, health and cleanliness. One high school for girls only has been provided by the educational authority, and here fees of £3 2s. 6d. annually are charged.

The State Legislature of Georgia in 1907 passed a law prohibiting the sale or the keeping of liquor throughout the State. In the case of Augusta it is difficult to estimate to what extent sobriety has been promoted by the closing of saloons, seeing that facilities still exist for obtaining alcoholic liquors in the suburb of North Augusta, in the State of South Carolina, where beer and spirits are sold by the bottle exclusively in "State Dispensaries." One of these "Dispensaries" is within a few minutes walk of the city and is extensively patronised. Within the city itself a drink known as "near beer," stated to contain less than 3 per cent. of alcohol, the limit fixed by law, is largely sold. The illicit sale of whisky is also carried on to a considerable extent in numerous "Blind Tigers," or secret drinking dens. Public opinion is to a considerable extent hostile to the prohibition law, and since it came into operation the number of prosecutions for drunkenness and disorderly conduct has not been greatly reduced, the numbers for 1907 and 1908 being 3,540 and 3,198 respectively. Local employers generally stated that they had not noticed any marked improvement in the sobriety of their workpeople, though they added that they had little or no complaint to make in this respect before the law was passed. On the other hand several house agents who were consulted said that their rents had been paid more regularly, and negro pastors testified to very considerable improvement in the habits of many of their people.

OCCUPATIONS, WAGES AND HOURS OF LABOUR.

The industry which gives employment to the largest number of workers at Augusta is that of cotton spinning and weaving. According to information supplied by the local Chamber of Commerce 4,394 operatives were employed in the cotton mills of Augusta in 1908, of which number 2,515 were males and 1,879 females (3,757 white and 637 coloured persons). A small allied industry is the manufacture of cotton-seed oil and cotton-seed oil products, in which over 300 persons are employed. Next in importance to

cotton spinning and weaving come the repairing of locomotives and the building of railway carriages and wagons, in which occupations over 1,100 employees were engaged in 1908. Two foundries and machine shops employed about 260 men. The lumber trade is carried on in several large establishments which usually employ altogether over 800 men, who are engaged in the sawing of planks and the manufacture by machinery of sashes, doors, blinds, boxes, &c., the sawing of the logs being done in the country near the lumber forests. The proximity of the timber supply and the cheap water power at Augusta have given this industry its importance and made it a source of supply for a large area. The abundance of clay of a good quality in the neighbourhood has led to the establishment of nine brickmaking plants, worked by one company, which produces over 500 million bricks annually, amongst them being a hard kind of brick specially adapted for street paving. Sewer pipes of all kinds are also made and altogether this industry gives employment to nearly 600 men.

Excluding the cotton industry, the majority of the working classes of Augusta belong to the coloured race, and unskilled labour is almost exclusively performed by negroes, whose weekly earnings range from 20s. to 25s., the latter figure being more frequent than the former. In the case of married men with families these earnings are usually supplemented by the earnings of wives and daughters, who engage themselves as cooks, charwomen and general servants in the hotels and residences of Augusta and its wealthy suburbs. These supplementary earnings tend to increase the natural aversion to continuous labour in the case of a large number of negroes, and complaints are frequent amongst employers of the difficulty of securing a full week's work from coloured labourers, even when during pressure of trade the inducement of higher wages is offered. A very considerable number, however, are engaged in skilled occupations as bricklayers and not a few as plumbers. In these occupations the increased earnings are reflected in a higher standard of living, manifested not only in dress and character of house but also in a keen desire to give to sons and daughters a high-school and even a college education.

Next in numerical importance to the negroes comes a large class of workers known as the "Poor Whites," who form the great bulk of the operatives in the cotton mills. Coming originally from the mountainous districts, where they had lived for generations as poor peasants uninfluenced by the progress of civilisation, they are as a class shiftless, ignorant and intemperate. Many of the men show a disposition to avoid work altogether and to live upon the earnings of their families, much of which they spend in drink. Even those who work in the mills are in many cases unreliable, frequently absenting themselves from work on account of their intemperate habits. Social workers find them unresponsive, yet notwithstanding their defects of character they are slowly yielding to the discipline of the mill and the social and educational influences of city life.

Female labour, so far as the whites are concerned, is mainly confined to the cotton mills and belongs to the class last mentioned. In 1908 over 1,800 women and girls were engaged in the various occupations of spinning, spooling and weaving. The earnings of girls generally run from 20s. to 30s. per week. Women ring spinners are paid at the rate of 4½*d.* per side and earn about 25s. per week; weavers' earnings vary from 25s. to 37s. 6*d.* per week.

The law of Georgia permits children over ten years of age to be employed in exceptional circumstances only, but as there is no system of factory inspection the law cannot be considered to be enforced. No figures are available as to the number of children employed between the ages of 10 and 14 years. As school attendance is not compulsory and the percentage of children of school age in attendance is, as already stated, 60 for the white and 50 for the coloured children, it is evident that abundant opportunities exist for the employment of this class of labour.

Hours of labour vary in the different industries. In the cotton mills 60 hours weekly are worked. Work begins at 6:45 a.m. and continues uninterruptedly until 12:30, when there is an interval lasting until 1:10, after which work continues until 6:15, but on Saturday work ceases at 12:35. In the railway and machine shops 59 and 60 hours weekly are worked except in the case of one of the railway companies' shops, where hours have recently been reduced to nine daily or 54 weekly. Where the ten-hour day prevails, work is carried on from 7 to 12 and from 1 to 6, or from 7:30 to 12:30 and from 1 to 6, and where the nine-hour day prevails, from 7:30 to 12:30 and from 1:30 to 5:30, except in summer, when the dinner interval is reduced by ten minutes and work ceases one hour earlier on Saturday. In the building trades the hours are nine daily (7 to 12 and 1 to 5) or 54 weekly throughout the year for most of the occupations. Carpenters and plumbers, however, work ten hours daily or 60 hours weekly, and stonecutters,

of whom few are employed in Augusta, work eight hours daily or 48 hours weekly. Men engaged in the printing trades have an eight-hour day according to their national agreement. The Saturday half-holiday is only observed in the cotton mills. The only holidays generally observed at Augusta are Independence Day (July 4), Labour Day (first Monday in September) and Christmas Day, but in addition the mills usually have a "Pic-nic Day" in May. Wages are not paid for these holidays.

In the building, engineering, and printing trades time rates of wages are paid universally, except in the case of machine compositors, who are paid piece rates. Time rates also prevail in the lumber mills and woodworking factories. The premium bonus system has not been introduced by any local firms. Piece rates are mainly confined to certain classes of cotton operatives, viz., spinners (women), slubbers (mostly men) and weavers (men and women). Only in the case of weavers do the earnings vary to any great extent, and this is due to the fact that no limit is fixed for the number of looms per operative. Automatic looms are largely in use and the most highly skilled weavers attend to as many as 20 or 24 looms each, whilst weavers of average skill superintend 16 or 18 looms. Those who run the ordinary looms tend 6 or 8 looms each. Ring spinners usually tend 6 or 8 sides.

The following Table shows the predominant wages paid to adult males and the usual hours worked by them in February, 1909. The rate stated for carpenters refers to fully skilled men, most of whom are whites; rough carpenters, who are coloured men, are paid 37s. 6d. for a week of 60 hours. Most of the bricklayers are negroes, and in the textile trades, pickers, card minders and strippers are also coloured. With these exceptions, skilled men are usually whites, while unskilled men in all trades are negroes. Brickmakers and teamsters are recruited from the coloured section of the population.

Predominant Weekly Wages and Hours of Labour of Adult Males in the Principal Occupations in February, 1909.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|---|---------------------------|-------------------------------------|
| <i>Building Trades:—</i> | | |
| Bricklayers | 90s. | 54 |
| Stonemasons | 90s. | 54 |
| Stonecutters | 75s. | 48 |
| Carpenters | 62s. 6d. | 60 |
| Plasterers | 90s. | 54 |
| Plumbers | 81s. 3d. to 87s. 6d. | 60 |
| Painters | 56s. 3d. | 54 |
| Bricklayers' and Plasterers' Labourers | 22s. 6d. | 54 |
| <i>Foundries and Machine Shops:—</i> | | |
| Ironmoulders | 68s. 9d. | 59 to 60 |
| Machinists | 68s. 9d. | 59 ,, 60 |
| Patternmakers | 62s. 6d. to 75s. | 59 ,, 60 |
| Labourers | 25s. | 59 ,, 60 |
| <i>Railway Shops (Repairs):—</i> | | |
| Machinists | 78s. 9d. to 87s. 6d. | 54 to 60 |
| Blacksmiths | 78s. 9d. ,, 87s. 6d. | 54 ,, 60 |
| Patternmakers | 78s. 9d. ,, 87s. 6d. | 54 ,, 60 |
| Platers and Rivetters | 78s. 9d. | 54 |
| Platers' and Rivetters' Helpers | 31s. 3d. | 54 |
| Labourers | 25s. | 54 to 60 |
| <i>Railway Shops (Car Building):—</i> | | |
| Coach Builders | 68s. 9d. to 80s. | 54 to 60 |
| Car Carpenters | 55s. ,, 68s. 9d. | 54 |
| Car Repairers | 37s. 6d. ,, 55s. | 54 to 60 |
| Wood Turners | 43s. 9d. | 54 |
| <i>Cotton Spinning and Weaving.—</i> | | |
| Pickers | 25s. | 60 |
| Card Grinders | 35s. to 37s. 6d. | 60 |
| Card Minders | 25s. | 60 |
| Strippers... .. | 25s. | 60 |
| Drawing Frame Tenders | 25s. | 60 |

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|--|---------------------------|-------------------------------------|
| <i>Cotton Spinning and Weaving—continued.</i> | | |
| Slubbers | 27s. 1d. to 35s. | 60 |
| Slashers | 31s. 3d. „ 37s. 6d. | 60 |
| Ring Spinners | 27s. 6d. „ 30s. | 60 |
| Mule Spinners | 29s. 2d. „ 37s. 6d. | 60 |
| Loom Fixers | 38s. 9d. | 60 |
| Weavers | 29s. 2d. to 37s. 6d. | 60 |
| Labourers | 20s. „ 25s. | 60 |
| <i>Woodworking Trades :—</i> | | |
| Band Sawyers | 62s. 6d. | 60 |
| Machine Hands... .. | 35s. to 37s. 6d. | 60 |
| Carpenters | 62s. 6d. | 60 |
| Cabinetmakers | 75s. to 87s. 6d. | 60 |
| Labourers | 25s. | 60 |
| <i>Brickmaking :—</i> | | |
| Kilnmen | 25s. | 58½ |
| Loaders | 29s. 2d. | 58½ |
| Machine Men | 31s. 3d. | 58½ |
| Shovellers | 22s. 6d. | 58½ |
| <i>Printing Trades :—</i> | | |
| Newspaper— | | |
| Hand Compositors (Night work)... .. | 90s. | 48 |
| Machine Compositors (Night work)... .. | 95s. 10d. to 104s. 2d. | 48 |
| Book and Job— | | |
| Hand Compositors | 75s. | 48 |
| Machine Compositors | 87s. 6d. to 100s. | 48 |
| <i>Public Services :—</i> | | |
| Street Construction, Paving and Cleaning— | | |
| Paviors (Contractors' Men) | 62s. 6d. | 59 |
| Paviors' Labourers (Contractors' Men) | 43s. 9d. | 59 |
| Road Menders, Sweepers and Drivers (Municipal) | 35s. | 60 |
| Water Works (Municipal)— | | |
| Labourers | 35s. | 60 |
| Gas Works (Company)— | | |
| Gas Stokers | 40s. 10d. | 84 |
| Labourers | 29s. 2d. | 70 |
| Electric Light and Power Works (Company)— | | |
| Electricians and Fitters | 62s. 6d. | 56 |
| Wiremen | 50s. | 60 |
| Labourers | 25s. to 31s. 3d. | 60 |
| Electric Tramways (Company)— | | |
| Motormen and Conductors | 41s. 8d. „ 62s. 6d. | 70 |

Taking wages at New York as the base, = 100, in each case, the wages index numbers for Augusta are—building trades, skilled men 73, hod carriers and bricklayers' labourers (negroes) 33 ; foundries and machine shops, skilled men 82, unskilled labourers (negroes) 60 ; printing, hand compositors (job work) 86.

Wages are paid monthly in the railway shops, fortnightly in the cotton mills and weekly elsewhere.

Owing to the favourable climate building operations can be carried on as a rule during eleven months of the year. Business premises and public buildings are constructed mostly of brick and nearly all private dwellings of wood, the only brickwork required in the latter case being the foundations and chimney.

In the printing trades the union scale of wages is mostly exceeded owing to the scarcity of this class of labour at present, and wages vary considerably according to the class of work done. Pressmen's helpers are often youths and in the newspaper offices automatic feeders have displaced this class of labour.

Men employed at the brick plants work there during nine months of the year only, and for the remaining three months seek employment in other directions, many of them finding work in a large fertilizer manufactory.

The earnings of weavers in the cotton mills show a wide range, as they are paid by the piece, but the wages stated in the above Table cover 75 per cent. of those

working at this occupation. The piece rate is the same for men and women and their respective earnings differ very little, the women being stated to be, on the whole, rather more industrious than the men.

Owing to the difficulty of securing suitable operatives for the skilled processes, hours are curtailed in the cotton mills in slack times in preference to discharging workpeople, and during 1908, a year of acute industrial depression, these mills were running half-time. The same custom is followed in the railway shops and other industries for the same reason.

Trade unions exist for the principal occupations in the building, engineering and printing trades, but with the exception of that of the machinists they are not strong numerically and have not effected any trade agreements. All the unions except that of the bricklayers, who being negroes maintain a separate organisation, are affiliated to a local Trades Council.

HOUSING AND RENTS.

The working-class population of Augusta is mainly housed within the city area, the two suburbs of North Augusta and Summerville being occupied almost exclusively by the well-to-do classes. As a rule workers live within walking distance of their employment. With the exception of a comparatively small number of dwellings in the alleys between Broad Street and the river, which constitute the slums of Augusta, working-class houses as a rule have an abundance of air and light and are situated in streets mostly lined with trees, which not only give them a pleasing appearance, but also afford welcome shade during the heat of summer. The negro quarters occupy the northern and southern portions of the city, whilst the "Poor Whites" live in close proximity to the mills lining the canal, which crosses the city diagonally from the north-west. The dwellings of the mechanics and better class operatives are distributed over the remaining portions of the city.

The houses occupied by the poorer section of the working-class population, mostly negroes and "Poor Whites," are primitive in accommodation and wholly lack modern conveniences, but those of the better-paid mill operatives and of mechanics reach a good standard of comfort, and in the character of their conveniences compare favourably with houses of a similar class in other cities. Working-class houses are invariably built of wood and as a rule are single-family cottages of one story resting on brick supports some three or four feet above the street level. A front verandah, reached by a short flight of steps, is a common feature of these houses, as is also a small forecourt or front garden. Houses usually stand from three to six feet apart, the intervening space serving as a passage by which to reach the plot of ground always found, with wood or coal shed and closet, in the rear. A back verandah with steps leading to the yard is also provided save in the poorest and smallest class of dwellings.

The number of rooms varies from two to five or six, excluding vestibules and bathrooms. Basements are not met with and the space between the house floor and the ground is generally left open, though often it is enclosed with lattice work and serves for storing wood. The only tenement blocks met with were erected by several mill companies for their operatives, but they are not sufficiently numerous to need separate description.

The poorer working-class families occupy dwellings of two and three rooms. These are principally situated in the two coloured districts and in the neighbourhood of the cotton mills. The most inferior dwellings of this class are found in the coloured district near the river and are of the "cabin" type. They are flimsy, unpainted structures, the woodwork of which is often in a state of decay. But for the genial climate, the dry sandy soil and the fact that the houses are raised and detached, admitting of free circulation of air and abundant light, these houses in a large number of cases would have to be classed as slums. The accommodation of two-roomed dwellings consists of a front room, entered direct from the verandah, and a back room containing a stove and used as a kitchen. The front room contains an open fireplace (in which wood is burnt) and is used both as sitting room and bedroom. The kitchen stove is the property of the tenant. Neither sink nor copper is found in any of these dwellings and the supply of water is obtained from a hydrant in the yard or in the street, serving for a number of dwellings. Yards are unpaved and the convenience is of the primitive kind called the surface closet, for the emptying of which tenants have to arrange privately, paying as a rule 5*d.* each time to the negroes who do this work. Scarcely any two-roomed houses have been built

of late years and the three-roomed dwelling is thus tending to become the typical home of the unskilled worker.

Three-roomed dwellings only differ from the foregoing in having a kitchen behind the back room. The kitchen is some three feet narrower than the back room to allow for a verandah, upon which the back room and kitchen doors open. The water-tap and sink are usually placed on this verandah. The convenience and yards are as described above. Semi-detached houses of this class are frequently met with, but the detached house predominates. Uniformity of structure prevails and differences in rent are due to situation, size of verandahs and ground and interior finish, the walls being coloured as well as plastered in the case of the more highly rented houses.

The better-paid workmen, both coloured and white, occupy dwellings of from four to six rooms; those consisting of six rooms are, however, comparatively few and not infrequently are let to two families, each occupying half the house and paying half the rent. The four and five-roomed houses form one class. They are one-storied dwellings, detached as a rule and furnished with larger and more ornamental front verandahs than those of the foregoing type. A lobby usually runs from the front, either alongside (in the case of four-roomed houses) or in the centre of the house, to the back verandah, and from this lobby all the rooms are entered. Many of the more modern houses of this class have a small vestibule instead of a lobby, in which case the rooms open into each other. Dwellings of this class are found distributed over the whole district south of Broad Street, both in the white and coloured quarters, though they are not so numerous in the latter portion of the city. The more modern houses have a sink in the kitchen and a water-closet in the back yard or in the bathroom, which, however, is not a common feature. Gas cookers are extensively used in the better-class dwellings.

There are no statistics showing the density of population in working-class districts, but observation of the prevailing conditions seemed to indicate that overcrowding does not exist to any serious extent. Furthermore, the general tendency to seek increased accommodation tends to mitigate the evils of congestion.

The dimensions of rooms vary from 9 feet by 12 feet to 12 feet by 15 feet for kitchens, and from 12 feet by 15 feet to 15 feet square for the other rooms, the second measurement being more frequent in the latter case. The usual height of rooms is 9 feet.

The following Table shows the rents most generally paid by the working classes in February, 1909 :—

Predominant Rents of Working-class Dwellings.

| Number of Rooms per Dwelling. | | | | | Predominant Weekly Rents. |
|-------------------------------|-----|-----|-----|-----|---------------------------|
| Two rooms | ... | ... | ... | ... | 2s. 11d. to 4s. 2d. |
| Three rooms | ... | ... | ... | ... | 4s. 2d. ,, 6s. 9d. |
| Four rooms | ... | ... | ... | ... | 6s. 9d. ,, 9s. 7d. |
| Five rooms | ... | ... | ... | ... | 11s. 6d. ,, 13s. 6d. |

The level of rents at New York being represented by 100, the rents index number for Augusta is 58.

These rents include the charge for water and the local taxes levied upon real estate so far as these find expression in rents. In the matter of rent there is no discrimination between white and coloured tenants, the same rent being paid for similar accommodation by both races. The proportionately higher rent in the case of the five-roomed houses is due to the fact that these houses are more frequently of modern type and construction and are generally situated in better streets, which are sewered.

The provision of houses is entirely in the hands of private speculators, no action having been taken in this direction either by the municipality or any philanthropic agencies. A considerable number of dwellings, mainly of the two and three-roomed type, belong to local industrial firms and are occupied exclusively by the poorer class of their employees. Some of them are tenement dwellings, but the large majority are detached houses of the type prevailing generally in Augusta. None have been built recently and mill workers show a tendency to prefer larger and more modern dwellings as their family earnings and standard of living improve. The rents of these mill dwellings are from 1s. 8d. to 2s. 1d. per week for two rooms and from 3s. 2d. to 4s. 2d.

per week for three rooms. During the last four years rents have shown an upward tendency owing partly to a scarcity of houses and partly to a general increase in the value of property accompanied by a rise of assessed values for purposes of local taxation. In many cases sanitary improvements have also led to an increase in rent, which mainly affects the five-roomed houses and ranges from 1s. to 1s. 5d. per week.

As a rule houses are rented by the calendar month and rent is paid in advance. A month's notice is expected on the part of either tenant or landlord and can be legally enforced; written contracts are not customary.

According to the Census Report only 16·3 per cent. of all the houses in Augusta were owned free by their occupiers in 1900, whilst 2·2 per cent. were owned encumbered, the remaining 81·5 per cent. being rented.

Sanitary inspection is carried out by officials under the direction of the Board of Health and is efficient, the Board being desirous of maintaining a good reputation for Augusta as a health resort.

Taxes are levied by the municipality on real estate and personal property, the latter including household furniture, pictures, carpets, books, watches, pianos and other musical instruments. Public assessors periodically fix the value of all real estate and of personal property. Personal property is assessed at its full value and real estate at 80 per cent. of its value. The tax-rate is $1\frac{1}{4}$ per cent. of the assessed value, and the taxes when collected are apportioned between the city, the county and the State. A poll tax of 4s. 2d. per annum is also levied on all males of 21 years of age and over.

RETAIL PRICES.

Augusta lies in the centre of a rich agricultural country, which produces, in addition to cotton, abundant crops of corn, fruit and vegetables; Georgia peaches, asparagus and melons are famous all over the States. Market gardening and poultry farming are flourishing industries in the surrounding country, and consequently Augusta is well supplied locally with most of the necessaries of life at moderate prices. The grocery and provision trade of the city is mainly in the hands of private dealers, amongst whom there is keen competition, leading to fairly uniform prices. Two company stores, which do a strictly cash business, serve the more thrifty and well-to-do people, but there are no public markets or co-operative stores. The working-class population buy almost exclusively from the family grocer, who serves them on the credit system.

There is no inspection of weights and measures, but an official visits shops where meat, milk, vegetables and fruit are sold, for the purpose of condemning all food which is unfit for consumption and of requiring the same to be sent out of the city and destroyed, the penalty for neglect so to do being a fine not exceeding £20 16s. 8d. or imprisonment not exceeding ninety days. No person is allowed to sell milk or to keep dairy cattle without having obtained from the Board of Health a licence for this purpose, which is issued on condition of a promise to obey all the regulations of the Board relating to the sale of milk and the condition of dairies and cowsheds. Violations of these regulations are punishable by a fine of 41s. 8d. or imprisonment up to 60 days. The Board's report for 1909 states that during the preceding year there were condemned 324 lb. of meat and 516 cans of tripe, 2,028 lb. of fish, 62 gallons of oysters, 8 quarts of strawberries, 1,263 cantaloupes, 2,085 lb. of bananas and 744 lb. of other fruit and vegetables.

The dietary of the poorer section of the community, the negroes and "Poor Whites," consists mainly of pork and the cereals and vegetables produced in the neighbourhood. The principal cereals in favour are rice, hominy (maize steeped in lye to remove the husk and to soften and swell the grain) and grits (coarsely ground maize), which is boiled and eaten as a breakfast cereal with milk and sugar. Maize meal is purchased more than wheaten flour and is baked at home in large flat cakes or small round ones called "biscuits," negroes especially having a fondness for hot maize bread. Potatoes, largely of the sweet variety, are an important article of diet, as are also peas and beans, the latter being boiled along with salt pork and rice. In place of tea the cheaper grades of coffee are drunk. Molasses, made from Georgia cane, are also much in favour. Beef, mutton and veal are but little bought by this class of people, and the same remark applies to fresh milk and eggs.

In the case of the mechanics and better-paid negroes, whose diet approximates more closely to that of the skilled white workmen, there is a considerable demand for good cuts of beef, mutton and veal, as also for eggs, milk and a good quality of butter and coffee.

Groceries and other Commodities.

Bread is largely baked at home, but a considerable quantity is also purchased in the form of small oblong loaves at the uniform price of 2½d. per loaf (or six loaves for

1s. 0½*d.*), all the loaves being of the same size. As flour increases in price the loaf is made smaller. The predominant weights of the 2½*d.* loaf in March, 1909, were from 11 to 13 oz., though loaves were found in some cases to weigh only 10 oz..

Tea is very much less consumed than coffee and a good quality is most in demand. *Coffee* is sold largely roasted and ground. A medium quality is chiefly sold.

Of *sugar* the kind called white granulated is most in favour. Very little loaf and comparatively little brown sugar is purchased.

Two kinds of *bacon* are sold, "white" or dry salt cured, purchased largely by the poorer classes for boiling, and "sugar-cured." Most of the supply of bacon comes from Western packing-houses.

During the season large supplies of local farm *eggs* come to Augusta, and when these are scarce their place is taken by the cold storage eggs from the Western States.

Tub or firkin *butter*, coming from the Western States, is mostly sold. A cheaper kind is known as "renovated" (*i.e.* re-made) butter. Little local "country" or farm butter is sold, as it is inferior to the other kinds. Butter substitutes are not popular with the working classes and few dealers keep them.

Irish *potatoes* come from the neighbourhood, but large supplies are also obtained from the State of Maine.

Maize meal, so largely used by the negroes and "Poor Whites," is sold at the uniform price of 1s. 0½*d.* per peck of 12 lb.

The *milk* supply is entirely local and is delivered in town by farmers and cowkeepers at the uniform price of 6*d.* per quart. Condensed milk is largely consumed by the poor.

Anthracite and bituminous *coals* are both sold, but the working-class coal is mainly bituminous. It is sold mostly by the quarter-ton (500 lb.) at the price of 6s. 3*d.* delivered. Many of the poor fetch their coal from the dealers' yards, where it is sold at 1s. 3*d.* for 100 lb. and at 1s. 0½*d.* for 70 and in some cases 75 lb. The main sources of supply are the States of Tennessee and Kentucky.

Coal consumption is not large owing to the short and mild winters. In summer, however, the heat necessitates another item of household expenditure, namely, ice, which is packed round food safes to preserve their contents. The expenditure on this is 2½*d.* per day for 12½ lb. delivered. Several coal firms manufacture and deliver ice.

Wood is principally used for cooking purposes. It is sold at the uniform price of 20s. 10*d.* per cord, but more usually in dollar (4s. 2*d.*) lots, varying from ¼ to ½ of a cord, there being no standard quantity for this sale. A "cord" is a pile of wood measuring 8 feet by 4 feet by 4 feet and is estimated to weigh from 2,400 lb. in the case of pine to 2,600 lb. in the case of oak. Coke is sold only by the local Gas Company and at the price of 10s. 5*d.* per 1,000 lb. delivered. Bags of 40 lb. when fetched cost 5*d.*

Kerosene is sold at the uniform price of 9*d.* per gallon and is largely in use for lighting.

The following Table shows the prices most generally paid by the working classes in February, 1909, for certain principal articles of food, other than meat, for fuel and for kerosene :—

Predominant Prices paid by the Working Classes in February, 1909.

| Commodity. | Predominant Price. |
|------------------------------------|--------------------------------------|
| Tea per lb. | 2s. 6 <i>d.</i> |
| Coffee " | 10 <i>d.</i> |
| Sugar :— | |
| White Granulated " | 2½ <i>d.</i> to 3 <i>d.</i> |
| Brown " | 2 <i>d.</i> .. 2½ <i>d.</i> |
| Bacon, Breakfast—Boneless " | 8½ <i>d.</i> .. 11¼ <i>d.</i> |
| Eggs per 1s. | 12 |
| Cheese, American per lb. | 10 <i>d.</i> |
| Butter " | 1s. 5½ <i>d.</i> |
| Potatoes, Irish per 7 lb. | 8½ <i>d.</i> |
| Flour, Wheaten—Household " | 10¼ <i>d.</i> to 1s. 0¼ <i>d.</i> |
| Bread, White per 4 lb. | 1s. 0¼ <i>d.</i> .. 1s. 2½ <i>d.</i> |
| Milk per quart | 6 <i>d.</i> |
| Coal, Bituminous per cwt. | 1s. 4¼ <i>d.</i> * |
| Kerosene per gallon | 9 <i>d.</i> |

* By the ¼-ton (500 lb.).

Meat.

Augusta is favourably situated with regard to its meat supply and has the second largest cattle market in the South, the major part of the cattle coming from the State of Georgia. Western packing-houses ship considerable quantities of dressed meat in refrigerator cars to Augusta. Local cattle are all slaughtered in two abattoirs, one of which belongs to a local company of butchers and the other to a private individual. A Government Inspector is stationed at each abattoir and all dressed meat coming into the city is examined. The method of cutting is as follows:—The forequarter is divided longitudinally and about equally, the whole of the lower part being in most cases termed brisket and being sold with the bone. The shin is usually sold whole at 1s. 0½d. The first six ribs of the upper half, reckoned from behind forwards, are sold as prime ribs or first cut. The remaining ribs form the chuck. The ribs are generally cut into joints of 3 to 4 lb. The upper part of the hindquarter is divided into porterhouse, tenderloin and sirloin, and is sold in steaks. The lower part is called flank but does not include the bed steak, which goes with the round. The round is cut right through in steaks and sold with the bone. The cut between the sirloin and the round is called hip roast and sells at 7½d. per lb. It fairly corresponds with English rump steak, and part of the aitchbone.

The poorer classes buy the brisket and the shin for stewing and the chuck ribs for roasting, also the shoulder clod for pot roast. The better-paid workmen buy the dearer cuts from the hindquarter, and also show a fondness for mutton and veal. Mutton, however, is not in large demand and prices vary according to the age of the sheep. The shoulder of mutton is not raised but cut through in chops as in Scotland and the North of England, leaving only the scrag end of the neck, which sells at 5d. per lb. Small mutton is cut into forequarter, loin and leg.

Meat is mainly sold in butchers' shops or "markets," as they are called, though some of the grocers sell meat also.

The usual prices paid by the working classes for meat in February, 1909, are shown in the following Table:—

Predominant Prices paid by the Working Classes in February, 1909.

| Description of Cut. | Predominant Price per lb. |
|------------------------------|---------------------------|
| Beef:— | |
| Roasts—Round | 6½d. to 7½d. |
| „ Ribs prime | 7½d. |
| „ Ribs second cut | 5d. to 7½d. |
| „ Chuck or short ribs | 5d. |
| Steaks—Round | 7½d. |
| „ Sirloin | 7½d. |
| Flank | 2½d. to 3d. |
| Plate, Brisket—Fresh | 3½d., 4d. |
| Mutton or Lamb:— | |
| Leg | 10d. |
| Breast | 7½d. |
| Loin | 10d. |
| Chops | 10d. to 1s. 0½d. |
| Shoulder | 7½d. |
| Neck | 5d. |
| Veal:— | |
| Cutlets | 10d. |
| Rib chops | 7½d. to 10d. |
| Loin chops | 7½d. „ 10d. |
| Breast | 6½d. „ 7½d. |
| Neck | 5d. |
| Pork:— | |
| Fresh—Loin | 7½d. to 10d. |
| „ Spare rib | 7½d. |
| „ Shoulder | 6½d. to 7½d. |
| „ Chops | 7½d. |
| Dry salt | 5½d. to 6½d. |

Prices at New York being taken as the base, = 100, in each case, the index number for the price of meat at Augusta is 93, for other food it is 107 and for food prices as a whole 103. For rents and food prices combined the index number is 92.

BALTIMORE.

Baltimore, the first city in Maryland, is situated upon the estuary of the Patapsco, and upon two small rivers, called Jones' Falls and Gwynn's Falls. The city lies twelve miles from Chesapeake Bay and about 190 miles from the Atlantic Ocean. Philadelphia is 95 miles to the north-east, and New York about twice that distance in the same direction, while Washington is only 40 miles to the south-west.

Baltimore, which is primarily a great commercial and shipping centre, owes its importance in large measure to its geographical situation. It is closer by rail to the producing areas of the West than any other Atlantic port; it is near to the bituminous coal regions of Maryland, Pennsylvania and West Virginia; and it is the most suitable port and general market for many Southern States. It is also conveniently situated for the importation of the iron ore of Cuba, and the fruits, rice and other products of Central America.

Some indication of the commerce and shipping of Baltimore is afforded by the following Table:—

| Year ended June 30th. | Tonnage Entered and Cleared in the Foreign Trade. | Value of Imports. | Value of Exports. | Number of Passengers arriving at the Port. |
|-----------------------|---|-------------------|-------------------|--|
| | | £ | £ | |
| 1905 | 2,474,658 | 4,412,758 | 19,003,137 | 64,080 |
| 1906 | 3,160,362 | 6,267,636 | 22,901,051 | 56,022 |
| 1907 | 2,915,943 | 7,869,647 | 21,835,198 | 69,498 |
| 1908 | 2,804,554 | 6,141,063 | 18,747,605 | 33,626 |
| 1909 | 2,204,705 | 5,004,651 | 16,156,387 | 21,633 |

Among the principal commodities of export were foodstuffs (wheat and flour, maize, lard, oleomargarine and live cattle), copper ingots and bars, iron and steel and manufactures thereof (agricultural implements and steel rails being particularly important), tobacco, cotton, oils, oilcake and meal and timber. The chief imports included copper bars, pig iron and iron ore, nitrate of soda, china, bananas and chemicals.

Chesapeake Bay, which with its tributaries covers 2,000 square miles of water, is an important source of wealth to the city. The annual products of its waters comprise, according to the Statistical Bureau of Maryland, 260,000,000 lb. of fish, 5,000,000 bushels of oysters and 750,000 bushels of hard and 700,000 dozen soft crabs; and the annual value of these products is computed at over £3,000,000. The fruitful agricultural lands of the State of Maryland, which is divided by the Chesapeake, allow of the successful production of fruits, vegetables, cereals and poultry, with stock raising and dairy farming, and Baltimore is the centre in which the plentiful supplies of farm produce find their principal market.

The city enjoys good transport facilities by land and water. In addition to the minor railway lines connecting Baltimore with places in Maryland and the adjoining States, three trunk lines bring it into connexion with the North, South and West. Nineteen steamship lines, apart from tramp steamers, are engaged in its foreign trade, which includes important passenger services, while regular lines of steamers ply to Boston, New York, Philadelphia, Providence, Savannah and ports in South Carolina. The Chesapeake trade is maintained by fifty steamers and several hundred sailing vessels.

Baltimore is an educational centre of great importance. There are two universities (the Johns Hopkins University and the University of Maryland) in addition to many educational institutions of a miscellaneous character.

The population of the city more than doubled in the 40 years 1870 to 1910. The following Table shows the rate of growth since 1870, the figures being those of the Federal Census.

| Year. | Population. | Increase. | Percentage Increase. |
|-------------|-------------|-----------|----------------------|
| 1870 | 267,354 | — | — |
| 1880 | 332,313 | 64,959 | 24·3 |
| 1890 | 434,439 | 102,126 | 30·7 |
| 1900 | 508,957 | 74,518 | 17·2 |
| 1910 | 558,485 | 49,528 | 9·7 |

At the Census of 1900, 46·4 per cent. of the population were found to be Americans of American-born parents, and 24·6 per cent. American-born whites of foreign-born parents, while 13·3 per cent. were foreign-born whites, and 15·6 per cent. were of negro descent. Of those born in foreign countries, 48·4 per cent. were born in Germany, 15·3 per cent. in Russia, 14·1 per cent. in Ireland, 5·6 per cent. in Austria-Hungary and 5·1 per cent. in Great Britain. No other countries contributed more than 5 per cent. of the foreign-born population. Since 1900 Russian Jews, Bohemians, Poles and Italians have been settling in the city in increasing numbers, but although Baltimore receives many immigrants from German and Austrian ports only a relatively small proportion remain in Maryland. In 1907, 1908, and 1909 there were admitted at the port of Baltimore 66,714, 8,472, and 25,140 immigrant aliens respectively; of the immigrants in 1909, only 2,577 gave Maryland as their destination, and of these 624 were Jews (mainly Russian), 613 were Poles and 505 were Germans. The Government of Maryland endeavours to attract immigrants, especially from Northern Europe, and it has from time to time sent commissions to the Netherlands and other European countries with that object.

The negro population (79,258) was numerically greater in 1900 at Baltimore than in any other city of the Union, except Washington (86,702). In 1906 the Police Census returned its numbers at 81,434, which was about 15 per cent. of the total population. There is much evidence that the negroes are increasing in wealth and that they are developing race consciousness. They tend more and more to consider it a duty to employ doctors and lawyers of their own colour and to deal with their own people in the retail trade. They publish a newspaper of their own; they have erected, or bought at advantageous prices, several churches of dignified appearance, and have altogether nearly sixty places of public worship; they are educated apart from the whites, public and high schools and training schools for teachers being maintained by the city for their exclusive use; they have their own amusement halls and amusement park, clubs, benefit societies, trading league, etc.; and in other directions they appear, in fact, to be tending towards the formation of a community within a community.

The following Table gives the number of deaths per 1,000 of the population (for the white and coloured populations separately, and for both combined), as calculated by the municipality for each of the five years 1904-8:—

| Year. | Death-rate per 1,000 of | | |
|------------|-------------------------|----------------------|-------------------|
| | White Population. | Coloured Population. | Whole Population. |
| 1904... .. | 17·0 | 31·4 | 19·3 |
| 1905... .. | 16·5 | 31·1 | 18·8 |
| 1906... .. | 16·3 | 30·0 | 18·5 |
| 1907... .. | 16·7 | 30·1 | 18·9 |
| 1908... .. | 15·6 | 27·2 | 17·4 |

It will be seen that in Baltimore, as generally in cities where the negroes are numerous, the death-rate among the coloured race far exceeds that among the whites.

It is not possible to state the birth-rates for Baltimore, as it is recognized that the birth registration returns are far from complete. The report of the Health Department estimates that not more than 65 per cent. of the births are returned. The birth figures being incomplete, the infantile mortality rates cannot, of course, be stated.

Baltimore, which is one of the older American cities, having been settled in 1730, covers an area of 31·6 square miles, including the harbour (which is one-and-a-half square miles). The last extension of the municipal boundaries was in 1888, when the area was enlarged from 13·2 square miles to the present dimensions. It is anticipated that other contiguous suburbs, such as Canton and Highlandtown, will eventually be incorporated. The city occupies a somewhat hilly site. In general design it is less uniform than the majority of the larger cities, the regularity of its planning being disturbed by certain important streets which cross obliquely the usual rectangular plan of the city, such as Gay Street and Fremont Avenue. Red brick of a bright colour is everywhere the building material, and the architectural features present a remarkable similarity in nearly all districts. The houses are built in terraces, and the great bulk of them are of two and three stories. In July, 1907, of 90,920 private dwelling-houses (excluding those with shops) 56 per cent. had two stories and 43 per cent. three stories. The houses almost invariably abut upon the footways, on which project from three to six steps in wood, stone or marble leading up to the front doors. Fine public buildings are numerous: among the most notable may be named the new Court House, the City Hall, the Custom House, the Post Office, the Johns Hopkins University Buildings, the Washington Monument and the Cathedral. The streets, though generally wide, are badly paved, the large cobble stones frequently lying far apart, and the system of surface drainage which prevails mars their appearance. There are, however, some beautiful and well-built boulevards in the outer parts of the city. Of the two small streams that traverse the city, Jones' Falls serves as a dividing line between East and West Baltimore. Its valley in the northern part of the city provides the railways with a convenient area for shunting purposes, and several bridges span the depression. The north-west branch of the Patapsco also runs into the heart of the city, forming a basin which smaller craft can enter. A feature of Baltimore is the almost complete absence of the level railway crossings so commonly found in American cities. This is due to the fact that the principal railway systems cross the city by tunnels.

The great fire of 1904, which traversed 140 acres of the central district of the city, destroying 46 blocks, not only led to the rebuilding upon modern plans of the area devastated, but also gave rise to a general reconstruction movement. Streets were widened, parks were improved, an open space was reserved on the west front of the Court House, cables and wires were removed from the streets and re-laid underground, the sum of £208,333 was allotted for the provision of new schools, the docks on the north side of the harbour were acquired by the city, large wholesale and retail market houses were built in the Marsh Market space and a great sewerage system for the whole city was begun. A total expenditure of £4,375,000 was authorized for these improvements. In 1908 a further loan of £1,250,000 was sanctioned by a popular vote, five-sixths of which is to be applied in improving the water supply, and the balance in continuing the removal of overhead wires.

Baltimore is fortunate in the possession of several public parks and squares, which have an aggregate area of 2,232 acres. Druid Hill Park, which is the largest and most beautiful, consists of 673 acres, while five other parks each exceed 100 acres in area. The parks and squares are well distributed, and the interests of the poorer quarters in this respect have not been neglected. Their maintenance and improvement are paid for out of the tramway tax of 9 per cent., yielding over £83,000 yearly, which must be devoted wholly to this object. The city also owns the water supply, the markets, eleven public baths, the public wharves and docks, and it maintains and cleans the public ways. Street construction is given out by contract. The public service of street locomotion, the gas supply and the electric light and power supply are in the hands of private companies. The electric tramway system is very complete; it has 235 miles of track within the city, and 167 miles outside the city. Washington and other towns are connected by tramway with Baltimore.

Baltimore is well equipped with free public libraries. One donor gave £260,000 and a second £104,000 for the building of public libraries. In 1909 there were twelve separate libraries and they were supported by a public grant of £12,600. It is proposed to apply the second donation to the erection of twenty additional branch buildings for which sites and maintenance are to be provided by the city.

OCCUPATIONS, WAGES AND HOURS OF LABOUR.

No enumeration of the entire population according to occupation exists of more recent date than that contained in the Federal Census returns of 1900. A summary

of these returns is shown in the following Table, which relates to persons of ten years of age and over :—

Number of Persons of 10 years of age and over engaged in Occupations in Baltimore in 1900.

| Occupations. | Males. | Females. | Total. |
|---|---------|----------|---------|
| Building | 12,145 | 71 | 12,216 |
| Metalworking and Engineering | 11,589 | 265 | 11,854 |
| Cotton | 970 | 1,470 | 2,440 |
| Other and not specified Textile | 385 | 243 | 628 |
| Leather | 674 | 56 | 730 |
| Boot and Shoe Making | 2,089 | 139 | 2,228 |
| Clothing | 7,142 | 15,950 | 23,092 |
| Woodworking and Furnishing | 4,232 | 118 | 4,350 |
| Paper and Printing | 2,431 | 549 | 2,980 |
| Brick and Tile | 553 | 1 | 554 |
| Glass | 476 | 35 | 511 |
| Food, Drink and Tobacco | 6,792 | 1,526 | 8,318 |
| Other Manufacturing and Mechanical Pursuits | 8,237 | 1,176 | 9,413 |
| Trade and Transportation | 54,143 | 7,666 | 61,809 |
| Labourers (not otherwise specified) | 23,377 | 618 | 23,995 |
| Professional, Domestic and Personal Service and } Agricultural Pursuits | 21,214 | 31,018 | 52,232 |
| All Occupations | 156,449 | 60,901 | 217,350 |

The commercial character of the city is seen in the numbers grouped under trade and transportation, which exceed those under any other single group and form 28·4 per cent. of the whole. The clothing trades, with a total of 23,092, formed 10·6 per cent. of the whole, the two main branches being concerned with the manufacture of men's ready-made clothing and of shirts, overalls, men's and women's underwear and other "white" products. Among the other distinctive industries of Baltimore may be mentioned the canning and preserving of fruits and vegetables, the tobacco trades, straw hat making, the manufacture of fertilisers and the distilled and malt liquor industry. The tin ware industry was formerly of greater importance, but when the trust in this industry was formed some ten years ago four mills at Baltimore were closed down. One of the distinctive industries of the city is the manufacture of cotton duck. Formerly from 60 to 80 per cent. of the total production in the United States (according to different estimates) came from Baltimore. In 1899, however, a combination was formed of manufacturers here and in Alabama, South Carolina and Newhaven (Conn.), which controlled 90 per cent. of the output, and it is stated that the industry is now becoming more extensive in the South, where labour is cheaper and the raw material closer at hand. The production of Baltimore is at present not more than 40 per cent. of the total.

Female labour finds many openings at Baltimore. In the making of clothing, both for men and women, and in the vegetable and fruit canning industry, women are more numerous than men; in the tobacco trade they find increasing employment; and they are also largely employed in straw hat making, boxmaking and in the cotton duck factories.

The trade union movement is not strong in this city; a large number of trades have formed organisations, but apart from certain occupations in the building trades and in newspaper printing, and all the occupations in breweries, these combinations are not effective. The rates of wages, hours of labour and other matters affecting employment in all the breweries and newspaper offices are regulated by agreements. In some branches of the building trades, notably bricklaying, union hours and rates are recognized, but open shops are maintained.

Seasonal slackness occurs to a greater or lesser extent in many of the more distinctive trades. This is especially true of brickmaking, straw hat making, whisky distilling, chemical manufacture, the clothing trades and the transport trades so far as dock activity is concerned.

The immigration from Europe into Baltimore directly or *via* New York has been considerable in recent years. Up to some 15 years ago the Germans and Irish formed the bulk of the immigrants. The former now constitute the larger proportion of those engaged in the skilled occupations, while the Irish have for the most part been displaced in the less skilled and unskilled occupations by the Austro-Hungarians and the Italians. The Italians do not generally care for mill work, and prefer out-of-door work. A large amount of the labour in the streets and roads falls to their share and they are engaged in the fruit, vegetable and ice cream trades. Some have entered the clothing trades. The immigrants from Russia usually enter the clothing trades and the more sedentary occupations generally.

The negroes, owing to their history and numbers, occupy a very important position in the working-class element of the population. They generally find employment of an unskilled order—as labourers in all kinds of industrial establishments, as drivers, as dock workers, as waiters and servants, while an overwhelming majority of the labourers in the building trades are negroes.

As regards the hours of labour, the report of the Maryland Bureau of Statistics for 1909 states that, of the Baltimore manufacturing establishments reporting, eight hours daily were worked in 534, eight-and-a-half in 111, eight-and-three-quarters in 7, nine in 1,208, nine-and-a-quarter in 4, nine-and-a-half in 187, nine-and-three-quarters in 17 and ten in 1,446. The interval allowed at mid-day is half an hour. There is not as a rule a full half-holiday on Saturday, although in many cases work ceases earlier than on the other week days, in which event it is a common practice for the men to work a little longer on the other five days. The holidays generally recognised are Christmas Day, Independence Day (July 4), Labour Day, Thanksgiving Day (November) and Decoration Day. In the clothing factories certain Jewish festivals are commonly observed.

A Free Labour Registry is maintained in Baltimore by the State Bureau of Labour Statistics, but its operations are as yet of limited extent. The number of workpeople who applied for situations in 1909 was 255 and the number of situations filled only 32.

The following details relate to certain of the trades for which wages and hours of labour are given below.

Building Trades.—As in the majority of American cities, the bricklayers form the most strongly organised branch of these trades, and are able to secure recognition of their scales and hours of labour. The stonemasons and stonecutters and the plasterers are also well organised. The other unions are not strong. The Germans are largely employed in the skilled branches of the building trades, while negroes do practically all the unskilled work.

Metal, Engineering, and Shipbuilding Trades.—At Sparrow's Point, which is 12 miles from Baltimore, near the point at which the Patapsco merges in the Chesapeake, is a steel and shipbuilding works, employing at times over 2,000 men (a very large proportion being negroes), and there are also other minor shipbuilding establishments. Sea-going vessels are not largely built. In 1908, 38 vessels, with an aggregate tonnage of 19,671, were built, these being mainly dredgers for the United States Government, and none being sea-going craft. Some steel colliers have since been built for the Government. Among the other branches of the metal trades are the construction of gun carriages and the manufacture of tobacco machinery, elevators, &c. Ship-repairing gives a large amount of employment, and the great railway companies also employ a considerable body of workpeople in their repair shops. The open shop is generally maintained for most sections of the workers. The moulders have a strong union.

Clothing Trades.—The production of ready-made clothing is now for the greater part carried on in factories; up to the last decade of the nineteenth century the bulk of this work was done in small shops. It is said that two-thirds of the work is still done by contract, that is to say, special contractors (for coats, vests, pants or for certain processes in these garments) are allotted floor space, power, light and heat by the firm concerned, but they alone employ and pay the workers, or the contractors may hire their own factory room. All the important firms, although they have large staffs on their premises, have also work done outside, but cutting is always done within the factory. No two establishments

follow the same methods of working and payment. The "team" system is in operation at some; there are then three classes of workers on the garment, viz., the operators, pressers and finishers. In one factory making high-class goods, 16 operators were usually employed on a coat, and in another there were 10. The scale of remuneration depends upon whether the worker performs one or more operations, or makes the whole coat. Again, piece and time payments are made for different branches of work; sleeve sewers, for instance, are apt to be paid by the week, and stay sewers by their production. Piece rates predominate, however, and the only important classes of workpeople paid by time are the cutters and trimmers, who are nearly all men. Men are also employed almost exclusively in coat pressing, which is very heavy work, and they also predominate as tailors. Women are engaged in vest basting, finishing, buttonhole making and, to a considerable extent, as machinists. Women are more largely employed than men as coat basters, but for speed men are preferred. In these trades generally the employment of women has been somewhat adversely affected by the large Russo-Jewish immigration. There is said also to be a certain opposition among Jews to the employment of their women in factories. As to nationality, German-Americans or Germans form the bulk of the cutters and trimmers, but the Russian Jews are more numerous than all other races combined, these including Bohemians, Italians and Lithuanians. The Italians are stated to make very efficient tailors. The production of Baltimore is mainly men's clothing of a cheap kind, although three or four large establishments make high-grade goods. The market for the Baltimore trade is chiefly in the Southern States. In the clothing trade there is usually some forty weeks' work in the year, and overtime is often worked. The slack season falls in the spring months.

In the shirt trade the majority of the workers are women, and practically all the work is now done in factories under the direct management of the manufacturers. The men employed do the cutting and the harder laundry and ironing work. Unlike the ready-made clothing trade, the workers are mainly American. The two other principal centres in the United States for this trade are New York and Troy, where a higher grade of "white" work is done. In Baltimore, Indian linen, which is cotton woven cloth, is the material used.

Straw Hat Making.—Baltimore sends its products in this trade to all the States in the Union and the annual value of the output is estimated at £500,000. Porto Rico and Panama hats come in the rough and are trimmed in Baltimore. The season is generally counted as from August to June, July being a quiet month, but for several weeks after the season begins work is slack, the production then being confined to samples; there are only about forty-two weeks of full work in the year. The workers are mainly Americans and Germans. Women are occupied as trimmers, &c. The piece method of payment prevails in this trade.

Chemical Works.—In the fertiliser trade unskilled labour is mainly employed, and negroes with an admixture of Poles form the bulk of the workpeople, the more responsible posts, however, being filled by Germans or Irish.

Brickmaking.—Brickmaking is an old and important industry in Baltimore. The labour employed is mainly that of unskilled negroes. Production is carried on during nine or ten months of the year.

Printing Trades.—Owing to its commercial and educational interests, Baltimore is an important centre for job printing and general book printing, and some large firms carry on business here. The newspaper offices are all union offices, but many of the other printing establishments refuse to recognise the unions.

Food and Drink Trades.—Maryland is the main centre of the manufacture of "straight" or pure rye whiskies, the rye whiskies of Kentucky being made from a mixture of corn and rye. The total capital of the firms engaged in this trade in the Baltimore district is £2,300,000, but the whisky trade, like the brewing trade, employs a small labour force and in 1908, 445 persons only were engaged in this industry. The workpeople are not organised. In the various branches of the brewery trade, in which Germans predominate, union rates and hours of labour are universally recognised. The canning of fruit and vegetables, which work is paid by piece, is important but seasonal. The Poles are largely employed in this work. In 1900, 33,600,000 cans of tomatoes, of an average weight of 3 lb., and 11,400,000 2-lb. cans of maize were packed in the Baltimore

district. Among other commodities which enter into this trade are spinach, beans, peaches pears, strawberries and pineapples. Oyster packing has declined in importance at Baltimore, the industry having gone further down the Chesapeake, and Annapolis, Crisfield, Cambridge, Oxford, St. Michael's and other places in the bay are growing centres for this trade. The consumption of bakery bread tends to increase in Baltimore, and some large bread factories exist. The manufacture of biscuits and crackers also employs a large number of people. The large firms do not recognise union rates and conditions.

Transport Trades.—Dock labourers, who are mainly negroes, are paid hourly rates. No union rates are recognised, but it is the custom to pay all time over ten hours on Saturdays, Sundays and holidays at time-and-a-half.

Public Services.—The tramway company pays its motormen and conductors 9*d.* per hour during the first two years of service, 9½*d.* during the third and fourth and 10*d.* during the fifth and succeeding years. The number of hours worked per week was stated to average 63. The municipality pays the drivers in its street service, the drivers themselves supplying horse and cart, from 10*s.* 5*d.* to 12*s.* 6*d.* per day. By act of legislature the number of hours of municipal employees is fixed at eight per day, and all city contractors must keep within this limit, and pay the city scale of wages.

Appended is a Table showing the predominant weekly wages and hours of labour of men engaged in certain principal occupations at Baltimore, in February, 1909 :—

Predominant Weekly Wages and Hours of Labour of Adult Males in the Principal Occupations in February, 1909.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|--|--|-------------------------------------|
| <i>Building Trades :—</i> | | |
| Bricklayers | 114 <i>s.</i> 7 <i>d.</i> to 125 <i>s.</i> | 44 to 48 |
| Stonemasons | 103 <i>s.</i> 2 <i>d.</i> ,, 112 <i>s.</i> 6 <i>d.</i> | 44 ,, 48 |
| Stonecutters | 82 <i>s.</i> 6 <i>d.</i> ,, 91 <i>s.</i> 8 <i>d.</i> | 44 |
| Carpenters | 75 <i>s.</i> | 48 |
| Plasterers | 100 <i>s.</i> | 48 |
| Plumbers | 87 <i>s.</i> 6 <i>d.</i> | 48 |
| Structural Iron Workers | 100 <i>s.</i> | 48 |
| Painters | 62 <i>s.</i> 6 <i>d.</i> to 75 <i>s.</i> | 48 |
| Hod Carriers, Bricklayers' and Plasterers' Labourers | 56 <i>s.</i> 3 <i>d.</i> ,, 62 <i>s.</i> 6 <i>d.</i> | 48 |
| General Labourers | 37 <i>s.</i> 6 <i>d.</i> | 48 |
| <i>Foundries and Machine Shops :—</i> | | |
| Ironmoulders | 68 <i>s.</i> 9 <i>d.</i> to 75 <i>s.</i> | 54 |
| Machinists | 63 <i>s.</i> 4 <i>d.</i> ,, 75 <i>s.</i> | 54 |
| Blacksmiths | 62 <i>s.</i> 6 <i>d.</i> ,, 75 <i>s.</i> | 54 |
| Patternmakers | 75 <i>s.</i> ,, 87 <i>s.</i> 6 <i>d.</i> | 54 |
| Labourers | 31 <i>s.</i> 3 <i>d.</i> ,, 40 <i>s.</i> 6 <i>d.</i> | 54 |
| <i>Shipbuilding :—</i> | | |
| Rivetters... .. | 68 <i>s.</i> 9 <i>d.</i> to 75 <i>s.</i> | 54 |
| Holders-up | 50 <i>s.</i> ,, 62 <i>s.</i> 6 <i>d.</i> | 54 |
| Caulkers | 68 <i>s.</i> 9 <i>d.</i> | 54 |
| Labourers | 37 <i>s.</i> 6 <i>d.</i> to 50 <i>s.</i> | 54 |
| <i>Clothing Trades :—</i> | | |
| Cutters | 62 <i>s.</i> 6 <i>d.</i> to 83 <i>s.</i> 4 <i>d.</i> | 54 |
| Trimmers | 56 <i>s.</i> 3 <i>d.</i> ,, 62 <i>s.</i> 6 <i>d.</i> | 54 |
| Tailors | 50 <i>s.</i> ,, 75 <i>s.</i> | 58 to 60 |
| Pressers | 50 <i>s.</i> ,, 75 <i>s.</i> | 58 ,, 60 |
| Basters | 50 <i>s.</i> ,, 75 <i>s.</i> | 58 ,, 60 |
| <i>Shirt, Overall, &c. Making :—</i> | | |
| Cutters | 66 <i>s.</i> 8 <i>d.</i> to 83 <i>s.</i> 4 <i>d.</i> | 52½ to 54 |
| Laundry Men and Ironers | 68 <i>s.</i> 9 <i>d.</i> ,, 75 <i>s.</i> | 52½ ,, 54 |
| <i>Straw Hat Manufacture :—</i> | | |
| Blockers | 75 <i>s.</i> to 87 <i>s.</i> 6 <i>d.</i> | 60 |
| Finishers | 62 <i>s.</i> 6 <i>d.</i> ,, 75 <i>s.</i> | 60 |

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|--|---------------------------|-------------------------------------|
| <i>Chemical Works :—</i> | | |
| Sulphur and Pyrites Burners... .. | 50s. to 58s. 4d. | 60 |
| Mixers and Grinders | 37s. 6d. ,, 50s. | 60 |
| Labourers | 37s. 6d. | 60 |
| <i>Brickmaking :—</i> | | |
| Machine Men | 31s. 3d. to 37s. 6d. | 60 |
| Burners | 31s. 3d. ,, 56s. 3d. | 60 |
| Kiln Men (Setters) | 37s. 6d. ,, 50s. | 60 |
| Labourers | 31s. 3d. | 60 |
| <i>Printing and Bookbinding Trades :—</i> | | |
| <i>Newspaper—</i> | | |
| Machine Compositors { Day work | 93s. 9d. | 42 |
| { Night work | 100s. | 42 |
| <i>Book and Job—</i> | | |
| Hand Compositors | 64s. 2d. to 75s. | 48 |
| Machine Compositors | 87s. 6d. ,, 91s. 8d. | 48 |
| Pressmen { Cylinder Presses... .. | 75s. ,, 83s. 4d. | 48 |
| { Small Presses | 41s. 8d. ,, 50s. | 48 |
| <i>Bookbinding—</i> | | |
| Forwarders { Edition work | 62s. 6d. to 66s. 8d. | 48 to 54 |
| { Blank book work | 75s. ,, 83s. 4d. | 48 ,, 54 |
| Finishers | 75s. ,, 83s. 4d. | 48 ,, 54 |
| <i>Baking :—</i> | | |
| First Bench Hands | 58s. 4d. to 75s. | 60 to 62 |
| Second Bench Hands | 50s. ,, 58s. 4d. | 60 ,, 62 |
| Delivery Drivers | 62s. 6d. ,, 83s. 4d. | 60 ,, 66 |
| <i>Brewing :—</i> | | |
| Kettlemen, Cellarmen, Fermenters, Washers, Rackers, Warehousemen and Route Drivers. } | 70s. 10d. } | 48 Nov. to Feb. 54 March to Oct. |
| Bottlers | 54s. 2d. } | 48 Nov. to Feb. 54 March to Oct. |
| Drivers (Bottle Beer) | 54s. 2d. | 60 |
| <i>Distilling (Whisky) :—</i> | | |
| Still Runners | 58s. 4d. to 62s. 6d. | 60 |
| Mash Hands | 50s. ,, 58s. 4d. | 60 |
| Millers | 62s. 6d. ,, 75s. | 60 |
| Coopers | 50s. ,, 62s. 6d. | 60 |
| Bottlers | 41s. 8d. ,, 50s. | 60 |
| Warehousemen | 41s. 8d. ,, 50s. | 60 |
| <i>Oyster, Fruit, Vegetable Bottling and Canning :—</i> | | |
| Oyster Shuckers and Vegetable and Fruit Peelers... | 25s. to 33s. 4d. | 69 to 72 |
| Tippers | 50s. ,, 75s. | 69 ,, 72 |
| Shippers | 37s. 6d. ,, 41s. 8d. | 60 |
| Labourers | 31s. 3d. ,, 37s. 6d. | 60 |
| <i>Dock Labour :—</i> | | |
| <i>General Cargo—</i> | | |
| Dock Hands | 10d. to 11½d. | — |
| Hold Hands | 11½d. | — |
| Deck Hands | 1s. 0½d. | — |
| <i>Grain—</i> | | |
| Wheat, Rye and Oat Trimmers | 1s. 8d. | — |
| Maize Trimmers | 1s. 3d. | — |
| Grain Baggers | 1s. 0½d. | — |
| <i>Iron Ore, Nitrates, &c.</i> | | |
| Stevedores—Dock and Hold | 1s. 0½d. | — |
| <i>Public Services :—</i> | | |
| <i>Street Maintenance, Paving and Cleaning (Municipal)—</i> | | |
| Paviors (cobblestones) | 87s. 6d. | 48 |
| Paviors (Belgian blocks, &c.) and Stoncutters | 100s. | 48 |
| Rammers | 75s. | 48 |
| Road Sweepers | 41s. 8d. | 48 |
| Labourers | 41s. 8d. | 48 |
| <i>Water Works (Company)—</i> | | |
| Labourers | 41s. 8d. to 46s. | 48 |
| Firemen | 62s. 6d. | 72 |

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|---|---------------------------|-------------------------------------|
| <i>Public Services—cont.</i> | | |
| Gas Works (Company)— | | |
| Gas Stokers | 50s. | 72 |
| Labourers | 37s. 6d. | 57 |
| Electric Light and Power Works (Company)— | | |
| Electricians | 68s. 9d. | 72 |
| Fitters | 75s. | 60 |
| Stokers | 55s. | 72 |
| Labourers | 43s. 9d. | 60 |
| Electric Tramways (Company)— | | |
| Motormen and Conductors | 47s. 3d. to 52s. 6d. | 63 |

Taking wages at New York as the base, = 100, in each case, the wages index numbers for Baltimore are—building trades, skilled men 87, hod carriers and bricklayers' labourers (negroes) 86; foundries and machine shops, skilled men 83, unskilled labourers 86; printing, hand compositors (job work) 80.

HOUSING AND RENTS.

In those parts of the city which are inhabited by the wage-earning classes a general segregation by race or by colour is discernible. The Germans by descent or birth, who form a high percentage of the skilled workers and like good homes, are found mainly in the north-east and in the south-west. The great body of later immigrants, Russians, Poles and other Slavs, Bohemians and Italians, are congregated in the older eastern districts, extending from Jones' Falls to the city boundaries and beyond, although scattered groups are found elsewhere. The negroes constitute a very large percentage of the inhabitants in the Fourth, Fifth, Eleventh, Fourteenth, Fifteenth, Seventeenth, Eighteenth and Twenty-second Wards, which adjoin or lie near one another in the inner and north-western portion of the city. In March, 1906 these eight wards contained 50,990 coloured people out of a total coloured population of 81,434. In some of the above wards, notably in the Seventeenth, where they numbered 12,212 out of a total population of 21,652, the negroes have emerged from the alleys and side streets into leading thoroughfares, such as Druid Hill Avenue and Dolphin Street. In the former street they have obtained good houses on very favourable conditions owing to the unwillingness of the whites to have them as neighbours. It often happens, especially in the better parts of the city, that when a coloured family is able to secure a house in the centre of a row hitherto exclusively occupied by whites, the latter will remove at the earliest moment, even at a pecuniary loss. One house was shown to the writer which had cost some £300 and was sold by its owner for this reason for £125. In certain wards the negroes formed in March, 1906 a strikingly low proportion of the residents: the First Ward had 238 negroes out of 21,766 inhabitants, the Second 456 out of 21,634 and the Twenty-fourth 10 out of 22,011.

Owing to an extensive and efficient tramway system, the working classes are enabled to live at a distance from their place of work. The tramway company for the minimum fare of 2½d. issues a transfer ticket enabling the passenger to change from the first to a second car within the city limits. No special fares, however, are conceded to working men.

The single-family dwelling enjoys an absolute predominance in Baltimore. In 1900 the percentage of families in dwelling-houses occupied by one family was 72·6, while the percentage in dwelling-houses occupied by two families was 20·0, and the percentage in dwelling-houses occupied by three or more families was 7·4. Americans, German-Americans and Irish-Americans live for the most part in single-family houses. The Italians, Russian Jews, Bohemians and other later immigrant races live largely in houses containing two or more tenants and the negroes also form an important percentage of those similarly housed.

The most typical houses in the occupation of the working classes have two or three stories and contain six habitable rooms. Those of two stories, which are the more numerous, and are being built almost to the complete exclusion of the other kind, have three rooms on the ground floor and three rooms on the upper floor. The central room on the ground floor (used as the dining room) borrows its light from the kitchen and the front room; on the upper floor the central room is provided with a skylight. A bathroom is found in all recently-built houses of more than four rooms, and it lies either between the middle room and the back room or parallel to the back room. Vestibules and hall passages are usually found in these houses, especially if of recent construction and the staircase is at the end of the hall passage facing the front door.

In the six-roomed house of three stories there are two rooms on each floor. The rooms on the highest floor often have lower ceilings than those on the other floors. These houses are older, and are not generally provided with bathrooms, but a bath tub with water connexion is frequently found in one of the upper rooms. A small "summer" kitchen or scullery is sometimes attached to the back room on the ground floor. Such houses have not as a rule vestibules or halls and the staircase is generally found in the back room.

The four-roomed houses have simply two rooms on the ground floor and two rooms on the first floor, but a separate small kitchen is sometimes added on the ground floor. The staircase is usually placed between the front and back rooms, though it is sometimes found in the back room. The street door opens directly into a room. These houses are only seen in smaller streets and alleys, and are occupied by the unskilled labouring classes.

Baltimore is described locally as being "a city with practically no tenements." The municipal definition of a tenement house is a "house which is occupied by more than three families living independently of one another, each doing its own cooking; or by more than two families on a floor so living and cooking, but having a common right in the halls, stairways, yards, water-closets or privies, or some of them." Accepting this definition—it differs from that adopted in the majority of American cities, where a tenement is a house occupied by three or more independent households—it is true that buildings housing more than three separate households are seldom found. Nevertheless, a considerable proportion of the negro population and of the newly-arrived immigrants live in houses accommodating two or three households. The negroes often occupy the lower part of a house and let the upper part; and the Poles, Italians and still more the Bohemians are inclined to follow the same practice. In the latter case economy of space is practised with a view to assisting the tenants-in-chief to purchase their houses. The effect of this arrangement is that a large proportion of the negro population and of the recent immigrants inhabit dwellings of three or four rooms.

In the principal foreign quarter, that is, to the east of Jones' Falls from Albemarle Street to beyond Fell's Market, a large number of houses exist which were occupied in the past by well-to-do merchants and have been converted into residences for three or more households. Such households occupy from two to four rooms, those with three and four rooms being most frequent. The Russian Jews form the most notable element among the occupiers. The Poles live on the outskirts of the same neighbourhood, and in addition to taking in boarders they often sub-let the upper rooms.

The houses in Baltimore are almost always provided with cellars, which cover the entire space beneath the building. The sanitary arrangements, however, are not in keeping with the modern requirements of large cities. The vault system predominates; the newer houses have flush water-closets and sewerage connexions, but it will be many years before the privy system will have disappeared. The surface drainage system prevails, and waste household fluid matter is simply discharged into the open gutters, with cobbled surface, which line the kerb stones on both sides of the streets. Refuse sometimes finds its way into them, and the alleys between the rows of houses are frequently infested with refuse and slime. The water supply is good, and the houses have almost invariably their own private taps. For a number of years a by-law has compelled the installation of a bathroom in all new houses having more than four rooms.

The houses of the working people, like those of the wealthier classes, are built in rows, and are rarely, if ever, detached or semi-detached. They lie flush with the pathways, into which several steps in wood, stone, or marble extend. The façades are plain, and without bay windows. The roofs are flat.

The following Table shows the predominant rents which were paid in February, 1909, for dwellings consisting of three, four and six rooms:—

Predominant Rents of Working-class Dwellings.

| Number of Rooms per Dwelling. | | | | Predominant Weekly Rents. |
|-------------------------------|-----|-----------------|-----|---------------------------|
| Three rooms | ... | ... | ... | 4s. 10d. to 7s. 8d. |
| Four rooms | ... | ... | ... | 6s. 9d. ,, 7s. 8d. |
| Six rooms | } | Older buildings | ... | 9s. 7d. ,, 11s. 6d. |
| | | Newer buildings | ... | 11s. 6d. ,, 14s. 5d. |

The level of rents at New York being represented by 100, the rents index number for Baltimore is 54.

The above rents include the water charges. The annual cost of water for houses with a frontage of 12 feet and under is 10s. 5*d.*; for those of over 12 up to 13 feet, 16s. 8*d.*; and for those of over 13 up to 14 feet, 20s. 10*d.* A discount of five per cent. is allowed upon these rates for prompt payment. No taxes fall as a rule upon working-class tenants. Rents are payable monthly in advance, save in the case of many negro tenants and the less reliable immigrants, from whom weekly payments in advance are required. Payment in advance is necessitated largely because distraint for rent is not applicable to working-class tenants. The only method of procedure open to the landlord is to give the tenant five days' notice to leave: if this notice is not complied with, he may place the furniture upon the street.

Neither the municipality nor private employers have undertaken any housing schemes. House-ownership among the working classes has made great progress, however, and among American cities Baltimore claims to take a leading place in this respect. In 1900 20·5 per cent. of all private dwellings in the city were owned unencumbered by their occupants, 7·4 per cent. were owned but encumbered, while 72·1 per cent. were hired. The number of building loan societies is very large, some 200 having meeting places in the city. The future owner must, as a rule, provide about one-third of the proposed cost of the dwelling, and the society advances the balance, and issues to the owner shares to the same amount, upon which interest of 6 per cent. is charged until they are paid up, but, in the meantime, the borrower is credited with dividends upon these shares.

A feature of land tenure at Baltimore is that the site is not bought by the house owner, but remains an annual charge upon him. It is estimated that the amount which has to be paid annually in ground and water rents, insurance and property tax by owners of the older working-class houses is from £11 9s. to £12 10s. and for the newer houses £13 11s. to £15 13s.

In 1907, three years after the great fire, which had effected great clearances in the older quarters of the city, a special Committee composed of members of the Charity Organisation Society, and of the Association for the Improvement of the Condition of the Poor, published the results of an investigation which had just been made into the housing conditions prevalent in certain tenement and other poor districts. Four districts were chosen, (1) the Albemarle Street district; (2) the Thames Street district; (3) the Biddle Alley district; and (4) the Hughes Street district. In the first the Russian Jews formed 54 per cent. of the families visited, the Italians 17 per cent., and there was a sprinkling of various other nationalities. In the second district the Poles formed 79 per cent., while in the third the inhabitants were mostly negroes, and in the fourth entirely so. Overcrowding was found most serious in the case of the Poles, though the Italian boarding houses also were "usually greatly overcrowded." In the Albemarle Street district the plots were unduly built upon: out of the 119 typical houses investigated, 56 per cent. covered more than 70 per cent. of the plots upon which they stood. In all districts the cellar-basement was found to serve as the kitchen of the dwellings. The water supply was found in a large percentage of cases to be outside the tenement, and often to lie in the fence separating two yards. With regard to sanitation, it is stated that "out of 600 houses only nine were found that had any accommodation other than yard privies," and the condition of these vault-privies left much to be desired. Ten bath tubs were found in the Biddle Alley district, many of them used for the most diverse purposes, including sleeping; eight and nine were found in two other districts, while in the remaining district no bath tubs were found. The cellars were found to be damp, a condition attributed mainly to the surface drainage system. Out of 590 houses, with 1,157 families, only six contained provision for the disposal of waste water by any method other than surface drainage. The yards also were unpaved, or badly paved, and, as a rule, no non-absorbent material was found therein. With regard to rentals, the average cost per tenement room per week for all districts proved to be 1s. 11½*d.*, while the average cost per room per week in the case of single-family houses was 1s. 7½*d.* For the latter the highest average rent was 1s. 8¾*d.* (in the Jewish district of Albemarle Street), and the lowest 1s. 4¾*d.* (in the essentially negro district of Thames Street); the highest average per room in the tenement houses was 2s. 1½*d.* in the Albemarle Street district, and in the three remaining districts the averages were 1s. 10*d.*, 1s. 10¼*d.* and 1s. 10½*d.*

It must be borne in mind, of course, that the areas to which the report relates represent a relatively small proportion of the city, yet, as is therein stated, "though not extensive as compared with the city as a whole, they cover a considerable territory; and, congested as they are, they house a very large number of people. Since undertaking the study, the investigator has seen other blocks just as congested as those included in the

two-tenement sections, and other alley neighbourhoods just as insanitary as the Biddle Alley and the Hughes Street districts."

The following notes relate to representative dwellings of the working classes which were visited in the course of the present enquiry:—

Collington Avenue.—Some 35 red brick houses, built in 1908, and occupied for the most part by Germans or German-Americans, many of whom are brewery workers. They contained three rooms on the ground floor, and three rooms with bathroom upon the upper floor. Marble steps led up to the street door, and the framework of the windows was of marble. The cellars had cemented floors, and each contained a furnace for heating the whole house. The hall passage ended at the stairs, and the cellar entry ran under the staircase. The front room of a house visited measured 15 feet by 9 feet, and contained a piano; the middle room measured 13 feet by 10 feet, and the kitchen 14 feet 6 inches by 12 feet 6 inches, and the height of all rooms was 9 feet. Upstairs, the front room measured 12 feet 6 inches square, the middle room 12 feet by 7 feet and the back room 15 feet by 12 feet, the height being as on the floor below. The tenant, a brewery worker, had been offered the house for £312 10s., but subject to an annual ground rent of £10. The rent of these houses was from 14s. 5d. to 15s. 5d. per week, but a considerable number were owned by the occupiers. On the opposite side of the street were 35 houses of two stories, containing six rooms and bathroom, but without the same interior finish, and without the marble steps and facings; they had a letting value of 13s. 6d.

Fait Avenue.—Ten red brick houses, containing six rooms and bathroom, hall and vestibule, let at 13s. 6d. per week. Three marble steps led to the front door, and there were marble trimmings to the windows. The houses had small yards, cellars with earthen floors, closets (vault) in the yards and hot and cold water supplies. The front and middle rooms downstairs measured 13 feet 6 inches by 10 feet 6 inches, and the kitchen 14 feet square. Upstairs the front room measured 13 feet 6 inches square, the middle room 14 feet by 7 feet 9 inches, the back room 14 feet by 8 feet 6 inches and the bathroom 7 feet 6 inches by 4 feet 9 inches.

Eastern Avenue.—Sixteen red brick houses looking upon Patterson Park, built in 1909, and all for sale at from £310 to £335, the rental value being from 13s. 6d. to 14s. 5d. per week. The houses had marble steps and facings, and vestibules with hall passage running back to the stairs. The dimensions of rooms were: downstairs—front room 13 feet by 9 feet; middle room 13 feet by 9 feet; kitchen 13 feet 9 inches by 12 feet 6 inches, with a height of 9 feet: upstairs—front room 12 feet 6 inches square; middle room 12 feet 3 inches by 7 feet; back room 14 feet by 10 feet; bathroom (parallel to back room). 10 feet by 4 feet, with a height of 9 feet in each case.

Grove Street.—Ten houses containing four rooms and a small scullery, occupied by Poles, and let at 7s. 8d. per week. The staircase was in the back room, the water and convenience in the yard. The front room measured 12 feet by 11 feet 3 inches by 8 feet 3 inches, and the back room was smaller to the extent of the staircase space at one side. The upper rooms were both like the front room below.

West Hoffman Street.—Six two-storied red brick houses, containing six rooms, occupied by negro waiters, draymen, &c. The kitchen measured 12 feet by 9 feet, the middle room 12 feet square and the front room 16 feet by 9 feet, the height being 8 feet 3 inches. The bathroom upstairs was 5 feet square. The staircase was between the front and middle rooms, and the convenience in the yard.

Preston Street.—Twelve houses with eight rooms, two in each of three floors, and two in the basement floor. Two negro families lived in several of these houses, each family having, as a rule, four rooms, one of them a basement, and paying half the rent or 6s. 3d. per week. The front rooms were 12 feet square, and the back rooms 9 feet 6 inches by 12 feet.

Walnut Alley.—About forty red brick houses, containing two basement rooms and two rooms on each of the other two floors, let at 8s. 4d. per week. The occupants were negroes. The back basement room measured 13 feet by 8 feet 9 inches, and the front 12 feet by 10 feet and the height was 7 feet 9 inches. The upper rooms had the same dimensions except that they were about 6 inches higher. The stairs were in the back rooms and the hydrants in the yard.

Oxford Street.—Some fifty houses of eight rooms, occupied by negroes. Two rooms were basement rooms. The houses were generally rented to single families, who sublet

four rooms at half the rent. There were wooden steps in the front and rear leading up to the doors of the first floor. The front rooms measured 16 feet by 12 feet, and the back rooms 12 feet square, with a height of 8 feet.

Dolphin Street.—Twelve good two-storied houses in red brick, with six rooms and bathroom, situated alongside a tramway line and occupied by negroes. The houses had marble steps and window trimmings, also vestibules and hall passages, and good cellars. The frontages measured 13 feet, and the measurements of the first floor rooms were as follows:—Front room 16 feet 6 inches by 12 feet, middle room 12 feet 6 inches by 7 feet 6 inches and back room 9 feet by 8 feet 6 inches, with a height of 8 feet 6 inches. The bathroom ran parallel to the last-mentioned room.

Alice Anna Street.—A tenement house near Fell's Point Market occupied by fourteen families, twelve being Polish and two German. Eight families occupied three rooms each at a rent of from 4s. 10d. to 5s. 9d. per week, five occupied two rooms at from 2s. 11d. to 3s. 4d. per week and one room was let at 1s. 5d. The ground floor was used as a stable, and the entrance—broad enough for the passage of a cart—was ill-paved and dirty. At the back of the yard were two small houses, containing two stories and four rooms, let at 4s. 10d. Three privies and two hydrants served for all tenants. The dimensions of one of the three-roomed dwellings were: front room 16 feet by 13 feet, middle room (dark) 14 feet by 13 feet and back room 12 feet by 13 feet, the height being 8 feet. The tenants belonged to the unskilled labouring class.

Albemarle Street.—A house inhabited by three German-Jewish tenants, of whom one was a baker, another a carpenter and the third a "junk dealer" or ragman. Two of the tenements contained three rooms and let at 7s. 8d., and there was a two-roomed tenement on the ground floor, let at 6s. 9d., the dimensions of these rooms being 18 feet by 12 feet 6 inches and 18 feet by 15 feet respectively, with a height of 9 feet. One convenience was provided for the three families, but each tenement had a water-tap. Two other tenements of three rooms and one of four rooms all let at 7s. 8d. The dimensions of the rooms in the four-roomed tenement were: 14 feet by 15 feet, 14 feet by 15 feet, 7 feet by 8 feet and 15 feet by 12 feet, the height being 9 feet. This was formerly a single-family house occupied by well-to-do people, but was now tenanted by Russian Jews.

Trinity Street.—A house occupied by two Italian families, the husband in one case being a mason, who occupied three rooms on the ground floor, the dimensions being 15 feet by 12 feet by 9 feet, 14 feet by 12 feet by 9 feet and 10 feet by 8 feet by 9 feet. There was no corridor in front, but a rear entrance with passage, where the stairs were found. The closet was on the vault system.

West Cross Street.—Twenty houses in a row, all with six rooms and bathroom, eighteen being owned or in course of purchase by the occupiers. The rents of the remaining two houses were 14s. 5d. and 11s. 6d. respectively. The frontages measured 13 feet. Each house had a vestibule and hall passage running back to the door of the middle room. The closet was on the vault system. The dimensions of the rooms were as follows:—Ground floor—front room 14 feet by 9 feet; middle room 12 feet by 10 feet 6 inches; kitchen 15 feet by 9 feet 6 inches. Upstairs:—Front room 15 feet by 13 feet; middle room 12 feet by 10 feet 6 inches; back room 9 feet 6 inches by 12 feet 3 inches, the height in every case being 8 feet 6 inches. Among the occupants were two engineers, a railway conductor, a granite worker, a tailor. Most were Germans or of German descent.

RETAIL PRICES.

Baltimore is a noted food-supply centre. Fruits, vegetables, dairy products, poultry and meat are produced in the fertile districts of the State of Maryland, and the shores of the Chesapeake are especially favourable for these branches of agriculture.

The city is remarkable among the large cities of the United States for the abundance and varied character of its retail markets. In the principal districts of the city are covered markets where all kinds of meat, vegetables, fruits, butter, eggs and other important foodstuffs are sold. Of the eleven markets the Lexington, Fell's Point, Belair, Centre Cross Street and Lafayette Markets are the most frequented and in them working people make a large part of their purchases. All are open on Saturdays and one or two other days in the week. The streets which surround the markets are lined with a great variety of provision shops and other stores, the prices of which are influenced by the market quotations. The number of butchers' stalls is very great, and all grades of meat are sold in them.

There are no co-operative societies, but some "multiple" firms have several branches. One with seventy-five branches in other parts of the United States, and dealing in coffee, tea and sugar, has sixteen local shops. Two other general grocery firms have respectively seven and eleven shops in various parts of the city. In addition there are two important general shops, with large meat and grocery departments, which attract the custom of the workpeople.

Food prices have risen to a notable degree in Baltimore in the course of the last eighteen years. In 1892 the Maryland Bureau of Statistics began to collect regularly from a number of retail dealers the prices of the medium qualities of certain articles of general consumption. The average prices for 1909 showed an increase of 51.46 per cent. over those of 1892. The prices of 1909 were ascertained from 230 retail dealers in various parts of the city, and related to the medium quality of thirty-six different articles, comprising various descriptions of meats, fish, groceries and provisions and coal. Twenty-six of these articles were higher in price in 1909 than in 1908, and six were lower, while in the case of the remaining four, the average price was the same in each year.

The monthly average prices at the most important market in Baltimore were also collected in 1908 and in 1909 for 108 articles, which included meats, game, poultry, fish, vegetable, fruits, butter and eggs. Of these 108 articles, which are described as supplying "the table of the average home," 67 showed an increase in price in 1909 as compared with 1908, 38 showed a slight decrease and 3 were unchanged.

Groceries and other Commodities.

Tea is drunk to only a limited extent, *coffee* being the popular beverage. The tea mostly used is a China blend, and it is often bought in packets of four oz. for 7½*d.* The coffee in general use comes from Brazil. Sweet potatoes are plentiful and are largely eaten, especially by the negroes. Vegetables (notably tomatoes, peas, spinach, cabbage and potatoes) and fruits are also abundant and cheap. *Bread* is largely baked at home, but less in summer than in winter. The buying of bakery bread is, however, on the increase. The loaf sold at 2½*d.* weighed as a rule from 14 to 15 oz.; when put into the oven it weighed about 1 lb. It must be remembered, however, that wheaten bread does not constitute as large an item in the dietary of the American as of the Englishman or Frenchman. Maize bread and other substitutes are largely eaten. Boneless *bacon* is most generally bought, breakfast bacon with the rib in not being in much demand. American, Swiss and Limburg are the principal *cheeses*, but Swiss cheese is much dearer than the other two, being usually retailed at from 1*s.* 3*d.* to 1*s.* 5½*d.* per lb., while the American costs from 9*d.* to 10*d.*, and the Limburg 10*d.* per lb. The last-named is largely eaten by the German working people.

By municipal regulation the ton of *coal* must weigh 2,240 lb. when sold in the city. Baltimore is an important coal market.

The following Table shows the predominant prices of certain principal commodities of the qualities mostly consumed by the working classes in February, 1909:—

Predominant Prices paid by the Working Classes in February, 1909.

| Commodity. | Predominant Price. |
|-------------------------------------|---|
| Tea per lb. | 1 <i>s.</i> 8 <i>d.</i> to 2 <i>s.</i> 6 <i>d.</i> |
| Coffee " | 9 <i>d.</i> ,, 10 <i>d.</i> |
| Sugar:— | |
| White Granulated " | 2½ <i>d.</i> , 2¾ <i>d.</i> |
| Brown " | 2½ <i>d.</i> |
| Bacon, Breakfast—Boneless " | 9 <i>d.</i> to 10 <i>d.</i> |
| Eggs per 1 <i>s.</i> | 9, 10 |
| Cheese, American per lb. | 9 <i>d.</i> to 10 <i>d.</i> |
| Butter " | 1 <i>s.</i> 2½ <i>d.</i> ,, 1 <i>s.</i> 5½ <i>d.</i> |
| Potatoes, Irish... .. per 7 lb. | 5½ <i>d.</i> ,, 7 <i>d.</i> |
| Flour, Wheaten — Household " | 1 <i>s.</i> 0¼ <i>d.</i> ,, 1 <i>s.</i> 0¾ <i>d.</i> |
| Bread, White per 4 lb. | 10¾ <i>d.</i> ,, 11½ <i>d.</i> |
| Milk per quart | 4¾ <i>d.</i> |
| Coal, Anthracite per cwt. | { 1 <i>s.</i> 6¾ <i>d.</i> to 1 <i>s.</i> 7½ <i>d.</i> * 1 <i>s.</i> 6¾ <i>d.</i> ,, 1 <i>s.</i> 8¾ <i>d.</i> † 1 <i>s.</i> 7½ <i>d.</i> ,, 1 <i>s.</i> 10½ <i>d.</i> ‡ |
| Kerosene per gallon | 5½ <i>d.</i> ,, 6 <i>d.</i> |

* By the ton of 2,240 lb.

† By the half-ton (1,120 lb.).

‡ By the bushel (80 lb.).

Meat.

A large percentage of the meat consumed in the city comes from the West, although the home-killed meat forms an appreciable proportion of the whole, and commands better prices. It is said that the finer grades of Western meat are not sent to Baltimore. It is chiefly beef that comes from the West, the mutton, veal and pork being obtained for the greater part from the local centres.

There is no municipal abattoir at Baltimore, but there are two large private abattoirs and a number of minor ones.

The working people eat for the most part beef and pork, veal and mutton being in but slight favour. The shin is often sold whole at from 1s. 5½*d.* to 1s. 10½*d.*, according to its weight. Chuck roast, round steak, with plate and brisket, are the principal cuts of beef bought, while dry salt pork, spare rib and ham are very popular.

The subjoined Table shows the predominant prices paid for the chief cuts by the working classes in February, 1909 :—

Predominant Prices paid by the Working Classes in February, 1909.

| Description of Cut. | Predominant Price per lb. |
|-------------------------------------|------------------------------|
| Beef :— | |
| Roasts—Round | 7 <i>d.</i> to 7½ <i>d.</i> |
| " Rib prime | 7 <i>d.</i> " 8 <i>d.</i> |
| " Rib second cut | 6 <i>d.</i> " 7 <i>d.</i> |
| " Chuck or short ribs | 5 <i>d.</i> " 6 <i>d.</i> |
| Steaks—Round | 7 <i>d.</i> " 7½ <i>d.</i> |
| " Sirloin | 8 <i>d.</i> " 9 <i>d.</i> |
| Shin without bone | 4 <i>d.</i> " 5 <i>d.</i> |
| Flank | 3 <i>d.</i> " 4 <i>d.</i> |
| Plate, Brisket { Fresh | 3 <i>d.</i> " 4 <i>d.</i> |
| { Salt or corned | 3 <i>d.</i> " 4 <i>d.</i> |
| Mutton or Lamb :— | |
| Leg | 6 <i>d.</i> to 9 <i>d.</i> |
| Breast | 4 <i>d.</i> " 6 <i>d.</i> |
| Loin | 7½ <i>d.</i> " 10 <i>d.</i> |
| Chops | 9 <i>d.</i> " 10 <i>d.</i> |
| Shoulder | 5 <i>d.</i> " 6 <i>d.</i> |
| Neck | 4 <i>d.</i> " 5 <i>d.</i> |
| Veal :— | |
| Cutlets | 10 <i>d.</i> to 11 <i>d.</i> |
| Rib chops | 7½ <i>d.</i> " 9 <i>d.</i> |
| Loin chops | 7½ <i>d.</i> " 10 <i>d.</i> |
| Breast | 5 <i>d.</i> " 6½ <i>d.</i> |
| Neck | 4 <i>d.</i> " 6 <i>d.</i> |
| Pork :— | |
| Fresh—Loin | 7 <i>d.</i> to 8 <i>d.</i> |
| " Spare rib | 5 <i>d.</i> |
| " Shoulder | 5 <i>d.</i> to 7 <i>d.</i> |
| " Chops | 7 <i>d.</i> " 9 <i>d.</i> |
| Corned (wet salt or pickled) | 6 <i>d.</i> " 7½ <i>d.</i> |
| Dry salt | 6 <i>d.</i> " 7½ <i>d.</i> |
| Ham | 7 <i>d.</i> " 8½ <i>d.</i> |
| Shoulder, salt or smoked | 6 <i>d.</i> " 7½ <i>d.</i> |

Prices at New York being taken as the base, = 100, in each case, the index number for the price of meat at Baltimore is 92, for other food it is 99 and for food prices as a whole 97. For rents and food prices combined the index number is 86.

BIRMINGHAM.

Birmingham, which is now the largest city in the State of Alabama, has attained its present importance owing to the active development of the mineral resources of the State during the last twenty years. The city proper is the business centre of an important mining district in Jefferson County, where coal, iron ore and limestone are found in close proximity and in great abundance. Birmingham people claim that the local conditions for the production of pig iron are superior to those found in any other part of the world, but the development of this industry has been hindered by the fact that the principal markets for iron and steel lie in the northern portions of the United States. As no waterways are available for the commerce of the Birmingham district, producers of heavy commodities like pig iron and coal find their advantages in production counteracted by the heavy cost of transport to the more distant markets. The future development of the coal and iron industry is therefore dependent to a large extent on the development of the resources and population of the Southern States.

The following Table shows the growth in the production of coal, coke and pig iron in the State of Alabama (which for this purpose practically means the district of which Birmingham is the commercial and railway centre) since 1877. The figures are those collected by the State Inspector of Mines :—

| — | Coal. | Coke. | Pig Iron. |
|-------------|-------------------|-------------------|-------------------|
| | Tons of 2,000 lb. | Tons of 2,000 lb. | Tons of 2,240 lb. |
| 1877 | 196,000 | — | 36,823 |
| 1887 | 1,950,000 | 325,020 | 261,394 |
| 1897 | 5,893,771 | 1,443,017 | 947,831 |
| 1907 | 14,424,863 | 3,096,722 | 1,686,674 |

The city of Birmingham and the smaller townships adjacent lie in a valley which runs east and west. The southern side of the valley is bounded by a steep escarpment of red rocks, indicating the presence of iron ore. Towards the north-west are the coal mines extending over a considerable area. Limestone is quarried towards the north-east. The iron and steel works are situated at various points in the valley, the largest being at Ensley, which is about ten miles from Birmingham. In Birmingham itself and the immediate suburbs there are several important smelting works and also a number of foundries and machine shops producing cast iron pipes, engines and sugar-milling machinery. In North Birmingham, brick and fireclay works and saw-milling are of importance. The textile industries have obtained little foothold as yet in Birmingham, but there is a large cotton mill a short distance away.

The Table given above, showing the production of coal, coke and pig iron, affords a better indication of the growing importance of Birmingham than the population, though this has increased remarkably, as is seen from the Table below. Residential suburbs have sprung up, and beyond them have grown small detached townships, such as Ensley, Pratt City and Bessemer, which are only a few miles distant from the city. Birmingham is thus the commercial, shopping and social centre for a wide district. The Census figures for 1880–1910 for the city proper are shown in the following Table :—

| Year. | Population. | Increase. | Percentage Increase. |
|-------|-------------|-----------|----------------------|
| 1880 | 3,086 | — | — |
| 1890 | 26,178 | 23,092 | 748·3 |
| 1900 | 38,415 | 12,237 | 46·7 |
| 1910 | 132,685 | 94,270 | 245·4 |

In the year 1900, 52·3 per cent. of the total population consisted of American-born whites, 43·1 per cent. of persons of negro descent and only 4·6 per cent. of foreign-born whites. These figures relate only to the population comprised within the city limits. In the outer districts, near the mines and the large iron and steel works, there are now some colonies of Italians and Slavs, who do not form as yet a large proportion of the population, though their numbers are likely to increase. Opinions differ amongst employers as to the comparative merits of negro and East European labour, but some companies, at least, prefer Slavs or Hungarians, the latter particularly having a reputation for steadiness, and also possessing the physique which is required for heavy labour in the iron works. Whether they can be attracted in large numbers at the existing level of wages paid to unskilled labour remains, however, to be seen. Italians are employed to some extent on railway construction and maintenance. They are not fond of underground work in the coal mines, but are employed to some extent in surface work. One of the mine managers stated that Italians, owing to unfamiliarity with the hazards of coal mining, are "too easily scared" by small accidents which the negro takes more philosophically, saving the management much worry and expense. Another point in the negro's favour is that he spends his earnings freely at the mining companies' stores, whereas the Italian frequently lives frugally and saves all he can, remitting the money to Italy.

Within the city limits practically all the unskilled labour is performed by negroes, but it would not be true to say that all negroes are unskilled labourers. In the building industry, which is discussed in more detail below, they have a footing in the skilled occupations, and there are negro doctors, lawyers, ministers, schoolmasters and even bankers. Educational facilities for negroes in Birmingham are, however, rather meagre, the schools being understaffed and overcrowded. Money is not voted readily for negro education, though for white children handsome and well-equipped schools are provided. Education is not compulsory for either race, but in the city the great majority of white children attend school.

The climate and physical characteristics of all this region are quite favourable to the health of white men. Birmingham is from 700 to 800 feet above the sea-level, and the soil is of a porous nature, readily absorbing moisture. The surrounding country consists mainly of low, thickly-wooded hills and narrow valleys, altogether different from the low-lying level ground of the "black belt" further south. Although Birmingham, like Atlanta, is in nearly the same latitude as Fez in Morocco, the climate is essentially temperate. During a large part of the year the temperature is cool and the air bracing, and even in summer the nights are seldom hot. Pine woods are found to a considerable extent in the surrounding country, but in Birmingham itself and the immediate vicinity most of the trees are deciduous. In the middle of March there are no more leaves to be seen than in England at the same time of the year.

For a city whose rate of growth is both rapid and fluctuating, it is impossible to obtain vital statistics of a thoroughly reliable character for years far removed from the date of the last Census. According to local estimates of population, the death-rate has kept at about 21 or 22 per 1,000 of the population during the last few years, though it fell to 18·5 in 1908. The death-rate among white people alone during the same period was appreciably lower, probably 15 or 16 per 1,000. The total number of deaths in 1908 was 1,109, and the following Table shows some of the principal causes of mortality:—

Mortality from some of the Principal Causes in 1908.

| | White. | Negro. | Total. |
|---|--------|--------|--------|
| Violence (including accidents) | 63 | 68 | 131 |
| Tuberculosis | 31 | 111 | 142 |
| Pneumonia | 26 | 47 | 73 |
| Broncho-pneumonia | 10 | 16 | 26 |
| Typhoid | 32 | 21 | 53 |
| Cancer | 28 | 8 | 36 |
| Acute intestinal disorders of children under 5 years... | 37 | 35 | 72 |

Two facts attested by these figures are particularly noticeable, viz., the large number of deaths from violence and the heavy mortality amongst negroes from tuberculosis and lung diseases. Nearly 12 per cent. of the total deaths were due to violence, mainly accidents

on the railways at level crossings and in steel works, &c. The mortality from this cause in 1908, though heavy, was less than in previous years, and the report of the Health Officer suggests that the principal cause of the reduction has been the prohibition of the sale of alcoholic liquors, which came into force on January 1st, 1908. It is not easy to determine as yet how far prohibition has operated in this direction, because the year 1908 was one of exceptional trade depression, hence fewer accidents would be expected in view of the much smaller number of railway wagons in use and the almost complete stoppage of production in some of the iron and steel works. It is also probable that there was a much smaller floating population in Birmingham in 1908 than in the previous years of trade activity, for negroes remain on the plantations when the coal and iron works are not actively employed. There is good reason, however, for believing that prohibition has not been ineffective. The return of the number of convictions at the Birmingham City Court for certain offences in 1907 and 1908 given below shows a greater diminution in 1908 than can well be accounted for merely by the difference in the state of trade :—

Convictions for Various Offences in 1907 and 1908.

| | White Persons. | | Coloured Persons. | | Total. | |
|-------------------------------|----------------|-------|-------------------|-------|--------|-------|
| | 1907. | 1908. | 1907. | 1908. | 1907. | 1908. |
| Assault and Battery | 339 | 235 | 610 | 282 | 949 | 517 |
| Assault with intent to Murder | 7 | 8 | 37 | 25 | 44 | 33 |
| Disorderly Conduct | 492 | 316 | 804 | 443 | 1,296 | 759 |
| Drunkenness | 1,535 | 516 | 735 | 172 | 2,270 | 688 |
| Wife-beating | 16 | 14 | 96 | 42 | 112 | 56 |

It is noticeable that, allowing for relative numbers, drunkenness appears to be more prevalent amongst the white population than amongst the negroes, and that the effect of the prohibition law has been less marked in the case of the former than the latter.

The business portion of the city is built of brick and steel. Already there are several tall blocks of office buildings, of the kind known as "sky-scrapers," and a new block, taller than any already existing, was in course of erection at the time of the investigator's visit. The offices in these tall buildings are of a superior kind and are largely occupied by the iron and steel and coal mining companies, estate agents, lawyers, &c.; doctors and dentists also have their consulting rooms and surgeries in them, and it may almost be said that the commercial and professional life of the town, in its larger aspects, is concentrated in these imposing office blocks.

In a city in which every dwelling house has some space around it, the question of parks is not very pressing. Birmingham, however, has several small parks, the principal one some 5 or 6 miles from the centre of the city.

A drainage system has been carried out in practically the whole area of the city proper, but most of the suburbs are still imperfectly served in this respect, for no regulations have compelled builders to keep to the land adjacent to paved and sewered streets, so that houses have been erected anywhere within reach of the widely radiating tramway system. In their desire to obtain cheap land and plenty of room people do not mind sacrificing the convenience of made roads and sewers for a few years. When districts become sufficiently inhabited the roads are made and the sewers follow sooner or later. Water has to be procured from the beginning, however, and as wells are not available in most places, the supply of the Water Company has to be taken. The charges are rather high, probably on account of the large area which needs to be covered in order to reach a limited number of houses. The rate of charge by meter is 1s. 6d. per 1,000 gallons for quantities not exceeding 25,000 gallons per month; for a larger consumption the price per gallon is reduced according to a scale. Most of the domestic supply, however, is not charged by meter. The scale of charges varies in the different suburbs, each of which has made its own bargain with the Water Company. For the city the charge for domestic consumption, in so far as it applies to houses of the kind occupied by wage-earning families, is as follows :—

| | Per annum. |
|---|------------|
| Dwellings of three rooms and less | 33s. 4d. |
| Each additional room up to ten rooms | 4s. 2d. |
| Water-closet | 20s. 10d. |
| Bath | 16s. 8d. |

Thus a house having five rooms and water-closet, without bath, would be charged 62s. 6d. per annum, or about 1s. 2d. per week, while with a bathroom the charge for such a house would be about 1s. 6d. per week. The water charge is nearly always paid directly by the tenant.

The electric lighting system, the gas works and the tramways are all owned by one company. The charge for gas is 4s. 2d. per 1,000 cubic feet. The tramways have 112 miles of track and a 2½d. fare for any distance is charged over nearly the whole system.

The municipal revenue is derived partly from the usual general property tax, and partly from licences. A State law prohibits the city from levying a tax of more than one per cent. per annum on the assessed capital value of property for municipal purposes. The State and county taxes, however, amount to 1.35 per cent., so that the total levy is 2.35 per cent., of which the city retains less than half. To make up a sufficient revenue the city has an elaborate schedule of licences for all kinds of businesses and professions. Banks pay from £42 to £94 per annum, according to the amount of their capital, surplus and undivided profits; dry-goods stores pay from £3 to £63 according to the value of the stock, barbers' shops pay 12s. 6d. per chair, &c. The Tramway Company pays £875 per annum, and the railway companies £365 each. The Water Company is charged £3,646, and the Telephone Company £521. Lawyers, doctors and dentists pay from £5 to £26 according to their gross business receipts. The licences yield rather more than the ordinary property tax; this reverses the usual position in American cities.

OCCUPATIONS, WAGES AND HOURS OF LABOUR.

Birmingham is more important as the centre of a manufacturing and mining district than as a manufacturing city and the Census statistics for the city alone do not do justice to the industries which in reality give the place its importance.

According to the Census of 1900 trade and transportation, and professional and domestic service gave employment to the largest number of people, but metalworking and engineering and the building trades were also largely represented. The Census statistics may be summarised as follows:—

Number of Persons of 10 years of age and over engaged in Occupations in Birmingham in 1900.

| Occupations. | Males. | Females. | Total. |
|---|--------|----------|--------|
| Building | 1,127 | — | 1,127 |
| Metalworking and Engineering | 1,532 | — | 1,532 |
| Textile | 21 | 3 | 24 |
| Boot and Shoe Making | 67 | — | 67 |
| Clothing | 76 | 370 | 446 |
| Woodworking and Furnishing | 84 | 1 | 85 |
| Paper and Printing | 127 | 5 | 132 |
| Food, Drink and Tobacco | 205 | 8 | 213 |
| Other Manufacturing and Mechanical Pursuits | 924 | 8 | 932 |
| Trade and Transportation | 5,725 | 370 | 6,095 |
| Labourers (not otherwise specified) | 1,647 | 24 | 1,671 |
| Professional, Domestic and Personal Service and } Agricultural Pursuits | 2,153 | 4,373 | 6,526 |
| All Occupations | 13,688 | 5,162 | 18,850 |

Coal Mining.—Both white and coloured men are employed in the coal mines as pick miners, but practically all the labourers are coloured. Payment is by the ton, 1s. 8d. per ton of 2,000 lb. being a common price at the time of the investigation, the rate having been reduced in most mines in 1908, when a great strike resulted in the defeat of the miners. Unskilled helpers, paid either by time or piece, but mainly by time, are often employed by individual miners, who thus take somewhat the same position as foremen, and in this way make high earnings when they are themselves good managers. It is said that the best miners are those from Great Britain, who came to this district many years ago and were able to turn to advantage their knowledge of mining methods in the

British coalfields. The rapid development of the industry in recent years has led to the employment of large numbers of Southern white Americans and negroes who have had to gather their knowledge as best they could. These men, on the whole, are less skilful than those who have been brought up to mining from their youth.

Partly owing to differences in skill and experience, and partly owing to the fact that unskilled helpers are frequently employed, there are wide differences in individual earnings. These differences are further accentuated by the fact that many of the men, especially those of coloured race, work irregularly. A mining manager stated that owing to irregularity of attendance he was compelled to have from 30 to 40 per cent. more men on his books than he was likely in ordinary circumstances to need at any one time.

The average hewer earns from 10s. 5d. to 12s. 6d. per day and usually works from three to five days per week, but many men, including some coloured men, earn higher amounts. The hours are variable, and depend largely upon the men themselves, but the usual day's work averages about eight hours. The wages and hours of labour stated in the Table on p. 93 are for a full week of six days.

Blast Furnaces.—The labour employed in blast furnaces is almost entirely coloured, and of a comparatively unskilled type. A few white supervisors, mechanics and engineers earn skilled rates of wages, but the majority of men employed earn less than 8s. 4d. per day. Two shifts of twelve hours each are worked seven days per week. The furnaces mostly lie a few miles beyond the city boundaries. The largest plant is at Ensley.

Rolling Mills.—Most of the iron smelted in the Birmingham district is sent away as pig iron, but some is converted into steel and rolled into rails and plates. Labour in the rolling mills is mainly coloured, though some Slavonic and Italian unskilled labour is employed. White men act as head rollers and as foremen and superintendents, but coloured men are employed as heaters and catchers, and have very high earnings.

Coking Ovens.—Work is done entirely by negroes, who can stand the heat better than white men. The nature of the work, in fact, specially suits the negro, as constant attendance is not required. The work of pulling and loading is hard while it lasts, but the duration of actual work is not great. Pullers and loaders are paid by piece.

Foundries and Machine Shops.—There are a few machine shops and foundries, the most important of the latter being those which produce cast iron pipes, and of the former those which are engaged in making engines, sugar-milling machinery, &c. The railway companies also have repair shops which employ a considerable number of mechanics. Moulders in general machine shops have a recognised rate of 13s. 1½d. per day of ten hours. Both moulders and machinists are mainly union men, and the rate of pay is about the same for the two occupations. No half-holiday on Saturday has yet been secured in machine shops, and, indeed, at the time of the investigator's visit the question of introducing a Saturday half-holiday even into business offices was only just being taken up. The skilled men are all white, and the labourers are all coloured men.

Building Trades.—About half the bricklayers in Birmingham are said to be members of the trade union, which includes a small number of coloured men. It is not owing to the existence of any very sympathetic feeling between the white men and the negroes that the latter are allowed to join the union; it is simply because the white men feel that their interest demands that coloured men should be organised so far as possible, so as to prevent them from cutting down the rates of wages. Wherever a sufficient number of coloured men can be organised, they are encouraged to form a union of their own, affiliated to the white men's unions, but where there are not enough to form a separate union, they are allowed, in the South, to become members of the white men's organisations. Union bricklayers are employed principally by the larger contractors, and are paid 2s. 7¼d. per hour, working eight hours per day. Non-union men, who are mainly coloured, work nine to ten hours per day, earning from 12s. 6d. to 16s. 8d. per day. A few are paid the full rate of 20s. 10d. per day, and some earn less than 12s. 6d. per day, but the majority come within the range quoted. It is not uncommon for non-union coloured bricklayers to work by contract or piece work; their work is largely on foundations of frame houses, where good finish is not required. In spite of the mild climate in winter, bricklayers are said to have almost as much irregular work as in the North. Rain is very heavy when it falls, and stops outdoor work, and further irregularity is due to the fact that the demand for bricklayers' work comes mainly from builders of large premises, for which there is not a continuous demand.

Stonemasons and stonecutters do not form a large class.

Carpenters are the most important class of men employed in the building of frame houses. The district unions have a membership of about 600, including a small union of

coloured men. The union rate of pay is 1s. 8d. per hour, and eight hours per day are worked for six days per week. A considerable number of coloured carpenters, estimated at 300, are outside the unions, and there are a few non-union white carpenters. The non-union men include a large number of rough carpenters, who are paid rates as low as 10d. per hour, and work usually ten hours per day.

Plasterers are almost all coloured men, who have a fairly strong union. They have an eight-hour day, with a half-holiday on Saturdays, making 44 hours per week. Non-union plasterers often are paid by piece and their earnings vary considerably.

Plumbers are all white men, and practically all are organised. The ordinary day is eight hours, but only seven hours are worked on Saturday for a full day's pay.

Structural iron workers are all white men.

Painters are a numerous body, as all frame houses have to be painted periodically. The white men are mainly unionists, and at the time of the investigation they were asking for 1s. 8d. per hour; rather less than half had already received that rate and the remainder were still receiving 1s. 5½d. per hour. The non-union coloured painters are numerous, being estimated at 600 to 700. They earn from 10d. to 1s. 3d. per hour and work ten hours per day.

General unskilled labourers in the building trades earn from 4s. 2d. to 5s. 2½d. per day, and usually work ten hours. Labourers attached to skilled men as helpers are paid various rates. When union labour is employed, there is a sharp line between the skilled men and the unskilled, the latter receiving from 5s. 2½d. to 6s. 3d. per day. When the line of division is less definite, helpers may get as much as 8s. 4d. per day. Hod carriers, who are employed mainly in connexion with plasterers, have a union, but it is not strong. Members of the union receive 1s. 0½d. per hour or 8s. 4d. per day, which is the maximum figure. For non-union hod carriers the range is from 5s. 2½d. to 6s. 3d. per day. Practically all the unskilled labour in the building trades is coloured. A few Italians, Greeks and Syrians are employed, but they are an insignificant factor.

Among employers opinions differ strongly on the question whether coloured men are likely to displace white men in the skilled occupations in building. Those who employ one or the other exclusively are satisfied that their policy is right. For the better class of buildings, especially large business buildings, good houses and hotels, white men are employed, but builders of small houses of a plain type find coloured men capable of doing all that is required, and to a certain extent even able to do work of a good class, in which case they can command corresponding rates of pay.

The building and mining industries are the two in which the white and coloured races come into the most direct competition with one another, yet it cannot be said that in either of these industries a situation exists which occasions any very serious friction. No doubt in both industries the white men would like to monopolise the skilled work for themselves, but they recognise that that is impossible, and make the best of the situation. In ordinary times there is a tolerable *modus vivendi*, tolerable at least so far as the white men are concerned, for they make it quite clear that their connexion with the coloured men is purely a matter of business and involves no social recognition whatever. From the point of view of the coloured men the position is by no means so satisfactory, though admittedly better than it might have been. It is in the mining industry that the relations between the two races, though working side by side in direct competition, are smoothest. They acted together in the great strike of 1908, and in fact the good feeling between the white and the coloured men was used with great effect by the opponents of the strikers, who charged the white miners with disloyalty to their race.

The system of piece work is doubtless a factor which contributes towards the avoidance of racial friction; under this system the inefficiency of one set of men does not tend to lower the standard rate of wages for all in the same degree that it might do if time rates were paid. White coal miners, moreover, have less delicate tastes and modes of life and are less imbued with social ambition than the skilled men in the building trades. Many of the latter are Northern men, unaccustomed to contact with a large mass of negroes from childhood, and having as a rule lived in cities, they are more influenced by the desire for social equality with the commercial classes, and they are apt to feel that this social equality is endangered by any suspicion of association with negroes.

Printing Trades.—Union rates of wages are general in the printing trades. The rate for compositors on day work is 2s. 3½d. per hour, and on night work 2s. 6d. per hour. The machine compositors working on the morning newspapers are on piece work and earn from 20s. 10d. to 25s. per day.

Municipal and Public Services.—Street construction work is done by contractors. Scavenging and road sweeping is done by convicts hired by the city from the State authorities. These men work with manacles on their legs. Motormen and conductors in the employ of the tramway company are all white men, and are paid on a scale beginning at 8*d.* per hour for the first six months and increasing to 8 $\frac{3}{4}$ *d.* per hour for the second six months; in the second year they are paid 9 $\frac{1}{2}$ *d.*, after which they rise by $\frac{1}{2}$ *d.* per hour each year up to 1*s.* 0 $\frac{1}{2}$ *d.* per hour in the eighth year of service. The day's work amounts to about ten hours; seven days are worked per week.

The following Table shows the predominant weekly wages and hours of labour of adult males in the principal occupations in Birmingham in February, 1909:—

Predominant Weekly Wages and Hours of Labour of Adult Males in the Principal Occupations in February, 1909.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|--|---|-------------------------------------|
| <i>Building Trades:—</i> | | |
| Bricklayers { White | 125 <i>s.</i> | 48 |
| { Coloured | 75 <i>s.</i> to 100 <i>s.</i> | 54 to 60 |
| Carpenters { White | 80 <i>s.</i> | 48 |
| { Coloured | 62 <i>s.</i> 6 <i>d.</i> to 75 <i>s.</i> | 60 |
| Plasterers | 114 <i>s.</i> 7 <i>d.</i> | 44 |
| Plumbers | 125 <i>s.</i> | 47 |
| Structural Iron Workers | 112 <i>s.</i> 6 <i>d.</i> | 54 |
| Painters { White | 70 <i>s.</i> to 80 <i>s.</i> | 48 |
| { Coloured | 50 <i>s.</i> „ 75 <i>s.</i> | 60 |
| Hod Carriers, Bricklayers' and Plasterers' Labourers... .. | 31 <i>s.</i> 3 <i>d.</i> „ 50 <i>s.</i> | 60 |
| General Labourers | 25 <i>s.</i> „ 31 <i>s.</i> 3 <i>d.</i> | 60 |
| <i>Coal Mining:—</i> | | |
| Hewers | 62 <i>s.</i> 6 <i>d.</i> to 75 <i>s.</i> | 42 to 54 |
| Drivers | 37 <i>s.</i> 6 <i>d.</i> „ 50 <i>s.</i> | 48 „ 60 |
| Labourers (underground) | 37 <i>s.</i> 6 <i>d.</i> „ 50 <i>s.</i> | 48 „ 60 |
| Labourers (surface) | 31 <i>s.</i> 3 <i>d.</i> „ 37 <i>s.</i> 6 <i>d.</i> | 48 „ 60 |
| <i>Blast Furnaces* :—</i> | | |
| Keepers | 46 <i>s.</i> 8 <i>d.</i> to 54 <i>s.</i> | 84 |
| First Helpers | 42 <i>s.</i> 4 <i>d.</i> „ 52 <i>s.</i> 6 <i>d.</i> | 84 |
| Second Helpers | 39 <i>s.</i> 5 <i>d.</i> | 84 |
| Hot-blast Men | 46 <i>s.</i> 8 <i>d.</i> to 51 <i>s.</i> 1 <i>d.</i> | 84 |
| Pig Carriers and Pig Breakers | 51 <i>s.</i> 1 <i>d.</i> „ 58 <i>s.</i> 4 <i>d.</i> | 84 |
| Labourers... .. | 36 <i>s.</i> 6 <i>d.</i> | 84 |
| <i>Coking Ovens:—</i> | | |
| Coke Pullers and Loaders | 31 <i>s.</i> 3 <i>d.</i> to 50 <i>s.</i> | 40 to 56 |
| Labourers | 27 <i>s.</i> 6 <i>d.</i> „ 31 <i>s.</i> 3 <i>d.</i> | 60 |
| <i>Foundries and Machine Shops:—</i> | | |
| Ironmoulders | 78 <i>s.</i> 9 <i>d.</i> | 60 |
| Machinists | 78 <i>s.</i> 9 <i>d.</i> | 60 |
| Blacksmiths | 78 <i>s.</i> 9 <i>d.</i> to 103 <i>s.</i> 9 <i>d.</i> | 60 |
| Patternmakers | 78 <i>s.</i> 9 <i>d.</i> „ 85 <i>s.</i> | 60 |
| Labourers | 25 <i>s.</i> „ 31 <i>s.</i> 3 <i>d.</i> | 60 |
| <i>Railway Shops:—</i> | | |
| Machinists | 72 <i>s.</i> to 76 <i>s.</i> 6 <i>d.</i> | 54 |
| Boilermakers | 85 <i>s.</i> „ 88 <i>s.</i> 9 <i>d.</i> | 53 to 60 |
| <i>Printing Trades:—</i> | | |
| Newspaper— | | |
| Hand Compositors { Day work | 110 <i>s.</i> | 48 |
| { Night work | 120 <i>s.</i> | 48 |
| Machine Compositors { Day work | 110 <i>s.</i> | 48 |
| { Night work | 125 <i>s.</i> to 150 <i>s.</i> | 48 |
| Book and Job— | | |
| Hand Compositors | 75 <i>s.</i> | 48 |
| <i>Public Services:—</i> | | |
| Street Construction and Paving (Contract)— | | |
| Paviors | 62 <i>s.</i> 6 <i>d.</i> | 60 |
| Paviors' Labourers | 37 <i>s.</i> 6 <i>d.</i> | 60 |
| Road Menders | 31 <i>s.</i> 3 <i>d.</i> | 60 |
| Drivers | 31 <i>s.</i> 3 <i>d.</i> | 60 |

* The hours of labour stated for men employed at blast furnaces are inclusive of intervals.

| | Predominant Weekly Wages | Predominant Weekly Hours of Labour. |
|---|-----------------------------|--|
| <i>Public Services—cont.</i> | | |
| Water Works (Company)— | | |
| Regular Labourers | 36s. 6d. | 70 |
| Construction Labourers | 27s. 6d. | 60 |
| Gas Works (Company)— | | |
| Gas Stokers | 48s. 3d. | 84 |
| Labourers | 25s. | 60 |
| Electric Light and Power Works (Company)— | | |
| Electricians—1st class | 96s. 3d. | 84 |
| Electricians—2nd class | 70s. | 84 |
| Stokers | 65s. 8d. | 84 |
| Oilers | 58s. 4d. | 84 |
| Overhead Linemen | 68s. 9d. | 60 |
| Labourers | 43s. 9d. | 84 |
| Electric Tramways— <i>See text.</i> | | |

Taking wages at New York as the base, = 100, in each case, the wages index numbers for Birmingham are—building trades, skilled men 97, hod carriers and bricklayers' labourers (negroes) 59 ; foundries and machine shops, skilled men 94, unskilled labourers (negroes) 67 ; printing, hand compositors (job work) 86.

HOUSING AND RENTS.

Outside the small area of the business centre of the city, wood is the almost universal building material for all classes of dwelling houses. The exterior is of frame boards painted usually a light or subdued tint, green occasionally giving a touch of colour. All the smaller houses consist of only one story, and consequently cover a much larger area than is usual in England. A verandah is always provided except in the case of some of the poorest negro houses, and ample air space surrounds every house. In the latter respect Birmingham does not differ greatly from other American cities of similar size, but Birmingham is very modern and has mostly grown since the invention of electric traction, so that the tendency to expand is there rather greater than usual.

A common size for a residential building site is 40 feet by from 100 to 150 feet, and on this site there may be a single house or a pair of semi-detached houses. Negro houses are built in closer groups, some facing the street or avenue and some in the rear, forming rough quadrangles. As many as twenty-eight semi-detached negro houses may occupy a space 150 feet by 190 feet, but considering that this type of house contains only two rooms, and is only one story in height, even this cannot be regarded as very close building.

The external appearance of the houses does not greatly differ from that of frame houses as built in the North ; the most distinctive feature is the fact that the cheaper houses in Birmingham are built above the ground, on little brick piers, allowing the air to circulate freely underneath, a method of building which is not adapted to the requirements of people living in more northerly climates. Another noticeable fact is that verandahs are more general in Birmingham than in northern cities, where many of the frame houses occupied by the wage-earning classes are without verandahs. In Birmingham even the cheaper negro houses have usually a porch extending along the whole of the house front.

The typical negro houses are built in pairs, semi-detached, each house having two rooms, about 12 feet by 14 feet. These houses are not always plastered inside, and many of them look as if nothing were spent on paint and repairs. Water-closets are provided to the extent of one to four or five houses, and a whole group of houses will have a common hydrant and sink in the yard round which they are built. The cheap negro houses are not confined to any one quarter of the city, but occur in groups here and there, especially in the neighbourhood of railway lines, iron and steel works and coking ovens. In many cases the land on which they stand is increasing in value, and will in course of time be needed for business purposes. Some day it may be impossible to provide cheap accommodation in the form now prevalent, and a tenement house problem may then arise.

Three-roomed houses are occupied by both white and coloured people. They are usually of better appearance than the two-roomed houses, being better painted and kept in repair. They are not built in groups or behind other houses. The rooms are often large, and in some cases there is a passage from the front door by which the middle room can be reached without passing through either of the other rooms.

Four-roomed houses are seldom occupied by coloured people. They are not infrequently detached, and vary from the simple four rooms to a little bungalow, with a hall, a bathroom and electric light. The range of rents is consequently very wide, but the majority run from 10s. 1d. to 13s. per week. The best type of four-roomed houses, conveniently situated, and having every modern improvement, cost from 15s. 5d. to 19s. 3d. per week.

The houses with five rooms are much the same in character as those just spoken of, and their rents likewise show a wide range. As in the case of four-roomed dwellings, locality is a very important factor.

In the suburbs rents are lower than in the city, not only because land is cheaper, but also because the expense of drainage and roadmaking has not been incurred to the same extent as in the city. Further, a working man who has to travel regularly to reach his work pays 2s. 6d. per week for car fares, and when loss of time and the travelling expenses of other members of the family are taken into account, it will be understood that convenience of situation is important. Equally important, if not more so, is the social character of the neighbourhood. Too close proximity to coloured settlements or to a low-class white population has the effect of greatly depreciating rents. Skilled workmen like to live in neighbourhoods where their children will mix with the children of the commercial classes in the public schools, and that is a privilege which has to be paid for in the shape of rent. Another factor making for higher rents is the existence of halls, which are sometimes square and of good proportions, so that they are almost equal to rooms; in fact, in the matter of rent, no clear distinction is drawn between houses with four or five rooms and a hall and houses with five or six rooms. The fact of the water-closet being inside the house has also a bearing on the rent, while the existence of a bathroom and electric light adds further to the value of a house. Though there are houses which combine these advantages with convenience of locality, and are let at from 19s. 3d. to 28s. 10d. per week, they are occupied to a considerable extent by business people. For wage-earners the predominant range of rents for houses with five living rooms is from 13s. to 18s. 9d. per week.

No general statement can be made with regard to the arrangement of rooms in the detached four and five-roomed houses, the shapes of which are very variable. It may be said, however, as a general rule, that when there is no hall the front door opens into the parlour and that the kitchen is in the rear. Even when there is no passage it is seldom necessary to pass through one bedroom to reach another, as the bedrooms open off the parlour and the kitchen. The rooms are on the whole sufficiently spacious. The principal living rooms are seldom less than about fifteen feet square, and they are commonly about ten feet in height. All the better houses have gauze screens over the doors to keep out flies, which are everywhere in America a serious nuisance in summer. It is usual to have fire-places in several of the rooms, as in England, for heating in winter, but in the kitchen there is the usual American stove, which stands out from the wall; it is commonly the property of the tenant and is of ornamental design. Where there is a bathroom, it is usual to have a hot-water supply from a boiler fitted to the kitchen stove. During about six months of the year, fires are used very much as in England. Many working-class families burn a ton of coal per month for nearly half the year.

The following Table shows the predominant ranges of rents, including the water-rate where such is paid separately by the tenant, of houses occupied by wage-earning families in Birmingham and the immediate suburbs. Rents in the mining villages are excluded.

Predominant Rents of Working-class Dwellings.

| Number of Rooms per Dwelling. | Predominant Weekly Rents. |
|------------------------------------|---------------------------|
| Two rooms—Coloured Tenants ... | 4s. 4d. to 5s. 9d. |
| Three rooms { Coloured Tenants ... | 6s. 9d. „ 8s. 8d. |
| { White Tenants ... | 7s. 3d. „ 10s. 7d. |
| Four rooms—White Tenants ... | 10s. 1d. „ 13s. |
| Five rooms—White Tenants ... | 13s. „ 18s. 9d. |

The level of rents at New York being represented by 100, the rent index number for Birmingham is 81. This is rather higher than might be expected in a city of the size of Birmingham. The explanation of this is probably to be found in the fact that Birmingham

has been growing rapidly, and for a number of years the supply of houses has hardly kept pace with the demand. It should also be borne in mind that in new and growing communities such as Birmingham, local capital is scarce and therefore commands a high return. There is not the supply of cheap capital available for investment in buildings which is found in older communities where there is a considerable number of retired business men or their descendants with capital to invest. Land also is more expensive than might be expected in view of the great areas available. This is due to the fact that great expectations are entertained, doubtless with good reason, regarding the extension and the future growth of the city, for which a population of a million within measurable time is predicted by local enthusiasts.

There is comparatively little ownership of homes by wage-earners. According to the Census of 1900, 86.3 per cent. of the families of Birmingham rented their homes, this proportion being almost as high as in New York.

The mining companies and some of the outlying iron works house their own employees. When mines were first opened in this district there were no houses for the men to live in, and no local capitalists to build them, so that the companies had to provide accommodation, and they have continued to do so in most of the mining centres. The miners' houses are very cheap, flimsy buildings, unplastered and not always air-tight. They contain either two, three or four rooms, seldom more, and are let at much lower rents than houses with an equal number of rooms in Birmingham and its suburbs. The rent per room ranges from 1s. 2d. to 1s. 11d. per week. The country in which these mining villages are situated has great natural attractions, but many of the villages themselves are destitute of charm, consisting, as a rule, of a collection of plain wooden huts erected on land carefully cleared of all vegetation. No one seems to think of fencing in gardens with a view to making the homes look attractive. In this respect, however, the miners are no different from the bulk of the wage-earners, and even a large part of the middle classes, of Birmingham and many other American cities. In the cities, however, it is quite usual to grow trees either along the roads or in the garden plots, and the frame houses have some architectural attraction and are mostly kept in repair and painted periodically. Most of the mining villages, on the other hand, have a bare and dreary aspect, and look like temporary settlements built for men engaged on works of construction, and destined to move elsewhere before long.

Sanitary conditions in these villages are very primitive. Public attention has only recently been called to the grave dangers of this state of things by the discovery that the disease ankylostomiasis, popularly known in America as "hook-worm" and in England as "miner's worm," is widely prevalent in the Southern States. The symptoms of the disease—acute anaemia, debility, "dirt eating" and, in the case of children, arrested development of body and brain—have been known for generations to be widely prevalent, but it is only in recent years that the discovery has been made that ankylostomiasis is the cause. It has been found in some rural districts where investigations have been made that as many as from 20 to 30 per cent. of boys under sixteen years have been suffering from this disease, and many medical men believe that the reputation for indolence which has been acquired by the Southern "Poor Whites" is largely attributable to the enfeebled physique which results from ankylostomiasis. At the time of the investigator's visit early in 1909, this subject was only beginning to engage public attention, and no investigations had been made in the mining districts of Alabama. There were, however, complaints of indolence on the part of white as well as coloured miners, and the necessary conditions for the prevalence of ankylostomiasis were present, namely, neglect of sanitation and the habit, on the part of children, of going barefooted, for the disease is contracted either by drinking polluted water or through the skin of the foot.

The ownership of houses by the companies led to an embittered state of feeling at the time of the strike in 1908, when the men had to camp out in tents. The Governor of the State declared this to be a danger to the community, and sent troops to turn the men out of the camps, thereby breaking the strike.

RETAIL PRICES.

There are no co-operative stores in Birmingham, but at the time of the investigator's visit the labour unions and the Farmers' Alliance were negotiating with a view to the establishment of one. "Multiple" firms with branches in different places are not represented in this city. One local firm has five provision stores in the city and the immediate neighbourhood, but the great majority of shops are under separate ownership. There is a market of no great size where a few butchers and greengrocers have stalls. The local supplies of farm and market garden produce are said to be inadequate,

and large quantities are brought from the Middle and more northerly States. Meat of local production is not held in great favour, and a large part of the supply comes from Chicago. There seems to be a consensus of opinion that local agriculture is rather backward at present, and that more efficient farming and market gardening would be a great boon to the neighbourhood. There is plenty of good land and a good climate, and it is hoped that the efforts of the State and Federal Departments of Agriculture will effect great improvements in this respect, to the advantage of both farmers and industrial workers.

The mining companies have "commissary stores," at which most of the miners' provisions are bought. Wages are paid in the form of cheques on the stores, which may be cashed on demand. In practice the men are stated by employers to be quite at liberty to have cash if they choose and to buy their food where they like. The demand for labour has been increasing to such an extent that the companies say they cannot afford to quarrel with their men over such a point. Formerly it used to be said that a company could afford to sell its coal at cost and yet make a satisfactory profit from its stores, but in recent years the strong demand for competent labour in times of ordinary trade activity and the increase of population, with its accompaniment of private competitive shops and the extension of tramways, have combined to check the abuse by the companies of their monopoly of the supply of houses and food. In the absence of a sufficiently developed corporate feeling, co-operative stores, so familiar in England, cannot be established. It is impossible, however, that the system of company ownership of stores and of houses should be entirely satisfactory. The men feel, whether with reason or not, that refusal to buy at the company stores is regarded with disapproval, and may lead to prejudice in the allotment of stations in the mine, which vary greatly in earning capacity.

Groceries and other Commodities.

Newly-made *butter* from distant creameries sells at 1s. 5½*d.* per lb. The local farmers' butter is not much liked, as it is unscientifically made and does not keep well. The most popular butter is a kind known as "renovated" which retails at 1s. 3*d.* per lb.

Fresh *milk* is considered too expensive for consumption by many of the wage-earners, who consume buttermilk to a very great extent. Another reason sometimes given for the preference of buttermilk to fresh milk is a suspicion that fresh milk might be contaminated with typhoid. The city has a milk inspector, but in a warm climate and in a widely scattered town it is difficult to ensure the purity of milk.

Coal is burned very regularly during the winter months, when the temperature is often comparatively low, especially at nights. It is bought mainly by the ton and half-ton.

For the purposes of this enquiry returns were obtained from a number of retail tradesmen in the town and suburbs, and the appended Table gives the predominant prices of some of the principal provisions, &c. in February, 1909.

Predominant Prices paid by the Working Classes in February, 1909.

| Commodity. | Predominant Price. |
|-------------------------------------|--------------------------------------|
| Tea per lb. | 2s. 1 <i>d.</i> to 2s. 6 <i>d.</i> |
| Coffee " | 10 <i>d.</i> |
| Sugar :— | |
| White Granulated " | 3 <i>d.</i> , 3½ <i>d.</i> |
| Brown " | 2½ <i>d.</i> to 3¼ <i>d.</i> |
| Bacon, Breakfast—Boneless " | 9 <i>d.</i> .. 10 <i>d.</i> |
| Eggs per 1s. | 12 .. 14 |
| Cheese, American per lb. | 10 <i>d.</i> |
| Butter " | 1s. 3 <i>d.</i> to 1s. 5½ <i>d.</i> |
| Potatoes, Irish... .. per 7 lb. | 7 <i>d.</i> .. 9¼ <i>d.</i> |
| Flour, Wheaten — Household " | 1s. 0¼ <i>d.</i> .. 1s. 1½ <i>d.</i> |
| Bread, White per 4 lb. | 10 <i>d.</i> .. 1s. 0¼ <i>d.</i> |
| Milk per quart | 6 <i>d.</i> |
| Coal, Bituminous per cwt. | 9¾ <i>d.</i> to 1s. 0½ <i>d.</i> * |
| Kerosene per gallon | 9 <i>d.</i> |

* By the ton of 2,000 lb.

Meat.

The meat supply of Birmingham comes mainly from distant packing centres, especially from Kansas City and Chicago, but some comes from Texas. It is usually sold

in retail shops, but a few butchers have shops in a private market. The mining companies do not always sell meat at their commissary stores ; in mining districts this business is in the hands of private firms to a greater extent than the provision trade.

The predominant retail prices of the different cuts of meat in Birmingham and the immediate neighbourhood in February, 1909, are shown in the subjoined Table, based upon returns furnished by butchers :—

Predominant Prices paid by the Working Classes in February, 1909.

| Description of Cut. | Predominant Price per lb. |
|---------------------------------|---------------------------|
| Beef :— | |
| Roasts—Round | 7½d. |
| " Ribs prime | 7½d. to 8¾d. |
| " Ribs second cut | 6¼d. ,, 7½d. |
| " Chuck or short ribs | 6¼d. |
| Steaks—Round... .. | 7½d. |
| " Sirloin | 8¾d. |
| Flank | 3¾d. to 5d. |
| Plate, Brisket—Fresh | 3¾d. ,, 5d. |
| Mutton or Lamb :— | |
| Leg | 10d. |
| Breast | 5d. to 7½d. |
| Loin | 7½d. to 1s. 0½d. |
| Chops | 10d. ,, 1s. 0½d. |
| Shoulder | 7½d. |
| Neck | 5d. |
| Veal :— | |
| Cutlets | 10d. |
| Rib chops | 7½d. |
| Loin chops | 7½d. |
| Breast | 4d. to 6½d. |
| Neck | 4d. ,, 5d. |
| Pork :— | |
| Fresh—Loin | 7½d. |
| " Spare rib | 6¼d. |
| " Shoulder | 6¼d. |
| " Chops | 7½d. |
| Dry salt | 6¼d. |
| Ham | 7½d. to 8d. |
| Shoulder, salt or smoked | 6¼d. ,, 7½d. |

Prices at New York being taken as the base, = 100, in each case, the index number for the price of meat at Birmingham is 98, for other food it is 104 and for food prices as a whole 102. For rents and food prices combined the index number is 97.

BOSTON.

Boston, the settlement of which dates from 1630, ranks as one of the great and historic cities of the New World and is at once the political capital of the Commonwealth of Massachusetts and the commercial metropolis of New England. In the former respect its position is somewhat exceptional, inasmuch as among the fifteen cities in the United States having a population of more than a quarter of a million in 1900, Boston is the only State capital.

The city is situated at the head of Massachusetts Bay and lies 234 miles by rail to the north-east of the City of New York, which can be reached by the fastest trains in five hours. No great city lies to the north of Boston within the borders of the United States, but beyond these is Montreal with a lake and river connexion with the agricultural areas of the West, both those of the United States and of Canada, that is unrivalled for the greater part of the year by any ocean port, not excepting New York itself. In general the advantages of New York over Boston as a port are indeed conceded—hence its power, to quote from the recent Report of a Municipal Improvements Commission, appointed in part by the Governor of the Commonwealth and in part by the Mayor of Boston, “to hold its position as the leading port on the Atlantic and keep far in advance of all others in the extent and value of its commerce.” But New York cannot handle or indeed attract all trans-atlantic commerce, and thus Montreal (handicapped, however, by its winter climate), Philadelphia and Baltimore are regarded as being destined in the future to be in more direct because in more equal competition with Boston than is New York itself.

The great importance of these considerations is due to the fact that Boston itself is pre-eminently a commercial centre and a port, and that in its magnificent harbour, of which the main channel will shortly be 35 feet deep at mean low water, it possesses its greatest single physical asset—an asset that, incompletely developed as it is, still finds Boston competing for place as the second sea port in the United States.

The following Table presents a summary of the statistics of tonnage, imports, exports and passenger arrivals at the Port of Boston for the years ended June 30th, 1905-9 :—

| Year ended June 30th. | Tonnage Entered and Cleared in the Foreign Trade. | Value of Imports. | Value of Exports. | Number of Pas- sengers arriving at the Port. |
|-----------------------|---|-------------------|-------------------|--|
| | Tons. | £ | £ | |
| 1905 | 4,687,393 | 20,899,559 | 18,292,603 | 83,065 |
| 1906 | 5,201,487 | 22,175,433 | 20,570,760 | 80,281 |
| 1907 | 5,263,012 | 25,923,537 | 21,015,031 | 95,142 |
| 1908 | 4,940,655 | 19,516,399 | 20,010,639 | 64,110 |
| 1909 | 4,833,828 | 23,431,791 | 15,866,158 | 59,179 |

Although the development of its foreign trade and to this end the improvement of its port and railway facilities are felt to be essential conditions of the maintenance of the great position held by Boston, the part which the city plays as a place of manufacture and as the chief distributing centre for the industrial districts of New England is of equal and allied significance. Boston in this connexion occupies a somewhat unique position among American cities and its present importance would be inadequately reflected in figures that merely gave particulars with reference to the city itself. For it is the point at which the activities of a ring of outlying centres converge, and while “Greater Boston,” often called the “Metropolitan District,” contains such cities as Lynn, Cambridge, Waltham, Somerville, Quincy, Hyde Park and Watertown, with other smaller industrial and many residential centres, beyond the narrow borders of this district, but still well within the sphere of influence of Boston itself, lie such cities as Lowell, Lawrence and Haverhill. Thus Boston is the centre and the mainspring of one of the greatest as also one of the oldest manufacturing centres in the States. With all these outlying points it is organically connected, and just as the obligation to develop the resources of the port is forcing itself upon the attention of the more farsighted members of the community, so also is the necessity for developing on special lines the aptitude and the skill, the power of initiative and the industrial resources of a large area that is being confronted by an increasing dependence for its food supplies upon distant centres ; by a gradual shifting away from itself of the centre of population of the country as a whole ; and by the increasing strength, nearer that centre and thus nearer the centres of

production of the raw material of food and manufacture, of competing industries. Thus while in many parts of the country cities are apt to take their progressive development almost for granted, in Boston and its neighbourhood a new set of conditions appears to supervene. As a centre of oversea export the position of New England would be highly advantageous, but as one of production for domestic use its advantages are conditional upon the maintenance and development of such special features as will overcome the handicap of a geographical position that is somewhat isolated. It is largely on this account that the retention of local capital for local investment; education; the maintenance of industrial peace; specialised skill and the excellence, or it may be the special cheapness, of output are found to have special claims to attention in this relatively old established centre of industrial life.

It will be concluded from what has been said that Boston is very far from being simply a leading centre of the intellectual and cultured life in America. It is this, as is also the Harvard belt of the adjoining city of Cambridge; but Boston to-day, with a certain distinctive New England atmosphere that makes itself occasionally felt, is a cosmopolitan, commercial and industrial city with racial characteristics *in petto* very much resembling those of New York itself. The Irish have been in greater numerical preponderance than in any other American city of the first rank, the British and Canadian element is also unusually large, and there is a comparative absence of Germans, but there are well defined Jewish and Italian districts, with similar areas, smaller and less definite, frequented by Poles and Scandinavians and others, and sprinklings here and there of coloured quarters.

In spite of this mixture of races there is some truth in the common view, traceable in part to its structural and material aspects, that Boston is one of the most "English" of American cities. To some extent the resemblance is negative and is due to an absence of plan which has characterized the development of the older city, no longer, it may be noted, a peninsula approached from the mainland by the historical "Neck" but through extensive reclamations converted into a promontory some two miles in length and a mile or more in width. There is a saying that "the cows laid Boston out," and much of the centre is certainly a confusing maze of streets. And it is at the centre that the material resemblance to an English environment makes itself most felt. Tall buildings like those of New York are the exception and as carried to their extreme heights are unknown, while many of the busy and crowded streets of the older city almost repeat the impressions that are given by many English towns. Further from the centre the tendency is for the streets to become wider and for the planning to be more systematic, but rarely is there found that convenient but obtrusive rectangularity so widely characteristic of American cities.

Apart from the business centres and the crowded poorer districts found near the heart of the city, other distinctive features are the high ground in the neighbourhood of Beacon Street; Boston Common, that famous and magnificently situated open space; and to the south-west of these the district still known as Back Bay, one of the extensive areas that from time to time have been reclaimed, and now forming one of the best residential quarters of the city.

The old city, still spoken of as "Boston proper," is surrounded on three sides by the waters of the Charles River, of its harbour, and of a harbour inlet—Fort Point Channel—and contains considerably less than one-third of the total population of municipal Boston. Across the Charles River to the north lies Charlestown, rivalling Boston itself in age and annexed to the city in 1874. On the other side of the harbour but now reached by a tunnel lies East Boston (with some 50,000 inhabitants), which has been part of the city for more than two centuries, but the settlement of which only began some 70 years ago. South Boston—"South" only in relation to Boston proper—is also separated from the old city by water and has a somewhat stationary population of under 70,000. To the real south of the city lie Roxbury, with parts already closely built, and the outlying and more suburban areas of Dorchester and West Roxbury. On the south-west, the side which, with the west and to some extent the south, is attracting the more fashionable trend of population, the detached and wealthy town of Brookline penetrates to a point not more than two or three miles from the heart of Boston itself. North of Brookline, and completing the area comprised by municipal Boston, lies Brighton, annexed in 1874, and for the most part a pleasant residential district. Across the Charles River lie the cities of Cambridge and Somerville, both, like Brookline, abutting closely on Boston itself.

As already stated, at further distances in almost every direction landwards lie other places, some 40 in number, within a radius of about 15 miles of the State House in

Boston, helping to form a Metropolitan District, much of it already united by a common system of sewerage, by a common water supply, and by a single park system, as well as by the system of transit facilities enjoyed. The aggregate population of this District in 1905 was about $1\frac{1}{4}$ millions. To a great extent the area thus covered is residential, but in the aggregate the manufacturing industries of the centres lying outside Boston somewhat exceed those of Boston itself. Of these centres Lynn and Cambridge are the most important.

The following Table, derived from the Census of 1905, gives certain statistics of manufactures relating to these three cities and to the Metropolitan District as a whole :—

| | Amount of Capital Invested. | Value of Stock Used. | Value of Goods Made. | Number of Persons Employed. | Amount of Wages Paid. |
|----------------------------------|-----------------------------|----------------------|----------------------|-----------------------------|-----------------------|
| | £ | £ | £ | | £ |
| Boston | 27,408,921 | 19,708,940 | 38,406,492 | 59,160 | 6,640,247 |
| Cambridge | 6,720,883 | 5,232,612 | 8,834,805 | 14,586 | 1,561,220 |
| Lynn | 4,820,664 | 6,794,926 | 11,458,963 | 21,540 | 2,445,362 |
| Metropolitan District as a Whole | 57,948,313 | 45,642,710 | 85,082,494 | 139,468 | 15,373,545 |

From 1875 up to the State Census of 1905, the population in the whole of this District rather more than doubled, that of Boston itself having increased during the same period from 341,919 to 595,380, or by 74 per cent. According to the Federal Census, the population of Boston had further increased to 670,585 in 1910, but figures for other parts of the Metropolitan District are not yet available.

The following Table shows the population of Boston, as returned at the Federal Censuses of 1870–1910, together with the percentage inter-censal increases :—

| Year. | Population. | Increase. | Percentage Increase. |
|--------------|-------------|-----------|----------------------|
| 1870 | 250,526 | — | — |
| 1880 | 362,839 | 112,313 | 44·8 |
| 1890 | 448,477 | 85,638 | 23·6 |
| 1900 | 560,892 | 112,415 | 25·1 |
| 1910 | 670,585 | 109,693 | 19·6 |

West Roxbury, Brighton and Charlestown were incorporated in 1873, since which date there has been no extension of the city limits.

The total area of the city is 27,300 acres, of which 1,637 are flats and 1,050 water.

The lower rate of increase in population in recent years is to a great extent explained by the extra-metropolitan increase, attributable in part to the increasing efficiency of transit facilities.

The following Table, compiled from the State Census figures, will show in which districts of the city increase in population has been most marked during the 30 years 1875–1905 :—

| | Population in 1875. | Population in 1905. |
|-----------------------|---------------------|---------------------|
| Boston proper | 140,669 | 172,473 |
| Charlestown | 33,556 | 39,983 |
| South Boston | 54,147 | 67,436 |
| East Boston | 27,420 | 51,334 |
| The Islands | 1,927 | |
| Roxbury | 50,429 | 111,261 |
| Dorchester | 15,788 | 90,011 |
| West Roxbury | 11,783 | 41,076 |
| Brighton | 6,200 | 21,806 |
| All Boston | 341,919 | 595,380 |

For the last 15 years the figures for South Boston and Charlestown have been almost stationary, while those of Boston proper, where the non-residential business area is

extending but in other parts of which the congestion has become somewhat greater, have shown as a net result of these conflicting tendencies only a slight increase.

The latest available figures as to the resident alien population are those of the State Census of 1905. During the last decade the largest increase has been among Italians.

Although about 15 times as many immigrants land at New York as at Boston, the latter port nevertheless ranks as the immigrant station second in importance in the whole country. The number of immigrant aliens admitted during the 12 months ending June 30, 1908, was 41,363, and in the following year 36,318. During the latter year 61,197 immigrants at all ports gave Massachusetts as their place of intended future residence, but it is obvious, since intentions may change after landing, that this figure may not prove true even for the State as a whole, and that its bearing upon any one city within the State is uncertain. But it may be noted that some of the larger groups that figured in the return were Italian (mainly southern), Polish, British and Irish, French (mainly French Canadian), Hebrew, Greek, Portuguese (the majority probably from the Azores), Lithuanian, Scandinavian and Finnish. Minor streams of recent immigration to Boston itself may be illustrated by the Albanians and the Greeks. In both these cases new arrivals are mostly men, the Greeks, however, having somewhat more family life of the two, but both representing races by which boarding-houses and restaurants are much used. The former are said to be taking the place of the Italians in the push-cart fruit trade, but industrially neither are so far important.

In 1905 the total native-born population was 64.8 per cent. of the whole, 51.7 per cent. having been born in Massachusetts itself. It will be remembered that this large percentage includes the American-born children of foreign parents. Of the foreign-born population at that date 31.8 per cent. were born in Ireland, 23.4 per cent. in Canada (mainly English Canadians), 11.5 per cent. in Russia, 9.7 per cent. in Italy and 8.2 per cent. in Great Britain. Some of the main tendencies of recent immigration may be traced in the changes that took place in this series of percentages during the five years 1900-5, the percentages of persons born in Ireland, Canada and Great Britain having declined from 35.8, 25.5 and 9.2 respectively in 1900, and the percentage of persons born in Russia and Italy having risen from 7.6 and 7.0.

The density of the population of Boston ranges by wards from 3.5 to 185.6 per acre, and the average for the whole city is 24.2. The highest figure is found in Ward 8, in the area known as the West End, containing the largest Jewish Colony in Boston. Many individual blocks in this district, as also in that known as the North End (largely an Italian quarter), where the number of persons per acre falls to 102.3, would represent a much more congested population than the above percentage figures indicate, since much of the tenement building both of the past and present is of such a character that, were the areas large, intolerable conditions of congestion would have been created. And the same is true of a few other districts in which careless development has been permitted, as, for instance, in part of the district known as South Bay.

A certain indifference or lack of foresight appears indeed to have characterised some of the structural changes permitted in Boston, an attitude that probably finds a partial explanation in the comparative smallness of the Boston housing problem and, in recent years, in the relief from much of the normal pressure of congestion afforded by an excellent tramway system. In some small areas conditions are highly unsatisfactory, however, and with special reference to one such district the following extract from an appendix on "The Metropolitan Plan" included in a recent Report of the Metropolitan Improvements Commission may be quoted. The reference is especially to school-house provision, but the strictures apply to and indeed result from the street planning and the close building of the neighbourhood:—"These school-houses [the North End school-house group] are so closely huddled together, and are so badly shadowed by adjoining private buildings, that they require artificial light in many of their class rooms even on bright days. A single visit to this locality and to the schools themselves should convince anyone that these conditions, if not actually criminal, are so bad as to deserve immediate remedy. Boston cannot regard itself as an enlightened city while it allows the children of the North End to be schooled in such shameful darkness and without proper playground space. This site should either be abandoned for school purposes or a project for its re-organization should be made to enable it to fulfil its functions properly Buildings which hem it in too closely should be torn down and future school structures should be so placed as to form in connexion with these new spaces a comprehensive architectural scheme."

The vital statistics of Boston are somewhat more complete than those usually available in the United States, and the following Table, based on statistics contained in

the Annual Report of the City Registry Department, gives the birth-rates, death-rates and infant mortality rates for each of the years 1903-7 :—

| Year. | | | | Birth-rate per 1,000 of Population. | Death-rate per 1,000 of Population. | Infantile Mortality per 1,000 Births. |
|-------|-----|-----|-----|--|--|--|
| 1903 | ... | ... | ... | 26·3 | 17·6 | 120 |
| 1904 | ... | ... | ... | 25·5 | 17·4 | 118 |
| 1905 | ... | ... | ... | 26·3 | 18·4 | 119 |
| 1906 | ... | ... | ... | 28·2 | 18·8 | 124 |
| 1907 | ... | ... | ... | 30·7 | 20·1 | 107 |

The larger outlets for municipal enterprise are mainly limited to the more necessary functions of government, including education, water supply, and, one of the most distinctive achievements as regards the metropolitan district, a comprehensive system of parks, park ways and beaches. Minor illustrations of municipal enterprise are found in baths, cemeteries, hospitals, alms-houses, a temporary home for the destitute and lodging-house for wayfarers ; a municipal printing department ; a few public conveniences ; two market-halls, and a magnificent public library with ten branches. The supply of gas, electric light and transit facilities in Boston, as in the great majority of American cities, is in the hands of private companies.

Among the private undertakings probably the most important, and the one most identified with the development of the city, is that known as the Boston Elevated Railway, mainly, it may be noted, not an elevated railway, but an electric surface car system, with a total mileage of 474. As already stated, the area served is largely beyond the city boundaries, and the statistics of the Company refer rather to a considerable section of the Metropolitan District, including Boston, than to Boston alone. It is worthy of note, however, that during the year ended September 30th, 1908, more than 273,000,000 revenue passengers were carried ; and that the gross earnings were £2,932,229. Out of this total, it is estimated that about 10·5 per cent. (including ordinary taxation amounting to £180,860), went in one form or another of contribution to the public, while dividends paid represented a little over 5 per cent. on the capital invested. The speed of the surface cars is now from $8\frac{3}{4}$ to 9 miles per hour as compared with from a little over 7 to 8 miles eight years ago. The elevated trains run at about 14 miles an hour. The uniform fare is $2\frac{1}{2}d.$ whether for 15 miles or only to the next stopping place, and a liberal system of transfers is in operation.

The number of charitable and beneficent organisations of every kind in Boston is large, falling into much the same groups as in, for instance, New York, but perhaps more impressive than there because of the relative smallness of the Massachusetts city. The number and variety of agencies and societies with constructive and reforming objects in view that may be summed up under the general title of Civic Betterment are especially noteworthy, and one of these, known as "1915," may be mentioned as illustrating and as endeavouring to co-ordinate a good deal that is distinctive in local aims and aspirations.

"1915" is a society which by a study of the experience of other cities and by the co-ordination of local organisations hopes to secure, or to pave the way for securing, the best results from city planning, and it owes its name to the hope that the adoption of certain steps both of investigation and of practical reform in the intervening years may make it possible five years hence to hold an exhibition that will demonstrate not only what has been done in the interval, but also what can be shown to be necessary and possible in the future in order to make Boston the "finest city in the world." The society appeals for the service of all classes and endeavours to take account of the interests of all : "not only politics but business ; not only commerce but labour ; not only work but health and pleasure, art, music and painting ; not only adults but children." "In more economical and more responsible city government ; in better sanitary administration ; in the improvement of homes ; in education ; in architectural improvements and in better street alignment ; in the adoption of a system of insurance for wage-earners and old age pensions ; and in making Boston a more prosperous centre of commerce and industry"—in these and in other endeavours "1915" has outlined a varied, hopeful and ambitious programme.

The inception of "1915" has synchronised with, and probably may be partly traced to, the indirect effects of municipal changes of importance that are taking place in Boston. Of these, the Report presented in January, 1909, by the Boston Financial Commission, appointed in July, 1907, may be regarded as to a great extent the proximate cause. The circumstances under which the Commission was appointed, and the conclusions which it has reached, may be illustrated by the following extracts from the report itself. It will

be noted that the Commission was appointed before the crisis of 1907, but that the period of its deliberations corresponded more or less with the depression that followed, and that these may to some extent have been coloured thereby. But in its report, in a section dealing with "General Results" in which special attention is drawn to the heavy and increasing burden of municipal expenditure and indebtedness, the Commission comments as follows:—

"The city is not keeping pace with its rivals in commerce or in its industries. The population is nearly at a standstill. There is but little demand for real estate and almost none for vacant land.

"These conditions are, of course, not all due to the bad government of the city; but no intelligent observer can fail to perceive that they are much aggravated by that cause, and particularly by the apparent unwillingness or inability of the citizens at large to stop the extravagance. Until recently the general public appears to have regarded the situation with helpless acquiescence.

"The effect of municipal misgovernment and the consequent high rate of taxation upon the prosperity of the city is apparent, when the comparative lack of growth of manufacturing industries is considered. With our large population, excellent police department, cheap land, and above all an extensive tide-water frontage, the city affords excellent facilities for manufacturing establishments; but the manufacturer knows that if he locates in Boston his taxes will be greater than in other cities, and that they are being constantly raised without effective protest from the citizens."

Among the legislative measures which the Commission regarded as "essential to enable the people to redeem their Government" are the following:—

1. A City Council consisting of a single small body elected at large;
2. The concentration of executive power and responsibility in the Mayor;
3. The administration of the departments by trained experts or persons with special qualifications for the office;
4. Full publicity secured through a permanent Finance Commission.

The proposals of the Commission have borne fruit and after nearly 90 years of government by Mayor and City Council—modified by successive charters granted by the General Court of the Commonwealth but in essential particulars the same—following on 180 years' experience of the Town Meeting, the important step has been taken of changing the city government on the lines laid down above. Thus in effect Boston will for the present be governed by an elected Mayor, with full executive responsibility, and by a small body of elected Commissioners. The conditions laid down for nomination and the form of ballot papers are intended to weaken if not destroy the power of the "Caucus" and the "Boss," and Boston has thus adopted its own modification of new plans on which a few other cities have already experimentally and on the whole successfully embarked. The step is of great interest and potentially of great importance because of the example it may afford of practicable reform in matters of municipal government.

The real estate valuation for May, 1908, from the assessment of which as in other cities the greater part of the municipal expenditure is met, was £225,501,104, about three-fifths being for land and two-fifths for buildings. The total figure for 1909 was almost identical, viz.—£227,624,042. The valuations of personal estate in the two years were respectively £51,095,216 and £53,217,964. The tax-rate for 1909 was 1·65 per cent., of which 1·30 per cent. was for city purposes, 0·24 per cent. for State charges, and 0·11 per cent. for county charges. Although not co-terminous with Suffolk County, Boston bears all county charges, Chelsea, Revere and Winthrop, the other places within the county, paying no contributions for these purposes.

OCCUPATIONS, WAGES AND HOURS OF LABOUR.

In the previous section it has been indicated that Boston is a commercial rather than an industrial city and it is as such that it is generally regarded. It is thus identified with no special manufacture, considerable and varied though its field of employment is, and is without any staple industry like several cities in the Metropolitan District itself, notably Lynn as a centre of the boot and shoe industry, and Waltham with its watch-making; or places a little further afield which have been specially studied in connexion

with the present enquiry, like Fall River, Lawrence or Brockton. Such places, relatively small but with specialised industrial pursuits, are the more representative manufacturing centres of New England. The field of occupation in Boston itself, representative as it is of a few of the localised industries of Massachusetts, is neither dominated by nor indeed identified primarily with any of them, and it is noteworthy that in a long and miscellaneous list of about 80 manufactures of the city given in the Report of the State Bureau of Statistics for 1908 the average number of employees of both sexes exceeds 4,000 in no single industry, and exceeds 1,000 in only ten cases. The total number of establishments included in the above return is 1,683, and the total average number of employees 52,103, of whom 34,033 were males.

The following Table, compiled from the Federal Census of 1900, gives in large groups the latest available statistics for employment of every kind :—

Number of Persons of 10 years and over engaged in Occupations in Boston in 1900.

| Occupations. | Males. | Females. | Total. |
|--|---------|----------|---------|
| Building | 17,971 | 36 | 18,007 |
| Metal working and Engineering | 11,050 | 187 | 11,237 |
| Textile | 758 | 1,320 | 2,078 |
| Leather | 731 | 40 | 771 |
| Boot and Shoe Making | 2,201 | 703 | 2,904 |
| Clothing | 4,469 | 12,153 | 16,622 |
| Woodworking and Furnishing... .. | 4,157 | 460 | 4,617 |
| Paper and Printing | 4,297 | 2,079 | 6,376 |
| Food, Drink and Tobacco | 5,035 | 1,153 | 6,188 |
| Other Manufacturing and Mechanical Pursuits | 11,101 | 2,119 | 13,220 |
| Trade and Transportation | 69,667 | 15,916 | 85,583 |
| Labourers (not otherwise specified) | 19,545 | 134 | 19,679 |
| Professional, Domestic and Personal Service and } Agricultural Pursuits... .. } | 30,201 | 34,039 | 64,240 |
| All Occupations | 181,183 | 70,339 | 251,522 |

In the introductory section the considerable foreign element has been mentioned. The employments followed by it show great variety, and the general fact that a great diversity of occupation is apt to be followed even by peoples who are supposed to run somewhat exclusively in, as it were, more or less prescribed channels, is being more widely recognised. But although the industrial complexity of the life that every considerable foreign community tends to create is an economic and social fact of great significance, predominant channels of employment may nevertheless be indicated for this or that group, as, for instance, carpenters and joiners, teamsters, and in a less degree machinists, painters and labourers, as followed by Canadians; the large labouring element and the number of teamsters in the varied groups of occupations followed by the Irish; the drift to the metal and building trades illustrated by the Scandinavians; the large number of tailors, retail dealers and hawkers among the Jews, the first of these industries being also predominantly followed by the Poles; the large number of Italian labourers; and, as regards the coloured population, the numbers of these who are absorbed as servants and waiters, labourers, teamsters and porters.

From the Table of predominant wages and hours of labour given on p. 107 it will be observed that in the building trades the eight-hour day, with a short working Saturday, is widely recognised; that in the printing trades the working week consists of 48 hours or less; that in municipal employment the 48-hour week prevails; that the 54 and 55-hour week is predominant in the metal trades; and that in the transport trades the ten-hour day and 60-hour week are most usual.

The general tendency when changes are made in the recognised length of the working week is for the number of hours to be diminished, and the figures for 1908 published by the Commonwealth Bureau of Statistics show that in that year 2,310 employees in Boston received reductions, the most important change being the concession of the 44-hours week to 1,100 painters, and of the 48-hours week to 475 persons engaged in the clothing industry.

The holidays most observed are Independence Day, Labour Day (September), Thanksgiving Day (November) and Christmas Day; but Washington's birthday

(22 February), Patriot's Day (April) and Memorial Day (May) are also widely recognised. Massachusetts is one of the two States of the Union in which New Year's Day is not recognised as a general holiday.

As would result naturally from the numerous industries followed in Boston the number of trade unions is large, some 241 different local societies being enumerated by the State Bureau of Statistics in 1908. The total membership of 228 of these, composed almost entirely of males, amounted to 62,389. Among the most strongly-organised occupations are those of the cigarmakers and longshoremen working on ocean-going vessels. Boston is not a stronghold of trade unionism, however, and in most trades, including building and printing, the "open shop" generally prevails. This practice by no means implies that as regards the principal conditions of employment terms inferior to those aimed at by the trade union exist, but simply that no preference to trade unionists is recognised. The objection to the "closed shop" is thus compatible with the observance of a trade agreement, and in Boston itself more than half the local societies report the existence of agreements with varying degrees of comprehensiveness and validity.

In the building trades an experiment is being made in regulating and improving conditions in relation to employment by the organised alliance of employers and employed. To this end two societies, duly incorporated, the one of Brick and Stone Masons and the other of Carpenters and Joiners—in both cases including "Masters and Craftsmen"—have been formed, and conditions regulating the terms of employment as regards hours, wages, overtime, &c., have been laid down. A distinctive feature of the Carpenters' and Joiners' Society is the division of the employee members into "Craftsmen" and "Associate Members," the minimum rate of 2s. per hour being fixed for those who are admitted into the former class, and of 1s. 7d. for the latter. In the agreement of the Brick and Stone Masons' Society there is a similar clause, those not qualified as craftsmen not being "entitled to receive a wage greater than the sum of 20 per cent. less than the standard minimum wage," which in this case is fixed at 2s. 6d. per hour.

The principle of the minimum wage is thus recognised, but is supplemented in the case of both societies by the avowed attempt to regulate wages more completely than usual according to efficiency and by the recognition of a grade of the fully competent, for which those "not up to the average of skill and efficiency" may, unless they be old men, hope to qualify. About 400 "craftsmen" have been admitted to the two societies, which, it may be added, are not approved by the ordinary trade unions.

A State Free Employment Office was opened at Boston in December, 1906, and in the following year similar offices at Springfield and Fall River. In the year ended November 30th, 1907, the Boston office was instrumental in filling 14,480 positions. In the following year—a year of depression—the number of positions filled fell to 9,941, while in the year ended November 30th, 1909, 13,034 positions were filled by the agency of this office. The following statement shows the more important details illustrative of the work of the Boston office in the year ended November 30th, 1909, as compared with the previous year:—

| | 1909. | | | 1908. |
|---|--------|----------|----------------|----------------|
| | Males. | Females. | Total Persons. | Total Persons. |
| Number of Applications for Employment | 23,334 | 8,486 | 31,820 | 46,563 |
| Number of Persons applied for by Employers | 9,375 | 8,029 | 17,404 | 12,825 |
| Number of Positions reported Filled | 6,729 | 6,305 | 13,034 | 9,941 |
| Number of Persons for whom Positions were secured:— | | | | |
| (a) once only | 3,804 | 2,267 | 6,071 | 4,954 |
| (b) more than once | 1,017 | 1,239 | 2,256 | 1,581 |

No classification according to occupation of the "Positions reported filled" is available for the year ended November 30th, 1909, but in the previous year the largest number of positions obtained for males was for "boys (errand, office, &c.)", 624, and farm hands 568. Among positions in manufacturing and mechanical pursuits the following are some representative numbers:—Blacksmiths 15; carpenters 146; firemen 95; machinists 70; painters 128. The largest groups for females are classed as: Housework 1,386; waitresses 706 and kitchen workers 519; while factory workers (thus described) numbered 273.

The following Table shows the predominant weekly wages earned by men in certain of the principal occupations in Boston in February, 1909, with the number of hours usually worked :—

Predominant Weekly Wages and Hours of Labour of Adult Males in the Principal Occupations in February, 1909.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|--|----------------------------------|-------------------------------------|
| <i>Building Trades :—</i> | | |
| Bricklayers | 110s. to 120s. | 44 to 48 |
| Stonemasons | 110s. | 44 |
| Stonecutters | 91s. 8d. | 44 |
| Carpenters | 80s. 3d. to 90s. | 44 to 48 |
| Plasterers | 110s. | 44 |
| Plumbers | 87s. 6d. to 100s. | 48 |
| Structural Iron Workers | 90s. „ 100s. | 48 |
| Painters | 72s. 5d. „ 77s. | 44 |
| Hod Carriers and Bricklayers' Labourers | 45s. 10d. „ 60s. | 44 to 48 |
| Plasterers' Labourers | 69s. 8d. | 44 |
| <i>Foundries and Machine Shops :—</i> | | |
| Ironmoulders | 75s. | 54 |
| Machinists | 61s. 11d. to 72s. | 54 to 55 |
| Blacksmiths | 56s. 3d. „ 67s. 6d. | 54 „ 55 |
| Patternmakers | 68s. 9d. „ 90s. | 54 „ 55 |
| Labourers | 41s. 8d. „ 43s. 9d. | 54 „ 55 |
| <i>Tailoring Trades :</i> | | |
| Cutters | 95s. 10d. to 104s. 2d. | 44 to 53 |
| Trimmers | 62s. 6d. „ 75s. | 46½ „ 56 |
| <i>Printing and Bookbinding Trades :—</i> | | |
| Newspaper— | | |
| Compositors, Hand and Machine | { Day work 106s. 9d. | 42 |
| | { Night work 113s. 9d. | 42 |
| Pressmen | { Day work 82s. 6d. to 85s. 5d. | 42 |
| | { Night work 82s. 6d. „ 85s. 5d. | 36 |
| Book and Job— | | |
| Hand Compositors | 79s. 2d. | 48 |
| Pressmen { Cylinder Presses | 87s. 6d. | 48 |
| | { Small Presses | 68s. 9d. |
| Bookbinders | 73s. 9d. to 83s. 4d. | 48 |
| <i>Cigarmakers</i> | 75s. | — |
| <i>Transport Trades :</i> | | |
| Longshoremen | 75s. | 60 |
| General Drivers, Teamsters— | | |
| One horse | 50s. to 54s. 2d. | 60 |
| Two horses | 58s. 4d. to 62s. 6d. | 60 |
| <i>Public Services :—</i> | | |
| Street Construction, Paving and Cleaning— | | |
| Municipal Employees : | | |
| Paviors | 75s. | 48 |
| Paviors' Labourers | 62s. 6d. | 48 |
| Scavengers | 56s. 3d. | 48 |
| Road Sweepers | 56s. 3d. | 48 |
| Drivers | 56s. 3d. | 48 |
| Contractors' Employees : | | |
| Paviors | 100s. | 48 |
| Paviors' Labourers | 50s. to 56s. 3d. | 48 to 54 |
| Road Menders | 40s. to 45s. | 48 „ 54 |
| Drivers | 43s. 9d. to 50s. | 54 „ 60 |
| Water Works (Municipal)— | | |
| Labourers | 56s. 3d. | 48 |
| Gas Works (Company)— | | |
| Labourers | 50s. to 56s. 3d. | 48 to 54 |
| Electric Lighting (Company)— | | |
| Electricians | 75s. | 56 |
| Installation Men | 68s. 9d. | 56 |
| Firemen | 66s. 8d. | 56 |
| Labourers | 50s. | 54 |
| Electric Railway (Company)— | | |
| Surface Lines : | | |
| Motormen and Conductors | 57s. 6d. to 62s. 6d. | 60 |
| Elevated Railway : | | |
| Motormen | 58s. 9d. „ 68s. 9d. | 60 |
| Guards | 53s. 9d. „ 58s. 9d. | 60 |
| Brakemen | 47s. 6d. „ 52s. 6d. | 60 |

Taking wages at New York as the base, = 100, in each case, the wages index numbers for Boston are—building trades, skilled men 91, hod carriers and bricklayers'

labourers 77 ; foundries and machine shops, skilled men 81, unskilled labourers 102 ; printing, hand compositors (job work) 90.

In the building trades the usual working day is from 8 a.m. to 5 p.m., with one hour's interval at noon. Over the greater part of the United States no seasonal alteration of hours is necessary on account of the difference in the length of the summer and winter day, but in Boston a latitude is reached in which in winter daylight is curtailed to an extent that may stop work or make it difficult before the close of the ordinary work day. Thus in the agreement of the Massachusetts Society of Brick and Stone Masons, to which reference has been made, an exceptional clause is found stating that "when darkness prevents working up to 5 o'clock the noon interval may be shortened so that full time may be worked."

Building work is undertaken in Boston, as generally in the States, on an extensive system of sub-contracting, the chief contractors in this city being generally either master bricklayers or master carpenters. This method, by which, while the client has the convenience of dealing with only one contractor, the latter on his part puts out most of the work to specialist firms, was influentially criticised as sacrificing too much to mere speed in execution, and as not securing a proper unity or co-ordination in construction.

Among machinists there is in Boston a fairly clear distinction between the skilled machinists and unskilled or semi-skilled helpers. The predominant range for the former is quoted in the Table. A starting point for the others is at about 50s. per week.

In the clothing industry there are no very large firms in Boston, but a considerable number of small ones. The machining is largely done by small contractors, and there is a fair amount of homework. Cutters are strongly organised and are on piece work, a practice that is now unusual in America in this occupation. Their earnings are high, averaging in the best shops about £5 a week during the greater part of the year. Trimmers are paid time wages and are directly employed. Their wages range from 62s. 6d. to 75s. per week. Pressers are sometimes on time wages and sometimes on piece work, and earnings vary so considerably according to the class of work done that it is not possible to state a predominant range of weekly wages.

Women are mainly employed by the small contractors, and no investigation was made of the earnings of such workers, but those who work for the larger firms earn from 22s. 11d. to 33s. 4d. per week for the most part.

In Cambridge there are some large publishing and printing firms, mainly engaged on book work, and the rates for compositors (engaged a good deal on piece work), range from 62s. 6d. to 75s. 6d. for a week of 48 hours, or somewhat lower than for the ordinary job printing in Boston as shown in the Table.

In the case of electric railway employees, the law requires that a day's work shall be 10 hours in 12 consecutive hours for platform work. No uniforms are provided by the electric railroad company. "Satisfactory service" money to the amount of 62s. 6d. is paid to about 80 per cent. of the men each year. Under a plan which has been in force since 1903 employees who have been in the service of the company continuously for 25 years and who, in the judgment of the management, are unfitted to serve the company further, and also those who have reached the age of 60 and have been continuously employed for not less than 15 years, are qualified for a pension not exceeding 24s. a week for life.

Employees of the electric light company have 14 days' holiday in the year with pay. Days taken off, including those on account of illness, are paid for up to 14 days in one year and deducted from the annual leave.

About three years ago the local branch of the International Brotherhood of Teamsters was defeated in a dispute for shorter working hours, and since then this trade union has been weakened. But the rates of wages for these men are said to have remained unaltered.

HOUSING AND RENTS.

Boston is not regarded as a tenement house city, but the law and administration as regards this type of dwelling have had a considerable effect upon the lines upon which local housing has developed. The local definition of a tenement house has varied and is somewhat obscure, but the working definition is a house in which more than three families are living, or one in which, with a shop underneath, as many as three families are living. Thus the "three-family house" is not subject, as it would be, for instance, in New York and in many other cities, to tenement house conditions as regards construction and inspection, and, partly owing to the above definition and to the ensuing practices, the three-family house has become a distinctive and representative type of working-class dwelling in Boston. In some districts, tenement houses have multiplied and are multiplying, especially where the value of land is greatest, where a population is found willing or it may be in some cases preferring to accept the conditions of ordinary tenement house

life, and where either old houses existed that lent themselves to re-modelling on tenement house lines, or older small frame buildings were found that could be pulled down and their sites profitably used for the accommodation of twice or thrice the old number.

Thus as regards the extension of housing accommodation in Boston two active tendencies may be traced—at the centre the construction or remodelling of the brick tenement house and in the more outlying and expanding districts the erection of houses largely for three families. These tendencies have been operative for some years, with the result that while as regards the latter type the three-family house may perhaps be considered as predominant for Boston as a whole, as regards the former type, districts that are predominantly tenement-house in character have grown up in at least three fairly well defined areas. Of these districts the more important lie near the business centre of the city, almost girdling it with their areas of relative congestion, and the best known of this description have been already mentioned as lying in the West End or Jewish, and the North End or predominantly Italian, quarters. Both have been made the subject of careful studies by Residents and Associates of the Social Settlement known as South End House.

One other general feature of the housing situation that must be mentioned, is a middle zone of older dwellings of which the sites are not sufficiently near the centre to make it worth while to rebuild, and not sufficiently far out to attract a population that finds itself able, at no greater expense as regards transit and at little extra expenditure of time, to seek pleasanter surroundings further afield. Thus a considerable part of South Boston, especially that lying east of Dorchester Street; of Charlestown; parts even of East Boston—in some respects one of the most attractive of the inner districts—and parts too of East Cambridge are for the moment stagnant areas, in which housing conditions affording relatively cheap but unsatisfactory accommodation persist, and where there is no economic force at work to bring about either improvement or reconstruction.

A proximate cause of many of these more than usually well defined areas of arrested development is found in the Boston Elevated Railway Company, which, acting as a clearing house for the centre, is able easily to transmit, especially from its main termini at Charlestown and Roxbury, large numbers to various connected outlying districts lying both within and without the city boundaries.

Although the tenement and the three-family houses have been mentioned as though representing distinct types, it will be understood that they fall into various sub-divisions, the former, for instance, according to the number of tenements per house, the number and size of rooms per tenement and the conveniences that are provided; and the latter according to the two last points, whether they are built in rows or pairs or detached, and other characteristics of the dwelling that may affect its standard.

Each type is, indeed, highly composite, the house for three families being perhaps of the two the more inadequately defined by the simple classification that has so far been used. The range of standard which it illustrates may, for instance, be indicated near one end of the scale by a modern but not quite new dwelling in Brighton where 26s. a week was being paid for five light rooms and a bathroom, hot and cold water, steam heat and janitor service, though this would represent a class of dwelling occupied by "business" rather than by working-class families; and near the other end of the scale by a row of dwellings in Charlestown in which 10s. 7d. per week was paid for the same number of rooms, two dark and one a small "hall bedroom," all, with the exception of the last, being of fair size, with no conveniences but cold water and a private water-closet on the landing.

While in some of their essential characteristics the houses built for three families are somewhat closely allied to the tenement type, this similarity becomes the more complete the more closely they are built. Even in one of the outlying areas, for instance, which a few years ago ranked as one of the more desirable suburbs of the city and which to a considerable extent is maintaining its past character, there are districts in which three-family houses have been built on a speculative basis in considerable numbers, and in such close proximity to one another that the opinion is expressed by responsible persons that this district will "in ten years' time rank as undesirable." Thus, both because the types of each are so various, and because of certain conditions that both types tend to introduce, no clear and consistent distinction can be drawn between the tenement and the three-family house. The real differences are rather those of style, position and character which each may manifest, rather than of the type itself.

To a great extent the same considerations hold good also of the house constructed for two families, which is also frequently found in some parts of the city—for instance, in South and East Boston.

In a broad classification the three general types of dwelling that have been mentioned may be regarded as exhaustive, since single-family houses are not being built commercially

for those of small means, and when they are built, which is not often, are usually owned by their occupiers; and also leaving out of account the numerous lodging-houses which are a class apart and are found especially in the South End and in parts of the West End districts.

There were about 87,000 buildings of every description in Boston in 1907, and of these nearly three-fourths were wooden. The total number of dwelling houses of all kinds was 70,145, including 1,864 which were vacant. Of the total about 7,000 are officially classed as tenement houses, and of these the great majority are in the central districts. This concentration may be illustrated by the fact that in East Boston only about 100 real tenement houses are found.

Apart from the number of tenement houses no recent statistics are available as to the number of houses of different types, but in 1891 an exhaustive Census was taken showing, as regards the size of tenements, that at that date, when the total population covered by the Census was 311,396, 0·66 per cent. of that population were living in one-roomed dwellings, 5·25 per cent. in two rooms, 16·58 per cent. in three rooms, 24·87 per cent. in four rooms, 18·25 per cent. in five rooms, 12·12 per cent. in six rooms and the rest (22·27 per cent.) in seven rooms and over. The information was obtained by a house-to-house canvass of rented tenements throughout the city without respect to grade of dwellings or class of occupants, but in spite of a comprehensiveness which would tend, from the point of view of the present enquiry, to exaggerate considerably the importance of the dwellings of larger size, and of the long interval, it is probable that the relative proportions shown have still a general validity.

As regards the average number of persons per dwelling-house, this, according to the Census of 1900, in the whole of Boston was 8·4.

In 1907 the average ranged in the different wards from 5·5 in Brighton to 20·7 in the North End, and in the West End district the corresponding figure was 16·6. In eight other widely scattered wards, in which in the aggregate the Irish are the predominant population, but in two of which Jews are living in considerable numbers, and in one each of which Italians, Americans and negroes are largely found, the number of persons per dwelling exceeded ten. In 14 other wards the number was less than ten.

The percentage of families of every class living in dwelling-houses occupied by one family was 32·2 according to the Census of 1900, while 41·3 per cent. of families were then living in dwelling-houses occupied by three or more families.

In spite of a sanitary administration that is improving and on the whole efficient, from few points of view does it appear that the general housing conditions for the working classes of Boston give satisfaction (an exception being the small proportion of families occupying only one or two rooms) to those who are most anxiously watching and most eager to plan for the betterment of this great and beautifully situated city.

It may be noted that in the extra-municipal areas in which, as has been mentioned, a considerable amount of building is taking place, and in which many who work in Boston live, such provision for the working classes as is being made is of a rather superior type and that "cheap" houses outside Boston appear to be old dwellings, scattered among some of the older adjacent townships.

The characteristic features of the congested tenement house districts of Boston proper that have been mentioned are irregular planning and the resulting great variety in the description of dwellings erected, the numerous courts, the close building, and, as already stated, the remodelling or rebuilding as tenement houses of dwellings once in private occupation, and the disappearance of the once common frame house. Drying posts and lines on the roofs are common features, and are indications of the dearth of other open space even in the form of yards. In the West End the close building rather than the narrowness of the streets attracts attention. The tenement houses there are largely five and six-storied brick buildings. Outward evidences of poverty were not visible, and even a crowd, including a sprinkling of the coloured population, attracted by a fire in Cambridge Street, which runs through this district, was free to a noticeable extent from the poor and ragged element that such an occurrence would have collected in one of the poorer and crowded parts of London.

The following are notes on dwellings visited in the West End:—

Three-storied frame house in court. Plenty of yard space. Outhouses. Water-closet in the house, one for three families. Three rooms—one living room and two excellent bedrooms—comfortably furnished. Occupied by Russian Jewish family. Rent 10s. 7d. per week. On the ground floor a coloured family occupied three rooms at 8s. 4d. per week. This is a type of house that is disappearing.

Close by in a fairly wide street with granite setts, a modern four-storied brick tenement house for ten families. Shop in the basement. Interior of stairs lit with gas at night. The service of a janitor, with several houses in his charge, provided. Front door open. First floor front tenement contained four rooms with bathroom and private water-closet. Dimensions of two principal rooms 15 feet by 14 feet by 9 feet and 15 feet by 15 feet by 9 feet. Two other rooms inferior, but good specimens. All well furnished. Piano. Occupiers Jewish. Rent 19s. 3*d.* per week.

In the same house on the first floor back four rooms (with private water-closet), comfortably furnished, also with Jewish occupiers, were rented at 13s. 6*d.* per week. Sheds for coal were provided. In the basement were barrels for rubbish, which was collected weekly.

In a five-storied brick tenement house a five-roomed tenement with bathroom and private water-closet. Set range fitted for hot water supply. Dimensions:—Parlour 14 feet 6 inches by 9 feet 6 inches; kitchen 16 feet 7 inches by 9 feet 6 inches; three bedrooms, all with less than the present legal minimum of 90 square feet of floor space, 9 feet 8 inches by 6 feet 8 inches, 8 feet by 6 feet 10 inches and 9 feet 6 inches by 7 feet 9 inches; height 9 feet, or 6 inches more than the present legal minimum. The last room dark, with no window between it and adjoining rooms, but very wide doors. The window of bathroom opened out on to narrow 30 feet shaft, dirty at bottom. Fire escape from window in the rear bedroom, not in the shape of a ladder but of a balcony leading to the staircase window of the next house. Family Jewish, numbering seven. Rent 19s. 3*d.* per week.

Four-storied brick tenement for five families. Store in basement. Yard very small. No janitor. Shed for coal. Rooms well lighted, comfortable and clean. Occupiers Austrian Jews. There four years and a half without change in rent. Four rooms and an alcove called a room, bathroom and private water-closet. Rent 16s. 4*d.* per week.

Three-storied brick houses in court. One family with two rooms on each floor. Cold water laid on. One water-closet in basement for three families. Occupiers Irish. Rent ground floor 8s. 4*d.* and other floors 9s. 5*d.* per week.

Although it is common to find a tenement house or a section of a street in the exclusive occupation of some single nationality, the mixture of peoples found in close proximity is sometimes noticeable. Thus some twenty small brick tenement houses of three and four stories in a broad court in the West End were in the occupation of Irish, Coloured, Italian and Jewish families. The court was private and, as indicating that a public way had not been taken over by the public authority and that the private owner was therefore still responsible for it, the not infrequent notice "Private, dangerous crossing" was exposed. In a three-storied house in this court three rooms and a small scullery, with cold water, in the occupation of a Russian Jewish family, were let for 12s. 6*d.* per week.

The North End has been mentioned as being the largest predominantly Italian district in Boston, but Italian colonies are also found in South Boston, in East Boston (where as compared with those at the North End they are better off and more established), in Roxbury and in Dorchester, where the colonies are more scattered and are also composed of the better off. This feature also holds good of the Jewish migrants to the same district, for whom Roxbury, for instance, as compared with the West End, presents differences analogous to those that would be found in London as between the East End and North London centres of Jewish life.

The main displacement that the Italians have brought about in the North End is of the Irish, and the process is being accompanied by an extensive change not only of occupancy but of ownership, Italians like the Jews being active buyers of real estate.

American families left in the North End are exceptional, and in a house visited an American family was one of a total of three still lingering in that particular district. They were owners of property and were thus anchored by their belongings, but the household visited in a building otherwise filled by Sicilians illustrated a change that is in active progress not only in parts of Boston but widely in America. To many of the older residents upon whom the change bears directly it represents the distressing introduction of an altered relationship and a new environment. But the contrast between the gay and chattering groups of Italians, happy as children and in many ways as ignorant, and the resignation of the member of the American household seen was a parable. Gaiety, simplicity, and contentment, combined with industry, represent qualities that, especially when maintained amid sordid surroundings, are destined to carry a people far in the persistent and half-conscious movement that is securing its predominance in some of the less desirable districts of the city.

The following notes refer to individual dwellings in this neighbourhood :—

Tenement house, three families on each floor. Three rooms in the rear : living room looking on an inner court ; one large and one small bedroom. Water-closet on passage. Cold water supply. Stove furnished by tenant. Very dirty shaft. Occupiers Italians. Rent 10s. 1d. per week.

On the second floor two rooms, one a large and greatly treasured bedroom. Rent 12s. per week.

In the neighbourhood, three rooms occupied by a family of seven were rented for 13s. 6d., two rooms with three in family for 7s. 8d., and two rooms with six in family, four being infants, for 8s. 8d.

In one instance the janitor complained with animation of the tenants' habit of throwing things from the window to save themselves trouble and in other ways showing disregard for everything outside their own home. The above dwellings illustrated indeed a contrast frequently noted between the dirty neglected precincts and the rooms, especially the bedrooms, themselves. Care and responsibility for the home appear often to stop within the four walls.

In the South End some excellent tenements were seen. Three good rooms with a bathroom were let for 14s. 7d. per week, and other sets of three rooms for 10s. 5d. to 12s. 6d. per week. Four rooms could be had for 14s. 7d. a week, or with bathroom for 16s. 8d. In an old frame house six sets of three rooms were let at 7s. 4d. per week. Cold water was the only convenience and one water-closet in the basement served for the whole house. The occupants were coloured.

In this neighbourhood, where also some of the closest building in Boston may be found, is a block belonging to the Boston Co-operative Building Company, a distinctive feature of which is the special provision of one and two-roomed apartments. The latter, as is most usual in Boston, are rarely in the occupation of ordinary families, but, of, for instance, a widow and child, or spinsters. The regulations of the Health Department prohibit the occupation of a single room under all circumstances for cooking and for all other living purposes, but some discretion in practice is allowed.

Charlestown is mainly an Irish district and is fairly uniform in character. It is shrinking rather than increasing in numbers owing to the encroachment on the one side of the United States Navy Yard and on the other of the Boston and Maine Railway. The best district is in the neighbourhood of a small park in which the Bunker Hill Monument stands.

Frame houses, often for three families, of an old type with no conveniences save cold water, are common. Four and five-roomed apartments appear to predominate, letting at something above or below 2s. 11d. per room per week, unless, which would be the exception, they are modern with modern conveniences, in which case a representative rental would be nearer 3s. 10d. per room.

Much the same rental conditions prevail in South and East Boston. In Dorchester, where buildings are newer although, as already stated, often unsatisfactorily placed, the scale would be somewhat higher, as also in West Roxbury and Brighton.

The more modern three-family house to which reference has been made is built in rows, in pairs and detached. Each dwelling is self-contained, generally with a separate entrance from a public hall and stairway in front, and often with a similar entrance from a small stairway in the rear. Types vary greatly, but a fairly representative dwelling with five rooms and a bathroom would contain a small private hallway, leading on the one side into the parlour, bedroom and dining room, the last with its window opening on to an open "piazza" or balcony—one of the most desirable features of these houses ; on the other side the private hallway leads into the second bedroom and the bathroom, and at the end is the door, leading to the kitchen, at the other side of which is the entrance from the back public stairway. Such a dwelling would probably be fitted with a fixed range with hot water fittings. The rent, varying according to the character of the house and locality, might be put at from 16s. 4d. to 17s. 4d. per week. A six-roomed tenement much the same in general planning might be rented at from 18s. 3d. to 19s. 3d., or if fitted with a furnace in the basement for heating with hot air at 24s. per week.

Certain economies are secured in the construction of the three-family house as, for instance, in plumbing requirements, but the multiplication of this type of dwelling appears to be due rather to the force of habit in construction and to the strength of the imitative faculty than to pressure upon space or to any special advantage which it offers.

There is a tendency, partly owing to the increased price of materials, for houses to be built more slightly than formerly and for rooms to be built smaller, and the 20 feet front by 66 feet deep building plot of a six-roomed, three-family house of comfortable but not modern type seen in Charlestown represented a more than ordinarily liberal

planning. The measurements of another tenement in which five rooms, 9 feet high, contained 724 square feet of floor space, excited favourable comparison with some more modern erections.

As a type of the house for two families may be noted a frame building of two stories, conveniently arranged with separate entrances back and front, with separate cellar and yard, and private water-closets. Cold water and gas were laid on. The cooking stoves, in one case costing 62s. 6d., were supplied by the tenants. The occupiers were American, and on the ground floor the rent for four rooms was 12s. 6d. per week, and upstairs the rent for five rooms, that is, including the "hall bedroom," was 13s. 6d.

The predominant rentals given in the Table below are derived from the returns specially obtained for the purposes of the present enquiry. In connexion with the ranges stated in the Table it must be stated that two-roomed dwellings are not representative for the city as a whole, but in tenement houses the predominant rent for dwellings of this size in February, 1909, was from 6s. 9d. to 8s. 8d. per week. Six-roomed dwellings are also relatively uncommon, especially in the ordinary tenement house, and the figures quoted cannot therefore be taken as applying to districts where the tenement house is the prevailing type. The rent of tenements with six rooms shows an unusually wide range, even for a great city including dwellings of very various type and age, and, starting from as low as from 12s. 6d. to 14s. 5d. per week, reaches to 24s. and upwards. They represent a class of dwellings that is largely in non-working-class occupation.

With the exception of two and six-roomed dwellings, for which, for the reasons just mentioned, a common body of rental figures cannot be secured, the predominant figures shown by the results of the present enquiry are either identical or almost identical for the main types of dwellings for the city as a whole. The ranges covered are wide but the differences in the predominant rentals, although showing in the maxima some indication of greater pressure upon house room in the more congested districts, are on the whole slight, the only case in which the difference is marked being that of the four-roomed dwellings in the ordinary tenement house. Here the mean of the limits of the predominant range shows an excess of 1s. 11d. per week over that for the same number of rooms in houses of the various types constructed for three families. On the whole, however, room for room, the predominant figures show a great general similarity both of figure and of range, and the following Table has therefore been prepared giving the combined results for all tenements of the various sizes specified, viz., two, three, four, five and six rooms:—

Predominant Rents of Working-class Dwellings.

| Number of Rooms per Dwelling. | | | | | Predominant Weekly Rents. |
|-------------------------------|-----|-----|-----|-----|---------------------------|
| Two rooms | ... | ... | ... | ... | 6s. 9d. to 8s. 8d. |
| Three rooms | ... | ... | ... | ... | 7s. 8d. ,, 10s. 7d. |
| Four rooms | ... | ... | ... | ... | 9s. 7d. ,, 13s. 6d. |
| Five rooms | ... | ... | ... | ... | 13s. 6d. ,, 16s. 4d. |
| Six rooms | ... | ... | ... | ... | 15s. 5d. ,, 22s. 1d. |

The level of rents at New York being represented by 100, the rents index number for Boston is 82.

Taxes and water-rate are paid by the owner, and, apart from a small poll tax, tenants are thus left free from any direct taxation. The water-rate for a dwelling occupied by two families ranges from 29s. 2d. per annum upwards according to value, with an additional charge of 20s. 10d. per annum for one or more water-closets. Thus a house occupied by two families valued at over £417 and under £625 would be rated at 62s. 6d. per annum. Dwellings used by three or more families are rated according to rental at from 10s. 5d. per tenement with an extra charge for each water-closet and bath tub of 12s. 6d. or for water-closet and bath tub together of 20s. 10d. Thus, a house occupied by three families at rentals not exceeding 24s. per week with water-closets and bath tubs would be rated at 93s. 9d. per annum, or one occupied by six families, supplied with three water-closets but without bath tubs, at 100s. per annum.

Sanitary inspection is in the hands of a carefully organised Board of Health, according to the regulations of which the tenement houses, as forming part of the general responsibility devolving upon the Board, have to be visited every six months. Seventeen Health Inspectors are employed, and in addition five police officers are specially detailed to the service of this Department.

A few attempts off the lines of ordinary commercial enterprise have been made to meet the housing requirements of the working classes in Boston, but recent enterprise in

this direction has been unimportant. The chief significance of the attempts that have been made in the past consists not so much in the superior character of the accommodation now offered as in the recognition of the social importance of the housing question and in the endeavour made to raise the standard of the normal relationship between landlord and tenant, and by so doing to make each interpret more widely the nature of his responsibilities. In this respect a long and honourable record is held by the Boston Co-operative Building Company, which has now been in existence for 40 years and is at present the owner of various properties on which about 1,000 persons are housed. The rents vary according to the nature and locality of the property, and range for two rooms from 5s. 3d. to 9s. 5d., for three rooms from 6s. 3d. to 13s. 7d., and for four rooms from 9s. 5d. to 15s. 8d. per week.

In 1900 about 81 per cent. of all dwellings of every description in Boston were rented.

RETAIL PRICES.

In its general features the machinery of retail distribution possessed by Boston is that common to many large cities—a central ganglion of busy and crowded shopping streets, recognised shopping centres in all well-defined out-lying districts, be these near to or far from the centre, and, in addition, especially so far as groceries, meat and provisions are concerned, scattered shops more definitely of the “neighbourhood store” type.

Large “department stores” are found which, owing to their convenience, their free delivery of goods and their general attractiveness, absorb much custom, but as regards foodstuffs probably have less effect upon prices and upon the general marketing practices of the community than the so-called “multiple” shops or “chain stores.” The latter are numerous, including most of the shops belonging to the largest business of this kind in New England. This type of shop is of comparatively recent growth, and the particular firm referred to has sprung up during the last fourteen years. Credit is not given by the ordinary “chain stores,” but although the prices ruling in them are often relatively low they are not the determining factor in the local range of prices. These appear to be still mainly determined, subject to any ruling conditions of the wholesale markets, by competition between the ordinary shops. Trading stamps are a good deal used with a view to securing and retaining custom, but they are probably a device that will not prove lasting.

Co-operative stores are not found, but the principle of industrial co-partnership is in successful operation in one of the best known drapery establishments, and is now attracting favourable attention.

Public markets for retail buyers are not important for the working-class consumer; the stalls in the two best-known market buildings, mainly for meat, provisions and fruit, being largely taken by wholesale dealers and by those who supply the large consumers, such as hotels and restaurants. The smaller and poorer class of consumer is affected by a certain amount of “clearing-up” trade rather than by the ordinary business of the markets as a whole. On the other hand in their immediate neighbourhood two or three streets, with their push carts, shops and a small local market hall, are on occasion filled with a huckstering and bartering cosmopolitan crowd, but in general the public market system affects retail distribution but slightly in Boston.

Another form of “market” so-called is, however, found everywhere. This is simply the foodstuff shop which exists in many cities, in which, whether it be large and fully equipped, or small and unpretentious, the principle of the “department” is adopted. In such a shop, if it be a complete establishment, groceries, bread, meat, poultry, provisions, fruit and vegetables can all be purchased under one roof. This description of shop, more or less completely developed, is the most distinctive and perhaps the most common type so far as the retail distribution of food is concerned in Boston.

In spite of changes in the direction of cash payments, as through the medium of the “multiple” shops, credit is still extensively given, but although individual customers of poor reputation who take credit may have to pay more, either by getting an inferior quality for their money, or in the shape of a higher market price, a double basis of charging for cash and for credit accounts is not systematically adopted. The conditions of competition and the gossip of neighbours prevent this. Neither, it may be noted, are customers who take reasonable credit in general less valued than others, since credit is considered by some to ensure regularity of dealing: they “always come.”

Groceries and other Commodities.

The following notes refer to particular commodities. The brands of *eggs* in most general consumption are Western, and in an ordinary year do not appear to vary greatly in price. They are, however, usually cheapest from April to June, when local supplies

are most abundant. Really fresh "near by" eggs in February, 1909, cost about 2s. 1d. a dozen. During the summer of 1909 eggs were unusually dear, but the following prices were being advertised at one of the large cash shops at the beginning of September:—"Western Brand" 1s. 3d. per dozen; "strictly fresh" 1s. 3d. per dozen; "fancy Eastern" 1s. 1½d. per dozen; "fresh Western" 1s. 0½d. per dozen.

The *butter* sold in February is mainly storage. Oleomargarine is rarely kept.

The *flour* sold is of various grades and one of the best is a Western brand accepted by many dealers as a kind of standard maximum and was being sold in February at 4s. 4½d. for 24½ lb. The maximum price reached by this brand for the above quantity during the summer of 1909, when prices were rising, was 4s. 7d. This price held good as far south as New Jersey, freight charges from the West being practically the same all through. The lowest price quoted for flour in Boston in February was 3s. 3½d., but the predominant price for 24½ lb. was from 3s. 9d. to 4s. 2d.

As regards *bread*, the ordinary 2½d. loaf is generally supposed to weigh 1 lb., but the predominant weight was 14 oz. in February. Much bread is sold by the shops, being delivered to them twice a day by the large wholesale bakers, who take back any old loaves and sell these as stale bread. "Rye bread" of the ordinary mixture of wheat and rye flour, and in various sizes, is sold to a considerable extent, especially in the Jewish districts, at a slightly heavier weight for a 2½d. loaf than the wheaten bread. The rough rye bread so much in evidence in some districts in New York is not sold.

Much *milk* is sold "loose," and the price for milk so retailed would be 4¼d. and under per quart. In the summer the milk-can at the shop is kept in ice, but a proposal is under consideration to make the sale of milk in bottles compulsory. In September milk was ½d. dearer at some shops than in February, when the predominant price was from 4¼d. to 4¾d. per quart.

The following are some miscellaneous prices noted at the beginning of September:—

Bananas 7½d. a dozen; tomatoes 1s. 8¾d. a peck; corn (maize) cobs 7½d. and 10d. a dozen according to the size, and cabbages 2d. per lb.—the sale of these by weight being common. Sweet potatoes are relatively dear in Boston, 1½d. a lb. being asked for the latter in September, when they were in season.

Anthracite *coal* is consumed in Boston and the usual price per "short" ton of 2,000 lb. for "nut" coal, the variety ordinarily consumed, was 32s. 3½d. in February. In April this price fell to 30s. 2½d. according to custom, the winter level being regained, by regular monthly increments, in September. Much coal is bought by the ton, sometimes on the instalment plan, when a usual price was 33s. 4d. Larger dealers are not in the habit of selling less than a quarter of a ton. Common small units of sale are in 100, 50 and 25-lb. bags, with the weight stated thereon, and (compulsorily in the case of the 25-lb. bags) with the name of the dealer also. The predominant price for the 25-lb. bag in February was from 5d. to 6d.

A good deal of coke is consumed, small lots being retailed in bags of about 18 lb. at 5d.

The following Table shows the prices most usually paid by the working classes of Boston for various articles of food, for coal and for kerosene in February, 1909:—

Predominant Prices paid by the Working Classes in February, 1909.

| Commodity. | Predominant Price. |
|------------------------------------|----------------------------------|
| Tea per lb. | 1s. 8d. to 2s. 1d. |
| Coffee " | 1s. 3d. ,, 1s. 5½d. |
| Sugar— | |
| White Granulated " | 2¾d. |
| Brown " | 2½d. |
| Bacon, Breakfast—Boneless " | 7½d. to 9d. |
| Eggs per 1s. | 8 ,, 10 |
| Cheese, American... .. per lb. | 10d. |
| Butter " | 1s. 5½d. |
| Potatoes, Irish per 7 lb. | 7d. |
| Flour, Wheaten—Household " | 1s. 0¾d. to 1s. 2¼d. |
| Bread, White per 4 lb. | 11½d. |
| Milk per quart. | 4¼d. to 4¾d. |
| Coal, Anthracite per cwt. | 1s. 9¾d.*; 1s. 10½d. to 2s. 3d.† |
| Kerosene per gallon. | 6d. to 7¼d. |

* By the ton of 2,000 lb.

† By the bag of 25 lb.

Meat.

The greater part of the meat supply of Boston of every kind, except possibly veal, is Western, and most is not only Western-reared but Western-killed and Western-dressed. The abattoir is at North Brighton, on the site of a cattle market once well-known throughout New England, and all killing is done there. The amount thus killed has increased somewhat in recent years, partly owing to the Jewish regulations as regards "Kosher" meat, and the larger number of Jews now living in Boston and district. But the great bulk of the meat consumed still comes dead from the West. The grade of meat that Boston secures is said to be relatively high. Mutton, in any case under that name, is little consumed, "lamb" being the common designation. It is worthy of note that in the State Labour Bulletin for December, 1907, where retail prices for various commodities sold in Massachusetts cities are given, prices for "lamb" alone are quoted.

The following were the prices most commonly paid for various cuts of meat by the working classes of Boston in February, 1909 :—

Predominant Prices paid by the Working Classes in February, 1909.

| Description of Cut. | Predominant Price per lb. |
|-------------------------------------|---------------------------|
| Beef :— | |
| Roasts—Ribs prime | 7½d. to 9d. |
| " Ribs second cut | 7½d. |
| " Chuck or short ribs | 5d. to 6½d. |
| Steaks—Round... .. | 10d. to 1s. 0½d. |
| " Sirloin... .. | 1s. 0½d. |
| Shin without bone | 4d. to 5d. |
| Flank | 2½d. ,, 4d. |
| Brisket, "Fancy" | 7d. ,, 7½d. |
| Mutton or Lamb :— | |
| Leg | 7½d. to 9d. |
| Breast | 5d. ,, 6d. |
| Loin | 7½d. ,, 8d. |
| Chops | 10d. ,, 1s. 0½d. |
| Shoulder | 6d. |
| Veal :— | |
| Cutlets | 1s. 3d. |
| Rib chops | 7½d. to 10d. |
| Loin chops | 10d. to 1s. 0½d. |
| Breast | 5d. |
| Neck | 4d. to 5d. |
| Pork :— | |
| Fresh—Loin | 6½d. to 7½d. |
| " Spare rib | 5d. |
| " Shoulder | 5d. to 5½d. |
| " Chops | 7½d. |
| Corned (wet salt or pickled) | 7d. |
| Ham | 7d. to 7½d. |
| Shoulder, salt or smoked | 5d. |

Prices at New York being taken as the base, = 100, in each case, the index number for the price of meat at Boston is 105, for other food it is 105 and for food prices as a whole 105. For rents and food prices combined the index number is 99.

Boston is an important fish market but the volume of its domestic export robs the city itself of any particular advantage from the point of view of local consumers that might otherwise be derived from its large local supplies. The fish is mainly haddock, cod, hake, pollack and, principally in June and July, mackerel; the total value of fresh fish landed by American vessels in 1908 being put at something over half a million sterling. The following are usual retail prices for fresh fish :—Haddock 3½d. per lb.; cod 3d.; cod steaks, from large fish, 6d.; halibut from 7½d. to 9d.; and mackerel, according to size and season, at prices equivalent to about 5d. per lb.

As regards poultry, which according to the regulations must be sold dressed, ordinary prices were 10d. per lb., but in September, 1909, when it was stated to be dearer than ever known, fowls were being sold at 11½d. and chickens at 1s. 0½d. per lb.

BROCKTON.

Brockton, the principal centre in the United States for the manufacture of fine grade shoes, is situated in Massachusetts, about 20 miles south of Boston. It was not incorporated as a city until 1881. Originally it formed part of the town of Bridgewater and later, in 1821, was itself constituted a town under the name of North Bridgewater. In 1874 it adopted its present name. Various stages in the rapid growth of the population of Brockton since 1870 are shown in the following Table :—

| Year. | Population. | Increase. | Percentage Increase. |
|-------|-------------|-----------|----------------------|
| 1870 | 8,007 | — | — |
| 1880 | 13,608 | 5,601 | 70·0 |
| 1890 | 27,294 | 13,686 | 100·6 |
| 1900 | 40,063 | 12,769 | 46·8 |
| 1910 | 56,878 | 16,815 | 42·0 |

The area of the city is $21\frac{1}{2}$ square miles. The chief thoroughfare, Main Street, runs in a straight line from north to south throughout the whole length of the city, and the built-up section of the city extends only for a comparatively short distance to the right or left of this central street. A short distance to the east of Main Street, and running parallel to it, is the railway line. On the far side of the line the appearance of the city is less inviting than on the western side, and it is there that most of the non-English-speaking people, other than the Swedes, are found. Though of rapid growth, the city is on the whole well paved, and presents a less unfinished appearance than some cities of older date in the same State. With the exception of the High School and the City Hall there are few buildings of any pretensions.

In its outward appearance the city gives an impression of prosperity and comfort on the part of its workers, and this impression is confirmed by closer investigation. Though scattered instances of dilapidated or ill-kept houses are to be found, it may be said that the city is wholly without slums, as that term is usually understood. This pleasing characteristic is no doubt due in part to the recent growth of the city, but much must also be allowed for the fact that Brockton is engaged mainly in an industry in which most of the employees are well paid. The appearance of the city owes something also to the fact that most of the manufacturers and heads of concerns trading in Brockton have their homes there, and their presence accounts for a number of choice residences which, with their gardens, tend to relieve the monotony of appearance characteristic of many industrial centres. The influence of the close proximity of Boston, though clearly perceptible in certain branches of the city's activities, is not so well marked as in some of the other industrial centres in Massachusetts, the directing force behind most of the Brockton enterprises being largely exercised in the city itself.

Brockton may be contrasted with such Massachusetts cities as Lawrence and Lowell as regards the elements of its population. According to the Census of 1905, the only non-English-speaking nationality represented by more than a thousand persons was the Swedish. Though no fewer than 12,275 persons out of a total population of 47,794 were shown to be foreign-born, over half of this number consisted of English-speaking immigrants not readily distinguishable from the native population. Of the total foreign-born population, 27·4 per cent. were born in Canada (only one-quarter of these being French Canadians), 23·3 per cent. in Ireland, 20·3 per cent. in Sweden, 9·3 per cent. in Great Britain, 6·3 per cent. in Russia and 5·4 per cent. in Poland. The English, the English-speaking Canadians and, to a less extent, the Irish become readily assimilated to the Americans themselves in their mode of living; the Swedish people also maintain a standard of life at least as high as that of the Americans; so that the proportion of the population which is composed of those national elements which are usually most closely associated with poverty in American cities is not large.

The industrial importance of the city is derived entirely from its manufacture of boots and shoes. Beyond this industry and such directly dependent trades as the manufacture of shoe "findings," few manufactures are represented to any extent in the city. The predominance and the magnitude of the boot and shoe industry are shown clearly by statistics published by the State for the year 1908. The total output of all industries in the city was stated at £9,314,874 and of this sum £7,349,349 was due to boots and shoes, £559,614 to boot and shoe findings and £588,428 to boot and shoe cut stock.

The municipal activities of Brockton are confined to the ordinary services undertaken by a modern American city, municipal trading being limited to the maintenance of the water supply ; this supply, which is considered to be very satisfactory, is obtained from Silver Lake, some distance from the city. The city is served by an elaborate system of electric tramways which is controlled by a company operating over the greater part of Massachusetts. Boston, Providence and other points even more distant can be readily reached. The electric light and power supply and the gas works are also under the control of private companies. The charge for electric light current in the early part of 1909 was 10*d.* net per kilowatt-hour, but since July of that year this charge has been reduced to 7½*d.* At present electricity for lighting or for other domestic uses has not made its appearance to any appreciable extent in working-class homes. The charge for gas is 5*s.* per 1,000 cubic feet, a discount of 5*d.* on this price being allowed for prompt payment. A considerable number of prepayment meters are still in use, but for some time past they have not been supplied or replaced, their use being considered by the company to be unsatisfactory on many grounds. The number of gas stoves known to be in use in the city at the time of the investigation was nearly 6,000.

The financial system of the city need not be described at length, being generally similar to that of the larger cities of Massachusetts dealt with in this volume. The tax-rate on real and personal property in 1909 was 2·06 per cent. of the assessed value, and in 1908, 2·09 per cent. In 1906, the last year for which comparative statistics are available, the rate was 1·97 per cent. Only two of the thirty-three cities in Massachusetts showed a higher rate than this, and both of these had less than 25,000 inhabitants each. The *per capita* valuation in Brockton was, however, comparatively low, being £147 16*s.* It is probable that this low valuation is due as much to a lack of stringency in the assessments as to the character of the population. Very few of the taxpayers make declarations or returns of their personal property. The assessments are almost always made on hypothetical amounts, and there is no doubt that these are in most cases well below the actual amounts strictly liable.

In addition to a sum of £164,041 raised by taxation, £890 was derived from licence duties and £3,568 from special assessments on account of improvement works. The small amount derived from the licence duties is accounted for by the fact that with the exception of a break of twelve months the city has, for more than 20 years, prohibited the sale of intoxicants. The interruption in this period of prohibition occurred some years ago, and according to all accounts the reversion to the previous practice was made with remarkable unanimity.

The private charities of the city are not organised, differing in this from so many American cities. Public assistance is controlled by the City Government and the principles of administration and relief are generally similar to those in other cities of the State. Indoor relief is given at the City Home, a comfortable, neatly furnished house, with farm lands attached, on the outskirts of the city. The number of inmates of both sexes is usually about 100, nearly all of whom are of very advanced age. Outdoor relief to those who have a settlement in the city is usually given in kind, the value of the weekly supplies being about 8*s.* 4*d.* in summer and 12*s.* 6*d.* in winter for each family assisted. The articles supplied, according to the needs or wishes of the family assisted, comprise flour, butter, sugar, tea, coffee, potatoes, beans, rice, oatmeal, meal, crackers, soap, pork, salt fish and lard. The goods are supplied from the City Store and it is said that the quantity given for 8*s.* 4*d.* is more than could be obtained at a retail shop for that sum. Shoes are also supplied for children in deserving cases, and on the whole there is a good deal of elasticity in administration. The total number of families assisted in 1908—a year of exceptional distress—was 377, representing 1,526 persons.

The sanitary administration of the city is under the control of a Board of Health, consisting of a chairman, a health officer (who is a medical man) and an executive officer. The staff consists of two bacteriologists, a plumbing and sanitary inspector, an inspector of meats and provisions and a city physician.

The total numbers of births, deaths, deaths under one year and deaths from tuberculosis of all kinds for the period 1904–8 are shown in the following Table :—

| Year. | Births. | Deaths. | Deaths under One Year. | Deaths from Tuberculosis. |
|-------|---------|---------|------------------------|---------------------------|
| 1904 | 914 | 567 | 100 | 74 |
| 1905 | 1,104 | 609 | 96 | 86 |
| 1906 | 1,159 | 568 | 109 | 61 |
| 1907 | 1,430 | 676 | 143 | 50 |
| 1908 | 1,426 | 605 | 137 | 52 |

OCCUPATIONS, WAGES AND HOURS OF LABOUR.

The importance of the boot and shoe industry in Brockton has been already referred to. Apart from this and cognate industries, the largest single enterprise is a colour-printing establishment. The purely industrial character of the city, to which testimony is afforded by the comparatively small percentage of people engaged in professional pursuits, is shown by the following Table of occupations based on the results of the Federal Census of 1900 :—

Number of Persons of 10 years of age and over engaged in Occupations in Brockton in 1900.

| Occupations. | Males. | Females. | Total. |
|---|--------|----------|--------|
| Building | 830 | — | 830 |
| Metalworking and Engineering | 371 | 2 | 373 |
| Textile | 21 | 8 | 29 |
| Boot and Shoe Making | 6,254 | 1,959 | 8,213 |
| Clothing | 77 | 374 | 451 |
| Woodworking and Furnishing | 80 | — | 80 |
| Paper and Printing | 113 | 107 | 220 |
| Food, Drink and Tobacco | 133 | 20 | 153 |
| Other Manufacturing and Mechanical Pursuits | 858 | 67 | 925 |
| Trade and Transportation | 2,762 | 529 | 3,291 |
| Labourers (not otherwise specified) | 476 | 10 | 486 |
| Professional, Domestic and Personal Service and } Agricultural Pursuits | 1,075 | 1,416 | 2,491 |
| All Occupations | 13,050 | 4,492 | 17,542 |

It will be seen from the above Table that 47 per cent. of all persons employed in work for gain were engaged in the staple industry of the city. Later figures, based on a State enquiry in the year 1908, are even more significant. These figures relate only to persons employed as manual workers in manufacturing industries, and show that of such workers 82 per cent. were engaged directly in boot and shoe manufacturing, while a large percentage of the remainder were engaged in trades auxiliary to the chief industry. The following are the full details :—

Number of Wage-earners employed in 1908 in the Manufacturing Industries of Brockton.

| Industry | Wage-earners Employed. | | | | |
|-----------------------------------|------------------------|----------|--------|------------------|------------------|
| | Average Number. | | | Smallest Number. | Greatest Number. |
| | Males. | Females. | Total. | | |
| Boots and Shoes... .. | 9,264 | 3,814 | 13,078 | 9,598 | 14,692 |
| Boot and Shoe Cut Stock | 503 | 228 | 731 | 615 | 845 |
| Boot and Shoe Findings | 367 | 200 | 567 | 432 | 723 |
| Boxes, Fancy and Paper | 66 | 168 | 234 | 213 | 248 |
| Lasts | 140 | — | 140 | 113 | 158 |
| Foundry and Machine Shop Products | 146 | — | 146 | 130 | 172 |
| Other Industries | 819 | 141 | 960 | 792 | 1,150 |
| All Industries | 11,305 | 4,551 | 15,856 | 11,893 | 17,988 |

The above Table shows that if the manufacture of fancy and paper boxes be regarded as one dependent on the shoe industry, the number of workers employed in manufactures having no obvious connexion with boot and shoe manufacture is less than 7 per cent. of the total. Reference to the last two columns of the Table will show that in the boot and shoe trade a great fluctuation occurred in the numbers employed during the year. This feature of the statistics is no doubt explained to a large extent by the general depression of trade which passed over the country in that year, but much is accounted for by the occurrence of trade disputes. The year 1908, indeed, compares very unfavourably with the previous year. In 1907 the average number of wage-earners in the manufacturing industries reported in the city was 18,338, the difference between this total and that for 1908 being almost entirely due to the falling off which occurred in the leading industry. In 1907,

too, the fluctuation in the numbers employed was much smaller than in 1908. The greatest number employed in the boot and shoe factories in the former year was 16,558, while the smallest number was 13,098.

The boot and shoe trade in Brockton is highly organised, and practically all the manufacturers recognise agreements with the men's unions. The trade union stamp system has been developed with considerable success. There is little doubt that the manufacturers regard the stamp as an asset of some value for advertising purposes and as a *quid pro quo* for their concession of union claims. The agreement, known as the "union stamp agreement," is entered into between the manufacturer and the Boot and Shoe Workers' Union, the international organisation which forms a co-ordinating body for the unions concerned with special branches of the trade. The principal provisions of the agreement are that "the union agrees to furnish its union stamp to the employer free of charge, to make no additional price for the use of the stamp, to make no discrimination between the employer and other firms, persons or corporations who may enter into an agreement with the union for the use of the union stamp and to make all reasonable effort to advertise the union stamp and to create a demand for the union stamped products of the employer, in common with other employers using the union stamp." On the other side the employer agrees to hire as boot and shoe workers only members of the union. It is further agreed that the union will not cause or sanction any strike, that the employer will not lock out his employees while the agreement is in force and that all questions of wages or conditions of labour which cannot be mutually agreed upon shall be submitted to the Massachusetts State Board of Conciliation and Arbitration.

In addition to the Boot and Shoe Workers' Union there are no fewer than thirteen unions concerned with special branches of the trade, viz., those of the vampers, lasters, sole fasteners, skivers, heelers, edgemakers, finishers, treers, packers and dressers, sole leather cutters, stitchers and cutters and also a mixed union. It may readily be surmised that with this somewhat elaborate organisation the number of questions arising for settlement is considerable. Most of the negotiations between the employers and the men take place through the Manufacturers' Association, to which the majority of the firms belong. The number of references to the State Board of Arbitration is great. In 1908 no fewer than 75 separate decisions were given by the Board in matters submitted by Brockton concerns, several firms figuring a number of times in this total.

The general feeling appears to be that this organisation of industry is an advantage to both sides, and certainly the progress of the city under this *régime* has been marked, for it is too early yet to judge whether the set back of 1908 was the first step of a gradual decline, or merely a temporary disturbance in which Brockton was not the only participant. The advance made by Brockton as a boot and shoe centre and the rapidity with which the volume of its output has grown show at least that industrial prosperity, measured by the usual standards, has been concurrent with the frank recognition of the men's unions. On the other hand, it is sometimes argued that the concession of the high union rates of wages has resulted in the transference to other centres of many of the cheaper grades of work. There appears to be no doubt that the average yearly earnings of the boot and shoe operatives are higher in Brockton than in any other boot and shoe centre in Massachusetts. It is claimed, indeed, that they are higher than in any other centre in the world. According to the State Bureau of Statistics, the average yearly earnings in 1908 of workpeople of both sexes engaged in this trade were £136 5s. in Brockton, £122 7s. in Haverhill, £124 5s. in Lynn and £114 10s. in Beverley, all these cities being important boot and shoemaking centres. If, however, it is true that high rates of wages have resulted in the loss to Brockton of certain of the cheaper kinds of work, such a change is probably only an aspect of a tendency which, according to local information, has in fact been at work, namely the gravitation to the city of the most efficient labour in the country. There seem accordingly to be adequate grounds for the belief that a development has taken or is taking place which might be foreseen in the light of ordinary theory. High rates of wages, once established, have developed or attracted labour of a quality for which alone such wages can be commercially paid, and the labour previously available has been obliged either to bring itself up to the new standards of efficiency or to seek employment elsewhere. If such be the industrial phase through which Brockton is passing, it would go far to explain those favourable features in its appearance and economic life to which references are made elsewhere in this report.

In 1908 the number of industrial disputes in Brockton was large and unusual. One in particular was very serious for the city, inasmuch as it resulted in the virtual removal to other centres of a large firm, and the consequent dismissal of over 2,000 workers. The dispute in this case, coming after a number of years of remarkably harmonious relation-

ships, had its origin in a somewhat technical point. The matter was submitted to arbitration by the State Board, whose decision was distasteful to the men. The Boot and Shoe Workers' Union then gave notice, as they were technically quite entitled to do, that they would terminate the "union stamp agreement" and this action caused a good deal of bitterness that was responsible for further quarrels. In its annual report the Board of Arbitration, commenting on the dispute, says, "It is the opinion of the Board that industrial peace is retarded in this instance by relatively small matters and that to set them aside would result in a renewal of the friendly and contractual relations which accomplished much benefit to the community during the past ten years, and contributed to the high repute of the parties." At the time of the investigation reasonable hopes were entertained that the matter would be settled and that the firm would re-establish itself in the city. Meanwhile, the effect of the dismissal of so many workers had created a good deal of disturbance in the economic life of the city.

The strength of the trade union position in the shoe industry in Brockton has not been without effect on the other trades of the city, most of which are effectively organised. Trade union rates are paid in all branches of the building trades, and the amount of non-union labour employed is probably insignificant. In the printing trades the union rates are generally paid or exceeded, though not all the shops are staffed exclusively with union labour. The machinists are organised, but in Brockton as in many other cities wide differences of skill, &c., are a difficulty in the way of the establishment and enforcement of a high minimum rate. The union rate for machinists is 62s. 6d. per week, a rate which, when compared with the rates paid locally in other occupations, is somewhat low. In practice, however, this rate is often exceeded. The machine shop industry in Brockton is small; there is no general foundry in the city, casting work being sent to Bridgewater or elsewhere. Not the least effective union in the city is that of the labourers. This union has had a large measure of success in fixing the rate of wages for general unskilled able-bodied labour at the rate of 56s. 3d. per week.

As in other American cities the unions show a marked singleness of purpose in carrying out the primary objects for which they exist, being very little identified with aims other than those directly concerned with wages and hours of labour. The sick and death benefits are the only exception to this general policy. In the Painters' Union the sick benefit is 20s. 10d. per week for a maximum of eight weeks in any one year. The death benefit varies from £10 8s. 4d. to £62 10s. according to length of membership. This may be taken as fairly typical of the building trade unions. There are no out-of-work benefits other than strike pay. The subscriptions to the unions are usually 10d. per week.

The following Table shows the predominant weekly wages and hours of labour in the principal trades and occupations in February, 1909:—

Predominant Weekly Wages and Hours of Labour of Adult Males in the Principal Occupations in February, 1909.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|--|---------------------------|-------------------------------------|
| <i>Building Trades:—</i> | | |
| Bricklayers | 110s. | 48 |
| Stonemasons | 100s. | 48 |
| Carpenters | 82s. | 48 |
| Plasterers | 110s. | 48 |
| Plumbers | 91s. 8d. | 44 |
| Painters | 75s. | 48 |
| Hod Carriers, Bricklayers' and Plasterers' Labourers | 70s. | 48 |
| General Labourers | 56s. 3d. | 48 |
| <i>Foundries and Machine Shops:—</i> | | |
| Machinists | 62s. 6d. to 67s. 6d. | 54 |
| Blacksmiths | 62s. 6d. | 54 |
| Labourers | 37s. 6d. to 43s. 9d. | 54 |
| <i>Printing Trades:—</i> | | |
| Newspaper— | | |
| Compositors, Hand and Machine—Day work ... | 83s. 4d. to 91s. 8d. | 48 |
| Book and Job— | | |
| Hand Compositors | 72s. 11d. | 48 |
| Pressmen { Small Presses | 66s. 8d. | 48 |
| { Cylinder Presses | 79s. 2d. | 48 |

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|---|---------------------------|-------------------------------------|
| <i>Boot and Shoe Trades :—</i> | | |
| Outside Cutters { Hand | 75s. | 54 |
| Machine | 87s. 6d. | 54 |
| Outsole Cutters | 68s. 9d. | 54 |
| Upper Cutters { Hand | 62s. 6d. | 54 |
| Machine | 75s. | 54 |
| Goodyear Welters and Goodyear Stitchers | 91s. 8d. to 104s. 2d. | 48 |
| Lasters and Pullers-over | 68s. 9d. „ 83s. 4d. | 51 to 54 |
| Edge Trimmers and Edge Setters | 100s. „ 104s. 2d. | 48 |
| Vampers | 70s. 10d. „ 91s. 8d. | 54 |
| Heelers | 83s. 4d. „ 100s. | 54 |
| Treers | 62s. 6d. „ 75s. | 54 |
| <i>Public Services :—</i> | | |
| Street Construction, Paving and Cleaning (Municipal)— | | |
| Paviors | 87s. 6d. | 48 |
| Paviors' Labourers | 56s. 3d. | 48 |
| Road Menders | 56s. 3d. | 48 |
| Scavengers | 56s. 3d. | 48 |
| Drivers, Teamsters | 56s. 3d. | 48 |
| Water Works (Municipal)— | | |
| Labourers | 56s. 3d. | 48 |
| Gas Works (Company)— | | |
| Gas Stokers | 72s. 11d. | 56 |
| Labourers | 56s. 3d. | 48 |
| Electric Light and Power Works (Company)— | | |
| Stokers | 72s. 11d. | 56 |
| Linemen | 62s. 6d. | 48 |
| Labourers | 56s. 3d. | 48 |
| Electric Tramways (Company)— | | |
| Motormen and Conductors*— | | |
| 1st year | 61s. 3d. | 70 |
| 2nd year | 64s. 2d. | 70 |
| 3rd, 4th and 5th years | 67s. 1d. | 70 |
| 6th and 7th years | 70s. | 70 |
| After 7 years | 72s. 11d. | 70 |

* 67s. 1d. was the rate received by the majority of the men.

Taking wages at New York as the base, = 100, in each case, the wages index numbers for Brockton are—building trades, skilled men 88, hod carriers and bricklayers' labourers 102; foundries and machine shops, skilled men 75, unskilled labourers 97; printing, hand compositors (job work) 83.

In the above Table the hours of labour of the workers in the boot and shoe trade have been given as accurately as possible, but in regard to the piece workers there is considerable doubt as to the usual number of hours worked in an ordinary week. Many of the piece workers appear to have a good deal of freedom in their comings and goings, and their hours of work were variously estimated at from seven to nine per day. There is good reason, however, for putting the hours of the goodyear welters and stitchers and the edge trimmers and setters at 48 per week, and for assuming that the other workers mentioned in the Table usually work the full nominal hours of 54 per week. Cutters are usually employed on time work, and the rates stated above are the recognised standard rates. Edge trimmers and edge setters are piece workers, the usual rate for trimming being 1s. 0½d. per dozen pairs. Lasters are sometimes employed on piece work and sometimes on time work. The standard rate per day is 12s. 6d. Goodyear welters and stitchers are invariably piece workers, the rate for welting averaging about 9½d. per dozen pairs, and for stitching about 10½d. per dozen pairs. The majority of treers are employed on piece work, but some are employed on time work. Heeling is paid at piece prices, and is divided between four sets of workers, known respectively as heelers, sluggers, shavers and breasters. The heeler, so-called, employs a boy to assist him; the payment is a matter of private arrangement, but is usually about 4s. 2d. per day. The net earnings of all four classes are about the same. Vampers consist about equally of men and women, and are employed both as piece and time workers. The rates given in the Table are those applicable, as nearly as can be ascertained, to men. Women also find employment in many operations in the closing and treeing rooms. The variety of operations is so great and the range of payment so wide that there is much difficulty in stating the predominant earnings of these female workers. For women closers or stitchers the most

usual rates appear to range from 50s. to 62s. 6d. per week. For other women no rate can be quoted. At one factory women employed on "table" work earned from 31s. 3d. to 50s. per week, while another firm stated that none of the adult women employed earned less than 43s. 9d. per week.

HOUSING AND RENTS.

At the time of its incorporation as a city in 1881 the population of Brockton was less than 14,000, while in 1910 it was 56,878. The number of its inhabitants has thus quadrupled in less than thirty years. The evolution of Brockton from a small country town into a considerable city is therefore comparatively recent, and the city has not to contend with any evil legacy in the shape of large blocks of dwellings, built according to the loose standards of bygone days, such as characterise older and larger cities. A number of old tenements and cottages are, of course, to be found, but these are for the most part scattered and nowhere present a serious problem.

Practically all the residential buildings in Brockton are of the familiar American "frame" or wooden type, detached, enjoying a generous measure of ground space, and exhibiting a variety of treatment in their outward design. The working-class dwellings may be classified into two fairly distinct types. The first is a tenement in a house with gables or sloping roof, which contains attics. Such houses are, generally speaking, the older type, but, with a certain variety of treatment which often makes them of attractive appearance, they are still being built. As a rule they contain two separate dwellings, the attics being shared by the tenants on the two floors below. Occasionally, however, the attic floor is converted into a separate dwelling. The attic rooms are as a rule lighted quite adequately by ordinary or perpendicular windows, their chief drawbacks being the sloping roof and a tendency to be very cold in winter and very hot in summer. The second type of working-class tenement house is a square-built house, without attics, containing as a rule three separate dwellings, that is, one on each floor. As regards convenience and general desirability, these present as wide a variation as the houses of the first type. Though differing rather widely as regards external appearance the two types of houses may be conveniently considered together so far as the character of the individual tenements is concerned.

The usual number of rooms in working-class tenements is five, but four and six are also common. Practically all the tenement houses have both front and back entrances, there usually being two independent staircases. Most of the houses are detached; there are very few semi-detached dwellings and practically no "terrace houses." The ground space surrounding the buildings varies a good deal both in extent and appearance, but is usually ample from a health point of view. As regards frontage the houses at the higher rentals are made attractive by deep porches or balconies. With few exceptions the residential buildings are of wood, but otherwise the architecture of the better types of the two-family "gable" houses is not unlike that of the cottage revival style to be observed in the outlying suburbs of London and other large English cities. In the case of such a house there is nothing to tell an inexperienced observer that it is occupied by two working-class families and is not the residence of a well-to-do citizen. About the three-tenement houses of the second type described above there is no similar doubt or ambiguity.

Inside the tenements the arrangement of the rooms is similar to that common in almost all New England cities, the chief characteristic being an absence of any passage or corridor joining the separate rooms of the tenement. As a rule all the rooms communicate with each other, an arrangement which economises space and facilitates warming. The latter consideration is important, for not only is the winter severe but American habit usually requires living rooms to be maintained at a temperature of at least 70 degrees, while heated bedrooms are regarded as a moderate comfort that should be within reach of every self-respecting workman. On account of wide variations it is difficult to give any standard or normal measurements of the various rooms. Usually, however, the kitchen is large, about 14 feet square being a size frequently found. The bedrooms are often small, especially in the tenements containing six or more rooms. The height of the rooms in the typical houses is always sufficient, 9 feet being usual. No instances of rooms without windows were observed.

The conveniences or "improvements" in the tenements vary with the rental. Well within the range of dwellings of a strictly working-class type are such conveniences as bathrooms well fitted with porcelain baths and basins, basement furnaces supplying heat by means of hot air or steam to the several tenements in the house, hardwood floors and fixed china cupboards, and electric bells and speaking tubes communicating between the kitchens and the front street doors. All these conveniences are found together only in

the tenements at the higher rentals; but few of the artisans' homes are destitute of all of them. It may be said that in most of the working-class dwellings a bathroom—usually containing also the “toilet”—is a common feature. Another very usual convenience is a slate or stone set tub in the kitchen. It is as a rule rectangular in shape and about 3 feet 6 inches long, divided into two partitions, so that both hot and cold water can be used at the same time. Where these are found there is always a water heating system also. In the less expensive tenements this is worked by the kitchen stove, but in those at the higher rentals a basement furnace supplies the hot water for domestic uses as well as heat for the rooms. The furnaces are usually maintained by the individual tenants, a slow combustion system being the most common, but in a few cases in working-class tenements, and in many cases in middle-class tenements, the heat is supplied by the landlord, who charges an inclusive rent. In the case of a tenement of four or five rooms, the fact of heat being supplied would make a difference in rent of about 2s. 11d. per week. As has just been indicated these cases are not common among working-class tenements and they have not been considered in the statistics of predominant rentals shown below.

No important modification need be made in the above description of typical working-class houses in Brockton when attention is confined to the non-English-speaking population. The most important and numerous section of this population are the Swedes, who maintain a standard of housing accommodation quite equal to that of the English-speaking people. With regard to the Russians and Poles, and other nationalities that in other American cities generally exhibit a standard of life which is in contrast very low, it is a matter of importance that in Brockton there is no old or densely crowded district which it might be supposed, by analogy with other cities, would become their distinctive quarter. That there should be a tendency to cohere in groups even in Brockton is to be expected, yet these colonies are not in the centre of the city but well towards the outskirts, where at the present time there is no strong temptation to economise ground space at the risk of health. Their dwellings are for the most part the old two-family houses and the three or six-tenement blocks. The special conveniences or improvements indicated above are not generally present, and, inside, the houses may exhibit a poverty of furniture in strong contrast with the comfort of the American skilled artisan's home, but otherwise the housing conditions of the poorer foreign immigrants are not exceptional to those of the city as a whole.

The rents most usually paid in Brockton for accommodation of a working-class character are as follows:—

Predominant Rents of Working-class Dwellings.

| Number of Rooms per Dwelling. | Predominant Weekly Rents. |
|-------------------------------|---------------------------|
| Four rooms | 10s. 7d. to 14s. 5d. |
| Five rooms | 12s. 6d. „ 17s. 4d. |
| Six rooms | 15s. 5d. „ 19s. 3d. |

These rents include the charge for water.

The level of rents at New York being represented by 100, the rents index number for Brockton is 83.

Many people of the working class own their homes. Recent figures showing what proportion they bear to the total are not available, but the United States Census of 1900 showed that 33.9 per cent. of all homes in the city were owned, either free or encumbered, by their occupiers. It must be borne in mind that tenements are the prevailing type of housing accommodation for working-class families, and that since two or three families to a house is the usual rule it is not possible for more than a certain proportion, less than half, of the families so accommodated to be themselves the owners of their homes. The actual proportion shown by the Census is therefore remarkably high. Of all the homes which were owned, about two-thirds were encumbered with mortgage or other charges.

RETAIL PRICES.

The shopping facilities in Brockton appear to be exceptionally good on account of the presence in the city of several very large shops and “markets” doing trade on a strictly cash basis. It is claimed, indeed, that the shops in Brockton serve not only strictly local needs but also attract custom from towns at a considerable distance. The scene inside the two or three largest of these cash “markets” is almost always

a busy one. Each consists of a large shop in which are numerous counters at which all imaginable foodstuffs in season, including vegetables, fruit, meat and provisions, groceries, bread and cakes, are sold. Overhead is a network of wires conveying the bills and money from each separate counter to the cashier, while in a gallery at one end or side is a small office from which the proprietor or manager can watch the proceedings over the whole shop. These shops cater for all classes of trade, both as regards the various social grades and the different nationalities. Separate shops maintained by foreigners for the benefit of their fellow-countrymen are not an important feature in Brockton, though a few exist at which the more distinctively national articles of food can be obtained.

Groceries and other Commodities.

As elsewhere in the United States the weight of the loaves of *bread* sold for the same price varies considerably with different shops, while even at the same shop it is not certain that all the loaves of the same price and quality weigh the same. Loaves were sold at $2\frac{1}{2}d.$ and $5d.$, and a number of tests of relative weights showed that the $2\frac{1}{2}d.$ loaf represented the better bargain, yet in spite of this the $5d.$ loaf was reported at several of the shops to be more popular. It was said to be a "better" loaf than the cheaper kind.

"Grey" or rye bread is popular among the Swedes. As a rule its price is the same as that of ordinary wheaten bread. The Swedes, like most Americans, drink coffee in preference to tea, and also show a marked taste for beet as distinct from cane sugar, the most favoured kind being imported from France and selling at from $4d.$ to $5d.$ a pound.

There is some variation in the price of *milk*, this sometimes being a line in which "cutting" is practised. The most usual price is $4\frac{3}{4}d.$ per quart, though many shops sell at $4\frac{1}{4}d.$ and in a few cases it can be purchased at the shop itself, that is to say undelivered, for $3\frac{1}{2}d.$ per quart. Practically all the milk used in the city is obtained from the neighbourhood.

As is usual in a number of Massachusetts cities the milk supply is the subject of a good many regulations by the city authorities. Numerous samples are taken from the cans of dealers in the course of the year and subjected to an examination with a view to ascertaining the number of bacteria per cubic centimetre, and pressure is brought to bear upon the dairy-keepers and merchants both by means of prosecutions and publicity. The 1908 report of the bacteriologist concerned with milk inspection shows that the average bacterial count of samples of milk taken from the dealers purveying milk in wagons is much less than that of samples taken from shops. In the first case the average per cubic centimetre was 570,000 and in the second case 1,419,000. Of 556 samples taken from wagons 87 per cent. showed a count of less than 500,000, while the corresponding proportion of 269 samples taken from shops was 68 per cent. The percentage of samples of and above 5,000,000 was 2.9 in the case of wagons and 4.8 in the case of shops.

An unusual practice prevails in Brockton with regard to the sale of *coal*. The coal is always nominally the same price. During April, however, a discount of $2s. 1d.$ per short ton of 2,000 lb. is allowed, in May the discount is reduced to $1s. 8d.$, in June to $1s. 3d.$ and so on, the discount being reduced by $5d.$ each month until it comes back to the winter price on the 1st of October. The most popular kinds of coal which are sold among the working classes are probably the "White Ash," the "Lehigh Egg" and the "Shamokin Stove." The first is the cheapest and was sold in February, 1909, at a net price of $32s. 3\frac{1}{2}d.$ per short ton of 2,000 lb. The Lehigh Egg is a very hard coal and is popular among those who have basement furnaces; in February it cost $33s. 4d.$ net per short ton. The Shamokin coal cost $35s. 5d.$ net per short ton. Practically no coal is hawked about the streets. It is common for the grocery and provision shops to sell half-bushel bags of coal, containing from 35 to 40 lb., for $10d.$, but at a few shops they may be obtained for $9d.$ This method of buying cannot be said, however, to be the most usual among the working classes. As a rule, the accommodation for coal provided in the tenements is ample, and it is probable that in normal times the majority of the working classes are in a position to buy a large quantity at once.

Coke is sold in small bags weighing about 20 lb. The most usual price for this quantity is 6*d.*, but at a few places it can be obtained for 5*d.*

The following Table shows the predominant prices paid by the working classes in February, 1909, for certain articles of food, other than meat, for coal and for kerosene :—

Predominant Prices paid by the Working Classes in February, 1909.

| Commodity. | Predominant Price. |
|-------------------------------------|---|
| Tea per lb. | 1 <i>s.</i> 8 <i>d.</i> to 2 <i>s.</i> 6 <i>d.</i> |
| Coffee " | 1 <i>s.</i> 0½ <i>d.</i> „ 1 <i>s.</i> 5½ <i>d.</i> |
| Sugar :— | |
| White Granulated " | 2½ <i>d.</i> „ 3 <i>d.</i> |
| Brown " | 2½ <i>d.</i> „ 3 <i>d.</i> |
| Bacon, Breakfast—Boneless... .. " | 9 <i>d.</i> „ 10 <i>d.</i> |
| Eggs :— | |
| Fresh per 1 <i>s.</i> | 7 „ 8 |
| Storage " | 10 „ 12 |
| Cheese, American per lb. | 9 <i>d.</i> „ 10 <i>d.</i> |
| Butter " | 1 <i>s.</i> 4 <i>d.</i> „ 1 <i>s.</i> 5½ <i>d.</i> |
| Potatoes, Irish... .. per 7 lb. | 5½ <i>d.</i> „ 7 <i>d.</i> |
| Flour, Wheaten — Household " | 1 <i>s.</i> 0¼ <i>d.</i> „ 1 <i>s.</i> 2¼ <i>d.</i> |
| Bread, White per 4 lb. | 11½ <i>d.</i> „ 1 <i>s.</i> 0¼ <i>d.</i> |
| Milk per quart | 4¾ <i>d.</i> |
| Coal, Anthracite per cwt. | 1 <i>s.</i> 9¾ <i>d.</i> to 1 <i>s.</i> 11¾ <i>d.</i> * |
| Kerosene per gallon | 6 <i>d.</i> to 7¼ <i>d.</i> |

* By the ton of 2,000 lb.

Meat.

The beef sold in Brockton is almost entirely Western-dressed. Mutton or lamb and pork are obtained both from local sources and from the West, but the proportion of local to Western-dressed sheep consumed is not large. It is said that little mutton properly so called is consumed in the city. Beef, pork and lamb, in this order, are probably the most popular forms of flesh food in the city as a whole. Veal is obtained almost entirely from local sources. Western-dressed veal is held in low esteem, and when sold is cheap. Western calves fetch only 4*d.* per lb. at a time when local or “native” calves fetch 6*d.* to 7*d.*

The principal meat trade of the city is centred in the large shops or “markets,” which have already been described. There are apparently no shops in the city where meat alone is sold, though at some stores the trade in groceries, provisions, &c., is subordinated to the sale of meat.

A few particulars in regard to the local method of cutting meat may be added. Rounds of beef are almost always cut into steaks, never sold as joints. When cut as steaks, three different cuts are usually recognised—top, bottom and vein. The top cut is usually 4*d.* to 5*d.* per lb. more than the bottom cut. The vein cut is only slightly dearer than the bottom cut. Plate and brisket of beef are usually only sold “corned” or salted. The brisket is usually boned and rolled and known as “fancy” brisket.

In regard to lamb or mutton, the most usual method of cutting is to sell the fore-quarter in one piece and not to cut the breast, neck and shoulder separately. Similarly in the case of veal, the breast and neck are usually sold as a forequarter. The distinction between rib chops and loin chops of veal is not general. Veal cutlets are often known locally as veal “steaks.”

Dry salt pork is sold but little in Brockton. Hams and shoulders are usually smoked.

The following Table shows the prices most generally paid by the working classes for certain cuts of beef, mutton or lamb, veal and pork in February, 1909 :—

Predominant Prices paid by the Working Classes in February, 1909.

| Description of Cut. | Predominant Price per lb. |
|-------------------------------------|---------------------------|
| Beef :— | |
| Roasts—Ribs prime | 9d. to 10d. |
| " Ribs second cut | 8d. ,, 9d. |
| " Chuck or short ribs | 5d. ,, 7d. |
| Steaks—Round | 8d. ,, 1s. 0½d. |
| " Sirloin | 1s. 0½d. ,, 1s. 3d. |
| Shin without bone | 4d. ,, 5d. |
| Flank | 3d. ,, 4d. |
| Brisket, "Fancy" | 6d. ,, 7½d. |
| Mutton or Lamb :— | |
| Leg | 7d. to 9d. |
| Breast | 4d. ,, 6d. |
| Loin | 6d. ,, 8d. |
| Chops | 1s. 0½d. ,, 1s. 3d. |
| Shoulder | 5d. ,, 7d. |
| Veal :— | |
| Cutlets | 1s. 2d. |
| Rib chops | 10d. to 1s. 0½d. |
| Loin chops | 10d. ,, 1s. 2d. |
| Breast | 5d. ,, 6d. |
| Neck | 4d. ,, 5d. |
| Pork :— | |
| Fresh—Loin | 6d. to 7½d. |
| " Spare rib | 5d. |
| " Shoulder | 5d. to 6¼d. |
| " Chops | 8d. |
| Corned (wet salt or pickled) | 6d. to 7d. |
| Ham | 6½d. ,, 8½d. |
| Shoulder, salt or smoked | 5d. ,, 6d. |

Prices at New York being taken as the base, = 100, in each case, the index number for the price of meat at Brockton is 110, for other food it is 105 and for food prices as a whole 106. For rents and food prices combined the index number is 100.

CHICAGO.

Chicago, the Metropolis of the Middle West, is the largest city in the State of Illinois and the second largest in the United States. Its abnormally rapid development is due to its situation at the southern end of Lake Michigan, a position which enables it to dominate the principal trade routes by water and rail for a very large portion of the country. In the work of opening up the vast area of the West and Middle West, Chicago, in common with its rival St. Louis, formed a natural starting point for pioneers and immigrants. Even before the advent of railways a short canal connected the city with the great water system of the Mississippi, thus providing communication between the chain of Great Lakes and New Orleans on the Gulf of Mexico.

During the early period of railway development eastern capital favoured Chicago in preference to St. Louis and thus secured the ascendancy of the former, with the result that to-day Chicago is the greatest railway centre in the world. Twenty-six trunk railways radiate from the city and connect it with the Atlantic and Pacific coasts, Canada and the Gulf of Mexico, while a much larger number of branch lines assist in the transport to the city of vast quantities of grain, lumber, live stock and minerals from its more immediate environment, and also in the distribution of the manufactures of the East. To facilitate the transfer of freight from one railway to another an independent belt line has been built extending round the city and linking up the whole of the freight termini. Shunting operations are simplified by the use of artificial gradients.

In spite, however, of the remarkable network of railways converging upon Chicago, and the facilities for rapid transference from one system to another, the volume of traffic has increased so enormously that the question of improved water communication between the Great Lakes and the Gulf of Mexico for the conveyance of the heavier freight has become one of first-rate importance. The State Legislature of Illinois has already voted over £4,000,000 for the purpose of extending the present Chicago Drainage Canal to the head of navigation on the Illinois River, and of dredging the latter river to its junction with the Mississippi, so as to provide a uniform depth throughout of 14 feet at low water and a channel 200 feet wide at the bottom. The execution of this scheme awaits the co-operation of the Federal Government and of the various States in the Mississippi Valley, and when completed the scheme will provide a deep waterway extending 1,625 miles from Lake Michigan to New Orleans.

Whilst Chicago's interests are primarily commercial its favourable situation and exceptional transport facilities have led to the establishment of many industries, some of which are conducted on a very large scale. The total value of the city's manufactures for 1908 was returned at £319,723,472 and for 1909 at £367,282,280.

The industry for which Chicago is most famous is that of meat packing, and the value of its output for the year 1909 was nearly £55,000,000, or including many of the by-products over £65,000,000. The great development of this industry is mainly due to the introduction in the 'Seventies of the refrigerator car, which made it possible to ship dressed beef great distances and to effect considerable saving in cost of transit besides other economies. The perfecting of the system of cold storage and of the sterilising and airtight packing of meat in cans has further contributed to the growth of this industry. About 40 firms are engaged in meat packing, but the bulk of the trade is in the hands of four or five companies, whose products are shipped all over the world. In addition to their highly developed organisation these firms are distinguished for their scientific utilisation of waste products.

The iron and steel industry is also of considerable and growing importance, ore being brought in lake steamers from the rich mines round Lake Superior. Two steel works equipped with modern plant are situated within the city boundaries, whilst the United States Steel Corporation has recently constructed large works at Gary, some 25 miles to the south of Chicago, on the Lake shore, on a tract of land over 9,000 acres in extent and having a frontage to the Lake of seven miles. The plant itself covers 1,000 acres and embodies the latest ideas in equipment and working. The total value of the output of the Chicago rolling mills, blast furnaces and foundries for 1909 was over £67,000,000.

The manufacture of machinery, railway and tramway cars, bridges, lifts, heating apparatus, electric supplies, &c., is carried on extensively, whilst several of the railway companies have large works for repairs, the building of their locomotives being done at other centres. Amongst the firms manufacturing machinery, the International Harvester

Company is one of the best known, its agricultural machines being made in two large establishments employing some 15,000 workpeople. The Pullman Car Company is another Chicago firm with an international reputation. The luxurious cars which are such a conspicuous feature of American railway travelling are constructed in the works of this company, which employs about 8,000 men as a rule, but ordinary passenger cars and tramcars are also made by the firm. The value of the machinery, cars and other articles mentioned above manufactured in Chicago in 1909 exceeded £35,000,000.

The manufacture of ready-made clothing is also an industry for which Chicago, like New York and Cincinnati, is famous. Chicago claims to be the largest centre outside New York for the better-class trade in men's ready-made suits, the trade of Cincinnati being principally in cheaper lines intended for the South. In Chicago the work is done mostly in factories, which are steadily ousting the sweatshop. The industry is highly developed and suits are finely graded to secure a good fit. The value of the output of the ready-made clothing industry for 1909 was £11,000,000.

Boot and shoemaking and woodworking are also very important industries in Chicago, while there is a host of minor industries such as are usually associated with a great city.

The growth of population in Chicago during the period 1870-1910 is shown in the following Table, the figures being those of the Federal Census :—

| Year. | Population. | Increase. | Percentage Increase. |
|-------|-------------|-----------|----------------------|
| 1870 | 298,977 | — | — |
| 1880 | 503,185 | 204,208 | 68·3 |
| 1890 | 1,099,850 | 596,665 | 118·6 |
| 1900 | 1,698,575 | 598,725 | 54·4 |
| 1910 | 2,185,283 | 486,708 | 28·7 |

In 1840 the inhabitants of Chicago numbered only 4,470. The population has grown by successive waves of immigration, in which the following nationalities and races have in turn been prominent :—Irish, Germans, Scandinavians, Bohemians, Poles, Jews, Lithuanians, Italians, Austrian and Hungarian Slavs (mainly Slovaks and Croats) and lastly, Roumanians, Servians, Bulgarians and Greeks.

To a large extent the Irish and Germans have risen from the ranks of unskilled labour, and are now well represented in the business, professional and municipal life of the city, and it is noteworthy that the police force and tramway staff are predominantly Irish.

The Federal Census of 1900 showed that the white inhabitants of American birth formed 63·7 per cent. of the population, 20·9 per cent. having American-born and 42·8 per cent. foreign-born parents, while the foreign-born whites formed 34·4 per cent. of the population; persons of negro descent formed 1·8 per cent. and other coloured persons 0·1 per cent. Of the foreign-born inhabitants, 29·1 per cent. were born in Germany, 12·6 per cent. in Ireland, 10·2 per cent. in Poland, 9·0 per cent. in Austria-Hungary (mainly Bohemians), 8·3 per cent. in Sweden, 7·1 per cent. in Great Britain and 5·9 per cent. in Canada.

Since 1900, however, the Slavonic and South-Eastern European immigration has increased so largely that these figures are probably of little value as an indication of the present composition of the population of Chicago. An estimate made by the Chicago Association of Commerce of the approximate number of inhabitants of Chicago who in their everyday conversation use the languages of Southern and Eastern Europe includes 125,000 Polish, 90,000 Bohemian, 50,000 Yiddish, 25,000 Italian, 10,000 Croatian and Servian, 10,000 Slovakian, 10,000 Lithuanian, 7,000 Russian, 5,000 Hungarian, 4,000 Greek, 2,000 Roumanian and 2,000 Slovenian.

The cosmopolitan character of the city is further emphasised by the fact that newspapers are regularly printed in ten different languages, and Church services conducted in twenty.

The city covers an area of 191 square miles, large portions of the outlying districts consisting of open prairie land. The city is laid out on a regular rectangular plan, but a number of avenues radiate from the centre near the Lake front. Some of the streets which run in a straight line from the extreme northern boundary to that in the south are over 20 miles long. The city has a frontage to Lake Michigan 25½ miles in length. The nucleus from which the city has grown is the district near the mouth of the Chicago River, the small natural harbour of which determined the early pioneers and traders of this part of the country in their choice of the site of Chicago. This river, with its northern and southern branches, divides the city into three parts

known as the North, West and South Sides respectively. The commercial and business activities of the city are concentrated in the oldest part of the South Side, now known as the Loop District, since it is encircled by the Loop Line of the Elevated Electric Railway, from which branch lines run to various outlying parts of the city. Nearly all the streets in this area are lined with buildings of brick or stone varying from ten to twenty and even more stories in height, and though with few exceptions the style of architecture is plain, even to monotony, the effect produced by these long lines of lofty, massive structures is very imposing, particularly in the case of those buildings which front the Lake, some of which are more handsome in appearance. In this district are located all the leading banks and hotels, the offices of the great commercial and industrial companies, and also the official buildings, including the county and municipal offices and the Federal Government building, in which is the central post office. The "Chicago system" of steel frame building is practically universal in the commercial quarter, and as the ground is swampy the structures rest on piles which have been sunk to an average depth of 90 feet. The method of pile construction adopted for modern buildings is to line the shaft with caissons, fix steel rods vertically and fill up the shaft with cement. As these piles are only a few feet apart they form a foundation strong enough to support the most massive superstructures.

The Federal Building is an imposing structure of Roman Corinthian design built of grey granite, cruciform in shape, and surmounted by a huge central dome. The main building is eight stories high, while the dome contains eight stories more, giving a total of 16 stories and a height of 297 feet. The interior corridors and rotunda are cased with marble, and the building contains more than 500 rooms, while its area at the base is 150,000 square feet. The County Building, to which is being added a new City Hall constructed of grey granite, will when complete form a fine and massive structure of modern classic style of the Corinthian order. The County Building alone rests on 130 caissons of concrete extending to bed rock 115 feet below the street level.

The more modern of the office buildings, though plain in exterior, are remarkable for the degree of elegance and convenience offered internally. Many of them have a spacious hall lined with marble on the ground floor and a number of lifts, the movements of which are controlled by a person whose duty it is to see that no time is wasted. The express lifts in particular, which do not stop between the ground and some specified upper floor, are typical of the facilities for the rapid transaction of business which are so characteristic of Chicago. The extensive use of time-saving methods and appliances is also strikingly illustrated by the manual signs by which large transactions are conducted amid the deafening clamour of the Grain Pit, the automatic telephone system largely in use in offices, which enables one subscriber to reach another directly by means of a simple mechanism at the side of his instrument with which the necessary connexion at the central exchange is made automatically, and the underground freight system which follows the lines of the principal streets in the Loop District, connecting all the railway freight and passenger termini, the docks, warehouses, the central post office and the principal "department stores." Between the underground stations miniature goods trains drawn by electric engines carry all kinds of freight, from mail bags to furnace cinders and excavated earth, these cinders and earth being conveyed to the Lake front for the purpose of filling up a portion of the harbour to form a new park. Huge "department stores" are a marked feature of this "down-town" district, and one of them, said to be the largest in the world, employs from 7,000 to 10,000 persons according to the season.

Round the Loop railway there is a very frequent service of trains; twenty different train lines enter it from all parts of the city and the principal railway termini are in close proximity. The vast concourse of people which gathers daily within this restricted area and the large amount of surface traffic have created a serious problem to which the authorities have long had to devote earnest thought. Efforts have been made more or less successfully to cause as much carrying as possible, particularly the delivery of coal, to be done during the night. In spite of these efforts and the increasing use of the underground tunnel, however, much remains to be done before the congestion of passenger and goods traffic will be satisfactorily relieved.

Outside the "down-town" district the city is very mixed in character. Of the three principal divisions the Western and Southern are largely industrial, while the Northern is to a great extent occupied by well-to-do citizens, and includes the Lake Shore Drive, where the finest residences are situated. In various parts of the Western and Southern divisions, however, are broad streets and avenues of handsome appearance, lined with trees, open lawns and blocks of modern and expensive flats built of brick or stone. Elsewhere the aspect of these districts is cheerless, shops and dwellings of frame construction preponderating, and few of them showing signs of recent painting, while

the smoke of factories, the dust given off by unmade streets and the general untidy appearance of both streets and buildings give a repulsive appearance to entire localities. Only a small percentage of the streets are macadamised, and a very large number, called "dirt" streets, have not been made at all, with the result that they are quagmires in wet weather and are filled with clouds of dust in dry and windy weather.

In the district south of the river are situated the largest industrial establishments, the stock yards and meat packing establishments, the steel works and the principal engineering works. The stock yards form the largest live-stock market in the world and cover an area of 500 acres divided into 13,000 pens, giving accommodation for about 75,000 cattle, 300,000 hogs, 125,000 sheep and 6,000 horses. Within this area are 300 miles of railway track, a large Exchange and hotel, while banking and other facilities are also provided. Since 1900 a yearly average of more than 16,000,000 animals have been marketed and sold, the total value exceeding £60,000,000, or more than £200,000 for each business day. Adjoining the stock yards is Packing Town, where slaughtering and packing, together with allied industries, are conducted in colossal establishments.

Further south, at a distance of twelve miles from the centre of the city, is an industrial district known as South Chicago, which in recent years has been added to the city and now contains about 100,000 inhabitants. In this district is Pullman Town, formerly an independent township, where the famous Pullman cars are made. Pullman Town still retains a distinct individuality, having been built and till recently owned by the original head of the firm to accommodate his workpeople. The town is laid out in broad streets and the houses are all built of brick, those occupied by the skilled workmen resembling the houses of the same class of workers in English towns, whilst the unskilled labourers reside in blocks of flats. Several large buildings erected for public and philanthropic purposes give the town the appearance of a self-contained community.

In the same district, on the Calumet River, are situated the two extensive steel works of Chicago, whilst in the neighbourhood is one of the large works where agricultural machines are made. The vicinity of the steel works is one of the most dreary and unsightly parts of Chicago, being inhabited almost exclusively by the latest class of immigrants—Servians, Croatians and other Austrian Slavs, &c. In this neighbourhood saloons, patronised by the various nationalities, may be seen in long rows side by side.

Within a radius of about 40 miles from Chicago are many suburbs inhabited by the commercial and professional classes of the city, the largest being Evanston, situated 12 miles to the north on the Lake shore, and connected with the heart of the city by two lines of railway.

As a city Chicago has always been distinguished for daring enterprise and for the opportunities which it has afforded for the rapid accumulation of wealth. The almost entire absorption of its leading citizens in commercial and industrial pursuits, however, led to laxity in municipal government and to neglect of humane ideals, with the result that the city gained an unenviable reputation for lawlessness and disregard of human life. The most desperate criminals in the country congregated there, and innumerable low-class saloons were known centres of vice and crime. Owing to the congested condition of street traffic and the lack of proper control accidents at the street railway crossings were notoriously frequent, and resulted in nearly one death per day on an average, whilst the accidents due to trams and other vehicles also reached an alarming total. Large areas in working-class districts were covered with jerry-built frame houses crowded together with a total disregard for hygienic considerations. The rapid growth of the city after the great fire of 1871 and the great tide of immigrants of so many nationalities, mostly of the unskilled labour class, and ignorant of city life and its requirements, would under any circumstances have taxed the energies and resources of municipal authorities to the utmost, but the difficulties were greatly increased by a system of local government which gave prominence to the "ward boss."

To-day there are signs on all hands that a better order of things is beginning to dawn for Chicago since civic problems have begun to engage the serious attention of thoughtful and enlightened citizens. Amongst improvements of recent date are the elevation of railway tracks, forced on the companies by the municipality in the interest of public safety; better discipline in the police force, leading to the readier suppression of crime; the establishment of juvenile courts and a system of probation which materially assists in preventing the growth of criminal propensities amongst children; the better regulation of street traffic; the substitution of concrete pavements for planked sidewalks in the poorer localities; the increasing stringency of sanitary regulations, accompanied by systematic efforts on the part of the health authorities to educate the public on these matters; the growth of well-equipped Social Settlements which not only serve as centres for much beneficent personal influence, but by means of investigation direct public and

official attention to various social evils ; and the activities of the Immigrant Protection League. A movement which seems destined to influence greatly the development of the city is that promoted by the Association of Commerce with the avowed aim of a "Better as well as a bigger Chicago." The main features of "the New Plan for Chicago" projected by the Association includes the provision of a Civic Centre, consisting of municipal and Government offices grouped round a spacious square, from which main avenues are to radiate in various directions, the improvement of the Lake front, the development of a complete system of traction for freight and passenger traffic and a system of outer parks and boulevards. Being the joint work of business men whose financial interests are identified with the welfare of the city, and of experts, the Chicago Plan has aroused the interest of a large section of the community, and a Commission has been appointed by the City Council to study the problems involved.

The death-rate per 1,000 of population, as published by the Chicago Department of Health, in each of the years 1904-8, was as follows :—1904, 13·6 ; 1905, 13·7 ; 1906, 14·2 ; 1907, 15·3 ; 1908, 14·1. From the results of the Census enumeration of 1910 it would appear, however, that the population estimates utilised in the calculation of these mortality rates are slightly in excess of the actual figures, and accordingly the death-rates are under-stated, but not appreciably so. The death-rates must therefore be considered low, and among the factors contributing to this condition are, as mentioned in a recent report of the Health Department, the invigorating breezes from Lake Michigan and the large proportion of young and sturdy immigrants in the population, while another cause is suggested by the following passage in a recent report of the Chicago Tuberculosis Institute :—"Most Chicago people still regard some other place as home, and when they feel they have not long to live they go to the old home, whether it is a village in Italy or a farm in Iowa, to die. This is truer of Chicago than of any other city."

The registration of births, especially among the immigrants, is incomplete. The infant mortality is therefore stated per 1,000 deaths, and during the years 1904-8 this figure was as follows :—1904, 191 ; 1905, 214 ; 1906, 210 ; 1907, 209 ; 1908, 226.

That the infantile mortality is regarded as a serious problem is shown by the attention given to the subject by the Health Department, which is endeavouring to reduce the prevailing high rate by the more vigilant supervision of the milk supply, and in other ways, while the Milk Commission of Chicago, a philanthropic institution, has co-operated by establishing milk stations where pure milk is sold in bottles below cost price. The mortality amongst infants is largely due to diarrhoeal diseases, but diphtheria has also been so frequent that the Health Department now supplies anti-toxin free to medical men, who are required to report on the cases for which it is used.

The rate of mortality from tuberculosis of all kinds during the five years 1904-8 ranged from 1·82 to 1·91 per 1,000 of population. The report for 1908 of the Tuberculosis Institute, a philanthropic organisation, points out that the official figures given above do not represent the true state of affairs, owing to the tendency mentioned above of sick people to return to their homes in the country or to Europe, and of a large proportion of consumptives in particular to migrate in search of health. An investigation made recently by this Institute led to the conclusion that "some localities have as great a frequency of the disease as can be found in the slums of any city in the world. From the well-known lodging district of the 1st Ward cases have been reported at the rate of 6·1 per 1,000 living in one year. This is a district containing a large floating population. In the 22nd Ward 3·7 cases per 1,000 inhabitants have been found and in the 2nd Ward 4·0 cases per 1,000 inhabitants. These are resident districts. As the sources of these reports were meagre it is probable that not more than one-fourth of the existing cases have been reported."

In 1908 the Institute maintained seven free dispensaries, a staff of trained visiting nurses and one sanatorium. The number of applicants at the dispensaries during that year was 2,311, of whom 1,080 were Americans. The experiment has since been made of treating children suffering from consumption in an open-air school, and satisfactory results are reported.

The influx of large bodies of foreign immigrants unaccustomed to the sanitary regulations of cities has created a grave difficulty for the Health Department. For the purpose of educating public opinion the Department systematically exhibits in workshops and stores placards printed in various languages relating to contagious diseases and sanitation, and the daily Press and other publications are utilised for the same purpose. Weekly bulletins presenting in popular form the city's health statistics, together with information on subjects relating to public health, are sent to doctors, ministers, school teachers and social settlements, and officers of the Department frequently give public lectures on the same subjects.

Municipal enterprise in Chicago is confined to street cleaning and repairing (the work of construction and paving being done by contract) and to the supply of water; the gas, electric power and lighting and tramway services are in the hands of private companies. The supply of water is obtained from Lake Michigan. Owing to the fear lest the source of the water supply should be contaminated by the flow of drainage into the lake, a drainage canal was constructed connecting the Chicago River with the Illinois River and the Mississippi water system. This canal has caused the current of the Chicago River to flow away from the lake instead of into it as was formerly the case. The tramway company pays to the city 55 per cent. of its net annual profits in return for permission to use the streets. The fare for any distance within the city limits is $2\frac{1}{2}d$. Workmen's tickets are not issued.

Chicago possesses a fine system of parks, with connecting boulevards which encircle a large portion of the city. The formation of an "Outer Belt" system of parks, to include some fine features of natural beauty in the surrounding country, is also under consideration. In addition to the larger parks more than 60 small parks, squares and playgrounds have been opened in various working-class districts. Many of these are furnished with gymnastic apparatus, swimming pools, shower baths, club and reading rooms, public halls for entertainments and other rooms that can be reserved for private celebrations of various kinds. No charge is made for the use of any of these advantages.

Education is compulsory between the ages of 7 and 16 years, except in the case of children over 14 years of age whose employment is necessary for the support of the family, and for these special permits must be obtained. The public school system comprises secondary as well as elementary schools, and all are free. Manual training forms part of the instruction in the elementary schools, while some of the secondary schools are devoted to technical education. The training of teachers is conducted in a normal college affiliated to the University of Chicago. This university, which has been richly endowed, comprises 31 buildings standing on 95 acres of ground. Many of the buildings are handsome structures in the English Gothic style of architecture. On the same grounds and affiliated to the University is a group of schools in which a continuous course of instruction is given from the kindergarten stage up to matriculation at the University. Fees are charged for pupils attending these schools.

OCCUPATIONS, WAGES AND HOURS OF LABOUR.

The following Table shows the distribution of the occupied population of Chicago according to the Federal Census of 1900:—

Number of Persons of 10 years of age and over engaged in Occupations in Chicago in 1900.

| Occupations. | Males. | Females. | Total. |
|---|---------|----------|---------|
| Building | 46,970 | 127 | 47,097 |
| Metalworking and Engineering... .. | 47,884 | 767 | 48,651 |
| Textile | 1,033 | 1,233 | 2,266 |
| Leather | 3,609 | 128 | 3,737 |
| Boot and Shoe Making | 4,212 | 536 | 4,748 |
| Clothing | 15,542 | 33,159 | 48,701 |
| Woodworking and Furnishing | 17,337 | 373 | 17,710 |
| Paper and Printing | 12,886 | 3,459 | 16,345 |
| Food, Drink and Tobacco | 18,741 | 2,846 | 21,587 |
| Other Manufacturing and Mechanical Pursuits | 36,653 | 4,091 | 40,744 |
| Trade and Transportation | 195,163 | 36,371 | 231,534 |
| Labourers (not otherwise specified) | 73,597 | 1,446 | 75,043 |
| Professional, Domestic and Personal Service and } Agricultural Pursuits } | 81,888 | 65,331 | 147,219 |
| All Occupations | 555,515 | 149,867 | 705,382 |

As might be expected in a city which is growing with such rapidity as Chicago, the building trades employ a very large group of workpeople. Moreover, the reputation which local firms of contractors enjoy in connexion with the "Chicago system" of building results in their enterprise covering a very wide area of the Middle West, and in the constant transference of their workmen temporarily to outside places. The great demand for skilled workmen has given the men engaged in the building trades a somewhat privileged position, enabling them to maintain strong unions and to secure high

rates of wages together with other favourable conditions. Even the strong tide of immigration to Chicago is not prejudicial to their interests, as few of the immigrants are skilled men. The preference of American boys for commercial and professional pursuits rather than manual labour is another factor which tends to prevent the building trades from becoming overcrowded. On the other hand work is executed with great rapidity and a high standard of output is demanded in compensation for high wages and short hours. June and July are usually slack months in these trades.

Working agreements are in operation for all of the building trades. As all the leading contractors of Chicago belong to the associations of their trades, the wages and hours agreed upon are observed throughout the city and these are quoted in the Table. Union officials regularly visit buildings and shops where work is in progress for the purpose of seeing that the provisions of the agreements are complied with. None but union members may be employed unless these cannot be obtained, and fines are imposed upon employers or workpeople for violations of agreements. A Board of Arbitration is formed for each trade for the settlement of all disputes. The agreements state that there shall be no limitation of the amount of work which shall be performed by a man during the working day, which is explained to mean that each shall do a fair and honest day's work. On the other hand the carpenters' working rules contain a stringent provision to the effect that "any member guilty of excessive rushing on work shall be reported, tried, and fined "not less than 41s. 8d., ruled off the job for one year, or both." Another rule provides "that any member guilty of repairing, fitting, or grinding his tools in his own time while "employed by a contractor or builder shall be ruled off said job for one year and fined "not less than 41s. 8d."

Whilst minimum rates of wages are fixed by the agreements, employers are not debarred from paying higher rates to superior men. All wages are payable weekly, either in cash or by cheque as determined by the agreement. When the pay office is situated at a distance from the place where work is being executed an extra charge is made of half an hour's time for each mile and unnecessary waiting time at the pay office is also charged for at the regular rates.

Time rates of wages are almost universal in the building trades. The eight-hour day is the rule for journeymen except that only half a day is worked on Saturday, but labourers are required to commence work ten minutes before the bricklayers both morning and afternoon, while bricklayers have to be on the scaffold and ready to begin work at the starting time. Overtime is paid for at the rate of time-and-a-half in the case of bricklayers, stonemasons, structural iron workers, painters, hod carriers and labourers, while carpenters, plasterers and plumbers are paid at the rate of double time; but all work done on Sundays and holidays in any of the foregoing trades is paid for at the rate of double time. The holidays are New Year's Day, Decoration Day, July 4th, Thanksgiving Day and Christmas Day, but plasterers and plumbers are in addition entitled to Labour Day. The agreements also regulate the employment and the number of apprentices.*

The most distinctive industry of Chicago is meat packing, an industry mainly concentrated in a few establishments at Packing Town, and conducted along with many allied industries of minor importance. The slaughtering and packing in Chicago of millions of animals yearly have led inevitably to great sub-division of labour, the skill of each worker being utilised solely for the one operation which he can perform best and being highly developed by constant practice. The cattle are driven up an inclined way to the top story of the packing factory (which is four or five stories high), where the killing always takes place, and within the half-hour or so which elapses from the time each animal enters the "knocking pen" to the arrival of the dressed carcase in the cooler nearly 50 different operations are performed by as many men. Economy of money as well as of time is secured by this system, since the rates of wages correspond to the degree of skill required for each operation, and by means of this economy, together with the introduction of mechanical appliances to facilitate the rapid handling of the carcasses and the large local supplies, Chicago packers are enabled to compete successfully in the markets of New York and London. Cattle are first driven into a row of pens, each holding two animals, above which walks a man who fells each in turn with a swinging blow of his hammer. The front and floor of each pen are raised mechanically, and the animals roll out upon the killing floor, where the hind legs of each are fastened by a chain and the body hoisted and suspended from a rail, along which it travels slowly by gravity until it arrives at the ground floor in the form of dressed sides, all the various operations being performed on the journey. Of all the many operations those which demand most skill are the cutting of the hide and the splitting of the backbone, the former work being sub-divided into nine different sections with eight different rates of pay.

* For text of specimen agreements and working rules see Appendix, pp. 425-430 and 445-6.

Cows of an inferior grade are reserved for canning and are called "canners." The dressed sides pass into the cutting rooms, where by means of band saws and knives used by expert cutters the sides are cut into sections and rapidly stripped of all meat. Labour in these rooms is highly sub-divided, each cutter being restricted to one particular section of the body—one man divides the hind from the fore quarter, another severs the hind leg, which is stripped by a third, and so on. As in the killing and dressing department so also in the cutting room—not a moment is wasted, work being carried on at such high pressure that none but the strong and dexterous can maintain the pace.

The dressing of sheep resembles that of cattle. In the hog killing and dressing department, however, a larger number of mechanical contrivances are in use. The hogs are driven to the top floor of a four or five story building, where each in turn is shackled by the hind leg to a large revolving wheel with chains hanging at intervals along the rim, and on arriving at the top the chain is transferred automatically to a sloping rail and the suspended hog travels to the butcher, whose sole work is to stick each animal in the throat as it reaches him, an operation he performs at the rate of 700 to 800 animals an hour, this man being one of the "pace setters" of the department. The hog then travels on to a group of other carcasses, and when the blood has drained out it passes through a bath of scalding water and is drawn by an endless chain through a machine which scrapes off the bristles, washes it, and delivers it on to a table. Here a workman almost severs the head, which is forthwith examined by a Federal Meat Inspector. Continuous practice enables this inspector in a moment to find and make the requisite incisions in the two principal glands of the head, discoloration and granular appearance of which reveal the presence of tuberculosis. One ear of each tuberculous hog is either cut off or marked, and as the suspended carcass travels once more along the sloping rail it is arrested at a point where it is switched on to another rail, so being diverted into a retaining room, where a staff of Government inspectors examine each vital organ with a view to deciding whether or not the whole animal shall be condemned and sent to the fertiliser factory. Hogs which pass the medical examination proceed by gravity, still suspended from the overhead rail, from one floor to another, where the various operations of splitting, dressing and cutting are performed as in the case of the cattle department.

In the sausage and canning departments the work is done largely by machinery, and men have been displaced to a great extent by women and girls, a large proportion of whom are Slavs. The manufacture of cans is an allied industry which likewise finds employment for but few men, as the cans are made entirely by automatic machinery, while the work of painting and labelling them is done by females, who are paid piece rates, their earnings ranging from 33s. 4d. to 58s. 4d. for a full week of 60 hours in the busy season. In the canning department the meat on coming from the cooking room is handled by trimmers, who cut off superfluous gristle, fat, skin and connective tissue, and place the meat thus trimmed in chutes, which convey it to the stuffing floor. These trimmers and all other girls who handle the food in any way are attended to daily by a manicurist whose special business it is to keep their hands in order. Machinery is employed for filling the cans, which are then placed in a vacuum machine to be sealed, after which they are sterilised in a tank of oil at a temperature of 240 degrees Fahrenheit. This sterilising process enables the canned meat to be shipped to all parts of the globe and to be kept for an indefinite period. The earnings of female workers in the sausage and canning departments vary considerably, but the predominant weekly earnings are from 20s. 10d. to 25s.

The packing industry is of necessity seasonal, particularly in the killing and dressing departments. The largest supply of animals is obtained in the winter months and the smallest from February to July. Even during the busy season the supply during a typical week varies greatly from day to day. Slaughtering rarely commences before noon on Monday, whilst little is done on Friday and Saturday. The more highly skilled men are retained the year through, though they have much broken time; but the great majority of the men are unskilled workers, and only about 70 per cent. of the total number are employed in the slack season. During the busy season the working day in all departments, except that of killing, is one of 10 hours, or 60 hours for a full week. In the killing department itself, a full week is rarely worked. The introduction of methods of cold storage has steadied somewhat the work of the cutting and canning departments, but even in these there is considerable variation in employment in the course of the year.

At the present time the various trade unions of butchers and other skilled workers have little influence in this great industry. A series of conflicts between the unions and the packers culminated in the strike of 1904, which proved disastrous for the former. The union demand of a uniform hourly rate of 9¼d. for unskilled workers met with

determined resistance on the part of the packing firms, who pointed to the fact that from 3,000 to 5,000 of these labourers crowded round their offices every morning in search of work. By drafting in skilled men from their branch houses in other cities and negroes and Greeks for the unskilled occupations, the employers overcame the strike.

During the last 20 years successive nationalities have steadily displaced others in the meat packing industry. In 1886 the men were Americans, Irish and Germans. About that time the Bohemians began to enter the industry, displacing Irish and German labourers and in the course of time themselves advancing to the more skilled occupations. Following the Bohemians came the Poles, Slovaks and Lithuanians, who to-day form the bulk of the unskilled workers.

The largest of the establishments have introduced various sanitary improvements of late years under pressure of the authorities, but smoke, grime, dust and nauseating odours are still far too prevalent. The buildings themselves leave much to be desired, although the actual work of dressing is now conducted with a high degree of cleanliness. One of the largest firms carries on the work of canning in a new brick structure, the internal arrangements of which are quite up to date as regards lighting ventilation, heating and sanitary requirements. A comfortable and well-lighted restaurant in which meals are served at cost price is provided for the employees, whilst baths and conveniences of the most modern type have also been constructed. In the same building there is also a "rest room" for the use of the girls of the establishment when indisposed; the room is comfortably furnished and is superintended by a matron possessing practical knowledge of nursing and simple remedies.

The sub-division of labour in the packing houses is so great that it is impossible to make a satisfactory selection of any definite occupations as being typical of the industry, so far as wages are concerned, the number of occupations being great and the number of men at any given occupation comparatively few. The wages shown by the detailed returns obtained from representative packing firms have therefore been tabulated as a whole, and from this tabulation it appears that, of the several thousand workmen covered by the returns, about 85 per cent. were labourers, 11 per cent. time workers other than labourers, the great majority being semi-skilled, and 4 per cent. piece workers. The predominant weekly earnings for a week of 45 hours were from 28s. 2d. to 37s. 6d. for labourers and from 44s. 6d. to 56s. 3d. for semi-skilled time workers. For skilled time workers and for piece workers, who are comparatively few in number, it is not possible to state a predominant range of wages, though some indication of the level of wages of these men is afforded by the fact that such rates as 68s. 9d., 75s., 93s. 9d., and 109s. 5d. for a 45-hour week were frequently returned.

In the production of iron and steel Illinois takes a leading place amongst American States. This position is due to the abundant supply of coal in the State and to the proximity of the iron ore, much of which comes by water from the Lake Superior region. The two large companies at Chicago engaged in this industry use both the Bessemer and open-hearth processes in the production of steel, also up-to-date machinery for the rolling of rails, plates and bars. The total number of men employed by these two companies (the returns relating to October 1st, 1909, in the one case and to January 1st, 1910, in the other), exclusive of office staffs, was 9,979. Of this total between 25 and 30 per cent. were skilled workmen, principally American-born, the remainder being unskilled or semi-skilled men, the former predominating by more than two to one. The foreign-born workers number three-quarters of the whole and, though drawn from nearly every nationality of Europe, are mainly from Russian Poland and Austria-Hungary, these two sources contributing more than one-half of the total number of men employed at the works in question. The largest contingents from Austria-Hungary are the Croats, Austrian Poles, Slovaks and Magyars. More than three-quarters of these and the Russian Poles are employed in unskilled labour, as they come from agricultural districts. Concerted action on the part of these various nationalities is practically an impossibility, divided as they are by language and race prejudice; consequently the rates of wages paid and the general conditions of labour are determined by the play of competitive forces.

Of the numerous products of foundries and machine shops the most noteworthy are agricultural, printing, laundry and grain elevator machinery. The local shops of the railway companies are engaged in repair work. The International Harvester Company, which chiefly produces reaping, binding and mowing machines, has two large works in Chicago where over 3,000 men were employed in 1909. More harvesters, binders and mowers are manufactured in Chicago than in all the rest of the country combined. A large number of girls and women are also employed in these works in the making of twine for use on the binding machines. Intricate as some of this machinery is, the enormous production of standard patterns has led to a high degree of

specialisation in labour and to the extensive adoption of piece rates, particularly for moulders, assemblers—who put together the various sections of the machines—and “builders”—who do the final work of fitting, adjusting and testing the machines. In this establishment and in others where similar conditions obtain only a relatively small number of skilled workmen are employed, the great majority being semi-skilled and unskilled labourers. The moulders work mainly at bench and machine moulding. In the establishments turning out a higher grade of machinery, union rates and hours prevail for moulders and machinists, both being paid time rates. In railway shops time rates also prevail.

In the large establishments producing standard machines or parts, and employing a large proportion of semi-skilled and unskilled labour, the bulk of the workmen belong to the more recent of the immigrants, the majority being Poles from Russia, who are willing and hard workers, particularly when they are paid piece rates. Prominent among the other nationalities are Lithuanians, Bohemians and other Slavs.

The construction of cars, mainly for railways, gives employment to more than 16,000 men, about half of these being found in the works of the Pullman Company and the remainder in several railway works. The dining and sleeping cars of the Pullman Company, as well as many of the passenger cars made by the railway companies, necessitate the employment of a large number of skilled workmen, the majority of whom are cabinetmakers, passenger car carpenters, coach painters and wood machinists, whilst freight car carpenters and repairers may be regarded as semi-skilled workmen. Some of the newest cars are now being constructed with steel bodies, wood being employed only for the lining and general interior finish. Standard rates of wages do not obtain and workmen are paid according to individual skill, both piece and time rates being paid.

The manufacture of men's and women's ready-made clothing is an industry of great and growing importance in Chicago. Bespoke tailoring, though employing a considerable number of persons, is relatively unimportant. The busy season generally commences about the middle of January and continues for some ten weeks, being followed by a slack season until the beginning of August, when another busy season commences and lasts over four months. The largest factories, however, endeavour so to regulate the output as to provide steady employment through the slack seasons. Superior machinery and organisation, minute sub-division of labour and the vigilance of the factory inspectors are steadily forcing the ready-made trade out of the hands of contractors into the factories, many of which, situated in the west and north-west divisions of the city, are new and well-equipped buildings, admirably lighted, warmed and ventilated, and provided with the latest washing and cloakroom facilities, sanitary conveniences, &c. A considerable amount of work is still handed over to contractors, particularly in times of pressure, but it is generally maintained that the evils of sweating are less pronounced in Chicago than in New York, since a considerable proportion of the Russian Jews and Italians engaged in this trade have come from the latter city, where they have already gained more or less experience of American ways and speech, with the result that they are fairly able to hold their own against the contractors. The predominant nationalities engaged in the clothing trades are the Scandinavians, Germans, Bohemians, Poles and Russian Jews, and in a less degree the Southern Italians. The Scandinavians and Germans are principally skilled cutters, whilst the tailors, operators and finishers, male and female, are mainly drawn from the other nationalities. The strongest unions are those of the Scandinavians and Bohemians, but they have failed to secure generally their union rates and conditions, having been defeated in the lock-out of 1904-5 on the “closed shop” issue. The ready-made garments are made in many sizes; thus for “normal” men ten sizes are made, for “slims” ten sizes, for “stouts” ten sizes and for men of extra size eight sizes. Sub-division of labour has largely affected the tailors in all branches of the clothing trade, a much greater proportion of the work being now done by female machinists and finishers. Cutters are paid by time, while the remainder of the occupations are paid by the piece. Wages and earnings vary very considerably according to individual skill, but those quoted in the Table are for the great majority of workers of average capacity. The earnings of machinists, who are mainly Russian Jews, show a wide range due to the sub-division of labour. The report of an investigation made by the City Health Department in 1906 into the clothing factories and workshops states that in these reasonably clean conditions prevail, while in many the conditions are perfect. Few of the 1,276 places visited were found to be overcrowded, but it was necessary to issue 761 notices to make improvements of various kinds, and to take out summonses in 100 cases. The investigation disclosed the fact that a considerable amount of work is let out by contractors to home

workers, and in many such homes visited all the worst evils of the sweating system were found to exist, even where the finishing of the highest-priced clothing was being done. The report states that much of this work was invariably done in rooms used for eating and sleeping and that garments lay about on the floors or on the beds, while the sanitary conditions generally were bad and at times members of the family were found to be suffering from diphtheria, scarlet fever, smallpox, measles and consumption. The report further adds that the weekly earnings of a family making up sweated garments, excluding the earnings of the husband or father, were rarely found to exceed 8s. 4d.

The annual report of the Health Department for the year 1908 states that during the year more than 6,600 workshops engaged in making wearing apparel were inspected, and of these about 3,600 were already licensed, and during 1908 about 3,300 further licences were issued. The report states that the problem of controlling the making of clothing in tenement houses is still unsolved, and that while it appears necessary to allow this work to some extent, in the interest of families which would otherwise find it difficult to make a living, the authorities recognise the need of measures of control and are investigating the action taken in other cities.

The woodworking industry of Chicago finds employment for a considerable body of men engaged mainly in the sawing of planks, and the manufacture by machinery of sashes, doors and the general interior woodwork required for buildings. Strong unions exist and the "closed shop" is the rule. The wages paid and the hours worked are regulated by an agreement. This agreement provides that nine hours shall constitute a day's work, there being an interval of one hour or less at noon. During the months of June, July and August, however, only five hours are to be worked on Saturdays. Overtime is to be paid for at the rate of time-and-a-half, except on Sundays, New Year's Day, Decoration Day, July 4th, Thanksgiving Day and Christmas Day, when the rate shall be that of double time. On Labour Day work is not allowed under any circumstances. Wages must be paid every two weeks in legal tender and not more than three days' pay may be held back. The proportion of apprentices that may be employed and their rates of wages are also determined by the agreement.

The printing and publishing industry is one of the most important in Chicago. Chicago newspapers circulate all over the States, while in the printing and publishing of books, maps, catalogues, &c., Chicago also serves a very wide area. School text books are printed and issued by one establishment which claims to be the largest job printing firm in the United States. Another large firm specialises in catalogues, the great demand for which is partly due to the enormous business done by the mail-order houses whose headquarters are in Chicago. One firm employing about 1,000 persons chiefly produces maps and railway and city guides.

Strong unions exist for all the different branches of the printing industry, but union rates and conditions are only generally operative in the newspaper establishments, the largest firms engaged in job printing refusing to recognise the unions.

The newspaper scale of the Typographical Union states that hourly rates, except for machine compositors, shall be not less than 2s. 3½d. for day work and not less than 2s. 6d. for night work; a day's work other than on linotype machines shall consist of not less than seven hours, making not less than 42 hours per week of six days, and all work performed after the expiration of eight hours, exclusive of not more than 30 minutes for lunch, shall be paid at the rate of time-and-a-half, except on Saturday, when overtime rates come into effect only after the expiration of ten hours. To enable morning newspapers to work their employees ten hours on Saturday, however, the hours of labour on the preceding days may be shortened to the extent of two hours in the aggregate; for men engaged on evening newspapers, however, eight hours constitute a day's work and 48 hours a full week, while the ten-hour provision does not apply in their case. The scale on linotype machines is fixed at 2s. 3½d. per hour for night work and 2s. 1d. for day work, with not less than six hours continuous employment per day. In order to be deemed a competent operator and to be entitled to these rates of pay a man must produce not less than 3,200 ems solid per hour for a week of six consecutive days of six hours each, but on attaining a product of 5,000 ems solid per hour for a like period, operators shall be paid for that period 2s. 6d. per hour on morning newspapers and 2s. 3½d. per hour on evening newspapers, whilst those who reach an average exceeding 5,000 ems an hour shall be paid 0.525d. for each additional 100 ems for day work and 0.55d. for night work. With regard to apprentices the agreement stipulates that there shall be one apprentice only for each ten journeymen or less, but no office shall have more than six apprentices at one time; all apprentices must be given an opportunity to work in every department of the composing room, and must be employed during the last two years of their apprenticeship on the case and at other intricate

work, except for the last three months of their apprenticeship, when they must be employed exclusively on linotype or typesetting devices in use in the office; and the term of apprenticeship is fixed at four years. For dealing with grievances a joint standing committee of the union and the employers' association is appointed.

A newspaper pressmen's agreement fixes the minimum wages for the four different classes into which the journeymen pressmen are divided, the weekly rates varying from 65s. 8d. for the fourth pressmen in their first year to 116s. 8d. for first pressmen in the case of night work and from 56s. 3d. to 100s. for the same classes in the case of day work. Night pressmen work seven nights aggregating 52 hours per week and day pressmen six days aggregating 48 hours per week. Overtime is paid for at the rate of time-and-a-half, except work on Saturday night in excess of ten hours or on Sundays and holidays after 7 a.m. when the rate is double time.

In the bakeries of Chicago union rates and hours, as fixed by agreement, prevail generally. The agreement prohibits the boarding and lodging of journeymen by employers and allows only one apprentice in each department. Overtime is paid at the rate of 2s. 1d. per hour and all work commenced before 6 a.m. or finished after 6 p.m. is to be considered as night work and paid at the rate of 4s. 2d. per week higher. No work may be done on the following holidays—July 4th, Labour Day, Thanksgiving Day, Christmas Day and New Year's Day. The night bakers are allowed to work during either the night preceding or the one following a holiday, but not on both nights, and not more than five days work may be done in any week in which one of the above holidays occurs.

The brewing of beer, principally lager, is carried on in ten large and many small breweries, estimated to employ together between 4,000 and 5,000 persons in 1909. Wages and the general conditions of labour are regulated throughout the industry by agreements between the Chicago Brewers' Exchange and the various trade unions. These agreements remain in operation until March 1st, 1911. The wages quoted in the Table are those fixed by the agreements, which prohibit the employment of any workers save those in possession of a union card of membership. For brewers, maltsters, bottlers and labourers the hours of labour are limited to eight per day or 48 per week, subject to the provision that bottlers and labourers may work ten hours a day from April to September. Overtime must be paid at the rate of time-and-a-half, like all work performed on holidays and Sundays, except in the case of maltsters, who are now allowed four days in each month in lieu of Sundays. The days to be regarded as holidays are January 1st, Decoration Day, May 1st, July 4th, Labour Day, Thanksgiving Day and Christmas Day; maltsters, however, only being allowed May 1st and Labour Day, and labourers January 1st, July 4th, Labour Day and Christmas Day. Only one brewer apprentice is allowed for each 20 journeymen or fraction of that number. The wages of an apprentice are not to be less than 41s. 8d. per week for the first six months, and not less than 50s. for the last eighteen months. All apprentices have to be instructed in all branches of their trade within two years. During the dull season employees are suspended in rotation for not longer than one week at a time, and no new man can be engaged whilst any of the regular employees are suspended. Free beer is given in such quantities and at such times as the employer or his brewmaster may decide. In case of any dispute between an employer and an employee the matter must be referred to a board of arbitration consisting of three representatives of each side and a seventh person, selected by these representatives jointly, who must be disinterested and unconnected with the trade. Pending such arbitration work must proceed under the agreement. A decision of the board of arbitration is final and binding on both parties.

The workers engaged in transport by road and rail form one of the most important trade groups at Chicago owing to the pre-eminence of the city as a railway centre. Freight trains from north, south, east and west pour into the various yards all day and night, and the work of sorting out the cars and making up fresh trains employs 4,000 to 5,000 switchmen or shunters, while a large body of men called freight handlers are engaged in passing freight through the clearing houses. The necessity for the rapid transference and handling of freight (trains coming into the yards at the rate of one in six minutes) demands strength and smartness on the part of the shunters and handlers. Sobriety is also of such importance that the use of intoxicating liquors or the visiting of gambling houses or saloons is considered a sufficient cause for dismissal, while the necessity of a thorough knowledge of English prevents immigrants from competing for this work. The result is that comparatively high wages are paid. Uniform rates and hours prevail for shunters, who receive 1s. 4d. per hour for day work and 1s. 5d. per hour for night work, the hours of labour, exclusive of mealtimes, being ten daily. Overtime is not paid for at a higher rate and work is usually done on

Sundays, application having to be made when a day's leave is required. Freight handlers receive from 50s. to 52s. 1d. for a week of 60 hours.

The teamsters of Chicago are a very numerous and highly organised class of workers. Unions exist for all classes of teamsters and they are affiliated to the International Brotherhood of Teamsters. The more important of these unions are those of the coal drivers, truck drivers (who deliver goods at the stores), lumber, packing-house, building material and brewery teamsters, furniture movers and express men. Wages and hours are fixed by agreements between the separate unions and the employers' associations, and these agreements also make provision for settling disputes by arbitration. The strength of the men's unions and the enforcement of minimum wages have resulted in the formation of strong associations of employers and the introduction of uniform cartage and delivery charges in place of the former competition. Prior to the signing of wages agreements the hours of teamsters were indefinite and frequently excessive. The overtime rates have forced owners to employ more stablemen and also to contrive so to arrange the work of teaming that the drivers shall be occupied during the whole of their working hours. The wages and hours quoted in the Table are those for ordinary teaming. Milk and bakery drivers receive in addition to a minimum wage a commission on sales, the rates for which are fixed by agreements. At the large packing-houses teamsters are paid hourly rates ranging from 10d. to 1s. 4d. per hour according to the number of horses driven, while the number of hours worked is indefinite.

Tramway motormen and conductors are paid 11½d. per hour for the first six months, 1s. 0½d. for the second six months and 1s. 1½d. afterwards. At the time of the enquiry more than four-fifths of the men were receiving 1s. 1½d. per hour, and this rate is therefore quoted in the Table. The hours on the platform vary from nine to eleven daily, and the average weekly working hours are 70. Uniforms are not provided. The trained men are mostly Irish, next to whom in number come men of German and Swedish nationalities.

The predominant weekly wages and hours of labour in certain principal trades and industries of Chicago are given in the following Table:—

Predominant Weekly Wages and Hours of Labour of Adult Males in the Principal Occupations in February, 1909.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|--|---------------------------|-------------------------------------|
| <i>Building Trades:—</i> | | |
| Bricklayers | 123s. 9d. | 44 |
| Stonemasons | 123s. 9d. | 44 |
| Carpenters | 110s. | 44 |
| Plasterers | 126s. 1d. | 44 |
| Plumbers | 126s. 1d. | 44 |
| Structural Iron Workers | 114s. 7d. | 44 |
| Painters | 100s. 10d. | 44 |
| Hod Carriers and Bricklayers' Labourers | 64s. 2d. | 45½ |
| <i>Rolling Mills* :—</i> | | |
| Heaters | 125s. to 133s. 9d. | 72 |
| Heaters' Helpers | 60s. ,, 65s. | 72 |
| Rollers | 133s. 9d. ,, 240s. 5d. | 72 |
| Shearmen | 58s. 9d. ,, 81s. 3d. | 72 |
| Labourers | 47s. 6d. ,, 55s. 5d. | 72 to 84 |
| <i>Foundries and Machine Shops:—</i> | | |
| Moulders (Floor) | 81s. 3d. | 54 |
| Bench and Machine Moulders | 56s. 3d. to 67s. 6d. | 54 to 58½ |
| Machinists | 81s. 3d. | 54 |
| Assemblers and Semi-skilled Machinists | 59s. 9d. to 75s. | 58½ |
| Blacksmiths | 81s. 3d. ,, 101s. 3d. | 54 |
| Blacksmiths—Semi-skilled | 58s. 9d. ,, 78s. 9d. | 54 to 58½ |
| Patternmakers | 101s. 3d. | 54 |
| Patternmakers—Semi-skilled | 77s. 5d. to 95s. 8d. | 54 to 58½ |
| Labourers | 38s. 9d. ,, 52s. 1d. | 54 ,, 58½ |
| <i>Railway Car Construction and Repair:—</i> | | |
| Cabinetmakers, Wood Machinists, Passenger | 67s. 6d. to 81s. | 53½ to 60 |
| Car Carpenters | 67s. 6d. ,, 87s. 9d. | 53½ ,, 60 |
| Semi-skilled Cabinetmakers, Wood Machin- | 55s. ,, 65s. 3d. | 53½ ,, 60 |
| ists and Carpenters | 58s. 6d. ,, 67s. 6d. | 53½ ,, 60 |

* The hours of labour stated for men employed at rolling mills are inclusive of intervals.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|--|---------------------------|-------------------------------------|
| <i>Railway Car Construction and Repair—cont.</i> | | |
| Passenger Car Painters { Time | 60s. to 81s. | 53½ to 60 |
| { Piece | 81s. „ 90s. | 53½ „ 60 |
| Passenger Car Repairers—Time | 60s. „ 62s. 6d. | 53½ „ 60 |
| Freight Car Repairers { Time | 46s. 8d. „ 50s. | 53½ „ 60 |
| { Piece | 54s. 2d. „ 62s. 6d. | 53½ „ 60 |
| Labourers | 37s. 6d. „ 41s. 8d. | 53½ „ 60 |
| <i>Clothing Trades :—</i> | | |
| Cutters | 75s. to 83s. 4d. | 48 |
| Tailors | 66s. 8d. | 48 to 54 |
| Basters | 58s. 4d. | 48 „ 54 |
| Operators | 62s. 6d. to 66s. 8d. | 48 „ 54 |
| Pressers | 58s. 4d. „ 66s. 8d. | 48 „ 54 |
| <i>Boot and Shoe Manufacture :—</i> | | |
| Cutters | 83s. 4d. | 55 |
| Lasters | 62s. 6d. to 79s. 2d. | 55 |
| Goodyear Operators and Inseamers | 104s. 2d. „ 125s. | 55 |
| Edge Trimmers | 79s. 2d. „ 104s. 2d. | 55 |
| Edge Setters | 79s. 2d. „ 83s. 4d. | 55 |
| Finishers | 50s. „ 62s. 6d. | 55 |
| <i>Woodworking Trades :—</i> | | |
| Rip Sawyers, Cross-cut, Butt-off Sawyers | 56s. 3d. to 59s. | 54 |
| Joiners and Cabinetmakers | 78s. 9d. „ 83s. 3d. | 54 |
| Labourers | 43s. 9d. | 54 |
| <i>Printing and Bookbinding :—</i> | | |
| Newspaper— | | |
| Hand Compositors. { Day work | 104s. 2d. to 112s. 6d. | 42 to 48 |
| { Night work | 112s. 6d. „ 125s. | 42 „ 48 |
| Machine Compositors { Day work | 116s. 8d. „ 122s. 6d. | 39 „ 42 |
| { Night work | 116s. 8d. „ 145s. 10d. | 39 „ 42 |
| Book and Job— | | |
| Hand Compositors | 87s. 6d. | 48 „ 54 |
| Pressmen—Cylinder Presses | 93s. 9d. to 99s. | 48 „ 50 |
| Bookbinders | 75s. „ 87s. 6d. | 50 „ 54 |
| <i>Meat Packing :—</i> | | |
| Skilled Men, <i>see text.</i> | | |
| Semi-skilled Men | 44s. 6d. to 56s. 3d. | 45 |
| Labourers | 28s. 2d. „ 37s. 6d. | 45 |
| <i>Bakeries :—</i> | | |
| Oven Hands { Day work | 70s. 10d. | 54 |
| { Night work | 75s. | 54 |
| Second Hands { Day work | 62s. 6d. | 54 |
| { Night work | 66s. 8d. | 54 |
| Third Hands { Day work | 54s. 2d. | 54 |
| { Night work | 58s. 4d. | 54 |
| <i>Breweries :—</i> | | |
| Brewers, Maltsters, Wash-house and Cellar Men | 77s. 1d. | 48 |
| Bottlers | 50s. | 48 |
| Labourers | 54s. 2d. | 48 |
| Keg and Bottle-beer Drivers | 76s. 11d. and commission. | variable |
| <i>Transport Trades :—</i> | | |
| General Drivers, Teamsters— | | |
| One horse | 50s. to 52s. 1d. | 66 |
| Two horses | 60s. 5d. „ 62s. 6d. | 66 |
| Railway Freight Yards— | | |
| Switchmen, Shunters { Day work | 93s. 4d. | 70 |
| { Night work | 99s. 2d. | 70 |
| Freight Handlers | 50s. to 52s. 1d. | 60 |
| <i>Public Services :—</i> | | |
| Street Maintenance and Cleaning (Municipal)— | | |
| Road Menders | 50s. | 48 |
| Scavengers | 50s. | 48 |
| Road Sweepers | 50s. | 48 |
| Water Works (Municipal)— | | |
| Labourers | 62s. 6d. | 48 |

| | Predominant Weekly Wages | Predominant Weekly Hours of Labour. |
|---|--------------------------|-------------------------------------|
| <i>Public Services—cont.</i> | | |
| Gas Works (Company)— | | |
| Gas Makers | 75s. 8d. to 81s. 3d. | 78 |
| Gas Stokers | 62s. 6d. „ 68s. 9d. | 78 |
| Labourers | 50s. | 59 |
| Electric Light and Power Works (Company)— | | |
| Switchboard Men { 1st Class | 80s. 6d. | 56 |
| { 2nd „ | 70s. 2d. | 56 |
| { 3rd „ | 63s. 1d. | 56 |
| Wiremen { 1st Class | 89s. 1d. | 45 |
| { 2nd „ | 70s. 4d. | 45 |
| { 3rd „ | 52s. 6d. | 45 |
| Overhead Linemen { 1st Class | 76s. | 48 |
| { 2nd „ | 68s. | 48 |
| Labourers | 50s. to 50s. 8d. | 54 to 60 |
| Electric Tramways (Company)— | | |
| Motormen and Conductors | 78s. 9d. | 70 |

Taking wages at New York as the base, = 100, in each case, the wages index numbers for Chicago are—building trades, skilled men 110, hod carriers and bricklayers' labourers 93; foundries and machine shops, skilled men 100, unskilled labourers 108; printing, hand compositors (job work) 100.

Few of the firms in Chicago undertake "welfare work" of any kind. The International Harvester Company, however, has in operation a comprehensive scheme which includes profit-sharing, sickness and accident insurance and old age pensions (*see* Appendix, pp. 447-453). The plan of profit-sharing falls into two sections, the first consisting of a percentage of the year's profits, which is distributed amongst those men who have shown marked ability during the year in contributing towards increased output or decreased cost of production; the second consisting of the sale of the Company's stock to its employees on the instalment plan. No employee is allowed to purchase stock amounting to more than his yearly earnings; nor can he pay a sum exceeding 25 per cent. of his annual earnings in any one year. In July, 1909, 12,500 seven per cent. preference shares and 15,000 ordinary shares were offered to the employees at a price below the current market value. In addition to the regular dividends a bonus is given of 16s. 8d. and 12s. 6d. per preference share and ordinary share respectively. This bonus is given annually for five years after the purchase of the stock, but men who leave the Company's service during that period cannot continue to receive the bonus, which is placed to a fund and distributed at the end of five years amongst the stock-holding employees. In 1909 over 4,300 employees of the Company were shareholders. The Company's benefit plan is under the control of the employees, but the Company contributes over £10,000 annually, provided the average membership equals 75 per cent. of the employees, which is now the case. Sick benefit amounts to half the average weekly earnings calculated on the basis of the previous 60 days worked, and in the case of women the benefit for disability due to pregnancy is limited to three months. Accident benefit also amounts to half the average earnings similarly calculated and continues for not more than 52 weeks. Should the accident result in the loss of a hand or foot the amount of compensation equals one year's average earnings, while the loss of one eye entitles a member to one-half that amount. The loss of a hand and a foot, or both hands or both feet, or of both eyes entitles the victim to two years' average wages. Compensation for death resulting from sickness equals the amount of one year's wages, but if death is due to accident the amount of two years' wages is paid. Pensions are paid by this Company to all male employees who have reached the age of sixty-five years, and who have remained twenty or more years in its service. Retirement of workpeople is compulsory at the age of seventy. Females are eligible when they have reached the age of fifty and have remained twenty or more years in the Company's service; retirement is compulsory for them at the age of sixty. The amount of the pension is one per cent. of the average annual earnings for each year of active service, this average being computed for the ten years preceding retirement, but no pension may exceed £20 16s. 8d. per month, or be less than £3 15s. per month. The same firm shows great interest in the comfort and general well-being of its employees in other ways, as by the provision of wash rooms, clothes lockers, cheap meals and a comfortable "rest room" with a nurse in attendance. Cases of accident are treated promptly in the factory hospital. A handsome club house has been erected close to one of the firm's two works

and another is being built for the second. This club house provides facilities for social intercourse, educational work and athletic games; a billiard room and baths are also attached. Technical instruction is also given to those youths who aspire to higher positions under the firm. The whole of the "welfare work" is under the direction of a superintendent, whose time is entirely devoted to it, while a lady secretary is entrusted with the supervision of all the institutions provided for the women and girls employed in the factories.

Another large firm also distributes a portion of its profits amongst its workpeople, but the percentage is not fixed, and the firm does not bind itself to continue the system.

One of the railway companies has had in operation for twenty years a benefit scheme providing compensation in case of disability or death resulting from sickness or accident. All expenses of administration are borne by the company and contributions and benefits are graduated according to the scales of wages. The monthly rates of contributions for the five classes into which the employees are divided are:—

| Limits of Weekly Pay. | | | Monthly Contribution. | | |
|-----------------------------------|-----|----------|-----------------------|-----|-----------|
| Less than 33s. 8d. | ... | ... | ... | ... | 3s. 1½d. |
| 33s. 8d., but less than 52s. 11d. | ... | ... | ... | ... | 6s. 3d. |
| 52s. 11d. | „ | 72s. 1d. | ... | ... | 9s. 4½d. |
| 72s. 1d. | „ | 91s. 4d. | ... | ... | 12s. 6d. |
| 91s. 4d. and over | ... | ... | ... | ... | 15s. 7½d. |

The benefits for disability due to accident for the same classes are respectively 2s. 1d., 4s. 2d., 6s. 3d., 8s. 4d. and 10s. 5d. per day, and are payable for a period not longer than 52 weeks, after which half-rates are paid as long as disability continues. Compensation for the loss of a hand or foot is paid in a lump sum, the amounts ranging from £167 to £667, according to the class to which the injured person belongs, and twice as much is paid for the loss of both hands, both feet, or one hand and one foot. Disability resulting from sickness is compensated at the same rates and for the same period as in the case of accident, except that half-rate payments may continue for an additional 52 weeks. Death benefits range from £62 10s. to £312 10s., according to the class to which the deceased belonged, but the amount may be materially augmented by the payment of additional contributions.

The labour laws of the State of Illinois contain many provisions for the health, safety and comfort of workpeople in "factories, mercantile establishments, mills and workshops." Compensation for injuries or death resulting from accident is not compulsory, however, and can only be secured by recourse to lawsuits, in which case negligence on the part of employers must be proved. The hours of labour of females engaged in any factory, mechanical establishment or laundry are limited to ten per day.

Children under 14 years of age are not permitted to be employed at any time, while those between the ages of 14 and 16 may only be employed eight hours per day, and between the hours of 7 a.m. and 7 p.m. Children between the ages of 7 and 16 years, with the exception of those between the ages of 14 and 16 years who are "necessarily and lawfully employed," are required to attend school during the whole time it is in session.

HOUSING AND RENTS.

The working-class population of Chicago is distributed mainly over the western and southern divisions of the city, the remainder being found in a district of the northern division which skirts the north branch of the Chicago River. The western division is pre-eminently the factory and workshop district, and also contains most of the breweries, in consequence of which its population is on the whole more homogeneous than is that of the southern division.

In this latter section of the city are two main industrial areas—the stock yard district in the northern part and a district situated at the south-eastern end where the steel works and the Pullman car works are situated. Both these districts are occupied almost entirely by working-class houses, but between them are large areas containing superior houses and flats of a modern type, these being found particularly in the vicinity of the parks and boulevards and also of the University.

The poorest and most overcrowded districts are in the central portion of the city and near the stock yards and the steel works. This central area is very extensive, and comprises portions of all three divisions of the city, as the northern and southern branches of the Chicago River, which form their boundaries, unite at a point only a short distance from the mouth of the main channel. At the heart of this district are the principal Italian colonies, near to which live the Poles and Jews, with the Bohemians at the southern end. Farther out to the west and north-west of this central district are the areas occupied by more or less skilled workers of mixed nationalities, though in certain localities particular nationalities predominate. Thus German mechanics occupy a considerable portion of the north division, Swedes and Germans divide between them the north-west portion, while Germans and Irish occupy fairly defined localities round Garfield Park in the middle-west. In the southern division the district round the stock yards is occupied by Irish, Poles, Lithuanians and other Slavs in fairly distinct localities, while adjoining the steel works are large colonies of Poles and other Slavs.

Visits to purely working-class districts in all parts of the city made in the course of the enquiry showed that the houses were generally constructed for the accommodation of more than one family, while the large majority contained from two to six flats. Although large blocks at present house a minority of the working-class population, they are fairly numerous in various parts of the city and are of growing importance where the increasing value of land and the demand for more modern conveniences, such as bathrooms, interior water-closets and good basements, necessitate this type of structure if the rents are to be within the means of even skilled working men. The frame dwelling constructed of wood predominates in the city generally, but a large proportion of the houses are built of brick, particularly in the north and central districts, though even in the latter the rear houses are universally of the frame variety, having been originally situated at the front of the building plot and afterwards removed to the rear to make room for new front houses. The building regulations now in force, however, prohibit the erection of new frame buildings, or the extension of existing ones, within what are known as the "fire limits," which enclose a considerable area, including the central districts.

Single-family dwellings, or cottages, form only a small percentage of the total, and as a rule are built for sale to their occupiers, the renting of this class of house being no longer a good investment. These houses are frame-built and have five or six rooms on the ground floor with an unfinished attic extending over the whole building. The rooms consist of kitchen, dining room, parlour and two or three bedrooms, with bathroom containing also the water-closet. Underneath is a brick basement lined with cement in which is placed the furnace or stove for heating all the rooms above. The average cost of building such a house is about £750, and the price of the plot, usually 25 to 30 feet by 125 to 175 feet, ranges from £125 to £210. Working men, particularly Germans, who are intent on purchasing their homes, prefer generally a two-storied or three-storied building with a flat on each floor, as by letting two of these flats they are able to cover both the interest on the mortgage and the taxes. The construction of this class of house costs from £1,000 to £1,600. The building of houses for sale is done almost entirely by private speculation, building societies of a philanthropic or co-operative character being almost non-existent.

The great bulk of the workers live in rented flats containing from four to six rooms; three-roomed flats are only met with in the oldest buildings or in modern steam-heated flats, which are not as a rule occupied by working-class families. Skilled workmen with families prefer the six-roomed flat owing to their custom of using one room as a dining-room distinct from kitchen and parlour, in consequence of which the five-roomed flat is relatively much less important, particularly in modern tenements occupied by this class of tenants.

Flats are found as a rule in two-storied or three-storied buildings of wood or brick, those of four or more stories being somewhat exceptional. In the older type of building the three-storied house, which predominates throughout several large districts, is strictly speaking one of two stories and a basement, owing to the fact that the street level has been raised, so that the original ground-floor flat is now considerably, if not entirely, below it. Where the buildings are set back from 10 to 17 feet, as frequently happens, the front rooms of the basement are well lighted. Access to the dwellings on the first floor is by a sort of bridge from the pavement or by a short flight of steps when the basement is only partially below the street level. For this class of building the closets have been placed side by side under the pavement where the presence of a back house at

the rear of the site made this arrangement necessary in order to comply with the by-law requiring closets to be at least 8 feet distant from any dwelling.

Four-roomed flats, which are the most numerous class owing to the relatively large amount of unskilled labour in Chicago, are as a rule found in detached buildings, each containing two back-to-back houses and having a frontage of from 18 to 20 feet, with a depth of from 40 to 42 feet. Such a double house consists of two or three stories containing altogether four or six tenements. The city by-law requires that all flats shall have separate front and back entrances, and this condition is met in the case of the back-to-back houses by placing a door in the middle of one side of the building, opening into a small vestibule; this vestibule gives access to the front and rear flats on the ground floor, while stairs ascend from it to the flats above.

A similar vestibule with stairs is usual in the front of the building, while at the rear the upstairs flats are reached by outside stairs of wood. All the rooms open into each other, thus making it possible for one stove to heat them all. There is no uniformity in the arrangement of the rooms, but the largest are situated in the front or back of the building, where the best light is obtained, while the smaller ones are at the sides and are used as bedrooms, being semi-dark, as the windows look out upon the adjoining building, which in the older districts is only a few feet away, in some cases only 3 feet 6 inches. A new by-law requires that the passage between new buildings shall be 6 feet wide and that the side windows shall be set at an angle in order to secure more direct sunlight, but as the vast majority of the houses were erected before this by-law came into force the number of semi-dark rooms is very large and when these rooms are situated in basements their appearance is dismal and depressing in the extreme. At the back of these buildings is an unpaved yard which is shared by all the tenants and in which are coal and wood sheds, and, in the case of the older buildings, the closets, when these are not placed under the street pavements. One closet is shared by two families, as a rule, though not infrequently by three. In the poorest districts in the centre of the city, near the stock yards and also near the steel works in South Chicago, a very large number of houses have been erected along the back passages, the distance between the front and back buildings ranging from 9 to 20 feet, except in crowded areas.

The flats of five or six rooms occupied by workmen who are more or less skilled are found in two or three-storied frame or brick buildings, which are farther removed from the central district. The majority of the flats occupied by this class of tenant contain six rooms, this accommodation being most in demand for a number of years past. The five-roomed flats, being of the older type, have little to distinguish them from the four-roomed flats beyond the additional room and the fact that the back-to-back construction is comparatively rare. Six-roomed flats, however, show considerable variety both as regards their external appearance and structure and also their internal appointments, style, finish, &c. This variety is reflected in the wider range of the rents, which run from 15s. 5d. to 21s. 2d. per week. Five-roomed and six-roomed flats are usually found in frame buildings which are detached and stand upon a site having a frontage of 25 feet and a depth of 125 feet, though the most recent houses have a frontage of 30 feet, in order to comply with a new by-law requiring that the side passage separating houses of two stories shall have a minimum width of 6 feet and that separating houses of three stories one of 7 feet. Forecourts fenced in with wooden railings or open lawns are invariably found in the front of this class of dwelling, and access to the open ground in the rear is by a side passage from 5 to 7 feet in width.

The basements of these buildings are rarely used as dwellings, and as a rule a water-closet is situated inside each flat, while a bathroom is a common feature where the rent is 11s. 6d. per week and upwards. The ground floor and upstairs flats in front are entered by a door usually placed at the side and reached by a short flight of steps leading either to a porch or a verandah. This door opens into a small vestibule, from which the downstairs flat is entered direct, while a flight of stairs leads from it to the floor above. Rooms open into each other, and also in many cases into a passage or lobby running through the flat to the kitchen. Access to the rear of an upstairs flat is by an outer wooden staircase with a small landing at the top. The open ground at the back of the house is common to the tenants.

The more highly-rented of these flats show an admirable degree of comfort and modern convenience. The brick-built basement has a cemented floor, facilities for laundry work and the storage of coal and frequently a furnace for heating the rooms above. Food pantries, clothes closets, kitchen drawers and shelves are usually provided. The use of hard wood for floors, doors and other interior woodwork is also a conspicuous

feature of the better class flat of the skilled workmen, while the furniture and the decorations of the home are in excellent taste.

Tenement blocks of frame and brick and also rows of brick houses divided into self-contained flats are frequently met with in working-class districts and are of growing importance, but at present they do not belong to the predominant types of working-class dwellings. Some of these tenement blocks, as also flats situated over shops, are heated throughout by steam pipes, in which case the rent includes the cost of heating and also of janitor service. Only a relatively small number of working-class families, however, occupy dwellings of this kind.

The building regulations* at present in force require plans to be submitted to and approved by the municipal building department before the erection of any structure whatever is begun. Unless the rear of a site abuts on a public way at least ten feet wide, 10 per cent. of the area of any site occupied by a tenement house, *i.e.*, for this purpose a house occupied by two or more families and not over three stories high, must be reserved for yard space, except in the case of corner sites, where only 8 per cent. need be reserved, while for each story over the third an additional 1 per cent. of the site area must remain unoccupied. Subject to certain provisions in respect of fire-proof passages, the distance between front and rear buildings on the same site must be at least 10 feet where buildings are one story high and 5 additional feet for each story above the first; the minimum widths of the inner courts of tenement houses of two, three and four stories must be six, seven and eight feet respectively, and no existing tenement may be enlarged unless these distances are observed. To be considered habitable, a room must have a window opening directly upon the street, the side passage or the yard, and the area of the windows must be one-tenth of the floor space of the room, while no window may have a less glass surface than 10 square feet. All basements must have Portland cement concrete floors and damp-proof walls; every tenement must have at least one room with a floor area of 120 square feet, while no other room may have less than 70 square feet of floor space; all rooms, other than attics, must have a minimum height of 8 feet 6 inches; all privies are to be replaced by water-closets wherever the Health Department decides that sewer connexion is practicable; and there must be at least one water-closet for each separate tenement in new tenement houses and at least one for every two tenements in existing tenement houses.

In the past a large proportion of the houses in Chicago, particularly in the poorer districts, have been erected with little regard either for building or sanitary regulations, and in large areas conditions exist to-day which call for determined action on the part of the health authorities. One important step which has been taken by the Health Department in the last few years is the gradual abolition of the old privy-vaults. During 1907-8, some 10,000 of these were replaced by water-closets, with the result that privies are now rare, save in outlying districts without sewer connexion. Much has been done also to improve defective plumbing and to enforce the provision of outer ventilation for inside closets in the older buildings, but in crowded areas an enormous number of dwellings remain in which the conditions are comparable with those prevailing in the slum districts of European cities.

Comprehensive statistics do not exist for Chicago showing the extent of overcrowding and its accompanying evils, but partial investigations made by the City Homes Association, the Anti-tuberculosis League and the Health Department in selected districts stated to be typical of wide areas have revealed, from time to time, appalling conditions of housing, great overcrowding, and acute destitution.

An inspection made for the purpose of this report of the districts described in the reports of these agencies showed that no general improvement has taken place in the housing conditions, and that in some respects they are steadily growing worse. The largest and most compact area of this character is that embraced between the two arms of the river in close proximity to the "down town" or business quarter of the city. This area, which may be regarded as Chicago's East End, contains large colonies of Poles, Jews, Italians and Bohemians. A considerable proportion of all these nationalities are engaged in the clothing trades of the district, but a large number of the Italians, who come mainly from Sicily and South Italy, earn their living as navvies in railway construction work or as fruit vendors, a business which is, however, being wrested from them by the Greeks. Of the Poles, a large number are engaged as unskilled or semi-skilled workers in foundries and machine shops, and also in the lumber yards along the river. Whilst in some parts of the district the various nationalities intermingle to a considerable extent, they live on the whole in fairly well-defined localities grouped round their own churches. The Italians show the strongest disposition to invade streets outside their own

* See Appendix, pp. 456-460.

quarters, and the general testimony is that when they begin to reside in a street the other nationalities speedily remove elsewhere, the temperament and habits of the Italians being uncongenial to them. The consequence of this tendency is that property often depreciates in value where Italians settle.

The Jews and Bohemians are the most intelligent and progressive elements in this community, and the homes of even the poorest Bohemians show a much higher degree of cleanliness than do those of the other nationalities. The Poles and Bohemians show a strong desire to purchase their homes, and seek to accomplish this object both by thrift and by sub-letting or taking boarders. The Jewish Ghetto is situated in the heart of the district, and its most noteworthy characteristics are its squalor, the jumble of its dilapidated buildings and its street markets. This Ghetto is now mainly inhabited by foreign Jews, their predecessors having improved their position and migrated elsewhere.

A report issued in 1904 by the Visiting Nurse Association on the prevalence of tuberculosis gives the results of enquiries made in the poor Jewish district, which includes half the 9th and a portion of the 19th Wards of the city, and has a population estimated at 31,000, of whom 22,500 are Jews, mainly of Russian origin. The report states that "the air in this part of the city is constantly filled with dust and clouds of smoke from the vast number of factories, foundries and railways of the adjacent river district. It is further polluted by emanations from piles of refuse accumulating in streets and alleys. A large portion of this area is but seldom swept or sprinkled." Only one small playground exists, and the nearest park is three miles distant. A house-to-house visitation was made of a square block in the centre of the district covering an area of eight acres, with a density of 278 persons per acre, the population consisting of 2,007 Jews and 214 non-Jews. Of the population in this block, 45 per cent. live in rear flats, rear buildings or basements, through the side windows of which little or no sunlight enters. "Extreme poverty compels a large number of families to utilise only half of their rooms during the cold season. Windows are generally kept closed throughout the winter. The extremely unsanitary conditions in which these people work and live, their abject poverty and overcrowding would naturally lead to a high rate of mortality from all diseases, but the effect of these unfavourable conditions is greatly mitigated by certain features of Jewish life," among which are mentioned early marriage, chastity, sobriety, the tendency to consult the doctor for every trivial ailment, the careful selection of meat and its thorough cooking. Even in spite of these factors the death-rate from tuberculosis for this block was 2.81 per 1,000 of population. The fear of consumption is greater amongst the Jews than any other nationality and, in addition to the help given readily by Jewish Charities, great sacrifices are made to obtain for the victims a change of climate. The report adds that consumption is steadily increasing among the poor of Chicago generally, and urges the need for better housing conditions, compulsory notification of cases of consumption, the thorough disinfection of premises previously occupied by consumptives and the establishment of public sanatoria.

The natural tendency of immigrants to settle amongst people of their own nationality and the presence of a large number of workshops and factories in this crowded area have created an increasing demand for housing accommodation. One result of this has been the removal of a very large number of frame houses from the front to the rear of the sites to make room for larger structures, while tenement blocks of four or five stories have also been erected and bid fair to become the future type of dwelling in this area, since it lies inside the "fire limits," within which frame dwellings may not be enlarged. Even before the erection of these tenement blocks the overcrowding of buildings was a marked feature of the district, seriously diminishing the adequate provision of light and ventilation. Although in appearance many of these tenement blocks seem to be an improvement on the adjoining types of dwellings, being dryer and more substantially built, they have features which are regarded by housing reformers with disfavour. Many of them cover considerably more of the site than the proportion allowed by the building regulations, while rooms are often imperfectly lighted and the courts in the rear receive little sunshine. The crowding together of dwellings would of itself be prejudicial to the health of the inmates, but when workshops and stables are found in the rear, as often happens, the evil is intensified. Moreover, a large proportion of the frame buildings, which were but flimsily constructed at the outset, are now old and in a neglected condition. Most of the houses were originally built without any proper provision against damp, a defect which is all the more serious in Chicago owing to the low-lying and marshy nature of the soil, to the fact that during periods of heavy rain the sewers overflow and to the large number of basement and cellar dwellings. The immigrants' habit of sub-letting rooms to newly-arrived relatives and friends or

receiving these as boarders further complicates the evil. During the heat of summer the pavements are crowded at night with men, women and children who, finding the stifling atmosphere of their overcrowded quarters insupportable, prefer to sleep in the open air. In this large district squalor and misery make the saloon increasingly attractive and a generation of slum dwellers is growing up which in the future will hardly fail to increase the gravity of Chicago's social and municipal problems.

The general characteristics of the housing in the poorer districts adjoining the stock yards and the steel works are very similar to those already described except that the overcrowding of buildings is not so prevalent. In these quarters there has been an enormous amount of jerry building, and rents, though nominally low, are in reality high for the poor and primitive accommodation provided. There is also much overcrowding on the part of the Lithuanians and Poles resident in the vicinity of the stock yards. The main portion of the Lithuanians settled in Chicago from 1902 onwards, though they began to arrive some forty years ago. These people belong to the Roman Catholic faith and are a branch of the Slavonic race. They form a large colony and almost every family takes in boarders, who usually pay 12s. 6d. per month for a room, with cooking and washing. Food is bought independently, each lodger having a separate account with the butcher and grocer. Lithuanian girls often share a room, paying 6s. 3d. each per month, while doing their own washing and sometimes assisting in the housework. The typical flat occupied by these people is one of four rooms renting at from 33s. 4d. to 41s. 8d. per month, equivalent to 7s. 8d. to 9s. 7d. per week.

In South Chicago, in the neighbourhood of the steel works, back-to-back frame houses resting on piles largely predominate and a great number of cellars and basements are inhabited. Poles and Slavs from Austria-Hungary and South-Eastern Europe mainly occupy these dwellings, which are usually divided into four-roomed flats. The Slavs are principally unmarried men or men who have left their families at home, and coming from agricultural districts they are of sturdy build. They usually herd together in boarding houses, paying about 16s. 8d. per month for sleeping accommodation, cooking, mending and washing, while the woman of the establishment keeps a separate food account for each lodger. Beds are crowded together and are often occupied by day and night workers in turn. Most of the men regularly send home their savings for the support of their families or other relatives or allow these savings to accumulate in Chicago with a view to returning to Europe in a few years and purchasing small holdings.

The following Table shows the predominant weekly rents, including all local taxes and the charge for water, paid for working-class dwellings at Chicago in February, 1909 :—

Predominant Rents of Working-class Dwellings.

| Number of Rooms per Dwelling. | Predominant Weekly Rents. |
|-------------------------------|---------------------------|
| Three rooms | 5s. 9d. to 7s. 8d. |
| Four rooms | 6s. 9d. „ 11s. 6d. |
| Five rooms | 11s. 6d. „ 15s. 5d. |
| Six rooms | 15s. 5d. „ 21s. 2d. |

The level of rents at New York being represented by 100, the rents index number for Chicago is 70.

RETAIL PRICES.

Owing to its proximity to so many agricultural, dairy-farming and stock-raising States, and also to its position as one of the greatest railway centres in the country, Chicago is exceptionally favoured in the matter of food supply.

The retail trade is mainly in the hands of individual dealers, "multiple" shops being unimportant and co-operative societies non-existent. Two large "mail-order" firms have their headquarters in Chicago, but they do an almost exclusively outside business. Competition is very keen in all parts of the city, and it results in fairly uniform prices. Where, however, the latest immigrants who are unable to speak English happen to reside in localities in which there are few dealers of their own nationality they pay higher prices.

The dietary of the various nationalities is materially influenced by American habits and standards, particularly as the children grow up, yet racial preferences are strongly marked. The Italians in particular are tenacious of their national food and usually pay much higher prices for macaroni, spaghetti, cheese and salad oil imported from Italy. Next in this respect come the orthodox Jews, for the reformed Jews do not adhere to any rigid rules as to the kinds of food used or their preparation.

During the last few years public opinion has demanded a more efficient inspection of food and the Health Department is making strenuous efforts to secure reform in this direction, considerable quantities of decayed fruit and vegetables and canned goods being regularly destroyed under the supervision of the inspectors. Stricter regulations have also been imposed upon bakeries and milkshops. During 1908 over 1,300 bakeries were examined and it was found that, as regards the first thousand inspected, 45 per cent. were situated in cellars, where work was in many cases carried on under very undesirable conditions. Since the examination and as a result of the stricter provisions introduced many cellar bakeries have been closed, and a large number are still liable to be closed unless the structural changes demanded by the Health Department are completed within a reasonable time. Milkshops are no longer licensed unless their sanitary condition is approved by the Department, and milk is not allowed to be sold in grocery or other shops except in sealed bottles—an important provision owing to the large quantity retailed at these shops. The supply of milk for the city must either be drawn from cows which have, within one year, given a satisfactory tuberculin test—this provision being enforced by inspectors who visit the farms and cowsheds—or if obtained from cows not satisfactorily tested it must be pasteurised. Samples of milk and food are tested by the city analysts, and of 63,984 samples of milk and cream examined in 1908 4·8 per cent. were found below grade as against 7·4 per cent. in the previous year. The municipal regulations relating to the inspection and sale of milk, butter and cheese are given in the Appendix, on pages 478–482 of this Report, and the bakery ordinance is given on pages 482–3.

Groceries and other Commodities.

Tea is consumed to a considerable extent, but *coffee* is the principal domestic beverage of the working classes. The only kind of *sugar* consumed to any great extent is white granulated.

The most popular kind of *cheese*, the American variety, retails at 10*d.* and 11*d.* per lb., 10*d.* being predominant. Limburg cheese at the same prices is also in favour amongst the Slavs. A kind known as Swiss cheese also sells largely at 11*d.* and 1*s.* per lb. Italians prefer the cheese imported from their own country and pay from 1*s.* 3*d.* to 1*s.* 5½*d.* per lb. for it.

The *butter* mainly sold is a creamery product of good grade. Cheaper grades of butter and also butter substitutes are sold, but the demand is comparatively small. The retailing of *milk* is mainly in the hands of a few large companies.

The *bread* mainly sold is wheaten, though a considerable amount of mixed rye and wheat and pure rye bread is also sold. The principal sale of rye bread is amongst the various Slavonic nationalities, most of whom, however, prefer to bake their own bread, the stoves everywhere in use being adapted for this purpose. Previous to the passing towards the end of 1909 of a new by-law requiring loaves to weigh a pound, or a multiple of a pound, no standard weight was observed in Chicago. This by-law was the result of an enquiry made by the city inspector of weights and measures into the practice of selling short-weight loaves.

Both anthracite and bituminous *coal* is consumed by working-class households, anthracite being used in the homes of the more skilled workmen for heating purposes, while gas stoves are used for cooking. The bulk of the labouring people, however, burn bituminous coal, which is much cheaper though dirty and smoky, and which burns away to a white ash, leaving no cinders. The general testimony of workpeople is that they have to burn one ton (2,000 lb.) per month and from six to seven tons during the cold season. Coal is sold chiefly by the ton (2,000 lb.), half-ton and quarter-ton, but the poorer classes have for many years bought it by the pail and the bushel basket, for neither of which was there any recognised standard weight. A municipal by-law came into force in March, 1909, however, compelling every dealer to sell coal by avoirdupois weight and to deliver to each customer a ticket with the name and licence number of the seller and the net weight of the coal. The inspector of weights or one of his deputies has power to demand

the production of such a ticket and to require the dealer or hawker to convey the coal to any public scale selected by the officer for verification. All cases of fraudulent weight are punishable by a fine.

The following Table gives the predominant prices paid by the working classes of Chicago for groceries and other commodities in February, 1909 :—

Predominant Prices paid by the Working Classes in February, 1909.

| Commodity. | Predominant Price. |
|-----------------------------------|--------------------|
| Tea per lb. | 1s. 8d. to 2s. 1d. |
| Coffee " | 10d. ,, 1s. 0½d. |
| Sugar :— | |
| White Granulated ; | 2¾d. |
| Brown " | 2½d., 2¾d. |
| Bacon, Breakfast—Boneless... .. " | 9d. to 11d. |
| Eggs per 1s. | 8 ,, 12 |
| Cheese :— | |
| American per lb. | 10d. |
| Limburg " | 10d. |
| Swiss " | 11d. to 1s. |
| Butter " | 1s. 4d. to 1s. 7d. |
| Potatoes, Irish... .. per 7 lb. | 5½d. ,, 7d. |
| Flour, Wheaten—Household " | 11½d. to 1s. 0¼d. |
| Bread, White per 4 lb. | 11½d. |
| Milk per quart | 4¼d. |
| Coal :— | |
| Anthracite per cwt. | 1s. 9¾d.* |
| Bituminous " | 11¼d. to 1s. 0½d.* |
| Kerosene per gallon | 5½d. to 6d. |

* By the ton of 2,000 lb.

Meat.

The principal supply of meat comes from the packing firms of the city. All packing-houses doing an inter-State trade are subject to inspection by federal officers, some of whom examine the animals in the yards before slaughtering while others examine the meat before it is cut up. Inside the packing-houses inspectors are stationed at various points and the work is subdivided so that each inspector is responsible for the examination of one particular vital organ in the carcase. Before passing to the cooling room the carcase is stamped with indelible ink on each part examined, the stamp making it possible to trace afterwards any particular side or animal to the establishment where it was killed, and to determine the date and consequently the inspector responsible for passing it. Qualified veterinary surgeons are employed in this work, which is done with commendable thoroughness. Firms whose trade is within the city are subject to inspection by officials of the Health Department, who also visit the wholesale houses where dressed animals which have been killed outside the city are sold. A by-law makes a butcher liable to a fine for any animal exposed for sale in his shop which is not marked with the federal or city stamp showing that it has passed inspection. Butchers generally are said to be unwilling to run this risk, as the officials are constantly visiting premises in various districts.

Meat is sold mostly in butchers' shops or "meat markets." The best quality of meat is called "corn-fed" and this kind is exported in large quantities, the greater part of the remainder being disposed of to the best hotels and restaurants and the wealthy families. The meat chiefly consumed by the working classes is "range-fed" from the ranches, the better quality of which is bought by mechanics, while the inferior grade is eaten by the unskilled labourers' families. A still inferior grade from "skates" or old cows is used in making the cheap kinds of sausage that are in demand. In the case of pork there is less variation, Chicago pork being mostly a good grade.

The principal consumption is of beef, chuck, pot roast and round (the thinner end) being popular cuts with the working classes. The later immigrants buy largely stewing meat and also chopped meat from the shank for making "Hamburger" steaks. Mutton is in comparatively small demand. Veal and bacon are popular with Poles and other Slavs. Large quantities of Vienna sausage are eaten by Poles and Bohemians.

The following Table shows the predominant prices paid by the working classes of Chicago for various cuts of meat in February, 1909 :—

Predominant Prices paid by the Working Classes in February, 1909.

| Description of Cut. | Predominant Price per lb. |
|-------------------------------------|---------------------------|
| Beef :— | |
| Roasts—Round | 5d. to 6½d. |
| " Ribs prime | 6d. ,, 7d. |
| " Ribs second cut | 5d. ,, 6½d. |
| " Chuck or short ribs | 4d. ,, 5d. |
| Steaks—Round | 5½d. ,, 7d. |
| " Sirloin | 6½d. ,, 9d. |
| Shin without bone | 4d. ,, 5d. |
| Flank | 3d. ,, 3½d. |
| Plate, Brisket { Fresh | 3d. ,, 3½d. |
| { Salt or corned | 3d. ,, 4d. |
| Mutton or Lamb :— | |
| Leg | 6d. to 7½d. |
| Breast | 3d. ,, 4½d. |
| Loin | 6d. ,, 9d. |
| Chops | 6d. ,, 9d. |
| Shoulder | 5d. ,, 7d. |
| Neck | 4d. ,, 5d. |
| Veal :— | |
| Cutlets | 8d. to 10d. |
| Rib chops | 6d. ,, 7½d. |
| Loin chops | 6d. ,, 9d. |
| Breast | 5d. ,, 6d. |
| Neck | 4d. ,, 5d. |
| Pork :— | |
| Fresh—Loin | 6d. to 7d. |
| " Spare rib | 4d. ,, 5d. |
| " Shoulder | 5d. ,, 6d. |
| " Chops | 6d. ,, 7½d. |
| Corned (wet salt or pickled) | 6d., 6½d. |
| Dry salt | 6d. to 8d. |
| Ham | 6d. ,, 7½d. |
| Shoulder, salt or smoked | 5d. ,, 6½d. |

Prices at New York being taken as the base, = 100, in each case, the index number for the price of meat at Chicago is 80, for other food it is 100 and for food prices as a whole 94. For rents and food prices combined the index number is 88.

CINCINNATI.

Cincinnati is the second city of the State of Ohio in point of population. It is the oldest city west of the Alleghenies, and was at one time the metropolis of what used to be called "the West." At the present time the position of the city is more properly described as central in relation to the population of the United States as a whole, what is called the "centre of population" being, in fact, not far to the west of Cincinnati.

The main portion of the city is situated on a plateau, a little above the level of the Ohio river, which forms the southern municipal boundary. The residential districts of the middle and wealthier classes are now on the summit of a ridge of hills overlooking the lower plateau on the north, and to some extent the dwellings of the working classes also occupy the hillside. The manufactories are situated mainly on the lower level, especially in Mill Creek Valley, where a small river has cut through the barrier of hills from the north and formed a rather narrow strip of level land extending away from the Ohio.

In the first half of the nineteenth century a canal was constructed connecting the Great Lakes with the Ohio, via Mill Creek Valley, and it is still in use, though of diminished importance. Water traffic on both canal and river has almost been extinguished by the competition of the railways, which now find in Mill Creek Valley an easy approach to Cincinnati from the north-west.

Five bridges connect the north with the south side of the Ohio, where several townships have sprung up which are essentially suburbs of Cincinnati, though they can never be incorporated owing to the fact that they lie in the State of Kentucky. These townships, Covington, Newport, Bellevue and Dayton, are largely inhabited by working men and clerks, especially those desiring to buy small homes in preference to living in the flats and tenements which crowd the lower levels on the Ohio side of the river. Few manufacturers have hitherto cared to erect their works on the Kentucky side, mainly, perhaps, on account of the better railway and marketing facilities available in Ohio, but there are some iron foundries of large size and steel works at Covington.

On the Ohio side of the river, close to the north-east boundary of Cincinnati, lies the small independent township of Norwood. The exhaustion of the space available on the crowded lower levels of Cincinnati led to the removal of some important works to Norwood, which had previously been a residential district specially frequented by the wealthier classes. Owing to the fact that land at Norwood is too expensive for the erection of small dwellings, Cincinnati working men have not hitherto, to any great extent, transferred their homes there; most of the workmen employed at Norwood live in the down-town tenement buildings and travel to and fro every day.

The principal industries of Cincinnati are the manufactures of clothing, boots and shoes and machinery, especially machine tools, and printing and publishing, but there are also many minor industries, which are specified in a later portion of this report. Pork-packing, which was once the staple industry, and for which Cincinnati was famous throughout the world, is now insignificant except for the supply of local needs. Cincinnati also occupies an important position as a commercial and distributing centre. It is the most accessible large city for Kentucky as well as for Ohio, and it has extensive business connexions with a large portion of the Southern States.

The following Table shows the population at the five Federal Censuses of 1870-1910, together with the absolute and percentage inter-censal increases:—

| Year. | Population. | Increase. | Percentage Increase. |
|-------------|-------------|-----------|----------------------|
| 1870 | 216,239 | — | — |
| 1880 | 255,139 | 38,900 | 18·0 |
| 1890 | 296,908 | 41,769 | 16·4 |
| 1900 | 325,902 | 28,994 | 9·8 |
| 1910 | 364,463 | 38,561 | 11·8 |

The period of the city's most rapid growth was between 1840 and 1870, during which the population increased from 46,338 to 216,239. It will be seen that the rate of

increase is less than formerly. This decline is partly explained by the fact that railway developments in the Mississippi Valley caused Chicago to displace Cincinnati as the principal meat-packing centre. Another important reason for the slower rate of growth in recent decades is to be found in the fact that populous suburbs have sprung up outside the municipal boundaries. It is estimated that the population within a ten-mile radius of the business centre of Cincinnati numbers between 500,000 and 600,000.

Cincinnati has a smaller proportion of foreign-born inhabitants than the majority of large cities in America, its proportion being 17·8 per cent., yet the Census of 1900 showed that more than half the American-born people enumerated were children of parents born abroad. Of the foreign-born population in that year persons born in Germany constituted 65·9 per cent., those born in Ireland 15·7 per cent. and those born in Great Britain 5 per cent. Negroes constituted 4·4 per cent. of the total population, which is a larger proportion than in most Northern cities, a circumstance explained by the contiguity of Cincinnati to the former slave State of Kentucky, from which it is divided only by the river Ohio. German immigration has been small in recent years, and a large proportion of the German-born population has been settled in America a considerable time. Proof of this fact seems to be afforded by the mortality figures, which show that in recent years almost exactly half the deaths attributed to "senile decay" are of persons born in Germany, who yet form only about 12 per cent. of the population.

Since the Census of 1900, there has been a large immigration of Eastern Europeans into the United States, but Cincinnati has attracted this class of people to a less extent than most large cities. Russian Jews, it is true, are fairly numerous, but there are no such large masses of Poles and other Slavonic peoples as are found in cities where large iron and steel works are found, or in more eastern cities close to the ports of landing.

Vital statistics are often of doubtful value in American cities owing to the rapid changes of population and in a certain degree to imperfect methods of registration. In regard to births, the report of the City Department of Health for 1907 states that, "while it is an easy matter to obtain an accurate record of the number of deaths, it is probable that a large percentage of the births were unreported. Just how large a percentage it is impossible to say, but that it is considerable there can be no doubt. An examination of the death returns of children under one year during a certain period shows that the births of fully one-third had never been reported." In recent years the number of reported births has been fewer than the number of deaths. A curiously sudden increase in the number of births reported was shown from 5,563 in 1905 to 8,108 in 1906, followed by a fall to 6,041 in 1907, suggesting that in 1906, at any rate, the duty of registration was more carefully observed. Nevertheless, a comparison of the birth statistics for recent years with those of about twenty years ago seems to indicate that there has been an actual diminution in the number of births. The number of births reported per annum in the early 'nineties exceeded the number reported for the last few years, and there is no reason to believe that registration was more strictly enforced during the earlier period. In view of the uncertainty regarding the number of births, the returns of infant mortality have little value, while uncertainty as to the population of the city similarly renders it impossible to state reliable death-rates.

Towards the end of 1907 an improved water filtering system came into operation, and it was followed by a very marked decrease in the cases of typhoid fever and in the mortality from this cause. The numbers of cases and of deaths were as follows during the five years 1904-8:—

| Year. | Number of Cases of Typhoid Fever. | Number of Deaths from Typhoid Fever. |
|-------------|-----------------------------------|--------------------------------------|
| 1904 | 1,646 | 270 |
| 1905 | 746 | 155 |
| 1906 | 1,940 | 239 |
| 1907 | 1,252 | 157 |
| 1908 | 235 | 64 |

The Health Department has a corps of 16 sanitary officers, besides meat, milk and live-stock inspectors. Special sub-departments deal with contagious diseases and tuberculosis. In the work of school inspection the Department is assisted by a Bureau of Child Hygiene, whose special duty is to follow up cases recommended for treatment by the school inspectors.

The only public utility service in the hands of the municipality is the water supply. The gas works, electric lighting system and tramways are owned and worked by companies. The electric tramway system, as is generally the case in American cities, is very extensive. Besides the company which works the lines in Cincinnati itself, other companies have running powers over the lines, and connect the centre of the city with the Kentucky suburbs and with the whole State of Ohio, through which electric lines pass in all directions. It is possible even to travel either to New York or Chicago in electric tramways. The hilly nature of the ground in Cincinnati offers certain obstacles to locomotion, but in three places "inclines" have been in existence for a number of years. These inclines are platforms which are hauled up the hillside at a steep angle by cables and they were originally constructed for the carriage of horse-vehicles, though they are now also used for tramway cars. In addition to these routes up the hill, there are several others on which the aid of cables is not required, so that the upper plateau is reached in all directions by the tramways.

The gas supplied in Cincinnati is now entirely natural gas, for which the price is 1s. 3d. per 1,000 cubic feet. Until recently coal gas was used and cost 3s. 1½d. per 1,000 cubic feet.

The municipality has embarked on two undertakings which are unusual in America. One of these is a railway line running south, which was financed by the city and is now leased to a company. The other is the support of the University, which occupies a fine position overlooking Mill Creek Valley. The publicly supported Art Gallery in Eden Park, the new High School near the University and several handsome public elementary schools are buildings of a type which testify to public willingness to incur large expenditure on behalf of artistic and intellectual as well as more strictly business purposes.

The parks of Cincinnati deserve special mention. The hilly nature of the ground offers excellent opportunity for the formation of attractive open spaces, and there are several very beautiful parks, although all has not been done that might be done in this respect. On the crowded lower ground, efforts are now being made to provide a few open spaces for children's playgrounds.

OCCUPATIONS, WAGES AND HOURS OF LABOUR.

The relative importance of the principal manufacturing industries of Cincinnati is fairly indicated by the following return, published by the Bureau of Labour Statistics of the State of Ohio, showing the total wages paid in 1907 in those manufacturing industries of which the aggregate annual wages bill was not less than \$1,000,000 (£208,333). It will be seen that the engineering and metal industries, taken as a whole, are the most important, yet that the clothing and boot and shoe industries occupy a high place in the list.

| Industry. | Number of Firms Reporting. | Total Wages paid in 1907. |
|--|----------------------------|---------------------------|
| | | £ |
| Machinery | 63 | 521,965 |
| Foundry and Machine Shop Products | 35 | 271,354 |
| Tools and Implements | 30 | 233,181 |
| Electrical Goods and Supplies | 13 | 215,936 |
| Carriages and Wagons | 56 | 251,770 |
| Furniture | 47 | 251,254 |
| Clothing | 158 | 683,205 |
| Boots and Shoes | 28 | 674,835 |
| Printing and Bookbinding | 109 | 410,943 |
| Cigars | 54 | 269,579 |
| Liquors (Malt) | 21 | 255,862 |

The statistics of occupations given in the Table below are from the Federal Census of 1900, but Cincinnati has not altered greatly in character during the last few years. It will be noticed that in the clothing trade females are much more numerous than males, and that the numbers employed in trade and transportation are very large.

*Number of Persons of 10 years of age and over engaged in Occupations in Cincinnati
in 1900.*

| Occupations. | Males. | Females. | Total. |
|---|---------|----------|---------|
| Building | 8,486 | 28 | 8,514 |
| Metalworking and Engineering | 9,551 | 98 | 9,649 |
| Textile | 243 | 383 | 626 |
| Leather | 1,241 | 16 | 1,257 |
| Boot and Shoe Making | 3,283 | 1,533 | 4,816 |
| Clothing | 2,394 | 8,720 | 11,114 |
| Woodworking and Furnishing | 4,325 | 151 | 4,476 |
| Paper and Printing | 2,853 | 956 | 3,809 |
| Food, Drink and Tobacco | 5,019 | 2,035 | 7,054 |
| Other Manufacturing and Mechanical Pursuits | 8,494 | 1,048 | 9,542 |
| Trade and Transportation | 34,573 | 6,479 | 41,052 |
| Labourers (not otherwise specified) | 8,908 | 103 | 9,011 |
| Professional, Domestic and Personal Service and Agricultural Pursuits. } | 14,443 | 16,236 | 30,679 |
| All Occupations | 103,813 | 37,786 | 141,599 |

In addition to the industries specified above many others are carried on in and near Cincinnati. Several are represented by large individual undertakings, in some cases the largest of their kind in the United States, such as a playing card manufactory, a large soap works, a tannery, an office furniture factory, a harness factory, a printing ink factory and (on the Kentucky side of the river) a cast iron pipe foundry.

Amongst the machine shops of Cincinnati there is a very large undertaking engaged in making woodworking machinery, but the leading place is taken by the machine-tool industry, which is carried on mainly by firms of moderate size and has become highly specialised. Most firms confine themselves to one branch of the trade, *e.g.*, making only lathes, or planers, or milling machines, and in the works specialisation is also carried on to a great extent. All-round machinists are comparatively scarce, the majority of the employees in the tool shops being specialists on particular tools. The large amount of repetition work which makes this specialisation possible has also led to the development of the premium system, now adopted by many firms, who claim that cost of production has been very much reduced by this method of payment. The premium given is the value of half the time saved, but as experience enables employers to gauge fairly accurately the time which a man ought to take over a job which has often been done before, they can fix the time allowed in such a manner as to give opportunity for either large or small premium earnings according to the policy which they think best. A liberal time allowance enables the worker to earn a premium without such excessive haste as might result in an inferior quality of work. Premium earnings, therefore, vary from shop to shop according to the policy pursued, and some shops prefer not to have the system at all.

Most machinists earn from 10*d.* to 1*s.* 1*d.* per hour and a bonus which brings their average weekly wages within a range of from 56*s.* 3*d.* to 70*s.* 10*d.*, though in some shops the average is appreciably higher. Bonus earnings in some cases amount to an addition of 25 per cent. to the wages, while in others they may not reach 10 per cent. Lathe hands earn on the whole rather less than bench and vice hands. There is a great deal of comparatively simple lathe work in machine-tool manufacture.

There is hardly any trade unionism amongst the machinists in Cincinnati, but iron-moulders and patternmakers are organised. The union rate for patternmakers is 1*s.* 5½*d.* per hour, but the actual rates paid are very various. Ironmoulders for the most part receive the union rate of 13*s.* 4*d.* per day for floor and 12*s.* 6*d.* for bench moulding.

The clothing industry is represented mainly by firms engaged in making men's suits and overcoats. As elsewhere in America, the industry is mostly in the hands of Jews. No special investigation was made into the question of home work, but it was stated by employers that, relatively to the importance of the industry, considerably less work was done in homes in Cincinnati than in New York. A number of factories in the clothing trade, and also in other industries, are very well equipped for the comfort and health of the employees; lavatories, shower baths and lunch and recreation rooms are frequently provided, and lighting and ventilation are well arranged. Even comparatively

small firms in the clothing trade are able to offer very favourable conditions by renting space and power in a large ferro-concrete building which has been recently erected to meet their special requirements.

The wages shown in the Table given below for the clothing industry relate only to men employed in factories making men's suits and overcoats. Women in the factories earn very various rates of pay, mainly from 20s. 10d. to 41s. 8d. per week.

Ladies' boots—or "shoes," to use the American term—are the principal product of the boot and shoe factories of Cincinnati. This industry is highly organised in America. Piece work is the rule almost throughout and earnings are high. Employment, however, is somewhat irregular. According to the figures published by the Ohio Bureau of Labour Statistics, the average number of working days for the principal occupations was from 270 to 280 in the year 1906 and from 280 to 290 in 1907. The hours are 59½ weekly during the greater part of the year, but in summer they are often reduced to 55. A considerable proportion of the skilled men are members of a trade union, but no formal agreements in regard to wages exist. Difficulties are usually adjusted by informal discussions between the secretaries of the employers' and the men's associations.

Strong trade unions exist in the building, brewing and printing trades. Brewers and newspaper printers work under written agreements. In book and job printing and in the bookbinding trades, which are important trades in Cincinnati, unionism is not quite so strong. All the skilled branches of the building trades are fairly well organised. In the breweries the usual day's work consists of eight hours. In the malt and brew houses work is done on Sundays, but maltsters have the right to two days off per month. Stablemen have a half day off every other Sunday. Drivers and helpers are only required on Sundays to clean the horses; they have a nine-hours day in summer and an eight-hours day in winter.

The municipality lets out all street construction work to contractors, but repairs are done by its own men. Paviers are paid strictly by time, and are in much the same position as outdoor men in the building trades, losing a considerable amount of time, especially in winter. The other employees on this class of work are also irregularly employed.

Natural gas entirely replaced coal gas during the year 1909, but in February the old gas plant was in operation. The wages shown in the Table are those which were then paid. There is now no manufacturing plant in operation.

Motormen and conductors on the electric tramways are paid 10d. per hour for the first three years, 10½d. for the second three years and 11d. after six years, with 1s. 0½d. per hour for overtime. Ten hours per day are considered full time, and it is usual for the men to work seven days per week.

The following summary Table shows the predominant weekly wages and hours of labour of adult males in certain principal occupations in Cincinnati in February, 1909:—

Predominant Weekly Wages and Hours of Labour of Adult Males in the Principal Occupations in February, 1909.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|--|---------------------------|-------------------------------------|
| <i>Building Trades:—</i> | | |
| Bricklayers | 114s. 7d. | 44 |
| Stonemasons | 99s. | 44 |
| Stonecutters | 103s. 2d. | 44 |
| Carpenters | 82s. 6d. | 44 |
| Plasterers | 114s. 7d. to 115s. 11d. | 44 to 44½ |
| Plumbers | 92s. 9d. ,, 103s. 2d. | 44 ,, 44½ |
| Structural Iron Workers | 100s. | 48 |
| Painters | 85s. | 48 |
| Hod Carriers and Bricklayers' Labourers | 64s. 2d. to 73s. 4d. | 44 |
| <i>Foundries and Machine Shops:—</i> | | |
| Ironmoulders | 75s. to 80s. | 55 |
| Machinists | 56s. 3d. ,, 70s. 10d. | 55 |
| Blacksmiths | 67s. 6d. ,, 103s. 2d. | 55 |
| Patternmakers | 72s. 11d. ,, 81s. 3d. | 55 |
| Labourers | 37s. 6d. ,, 41s. 8d. | 55 |
| <i>Clothing Trades:—</i> | | |
| Cutters, Machine | 83s. 4d. to 100s. | 48 to 54 |
| Cutters, Hand | 75s. ,, 91s. 8d. | 48 ,, 54 |
| Pressers | 50s. ,, 62s. 6d. | 52 ,, 54 |

tenements with only two rooms is an unusual feature in American cities, and is probably the result of immigrant adherence to national custom.

Tenements of one room are found only in buildings which house the newly arrived immigrants, and are hardly used at all where there is a family. Some buildings which used to be good and even fashionable hotels are now crowded with Hungarian immigrants, mainly unmarried men or men who have left their families in Europe. These men crowd together as closely as possible with a view to economy, their great object being to save money. This state of things is found in all large American cities where immigrants are continually arriving from Eastern Europe, but the housing conditions of this class of people are not typical of any other important section of wage-earners.

Though the two-roomed family tenement is common, it is not usual to find families of large size occupying only two rooms. The owners of two-roomed tenements frequently object to the presence of children, especially in the better class of dwellings, and in fact a preference for families having few or no children is characteristic of the owners of the more respectable tenement blocks. Where there are only two rooms, they are usually of fair size, *e.g.*, 15 feet square or 12 feet by 17 feet, but there is frequently no scullery in addition, and the pantries in most cases are little better than small cupboards.

For about five years there was in force a law compelling builders of tenement houses to provide a bathroom for at least every two tenements containing between them not more than five rooms, and a bathroom for every tenement containing four or more rooms. This law has recently been repealed, because complaint was made that the cost of tenements for poor families was unduly raised and that the baths, for which it was not compulsory to provide hot water, were often used for purposes other than those intended. In consequence of the law, however, there are now a number of small tenements with bathrooms shared by two families, and these let for higher rents than tenements which have not this convenience. Water-closets inside the building are compulsory for new tenement buildings, and where tenement houses have been built under this regulation, a higher rent is obtained than for the older types.

The rents of two-roomed tenements are mainly from 5*s.* 9*d.* to 7*s.* 8*d.* per week. This rent is rather higher than might be expected, the explanation being that a better class of two-roomed tenements is found in Cincinnati than in most American cities, where only the very poor have so few rooms.

Tenements having three rooms are commonly found in the same buildings with those having two rooms. One at least of the rooms will be of good size, perhaps 15 feet square, but the dimensions vary considerably. Sometimes the kitchen and main living room are about the same size, for example about 12 feet by 15 feet, and there is a smaller room 10 feet by 12 feet. Where the family is large (apparently a somewhat rare thing in the tenement houses) a good sized kitchen-living-room, with two bedrooms, is needed. Where the family is small a good living room independent of the kitchen is preferred. The range of rents for tenements of three rooms is wide, but 9*s.* 7*d.* to 11*s.* 6*d.* per week would include a considerable proportion. Modern tenements having three rooms and a bathroom more frequently cost from 12*s.* 6*d.* to 14*s.* 5*d.* per week.

Both three and four-roomed tenements are found in smaller two-storied buildings as well as in larger tenement blocks, especially on the slopes of the hills. The rents of the older frame dwellings of this type are about the same as those of flats without bathrooms in the larger buildings. The former have the advantage of better light and air, but are not quite so conveniently situated for work. The more modern flats in two-storied brick buildings cost as much as 12*s.* 6*d.* per week for three good rooms without bathroom.

Four-roomed tenements are not very common in the large blocks occupied by wage-earning families. Those who care to have dwellings of this size either rent part of a two-storied flat of the kind just mentioned, or else purchase a small house in the suburbs. A certain number of such tenements may be obtained, however, at rents ranging from 13*s.* 6*d.* to 16*s.* 4*d.* per week. They are found in rather superior buildings which have a porter in charge and a bathroom on each floor for the use of occupants of several tenements or flats. Where the building is quite modern, and there is a bathroom to each flat and steam heating, the rents exceed £1 per week. Blocks of this kind are not uncommon, but they are seldom occupied by manual workers.

The best type of four-roomed dwelling within the range of rents which wage-earners can pay is the half of a two-storied house in the Kentucky suburbs, where four rooms can be had for rents ranging from 11*s.* 6*d.* to 15*s.* 5*d.* a week. In these suburbs there are also small one-family houses which can be rented, though they are more commonly purchased. The older types, containing five rooms without modern conveniences, are

let for about 14s. 5d. per week. The more modern, which are almost always built for sale rather than for letting, cost from £520 to £625.

Some light is thrown on the comparative prevalence of different types of housing by the results of the Federal Census of 1900. The figures relate to the whole population, including the middle and wealthy classes, who live mainly in one-family houses. In that year the average number of families per dwelling-house in Cincinnati was 1·8, which was the same as in Boston, and almost the same as in Chicago (1·9). Only two other cities included in the present enquiry had distinctly higher averages, viz., New York (2·9) and Fall River (2·2). In regard to the percentage of families living in dwelling-houses occupied by three or more families, Cincinnati came third, with 44·2 per cent., following New York and Fall River. The most noticeable feature of the statistics for Cincinnati was the comparatively large proportion of families living in dwelling-houses containing four, five, six and seven or more families. Large blocks of tenements are not very common outside New York and Cincinnati. As regards the proprietorship of homes, the Census of 1900 showed that 79·1 per cent. were hired by their occupiers and 20·9 per cent. owned, 13·9 per cent. being owned free and 7·0 per cent. encumbered.

The predominant rents paid by the working classes at Cincinnati are shown in the following Table:—

Predominant Rents of Working-class Dwellings.

| Number of Rooms per Dwelling. | | | | Predominant Weekly Rents. |
|-------------------------------|-----|-----|-----|---------------------------|
| Two rooms | ... | ... | ... | 5s. 9d. to 7s. 8d. |
| Three rooms | ... | ... | ... | 9s. 7d. „ 11s. 6d. |
| Four rooms | ... | ... | ... | 11s. 6d. „ 15s. 5d. |

The rent includes the charge for water, but not that for heating, which is seldom, if ever, provided by the owner in tenements occupied by wage-earners.

The level of rents at New York being represented by 100, the rents index number for Cincinnati is 93.

RETAIL PRICES.

There are several markets, in which the principal business is the sale of fruit and vegetables, but meat, mainly of the cheapest quality, is also sold in them. One very large "multiple" firm exists which has 139 shops in the city and suburbs. Groceries, meat and bread are all sold at most of the shops belonging to this firm.

Groceries and other Commodities.

Bread is retailed by the large firm just mentioned at 1½d. per loaf; other dealers sell mainly at 2½d. per loaf. The loaf early in 1909 weighed 1 lb., but with the increase of the price of flour the weight was reduced in the summer to about 14 oz.

Milk cost 3½d. per quart for a number of years, and that was the general price in February, 1909. In July, however, the price was raised to 4¾d. through the action of the farmers, who claimed that it was impossible to continue to supply the large quantities required at the former price. At the same date a regulation came into force requiring the bottling of all milk, and while this requirement does not appear to have been the primary cause of the increase of price, the greater stringency of the regulations regarding the sale of milk probably had some effect in hastening the change. Regulations are in force not only in regard to bottling, but also in regard to the conditions of cowsheds and of transport. The law requires that no milk be sold at a temperature exceeding 50° Fahrenheit, but it has been found impossible to compel the strict observance of this rule in summer. Milk is delivered only once a day, and the poorer people who cannot afford to buy ice have difficulty in keeping milk fresh in the hot summer weather. Milk can be procured from nearly all grocery shops, where the bottles are retailed over the counter at the same price as for delivery.

The *coal* used locally is mostly "soft" or bituminous. The price is from 12s. 6d. to 16s. 8d. per short ton of 2,000 lb., but an extra charge of 1s. 0½d. per short ton is made for delivery on the higher level. Owing to the large number of tenements of four and five stories, there is a considerable trade in small quantities of coal amongst the working classes; 9d. per bushel is a frequent price.

The usual prices paid by the working classes in February, 1909, for certain articles of food, excluding meat, for coal and kerosene, are shown in the following Table:—

Predominant Prices paid by the Working Classes in February, 1909.

| Commodity. | Predominant Price. |
|-------------------------------------|---------------------------|
| Tea per lb. | 2s. 6d. |
| Coffee " | 10d. |
| Sugar:— | |
| White Granulated " | 2½d., 2¼d. |
| Brown " | 2½d. |
| Bacon, Breakfast—Boneless " | 7¼d. to 9d. |
| Eggs per 1s. | 9 " 10 |
| Cheese, American per lb. | 9d. " 10d. |
| Butter " | 1s. 5½d. " 1s. 6d. |
| Potatoes, Irish per 7 lb. | 5½d. " 7d. |
| Flour, Wheaten — Household " | 1s. 0¼d. " 1s. 0¾d. |
| Bread, White per 4 lb. | 6d. " 10d. |
| Milk per quart | 3½d. |
| Coal, Bituminous per owt. | 8½d. to 11¼d.*; 1s. 0½d.† |
| Kerosene per gallon | 4¾d. to 5½d. |

* By the ton of 2,000 lb.

† By the bushel.

Meat.

The large "multiple" firm already mentioned has its own slaughtering and packing house, otherwise most of the meat sold is imported from the West. Round steak is sold with the bone in. It is cut in large slices right through, and sold bone and all. Ham was sold sliced mainly at 10d. per lb.

The following Table shows the prices most generally paid by the working classes for meat in February, 1909:—

Predominant Prices paid by the Working Classes in February, 1909.

| Description of Cut. | Predominant Price per lb. |
|-------------------------------------|---------------------------|
| Beef:— | |
| Roasts—Round | 6¼d. to 7d. |
| " Ribs prime | 7d. " 7½d. |
| " Ribs second cut | 5d. " 6¼d. |
| " Chuck or short ribs | 3½d. " 5d. |
| Steaks—Round | 7d. " 7½d. |
| " Sirloin | 7½d. " 9d. |
| Shin without bone | 4d. " 5d. |
| Flank | 3½d. " 4d. |
| Plate, Brisket { Fresh | 3½d. " 4d. |
| Salt or corned | 3½d. |
| Mutton or Lamb:— | |
| Leg | 7d. to 9d. |
| Breast | 5d. |
| Loin | 10d. to 11d. |
| Chops | 10d. to 1s. 0½d. |
| Shoulder | 5d. to 7½d. |
| Neck | 4d. " 6¼d. |
| Veal:— | |
| Cutlets | 10d. to 11d. |
| Rib chops | 7½d. " 9d. |
| Loin chops | 7½d. " 9d. |
| Breast | 6¼d. |
| Neck | 5d. to 6¼d. |
| Pork:— | |
| Fresh—Loin | 6d. to 7½d. |
| " Spare rib | 4½d. " 5d. |
| " Shoulder | 4½d. " 5d. |
| " Chops | 6½d. " 7½d. |
| Corned (wet salt or pickled) | 7½d. |
| Dry salt | 6¼d. to 7½d. |
| Shoulder, salt or smoked | 4½d. " 6¼d. |

Prices at New York being taken as the base, = 100, in each case, the index number for the price of meat at Cincinnati is 86, for other food it is 94 and for food prices as a whole 92. For rents and food prices combined the index number is 92.

CLEVELAND.

Cleveland is the largest city in the State of Ohio and, in point of population, second only to Chicago among the cities situated on the Great Lake system of America. Itself a large centre of iron and steel manufacture and of shipping on Lake Erie, its expansion has been greatly hastened since the discovery of iron ore deposits in the neighbourhood of Lake Superior, from which much of the ore has to be brought within reach of the coal-fields of Pennsylvania and Ohio. To these two great influences—a waterway for the transport of iron ore and accessible coalfields—is mainly due the present and the growing importance of Cleveland. Several ports of landing have been developed, the majority of which are used simply for landing cargoes for shipment through to the Pittsburg district, but at Cleveland and Lorain, twenty miles away, a large part of the ore is smelted. Cleveland also does a large business in the export of coal by steamer to other lake ports, both American and Canadian.

The following Table, embodying data compiled by the local Chamber of Commerce, shows the growth of the ore and coal trade of Cleveland during recent years :—

| Year. | | | | | Iron ore Receipts at the Port of Cleveland. | Bituminous Coal Shipped by Lake. |
|-------|-----|-----|-----|-----|--|-------------------------------------|
| | | | | | Tons. | Tons. |
| 1876 | ... | ... | ... | ... | 131,907 | — |
| 1886 | ... | ... | ... | ... | 1,034,650 | — |
| 1896 | ... | ... | ... | ... | 2,417,115 | 1,610,454 |
| 1906 | ... | ... | ... | ... | 6,642,431 | 2,612,749 |
| 1907 | ... | ... | ... | ... | 6,423,263 | 2,915,067 |
| 1908 | ... | ... | ... | ... | 4,175,096 | 2,991,813 |

Apart from the importation of ore and the exportation of coal, there is not a great shipping industry at Cleveland. The quantity of grain received has never been very large, and of late it has tended rather to diminish. A certain amount of general cargo is shipped by lake, but the railways do the great bulk of that trade. The number of men employed directly in connexion with the docks is comparatively small, since ore and coal are handled by mechanical methods which require few men save the skilled mechanics who work the buckets. Hence the great majority of the people are dependent for their livelihood on manufacturing industries, which include almost every kind of iron and steel manufacture, from the smelting of the ore to the production of finished articles, such as automobiles, together with all kinds of intermediate products. Ship-building is an important industry, but the largest yards are at Lorain.

The population of Cleveland, as ascertained by the Federal Censuses of 1870–1910, is shown in the following Table :—

| Year. | | | | | Population. | Increase. | Percentage Increase. |
|-------|-----|-----|-----|-----|-------------|-----------|----------------------|
| 1870 | ... | ... | ... | ... | 92,829 | — | — |
| 1880 | ... | ... | ... | ... | 160,146 | 67,317 | 72·5 |
| 1890 | ... | ... | ... | ... | 261,353 | 101,207 | 63·2 |
| 1900 | ... | ... | ... | ... | 381,768 | 120,415 | 46·1 |
| 1910 | ... | ... | ... | ... | 560,663 | 178,895 | 46·9 |

In 1890 the area of the city was 27·62 square miles, and in 1900 it was 34·40 square miles. Further extensions of the city boundary took place in 1903, 1904 and 1905, but since the latter year the area has remained unchanged at 41·17 square miles. The valuation of property for taxation purposes increased from £22,758,910 in the Census year 1900 to £38,367,806 in 1908.

The nature and rapid growth of the staple industries of Cleveland account for the fact that there is a much larger foreign population in this city than in Cincinnati, the other great city of Ohio. At the Census of 1900, 32·6 per cent. of the population were foreign-born, and it is probable that the results of the Census of 1910 will show a still larger

proportion. The most important of the foreign nationalities represented at the Census of 1900 were Germans, persons born in Germany forming 32·6 per cent. of the foreign-born population. Persons born in Austria-Hungary constituted 22·3 per cent. of the foreign-born, 10·9 per cent. being attributable to Bohemia and 7·7 per cent. to Hungary. The British and Irish-born accounted for 11·5 and 10·5 per cent. respectively, while natives of Poland and of Canada each contributed 6·9 per cent. of the foreign-born population. Recent immigration has been very largely from Italy, Poland, Russia and Austria-Hungary, while German and Irish immigration has declined. The Italians and the Russian Jews, who were insignificant factors in 1900, have now become important elements in the population.

The purely unskilled manual labourers in the iron and steel works now mainly belong to the Slavonic races from all parts of Austria-Hungary. Many of those who have been in America for a number of years, however, have risen to occupations above the unskilled class. Poles and Bohemians are found working as shearmen and shearmen's helpers, blacksmiths and blacksmiths' helpers, machinists, moulders, &c. The Bohemians, to a greater extent than the Poles, have found their way into the better paid occupations and into business and professional life. They have been established in Cleveland for many years, and have therefore had more opportunity to work their way upwards. In connexion with the progress made by the Bohemians, it is also important to remember that the original emigration from Bohemia took place at a time of political troubles, and educated men in the professions and in businesses were represented to an appreciable extent in that movement, so that the Bohemian population in the city has always contained highly progressive elements. One of the skilled trades in which the Bohemians are found, not only as workers but also as employers, is the clothing industry, which they divide with the Jews, the latter, however, predominating. Many Bohemians earn good wages as cutters, pressers, &c., and use their savings in purchasing suburban homes, which they frequently improve, making them attractive both inside and out. Even the poorest unskilled labourers of this race frequently purchase small frame houses, living on the plainest food in order to be able to meet the instalments of the purchase money on the gradual payment system. These houses are noticeably superior in cleanliness to those of some of the Slavonic peoples who have migrated to America in recent years from the Balkans and the bordering States.

The Jews, besides being employed in the great clothing industry, which they mainly have built up, are engaged in cigarmaking, but more than any other race they endeavour to avoid manual work, and hardly ever engage in heavy labour. The legal profession is the great avenue of advancement for the more intellectual of the race, and for others retail trading, even though it be only rag-dealing, offers a means of escape from manual labour. The Jew will work long hours for poor pay in a shop of almost any kind, rather than face the exertion inseparable from iron works or machine shops.

The counterpart of the Jew is the negro, who is very seldom found engaged in retail trade, unless the term be taken to include food-catering, hair-cutting or boot-blackening establishments. Negroes are found in the steel and wire works to some extent, and in any occupation which involves endurance of heat and heavy labour, and frequently they do work requiring some degree of dexterity. They are also employed as plasterers, hod carriers and teamsters, and as janitors and for working lifts. Their knowledge of the English language and of the ways of the country places them at an advantage over the Slavonic or Italian immigrants and they are usually able to earn better wages.

Italians are employed in large numbers on street, sewer and tramway construction, but some are skilled masons and stonecarvers, and others are barbers, small tradesmen, fruit vendors, &c.

The Germans, Scandinavians, British and Irish are hardly distinguishable from the American-born population, but to some extent national characteristics are reflected in the occupations of the North-European races. Swedes, for example, are frequently carpenters, Englishmen and Scotchmen are found in the skilled branches of the engineering and building trades, Welshmen in the smelting works and Irishmen in municipal employments. Germans are so numerous and so long-established in Cleveland that they are found in every trade and profession, but if they can be said to have any speciality, it is the brewing industry. Native Americans, fresh from the country, are employed in large numbers as motormen and conductors on the tramway cars.

The general situation of Cleveland is favourable to healthy conditions. It lies at a slight elevation above Lake Erie, at a point where a small river, the Cuyahoga, flows into the lake. This river has cut a narrow depression through the plateau on which Cleveland stands, but no large section of the population lives in this valley, which is occupied

mainly by industrial works of various kinds and timber yards. The river is navigable for vessels of shallow draught for a short distance, so that its banks have long been occupied by various works which are able to use the waterway.

The working classes live almost entirely on the higher ground, where they have the benefit of fresh breezes from the lake. Roughly speaking, the city is in the shape of the letter T. The horizontal portion of the T represents that part of the city which extends along the lake shore, and for about two miles inland. The shore itself is occupied by railway lines; the land immediately adjoining the railway lines is occupied by factories; further from the shore lie the homes of the workpeople, and beyond them are the houses of the wealthier classes. The other portion of the T is formed by the line of industrial works, with their dependent population, which spreads along the railways running south, at right angles to the lake front.

The business centre of the city is Public Square, about a quarter of a mile from the lake shore. From this point the streets and tramway routes radiate like the spokes of a wheel, instead of following the rectangular pattern usual in American cities.

The 41 square miles within the city boundary are not all built upon, but the fact that the manufacturing industries are spread out in the two long lines mentioned affords the workers ample room for housing, and they need not go far from their work unless they wish to do so. It is commonly said that the people who work on the East side of the city live on the West side, but whatever the extent to which this rule applies, the arrangement is one of choice and not of necessity.

The water supply is a municipal service and is drawn from the lake at a point five miles from the shore; as the lake has an area of 10,000 square miles, there is no danger of contamination. Electric light and power and the supply of gas are in the hands of private companies. Natural gas is now supplied, and the price is fixed by the terms of the concession at 1s. 3d. per 1,000 cubic feet. Cleveland is one of many American cities in which the introduction of natural gas has given the municipal authorities the opportunity of revising the terms of the gas company's lease with a view to giving the public some control over the price. Hitherto the tramway system has been mainly in the hands of one large company, whose lease was about to expire at the time the investigation was made. The question of the future terms of the lease, which was then under discussion, has since been finally settled, and a fresh lease granted on terms which give quite exceptional powers of control to the municipality, and which limit to six per cent. the dividend payable to the shareholders. A new scale of fares based upon distances has been adopted, but it may be modified if the revenue is insufficient to provide the six per cent. dividend.

Cleveland is fairly well supplied with parks, the total area of which in 1907 was 1,692 acres. The most attractive of these parks is a long narrow strip on either side of a stream which flows into Lake Erie a few miles east from the centre of the city.

The Chamber of Commerce has for a number of years taken a very active interest in all matters affecting the welfare of the city, and has not confined itself to strictly commercial subjects. It has appointed committees to investigate such questions as the tramway company's lease, the city finances, the statutory limitation of bonded indebtedness, charitable organisations, sanitation, medical inspection of schools and building and plumbing regulations. The Chamber may be said, in fact, to act as a kind of unofficial advisory board to the municipality. The Chamber has also interested itself in the conditions of workers in factories, and has encouraged manufacturers to provide for the comfort and health of their employees, a matter in which Cleveland is one of the most progressive cities in America.

Another project for the improvement of the city which has received active support from the Chamber of Commerce is the "Group Plan." It is a project for grouping all the principal public buildings—federal, state, county and city—around an open space, extending from the principal business street to the lake shore, where a handsome new railway station is to form the northern boundary of the quadrangle. It will be a number of years before the plan can be completed, but as new public buildings are required, they are being built in accordance with the plan.

OCCUPATIONS, WAGES AND HOURS OF LABOUR.

The reports of the Bureau of Labour Statistics of the State of Ohio show the amounts of wages paid in all manufacturing industries in Cleveland each year. The following Table shows the amounts paid in the more important groups of manufactures in 1907. It will be seen that the iron and steel group is by far the most important, and that the only other large industry is clothing manufacture.

| Industry. | Number of Firms Reporting. | Total Wages paid in 1907. |
|--|----------------------------|---------------------------|
| | | £ |
| Foundry and Machine Shop Products | 100 | 1,770,944 |
| Steel, Iron and Tin | 6 | 1,210,843 |
| Machinery | 50 | 915,702 |
| Automobiles and Parts | 20 | 545,086 |
| Stoves, Ranges and Furnaces... .. | 16 | 256,105 |
| Hardware | 13 | 233,384 |
| Tools and Implements... .. | 24 | 212,860 |
| Electrical Goods and Supplies | 26 | 224,268 |
| Clothing... .. | 173 | 739,731 |
| Oil and Grease | 9 | 224,587 |

The following Table gives the classification of employments for Cleveland according to the Federal Census of 1900 :—

Number of Persons of 10 years of age and over engaged in Occupations in Cleveland in 1900.

| Occupations. | Males. | Females. | Total. |
|---|---------|----------|---------|
| Building | 10,395 | 34 | 10,429 |
| Metalworking and Engineering | 21,736 | 164 | 21,900 |
| Textile | 397 | 800 | 1,197 |
| Boot and Shoe Making | 776 | 89 | 865 |
| Clothing | 2,745 | 7,159 | 9,904 |
| Woodworking and Furnishing | 2,658 | 46 | 2,704 |
| Paper and Printing | 1,912 | 534 | 2,446 |
| Food, Drink and Tobacco | 3,306 | 456 | 3,762 |
| Other Manufacturing and Mechanical Pursuits .. | 11,958 | 1,316 | 13,274 |
| Trade and Transportation | 34,927 | 6,248 | 41,175 |
| Labourers (not otherwise specified) | 17,946 | 184 | 18,130 |
| Professional, Domestic and Personal Service and } Agricultural Pursuits. | 13,749 | 14,321 | 28,070 |
| All Occupations | 122,505 | 31,351 | 153,856 |

The metal industries of Cleveland produce a very great variety of products, including in addition to pig iron and structural iron and steel of all kinds, wire rods, hardware, automobiles, tools, general machinery and ships.

The largest iron and steel works are those of the United States Steel Corporation, which has acquired the works of the American Steel and Wire Company of Cleveland and those of the National Tube Company of Lorain. There are, however, several large iron and steel firms outside the Steel Corporation.

In the rolling mills there are six working days per week, and two shifts are generally worked in twenty-four hours, though at some mills only five night shifts are worked in a week. In certain mills, however, a large proportion of the men work six eight-hour shifts in a week.

Iron puddlers work in gangs of two or three; the gangs are paid by tonnage, and they divide the earnings according to their own arrangements. They work six day or five night shifts per week, and the average earnings are from 12s. 6d. to 14s. 7d. per man per shift of ten hours. Iron rollers and puddlers have a strong union, which is recognised by the employers, but they have not been in a favourable position for securing advances in wages in recent years, owing to the fact that the demand for iron has diminished, steel taking its place for many purposes.

The wages and hours given in the Table under the heading of "preparation of structural iron and steel" relate to work in the shops, not to outside erectors, who are included in the building trades.

In the automobile and other machine shops the hours vary from 54 to 60 per week. There is a wide range in the rates of pay for machinists; no hard and fast line can be drawn between the skilled and the semi-skilled, and there is no recognised union rate. Time rates of wages are most usual, but some men in the hardware works are paid by piece. The earnings of the majority of skilled machinists fall within a range of 1s. 0½*d.* to 1s. 3*d.* per hour; almost unskilled men working at lathes and drill presses usually receive about 11¼*d.* per hour, though in some cases as low as 10*d.* per hour is paid. Iron-moulders on machinery work are paid by time, at the rate of 1s. 4¾*d.* per hour for nine hours per day.

Shipbuilding is entirely in the hands of one large firm, which employs between two and three thousand men in its yards at Cleveland and Lorain, those at Lorain being the larger.

The handling of iron ore and coal at the docks does not require a large number of men now that modern apparatus has been installed. The ore vessels are built to facilitate unloading by what are called clam-shell buckets, which are like mouths that are lowered open, and closed by electrical power when in contact with the ore. The consistency of the ore lends itself readily to this method of unloading. The bucket apparatus is worked by men who have only to watch and move switches, without doing any manual labour. They are paid at the rate of from 76s. 11*d.* to 101s. per week according to the size of the buckets operated. The buckets of the most modern apparatus hold five tons. A number of men have to be employed in the hold to shovel the ore out of places that cannot be reached by the buckets, but even the labour required for this work is being reduced by constructing the vessels with the widest possible hatches, and the fewest possible obstructions in the hold. These men are paid 1s. 2*d.* per hour, or 11s. 8*d.* for a full day's work of ten hours. The older method of emptying vessels is still in use to a certain extent. This method consists of filling large buckets by manual labour, and payment is on a piece rate basis. At this kind of work, a few men still earn about 2s. 1*d.* per hour. Coal is loaded into vessels with even less labour than is required for unloading ore. Men working machines which tip the trucks are paid from 67s. 4*d.* to 81s. 9*d.* per week. Such trimming as is necessary is done by the men employed on the vessel. The period during which the lakes are sufficiently free from ice for navigation lasts from the end of April to about December 10th, so that nearly five months of the year are lost. General merchandise is not handled very extensively by ships, but there is a certain amount of it. Men employed in transferring merchandise between railway cars, warehouses and docks are paid by the ton or the car load, and earn from 57s. 8*d.* to 67s. 4*d.* per week during the season. Labourers employed on railway work only, which goes on all the year round, earn 9¼*d.* per hour, working 60 hours per week. Labourers in the ore yards, who have a certain amount of work all the year round, are paid 11*d.* per hour.

The most important branch of the clothing industry in Cleveland is the manufacture of women's cloaks, coats and skirts. One large firm has recently erected a handsome and well-equipped factory, provided with the best appliances for ventilation and with various conveniences for the employees. There are in addition many smaller firms. Most of the male machine operators, or tailors, employ their own helpers, so that it is difficult to ascertain their net earnings. They are undoubtedly very good during the seasons of full activity. The months of May, June, July and December are those in which work is apt to be slack. In the remaining months the net earnings of machine operators, who are, in a way, small employers, are said to average about 83s. 4*d.* per week, and frequently much more. To a considerable extent the tailors and their women helpers work in the factories; there is not a great amount of home work. The earnings of competent women on piece work are about 41s. 8*d.* per week during the seasons of full-time work, but very skilful workers earn much more. Young women of 16 years of age and upwards engaged on the less skilled classes of work earn from 20s. 10*d.* to 33s. 4*d.* per week.

The meat packing and slaughtering trade is represented by one firm employing several hundred men, and by several smaller firms. There is nothing like the same degree of specialisation in the occupations incidental to the trade which is found in the great factories in Chicago, and no sharp line is drawn between unskilled and semi-skilled men.

Coming to the public services, city employees work eight hours per day, but those in the employment of private contractors generally have a ten-hour day. Motormen and conductors employed by the tramway company are paid from 11½*d.* to 1s. 0½*d.* per hour,

according to their length of service. The motormen, as a rule, remain in the service of the company a longer time than conductors, so that there are considerably more motormen than conductors earning the highest rate of pay; rather more than half the conductors receive the minimum rate. The majority of the men take one day off in two weeks, but they may take one day off each week. The tramway company and the electric lighting company have their own power houses, and the municipality has a small electric lighting station. These power houses are worked variably by eight-hour, nine-hour or twelve-hour shifts. Seven days' work per week is usual, but arrangements can be made for taking days off in the case of men employed on the longer shifts.

The following Table shows the predominant weekly wages and hours of labour in various industries in February, 1909, but in the case of piece workers the earnings are for the nearest period when full time was worked:—

Predominant Weekly Wages and Hours of Labour of Adult Males in the Principal Occupations in February, 1909.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. | |
|---|---------------------------|-------------------------------------|----------|
| <i>Building Trades:—</i> | | | |
| Bricklayers | 120s. | 48 | |
| Stonemasons | 100s. to 120s. | 48 | |
| Stonecutters | 91s. 8d. | 44 | |
| Carpenters | 80s. to 90s. | 48 | |
| Plasterers | 103s. 2d. | 44 | |
| Plumbers | 112s. 6d. | 48 | |
| Structural Iron Workers | 120s. | 48 | |
| Painters | 75s. | 48 | |
| Hod Carriers and Bricklayers' Labourers | 50s. | 48 | |
| Plasterers' Labourers | 55s. | 44 | |
| <i>Iron and Steel Puddling and Rolling:—</i> | | | |
| Puddlers { | Six day shifts | 75s. to 87s. 6d. | 60* |
| | Five night shifts... .. | 62s. 6d. ,, 72s. 11d. | 50* |
| Rollers | 150s. ,, 208s. 4d. | 48 to 72* | |
| Shearmen | 81s. 3d. ,, 104s. 2d. | 48 ,, 72* | |
| Labourers | 37s. 6d. ; 48s.† | 60 ; 72† | |
| <i>Foundries and Machine Shops:—</i> | | | |
| Ironmoulders | 75s. | 54 | |
| Machinists | 62s. 6d. to 75s. | 54 to 60 | |
| Blacksmiths | 70s. ,, 75s. | 54 ,, 60 | |
| Patternmakers | 85s. ,, 95s. | 54 ,, 60 | |
| Labourers | 37s. 6d. ,, 43s. 9d. | 60 | |
| <i>Preparation of Structural Iron and Steel:—</i> | | | |
| Layers-out | 51s. 7d. to 68s. 9d. | 55 | |
| Templatemakers | 68s. 9d. | 55 | |
| Shearmen | 57s. 4d. to 68s. 9d. | 55 | |
| Punchers | 43s. 7d. ,, 48s. 2d. | 55 | |
| Riveters... .. | 57s. 4d. ,, 63s. | 55 | |
| Labourers | 36s. 8d. ,, 40s. 1d. | 55 | |
| <i>Clothing Trades:—</i> | | | |
| Cloth Cutters | 66s. 8d. to 83s. 4d. | 54 | |
| Lining Cutters | 50s. ,, 66s. 8d. | 54 | |
| Pressers | 62s. 6d. ,, 66s. 8d. | 54 | |
| <i>Printing Trades:—</i> | | | |
| Newspaper— | | | |
| Compositors, Hand { | Day work | 96s. 11d. | 48 |
| | Night work | 109s. 5d. | 48 |
| Pressmen ... { | Day work | 85s. | 48 |
| | Night work | 99s. 2d. | 48 |
| Book and Job— | | | |
| Hand Compositors | 75s. to 87s. 6d. | 48 to 54 | |
| Pressmen { | Cylinder Presses | 75s. | 48 ,, 54 |
| | Small Presses | 66s. 8d. to 75s. | 48 ,, 54 |
| <i>Meat Packing:—</i> | | | |
| Cutters and Trimmers... .. | 62s. 6d. to 87s. 6d. | 60 | |
| Men in Sausage Department | 50s. ,, 68s. 9d. | 60 | |
| Drysalters and Picklers | 50s. ,, 62s. 6d. | 60 | |
| Men in other Departments | 50s. | 60 | |
| Labourers | 37s. 6d. to 43s. 9d. | 60 | |

* Including intervals.

† Shift workers—for 72 hours, including intervals.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|---|---------------------------|-------------------------------------|
| <i>Ore Unloading :—</i> | | |
| Bucket Operators | 76s. 11d. to 101s. | 60 |
| Shovellers | 70s. | 60 |
| Ore Yard Labourers | 55s. | 60 |
| <i>Coal Tipping :—</i> | | |
| Tip Operators | 67s. 4d. to 81s. 9d. | 60 |
| <i>Freight Handling :—</i> | | |
| Shipping Freight Handlers | 57s. 8d. to 67s. 4d. | 60 |
| Railway " " | 45s. 8d. | 60 |
| <i>Public Services :—</i> | | |
| Street Construction, Paving and Cleaning (Municipal)— | | |
| Paviors | 100s. | 48 |
| Paviors' Labourers | 62s. 6d. | 48 |
| Road Menders | 43s. 9d. | 48 |
| Scavengers | 43s. 9d. | 48 |
| Road Sweepers | 43s. 9d. | 48 |
| Water Works (Municipal)— | | |
| Labourers | 44s. | 48 |
| Gas Works (Company)— | | |
| Gas Stokers | 65s. 8d. to 72s. 11d. | 84 |
| Labourers | 37s. 6d. ,, 43s. 9d. | 60 |
| Electric Light and Power Works (Company)— | | |
| Oilers | 50s. 8d. to 59s. 1d. | 54 to 63 |
| Firemen and Stokers | 49s. 7d. ,, 58s. 4d. | 54 ,, 63 |
| Boilermen | 43s. 9d. ,, 51s. 1d. | 56 ,, 80½ |
| Switchboardmen | 67s. 4d. ,, 76s. 11d. | 63 |
| Overhead Linemen | 68s. 9d. ,, 87s. 6d. | 54 |
| Groundmen | 50s. | 54 |
| Labourers | 45s. | 54 |
| Electric Tramways—see text. | | |

Taking wages at New York as the base, = 100, in each case, the wages index numbers for Cleveland are—building trades, skilled men 96, hod carriers and bricklayers' labourers 73; foundries and machine shops, skilled men 86, unskilled labourers 97; printing, hand compositors (job work) 93.

HOUSING AND RENTS.

Although Cleveland is a large city of half a million inhabitants, the working classes, and a large proportion of the middle classes, live in frame buildings. The predominant types of working-class dwellings are detached houses generally occupied by either one or two families, but the poorer classes of immigrants are not infrequently found in dwellings containing three and four families, though seldom more than four. Many of the two and three-family dwellings occupied by this class of people are houses which were originally built for single families of larger means.

It is mainly owing to the fact that the industries at Cleveland are widely scattered that it is possible for so large a working-class population to live in detached dwellings. A few miles from the centre of the city, and within half an hour's ride on the street cars, building plots are commonly 30 feet wide. They vary very considerably in depth, however, and it is not uncommon to find two houses built on one plot, one behind the other. The external appearance of the houses shows little uniformity in most parts. One-storied and two-storied houses alternate, and hardly any two are identical in design. It is often difficult to tell from the outside whether a house has attic rooms or not, as it is quite a common thing to have a window under the gable but no finished bedrooms on the attic floor. Similarly many two-storied houses give the impression of having three habitable floors.

The most unpleasant feature of the frame houses, from the point of view of external appearance, is the coating of grime which a great many have acquired from the smoke of the workshops. In the districts sufficiently far removed from smoke, and inhabited principally by the better paid workers, the appearance of the houses is bright and clean. In these neighbourhoods the purchase of houses on the instalment system is common,

and, indeed, is almost the universal rule. Cleveland is noted, in fact, for the large proportion of home owners in the population. The Census of 1900 showed that 37·4 per cent. of the homes of Cleveland were owned by their occupiers.

The returns of the same Census also throw light on the proportion of families living in dwelling-houses occupied by one family, two families and three or more families, the percentages being 61·8, 25·1 and 13·1 respectively. These figures confirm the impression that the one-family house is the most important type amongst the working classes, but that two-family houses are also fairly numerous, and those containing three or four families, while not a negligible quantity, yet form a small minority.

The range of rents paid is very wide owing to the great differences between one house and another. The number of rooms varies from three to seven, and even more, and rents are further affected by such considerations as locality, age and state of repair. Frame houses which have been in existence a number of years deteriorate much more rapidly than brick houses, especially when they are not well built at the outset. The wood is apt to rot or warp, while the paper which is used to make the walls wind-proof cracks, and ceases to serve its purpose. A properly built frame house should be both sheathed and papered. The sheathing consists of boards placed diagonally on the outside of the wooden supports. Thick paper is put on the outside of the sheathing, and overlapping weather-boards cover the paper. On the inside of the supports are the laths, to which plaster is applied, as in brick houses. When the house is new, the air-space between the sheathing and the laths serves to prevent the rapid diffusion of heat through the walls, but when the paper has ceased to be airtight, the cold air in winter gets through, and only the plaster and internal wallpaper intervene between the rooms and the cold outside. Many, probably most, of the cheaper frame houses are not sheathed, and their paper, if they ever had any, has become useless. Other disadvantages of the older houses, as compared with the more modern types, are that the former are not cellared under the whole of the floor-space, as are the latter, while they are often blackened by smoke, or at any rate are seldom repainted. More important still, perhaps, in influencing the relative values of houses, are the character of the neighbourhood and the existence or non-existence of a bathroom and of a closet inside the house. The majority of the older houses have vault closets in the yards. These are now mostly connected with the sewers, excepting in the extreme outskirts of the town. It may be stated generally that houses in neighbourhoods where Eastern European immigrants are settling tend to depreciate in value.

Tenements of three and four rooms are occupied mainly by the poorer immigrants, and consist of portions of houses containing three and four families. The five-roomed type of dwelling shows the widest range of rents, as it includes some of the poorer as well as some of the better class houses. The majority come within a range of 9s. 7d. to 14s. 5d. per week, but there are a good many below 9s. 7d. and over 14s. 5d. There are not many quite modern six-roomed houses. The tendency in recent years has been to build two-storied houses containing seven rooms, and usually a bathroom in addition.

The size of the principal living rooms varies considerably, but is usually greater than in brick houses of the same class in England. On the other hand, passages by which the different rooms may be reached without passing through other rooms are very rare. The typical house, or half-house, with five or six rooms all on one floor, has a kitchen and parlour communicating, with bedrooms opening off them. It is quite a common thing to find two rooms used as parlours in houses with five, six or seven rooms.

Some idea of the accommodation of typical houses and half-houses may be gathered from the following details regarding dwellings visited in the course of the investigation:—

1. Brick terrace, old, two stories, occupied by immigrants from Carniola, one family on each floor. Lower floor—two rooms, each 12 feet by 13 feet, but no scullery, rent 3s. 10d. per week. Upper floor similar, rent 3s. 4d. per week.

2. Rear house, frame, containing four rooms and summer kitchen, kitchen 13 feet square, parlour 13 feet by 14 feet, bedrooms above. Occupied by Irish family, rent 9s. 7d. per week.

3. Two-family house, frame, containing six rooms and bathroom on each floor; rooms on lower floor measuring 13 feet by 15 feet, 13 feet square, 10 feet by 8 feet, 15 feet by 12 feet, and 16 feet by 12 feet, with small bedroom of irregular shape and bathroom 8 feet square. Front door led direct into parlour, and back door into kitchen. Rent of lower floor 16s. 4d. per week and of upper floor 14s. 5d. per week. Occupied by American families.

4. One-family frame house of one story, containing five rooms, kitchen 14 feet by 16 feet, parlour 16 feet square, bedrooms 6 feet by 8 feet and 8 feet by 10 feet, front room 12 feet square, not used. Bedrooms opened off front room and parlour. Rent 11s. 6d. per week.

5. Two-family frame house, containing five rooms on each floor. Lower floor—kitchen 14 feet by 13 feet, pantry 7 feet by 3 feet, parlour 15 feet by 10 feet, bedroom 8 feet by 10 feet, front room 15 feet by 10 feet and bedroom 12 feet by 8 feet. Occupied by English family (a brassfinisher's). Rent of lower floor 12s. 6d. per week, and of upper floor 11s. 6d. per week.

6. One-family frame house of one story with five rooms; parlour 14 feet by 11 feet, bedroom 10 feet by 8 feet, dining room 14 feet by 11 feet, bedroom 10 feet by 8 feet, kitchen 13 feet by 10 feet. Size of plot 33 feet by 100 feet; rent 13s. 6d. per week.

7. One-family frame houses of one story, with six rooms and no bathrooms; kitchen 14 feet by 8 feet, dining room 13 feet by 11 feet, parlour 15 feet by 11 feet, bedrooms 15 feet by 8 feet, 10 feet by 8 feet and 13 feet by 12 feet. Size of plot 30 feet by 90 feet; width of house 20 feet. Cellar under dining room and kitchen. Mainly owned by occupiers, many of whom were Germans; would rent for 15s. 5d. to 16s. 4d. per week.

An important type of house which deserves more extended description is the modern seven-roomed house which is built for purchase by instalments and is occupied mainly by skilled mechanics, building trade operatives, railway engine drivers, &c. This type of house is commonly about 24 feet square or 24 feet by 26 feet. It has two stories and an attic and is rectangular, without projecting outbuildings. The ground floor is divided into four rooms of nearly equal size, viz., about 11 feet by 12 feet, one of them curtailed so as to provide for the staircase. There is no hall. The front door opens into one of the rooms, through which the others are reached, not by doors, but through openings over which curtains are occasionally hung. On the floor above are three bedrooms and a bathroom, the bedrooms being of the same size as the rooms below. The attic is left unplastered when the house is built and hence does not constitute a living room, but after a house has been sold, the purchaser often finishes off this apartment and makes out of it one or perhaps two bedrooms.

The house throughout is heated by a furnace fixed in the basement which underlies the entire building. Beyond providing room for the furnace and for coals, the basement is not much used, for it is too warm to make a good storage room, unless partitioned. Some owners have partitions, but they do not seem to be general. It is only these modern houses which have furnaces in the basement. Ordinarily there is a cellar which is used for the storage of coal and wood. In most of the houses and half houses consisting of six rooms or less, heat is provided by stoves in the rooms. In a house or flat consisting of six rooms there may be as many as three stoves in use. The kitchen often has a stove for heating, and in addition a gas range for cooking. Where stoves and gas ranges are used together the coal and gas bills often amount to 4s. 2d. and sometimes to 6s. 3d. per week in the winter months. Natural gas is used by many persons for both heating and lighting. It is said to be economical when the weather is not cold enough to require furnaces to be kept going continually, while a gas furnace can be regulated with greater ease than a coal furnace. For continuous heating, however, it is a matter of dispute whether there is any economy in the use of gas.

The following Table shows the predominant weekly rents of working-class dwellings in Cleveland:—

Predominant Rents of Working-class Dwellings.

| Number of Rooms per Dwelling. | | | | Predominant Weekly Rents. |
|-------------------------------|-----|-------------|-----|---------------------------|
| Three rooms | ... | ... | ... | 5s. 9d. to 7s. 8d. |
| Four rooms | ... | ... | ... | 7s. 8d. ,, 9s. 7d. |
| Five rooms... | ... | ... | ... | 9s. 7d. ,, 14s. 5d. |
| Six rooms ... | ... | ... | ... | 14s. 5d. ,, 15s. 5d. |
| Seven rooms | { | Older types | ... | 14s. 5d. ,, 17s. 4d. |
| | | Modern type | ... | 17s. 4d. ,, 24s. |

The level of rents at New York being represented by 100, the rents index number for Cleveland is 64.

RETAIL PRICES.

There are several markets in which a large number of the working people and many middle-class families buy their vegetables, and, to a considerable extent, their meat. A few "multiple" firms in the grocery trade have shops in Cleveland, but the greater part of the retail trade in both meat and groceries is in the hands of shopkeepers who, in most cases, have only one establishment. The Bohemians, as a rule, are economical, and the diet of the poorer families amongst them differs perceptibly from that of the majority of Americans. They consume less meat, cakes and biscuits, among their staple articles of consumption being flour (wheaten and rye), rye bread, potatoes, maize and maize meal and onions. Municipal regulations relating to the inspection and sale of food in Cleveland are given in the Appendix on pp. 471-8 of this Report.

Groceries and other Commodities.

Tea is not consumed to anything like the same extent as in England, but a great many families use a certain amount. The popular price is 2s. 1d. per lb., but a price of 2s. 6d. is not uncommon.

Wheaten *bread* is sold principally in loaves costing 2½d. and weighing about 14 oz. ; to a considerable extent, however, families purchase flour and do their own baking. Rye bread is sold in loaves of varying sizes ; a loaf costing 3½d. was found to weigh 20½ oz., one costing 5d. weighed 2 lb. and a quartern loaf could be bought for 8d. This bread is bought by Germans, Jews, Poles and Bohemians, and the last-mentioned also sometimes buy rye flour, but as a rule those who consume rye bread buy it in loaves from the bakers.

Macaroni is bought principally by Italians, at from 2½d. to 4d. per lb. Italians also buy considerable quantities of lard, and often use no butter ; at the time of the investigation the popular qualities of lard cost 7½d. to 8½d. per lb.

The State of Ohio prohibits the sale of oleomargarine in the same shops with butter, and little is sold. The poorer Bohemians, however, not infrequently purchase it.

Milk is required to be sold in bottles, and usually cost 4¼d. to 4¾d. per quart, though a few dealers sold at 3½d.

Coal is mostly sold by the ton of 2,000 lb. Both anthracite and bituminous coal is burned, but most working-class families use only bituminous coal, the popular qualities of which cost 15s. 7½d. per ton of 2,000 lb., though there is also a considerable trade in better qualities at 16s. 8d. and 17s. 8½d. per ton of 2,000 lb. Coal is burned very freely in winter, and partly for this reason and partly because the popular qualities of bituminous coal used in Cleveland are of rather low grade, the quantity consumed by wage-earning families is large. A ton per month is a not uncommon rate of consumption, and, as has been stated, the bill for coal and gas together is frequently from 4s. 2d. to 6s. 3d. per week.

The following Table shows the predominant prices of various commodities of common use in February, 1909 :—

Predominant Prices Paid by the Working Classes in February, 1909.

| Commodity. | Predominant Price. |
|------------------------------------|--------------------|
| Tea per lb. | 2s. 1d. |
| Coffee " | 10d. to 1s. 0½d. |
| Sugar :— | |
| White Granulated " | 2¾d., 3d. |
| Brown " | 2½d. |
| Bacon, Breakfast—Boneless " | 8d. to 9d. |
| Eggs per 1s. | 10 |
| Cheese, American per lb. | 9d. to 10d. |
| Butter... .. " | 1s. 6d. , 1s. 7d. |
| Potatoes, Irish... .. per 7 lb. | 7d. |
| Flour, Wheaten—Household " | 11½d. |
| Bread, White per 4 lb. | 11½d. |
| Milk per quart | 4¼d. to 4¾d. |
| Coal, Bituminous per cwt. | 10½d. , 1s.* |
| Kerosene per gallon | 6d. |

* By the ton of 2,000 lb.

Meat.

A large proportion of the meat consumed in Cleveland is slaughtered locally. Prices have rather a wide range, as might be expected in a large city with a considerable foreign population engaged in heavy manual labour. The immigrant workpeople are not as a rule particular about the quality of the meat they consume, and there is a good demand for the cheapest kinds. At the same time American working men of the higher grades create a large demand for meat of fairly good quality.

Beef is more largely consumed than any other kind of meat, and pork, though next in popular favour, is much less eaten. Italians and Jews are rather fond of veal. The Italians eat little pork and mutton is very little consumed by any section of the community.

The following were the predominant prices paid by the working classes in February, 1909, for various cuts of meat :—

Predominant Prices paid by the Working Classes in February, 1909.

| Description of Cut. | Predominant Price per lb. |
|-------------------------------------|---------------------------|
| Beef :— | |
| Roasts—Round | 6d. to 7d. |
| " Ribs prime | 6d. ,, 8d. |
| " Ribs second cut | 6d. ,, 7d. |
| " Chuck or short ribs | 6d. |
| Steaks—Round | 6d. to 8d. |
| " Sirloin | 7d. ,, 10d. |
| Shin without bone | 4½d. ,, 5½d. |
| Flank | 4d. ,, 5d. |
| Plate, Brisket { Fresh | 3½d. ,, 4d. |
| { Salt or corned | 3½d. ,, 4d. |
| Mutton or Lamb :— | |
| Leg | 6d. to 9d. |
| Breast | 4d. |
| Loin | 7d. to 9d. |
| Chops | 8d. ,, 9d. |
| Shoulder | 6d. ,, 7d. |
| Neck | 4d. ,, 5d. |
| Veal :— | |
| Cutlets | 11d. |
| Rib chops | 8d. |
| Loin chops | 8d. to 9d. |
| Breast | 5d. ,, 8d. |
| Neck | 5d. ,, 6½d. |
| Pork :— | |
| Fresh—Loin | 8d. |
| " Spare rib | 5d. to 6½d. |
| " Shoulder | 6½d. ,, 7d. |
| " Chops | 8d. ,, 8½d. |
| Corned (wet salt or pickled) | 8d. |
| Dry salt | 8d. |
| Ham | 7d. to 8d. |
| Shoulder, salt or smoked | 6d. ,, 7d. |

Prices at New York being taken as the base, =100, in each case, the index number for the price of meat at Cleveland is 93, for other food it is 101 and for food prices as a whole 99. For rents and food prices combined the index number is 90.

DETROIT.

The city of Detroit, in the State of Michigan, is situated between Lakes Eric and St. Clair, on the western bank of the river Detroit, which joins them, and which forms a connecting link in the magnificent waterway system of the Great Lakes and the river St. Lawrence. On the eastern bank of the river opposite Detroit stands the small Canadian town of Windsor, which depends almost entirely for its existence upon the industrial activities of its neighbour. Formerly, Detroit was a centre of the lumber and grain trades and of the smelting industry, but when these were transferred to other parts of the country it turned its energies to manufacturing with great success, becoming the principal centre in the United States for the manufacture of stoves and motor cars. Admirable transport facilities by water and rail have largely contributed to the rapid expansion of the local industries, several large railway systems connecting the city with all parts of the country and with Canada. Iron and copper ore comes by way of the Great Lakes in huge steamers from the northern part of the State on Lake Superior, which possesses great mineral resources, whilst up Lake Erie is borne much of the coal required for local industries.

In addition to these natural advantages, vigorous enterprise and the adoption of the latest methods of manufacture have raised Detroit to a leading place amongst the industrial cities of the United States. The stoves for which Detroit is famous are mainly for household use and show a high degree of artistic design and finish, the ornamental parts being nickel plated and polished. During 1908 Detroit factories turned out 18,250 automobiles, this number being within 3,000 of the total for the whole of the United States in 1905, and in the course of 1909 this output was largely increased. These cars range in price from the £150 "run-about" to cars costing from £800 to £1,000. Adding machines are also manufactured in large quantities, being in great demand for banks and offices generally. Two companies are engaged in building large lake steamers, the hulls of which are constructed in yards several miles distant, whilst the machinery and internal fittings are made in the city. During 1908, out of a total of 26 lake freighters launched with a total tonnage of 213,000, eleven with a tonnage of 93,000 were built by the two Detroit companies. Copper and brass rolling and the manufacture of steel tubes, freight cars, steam radiators, structural iron work and general machinery are also important industries. The largest factory in the world for the production of drugs is situated in Detroit and employs over 2,000 persons, whilst the manufacture of carbonate of soda and various by-products is a prominent industry, finding employment for nearly 2,000 men. Numerous factories are engaged in the production of tobacco and cigars, clothing and boots and shoes, but these industries are of minor importance compared with the foregoing.

The history of the city dates back to 1710, the period of the French occupation. Since 1870 its growth has been remarkable, as is shown by the following Table:—

| Year. | Population. | Increase. | Percentage Increase. |
|-------|-------------|-----------|----------------------|
| 1870 | 79,577 | — | — |
| 1880 | 116,340 | 36,763 | 46·2 |
| 1890 | 205,876 | 89,536 | 77·0 |
| 1900 | 285,704 | 79,828 | 38·8 |
| 1910 | 465,766 | 180,062 | 63·0 |

The area of the city in 1900 was 29 square miles, but in 1906 about 12½ square miles were added, the increase of population from this cause being over 20,000. A further, but smaller, extension of the municipal boundaries took place in 1908.

The rapid growth of the city is illustrated by the composition of the population, which, according to the Federal Census of 1900, comprised 65·0 per cent. of American-born whites and 33·6 per cent. of foreign-born whites, while persons of negro descent amounted to only 1·4 per cent. of the whole. Of the American-born whites, two-thirds were of the first generation, that is, had one or both parents who were foreign-born; the Census figures being for American-born whites of American-born parents 21·5 per cent. of the total population, and for American-born whites of foreign-born parents 43·5 per cent. Of the foreign-born population of Detroit, 33·2 per cent. were born in Germany, 30·0 per cent. in

Canada, 14·1 per cent. in Poland, 6·7 per cent. in Ireland and 9·3 per cent. in Great Britain. The large percentage of Canadian-born persons is explained by the fact that Detroit is one of the natural gateways from Canada into the United States. Mutual trade relations between the two countries naturally account for the presence of a large number of Canadians, as does the fact that many young Canadians seeking their fortunes in the States come first to Detroit, moving later to Chicago and other Western cities as opportunities occur.

Among foreigners the percentage of German-born persons exceeds that of any other nationality, for Detroit, like Chicago, Cincinnati, Milwaukee and other cities of the Middle West, experienced a great wave of German immigration in the 'seventies. Of late years the immigration from Germany, excluding German Poles, has been comparatively unimportant, and the great bulk of this portion of the community has become Americanised to such a degree that purely German institutions, such as churches, schools, press, &c., do not appear to flourish.

The case is very different with the Poles who, though not so numerous as the Germans, are far more noticeable, as they yield much more slowly to American habits of life and speech, and live in two compact colonies in the eastern and western districts of the city, where Polish is the language of ordinary intercourse, of school instruction and of church service. Many handsome churches and large schools testify to their devotion to the national faith and language, for these institutions are entirely supported by their offerings. That the Poles make good citizens is generally acknowledged in Detroit, and though coming from agricultural districts in Germany their native intelligence and adaptability have enabled them to rise in considerable numbers from the ranks of unskilled labour, while employers speak in terms of praise of their industry and powers of endurance. Thrift is also a marked characteristic of these people, as is manifested by their eagerness to purchase their homes, to which end the earnings of sons and daughters are devoted. The rapid growth of many of the industries of Detroit has afforded abundant opportunities for comparatively well paid female labour in factories and offices, and has been an important factor in facilitating the purchase of homes. In business and in various professions the younger generation of Poles is largely represented, whilst the Polish community generally is by degrees approximating to American standards of living, the children almost without exception being observed to be well clothed and apparently well fed. Later Polish immigrants have thus found themselves from the outset under powerful progressive influences within their own community, and to these they have not been slow to respond.

During recent years some thousands of Hungarians and Italians have come to Detroit, the former finding employment as labourers in the chemical works and iron foundries, whilst the latter are engaged as navvies in excavating work. The Italians as yet show no progressive tendencies, but the Hungarians, though inferior to the Poles in this respect, are considerably in advance of the Italians as regards their general standard of home comfort, and many of them are purchasing their homes.

Detroit is considered to be one of the best examples of the modern American city. It is laid out in broad straight streets and avenues, lined as a rule with trees on both sides. Most of the main avenues run from the large square in front of the City Hall, which forms the hub of the city plan, the principal one, Woodward Avenue, being in the centre. A handsome boulevard, from 150 to 200 feet wide, and nearly 12 miles long, encircles a large portion of the city, beginning and ending on the bank of the river. The principal avenues are paved with asphalt and the remainder with stone setts. Many of the streets are paved with circular creosoted wood blocks. Macadam is not largely in use and a considerable number of streets have not yet been made. For the purpose of lighting up passages between streets and buildings, open iron work towers from 100 to 175 feet high have been erected, and are held in position by guy ropes. At the tops of these towers from four to six powerful electric lamps illuminate a large area, and in the centre of the city they serve not only to supplement the light of the ordinary street electric lamps but also to secure a more equal distribution of light. For various reasons, however, the authorities have not found these towers satisfactory, and they have decided not to erect any more.

The principal public buildings and business blocks are situated near the centre of the city. The two largest and most handsome public buildings are the Post Office and the County Government Offices, both of stone. Round the large central square rise lofty buildings of varied and pleasing exterior, including the City Hall, blocks of offices and a new and handsome hotel, while the centre is occupied

by a large fountain. Several steel-frame buildings of the "sky-scraper" kind, varying from 12 to 20 stories in height, have been erected in recent years. The newest and highest of these, the Ford Building and the Majestic Building, occupied by offices, are faced with white glazed brick and form the most conspicuous objects in the city. Many handsome stone churches and residences of the wealthy inhabitants are situated on the principal avenues. In the better class residential districts modern steam-heated flats in brick buildings are becoming a prominent feature; elsewhere, however, frame houses, with more or less ornamental verandahs, and with open grass plots in front, are universally met with.

The factories and industrial works are mainly situated in the outlying parts of the city, and several of the newest occupy sites on the city boulevard, broad grass plots separating them from the side walk. Considering the large number of factories and works situated within the city or adjacent to it, the air of Detroit is remarkably free from smoke. This fact is due to the vigilance of the city smoke inspector and to the adoption by a large number of firms of mechanical stokers and of various smoke-preventing devices. During 1909 the number of convictions obtained against residents and firms for violations of the smoke ordinance was 31, and of these 19 were suspended on account of the abatement of the nuisance. Efforts are being made to deal with the owners of steamers passing up and down the river, these at present being the principal offenders in this respect.

Detroit is well furnished with parks and open spaces, covering a total area of about 913 acres. The largest of these, Belle Isle Park, having an area of 707 acres, and situated on an island of the same name in the river, is a favourite resort on Sundays and holidays. The Water Works Park, covering 70 acres, is a picturesque pleasure ground, containing artificial lakes in addition to reservoirs with a total capacity of 33 million gallons; there are also numerous pleasure resorts within easy reach of the city by steamer.

The advantages enjoyed by Detroit of healthy location in the vicinity of large lakes, of a dry sandy soil, of generally favourable housing and sanitary conditions, and of a large proportion of young, sturdy immigrants in the population, all contribute to keep the death-rate of the city at a comparatively low figure. The number of deaths which occurred during the five years July, 1903 to June, 1908, was as follows:—

| Year. | | | | | | Number of deaths. |
|--------|-----|-----|-----|-----|-----|-------------------|
| 1903-4 | ... | ... | ... | ... | ... | 4,799 |
| 1904-5 | ... | ... | ... | ... | ... | 4,730 |
| 1905-6 | ... | ... | ... | ... | ... | 5,178 |
| 1906-7 | ... | ... | ... | ... | ... | 6,214 |
| 1907-8 | ... | ... | ... | ... | ... | 5,930 |

Compulsory registration of births was not enforced prior to 1906. In the year 1906-7, the number of births reported was 8,704, and in the following year it was 9,496. Deaths of infants under one year old numbered 1,222 in the year 1906-7, and 1,201 in the year 1907-8.

A public clinic and also a hospital have been established for the treatment of cases of consumption. In the clinic patients are examined and receive medical advice, and, where unable to purchase sufficient nourishment, they are also provided free with eggs and milk. During the year 1909, 3,450 dozen eggs and 10,415 quarts of milk were distributed in this way. Facilities for the open air treatment of consumptives have also been provided by the erection of 12 tents and cottages. At present the full extent to which tuberculosis prevails is not known, but the State Legislature during the winter session of 1909 passed a law which requires that in future all cases of tuberculosis shall be reported to the local Boards of Health.

Medical inspection of children attending schools is also carried out by the Health Department, and in this work 27 doctors and two nurses are engaged. During 1909, 50,501 children were examined, and of these 3,499 were excluded from school. Hitherto the examination for physical defects has been confined to cases referred to the doctors by teachers and principals, but a special examination of 300 children in one school showed that nearly 70 per cent. were suffering from one or more physical defects, and as a consequence of this discovery the Health Department has decided upon carrying out, during 1910, a complete physical examination of every child entering school, and the keeping of records on the card system. The nurses of the Health Department visit the homes of all children excluded from school on account of contagious diseases, for the purpose of advising the parents as to the proper treatment and, where necessary, of persuading them to secure medical attention.

The municipal enterprises include street construction, paving and cleaning and the water works. The gas works, electric light and power works and tramways belong to private companies. The price of gas is 3s. 4d. per 1,000 cubic feet. Electric cars connect all parts of the city and also numerous outlying townships. Interurban traffic is served by a system of fast cars. City fares are uniformly 2½d. for any distance, and in most cases a transfer from one line to another can be claimed for this fare. Workmen's tickets are issued at the rate of eight for 1s. 0½d., and are available between the hours of 5.30 and 7 a.m., and 4.45 and 5.45 p.m., one fare serving for a maximum distance of 12 miles.

The work of street construction, paving and cleaning is managed by a salaried commissioner appointed by the mayor for a period of four years. The electric light and power works and the water service are each managed by a board of honorary commissioners nominated by the mayor, and approved by the City Council. It is claimed for this system that it admits of these undertakings being controlled by business men with special knowledge of various departments of the work, and with special interest in their economical management, who would not consent to take part in election contests and to assume responsibility for the general work of the City Council. Moreover, it is held that men of exceptional ability and good local standing are by this means more likely to be secured for continuous service than would be the case if they had to run the risk of municipal elections.

Detroit is well supplied with schools for elementary and higher education. Attendance is compulsory in the case of elementary schools, and is enforced by a staff of "Truant Officers." The children of Roman Catholic parents as a rule attend their own parochial schools, which are maintained entirely by church dues. Six manual training centres and six high schools are maintained by the Board of Education, the curriculum in the high school including sciences, mathematics and ancient and modern languages. Evening schools have also been established where mechanical drawing and mathematical calculations, useful in various trades, as well as subjects usually found in commercial courses, are taught. Classes have also been formed for students who desire to prepare for Civil Service examinations. Many free public libraries are maintained by the city.

OCCUPATIONS, WAGES AND HOURS OF LABOUR.

The industry which gives employment to the largest number of men in Detroit is the manufacture of motor cars and their accessories. This industry is mainly in the hands of a few large firms. The work is highly specialised, and the latest and most costly machinery is used for the duplication of the various parts of the mechanism of the cars. The extent to which machinery is utilised makes it unnecessary to employ more than a relatively small proportion of skilled mechanics, who superintend the more complicated and costly machines. The buildings are of recent construction, well lighted and heated, and work generally is conducted under healthy conditions and with no small degree of personal comfort. Clean, well-kept washing rooms, cloak rooms and storage places for bicycles are provided for the employees.

Another highly specialised industry, in which conditions similar to the above prevail, is the manufacture of adding machines, carried on in one large factory employing over 1,000 men. Baths are provided for the workpeople, meals are served at cost price in lunch rooms on the premises, and a large hall on the top floor is set apart for social entertainments.

The manufacture of stoves comes next in importance to that of automobiles and is carried on principally in four large works. Being an older industry, the buildings and general conditions of work do not reach the same modern standards as those prevailing in the manufacture of motor cars.

Copper and brass rolling is carried on by two firms employing together over 900 men, three-fourths of whom are unskilled workers. The manufacture of steel tubes, radiators, structural iron work and general machinery completes the list of the metal working industries.

Chemical manufacture is the only remaining industry of considerable importance as far as the number of men engaged in it is concerned, the total being nearly 5,000, and is mainly confined to the making of carbonate of soda along with various by-products and of drugs. This industry is largely carried on by two large works, in one of which, the drug factory, considerable interest is taken in the social welfare of the employees,

provision being made for the supply of free coffee, tea and milk, and for social entertainments, while financial support is also given by the firm to its own baseball and bowling clubs.

The following Table shows the distribution of the workers of Detroit by industry, age and sex according to the factory inspector's report for 1908 :—

| Industries. | Males. | Females. | Total. | Children under 16 years included in Total. |
|--|--------|----------|--------|--|
| Automobiles, Carriages and Wagons | 9,766 | 272 | 10,038 | 77 |
| Stoves | 3,606 | 89 | 3,695 | 91 |
| Other Metal, Engineering and Shipbuilding | 16,185 | 1,296 | 17,481 | 475 |
| Clothing and Boots and Shoes | 2,280 | 6,189 | 8,469 | 368 |
| Woodworking and Furnishing | 4,703 | 468 | 5,171 | 303 |
| Paper and Printing | 2,795 | 928 | 3,723 | 137 |
| Chemicals | 4,919 | 1,943 | 6,862 | 103 |
| Tobacco | 973 | 4,652 | 5,625 | 340 |
| Food and Drink | 3,900 | 1,047 | 4,947 | 96 |
| Other | 7,360 | 2,322 | 9,682 | 354 |
| Total | 56,487 | 19,206 | 75,693 | 2,344 |

The factory legislation of the State of Michigan regulates to some extent the conditions and hours of labour in the case of males under 18 years of age and of females, also the sanitary condition of factories and workshops, hotels, shops and public buildings. The law limits the number of working hours to 60 per week for the above two classes (except that the law does not apply to shops employing not more than ten persons) and prohibits the employment of females other than members of the family as barmaids, or in dancing or furnishing music for hire in saloons or bar rooms. Children are not allowed to work under the age of 14 years, and the employment of illiterates under the age of 16 years is also forbidden. School attendance is compulsory up to the age of 16 years, but children who have received an eighth grade diploma from the public school, or whose work is necessary for the support of their parents, may be employed on attaining the age of 14 years, provided they have obtained the permission of the school authorities.

The provisions relating to factories and workshops require the removal of dust from the atmosphere and the provision of washing and dressing rooms. The minimum time allowed for the mid-day meal is 45 minutes.

It is also provided that no room or apartment in any tenement or dwelling house may be used for the manufacture of clothing, artificial flowers, cigarettes or cigars without a permit from the factory inspector, who must be satisfied on inspection of the premises that not less than 250 cubic feet of air space is allowed for each person employed, and that proper provision is made for light, heating and ventilation. All firms which put out to contract the above classes of work must keep a register of the names and addresses of all such persons to whom the work is so put out on contract, and this register must be produced on the demand of the factory inspector or his deputy. If it be discovered that garments which have been made under such conditions that they are a danger to public health are imported into the State the authorities may take such action as is deemed necessary for the protection of the public. Local health officers are required to notify the factory inspectors of cases of contagious or infectious diseases found in the above premises. Infringements of the law are punishable by fine or imprisonment, or both, at the discretion of the court.

The administration of the factory laws devolves upon the State Commissioner of Labour and a staff of factory inspectors, including women. The report of visits paid during 1908 to 176 establishments employing females in Detroit states that all were found satisfactory as regards conditions of safety, light, heating and ventilation, and all except four as regards sanitation. The number of females employed in these 176 establishments was 13,527 and the average daily wage paid was 5s.

Several industries at Detroit afford opportunity for the employment of a large number of women and girls, notably cigarmaking, which is largely in their hands, men acting mainly as overseers. Over 4,000 females are employed in local factories. In one

of the largest of these a dining room is provided for the use of the employees and a musician paid to play the piano during meal times. Food is furnished at nominal charges, and excellent facilities for washing and dressing exist. The manufacture of clothing and overalls employs over 1,500 women and girls, most of whom belong to the local branch of the Garment Workers' Union, which has secured union conditions of labour, while employers in return have the right to affix the union label to every garment made in the factory.

The manufacture of boots and shoes and of drugs also occupies a considerable amount of female labour, the number of females employed in the largest drug factory being about 1,000. The remainder of the women and girls engaged in industry are found in laundries and other miscellaneous establishments, whilst the better educated are engaged in office work as typewriters, bookkeepers, &c.

The hours of labour in general vary from 48 to 60 weekly according to the industry. In the building trades the rule is an eight-hour day, or 48 hours per week, except in the case of labourers and some of the structural iron workers, who work 60 hours. In the printing trades the hours range from 42 to 48 weekly. In the metalworking and engineering industries hours vary from 54 to 60 per week and the Saturday half-holiday is not generally observed. A large chemical firm made an important change in the hours for process men in 1903. The system of working twelve-hour shifts night and day was altered to one of three shifts of eight hours each without any reduction in the wage paid for the shift. During the six years in which this eight-hour shift has been in operation it has been found that the output per shift has not decreased and that the men work more regularly than was the case under the old system.

The holidays observed are New Year's Day, Decoration Day (May 30), Independence Day (July 4), Labour Day (first Monday in September), Thanksgiving Day (November) and Christmas Day. Wages are not paid for these days.

Most of the branches of the building, engineering and printing trades have local unions, and with few exceptions these are affiliated to the American Federation of Labour. The unions, however, with the exception of those of the compositors, stove polishers and garment workers, have not succeeded in forcing conditions of labour on employers, with the result that the "open shop" is the rule in Detroit and uniform rates of wages are rare. The union of metal polishers, buffers and platers has effected an agreement, which is renewed annually, with all the local firms in the stove industry. A Conciliation Committee exists on which both sides are represented. Disputes are submitted to a committee of two, one representing the employers and the other the union, and pending the decision of this committee no workmen may be discharged or may leave work. The union limits the piece earnings of members to 16s. 8d. per day and any member whose earnings exceed that amount is fined £5 4s. 2d. by the union for each offence, the object of this rule being to prevent any reduction of the piece rate.

Time rates prevail exclusively in the building trades and are the rule in the foundries and machine shops except in the case of moulders, who are in many cases paid by the piece. In the stove industry piece rates are common, especially for moulders, polishers and mounters, the latter being the men who put together the various parts of the stove. In the shipbuilding industry piece rates are common for occupations connected with hull construction excepting that of the angle-iron smiths. Time rates generally prevail in the motor car factories and in the copper and brass rolling mills, where, however, the casters are paid only by the piece. In the chemical industry time rates only are paid. In the printing trades time rates are general, except in the case of machine compositors in newspaper offices, who work on time and on piece rates according as circumstances require. The lower limits of the range of wages stated for these men in the Table on p. 179 are the minimum rates of wages required by the men's union for 42 hours' work.

Workmen of American and German descent form the bulk of those engaged in skilled occupations. A considerable amount of unskilled labour is performed by the Poles, but a large number of them are engaged in semi-skilled occupations and they also form a large proportion of the moulders and metal polishers. Hungarians, Belgians, and Italians belong to the more recent section of the immigrants and are almost without exception unskilled labourers, the Hungarians and Belgians being largely employed in the chemical works and foundries, whilst the Italians are engaged in excavation work of various kinds.

The following Table shows the predominant wages and hours of labour in the principal industries in February, 1909 :—

Predominant Weekly Wages and Hours of Labour of Adult Males in the Principal Occupations in February, 1909.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|--|--|-------------------------------------|
| <i>Building Trades :—</i> | | |
| Bricklayers | 100s. to 110s. | 48 |
| Stonemasons and Stonecutters | 100s. | 48 |
| Carpenters | 60s. to 70s. | 48 |
| Plasterers | 100s. | 48 |
| Plumbers | 81s. 3d. to 93s. 9d. | 48 |
| Structural Iron Workers | 62s. 6d. ,, 75s. | 48 and 60 |
| Painters | 60s. ,, 70s. | 48 |
| Hod Carriers and Bricklayers' Labourers | 37s. 6d. ,, 50s. | 60 |
| <i>Foundries and Machine Shops :—</i> | | |
| Ironmoulders | 68s. 9d.*; 75s.† | 60 |
| Machinists | 63s. to 68s. 9d. | 54 to 60 |
| Blacksmiths | 63s. ,, 66s. 3d. | 54 ,, 60 |
| Patternmakers | 68s. 9d. ,, 87s. 6d. | 54 ,, 60 |
| Labourers | 40s. ,, 45s. | 54 ,, 60 |
| <i>Motor Car Shops :—</i> | | |
| Ironmoulders | 75s.*; 104s. 2d.† | 60 |
| Other Skilled Men— <i>see text.</i> | | |
| Machine Operators and Semi-skilled Assemblers | 48s. 4d. to 54s. 5d. | 54 to 60 |
| Labourers | 36s. ,, 43s. 9d. | 54 ,, 60 |
| <i>Shipbuilding and Boilermaking :—</i> | | |
| Ironmoulders | 88s. 9d.*; 92s. 9d.† | 59 |
| Machinists | 72s. 4d. to 78s. 9d. | 59 |
| Blacksmiths | 73s. 9d. ,, 81s. 3d. | 59 |
| Patternmakers | 86s. 3d. | 59 |
| Labourers | 41s. 8d. to 46s. 8d. | 59 |
| Angle-iron Smiths—Shipbuilding | 75s. | 60 |
| Platers, Heavy— | | |
| Boilermaking | 81s. 2d. | 59 |
| Shipbuilding | { 68s. 9d.*; } { 100s. to 104s. 2d.† } | 60 |
| Platers, Light— | | |
| Boilermaking | 77s. 6d. | 59 |
| Shipbuilding | 62s. 6d. | 60 |
| Rivetters—Shipbuilding | 83s. 4d. | 60 |
| Caulkers | 68s. 9d. | 60 |
| Holder-up | 66s. 8d. | 60 |
| Labourers | 40s. to 50s. | 60 |
| <i>Manufacture of Stoves :—</i> | | |
| Ironmoulders | { 78s. 2d. to 93s. 9d.*; } { 87s. 6d. ,, 100s.† } | 60 |
| Machinists | 62s. 6d. ,, 75s. | 60 |
| Mounters | 100s. ,, 116s. 3d. | 60 |
| Blacksmiths | 68s. 9d. | 60 |
| Patternmakers | 75s. to 87s. 6d. | 60 |
| Polishers | 100s. | 48 to 60 |
| Buffers | 62s. 6d. to 68s. 9d. | 60 |
| Labourers | 43s. 9d. | 60 |
| <i>Copper and Brass Rolling Mills :—</i> | | |
| Brass Rollers | 75s. to 87s. 6d. | 60 |
| Casters | 100s. ,, 125s. | 45 to 48 |
| Casters' Helpers | 62s. 6d. | 45 ,, 48 |
| Wire Drawers | 50s. | 60 |
| Tube Drawers | 43s. 9d. | 60 |
| Other Helpers and Labourers | 37s. 6d. to 43s. 9d. | 60 |
| <i>Chemical Works :—</i> | | |
| Process Workers | 42s. 9d. to 51s. 4d. | 54 to 56 |
| Labourers | 36s. ,, 40s. 6d. | 54 |

* Time wages.

† Piece earnings.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|---|---------------------------|-------------------------------------|
| <i>Printing and Bookbinding Trades :—</i> | | |
| Newspaper— | | |
| Machine Compositors { Day work | 87s. 6d. to 100s. | 42 to 48 |
| { Night work | 96s. 3d. ,, 116s. 8d. | 42 ,, 48 |
| Pressmen (Day work) | 87s. 6d. | 42 ,, 48 |
| Book and Job— | | |
| Hand Compositors | 70s. 10d. to 75s. | 48 |
| Pressmen (Cylinder Presses) | 75s. ,, 87s. 6d. | 48 |
| Bookbinders | 70s. 10d. ,, 83s. 4d. | 48 |
| <i>Public Services :—</i> | | |
| Street Construction, Paving and Cleaning (Municipal)— | | |
| Paviors | 80s. | 48 |
| Paviors' Labourers | 43s. 9d. | 48 |
| Road Menders | 43s. 9d. | 48 |
| Scavengers | 56s. 3d. | 48 |
| Road Sweepers | 43s. 9d. | 48 |
| Drivers | 43s. 9d. | 48 |
| Water Works (Municipal)— | | |
| Labourers | 43s. 9d. | 48 |
| Gas Works (Company)— | | |
| Gas Stokers | 50s. to 53s. 6d. | 84 |
| Gas Fitters | 55s. | 60 |
| Labourers | 41s. 3d. | 60 |
| Electric Light and Power Works (Company)— | | |
| Electricians | 68s. 9d. | 56 |
| Linemen | 75s. | 48 |
| Stokers | 56s. 3d. | 56 |
| Labourers | 43s. 9d. | 48 |
| Electric Tramways— <i>see text.</i> | | |

Taking wages at New York as the base, =100, in each case, the wages index numbers for Detroit are—building trades, skilled men 81, hod carriers and bricklayers' labourers 64; foundries and machine shops, skilled men 80, unskilled labourers 101; printing, hand compositors (job work) 83.

In the building trades, union rates of wages are not the rule and the rates quoted in the Table are for men of ordinary ability. Superior bricklayers and fast workers are paid as high as 120s. per week. Comparatively little stone work is done and cutters are expected to act as masons also. Carpenters doing the best class of interior finish are paid higher rates, ranging to 80s. per week. Structural iron workers are not a very numerous class, and their work being of a dangerous character some of the more reliable men who raise and fix girders in position receive 80s. per week. The lower rates of wages paid to labourers are for men who fill the hoists with bricks; mortar mixers and others doing semi-skilled work receive the higher rates. Building operations can be carried on for nine or ten months of the year. Wages are generally paid fortnightly.

In the motor car industry the work varies considerably. Among the most highly-skilled men are those termed "tool and die makers," who are principally engaged in the work of testing; these men are comparatively few in number and their earnings are high, the general range being from 72s. 6d. to 84s. 7d. per week. Equally high wages are earned by the trained machinists in charge of the automatic machines, the management of which requires considerable knowledge and skill. Machine operators do little more than feed the machines of which they have charge. A large class of assemblers is employed in putting together various sections of machinery; some of this work demands little or no skill and the wages are the same as those paid to labourers. Others who fit together the more complicated parts receive the same rates as machine operators, as owing to the perfection of the machinery which turns out those parts the assemblers as a rule are not required to do any bench work.

Tramway men are paid 11½d. per hour during the first year, 1s. in the second and 1s. 0½d. after the second year. They spend nine hours daily on the platform but are considered to be on duty for 12½ hours. They are not provided with uniforms and the superintendent may require a man with whose appearance he is dissatisfied to buy a new outfit. As a rule a new suit is bought each summer and winter, the cost ranging from 37s. 6d. to 58s. 4d.

The earnings of female workers, mostly girls, engaged in the making of workmen's overalls vary from 25s. to 41s. 8d. per week of 48 hours. The piece work system prevails in this industry. Girls engaged in cigar factories are also paid by the piece and

earn on an average from 33s. 4d. to 37s. 6d. per week, but some of the more expert earn as much as 54s. 2d. per week.

The State Legislature of Michigan established labour exchanges in 1905, placing their administration in the hands of the Labour Commissioner, and providing funds for working expenses. No fees are charged either to workpeople or employers. The labour exchanges were at first only established in cities having a population of 50,000 or more, but owing to the success experienced the Legislature decided in 1907 to extend their operations to cities of 30,000 inhabitants or more. The report of the State Bureau of Labour contains the following figures showing the extent of the operations of the Detroit Exchange during the year ended 30th November, 1908 :—

| Sex of Workpeople. | Number of Applications. | | Number of Situations Filled. | Number of unsuccessful Applications. | |
|--------------------|-------------------------|------------------|------------------------------|--------------------------------------|------------------|
| | From Employers. | From Workpeople. | | From Employers. | From Workpeople. |
| Males... .. | 5,361 | 5,408 | 4,951 | 410 | 457 |
| Females... .. | 2,275 | 1,887 | 1,773 | 502 | 114 |
| Total... .. | 7,636 | 7,295 | 6,724 | 912 | 571 |

HOUSING AND RENTS.

Detroit rightly has the reputation of being a "Home City," the expression signifying that a large proportion of the inhabitants own their dwellings. According to the Census of 1900, 22·5 per cent. of the homes of Detroit were owned by their occupiers free of encumbrance, 16·6 per cent. were owned encumbered and 60·9 per cent. were hired. Since that date the system of purchasing houses by instalments has become still more popular amongst the working classes, but no figures are available showing the respective proportions of dwellings at present owned and rented. Whilst in many cases the effort to purchase the home leads to sub-letting, this practice does not appear to be so general as in some other cities visited, notably Minneapolis and Milwaukee. According to the above Census the average number of families per dwelling-house was 1·2 ; 87·1 per cent. of all dwelling-houses were occupied by single families, 10·6 per cent. by two families and 2·3 per cent. by three or more families. Of all families enumerated 74·9 per cent. were resident in dwelling-houses occupied by single families, 18·3 per cent. in dwelling-houses occupied by two families and 6·8 per cent. in dwelling-houses occupied by three or more families.

Observation of housing conditions as they at present exist points to the conclusion that the foregoing percentages have not been materially affected in the interval, and that overcrowding has not assumed serious proportions, in spite of the tendency shown by many of the later Hungarian immigrants, and most of the Italians, to herd together in tenement houses, the Italians being generally desirous of saving sufficient money to enable them to return to their homes in Europe. These immigrants, however, form a relatively small proportion of the total population, and the number of tenement dwellings of the poorer kind is not large.

Working-class houses are distributed throughout the city, with the exception of some of the finer avenues and the adjacent streets, which are occupied by large villas and rows of modern flats. Better-paid mechanics are frequently found living near business and professional men, social distinctions between these classes not being so sharply drawn in the matter of housing, save in the case of the wealthier inhabitants, as is usually the case in English towns. The only districts which are strictly homogeneous are those occupied by the Poles, Hungarians and Italians. The Poles live mainly in two large colonies, one to the east and the other to the west of Woodward Avenue, which bisects the city, whilst the Hungarians are principally found in the outlying district to the west known as Del Ray, which has been recently incorporated, and in the vicinity of which are large chemical works and several large foundries. The Italians also occupy the same quarter.

With the exception of the Del Ray district, the parts of the city mainly occupied by the working classes present generally a pleasing appearance. Most of the streets are lined with trees on both sides, and an open grass plot from 6 to 12 feet in width separating the houses from the side walk is a common feature. The absence of the monotonous uniformity so characteristic of working-class streets in English industrial towns in the matter of house construction is very marked in Detroit. As a rule houses are detached, standing about 6 feet apart, and are built of wood with considerable variety in the style

of structure, and where ornamental verandahs predominate and houses have been recently painted the general effect is highly picturesque. A liberal amount of space is generally found between houses which front on parallel streets, the building plots being usually from 100 to 120 feet deep, and separated by an alley 20 feet wide. Even in the poorer district of Del Ray the abundance of air and light is a pleasing feature, though the condition and general appearance of the houses themselves may leave much to be desired. Streets as a rule are sewered, and the collection of ashes and garbage is undertaken by the municipal authorities, tenants being required to provide their own ash-bins, though refuse heaps are not infrequently found in the alleys.

Whilst considerable variety obtains in the style and character of working-class houses the predominant type may be said to be the five and six-roomed frame house, mostly detached, though frequently semi-detached. As a rule this house is one story in height, with an attic used as a lumber room and lighted sometimes by a gable window. The floor of the house is raised $2\frac{1}{2}$ to 3 feet above the ground, the intervening space being enclosed with boarding. The front entrance is reached by a short flight of steps leading to a porch or verandah more or less ornamental. A similar porch and steps are not infrequently found at the side, the second entrance being at the back of the house. The front door opens either into a small vestibule or directly into the front room. The rooms open into one another and are ranged three on each side or three on one side and two on the other in the case of the five-roomed house, when the kitchen is a lean-to structure. The walls are generally plastered and coloured, being papered only in the better class dwellings. A dark pantry usually adjoins the kitchen, and in the latter the sink and the water-tap are usually placed, though sometimes the tap is found outside. A spacious yard, unpaved, lies at the rear and contains the wood or coal shed and the closet at the end nearest the back alley. Closets in the older type of house are flushed by water from the kitchen sink, which enters the fall pipe below the surface of the ground, while houses of recent construction have water-closets of the modern type. A modification of the above type, known as the "story-and-a-half house," is frequently met with in Polish districts. This is a two-family or semi-detached house, the attic story of which is furnished with two extra gables, one on each side of the house, with a window to each gable. The owner and his family occupy the attic floor, which is approached in the rear by a staircase between the two ground-floor dwellings, and the latter are sub-let, the rent thus obtained assisting the owner to pay off the purchase-money more rapidly.

The more modern type of six-roomed cottage is frequently a two-storied building with a basement which contains a furnace supplying heat to every room by means of pipes. In this basement are found the coal cellar and facilities for the washing of clothes. Bathroom and water-closet are always met with in this class of house, which is let at from 17s. 4d. to 21s. 2d. a week.

Seven and eight-roomed dwellings are frequently occupied by mechanics, but comparatively few are rented, nor are they sufficiently numerous to form a distinct type.

Flats of four and six rooms are numerous, though not belonging to the predominant types. They are generally modern and self-contained, and many of them are situated over shops in the principal streets, though the majority are met with in two and three-storied houses. Modern six-roomed flats are situated in the best parts of the city in the east and in the vicinity of the Boulevard. A large basement contains a separate furnace for each flat, the tenants supplying their own coal. A bathroom supplied with hot and cold water, and containing also the w.c., is provided, and the landlord supplies both electric and gas fixtures. All these flats are self-contained and well finished internally. The rents usually charged for ground and first floor flats of this class are from 19s. 3d. to 21s. 2d. per week and 17s. 4d. for the second floor. In a number of cases the whole building is heated by one furnace in the basement, and the cost of heating and the service of the janitor who attends to the furnace are included in the rent, which ranges from 24s. to 28s. 10d. per week. Many such flats situated over shops are let at 21s. 8d. per week, including heating, for seven months and at 17s. 4d. per week during the remainder of the year. Modern conveniences such as bathrooms and basements are rarely met with in dwellings of less than six rooms.

In the poorer neighbourhoods, where houses are not frequently repaired and painted, the woodwork deteriorates rapidly and presents an unsightly appearance. Dilapidated and insanitary dwellings are somewhat rare, however, slum conditions being mainly confined to a comparatively small number of tenement blocks occupied by the later immigrants of the lowest grades.

Sub-letting is fairly common in the poorer neighbourhoods, two rooms being usually let at 4s. 10d. per week, and three rooms at from 4s. 10d. to 5s. 9d. Two tenants frequently divide a house, each paying half the rent.

Kitchen and parlour stoves are invariably the property of the tenant. Except where families live in two or three rooms the general tendency is to use the kitchen for cooking purposes and as a scullery only, meals being taken in the living or dining room. Another room furnished as a parlour is a common feature in all working-class houses, save those of the poorer kind. Gas cooking stoves are in general use (the price of gas is 3s. 4d. per 1,000 cubic feet), and gas is largely used for lighting.

The dimensions of rooms observed to be typical in various parts of the city were :— 15 feet by 15 feet, 15 feet by 13 feet 6 inches, 15 feet by 12 feet 6 inches and 14 feet by 8 feet ; a small room measuring 10 feet by 7 feet 8 inches is frequently met with in the case of six and seven-roomed houses. The usual height of rooms is 9 feet.

The following Table shows the predominant rents paid for working-class houses in Detroit in February, 1909 :—

Predominant Rents of Working-class Dwellings.

| Number of Rooms per Dwelling. | | | | Predominant Weekly Rents. |
|-------------------------------|-----|-----------|-----|---------------------------|
| Four rooms | ... | ... | ... | 5s. 9d. to 7s. 8d. |
| Five rooms | ... | ... | ... | 8s. 8d. „ 11s. 6d. |
| Six rooms | { | Old | ... | 9s. 7d. „ 11s. 6d. |
| | | Modern... | ... | 17s. 4d. „ 21s. 2d. |

The level of rents at New York being represented by 100, the rents index number for Detroit is 57.

The above rents include water charges, which, like the taxes levied upon real estate, are paid by the owners ; there is no poll tax. Taxes are levied upon real and personal property, the average rate for a number of years past having been 1.95 per cent., and never exceeding 2 per cent. Personal property includes household furniture, for which the occupier has to make an annual declaration of value. As, however, exemption is granted for all personal property the total value of which is less than £104, the working classes as a whole do not pay this tax.

In the matter of housing provision no action has been taken either by the municipality or by philanthropic societies, private enterprise alone meeting all requirements. Estate agents do a considerable business in the sale of plots of land, and frequently in erecting houses on them for prospective purchasers. The system in vogue is that of payment by instalments, and the Poles particularly make great efforts to become the owners of their homes. A plot of ground for a workman's dwelling usually measures 30 feet by 100 feet, or 30 feet by 120 feet, and the prices for the freehold of such plots range from £52 to £125, according to situation. A frame house of five or six rooms has a frontage of from 21 to 24 feet, and a depth of 36 feet, and costs from £417 to £625. An initial deposit of variable amount is paid by the purchaser, and the balance is paid off in monthly instalments, the minimum being 41s. 8d. per month. In many cases the deposit and instalments are so arranged that the whole amount can be liquidated by the end of twelve years. One form of inducement offered to intending purchasers is the combination of life insurance with the loan. In case of the death of the purchaser, after payment of the initial deposit and the first year's instalments, the widow obtains possession of the house and land, the balance of the loan being covered by the policy. When the freehold of the land has been acquired, mortgages and loans are frequently negotiated with local banks.

RETAIL PRICES.

Detroit is favourably situated as regards its food supply, the State of Michigan having a flourishing agricultural industry. The working classes as a rule patronise the family grocers in their vicinity and purchase mainly on the credit system. There are several large "department stores" in the city, but their grocery and provision trade is mainly amongst the well-to-do class. Two or three "multiple" firms are represented, but these deal almost exclusively in tea and coffee on the system of giving presents with purchases. There is no co-operative society, nor are there any public retail markets of the English type. Competition is very keen amongst local dealers, and prices are consequently fairly uniform for the qualities of goods in demand.

The variety in the working-class dietary is not so great as might be expected from the nationalities represented in the population. Many of the Germans have lived so long at Detroit that they have adopted American standards of living. The

Poles, however, are unusually large consumers of pork, sausage, bacon and boiling and stewing beef and veal, whilst on Sundays and Church festivals poultry is eaten largely and on Fridays fish, principally herrings. The poorer workmen who carry their dinner to their places of employment usually make that meal of bacon or pork, with eggs and potatoes eaten cold. Rye bread is also eaten far more than wheaten by this same class of Poles.

Groceries and other Commodities.

Bread is purchased to a considerable extent, though there is also much home baking, particularly of cakes and rolls. A municipal by-law compels the baker to mark his name and the weight clearly on every loaf weighing other than an even number of pounds, and this is done either by means of a label attached to the loaf or by stamping it in legible characters. Food inspectors visit the shops where bread is sold for the purpose of detecting infringements of this regulation, which are punishable by fines. Three large firms dominate this trade, and have clean, sanitary, up-to-date bakeries. These firms bake mainly wheaten bread in loaves of 14 and 28 oz., which are sold at $2\frac{1}{2}d.$ and $4\frac{1}{2}d.$ respectively. The price of rye bread is the same as for wheaten bread of corresponding weight. In Polish districts some of the smaller bakers sell a 26-oz. rye loaf at $3\frac{1}{2}d.$ (The foregoing prices all relate to February, 1909.)

The *milk* supply is largely in the hands of three large dairy companies, which, in February, 1909, sold at the uniform price of $4\frac{1}{4}d.$ per quart delivered. In summer the custom is to sell milk $\frac{1}{2}d.$ cheaper per quart. A municipal by-law requires milk to be delivered to customers in sealed bottles.

Tea, though consumed to a greater extent than is usually the case in American cities, is much less popular than *coffee*, which is sold roasted and ground.

As regards *sugar* the greatest demand is for white granulated, the brown variety being used for cooking and for making candy at home.

Bacon is smoked and sugar-cured of various qualities, and the main supply is obtained from the Chicago packing-houses.

Butter made by local farmers and called "dairy" butter sells mainly at 1s. 3d. per lb., while the price of creamery butter ranges from 1s. 4d. to 1s. 5½d., the lower limit being most general. Renovated or re-made butter (*i.e.*, butter made at the creameries from low-grade butter made by farmers), is of inferior quality and costs 1s., but is not popular.

Both anthracite and bituminous *coals* are used by the working classes, the poorer section buying the soft kind almost exclusively. It is sold by the ton of 2,000 lb., but a great deal is delivered in quarter-ton lots, an extra charge being added to the fractional price of the ton. Coal is also sold by the "bushel" basket, for which no standard of weight or capacity is observed, at 1s. 0½d. per basket for bituminous and 1s. 3d. for anthracite.

The following Table shows the prices most generally paid by the working classes in February, 1909 :—

Predominant Prices paid by the Working Classes in February, 1909.

| Commodities. | Predominant Price. |
|-----------------------------------|---|
| Tea per lb. | 1s. 5½d. to 1s. 8d. |
| Coffee " | 1s. 0½d. ,, 1s. 3d. |
| Sugar :— | |
| White Granulated " | 2¾d., 3d. |
| Brown " | 2½d. |
| Bacon, Breakfast—Boneless... .. " | 7½d. to 10d. |
| Eggs :— | |
| Storage per 1s. | 13 ,, 14 |
| Local Fresh " | 9 ,, 10 |
| Cheese, American per lb. | 10d. |
| Butter " | 1s. 3d. to 1s. 4d. |
| Potatoes, Irish... .. per 7 lb. | 5½d. ,, 7d. |
| Flour, Wheaten—Household " | 10¾d. |
| Bread, White per 4 lb. | 10¼d. to 11½d. |
| Milk per quart | 4¼d. |
| Coal :— | |
| Anthracite per cwt. | 1s. 7½d.* ; 1s. 9¼d.† |
| Bituminous " | 11¼d. to 1s. 3½d.* ; 1s. 1d. to 1s. 5d.† |
| Kerosene per gallon | 6d. |

* By the ton of 2,000 lb.

† By the quarter-ton (500 lb.).

Meat.

The meat supply of Detroit is obtained from the State of Michigan and from Chicago packing-houses. The local supply comprises from 900 to 1,500 head of cattle, about 5,000 sheep and 1,200 calves weekly. There is no public abattoir, but meat inspectors examine all animals offered for sale in the local stock yards and also the dressed meat from Chicago in the storehouses. The mode of cutting meat does not differ materially from the New York standard.

The better cuts of beef and mutton are bought by those who follow the American style of living. Pork and veal are principally consumed by the Poles, who also purchase the cheaper cuts of beef for boiling.

The following Table gives the predominant prices paid by the working classes in February, 1909 :—

Predominant Prices paid by the Working Classes in February, 1909.

| Description of Cut. | Predominant Price per lb. |
|-------------------------------------|---------------------------|
| Beef :— | |
| Roasts—Round... .. | 5½d. to 6½d. |
| " Rib prime | 6d. " 7½d. |
| " Rib second cut | 5d. " 7d. |
| " Chuck or short ribs | 4d. " 5d. |
| Steaks—Round... .. | 5½d. " 6½d. |
| " Sirloin | 7d. " 7½d. |
| Shin without bone | 4d. " 5d. |
| Flank | 3d. " 4d. |
| Plate, Brisket { Fresh | 3d. " 4d. |
| { Salt or corned | 3½d. " 4d. |
| Mutton or Lamb :— | |
| Leg | 7d. to 7½d. |
| Breast | 4d. " 5d. |
| Loin | 7½d. " 10d. |
| Chops | 9d. " 10d. |
| Shoulder | 6d. " 7½d. |
| Neck | 4d. " 5d. |
| Veal :— | |
| Cutlets | 9d. to 10d. |
| Rib chops | 7d. " 8d. |
| Loin chops | 7d. " 8d. |
| Breast | 4½d. " 6½d. |
| Neck | 4½d. " 5d. |
| Pork :— | |
| Fresh—Loin | 6d. to 7d. |
| " Spare rib | 4½d. " 5d. |
| " Shoulder | 5d. " 5½d. |
| " Chops | 6d. " 7½d. |
| Corned (wet salt or pickled) | 6d., 6½d. |
| Dry salt | 5½d. to 6d. |
| Ham | 6½d., 6½d. |
| Shoulder, salt or smoked | 5d. to 5½d. |

Prices at New York being taken as the base, = 100, in each case, the index number for the price of meat at Detroit is 82, for other food it is 94 and for food prices as a whole 91. For rents and food prices combined the index number is 83.

DULUTH.

The city of Duluth, which derives its name from a French explorer of the seventeenth century named Jean du Luth, is situated in the State of Minnesota at the extreme western end of Lake Superior and about midway between the Atlantic and Pacific Oceans, in latitude about 47° N. It is the third largest city of the State, ranking next to Minneapolis and St. Paul. To the west of Minnesota lie the great agricultural and grazing regions of North and South Dakota and Montana, and also some rich tracts of timber land, whilst 80 miles to the north-west of the city are the exceptionally productive iron mines of the Mesaba Range, the exploitation of which may be said to have been only begun. Owing to its connexion with the great trans-continental railway systems of America and of Canada, Duluth is able to tap these great natural resources of the North-West, whilst its situation at the head of the chain of Great Lakes has made the city, in spite of a rigorous winter climate, the commercial gateway between East and West.

Opposite Duluth is the small city of Superior, in the State of Wisconsin, on the south bank of the River St. Louis, which separates the two and flows into a fine land-locked harbour on Lake Superior. Both cities form one great port and possess spacious docks of modern construction opening on to the river and the harbour; the commercial and jobbing firms, however, have their headquarters mainly in Duluth. The bulk of the trade is in grain and flour, iron ore and coal, much of which is carried in steamers of over 10,000 tons. By means of the most modern equipment these large steamers can be loaded with iron ore in three or four hours, whilst the introduction of the "clam-shell bucket" worked by machinery has reduced very materially the time required to unload a cargo of coal.

The following statement of cargo received and shipped illustrates the rapid growth within recent years of the business of the great port Duluth-Superior:—

| Year. | Cargo received (Tons of 2,000 lb.). | Cargo shipped (Tons of 2,000 lb.). | Total Value. |
|-------|--|---------------------------------------|--------------|
| | | | £ |
| 1895 | 2,035,465 | 4,289,886 | 19,791,667 |
| 1900 | 3,085,184 | 8,640,061 | 28,147,749 |
| 1905 | 4,212,704 | 18,463,441 | 40,989,913 |
| 1906 | 6,147,714 | 23,023,707 | 52,479,134 |
| 1907 | 7,840,023 | 26,946,682 | 59,902,020 |
| 1908 | 6,594,915 | 17,202,247 | 46,482,150 |
| 1909 | 6,815,410 | 25,713,891 | 54,481,075 |

During 1909 5½ million short tons of coal entered the port, whilst the shipments included over 50 million bushels of wheat, 9 million bushels of barley and flax seed, 4 million barrels of flour and 22 million tons of iron ore. Grain is stored locally in 24 enormous elevators, the newest of which are constructed of reinforced concrete as a protection against fire. Their total capacity is nearly 30 million bushels, and by the use of an ingenious system of shoots large steamers can be loaded in the course of a few hours.

While commercial and shipping activities predominate at Duluth, industry is also of growing importance. At present industrial enterprise is principally confined to lumber sawing and woodworking, to the smelting of ore, and to the manufacture of lumber mill and mining plant and general machinery; flour milling was formerly an important industry, but it has moved to other centres, principally to Minneapolis. In the neighbouring city of Superior are a large shipyard where lake steamers are built and repaired, repairing shops for the Great Northern Railway and a few small manufacturing works of various kinds.

In consequence of the enormous deposits of iron ore within the State of Minnesota and the richness of the new mines of the Mesaba Range, where iron is found so close to the surface that it is scooped out by steam shovels, the Steel Corporation has recently acquired land at Duluth for the erection of a large plant estimated to cost £2,500,000 in order to smelt and work the ore close to the source of supply. Another company has

built electrical works on the river St. Louis, close to the city, where there is a fall of 378 feet, for the purpose of distributing electric power to manufacturing concerns. Both the foregoing enterprises point to very considerable industrial expansion in the near future.

The following Table shows the population of Duluth according to the Federal Censuses of 1870-1910:—

| Year. | Population. | Increase. | Percentage Increase. |
|-------|-------------|-----------|----------------------|
| 1870 | 3,131 | — | — |
| 1880 | 3,483 | 352 | 11·2 |
| 1890 | 33,115 | 29,632 | 850·8 |
| 1900 | 52,969 | 19,854 | 60·0 |
| 1910 | 78,466 | 25,497 | 48·1 |

Out of a total of 64,942 inhabitants, at the date of the State Census of 1905, 38,017 or 58·5 per cent. were American-born and 26,925 or 41·5 per cent. were foreign-born. Of the latter 25·7 per cent. were born in Sweden, 22·9 per cent. in Canada, 14·7 per cent. in Norway, 7·9 per cent. in Finland and 7·1 per cent. in Germany, the remainder being mainly from Great Britain, Ireland, Poland, Austria and Russia. In addition to the immigrants from Sweden and Norway, a large number of the American-born inhabitants are also of Scandinavian parentage, principally Swedes, for the whole State of Minnesota was originally settled by people of that nationality.

Being a distributing point for labour required in mines, lumber camps and in railway construction over the north-eastern part of the State, Duluth attracts a large number of foreign immigrants, groups of whom may be seen daily standing in the vicinity of the various employment registries. When their seasonal work is over, or when the monotony of camp life becomes unendurable, many men return to Duluth for a "spree," and the hard earnings of months may be spent in the course of a few days. In the circumstances it is not surprising that cases of intoxication appear numerous to the visitor. Conspicuous in appearance and character amongst this class of workers is the "Lumber Jack," who is notoriously good-natured and proud of the social recognition he can command amongst his own class so long as his pockets are full.

The population is distributed over an area 22 miles long from east to west and half a mile wide on an average. The city boundaries embrace, in fact, a series of small towns extending along the steep slope of the hills which line the north bank of the river St. Louis and the head of Lake Superior. In the heart of the city, close to the harbour and the docks, is situated the business centre. The eastern portion of the city fronting the Lake is mainly occupied by handsome residences of the wealthy inhabitants, while the west end is predominantly working-class in character. Two picturesque suburbs have grown up on the eastern and north-eastern confines, Lakeside and Woodland, both of which are occupied by the business and professional classes and are connected with the centre by a service of electric cars. A working-class district, West Duluth, lies several miles from Duluth proper and is likewise connected with the latter by electric cars. Between these two places lie the docks of more recent construction, the lumber mills, ironworks, foundries and machine shops. On the extreme western limits, at a distance of 15 miles from the centre of the city, lies the small suburb of Fond du Lac, communication with which is maintained by a motor train service.

The general aspect of the city and suburbs as viewed from the harbour is very picturesque, particularly in the summer time, when the hill-sides are covered with thick foliage. The city is laid out on the usual rectangular plan, with steep avenues rising from the water's edge to the crest of the hills, and crossed at right angles by streets most of which are lined with trees. Lake Avenue bisects the city proper, and all avenues east and west of it are numbered consecutively. Tall blocks of office buildings, varying from six to ten stories in height, and mainly brick structures of the steel-frame type, rise in the business portion of the city. Fine stone buildings, notably the County Court House, the Post Office and the High School, are conspicuous, as is also the building of the local Board of Trade, which contains one of the important "Grain Pits" of the country. Handsome hotels and churches assist in imparting a substantial and prosperous appearance to this city, which has grown up with such remarkable rapidity.

The more important vital statistics of Duluth as registered for the period 1904-8 are given in the following Table:—

| Year. | Number of Births. | Number of Deaths. | Number of Deaths under one year. | Number of Deaths from Tuberculosis. |
|-------------|-------------------|-------------------|----------------------------------|-------------------------------------|
| 1904 | 1,440 | 717 | 133 | 124 |
| 1905 | 1,354 | 834 | 173 | 76 |
| 1906 | 1,517 | 940 | 211 | 96 |
| 1907 | 1,684 | 961 | 200 | 101 |
| 1908 | 1,750 | 882 | 178 | 105 |

The situation of Duluth is peculiarly healthy, as the steep sloping ground on which the majority of the houses stand affords a natural fall for the drainage, and at the same time exposes almost every house to the healthful breezes from Lake Superior. A small percentage of the sewage is treated in septic tanks, the remainder being discharged into the lake, where a constant current carries it away from the area of possible contamination to the water supply, which is drawn from a point in the lake eight miles east of the centre of the city.

Municipal enterprises include street cleaning (paving and construction being let out by contract), the water service and the distribution of gas. The supply of gas is obtained by contract from a local undertaking which manufactures gas as a by-product; the price to householders is 3s. 1½*d.* net per 1,000 cubic feet. The electric light and power works and the street tramways belong to private companies. The tramway company charges a uniform fare of 2½*d.* for any distance within the city limits, one transfer to any branch line being allowed. No workmen's tickets are issued, nor is there any reduction in price on the purchase of a number of tickets.

The city is well supplied with parks and open spaces, and a movement is on foot to provide a number of playgrounds for children. The total area covered by the parks is about 400 acres, and the largest of these, Lincoln Park, the Cascades and Lester Park, preserve some fine natural woodland and waterfalls. Two of these parks are situated close to the homes of the working people. In addition to these parks there is an open strip of land seven miles long fronting the lake, and separating it from the harbour, with entrances for shipping at its northern and southern ends. On this ground pine trees grow in abundance, and the sandy beach is a favourite resort for family picnics during the summer. Many bungalows have been erected there for summer residence, some owned by mechanics, and electric cars run for three miles along this peninsula. Across the shipping entrance at the Duluth end, passengers and vehicles are conveyed free by a suspended transporter worked by electricity, the first of the kind erected in America.

Duluth possesses many well built public schools. Education is free and compulsory between the ages of eight and sixteen years, attendance being enforced by truant officers, who also act as factory inspectors, but these officers are authorised to issue labour permits to children who have attained the age of fourteen years, and whose employment is necessary for their own maintenance or the support of parents. The centre for secondary education, which is also free, is the High School, a fine stone building erected at a cost of about £100,000. The final examination of this school at the end of a four years' course gives admission to the State University. Two centres for technical instruction are also provided, with a four years' course in which practical instruction is given in moulding, forging, machine construction and woodworking. The curriculum also includes mathematics, physics, drawing (freehand and mechanical), surveying, commercial law, typewriting and shorthand.

The city of Superior is connected with Duluth by railway, by electric cars and, during the period of open navigation, by a ferry service of small steamers across the harbour. Owing, however, to the high car fare, which is 5*d.* each way, and to the frequent delays caused by the opening of the swing bridge for the passage of steamers, few business or working-class people of Duluth find it practicable to reside in Superior, although the rent level is generally lower in the latter city. Apart from the activities at the docks, and at the large shipbuilding yard, where work fluctuates greatly, Superior is of little importance industrially at present, its manufacturing concerns being small and miscellaneous in character. The population in 1907 was a little over 40,000. Superior is well laid out in rectangular blocks, with broad streets nearly all lined with trees, while in the centre of the city are many handsome official and business buildings.

OCCUPATIONS, WAGES AND HOURS OF LABOUR.

The two most important industries at Duluth, from the point of view of the numbers employed, are those of lumber sawing and dock labour. In the former nearly 1,200 men are engaged, whilst nearly 800 men are employed in the allied industries of sash and door making and general woodworking. At the docks about 1,400 men are employed in the handling of coal, iron ore, grain, and general freight.

The following Table shows the distribution of the industrial population of Duluth in 1907, according to figures supplied by the State Bureau of Labour; but no figures were available for the building trades:—

| Industries. | Number of Workpeople. | | | |
|------------------------------------|-----------------------------|-------------------------------|-------------------------------------|--------|
| | Males over 16 years old. | Females over 16 years old. | Juveniles under 16 years old. | Total. |
| Dock Labour | 1,400 | — | 1 | 1,401 |
| Woodworking:— | | | | |
| Lumber Sawing | 1,160 | — | 1 | 1,161 |
| Sash and Door Making | 414 | — | 7 | 421 |
| Matchmaking | 68 | 93 | 19 | 180 |
| General Woodworking | 173 | — | 5 | 178 |
| Foundries and Machine Shops | 445 | — | — | 445 |
| Smelting Works | 262 | — | — | 262 |
| General Metalworking | 123 | — | 1 | 124 |
| Printing and Bookbinding | 209 | 38 | 4 | 251 |
| Leatherworking | 93 | 23 | — | 116 |
| Food Products | 335 | 75 | 1 | 411 |
| Clothing Trades | 217 | 209 | 1 | 427 |
| Laundries | 77 | 258 | — | 335 |
| Other Industries | 838 | 85 | 1 | 924 |
| Total | 5,814 | 781 | 41 | 6,636 |

Owing to the ingenious labour-saving devices used, the number of dock labourers is not large relatively to the amount of tonnage handled. Ore trains come direct to the dock side, and the ore drops through the trap doors at the bottom of the wagons into "pockets," which are large cavities in the side of the dock, each capable of holding over 220 tons of ore. Through a shoot attached to each pocket the ore pours direct through the hatchways of the steamer into the hold. As many as 36 shoots are sometimes in action simultaneously for one steamer, and 9,000 tons of ore have been loaded in the short time of an hour and a half. A small gang of men attend to the levers which work the trap-doors and the shoots. Trimming the ore in the hold is seldom resorted to, the voyage through the lakes being generally calm. The device used for unloading coal is the "clam-shell bucket," worked by machinery. The bucket, suspended from a huge rig or metal beam, descends into the hold and fills mechanically, after which it is hoisted and travels along the beam to the point of discharge on the dock side, where it opens and drops its contents. Few men are required to complete the work done by the "clam-shell" in the hold.

The sawing of lumber is an industry which is only carried on during the season of open navigation. In the lumber mills ingenious labour-saving machinery, which runs day and night, is in use, converting logs into planks, laths and shingles with a surprisingly small amount of waste. The sawn timber is stacked alongside the docks to be loaded on to steamers by the longshoremen or "lumber shovers," as they are called. Owing to the many processes involved, for each of which there is a special machine, attended by one or more men, this industry gives employment to a large amount of unskilled or semi-skilled labour during seven months of the year only, many of the men seeking employment during the remaining five months in the forest lumber camps. Comparatively high wages are paid to men who simply feed the machines, since smartness and some degree of skill are frequently necessary in order to utilise fully the high rate of speed at which the machinery is run. Sawyers especially are paid high wages, as the lives of other men depend on their nerve and judgment, and consequently their work is not comparable with that of English sawyers. These men manipulate levers controlling machinery which fixes the logs in position on a travelling carriage and moves the latter to and fro in front of the band saw. Standing on this carriage are two or three men who by means of levers set or adjust the log to the band saw according to the thickness of the planks required.

This work is controlled by signs from the sawyer, whose judgment decides how best to utilise each log. The high speed at which the carriage runs may be appreciated from the fact that 2,000 to 2,500 logs are sawn daily by one machine in ten hours, a rate of 200 to 250 per hour, and serious accidents are only averted by skill and nerve on the part of the sawyer who regulates the movement of this carriage.

Gang sawyers tend a stationary machine in which a row of saws work vertically in cutting up whole logs into planks. This work is not attended with danger like the carriage, but the gang sawyer has to superintend several helpers. The planks are carried on rollers to other machines which strip off the bark and are attended by "edger men," after which they pass to the trimming machines and are there cut to the required lengths by circular saws made to rise and disappear under the action of levers. Many other processes complete the work done in a lumber mill manned for the most part by unskilled labour.

The lumber industry appears destined to decline as the forest areas within reach become depleted. The iron and steel industry, however, promises to increase in importance owing to the advantages accruing from the smelting and working of the metal close to the ore mines. One factor of importance which is favourable to local industry is the low freight rates for coal brought by steamers from Pennsylvanian ports on Lake Erie. As the ore-carrying steamers going east would in many cases have to return under ballast, specially low rates are offered westward and coal is accordingly carried at one-third of the eastward rate. At present only one concern is engaged in the smelting of ore, but it is anticipated that in the near future the new works of the Steel Corporation will employ about 2,000 men. The making of logging machinery used in lumber camps and of lumber mill and mining plant is carried on mainly by three firms.

The long severe winter at Duluth and the closing of navigation during the months when Lake Superior is frozen over—from December to the middle of April—naturally cause the protracted suspension of many local activities. Work ceases altogether in the lumber saw mills and also at the docks except for a small number of men engaged in loading coal wagons from the supply accumulated during the period of navigation, and even this work is liable to frequent interruption when railways happen to be blocked with snow. Building operations are not entirely suspended, though as a rule bricklayers and masons cannot count on more than eight months of work during the year. More building is carried on in the winter than was formerly the case, but as the mortar has to be heated the extra expense is only entailed where urgent reasons exist for finishing the work in hand, and this applies principally to the erection of blocks of business buildings, whose proprietors are anxious to let the premises as soon as possible. Lumber camps in various parts of the State provide opportunities of employment in winter, but the arduous nature of the work, the monotony of the camp life and the crowding together of so many low-class foreigners, together with other objectionable features, make these camps unattractive to a considerable portion of the local workmen, who prefer to accept poorer-paid work near home when this can be had, or even to manage to get through the winter with no work at all, particularly when living in their own homes.

The following Table shows the predominant weekly wages and hours of labour in February, 1909 :—

Predominant Weekly Wages and Hours of Labour of Adult Males in the Principal Occupations in February, 1909.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|---|---------------------------|-------------------------------------|
| <i>Building Trades :—</i> | | |
| Bricklayers | 130s. | 48 |
| Stonemasons | 120s. | 48 |
| Stonecutters | 112s. 6d. | 48 |
| Carpenters | 90s. | 48 |
| Plasterers | 125s. | 48 |
| Plumbers | 125s. | 48 |
| Structural Iron Workers | 87s. 6d. to 100s. | 48 |
| Painters | 87s. 6d. ,, 90s. | 48 |
| Navvies | 50s. | 60 |
| Bricklayers' and Plasterers' Labourers | 67s. 6d. | 54 |

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|--|----------------------------------|-------------------------------------|
| <i>Foundries and Machine Shops :—</i> | | |
| Ironmoulders | 78s. 9d. to 81s. 3d. | 54 to 59 |
| Machinists | 78s. 9d. „ 87s. 6d. | 54 „ 59 |
| Blacksmiths | 75s. „ 79s. 11d. | 54 „ 59 |
| Patternmakers | 92s. 2d. „ 93s. 9d. | 59 |
| Labourers | 45s. „ 50s. | 54 to 59 |
| <i>Lumber and Woodworking Trades :—</i> | | |
| Sawyers | 150s. | 60 |
| Gang Sawyers | 68s. 9d. to 75s. | 60 |
| Setters | 68s. 9d. „ 75s. | 60 |
| Edger Men | 66s. 3d. „ 68s. 9d. | 60 |
| Trimmer Men | 50s. „ 62s. 6d. | 60 |
| Millwrights | 75s. | 60 |
| Cabinetmakers | 62s. 6d. to 75s. | 60 |
| Pilers, Sorters, Labourers | 50s. „ 56s. 3d. | 60 |
| <i>Printing Trades :—</i> | | |
| Newspaper— | | |
| Compositors, Hand and Machine | { Day work ... 92s. to 95s. 10d. | 48 |
| | { Night work ... 100s. | 48 |
| Book and Job— | | |
| Hand Compositors | 75s. to 90s. 10d. | 48 to 54 |
| <i>Dock Labour—see text.</i> | | |
| <i>Public Services :—</i> | | |
| Street Construction, Paving and Cleaning— | | |
| Paviors (Contractors' Men) | 56s. 3d. | 60 |
| Paviors' Labourers (Contractors' Men) | 50s. | 60 |
| Road Menders (Municipal Employees) | 50s. | 48 |
| Road Sweepers („ „) | 50s. | 48 |
| Scavengers (Municipal Employees) | 50s. | 48 |
| Water Works (Municipal)— | | |
| Labourers | 55s. to 60s. | 48 |
| Gas Works (Company)— | | |
| Heater Men and Gas Tenders... .. | 52s. 6d. | 84 |
| Labourers | 43s. 9d. | 70 |
| Electric Light and Power Works (Company)— | | |
| Linemen | 81s. 3d. to 87s. 6d. | 48 |
| Stokers | 60s. 1d. | 84 |
| Labourers | 50s. 6d. | 77 |
| Electric Tramways (Company)— | | |
| Motormen and Conductors | 64s. 4d. to 67s. 5d. | 73½ |

Taking wages at New York as the base, =100, in each case, the wages index numbers for Duluth are—building trades, skilled men 103, hod carriers and bricklayers' labourers 98; foundries and machine shops, skilled men 95, unskilled labourers 113; printing, hand compositors (job work) 95.

At the freight docks "boss" stevedores in some cases undertake the work from sea captains or shipping firms on the tonnage basis, and engage labourers at an hourly rate. Several railway and shipping companies have their own superintendents to look after the work and pay the labourers a fixed hourly rate. The usual rate of wages paid to dock porters is 1s. 1¾d. per hour.

At the ore docks employment is constant during open navigation and is suspended for the remainder of the year. From the opening of the season to July 1st the hourly rate is 10d., from July 1st to November 1st it is 11¼d., and for the rest of the season 1s. 0½d. A ten-hour day (60 hours per week) is worked, and overtime is paid for

at the rate of 1s. 0½*d.* per hour until July 1st and 1s. 3*d.* for the rest of the season, while Sunday rates are 1s. 3*d.* and 1s. 5½*d.* for the corresponding periods. For night work slightly higher rates are paid.

At the coal docks employment is constant on the whole, owing to the work of trans-shipment in addition to unloading, and is paid at the rate of 10*d.* to 11¼*d.* per hour, a ten-hour day being the rule, while for casual work rates of 1s. 1¾*d.* and 1s. 3*d.* per hour are paid. Coal heavers receive 2s. 6*d.* per hour, but cannot count on more than three days' employment in any week.

At the grain elevators, where work is more casual, a uniform rate of 1s. 0½*d.* per hour is paid.

The wages of longshoremen are not included in the Table owing to the intermittent character of their work. They are the only class of dock labourers who are organised in a union. This union, which has branches at all the principal ports on the Great Lakes, controls the loading and unloading of lumber at all these places and imposes a stringent regulation to the effect that union men may only be employed for unloading lumber from any ship if union labour was employed for loading the same. Captains are consequently careful to employ only union men for loading lumber when these can be obtained. When, however, the supply of union men is insufficient, and non-union labour has to be engaged, the captain is obliged to keep a flag flying at the masthead. While this flag is flying any union man who appears can require to be substituted for a non-union man. As soon as the last non-union man has left the ship the flag is hauled down. The union scale, which is thus effectively enforced, is 2s. 1*d.* per hour for a ten-hour day. Overtime is paid for at the rate of time and a half. The union secretary estimates the average weekly earnings during the season of open navigation at 83s. 4*d.*

Tramway motormen and conductors are paid according to a scale ranging from 10½*d.* to 1s. 0½*d.* per hour, the maximum rate being paid only to men who have served over five years; early in 1909 the predominant rates were 10½*d.* and 11*d.* per hour, the average hours of labour being about 10½ daily, seven days a week. The men are not supplied with uniforms.

The wages paid for unskilled labour frequently rise during harvest time, from the end of July to the end of August, when from 15,000 to 20,000 men are generally required in North and South Dakota, where harvesters are paid 8s. 4*d.* to 12s. 6*d.* per day in addition to board. During summer, railway construction is conducted on a large scale in this part of the States. The effect of these conditions is to force up wages for common labour at Duluth from July onwards, a rise of 2s. 1*d.* to 4s. 2*d.* per day being frequent according to the supply available. One of the local railway companies employing the largest number of ore dock labourers has a sliding scale for wages as the season advances, the rate rising from 8s. 4*d.* to 10s. 5*d.* per day. The introduction of labour-saving devices at the docks and the advent of Austrian and Italian immigrants in increasing numbers each year threaten to neutralise the above conditions, especially as these immigrants live cheaply by herding together in boarding houses, where one of their number attends to the catering and the cooking of food, and as their general standard of life is much lower than that of the Scandinavians and Finns, who have hitherto formed the bulk of the immigrants.

Time rates are the rule in Duluth, except in the shipbuilding and boilermaking trades, where piece rates are frequent.

Although a number of union rates are recognised no wages agreements are in force at Duluth, and the "open shop" is the rule. Building contractors established the principle of the "open shop" after a recent conflict with the unions, otherwise union rates and conditions have remained practically unaltered in these trades for some years. Wages are generally paid fortnightly, or twice during the calendar month, and by cheque. A large percentage of these cheques are cashed in the saloons on pay days, the saloon keepers being supplied with the necessary money by the local breweries. This system is considered to lead to more drinking than would be the case if wages were paid in cash.

The usual American holidays are observed, but not strictly, and the Saturday half-holiday is exceptional. The eight-hour day obtains generally in the building trades and for compositors. Workmen in the building trades are expected to have their tools in order, and no time is allowed for preliminaries when working hours begin. In the foundries and machine shops from 54 to 59 hours per week are worked, while at the lumber mills and docks a ten-hour day or 60-hour week is universal.

HOUSING AND RENTS.

Working-class houses are situated mainly in the west end of Duluth proper and in West Duluth, which is a district quite detached from the city, but they are also found scattered over the central portion of the city, in alleys, over shops and in tenement blocks, though they are not numerous there owing to the higher rents which prevail generally. The various nationalities do not congregate in particular localities excepting the Austrians and Italians, who are not sufficiently numerous, however, to need special consideration.

A large proportion of working-class people live in houses which they are gradually purchasing on the instalment system, a practice which leads to a considerable increase in the amount of daily travel by cars to and from work, as houses are selected for other reasons than proximity to the place of employment. As the tramway cars are every evening crowded with workmen returning home it is evident that a large number are in the habit of using this means of locomotion. The large majority of those who are purchasing their homes are Scandinavians, who, though Americanised to a very considerable extent, still retain the frugal habits of their race and especially the strong desire to possess their own homes. Local agents foster the purchase system by tempting offers of easy payments. The usual size of a plot of ground for a workman's cottage is 25 feet by 125 feet and the cost from £52 to £83 according to situation. A frame house consisting of four rooms costs from £167 to £208 and a six-roomed house from £250 to £313. One local land company is developing an outlying district, called Duluth Heights, which is reached by a steep grade railway worked by gravitation. This company offers building plots at from £26 to £31 on condition of a cash deposit of 41s. 8d., the balance, with interest, being payable in 60 monthly instalments. The same company offers to build houses of several types at from £167 to £250 each after a cash deposit of from £33 to £50, the remainder of the purchase money, with interest, taking the form of a monthly rent of from 58s. 4d. to 66s. 8d. payable until the amount is paid off. During sickness payments may be suspended for a maximum period of three months on production of a doctor's certificate stating that the purchaser is unable to follow his employment. If from any other cause than sickness the purchaser should fail in his payments for more than one month the company may require the immediate payment of the balance due, or may rescind the contract, in which case all previous payments made by the purchaser are forfeited. Agents are said on the whole to be lenient with purchasers and the success of these enterprises would seem to corroborate this statement. With the exception of men employed in the building trades, particularly carpenters, who are able to do a portion of the work of construction themselves, comparatively few of the American-born workmen seem to be able to purchase their own homes and at the same time to maintain their higher standard of life. Lumber companies supply all the exterior and interior framework of fittings for houses all ready prepared, so that the work of construction is considerably facilitated. The Scandinavians have a natural aptitude for woodworking, and this fact, together with their frugal habits, undoubtedly accounts for the fact that so many of them succeed in securing their own homes within a reasonable time. The United States Census of 1900 showed that the percentage of homes owned free by their occupants at Duluth was 24.2 and that of homes owned encumbered 11.5, the remaining 64.3 per cent. being rented. Since 1900, however, the system of house purchase has grown in popularity, and the difficulty of finding rented dwellings which existed in most working-class districts at the time of the investigation would seem to indicate that the percentage of rented dwellings is lower now than ten years ago.

The predominant type of rented dwelling is, in the case of less skilled workmen, a flat of three or four rooms and, in the case of better-paid mechanics, one of five or six rooms. These flats are frequently found in tenements but more generally on the ground and first floors of two-storied houses, in many of which the owner occupies one floor and lets the other in order to pay off the purchase money more rapidly. There are comparatively few rented houses in which the tenant does not sublet one or more rooms. Extremely varied conditions obtain as to situation, structure and conveniences, and these are all reflected in the rents charged. Flats in divided houses are rarely self-contained, the front entrance serving both for the downstairs and the upstairs flat, but a separate back entrance to the first floor flat, reached by outer stairs, is fairly common. As the downstairs occupier has the advantage of the use of the porch or verandah the rent charged is usually higher than that for the first floor flat. The water-tap and sink are as a rule in the kitchen on each floor, and a food pantry and several clothes closets are

common features. At the rear of the house is a drying ground, with wood sheds and privies. Sometimes a bathroom and water-closet are shared by both tenants. A divided house has usually three or four rooms on each floor. A certain number of flats are found in tenement blocks three stories high, the ground-floor flat being in some cases a semi-basement, owing to the sloping ground on which the block is built. These latter dwellings, however, are not sufficiently numerous to form a class by themselves, and the same remark applies to the houses adjoining back alleys.

The tenement blocks of the older type are frame built and have a common yard with wood sheds and privies. Access to the dwellings is by a common entrance and passage on the ground floor. Stairs lead from the passage to landings on the floors above, where the flats are ranged on both sides of long passages, which are not infrequently poorly lighted. Sometimes water-closets shared by several families are situated on the landings. Each flat has a water-tap and sink in the kitchen and one or more clothes closets. In most cases each room receives direct light.

Modern flats, mostly of five or six rooms, are found in rows of two-storied brick houses, in tenement blocks also of brick, or over shops. Each flat is self-contained and furnished with a bathroom in which the water-closet is placed. In most cases they have food pantries and clothes closets and are wired for electric light. Conveniences for washing and for storing wood and coal are provided either on the open ground at the rear or in the basement. A vestibule or lobby is also a common feature. Tiers of narrow wooden stairs at the rear give the upstairs tenants access to the yards.

Owing to the great variety of housing which prevails in Duluth predominant dimensions of rooms cannot be given. Measurements taken in a number of dwellings of normal character, however, showed living rooms to vary in size from 10 feet by 10 feet to 12 feet 6 inches by 15 feet with a fairly general height of 9 feet. Bedrooms vary from 9 feet by 10 feet to 10 feet by 15 feet. In five and six-roomed dwellings a small bedroom is often found measuring from 7 feet by 7 feet 6 inches to 8 feet by 10 feet, the height being generally 9 feet.

Frame houses of the more modern kind have a stone foundation. The most modern houses and flats have a large cement basement containing one or more furnaces for heating the rooms above by means of pipes. As a general rule working-class tenants heat their dwellings by means of a stove in which anthracite coal is burnt. As the rooms all open into each other the heat from this stove warms the whole dwelling. In the kitchen is another stove for cooking, in which soft coal or wood is burnt. Both stoves are always the property of the tenant.

No statistics are available as to the amount of overcrowding that exists at Duluth, but an inspection of all the working-class neighbourhoods justifies the conclusion that at present this is not a serious evil. In West Duluth and the west end of Duluth most of the working-class houses have abundance of air and light owing to their being as a rule detached or semi-detached, the buildings standing 6 feet apart, and having open ground or yards in the rear. The alleys separating the back yards of houses are required to be not less than 16 feet wide. There is, however, a tendency to erect a second house on a building plot, the front house being removed back towards the alley to make room for the additional structure. Tenement blocks in a number of cases cover too large a proportion of the building plot, to the detriment of light and ventilation, and this tendency becomes more marked towards the centre of the city where land is dearer. Duluth has not yet developed a slum district, but the tendency just mentioned, unless checked, will inevitably produce serious congestion in the future.

Water-closets are fairly general in sewered streets but a large number of privies are met with in various parts of the city. Garbage cans have to be provided by the tenants and both these and the privies are emptied at the cost of the tenants by scavengers licensed by the sanitary authorities. The emptying charge is 5*d.* per garbage can and 8½*d.* per cubic foot for privies. Sometimes in tenement blocks one large garbage can is used by several tenants, and the periodical charge of 1*s.* 0½*d.* for emptying this is divided amongst them.

City water is supplied to all houses except those in streets high up the hill sides and those in some of the streets in West Duluth, in which cases water has to be obtained from the nearest supply available.

The following Table shows the predominant weekly rents paid for working-class dwellings in Duluth in February, 1909 :—

Predominant Rents of Working-class Dwellings.

| Number of Rooms per Dwelling. | | | | Predominant Weekly Rents. |
|-------------------------------|---|---------------|-----|---------------------------|
| Three rooms | { | Old | ... | 6s. 9d. to 7s. 3d. |
| | | Modern... .. | ... | 13s. 6d. ,, 15s. 5d. |
| Four rooms— | { | Old | ... | 7s. 8d. ,, 11s. 6d. |
| | | Old | ... | 11s. 6d. ,, 15s. 5d. |
| Five rooms | { | Partly Modern | ... | 15s. 5d. ,, 18s. 3d. |
| | | Modern... .. | ... | 20s. 2d. ,, 24s. |
| Six rooms — | { | Modern... .. | ... | 21s. 2d. ,, 25s. |

The above figures include the water charges, which in the case of flats are nearly always paid by the owner. Rents are paid monthly and in advance.

In the centre of the city rents are often considerably higher than those quoted in the Table, but working-class dwellings are not sufficiently numerous in that quarter, and conditions are too varied, to justify separate classification.

In the small district of West Duluth rents are lower than in Duluth proper, partly owing to its distance from the centre and its proximity to works employing mainly unskilled labour, but owing also to the more primitive conditions of the locality, few of the streets being sewered, and stone foundations to houses being rare. Few mechanics reside in this district. Four-roomed flats cost from 7s. 3d. to 7s. 8d. weekly here, and six-roomed dwellings of the older type from 9s. 7d. to 11s. 6d., semi-modern ones from 12s. 6d. to 14s. 5d. and modern ones from 16s. 4d. to 19s. 3d.

RETAIL PRICES.

The food supplies of Duluth are nearly all brought a considerable distance, there being little agriculture or market gardening in this part of the State.

The grocery and provision trade is entirely in the hands of local dealers: the "multiple" shop is unknown, and the few "department stores" cater for the better class customers. A small co-operative society commenced business in December, 1908, and in June, 1909 its membership numbered 215. A member's share costs 41s. 8d. and the limit of investment is fixed at £10 8s. 4d. On these shares interest at 6 per cent. is paid, and on purchases a dividend of 1½ per cent. was paid for the first half year.

The credit system prevails almost universally, and bills are paid half-monthly or monthly, according as wages are paid by local firms.

Groceries and other Commodities.

In the matter of groceries and provisions no marked differences of taste prevail between the American and Scandinavian portions of the population, but the latter exercise greater frugality.

Comparatively little *bread* is sold owing to the prevailing habit of baking at home. Both wheaten and rye breads are sold, the latter in small quantity to those Scandinavians and Slavs who retain their taste for it. Wheaten loaves are sold at the uniform price of 2½d.; the predominant weights in June, 1909, were found to be from 12 to 14 oz. per loaf. Rye loaves, ranging from 1½ to 2 lb. in weight, cost 4d. per loaf.

One local firm has obtained almost a monopoly of the *milk* trade. In winter the price is 4¾d. for single quarts and 4¼d. where two or more quarts are bought daily. Small cowkeepers on the outskirts supply their neighbours with milk at 4s. 2d. for 12 or 13 quarts. In summer milk is ½d. per quart cheaper. The Health Department in its annual report publishes for each milk dealer and cowkeeper separately the results of the inspection made by its officers, stating in the case of each dealer the percentage of butter fat found in samples obtained, and in the case of each cow-shed the number of marks assigned for cleanliness and sanitary conditions.

Coffee, principally ground and roasted, is consumed to a far greater extent than *tea*.

White granulated *sugar* is the only kind in general use, and is usually sold in quarter-dollar, half-dollar and dollar bags. Brown sugar is used for cooking and for making candy.

Bacon comes almost exclusively from the Chicago packing-houses. As local supplies of *eggs* are meagre the only kind in general use are cold storage.

Creamery *butter* is the kind mostly in demand, costing 1s. 3d. to 1s. 5½d. per lb. A small amount of local farmers' butter is sold at 1s. 0½d. per lb.

Potatoes (Irish) are brought long distances to Duluth, by rail when navigation is closed. They are sold mainly by the peck.

Both anthracite and bituminous *coal* are used, the former predominating. The latter is only used for cooking purposes by the poorer classes, and even these often prefer slab wood from the lumber mills, purchasing it from hawkers at prices varying according to the distance from the mills, the situation on the hillside and the size of the load.

Anthracite coal is sold only by the short ton of 2,000 lb., the half-ton and the quarter-ton and the price of the kind mainly in demand is 32s. 3½d. per (short) ton, 17s. 3½d. per half-ton and 9s. 7d. per quarter-ton, delivered. The whole trade is in the hands of a few companies. An extra charge of 1s. 0½d. per ton is made for delivery in West Duluth and in streets high up the hillside. This extra charge affects a considerable number of working-class people. Bituminous coal (Hocking Valley Lump) is sold at 19s. 9½d. per (short) ton, 11s. 0½d. per half-ton and 6s. 5½d. per quarter-ton.

The price of hard wood is 25s. per cord unsawn and 28s. 1½d. sawn. An additional 4s. 2d. per cord is charged for cartage. Coke is not much used. The local firm which produces it requires it for the blast furnaces.

Predominant Prices paid by the Working Classes in February, 1909.

| Commodity. | Predominant Price. |
|-----------------------------------|---------------------------------------|
| Tea per lb. | 1s. 8d. to 2s. 1d. |
| Coffee " | 10d. ,, 1s. 0½d. |
| Sugar :— | |
| White Granulated " | 3d. |
| Brown " | 3d. |
| Bacon, Breakfast—Boneless... .. " | 7½d. to 10d. |
| Eggs per 1s. | 8 ,, 12 |
| Cheese :— | |
| American per lb. | 9d. ,, 11d. |
| Brick... .. " | 10d. |
| Butter " | 1s. 3d. to 1s. 5½d. |
| Potatoes, Irish... .. per 7 lb. | 5¾d., 6d. |
| Flour, Wheaten—Household " | 11½d., 11¾d. |
| Bread, White per 4 lb. | 11½d. |
| Milk per quart | 4¼d. to 4¾d. |
| Coal :— | |
| Anthracite per cwt. | 1s. 9¾d.* ; 1s. 11¼d.† ; 2s. 1¾d.‡ |
| Bituminous " | 1s. 1¼d.* ; 1s. 2¾d.† ; 1s. 5¼d.‡ |
| Kerosene per gallon | 7¾d. to 8½d. |

* By the ton of 2,000 lb. † By the half-ton (1,000 lb.). ‡ By the quarter-ton (500 lb.).

Meat.

Very little home-killed meat is sold at Duluth, stock raising not being carried on to any extent in the north-eastern part of the State. The principal sources of supply are the packing centres of St. Paul, Chicago and Omaha, and the meat is all chilled or frozen. Large Chicago firms have extensive cold storage premises at Duluth, using the city as a distributing centre for the mining districts. There are only two local abattoirs, both small, and these are visited by the meat inspector, as also are the butchers' shops of the city. Meat is sold almost entirely in separate shops and is rarely seen inside grocery shops.

The method of cutting beef, veal and lamb does not differ materially from that practised generally in other cities. The chuck is the portion of the forequarter remaining after the first six ribs and the plate (the thin half of the forequarter) have been cut away. Mutton and veal are cut similarly to beef.

Beef and pork are mainly in demand amongst working-class buyers, mutton or lamb and veal being consumed to a small extent only. Scandinavians have a decided preference for lean meat and are also large consumers of fish, principally fresh-water herring (1½d. to 2½d. per lb.), lake trout and white fish (6¼d. per lb.).

FALL RIVER.

Fall River, the largest cotton manufacturing centre in the United States, is situated on high ground rising sharply from a somewhat narrow bay or inlet which opens to the sea between Long Island Sound and Cape Cod. The city is in Massachusetts, but stands very close to the boundary between that State and Rhode Island. It is 49 miles distant by rail from Boston and about 180 miles distant from New York. With the latter city Fall River is connected by a line of large paddle steamers which depart each evening and afford good facilities for night travelling. Besides its rail and water connexions, Fall River shares in an extensive electric tramway system which provides direct communication not only with the scattered villages lying within the city's wide boundaries, but also with Providence, New Bedford, Newport and other important towns in the district. The electric cars also offer a slower but cheaper route, alternative to the railway, to Boston and other places at a considerable distance.

The site of the city is a granite plateau of uneven contour, varying in height from about 150 feet, a short distance from the river, to about 250 feet in the well-to-do residential district of the "Highlands." To this high situation and its exposure to the wind is in part due a certain brightness of aspect which is not commonly associated with large industrial centres. As bearing upon the general appearance of the city mention should be made of the prevalent use of anthracite coal not only in dwellings, but also to some extent in the mills.

The extreme length of the city of Fall River is about eleven miles and the greatest width about seven miles, but long before these limits are reached the houses thin out in districts of a rural character. No important extension of boundaries appears to have taken place since 1862. The following Table shows the population in the Federal Census years 1870-1910 :—

| Year. | Population. | Increase. | Percentage Increase. |
|------------------------------------|-------------|-----------|----------------------|
| 1870 | 26,766 | — | — |
| 1880 | 48,961 | 22,195 | 82·9 |
| 1890 | 74,398 | 25,437 | 52·0 |
| 1900 | 104,863 | 30,465 | 40·9 |
| 1910 | 119,295 | 14,432 | 13·8 |

It will be seen that in the earlier part of the period covered by the above Table the growth of population was rapid. Since 1900, however, there has been a somewhat striking check in the rate of increase. This was due in part to severe industrial disputes, and in part to trade depression, resulting probably from the expansion of the cotton industry in the Southern States, where much of the plainer and coarser kinds of work previously done in the old-established New England mills is now carried on.

The Federal Census of 1900 showed that at that date Fall River had a higher percentage of foreign-born inhabitants than any other large city in the United States, but from the State Census taken in 1905 it appeared that Fall River then ranked after Lawrence in respect of the proportion of foreign-born inhabitants, who in the former city constituted 43·9 per cent. of the total population, as compared with 46·1 per cent. at Lawrence.

Of the foreign-born inhabitants, 36·2 per cent. were born in Canada (93·9 per cent. of these being French Canadians), 26·7 per cent. in Great Britain, 13·2 per cent. in Ireland, 10·9 per cent. in the Western Islands of Portugal, 4·2 per cent. in Portugal itself and 2·9 per cent. in Russia. If the immigrants from the United Kingdom and the English-speaking Canadians be regarded as one group they constitute more than 42 per cent. of the foreign-born population of the city and over 18 per cent. of the entire population. Inasmuch as similarity of language and, to a large extent, of traditions makes the points of difference between this national group and the native-born slight, the significance

of these figures is obvious. Among the English immigrants—who are mostly from Lancashire—there are not wanting signs of a cohesive tendency, and a warm regard for much that has been left behind in the “old country” tinges many a conversation; but, on the whole, the English assimilate to the American type very closely and rapidly, and their inclusion among the figures of “foreign-born” residents has not the same significance as, say, the inclusion of Portuguese, Russians or even French Canadians.

The French Canadians form the most distinctive national group in the city, having preserved, unaffected by American conditions, their religion, language and, to a large extent, their customs. Their economic position in Fall River does not differ materially from that which they occupy in other New England cities, and it is not necessary here to repeat the more general description of their characteristics which will be found in the report on Lowell, a city which in many respects shows a strong likeness to Fall River.

The immigration into Fall River has taken place in a series of waves. The Irish came first, in the years following the agricultural crisis of the early 'forties, and though they still continue to come, the movement has spent its force. The next important influx was that of the French Canadians, who like the Irish came to fill the unskilled positions in the cotton mills. This movement has nearly ceased, and the French Canadians, speaking generally, have now risen in the industrial scale, and occupy a position between that of the experienced English immigrants from a Lancashire factory and that of the more recently arrived Portuguese.

The Portuguese represent one of the most recent large additions to the foreign-born population. The majority come from the Azores and other neighbouring islands. So far, the process of assimilation has not gone far. They maintain their own churches, and have so congregated together that certain quarters of the city have become identified with them. Though the majority of the Portuguese probably enter the mills to stay, yet many have a keen ambition to become possessed of farms and a considerable number of these drift off, not so much to the larger holdings in the Middle and Far West, as to the small and somewhat poor farms of New England itself. Other peoples represented are the Russians and Poles. These share with the Portuguese the roughest kinds of work in the mills. They do not show the same cohesive power as some of the other foreign nationalities. They are congregated, however, to a large extent, along the strip of land in the immediate neighbourhood of the river, and their dwellings present probably the lowest standard of housing accommodation in the city. It may be noted here that though Fall River has been affected to so great an extent by immigration, there are, on the whole, but few signs of those congested conditions of housing which in some cities are associated with the presence of a large alien population. In the neighbourhood just mentioned as being occupied largely by the Russians and Poles, there are many obtrusive signs of squalor and congestion, but, regarding the city as a whole, it may be stated that the practice of building the tenement houses as separate detached blocks secures for the inhabitants, in most instances, a sufficiency of light and air, though among some of the immigrant classes it is probable that, even in dwellings which are themselves satisfactory from a hygienic point of view, a certain amount of overcrowding exists.

The following Table shows the general and infantile mortality for the years 1904 to 1908 :—

| Year. | Number of Deaths. | Deaths under one Year. |
|-------|-------------------|------------------------|
| 1904 | 2,047 | 812 |
| 1905 | 2,139 | 809 |
| 1906 | 2,073 | 848 |
| 1907 | 2,359 | 991 |
| 1908 | 2,358 | 681 |

The total number of deaths due to zymotic diseases was 404 in 1908 and 553 in 1907. The number of deaths due to tubercular diseases (including phthisis) during the period 1904–8 was as follows :—1904, 166; 1905, 141; 1906, 166; 1907, 257; 1908, 143. The large increase shown for the year 1907 is not specially commented on in the reports of the Board of Health.

Municipal organisation in Fall River is generally similar to that of other cities in Massachusetts, the sanitary condition of the city being under the special care of the Board

of Health, which consists for the most part of local medical men serving voluntarily. This department of the city's activities has recently been reorganised. At the present time the actual administrative work is done by an agent or chief inspector and by a number of other inspectors, who are assigned special duties, *e.g.*, inspector of plumbing, inspector of milk and oleomargarine, inspector of animals and veterinary supervisor of food supplies. There are, in addition, two sanitary inspectors engaged on general duties connected with contagious diseases, the removal of sanitary nuisances and the periodic visiting of all houses in the city. Since May, 1907, particular care has been taken with a view to securing the purity of the milk supply. The regulations provide that every person wishing to sell milk in the city must first procure a licence from the Board of Health. As a condition of his obtaining this he must produce a veterinary certificate as to the condition of the cows belonging to himself or to the person from whom he proposes to obtain his supplies. No fresh cattle can be added to a herd supplying the city without first undergoing a tuberculin test. An inspector is assigned specially to the duty of visiting all sources of supply in and around the city with a view to satisfying himself as to the soundness of the animals and the cleanliness of the sheds and utensils.

The city undertakes the care of consumptives as well as of those suffering from the diseases ordinarily classed as contagious. It appears from the report of the Board of Health for 1907, however, that owing to the lack of funds the hospital provision of the city during that year was inadequate.

The electric lighting and gas supplies and the tramway services are controlled by private enterprise, the tramway forming part of a very extensive system covering a large portion of East and South Massachusetts. The water supply is municipal, and is obtained from a large lake lying north of the city, which is regularly patrolled with a view to preventing contamination. Through its Board of Park Commissioners the city also maintains cemeteries and two parks, one of which is a fine open, breezy green, commanding an extensive view of the bay on which the city stands and of the country beyond. Mention should also be made of a well-equipped Textile School, which provides day and evening instruction in both designing and practical processes connected with the staple industry of the city.

In Fall River the roads are for the most part cobbled, but the side walks in the centre of the city and along the chief roads are paved in the ordinary way with flags. In many of the residential streets, however, the paving is intermittent, short stretches of flags alternating with the roughly trodden bank according to no apparent system.

The city revenues are obtained in the main from a tax on real and personal property and a poll tax. Each citizen is supposed to make an exhaustive declaration of his property, and the amount required by the city authorities is levied on a *pro rata* basis. The poll tax is a tax of 8s. 4d. primarily on all men of not less than 20 years of age. The assessors have power, however, to abate this levy in cases of infirmity, poverty or old age, and in practice about 15 per cent. of the total amount assessed is abated on these grounds. Both the poll and property taxes are collected together. The total amount raised from both sources in 1907 was £339,047, representing a rate of 1.82 per cent. of declared property, real and personal. The whole of the sum raised is not available for civic purposes, however, for each city contributes to the State funds, which are principally derived from this source. The amount contributed by Fall River to the Massachusetts Treasury in 1907, for various purposes, was £26,245, while the sum of £24,599 was passed over to the county authorities. The chief source of municipal revenue in 1907 besides the taxes were the receipts from liquor licences, which amounted to £31,298. During the year beginning May 1st, 1909, however, the liquor traffic was prohibited in the city, so that this item almost disappeared, but the prohibition decision was reversed in 1910.

OCCUPATIONS, WAGES AND HOURS OF LABOUR.

The industrial position of Fall River is sufficiently indicated by the State statistics of manufactures. The report for 1908 shows that out of the total value of all products returned at £10,788,310, no less than £8,543,379, or 79 per cent., represented the value of cotton goods. The city is therefore dependent almost entirely upon the cotton industry, and the fact that it has no second important industry to fall back upon is recognised locally as being responsible for the severity with which the industrial disturbances of the past few years have affected the general commercial, trading and professional classes, besides those directly concerned in cotton manufacture.

The following Table, based upon the Federal Census for 1900, shows the distribution of the population of Fall River among the chief groups of occupations :—

Number of Persons of 10 years of age and over engaged in Occupations in Fall River in 1900.

| Occupations. | Males. | Females. | Total. |
|---|--------|----------|--------|
| Building | 2,146 | 4 | 2,150 |
| Metalworking and Engineering | 1,102 | 3 | 1,105 |
| Cotton | 12,762 | 11,375 | 24,137 |
| Other and not specified Textile | 1,007 | 1,850 | 2,857 |
| Boot and Shoe Making | 215 | 11 | 226 |
| Hat and Cap Making | 239 | 286 | 525 |
| Other Clothing | 120 | 850 | 970 |
| Woodworking and Furnishing | 128 | 10 | 138 |
| Paper and Printing | 179 | 25 | 204 |
| Food, Drink and Tobacco | 432 | 13 | 445 |
| Other Manufacturing and Mechanical Pursuits | 1,815 | 129 | 1,944 |
| Trade and Transportation | 6,303 | 816 | 7,119 |
| Labourers (not otherwise specified) | 2,621 | 10 | 2,631 |
| Professional, Domestic and Personal Service and } Agricultural Pursuits | 2,379 | 2,346 | 4,725 |
| All Occupations | 31,448 | 17,728 | 49,176 |

It will be seen that practically half of the total population engaged in occupations is employed in the cotton industry. The only other branches of manufacture of special importance are hat and cap making, carried on by one large firm, and metalworking and engineering. The last-named trade is represented by a number of shops engaged almost entirely in repair work, and also by a firm of considerable size making looms and other textile machinery.

The following Table, based on the Massachusetts State enumeration of industrial wage-earners for 1908, is less wide in scope, but it is of interest not only as relating to a later date but also as showing the great fluctuation in employment which took place in 1908 :—

Number of Wage-earners employed in 1908 in the Manufacturing Industries of Fall River.

| Industry. | Wage-earners Employed. | | | | |
|-----------------------------------|------------------------|----------|--------|------------------|------------------|
| | Average Number. | | | Smallest Number. | Greatest Number. |
| | Males. | Females. | Total. | | |
| Cotton Goods | 12,739 | 11,486 | 24,225 | 17,589 | 28,551 |
| Cotton Small Wares | 75 | 77 | 152 | 119 | 199 |
| Foundry and Machine Shop Products | 520 | 27 | 547 | 450 | 656 |
| Other Industries | 3,625 | 1,209 | 4,834 | 3,454 | 5,711 |
| All Industries | 16,959 | 12,799 | 29,758 | 21,612 | 35,117 |

It will be seen that in the leading industry of the city a great fluctuation in employment took place in the year. In 1907 the average number employed in this industry was 28,944.

Fall River is the largest cotton manufacturing city in the United States, the number of spindles being estimated in 1906 at nearly 3,400,000, or about one-seventh of the total for the whole country, and the number of looms at over 82,000. As is usual in the cotton manufacturing centres of the United States, both spinning and weaving are done under the same roof. Finishing and bleaching are also carried on to a large extent. Several of the mills are operated partly by water power, and to the possibilities presented by the stream which flows partly through and partly under the city is due no doubt the early localisation of the cotton industry in this district.

The mills appear to be fitted with machinery of the most modern design. The Northrop and other self-acting looms are largely used, especially for the plainer varieties of cloth in which an even tension is possible during weaving. A machine for performing

the tedious process of drawing-in has been introduced recently. The appearance of most of the mills is plain and business-like, but not unattractive. They appear to be generally well lighted and airy. No regulation of artificial humidity is imposed by the factory inspection authorities.

In the weaving department the number of looms per worker is greater than in England, twelve being the most usual number. The looms are lighter and are run at less speed than those of Lancashire. In the mule-spinning room one man usually looks after two pairs of mules, with a total of about 3,000 spindles. It should be mentioned that in recent years mule spinning has shown a marked tendency to leave Fall River and increase at New Bedford. This change coincides with and implies a change from relatively coarser to finer counts in the latter city, and the converse process in the former.

The principal trade unions in the textile industry are the Mule Spinners' Union, which comprises practically all the workers, about 350 men; the Card Room Workers' Union, which includes about one-third of the total number employed in this department; the Slasher Tenders' Union, with a membership of about 80 per cent. of the total; and the Weavers' Union, numbering about 3,000 out of 10,000 employed in the city. Generally, the unions pay accident, strike and break-down benefits. Out-of-work or sick benefits are not common, and there is no trade union provision for old age.

The following general changes in rates of wages in the cotton industry have taken place since July, 1906:—In November, 1906, there was an increase of 10 per cent.; in May, 1907, an increase of 10 per cent.; and in May, 1908, a reduction of 18 per cent., so that wages now bear a relation to those of July, 1906, of 99·22 : 100. These changes affected all classes of labour. Wages are at present regulated by agreement, according to which the rates are revised every six months and fixed according to the margin existing between the average price of middling upland cotton and the selling price of a certain quality of print cloth. The two essential clauses of this agreement are as follows:—

1. 10·89*d.* per cut shall be the recognised standard price for a margin of 95 points, based on the cost of 8lb. of middling upland cotton and the average selling price of 45 yards of 28 inches 64 × 64 print cloth and 33·11 yards of 38½ inches 64 × 64 cloth. Quotations from the "New York Journal of Commerce" shall be considered authoritative.

2. The standard of wages shall be fixed every six months, beginning the last Monday in May and November of each year, and no oftener, and shall be based on the average margin, as fixed above, for the previous six months. Prices for weaving shall be as follows:—

| With a margin of | points | ... | ... | ... | ... | ... | <i>d.</i> |
|------------------|--------|-----|-----|-----|-----|-----|-----------|
| 115 | points | ... | ... | ... | ... | ... | 11·98 |
| 112½ | " | ... | ... | ... | ... | ... | 11·845 |
| 110 | " | ... | ... | ... | ... | ... | 11·71 |
| 107½ | " | ... | ... | ... | ... | ... | 11·57 |
| 105 | " | ... | ... | ... | ... | ... | 11·435 |
| 102½ | " | ... | ... | ... | ... | ... | 11·295 |
| 100 | " | ... | ... | ... | ... | ... | 11·16 |
| 97½ | " | ... | ... | ... | ... | ... | 11·025 |
| 95 | " | ... | ... | ... | ... | ... | 10·89 |
| 92½ | " | ... | ... | ... | ... | ... | 10·75 |
| 90 | " | ... | ... | ... | ... | ... | 10·615 |
| 87½ | " | ... | ... | ... | ... | ... | 10·48 |
| 85 | " | ... | ... | ... | ... | ... | 10·345 |
| 82½ | " | ... | ... | ... | ... | ... | 10·09 |
| 80 | " | ... | ... | ... | ... | ... | 9·83 |
| 77½ | " | ... | ... | ... | ... | ... | 9·585 |
| 75 | " | ... | ... | ... | ... | ... | 9·34 |
| 72½ | " | ... | ... | ... | ... | ... | 9·00 |

but there shall be no change in prices on either the ascending or descending scale unless the margin has reached a point named in the above schedule. 9·00*d.* per cut shall be the minimum rate paid for weaving; 11·98*d.* shall be the maximum. Wages in all departments other than weaving shall be adjusted on the price for weaving as above determined.

It should be remarked that this agreement was departed from in favour of the workers on the occasion of the last reduction in May, 1908. Had the agreement taken full effect the reduction would have been much more than that which actually occurred, viz., 18 per cent. In February, 1909, the margin was 80 points.

In February, 1909, the predominant wages and hours of labour for adult males in various occupations were as shown in the following Table :—

Predominant Weekly Wages and Hours of Labour of Adult Males in the Principal Occupations in February, 1909.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|--|---------------------------|-------------------------------------|
| <i>Building Trades :—</i> | | |
| Bricklayers | 105s. | 48 |
| Stonemasons | 105s. | 48 |
| Stonecutters | 75s. to 87s. 6d. | 48 |
| Carpenters | 75s. | 48 |
| Plasterers | 105s. | 48 |
| Plumbers | 81s. 3d. | 48 |
| Painters | 68s. 9d. | 48 |
| Hod Carriers, Bricklayers' and Plasterers' Labourers | 43s. 9d. | 54 |
| General Labourers | 37s. 6d. | 54 |
| <i>Foundries and Machine Shops :—</i> | | |
| Ironmoulders | 62s. 6d. to 75s. | 58 |
| Machinists | 50s. to 70s. 10d. | 58 |
| Patternmakers | 75s. | 58 |
| Labourers | 33s. 4d. to 37s. 6d. | 58 |
| <i>Cotton Industry :—</i> | | |
| Picker Hands | 27s. 4d. to 30s. 9d. | 58 |
| Card Grinders | 41s. 8d. ,, 45s. 10d. | 58 |
| Card Strippers | 29s. 2d. ,, 31s. 3d. | 58 |
| Drawing Frame Tenders | 24s. 7d. ,, 28s. 3d. | 58 |
| Mule Spinners | 50s. ,, 70s. 10d. | 58 |
| Slasher Tenders | 43s. 7d. ,, 45s. 7d. | 51 to 58 |
| Loom Fixers | 50s. ,, 52s. 1d. | 58 |
| Weavers | 33s. 4d. ,, 45s. 10d. | 58 |
| Bleachers and Dyers | 35s. 5d. ,, 39s. 7d. | 58 |
| <i>Printing Trades :—</i> | | |
| Newspaper— | | |
| Hand Compositors—Day work | 66s. 8d. | 48 |
| Machine Compositors—Day work | 83s. 4d. | 48 |
| Pressmen—Day work | 83s. 4d. | 48 |
| Book and Job— | | |
| Hand Compositors | 66s. 8d. | 48 |
| Pressmen (Small Presses) | 54s. 2d. to 70s. 10d. | 48 |
| <i>Public Services :—</i> | | |
| Street Construction, Paving and Cleaning (Municipal)— | | |
| Paviors—Cobble | 56s. 3d. | 48 |
| Paviors—Block | 125s. | 48 |
| Paviors' Labourers, Road Menders, Scavengers and } Road Sweepers | 56s. 3d. | 48 |
| Drivers, One horse | 56s. 3d. | 48 |
| Drivers, Two horses | 62s. 6d. | 48 |
| Water Works (Municipal)— | | |
| Labourers | 56s. 3d. | 48 |
| Gas Works* (Company)— | | |
| Gasmakers | 61s. 3d. to 65s. 8d. | 84 |
| Firemen | 56s. | 84 |
| Labourers | 43s. 9d. | 60 |
| Electric Light and Power Works (Company)— | | |
| Engineers | 87s. 6d. | 84 |
| Switchboard Men | 58s. 4d. to 70s. 10d. | 84 |
| Wiremen and Linemen | 62s. 6d. ,, 75s. | 54 |
| Labourers— | | |
| Fire room | 45s. 10d. ,, 50s. | 84 |
| Others | 37s. 6d. ,, 45s. | 54 |
| Electric Tramways (Company)— | | |
| Motormen and Conductors†— | | |
| 1st year | 61s. 3d. | 70 |
| 2nd year | 64s. 2d. | 70 |
| 3rd, 4th and 5th years | 67s. 1d. | 70 |
| 6th and 7th years | 70s. | 70 |
| After 7 years | 72s. 11d. | 70 |

* Water Gas Works.

† 67s. 1d. was the rate received by the majority of the men.

Taking wages at New York as the base, =100, in each case, the wages index numbers for Fall River are—building trades, skilled men 83, hod carriers and bricklayers' labourers 64; foundries and machine shops, skilled men 80, unskilled labourers 85; printing, hand compositors (job work) 76.

With regard to the wages of women in the cotton mills it may be mentioned that the predominant wages of female slubbing and roving frame tenders range from 33s. 4d. to 37s. 6d. per week, a range which also represents the most usual earnings of women weavers. In the spinning rooms the frame spinners, paid according to the number of "sides" of which they have charge, usually earn from 29s. 2d. to 33s. 4d. per week. Apart from the cotton mills there is no other important field of employment for women. It is not known what proportion of the women at work are married.

Mention has already been made of the principal trade unions in the cotton industry. With regard to other occupations it may be noted that unions exist for most of the branches of the building trades and that the standard minimum rates of pay are generally paid. The most important branch which is not organised is that of the hod carriers and labourers. The printing trades are well organised, though, apart from the newspapers, the printing industry in Fall River is unimportant. The machinists are organised, but not very effectively.

In Fall River, as in Boston and Springfield, a Free Employment Office is maintained by the Massachusetts Government. During the year ending 30th November, 1909, the Office received 3,642 applications for employment, of which number 2,314 came from males. The total number of persons called for by employers was 2,130 and the number of positions filled 1,541 (males 436, females 1,105). The majority of the positions filled by women were of a domestic character.

There is little in the nature of "welfare work" in the mills in Fall River, but at one important establishment a scheme of profit sharing is in operation.

HOUSING AND RENTS.

It has already been remarked that the boundaries of Fall River are wide and embrace a large area which is rural in character. So far as the urban portion of the municipality is concerned, however, the working-class population is found everywhere except in a small quarter in the neighbourhood of the City Hall, which is occupied almost exclusively by shops, offices, &c., and in the district known as the "Highlands," which is pre-eminently the residential quarter for people of means. Those working-class people who live beyond easy walking distance from their work have at command extensive tramway facilities. The fare for journeys within the city limits is 2½d., but six tickets may be obtained for 1s. 0½d., this reduction being one of the conditions of the grant of the Company's concession by the city authorities.

Except in the "fire zoue," a small area in the centre of the city, practically all the houses in Fall River are of wood, the foundations only being of brick or stone. The use of wood permits of a considerable variety in construction, and the possibility of effective ornamentation at little additional cost, so that the working-class streets present a strong contrast to those of an English industrial town with their long rows of dwellings, quite uniform in structure. A few large blocks of dwellings built originally by mill-owners for their employees are the only residential buildings which remind an observer of English conditions.

The working-class dwellings almost without exception are flats or tenements, which most usually contain either four, five or six rooms, though three-roomed and seven-roomed tenements are not unknown. The size of the houses in which the tenements are situated varies considerably. Sometimes there are only two tenements in a building, and from two to six tenements in one building may be considered the most common number. There are in addition, however, many tenement blocks in which this number of separate dwellings is exceeded. The tenement buildings are usually detached or semi-detached, and are seldom built in rows. Many lie back from the street, and might perhaps be termed rear houses, though the term, on account of the generous amount of space which usually surrounds the buildings, would here have little significance. Gardens or separate house yards, such as are common in England, are rarely found. A rough grass plot usually surrounds the tenement building, and affords a drying green, but it is unfenced, and the boundary between two such plots is frequently hard to discern.

Though the size of the tenement building varies considerably, the arrangement of the separate dwellings is generally uniform. A common "hall-way" or staircase gives access to both or all the tenements, though in some cases the tenements on the ground floor have separate entrances from the street. Subject to certain minor differences

nearly all the flats or tenements conform to one of two fairly well-marked local types. In the first type the building is usually three stories high, and all the rooms of each tenement are on one floor. In the second type the building consists of two main floors and an attic floor, and the three or four attics are shared as a rule by the tenants in the building for the purpose of sleeping rooms. These attics usually have dormer windows, and when their interiors are plastered and papered their use as bedrooms is free from objection.

The first of the two types of tenement houses is more modern and on the whole represents a rather higher standard of housing than the other, but to this generalisation there are some exceptions, and both types may be considered as representative of the dwellings of most sections of the working classes.

A marked feature of a typical working-class tenement is the large size of the kitchen and the arrangement by which this apartment is made the centre of the dwelling, with all the other rooms opening directly off it without passages or corridors. The kitchen, in fact, serves as an entrance hall and as a living room, and from the point of view of size and utility is the most important apartment in the house. Standing out towards the middle of this room is almost invariably a large and often elaborate stove, sometimes designed only for heating purposes and sometimes for both heating and cooking. In many cases these stoves belong to the tenants, and appear often to be the object of a good deal of family pride, the manifest expensiveness of the stove being sometimes in strong contrast to the rest of the household furnishings.

A kitchen in a dwelling of moderate rental often measures as much as 16 feet square. The size of the other rooms varies greatly. The height of the rooms appears in practically all cases to be sufficient, being seldom less than 9 feet. In addition to the kitchen and the main apartments which lead off it, there is usually a small narrow closet or pantry containing sink and water supply and affording facilities for storing food. In the cheaper flats, however, this pantry is not found, the sink and water-tap being in the kitchen.

The other apartments which lead from the kitchen need no special description. As a rule they are of fair size and well lighted. The practice of building detached tenement houses makes it often possible, in fact, to light a room on two sides. A few houses still remain in which one or more rooms receive only a borrowed light, but such dwellings are no longer built.

The practice of reserving one room as a parlour or best room is usual, and except in the very poorest homes the furniture and ornaments appeared on the whole to be in very good taste and to suggest intelligent discrimination and appreciation of comfort.

Within the rental limits shown in the Table below bathrooms are fairly common, though by no means universal. The bathroom almost always contains the sanitary convenience.

In the method of heating—an important consideration in view of the severity of the winter—considerable differences exist. In the cheaper flats the parlour and bedrooms derive their warmth from the kitchen with its large stove. In this case the local adoption of the flat as the chief type of dwelling, and the arrangement by which the kitchen is made the centre of the tenement, are easily explained. This method is undoubtedly the most common so far as strictly working-class houses are concerned. In the dwellings of a better class the kitchen stove may be connected with a hot-water system, which, by means of radiators, heats the remaining rooms and also supplies the bath and fixed basins. A third common arrangement is to have furnaces in the basement, one to each flat, each under the care of the separate tenants and constructed on the slow combustion principle. The basement in such cases is usually a large apartment, partly underground, which affords a common washhouse, storehouse and drying room for the various tenants in the house. This last method is found only in houses occupied by the most prosperous of the working classes.

A type of dwelling which marks a passing phase in the industrial development of the city may be mentioned. It consists of large blocks of tenement houses originally erected by mill-owners for their operatives, but now mostly let on the usual commercial basis, and not exclusively to mill employees. One group of these dwellings consists of four long blocks of brick-built tenement houses, each block being separated from the next by a broad open yard. The houses are two-storied, with attics above. The majority of the tenements consist of a kitchen, two bedrooms and two attics, while some have, in addition, a sitting room or parlour. The rental of such accommodation is considerably below the predominant range for working-class dwellings in the city as a whole.

It will have been seen that the rent of a dwelling is influenced by a number of considerations besides the number of rooms, with the result that a wide range is shown for any one class of dwelling classified according to its nominal accommodation. Intermediately within the extreme limits, however, the predominant rentals are as follows:—

Predominant Rents of Working-class Dwellings.

| Number of Rooms per Dwelling. | | | | Predominant Weekly Rents. |
|-------------------------------|-----|-----|-----|---------------------------|
| Four rooms | ... | ... | ... | 7s. 4d. to 8s. 4d. |
| Five rooms | ... | ... | ... | 8s. 4d. ,, 11s. 6d. |
| Six rooms | ... | ... | ... | 10s. 5d. ,, 13s. 7d. |

The level of rents at New York being represented by 100, the rents index number for Fall River is 55.

These rentals have shown very little change during the last few years. Water charges are included. Houses are generally let by the week.

The by-laws which now regulate the erection of houses in the city are detailed and in some respects stringent. They recognise two "fire districts" in the centre of the city. In the first, with certain exceptions, only brick, stone, etc. buildings may be erected. In the second this regulation is modified, and allows of dwelling or tenement houses built of wood, when occupying an area of less than 2,000 square feet. In the rest of the city no restriction is placed on the erection of frame houses, but very careful and minute provisions are laid down for the insulation of flues, steam pipes, etc., in such dwellings. The by-laws also provide that every building shall have a foundation the bearing of which must not be less than four feet below any adjoining surface exposed to frost. The by-laws contain no provisions with respect to the ventilation, lighting or cubic space of rooms in dwelling houses.

No housing schemes have been attempted in Fall River by the municipality or by philanthropic effort. A number of building societies and companies do business in the city, the general principle upon which they proceed being the familiar one of a cash deposit and the repayment of the remainder of the loan in the form of quarterly or yearly instalments. Buildings and land are in almost all cases held freehold, though in some instances the house and the land belong to different owners. In the latter case the land carries a rent charge or feu sometimes subject to revision at certain intervals. According to the Census of 1900, 10.6 per cent. of the homes in the city were owned subject to encumbrance and 7.4 per cent. were owned free of encumbrance by their occupiers. It is not known what proportion would apply exclusively to the wage-earning classes.

RETAIL PRICES.

There is little in the working-class dietary or the shopping facilities of Fall River that calls for special remark. The usual routine of a working-class family prescribes breakfast at an early hour, according to the time of starting work, dinner at 12 noon and supper at 6 p.m. It is seldom that more than these three meals are taken.

The city has a market where at certain times a busy trade is carried on. There are also a few branches of "multiple" firms selling groceries. A system of canvassing for grocery orders is common. An agent for some company calls for orders weekly and when a custom has been established arranges for payment by fixed instalments. Among the shopkeepers credit is frequently given, especially at times of industrial depression. The retailer is forced by the stress of competition to trade on this system, and through his bad debts feels very quickly the effect of hard times in the industries of the city.

Groceries and other Commodities.

The taste in *tea* differs widely and is reflected in the range of price shown by the returns obtained. The most usual quality, however, appears to sell at about 1s. 3d. to 1s. 8d. per lb., though much tea is sold at prices outside these limits. The quality is generally an Oolong and large leaf variety. Ceylon tea, as commonly used in England, while obtainable, does not appear to be much sold.

In Fall River working-class customers usually buy *sugar* at so many pounds for a quarter-dollar or for a dollar (4s. 2d.) and frequently make no enquiry as to the weight which they receive for their money.

The weight of a loaf of *bread* is fixed by State statute at 2 lb., but in Fall River the law does not appear to be rigidly enforced. In practice, bread is seldom placed on the scales at all and in very many cases the loaf weighs much less than 2 lb. The loaves most usually sold cost 5d. and weigh from 1½ to 2 lb.

The *coal* commonly used by the working classes is anthracite, which is usually bought by the half-ton (1,000 lb.) Coal is not hawked through the streets; those who require only small quantities at a time buy bags of coal from the general shop. Coal cellars are usual in the houses, but where the sacks are carried upstairs an extra charge is made: if carried to the second floor 7½d. extra is charged for half a ton: if to the third floor 1s. 3d. Coke is usually bought at the grocery and provision shops in small bags containing about 20 lb., for which 5d. is charged.

The following Table shows the predominant prices of various articles in February, 1909 :—

Predominant Prices paid by the Working Classes in February, 1909.

| Commodity. | Predominant Price. |
|-----------------------------------|-----------------------|
| Tea per lb. | 1s. 3d. to 1s. 8d. |
| Coffee " | 1s. 0½d. |
| Sugar :— | |
| White Granulated " | 2½d., 2¾d. |
| Brown " | 2½d. |
| Bacon, Breakfast—Boneless... .. " | 8d. to 9d. |
| Eggs per 1s. | 7 " 9 |
| Cheese, American per lb. | 9d. " 10d. |
| Butter " | 1s. 2½d. " 1s. 4d. |
| Potatoes, Irish... .. per 7 lb. | 6d. " 7d. |
| Flour, Wheaten—Household " | 1s. 0½d., 1s. 0¾d. |
| Bread, White per 4 lb. | 10d. to 1s. 1¼d. |
| Milk per quart | 4¾d. |
| Coal, Anthracite per cwt. | 2s. 0¼d. to 2s. 1¾d.* |
| Kerosene per gallon | 7¼d. " 9d. |

* By the half-ton (1,000 lb.)

Meat.

The meat consumed in Fall River is both local and Western-dressed, the latter coming in specially constructed railway wagons from Chicago and neighbourhood. Both varieties are of good quality and there is little difference, if any, in price. Meat is sold as a rule in shops which also sell groceries and provisions; shops selling meat only are not common.

Beef is undoubtedly the meat most favoured, except by the Canadians, who consume nearly as much pork as beef. The best joints are in great demand and fetch a good price, the price of the inferior parts being correspondingly low. Mutton is not much sold. Veal is eaten to a very small extent; some butchers do not sell it at all and others only sell it at intervals. The price of such veal as is sold shows very great variation; this is due partly to a practice which prevails in many parts of New England of putting veal on the market either when it is too young or when it is too old to be satisfactory. Variation in the price of particular joints is also due to differences in the character of the trade carried on at any given shop: the inferior cuts may be dearer and the better cuts cheaper at one shop than at another where a better class trade is carried on.

The slaughter houses of the city are under the control of a veterinary supervisor of food supplies. Slaughtering is done under his inspection and the meat fit for food is stamped by him in accordance with Massachusetts State law.

The following Table shows the predominant prices paid by the working classes in February, 1909, for various cuts of meat :—

Predominant Prices paid by the Working Classes in February, 1909.

| Description of Cut. | Predominant Price per lb. |
|------------------------------------|---------------------------|
| Beef :— | |
| Roasts—Ribs prime | 8d. to 9d. |
| " Ribs second cut | 7d. ,, 8d. |
| " Chuck or short ribs | 5d. ,, 6d. |
| Steaks—Round | 8d. ,, 10d. |
| " Sirloin | 1s. ,, 1s. 1d. |
| Shin without bone | 4d. |
| Flank | 4d. |
| Mutton or Lamb :— | |
| Leg | 7d. to 9d. |
| Breast | 5d. |
| Loin | 7d. to 9d. |
| Chops | 7½d. ,, 10d. |
| Shoulder | 5d. ,, 6d. |
| Neck | 4d. ,, 5d. |
| Veal :— | |
| Cutlets | 10d. to 1s. 3d. |
| Rib chops | 8d. ,, 11d. |
| Loin chops | 9d. ,, 1s. |
| Breast | 5d. ,, 7d. |
| Neck | 4d. ,, 5d. |
| Pork :— | |
| Fresh—Loin | 6d. to 7½d. |
| " Spare rib | 5d. |
| " Shoulder | 5d. to 5½d. |
| " Chops | 6½d. ,, 7½d. |
| Corned (wet salt or pickled) | 6d. ,, 7d. |
| Dry salt | 6d. ,, 7d. |
| Ham | 6½d. ,, 7½d. |
| Shoulder, salt or smoked | 4½d. ,, 5d. |

Prices at New York being taken as the base, = 100, in each case, the index number for the price of meat at Fall River is 101, for other food it is 101 and for food prices as a whole 101. For rents and food prices combined the index number is 90.

LAWRENCE.

Lawrence, in the State of Massachusetts, is the chief centre in the United States for the manufacture of woollens and worsteds. It is situated on the river Merrimac about nine miles below Lowell, and at a distance by rail from Boston of about 26 miles. Lawrence is purely a manufacturing city, consisting of a group of very large and important textile mills with such dwellings, shops and offices as are indispensable to its industrial life. Few of the higher officials of the manufacturing firms located in the city have their homes there; Lawrence lies in the shadow of Boston, and it is from this larger city that its business enterprises are chiefly directed. Boston also forms the mart for the output of Lawrence, all the selling offices or agencies of the Lawrence mills being situated there.

The city is unattractive in appearance, there being a general absence of imposing buildings, with the exception of some municipal and judicial offices. The main street, which is practically the only shopping centre, is a long, straight thoroughfare, presenting a very uninteresting appearance on account of the many frail-looking, one-storied buildings which line both sides. Indeed, it appears anomalous that, in a city where signs of congestion in the housing accommodation are not wanting, the land available on the main street should be used apparently to so little advantage. The most pleasing quarter of the city as regards appearance is the Common. This is a small park in the centre of the city crossed daily by many operatives on their way to and from the mills.

If Lawrence itself lacks charm, the deficiency is amply supplied by the attractiveness of the small towns which lie in its neighbourhood and, so far at least as the well-to-do are concerned, serve as residential suburbs. The chief of these is Andover, which is situated about three miles from the city, and is the seat of the well-known middle class school Phillips Academy. Some parts of this little town, with their well shaded streets, are of marked beauty. The whole of the district is intersected by a very efficient system of electric tramways, and excellent sites for residences can be reached for the usual $2\frac{1}{2}d.$ fare, but it does not appear that this advantage has so far brought much relief to the working-class population of Lawrence. The great majority of the workers live inside the city limits, a fact which is probably accounted for by the early hour at which most of them have to be at the mills, and also by the large proportion of non-English-speaking foreigners at work in the city, this class being necessarily less enterprising than others in breaking away from the well-established residential districts, and from people of their own race.

The city has been of rapid growth, and in view of large mill extensions now in progress it may be predicted that its growth will continue vigorously for some years to come. The population in various Federal Census years from 1870 onwards is shown in the following Table:—

| Year. | Population. | Increase. | Percentage Increase. |
|-------|-------------|-----------|----------------------|
| 1870 | 28,921 | — | — |
| 1880 | 39,151 | 10,230 | 35.4 |
| 1890 | 44,654 | 5,503 | 14.1 |
| 1900 | 62,559 | 17,905 | 40.1 |
| 1910 | 85,892 | 23,333 | 37.3 |

A feature in connexion with the population of Lawrence that must constantly be borne in mind is the large proportion formed by immigrants. The number of foreign-born inhabitants in 1905 was 46.1 per cent. of the total population, as compared with 43.9 per cent. at Fall River, and 41.7 per cent. at Lowell. Of the foreign-born population, 26.2 per cent. were born in Canada (20.5 per cent. being French Canadians), 20.3 per cent. in Ireland, 19.7 per cent. in Great Britain, 8.7 per cent. in Italy and 7.4 per cent. in Germany. The largest single foreign national group, that of the French Canadians, forms 9.5 per cent. of the total population. The French Canadian element, however, is not so important in Lawrence as in Lowell, where this nationality forms 12.3 per cent. of the total population. Wherever the woollen or worsted and the cotton

industries exist side by side the French Canadians always show a marked preference for the latter, and their unequal numbers in Lawrence and Lowell are a rough indication of the relative importance of these industries in the two cities. Again, in contrast with Lowell, the Italians and the Germans form large groups in Lawrence. Both of these nationalities occupy fairly well defined quarters of the city. The presence of Germans in considerable numbers in New England cities is not a frequent spectacle, and the German settlement in Lawrence is not easily explained. The Italians have probably been attracted by the woollen industry, for it is an interesting fact that the tendency shown by the French Canadians is reversed by the Italians. At the same time accident and example no doubt play a large part in determining the settlement of immigrants from Continental Europe, and there is always a probability that a newly-arrived foreign-speaking labourer will go to some particular city in preference to another for no other reason than to be amongst his countrymen.

Poles and Russians (in the latter case largely Jews) together number more than 2,000. These nationalities are found in Lawrence in common with most other American industrial cities where there is a demand for cheap unskilled labour. The Poles and Russians as a rule show little national solidarity, though the Jews among them often become segregated in special areas.

An interesting feature in the city's varied population is the considerable group of Syrians, who numbered about 1,300 in the year 1905. Probably the Syrian colony in Lawrence is the largest in the United States, and it is certainly larger relatively to the total population than the Syrian settlement of any other American city. The Syrians in Lawrence are mostly from the neighbourhood of Damascus and Beyrout. They are all of the Christian faith; indeed, the Mahomedan from Syria has hardly yet begun to arrive in the United States. Most of them appear to have been used to pastoral or agricultural pursuits, and to have been led to emigrate by the well-known difficulties in which the Syrian is placed by the ascendancy in his own land of an alien race and faith. In Lawrence the Syrians exhibit considerable national solidarity, their homes are congregated in one quarter of the city, they maintain several of their own shops and *cafés* and are sufficiently enterprising to publish the "Al Wafa," a newspaper of eight pages, printed in Arabic and appearing twice a week. This journal has a considerable circulation outside Lawrence itself.

Large and interesting as is the immigrant section of the population in Lawrence, it would be easy to overestimate its influence on the general life of the city if sufficient regard were not paid to the fact that in Lawrence, as in many other American cities notable for their cosmopolitan character, a very considerable proportion of the foreign-born population consists of English Canadians and immigrants from the British Isles. The relative importance of this English-speaking section of the foreign-born population is not so great in Lawrence as in some other cities, but it nevertheless forms nearly half of the whole alien population. The Irish stand out with some distinctness from the native population; the poorest among them have undoubtedly a very low standard of life, though the prominent part which the Irish take in the political life of almost every city in which they are represented suggests that they are not slow in becoming assimilated to native standards so far as modes of thought are concerned. On the other hand, the English, the English Canadians and the Scotch bring or assume a manner of living which it would be difficult to distinguish from that of the Americans themselves, and this fact has an important bearing on any study of working-class conditions.

The principal vital statistics for the years 1903-7 are shown in the following Table:—

| Year. | Number of Births. | Number of Deaths. | Number of Deaths under one year. |
|-------------|-------------------|-------------------|----------------------------------|
| 1903 | 2,013 | 1,204 | 354 |
| 1904 | 2,013 | 1,141 | 308 |
| 1905 | 2,061 | 1,372 | 397 |
| 1906 | 2,338 | 1,330 | 414 |
| 1907 | 2,673 | 1,446 | 401 |

Infantile mortality appears to be high. During the period shown in the above Table the average rate of deaths under one year was 169 per 1,000 births. A notable feature of the vital statistics is the high percentage of deaths due to various forms of tuberculosis. Of the 1,446 deaths reported in 1907, 142 or 9·8 per cent. were due to this disease and of

this number 118 were cases of pulmonary tuberculosis. It is said that much tuberculosis exists among the immigrants from Continental Europe who, leaving agricultural pursuits to work for long hours in the mills, become especially susceptible to the disease. No separate statistics for foreign-born people are, however, available. Other important causes of mortality are pneumonia and broncho-pneumonia.

The annual State enquiry for 1908 showed that in respect of the total value of its manufactured products Lawrence had advanced to the second place in Massachusetts, being exceeded only by Boston. This industrial importance is due almost entirely to its manufactures of textiles, in which the worsted industry has by far the largest share. Worsted manufactures represented 69 per cent. of the total output of the city in 1908, Worsted and cotton together constituted 81 per cent. of the total product in 1908. The balance of the output of the city is made up of a variety of manufactures, most of which are unimportant, though mention may be made of paper and paper pulp, and of machine shop products. The paper industry is represented by a few small firms making paper from rags, &c., and one large firm making and using wood pulp. The machine shop products consist for the most part of machines for paper manufacture; textile machinery is made to a very small extent only. There is also a large foundry having a general casting trade.

The municipal activity of Lawrence is confined to the ordinary public services of police and sanitary administration, the upkeep of roads, &c., the provision of education and the maintenance of water works, a fire department and a public library. Apart from the small park known as the Common, little provision for open spaces has been made. This want, however, is perhaps less urgent than it otherwise would be on account of the nature of the surrounding country, to which the elaborate electric car system of Massachusetts, in which Lawrence shares, affords easy access. This street car system is under the control of a private company.

The sanitary administration of the city is under the control of a Board of Health consisting of three members, one of whom is usually a medical man. The executive staff consists of an agent and an assistant agent, neither of whom is a professional man, and two inspectors, one of whom is concerned with plumbing.

The gas and electric lighting works in Lawrence are under the control of a private company. The charge for gas is 4s. 2d. per 1,000 cubic feet, less 5d. for prompt payment. Prepayment or automatic slot meters are not numerous. The charge for electric current for lighting is 7d. per kilowatt-hour. The use of electric current by the working classes is very limited. As already mentioned, the water supply is municipal. The following are the charges for the smaller quantities:—

| | | | |
|--|-----|-----|------|
| When for each quarter (90 days) the quantity consumed shall | | | |
| average 50 cubic feet or less per day, for each 100 feet | ... | ... | 7½d. |
| For average daily use exceeding 50 cubic feet per day, each 100 feet | | | 7d. |
| Exceeding 100 cubic feet per day, each 100 feet | ... | ... | 6½d. |
| " 200 | " | " | 6d. |
| " 400 | " | " | 5½d. |
| " 800 | " | " | 5d. |

Where a meter is used the minimum annual charge is 29s. 2d. The annual rent of a meter is 15 per cent. of its cost. The water is obtained from the river and distributed after filtration.

The city revenues are derived chiefly from property taxes and licences. In 1906 the revenue from taxes was £175,019 and from licences £39,586. Nothing was raised by special assessments on account of public improvements beneficial to private property owners. In 1908 the general property tax-rate was 1·68 per cent. of the assessed value. In 1906 (the last year for which complete comparative statistics were available) the rate was 1·60 per cent. The total valuation in 1906 was £10,634,361, representing an average *per capita* valuation of £147. In comparing tax-rates and valuations it has to be remembered that different bases of valuation for assessment purposes may be adopted in different cities, but it may be observed that only six cities in Massachusetts showed a lower *per capita* valuation, and that none of these had a population exceeding 40,000. Of the 33 cities of Massachusetts only two—Boston and Springfield—showed a lower tax-rate.

OCCUPATIONS, WAGES AND HOURS OF LABOUR.

The purely industrial character of Lawrence is sufficiently indicated by the Federal Census figures of 1900, which show that less than 11 per cent. of the persons of 10 years

and upwards working for gain in the city were engaged in professional, domestic and personal service. The 1900 Census figures relating to the occupational distribution of the population of Lawrence are shown in the following Table :—

Number of Persons of 10 years of age and over engaged in Occupations in Lawrence in 1900.

| Occupations. | Males. | Females. | Total. |
|---|--------|----------|--------|
| Building | 2,104 | 3 | 2,107 |
| Metalworking and Engineering | 1,268 | — | 1,268 |
| Cotton | 1,968 | 2,682 | 4,650 |
| Woollen * | 3,152 | 2,654 | 5,806 |
| Bleaching and Dyeing | 463 | 26 | 489 |
| Other and not specified Textile * | 1,666 | 1,466 | 3,132 |
| Boot and Shoe Making | 318 | 77 | 395 |
| Clothing | 123 | 596 | 719 |
| Woodworking and Furnishing | 202 | 4 | 206 |
| Paper and Printing | 428 | 69 | 497 |
| Food, Drink and Tobacco | 309 | 12 | 321 |
| Other Manufacturing and Mechanical Pursuits | 1,388 | 82 | 1,470 |
| Trade and Transportation | 3,649 | 765 | 4,414 |
| Labourers (not otherwise specified) | 1,463 | 11 | 1,474 |
| Professional, Domestic and Personal Service and } Agricultural Pursuits. | 1,610 | 1,696 | 3,306 |
| All occupations | 20,111 | 10,143 | 30,254 |

* Following the classification adopted by the American Bureau of the Census, persons returned as worsted mill workers are entered against the heading "Other and not specified Textile," but it would appear that a large proportion of the number assigned to "Woollen" are actually worsted mill workers.

An enumeration of the workpeople employed in the manufacturing industries of the city made by the State Bureau of Statistics in 1908 showed an average of 24,856, the minimum number employed being 20,746 and the maximum 28,847. The details are as follows :—

Number of Wage-earners employed in 1908 in the Manufacturing Industries of Lawrence.

| Industry. | Wage-earners Employed. | | | | |
|--|------------------------|----------|--------|------------------|------------------|
| | Average Number. | | | Smallest Number. | Greatest Number. |
| | Males. | Females. | Total. | | |
| Cotton Goods | 2,211 | 2,211 | 4,422 | 3,869 | 4,903 |
| Worsted Goods | 8,214 | 7,411 | 15,625 | 12,939 | 18,067 |
| Foundry and Machine Shop Products | 778 | 89 | 867 | 719 | 1,042 |
| Other Industries | 3,183 | 759 | 3,942 | 3,219 | 4,835 |
| All Industries | 14,386 | 10,470 | 24,856 | 20,746 | 28,847 |

The return shows that 63 per cent. of all persons employed directly in manufactures, exclusive of clerks, managers, &c., were engaged in connexion with the worsted industry, while the cotton manufactures accounted for 18 per cent. of all wage-earners thus employed.

The size of the individual textile establishments may be indicated by the fact that the number of worsted mills in the city is only eleven and that of cotton mills only five. Two of the largest firms, each with accommodation for about 6,000 workers, carry on the manufacture of both cotton and worsted goods. The mills are for the most part red brick structures built alongside the river Merrimac, which at this point has a considerable fall, to which the establishment of the textile industry on this site was no doubt due, practically all the water being diverted along a canal for the purpose of supplying power to the mills.

The output of worsted goods comprises most varieties of cloth for men's and women's wear. All branches of manufacture—scouring, spinning, weaving and dyeing—are, as a rule, carried on under one roof. The output of cotton goods is varied, but is composed very largely of shirtings, ginghams, calico, duck and sheeting.

The textile trades are not strongly organised, differences of race and language being an obstacle to effective combination among the workers. Various unions exist for the textile workers generally or for specific branches of the trade, but they probably exercise little influence in determining rates of wages. The persons employed in the mills are for the most part foreign-born, and many are used to a standard of life which can be amply satisfied by the wages they are able to secure. Immigrants of this class lend but feeble support to those workers in whose case the margin between income and necessary or customary expenditure is so narrow as to furnish an impulse to militant organisation. The presence in the city of a large body of immigrant labour has also led to the indiscriminate employment of men and women in various occupations which in other circumstances would probably be reserved to the latter. In one mill all the slubbers are men, in another they are men and women, and in a third women only. This practice, however, does not seem to be carried on to the same extent in the cotton mills in Lawrence as in those of Lowell. Certainly no instances of men being engaged in ring spinning were noted here.

As the foregoing Table shows, and as the character of the staple industry would lead one to expect, Lawrence offers a large field of employment for female labour. It is interesting in this respect to compare Lawrence with the other Massachusetts cities included in the present investigation. According to returns of the State Bureau of Statistics the average numbers of male and female workers engaged in 1908 in the manufacturing industries of the cities investigated were as follows :—

| City. | Males. | Females. | Total. |
|-------------------|--------|----------|--------|
| Boston | 34,033 | 18,070 | 52,103 |
| Brockton | 11,305 | 4,551 | 15,856 |
| Fall River | 16,959 | 12,799 | 29,758 |
| Lawrence... .. | 14,386 | 10,470 | 24,856 |
| Lowell | 14,508 | 11,823 | 26,331 |

There are no statistics available to show what proportion of the women at work are married, but among the poorer immigrant classes both husband and wife commonly work in the mills. There is no agreement among the mill owners in Lawrence as to the rates of wages to be paid.

Workpeople in the building and printing trades are effectively organised, and as a rule the trade union minimum rates are operative. At the time of the investigation, the plumbers were striking for 87s. 6d. per week. Labourers in the building trades usually work longer hours than the skilled men, coming half an hour earlier in the morning in order to prepare for the day's work, and staying later in the evening in order to clear up.

In the foundry and machine shop trades, the ironmoulders are probably the only class of workers who are strongly organised. In addition to the machine shops of the city, there is a large firm a short distance beyond the city boundary which makes textile machinery. Most of its operatives live outside Lawrence, and many occupy houses provided at low rentals by the firm. This position gives the firm an advantage in respect to the rates of wages paid as compared with the rates paid by the firms in the city, and the statistics relating to its employees have therefore not been included in the tabulation given below.

The book and job printing industry is comparatively small, owing to the nearness of the city to Boston. The same circumstance also affects the newspaper printing trade, since the Boston daily and evening journals are on sale in Lawrence shortly after their appearance in Boston itself.

The information in the Table on page 213 in regard to workers employed in street construction and cleaning relates to municipal employees. At the time of the investigation some important paving work was being done, but the contract was in the hands of a Boston firm employing Boston workmen.

The following Table shows the predominant weekly wages and hours of labour in some of the principal male occupations in the textile industry, in the building, engineering and printing trades and in certain public utility services :—

labourers 82 ; foundries and machine shops, skilled men 78, unskilled labourers 104 ; printing, hand compositors (job work) 71.

The rates of wages for weavers given in the above Table are based upon returns obtained from mills in which the earnings of male and female weavers respectively could be discriminated. Weaving is an operation which is very largely shared by women, and it was not possible in all instances to obtain the respective earnings of the two sexes. At some mills it was stated that there was no difference between the earnings of men and women, but at one large establishment, where exact returns were kept, the relation between the average earnings of men and women weavers in the worsted trade was shown to be 100 : 85 and in the cotton trade 100 : 86. The predominant earnings of women and girls in some of the other principal occupations of the textile trades were as follows :—

Worsted Goods:—

| | | | | | |
|--------------------------|-----|-----|-----|-----|-----------------------|
| Gill-box Minders | ... | ... | ... | ... | 26s. 7d. to 32s. 11d. |
| Drawing Frame Tenders | ... | ... | ... | ... | 29s. „ 30s. 5d. |
| Frame Spinners | ... | ... | ... | ... | 30s. 3d. „ 32s. 8d. |
| Warpers | ... | ... | ... | ... | 25s. 3d. „ 41s. 1d. |
| Burlers | ... | ... | ... | ... | 24s. 2d. „ 36s. 11d. |
| Menders | ... | ... | ... | ... | 31s. 5d. „ 42s. 4d. |
| Twisters (2 and 3 sides) | ... | ... | ... | ... | 25s. 10d. „ 33s. 4d. |

Cotton Goods:—

| | | | | | |
|----------------------------|-----|-----|-----|-----|-----------------------|
| Drawing Frame Tenders | ... | ... | ... | ... | 24s. 3d. to 31s. 11d. |
| Intermediate Frame Tenders | ... | ... | ... | ... | 33s. 4d. „ 44s. 6d. |
| Jack or Fly Frame Tenders | ... | ... | ... | ... | 31s. 3d. „ 41s. 7d. |
| Ring Spinners... | ... | ... | ... | ... | 29s. „ 35s. 5d. |
| Spoolers | ... | ... | ... | ... | 25s. „ 33s. 4d. |
| Drawing-in Hands | ... | ... | ... | ... | 33s. 4d. „ 38s. 2d. |

The following details in regard to the course of wages during recent years were furnished by one of the largest firms, and substantially they apply to the cotton and worsted industries of the city generally:—In January, 1898, there was a reduction of 6·77 per cent. ; in March, 1899 an increase of 5·7 per cent. ; in December, 1899 an increase of 7·1 per cent. ; between December, 1899 and March, 1906 there was no change ; in March, 1906, there was an increase of 6·68 per cent. ; on December 31, 1906, an increase of 5·31 per cent. ; on June 10, 1907, an increase of 4·73 per cent. ; and on April 13, 1908, a reduction of 8·99 per cent. It will be seen that wages were stationary during the six years 1900–5. The business activity which was to end disastrously in the “panic” of 1907 then began to take effect, and several important advances in rates were made. The year 1908 was one of depression in almost every industry, and in the first half of that year a reduction of wages in the cotton trade took place which was almost equal in amount to the two previous advances. At the time of the investigation in 1909, wages were practically at the same level as they were during the greater part of 1906.

Little or no “welfare work” is carried on by the large establishments in Lawrence. The relations between employer and employee begin and end in the factory, though a few “corporation tenements” accommodating an insignificant percentage of the mill workers are still maintained. Apart from the churches, the only important social agency at work among the employees is a City Mission whose functions are principally the relief of the poor or destitute. The bulk of its funds is contributed by the proprietors or officers of the textile mills and the institution has a close but not a formal connexion with the large companies.

HOUSING AND RENTS.

Practically all the working-class families in Lawrence live in dwellings of the tenement type. As in other American cities containing a large immigrant population accustomed to a low standard of life the differences between the dwellings of the poorly-paid unskilled wage-earners and those of the well-paid native-born artisans are very great.

With a few exceptions the tenement blocks are of wood. They vary in size, but seldom contain more than eight separate dwellings. Each block is separated from its neighbour by a courtyard or passage, but in some districts, especially in the principal Italian quarter, there is much crowding, four-storied tenement blocks being separated by passages too narrow to allow two people to pass abreast and having no yard space at all. The rooms on the lower floors of such houses are very dark.

Generally speaking the cheaper tenements are the old ones and the more expensive are those most recently built. Both old and new tenement houses have as a rule been built expressly for occupation by several families. Each tenement has usually some degree of privacy ; there is one tenement on each floor, and all the rooms—except where there are attics—are accessible from each other without the use of common stairways or

landings, an arrangement which obviates corridors and facilitates the warming of the whole tenement. In the case of the old types of houses, while there is usually a separate water supply for each tenant, the sanitary conveniences are shared in common by two or more tenants. In general equipment the older tenements are of the plainest description. Insufficiently-lighted rooms are often met with, but rooms totally shut off from the outer air are not common.

Generalisation as to the size of the rooms cannot be attempted, as too great variety exists. In the older tenements, however, rooms upwards of 14 feet square are seldom found. As a rule the height is ample, nine feet being usual.

In external appearance the tenements are quite plain, but a distinction may be drawn between two types of old tenement houses. The first is a large rectangular block without attics or garrets. The second is a house, as a rule gabled, containing two or three attics disposed among the tenants occupying the lower floors. Sometimes these attics are unfinished and can be used only as storerooms; in other cases they are available as bedrooms.

The better types of tenements represent an ascending scale of convenience. Most have bay windows and covered porches or verandahs in front and as a rule small balconies on each floor—sometimes present even in the old tenements—at the back. With increasing rent bathrooms, separate closets, hardwood floors, pantries and, quite commonly, speaking tubes are provided.

The arrangement of a modern three-tenement house is as follows. The ground-floor dwelling has a separate entrance from the street. At the side of this door is another opening on to a staircase, which is used by the tenants on the two upper stories. This front staircase gives access directly to the sitting room or parlour. Beyond the parlour is the kitchen, which forms the central room of the apartment, the three bedrooms, the bathroom and the pantry all opening off it. At the far side of the kitchen a door gives access to the back stairs and to the small balcony to which reference has been made. This balcony is often fitted with a projecting clothes "reel"—a contrivance of wooden rods, opening like a rose, on which clothes can be hung to dry. On one side of the balcony also is usually the coal and wood shed, which as a rule is very capacious. A galvanized iron dust shoot leading to the bin in the yard facilitates the disposal of rubbish. The frontage of a house of this description is about 30 feet and the depth from 35 to 40 feet. The bedrooms are from 10 to 12 feet square, the parlour about 14 feet square and the kitchen rather larger. The fittings of such a tenement vary greatly, much depending upon the location of the house and the character of the neighbourhood. A tenement of this description may be regarded as very typical of the accommodation of the skilled artisan.

As a rule rents are paid weekly, and not monthly as in most American cities, and the rent includes all water charges. Rents vary widely, not merely on account of differences in accommodation, but also on account of differences in the character of the tenants. The rents of tenements occupied by Italians appear to be very high as compared with those of similar tenements occupied by other nationalities. One landlord attributed this to the carelessness of Italian families in the waste of water. In one Italian house, in fact, the following peremptory notice was displayed, "Less water must be used in this block or more rent will have to be charged at once." This cause alone, however, seems insufficient to explain the striking difference which exists between the rental of some of the houses in the principal Italian district just off the main street, and that of similar accommodation elsewhere. The reason of the high rents which prevail in the Italian district is probably that the social cohesion which always strongly marks the Italians has more than counteracted the financial advantage of abandoning this little colony for some other part of the city, from which circumstance the tenements in this district derive an artificial or special value. In spite of the strong disposition of Italian families to herd closely together, however, some of the more enterprising have gone beyond the city limits and purchased small farms, often continuing to work in the mills until the property has been freed of all encumbrances. In a district known as Pleasant Valley, lying between the city and Haverhill, are several of these small Italian holdings.

One of the most important and interesting national groups in Lawrence are the Syrians. These people, like the Italians, have a tendency to segregate, and are sufficiently numerous to maintain a few shops catering for their peculiar wants in the matter of food. The Syrian colony is near the centre of the city. Its housing accommodation calls for no special description, the houses being of the general types already described, with a preponderance of the older and plainer specimens.

It has already been stated that the number of French Canadians is much less in Lawrence than in Lowell, this difference being largely due to the difference in the industrial character of the two cities. The tendency of the French Canadians to become

segregated in a group or colony appears also to be much less strongly marked in Lawrence than in Lowell. They are more widely spread in the former city than in the latter, and although they are more numerous in some streets than in others, there is no really well-defined French Canadian quarter.

The Germans, who are numerous and support a church and a newspaper of their own, occupy a district that is fairly well-marked. Their tenements are for the most part of the better or more modern type, and are probably somewhat above the general standard for the city as a whole.

The rents most generally paid for accommodation of a working-class character are as follows :—

Predominant Rents of Working-class Dwellings.

| Number of Rooms per Dwelling. | | | | | Predominant Weekly Rents. |
|-------------------------------|-----|-----|-----|-----|---------------------------|
| Four rooms | ... | .. | ... | ... | 7s. 4d. to 10s. 5d. |
| Five rooms | ... | ... | ... | ... | 10s. 5d. ,, 12s. 6d. |
| Six rooms | ... | ... | ... | ... | 12s. 6d. ,, 16s. 8d. |

The level of rents at New York being represented by 100, the rents index number for Lawrence is 64.

The practice of housing the textile workers in tenements provided by the manufacturing companies belongs to a stage in the city's industrial development that is now past. In close proximity to the mills and the canal there are, however, several lines of red brick structures that once belonged to the mills and were designed for their workers. Now they are used almost entirely as boarding houses, and are in the hands of independent proprietors, who would, presumably, accommodate anyone whether working in the mills or not. The most usual charges in these boarding houses are as follows :—Board and lodging for a woman sharing a room with another, 10s. 5d. per week ; board and lodging for a woman having a separate room, 12s. 6d. per week ; board and lodging for a man having a separate room, 14s. 7d. per week. In several of the boarding houses single meals can be obtained. For breakfast or supper the usual charge is 5d. to 7½d., and for dinner, 10d. Tickets for a week's boarding can be obtained at from 8s. 4d. to 10s. 5d.

Though the tendency is for the mills to dispose of their tenement property rather than add to it, mention must be made of a housing scheme recently undertaken by one large company. Blocks of tenements of two types have recently been erected for this company's employees. The first type consists of six brick-built blocks, each containing seven flats. The two end flats of each block contain five rooms with bathroom and pantry, and are let at 11s. 6d. per week. The other five flats contain four rooms, with bathroom and pantry, and are let at 10s. 5d. per week. The second type comprises 36 frame-built tenements, each containing five rooms, with bathroom and pantry. The property is laid out with 18 flats facing the street and 18 facing an open elliptical granolithic court. The flats facing the street are let at 13s. 2d. per week, and those facing the court at 11s. 11d. per week. This housing scheme is an interesting reversion to an old practice, though it can hardly be said to be an outcome of the old motives which once led employers to provide accommodation for their workers, and which seemed to have their origin in a sense of social solidarity between employers and employees. It has been called for rather by the pressure upon existing housing accommodation. During the last few years there has undoubtedly been a large increase in the industrial activity of the city, to which the depression of 1908 was only a temporary set-back. The mill extensions alone, owing to the large scale on which they have been planned, have been directly responsible for a considerable addition to the workpeople connected with the building and kindred trades, and at the time of the investigation there were many signs that ordinary commercial enterprise had not for the time being succeeded in maintaining a supply of tenements of a working-class type equal to the effective demand.

RETAIL PRICES.

Most of the retail trade in Lawrence is done through the agency of small shops, there being only one large market doing trade on a purely cash basis. In the shops where credit is given no difference in price is made as a rule, whether goods are bought for cash or on account. The shops are scattered widely over the city, the main thoroughfare, Essex Street, being the shopping centre for clothing, furniture, &c., rather than for food!

The principal nationalities maintain shops catering to their peculiar wants. In addition to a number of privately-owned shops, the Germans have a Co-operative Society, which has about 350 shareholders and about 400 non-shareholding customers. Both classes receive dividends on their purchases. In the first half-year of 1909 the dividend

paid to shareholders was 12 per cent., and to non-shareholding customers 6 per cent. In the Syrian quarter there are several small shops each selling, as a rule, not only food of all kinds, but a great variety of small "dry goods." The wants of the Italians are also usually supplied by traders of their own nationality.

Groceries and other Commodities.

The most popular *bread* is plain wheaten, of which three times as much is sold as of any other variety. Here, as in other Massachusetts cities, a loaf sold simply as such is required by law to weigh 2 lb. In practice a sign is displayed in the shops which sell bread advertising the loaves as $\frac{3}{4}$ loaves and $\frac{1}{4}$ loaves. The minimum weight of the $\frac{3}{4}$ loaf must then be 24 oz., and of the $\frac{1}{4}$ loaf 8 oz. The most common method is to scale the larger loaf at 28 to 30 oz., and the smaller loaf at 15 to 16 oz., before baking; these weights would relate to February, 1909. The large loaf sold at $5d.$ thus usually weighs about 26 oz., and the small loaf sold at $2\frac{1}{2}d.$ about 14 oz. There seem to be few, if any, exceptions to the fact that the $2\frac{1}{2}d.$ loaf represents a better bargain as regards weight than the $5d.$ loaf; the price stated in the Table which follows relates to the $2\frac{1}{2}d.$ loaf, which is purchased much more generally than the $5d.$ loaf. The practice of weighing the loaf when sold prevails nowhere. Mention may be made of the fact that at the largest shop in the city three loaves, each weighing 16 oz. before baking, are sold for $5d.$, but such a price is quite exceptional. Rye bread is popular among the Germans, and is usually somewhat cheaper than the wheaten bread, a full lb. loaf being obtainable for $2\frac{1}{2}d.$

Sweet potatoes are used largely during their season—roughly, October till Christmas—the most usual price then being $1s. 0\frac{1}{2}d.$ for 10 lb.

The *tea* most commonly sold at the shops doing a general trade is Japanese, Formosa or Oolong, while *coffee* is usually the Mocha or Java variety.

The price of *milk* varies as between winter and summer, and also to some extent between shop and shop. In February, 1909, the usual price was $4\frac{1}{4}d.$ to $4\frac{3}{4}d.$ per quart; in summer the price is $3\frac{1}{2}d.$ to $4\frac{1}{4}d.$ The milk supplied at the higher price is usually delivered in bottles. Practically the whole of the supply is obtained from farms in the neighbourhood of the city. The improvement of the milk supply was, at the time of the investigation, a matter of considerable local discussion. A "Citizens' Committee" has been formed, and this is attempting, by means of publicity and prosecutions, to effect improvement in those cases where the conditions of supply are unsatisfactory.

As a rule ample accommodation for *coal* is provided in the tenements; probably not much coal is bought in quantities of less than a quarter of a ton. The prices ruling in February, 1909, for anthracite, the kind most generally used, were:—Ton (2,000 lb.), $31s. 3d.$; half-ton (1,000 lb.), $15s. 7\frac{1}{2}d.$; quarter-ton (500 lb.), $8s. 4d.$ For bags of coal, weighing from 80 to 100 lb., a charge of $2s. 1d.$ is made, this price being a constant one. Many of the shops and markets sell coal and coke in paper bags. A bag of coal usually weighs 20 lb., and a bag of coke $17\frac{1}{2}$ lb., and for either the price is $5d.$ Coke is much used, and is often bought in fairly large quantities. The price per chaldron (about 1,440 lb.) was $18s. 9d.$ in February, 1909.

The following Table shows the predominant prices paid in Lawrence for various commodities included in the investigation:—

Predominant Prices paid by the Working Classes in February, 1909.

| Commodity. | Predominant Price. |
|------------------------------------|---|
| Tea per lb. | $2s. 1d.$ |
| Coffee " | $1s. 0\frac{1}{2}d. \text{ to } 1s. 5\frac{1}{2}d.$ |
| Sugar:— | |
| White Granulated " | $2\frac{3}{4}d., 3d.$ |
| Brown " | $2\frac{1}{2}d. \text{ to } 3d.$ |
| Bacon, Breakfast—Boneless " | $9d.$ |
| Eggs per 1s. | 7 to 10 |
| Cheese, American per lb. | $9d. \text{ , } 10d.$ |
| Butter " | $1s. 3d. \text{ , } 1s. 6d.$ |
| Potatoes, Irish per 7 lb. | $5\frac{3}{4}d. \text{ , } 7d.$ |
| Flour, Wheaten—Household " | $1s. 0\frac{3}{4}d.$ |
| Bread, White... .. per 4 lb. | $11\frac{1}{2}d.$ |
| Milk per quart | $4\frac{1}{4}d. \text{ to } 4\frac{3}{4}d.$ |
| Coal, Anthracite per cwt. | $1s. 9d.*; 1s. 10\frac{1}{2}d.†$ |
| Kerosene per gallon | $7\frac{1}{2}d. \text{ to } 7\frac{3}{4}d.$ |

* By the ton of 2,000 lb., or by the half-ton.

† By the quarter-ton (500 lb.).

Meat.

The meat consumed in Lawrence is almost entirely Western-dressed, and calls for no special remark. Very wide variation exists as regards the price of veal. This appears to be due to the sale by some butchers of calves which are either too young to furnish good eating, or too old to deserve the name of veal.

A few peculiarities of cut may be referred to. Rounds of beef are seldom cut right through or sold as joints. They are nearly always cut into steaks, three cuts being recognised—the top cut or best, the vein cut or second quality and the bottom cut or cheapest. Brisket is seldom sold fresh, but is nearly always corned. It is often the practice to corn the whole of the “rattle,” *i.e.*, the lower ends of the thick and thin ribs cut horizontally. Usually the brisket, when corned, is boned and rolled and known as “fancy brisket.”

As regards mutton and lamb, the shoulder, neck and breast are usually cut in one piece and sold as a forequarter. The practice of “lifting” the shoulder and selling it as a separate joint, as in England, does not prevail.

Dry salt pork is very little sold in Lawrence. Smoked and sweet pickled hams have a large sale. They are sold whole, but more often sliced, at 10*d.* per lb., or in steaks.

The following Table shows the predominant prices for various cuts of meat :—

Predominant Prices paid by the Working Classes in February, 1909.

| Description of Cut. | Predominant Price per lb. |
|-------------------------------------|---|
| Beef :— | |
| Roasts—Rib prime | 7 <i>d.</i> to 10 <i>d.</i> |
| “ Rib second cut | 6 <i>d.</i> „ 8 <i>d.</i> |
| “ Chuck or short ribs | 6 <i>d.</i> „ 7 <i>d.</i> |
| Steaks—Round... .. | 7½ <i>d.</i> „ 10 <i>d.</i> |
| “ Sirloin | 1 <i>s.</i> 2 <i>d.</i> „ 1 <i>s.</i> 3 <i>d.</i> |
| Shin without bone | 4 <i>d.</i> „ 5 <i>d.</i> |
| Flank | 3½ <i>d.</i> „ 4 <i>d.</i> |
| Brisket, “Fancy” | 6 <i>d.</i> „ 7 <i>d.</i> |
| Mutton or Lamb :— | |
| Leg | 7½ <i>d.</i> to 10 <i>d.</i> |
| Breast | 5 <i>d.</i> |
| Loin | 7½ <i>d.</i> |
| Chops | 10 <i>d.</i> to 1 <i>s.</i> 3 <i>d.</i> |
| Shoulder | 5 <i>d.</i> „ 7½ <i>d.</i> |
| Neck | 3½ <i>d.</i> „ 5 <i>d.</i> |
| Veal :— | |
| Cutlets | 10 <i>d.</i> to 1 <i>s.</i> 3 <i>d.</i> |
| Rib Chops | 8 <i>d.</i> „ 10 <i>d.</i> |
| Loin Chops | 9 <i>d.</i> „ 1 <i>s.</i> |
| Breast | 5 <i>d.</i> „ 6 <i>d.</i> |
| Neck | 4 <i>d.</i> |
| Pork :— | |
| Fresh—Loin | 7 <i>d.</i> to 7½ <i>d.</i> |
| “ Shoulder | 5 <i>d.</i> „ 6 <i>d.</i> |
| “ Chops | 7 <i>d.</i> „ 8 <i>d.</i> |
| Corned (wet salt or pickled) | 6½ <i>d.</i> „ 7 <i>d.</i> |
| Ham | 7 <i>d.</i> |
| Shoulder, salt or smoked | 5 <i>d.</i> to 5½ <i>d.</i> |

Prices at New York being taken as the base, = 100, in each case, the index number for the price of meat at Lawrence is 107, for other food it is 104 and for food prices as a whole 105. For rents and food prices combined the index number is 95.

LOUISVILLE.

Louisville, which was founded in 1790 and was named after Louis XVI. of France, is the largest city in the State of Kentucky. It is situated on the border of the State, and lies wholly upon the left or southern bank of the Ohio, which here separates the State of Indiana from that of Kentucky. Cincinnati is 130 miles higher up the river. Chicago and St. Louis are at almost equal distances, the former being 300 miles by rail to the north-west, and the latter 291 miles to the west.

While not conspicuous as an industrial centre Louisville is yet the seat of a varied and considerable industrial activity. Its distinctive trades embrace the manufacture of whisky and of tobacco and cigars and the tanning of oak sole leather, but its metal, woodworking, clothing and transport trades are also important. Its commercial interests are large, for it is the greatest leaf tobacco market in the United States, and it has an extensive trade in Kentucky whisky and in horses and mules. The city is an important distributing centre, for its own and several more Southern States, for hardware, flour, groceries and many other commodities, and it serves as the shopping, banking and social centre of a wide area. Its educational institutions include the University of Louisville, several medical colleges, a dental college, a law school and two important theological colleges.

The city possesses good means of communication with both local and distant centres. Nine railway systems maintain services with it, and electric tramways extend into the country districts in many directions. One regular and rapid service of this kind runs to Indianapolis, the State capital of Indiana, covering the distance of 117 miles from Louisville in about four hours. The river traffic is relatively unimportant, though quantities of coal from the Pittsburg region for St. Louis, Memphis and New Orleans pass the city. To avoid the Falls, which are in reality rapids, a canal two-and-a-half miles in length has been built.

The population of Louisville in 1828, when the city charter was granted, was less than ten thousand, and thirty-two years later the Census returned the population at 68,033. The following Table shows the number of inhabitants at each decennial Census since that date :—

| Year. | Population. | Increase. | Percentage Increase. |
|-------------|-------------|-----------|----------------------|
| 1870 | 100,753 | — | — |
| 1880 | 123,758 | 23,005 | 22·8 |
| 1890 | 161,129 | 37,371 | 30·2 |
| 1900 | 204,731 | 43,602 | 27·1 |
| 1910 | 223,928 | 19,197 | 9·4 |

At the Census of 1900 43·2 per cent. of the inhabitants were American-born whites of American-born parents, 27·2 per cent. were American-born whites of foreign-born parents, 10·5 per cent. were foreign-born persons, while the negro population formed 19·1 per cent. of the total. The largest number of foreign-born inhabitants came from Germany, Ireland and Great Britain, natives of these countries forming respectively 57·8, 19·6 and 5·1 per cent. of the foreign-born population. Southern Germany (Wurtemberg, Bavaria, etc.) was represented in a marked degree.

On the opposite bank of the Ohio are two towns of Indiana, called New Albany and Jeffersonville, which face respectively the western and eastern extremities of Louisville. In 1900 the population of New Albany was 20,628 and that of Jeffersonville 10,774, but they have grown since that date. These towns are separated by a stretch of almost open country extending some three miles, and the traffic between them and with Louisville is not great. Of the three bridges which span the river two are reserved for the passage of trains or tramcars, whilst the third, with a roadway at each side for vehicles, connects the city with New Albany, but at a distance of three miles from the centre of the city. Ferryboats capable of conveying vehicles ply between Jeffersonville and the eastern part of Louisville.

The following Table shows, for each of the years 1904-8, the general death-rate, distinguishing white and coloured mortality, and also the death-rate from tuberculosis:—

| Year. | Death-rate per 1,000 of Population. | | | Death-rate from Tuberculosis per 1,000 of Population. |
|-------|-------------------------------------|-----------|-----------|---|
| | White. | Coloured. | Together. | |
| 1904 | 15·2 | 27·4 | 17·6 | 2·43 |
| 1905 | 14·7 | 25·6 | 16·8 | 2·27 |
| 1906 | 14·0 | 24·5 | 16·1 | 2·08 |
| 1907 | 14·8 | 23·3 | 16·4 | 1·97 |
| 1908 | 13·2 | 23·9 | 15·3 | 1·90 |

The law as to the registration of births is not enforced, and the number of births reported falls considerably short of the actual total. In the report of the City Health Department it is stated that maternity cases, particularly among the negroes, are frequently attended by "unlicensed midwives or pseudo-physicians. Such attendants studiously neglect to furnish the certificate required by law in order to avoid being subjected to the payment of a licence fee, which is required of all accoucheurs, whether physicians or midwives."

Louisville is a pleasant city, and is set in picturesque surroundings. It is built upon a flat plain slightly above the level of the Ohio and extends over six miles along the river banks. The area of the city is 13,094 acres. It has been laid out upon a geometrical plan, the streets running north to south being numbered, and those from east to west bearing names. The Broadway, a boulevard several miles in length, which commences at Cave Hill and ends at Shawnee Park on the river, forms a dividing line between north and south. The wholesale and retail business district lies between this boulevard and the river, but industrial establishments are not confined to a particular locality. Some of the largest works are situated in the southern outskirts, others in the south-western districts, while near the river various factories are found both east and west. In the central districts the by-laws compel the use of brick or stone as building material, and in the better residential quarters the bulk of the houses are of brick. Both frame and brick structures are found in the other quarters, but frame houses appear to be far less common than in the ordinary city of the South. Various kinds of pavement are used, viz., granite setts in the busy central streets and brick, asphalt and macadam elsewhere, though many roads are still merely "dirt" roads, to use the official description. The macadam roads do not withstand the climatic conditions successfully and the surface of many of the roads which have been made leaves much to be desired.

The tramway service is very complete, extending over 167 miles of track, and by the system of transfer tickets one may change from the first to a second line, and even a third if necessary, on a single journey for the minimum fare ($2\frac{1}{2}d.$) charged by the company. No special advantages are conceded to working men. The tramways are owned by a private company, but the city owns about one-third of the stock of the company that controls the gas and electric light and power works. The stock of the Louisville Water Company is owned by the city, and the company is managed by the "Board of Water Works," which consists of the Mayor and four members appointed by him.

The municipality owns 1,350 acres of park, and some of the parks are very beautiful; Cave Hill Cemetery is also a place of great natural and artificial beauty. It is a drawback of the parks, however, that they are in rather remote quarters of the city. The municipality also owns a large library with six branches, one of which is located in the principal negro district. Separate public elementary education is provided for coloured children, and one of the five public high schools is maintained for their exclusive use. In the matter of religion also the two races have separate organizations, and the negroes have in the city about sixty churches.

There is no poll tax in Louisville. The city property tax-rate for the financial year 1908-9 was 1·75 per cent. of the assessed value of real and personal property, but where the value of the personal property does not exceed £52 it is exempted from taxation. The State and county tax-rate for the same period amounted to 0·77 per cent. of the assessed value.

OCCUPATIONS, WAGES AND HOURS OF LABOUR.

No figures of recent date exist showing the number of persons employed in the various industrial occupations at Louisville, but the following Table, compiled from the

Census returns of 1900, sets forth the number of persons of 10 years of age and over engaged in occupations at that date :—

Number of Persons of 10 years of age and over engaged in Occupations in Louisville in 1900.

| Occupations. | Males. | Females. | Total. |
|---|--------|----------|--------|
| Building | 5,433 | 10 | 5,443 |
| Metalworking and Engineering | 4,440 | 23 | 4,463 |
| Woollen | 145 | 413 | 558 |
| Other and not specified Textile... .. | 178 | 282 | 460 |
| Leather | 912 | 20 | 932 |
| Boot and Shoe Making | 457 | 71 | 528 |
| Clothing | 1,076 | 4,369 | 5,445 |
| Woodworking and Furnishing | 1,940 | 34 | 1,974 |
| Paper and Printing | 942 | 206 | 1,148 |
| Food, Drink and Tobacco | 4,617 | 1,103 | 5,720 |
| Other Manufacturing and Mechanical Pursuits | 4,469 | 307 | 4,776 |
| Trade and Transportation | 22,632 | 2,800 | 25,432 |
| Labourers (not otherwise specified) | 8,885 | 90 | 8,975 |
| Professional, Domestic and Personal Service and } Agricultural Pursuits | 9,891 | 13,354 | 23,245 |
| All Occupations | 66,017 | 23,082 | 89,099 |

The distinctive industries of the city are whisky distilling, tobacco manufacture and tanning, though other trade groups employ large bodies of workers. The whisky for which Louisville is famous is made of maize on the Scottish method, but has a special colour owing to its being matured in charred barrels. Notwithstanding the great value of the whisky trade, the numbers occupied are relatively few, and the bulk of the work is of a semi-skilled nature.

Louisville claims to be the largest leaf-tobacco market in the United States, and the tobacco industry employs a large number of workpeople. One establishment, stated to be a branch of the tobacco combination, employs in its plug department alone 1,200 persons, of whom 75 per cent. are men. There were in the city in the summer of 1909 a total of 31 tobacco factories and 94 cigar factories. The latter include some quite small establishments; eight were reported to employ 50 or more workpeople, and most of the remainder from one to six. Women and girls are being introduced more and more into this trade, and in the cigar factory of the tobacco combination women are employed almost exclusively.

Oak sole leather is the special production of the Louisville tanneries, but harness and collar and other kinds of leather are also made. Twelve firms carry on the tanning industry, but the numbers employed are not so great as formerly. This is partly due to the introduction of machinery into certain processes. The bark used in tanning is obtained from Kentucky, Tennessee and Virginia, and the hides come from the Western packing-houses. A large proportion of the labour employed is coloured.

The metalworking trades have developed considerably since 1900, and now employ more men than any other single group of industries in the city. One railway works employs at normal seasons 2,500 persons in the manufacture and repair of its rolling stock; another firm employs 1,400 persons in the making of enamelled sanitary and plumbing ware; a third some 700 in the making of ploughs and other agricultural implements; a fourth from 400 to 500 in the manufacture of ice machinery, boilers, etc.; and another large concern produces cast iron pipes and other foundry work. Structural iron work and wireworking are other branches of the metalworking trades.

The woodworking industry comprises the making of farm waggons—Louisville claims to have the largest factory of this kind in the United States—boxes, pails, barrels and also furniture of medium quality. Owing to the importance of Louisville as a distributing centre the transport trades employ a very considerable amount of labour. Save in the tramway system, where all the labour is white, the bulk of this labour is negro. Some 3,000 persons are stated to be employed in the making of ready-made clothing; men's and youth's clothes and breeches (especially of corduroy) for country wear are mainly produced. Jews are largely engaged in this trade. Pork packing has declined in importance at Louisville.

Except in the building and newspaper printing trades, where an eight-hour day prevails for the most part, the normal working day is from nine to ten hours. The latter number appeared more usual, work beginning at 7.0 and ending at 5.30 or 6.0, according to the length of the dinner interval. A free half-day on Saturday is not common, but in

some works a little overtime is worked on five days of the week, and the afternoon's work on Saturday is proportionately shortened. The holidays universally recognised are three, viz., Christmas Day, Independence Day (July 4th) and Thanksgiving Day. In many cases Labour Day (in September) is observed, while, if work is not pressing, Washington's Birthday and New Year's Day may also be recognised. Wages are paid weekly, save in the case of some large metalworking establishments.

The trade union movement has suffered a reverse in Louisville in recent years, and the depression in 1907-9 tended to weaken further the influence of trade unionism. In 1909 only the unions in the newspaper printing and brewery trades were strong enough to obtain wages agreements. In the building trade the great majority of the employers have declared "open shop," and some of the unions, *e.g.*, those of the bricklayers and plasterers, while obtaining union rates of pay and hours of work, do not insist upon working only with union men. All the large firms in the other trades maintained the "open shop."

A profit-sharing scheme was found to be in operation in connexion with an important flour milling firm. This firm, which in other respects also treats its workpeople with much consideration (*e.g.*, by providing a reading room, billiard room, &c.), divides 10 per cent. of its annual profits among the employees, the amount paid to each varying from three to five weeks' wages.

The following Table shows the predominant weekly wages and hours of work in certain principal occupations in Louisville in February, 1909 :—

Predominant Weekly Wages and Hours of Labour of Adult Males in the Principal Occupations in February, 1909.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|--|---------------------------|-------------------------------------|
| <i>Building Trades :—</i> | | |
| Bricklayers | 120s. | 48 |
| Stonemasons | 110s. | 48 |
| Stonecutters | 70s. to 100s. | 48 |
| Carpenters | 62s. 6d. to 75s. | 48 |
| Plasterers | 114s. 7d. | 44 |
| Plumbers | 75s. to 100s. | 48 to 54 |
| Structural Iron Workers | 67s. 6d. to 90s. | 54 |
| Painters | 75s. | 48 |
| Hod Carriers and Bricklayers' Labourers | 56s. 3d. to 62s. 6d. | 48 |
| <i>Foundries and Machine Shops :—</i> | | |
| Ironmoulders | 68s. 9d. to 75s. | 60 |
| Machinists | 68s. 9d. ,, 75s. | 60 |
| Blacksmiths | 68s. 9d. ,, 75s. | 60 |
| Patternmakers | 75s. | 60 |
| Labourers | 37s. 6d. to 43s. 9d. | 60 |
| <i>Structural Iron Works :—</i> | | |
| Skilled Men in Works | 56s. 3d. to 67s. 6d. | 54 |
| <i>Railway Workshops :—</i> | | |
| Machinists | 83s. 9d. | 60 |
| Drill Press Men | 57s. 6d. | 60 |
| Blacksmiths | 68s. 9d. to 77s. 6d. | 60 |
| Patternmakers | 77s. 6d. | 60 |
| Boilermakers | 71s. 3d. to 83s. 9d. | 60 |
| Tinners | 72s. 6d. | 60 |
| Electricians | 70s. | 60 |
| Passenger Car Carpenters and Builders | 60s. to 70s. | 60 |
| Freight Car Builders | 52s. 6d. | 60 |
| Freight Car Carpenters and Repairers | 50s. | 60 |
| Engine Carpenters | 55s. | 60 |
| Woodworking Machinists | 58s. 9d. to 63s. 9d. | 60 |
| Cabinetmakers | 66s. 3d. ,, 72s. 6d. | 60 |
| Upholsterers | 66s. 3d. | 60 |
| Painters | 45s. to 52s. 6d. | 60 |
| Helpers to Skilled Men | 41s. 3d. ,, 47s. 6d. | 60 |
| General Labourers | 33s. 9d. | 60 |
| <i>Manufacture of Sanitary Wares :—</i> | | |
| Moulders | 75s. to 112s. 6d. | 54 |
| Enamellers | 100s. ,, 150s. | 48 |
| Machinists | 62s. 6d. ,, 75s. | 60 |
| Brassworkers | 62s. 6d. ,, 75s. | 60 |
| Labourers | 37s. 6d. | 60 |

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|---|------------------------------|--|
| <i>Clothing Trades :—</i> | | |
| Cutters | 62s. 6d. | 60 |
| Coat Makers { Machine | 75s. | 60 |
| { Hand | 62s. 6d. | 60 |
| Pressers | 50s. to 68s. 9d. | 60 |
| Basters—Trousers | 62s. 6d. to 75s. | 60 |
| <i>Lumber and Woodworking Trades :—</i> | | |
| Band Sawyers | 68s. 9d. to 100s. | 60 |
| Other Sawyers | 62s. 6d. | 60 |
| Trimmers | 50s. | 60 |
| Woodworking Machinists | 45s. 10d. to 62s. 6d. | 54 to 60 |
| Pailmakers | 87s. 6d. | 54 |
| Boxmakers | 50s. to 75s. | 54 to 60 |
| Coopers | 68s. 9d. ,, 75s. | 60 |
| Cabinetmakers | 45s. 10d. ,, 54s. 2d. | 60 |
| Upholsterers | 50s. ,, 62s. 6d. | 60 |
| Polishers and Varnishers | 37s. 6d. ,, 43s. 9d. | 60 |
| Labourers | 37s. 6d. | 60 |
| <i>Waggon Building :—</i> | | |
| Smith Shop— | | |
| Hammermen | 55s. 3d. | 50 |
| Blacksmiths | 52s. 1d. | 50 |
| Assemblers | 46s. 11d. | 50 |
| Helpers | 34s. 8d. | 50 |
| Wood Shop— | | |
| Benchmen | 57s. 4d. | 50 |
| Shaper Hands | 52s. 1d. | 50 |
| Other Machine Operators | 41s. 8d. | 50 |
| Paint Shop— | | |
| Stripers | 52s. 1d. | 50 |
| Coaters and Varnishers | 46s. 11d. | 50 |
| Labourers | 31s. 3d. | 50 |
| <i>Printing and Allied Trades :—</i> | | |
| Newspaper— | | |
| Machine Compositors { Day work | 94s. | 48 |
| { Night work | 104s. | 48 |
| Pressmen—Day work | 62s. 6d. to 66s. 8d. | 48 |
| Book and Job— | | |
| Hand Compositors | 72s. 11d. ,, 83s. 4d. | 54 |
| Pressmen { Cylinder Presses | 72s. 11d. ,, 81s. 3d. | 54 |
| { Platen Presses | 37s. 6d. ,, 47s. 11d. | 54 |
| Lithographic Engravers | 79s. 2d. ,, 100s. | 54 |
| Lithographic Pressmen | 91s. 8d. ,, 100s. | 54 |
| Bookbinders | 58s. 4d. ,, 75s. | 54 |
| <i>Tanning :—</i> | | |
| Fleshers | 56s. 3d. to 62s. 6d. | 60 |
| Workers-out and Strikers | 41s. 8d. ,, 52s. 1d. | 60 |
| Rollers | 52s. 6d. ,, 62s. 6d. | 60 |
| Curriers | 62s. 6d. | 60 |
| Labourers | 37s. 6d. to 40s. | 60 |
| <i>Flour Milling :—</i> | | |
| Millers | 50s. to 75s. | 48 to 65 |
| Millwrights | 87s. 6d. | 54 ,, 60 |
| Packers | 37s. 6d. to 47s. 11d. | 48 ,, 60 |
| <i>Baking :—</i> | | |
| First Hands | 70s. 10d. | 60 |
| Second Hands | 58s. 4d. | 60 |
| Vanmen | 58s. 4d. to 62s. 6d. | 60 to 66 |
| <i>Meat Packing :—</i> | | |
| Slaughterers and Cutters | 57s. 4d. to 68s. 9d. | 50 to 60 |
| Curers and Picklers | 41s. 8d. ,, 52s. 1d. | 50 ,, 60 |
| <i>Brewing :—</i> | | |
| Brewers, Cellarmen | 66s. 8d. to 75s. | 48 |
| Bottlers | 33s. 4d. ,, 45s. 10d. | 54 |
| Route Drivers | 75s. | 54 |
| Bottle-beer Drivers | 62s. 6d. | 54 |

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|---|---------------------------|-------------------------------------|
| <i>Distilling :—</i> | | |
| Distillery Men | 52s. 6d. to 54s. 2d. | 57 to 60 |
| Warehouse Men | 41s. 8d. „ 45s. 10d. | 57 „ 60 |
| Drier Men | 50s. „ 52s. 1d. | 57 „ 60 |
| Bottlers | 39s. 7d. „ 43s. 9d. | 54 „ 57 |
| Draymen | 40s. 8d. „ 50s. | 60 |
| Labourers | 37s. 6d. | 57 to 60 |
| <i>Tobacco Trades :—</i> | | |
| Warehouses— | | |
| Coopers | 50s. to 54s. 2d. | 60 to 65 |
| Rollers | 43s. 9d. „ 47s. 5d. | 60 „ 65 |
| Plug Tobacco Manufacture— | | |
| Strippers | 33s. 4d. „ 41s. 8d. | 54 „ 55 |
| Machine Feeders | 41s. 8d. „ 50s. | 54 „ 55 |
| Wrappers or Twisters | 58s. 4d. „ 75s. | 54 „ 55 |
| Cigarmaking— | | |
| Cigarmakers (better cigars) | 62s. 6d. „ 75s. | 48 „ 55 |
| „ „ (medium) | 41s. 8d. „ 50s. | 48 „ 55 |
| „ „ (cheap) | 33s. 4d. „ 41s. 8d. | 48 „ 55 |
| <i>Public Services :—</i> | | |
| Street Construction, Paving and Cleaning (Municipal)— | | |
| Paviors (Brick and Boulder) | 75s. | 54 |
| Stonecutters and Granite Paviors | 112s. 6d. | 54 |
| Rammer Men | 75s. | 54 |
| Labourers | 43s. 9d. | 54 |
| Water Works (Quasi-Municipal)— | | |
| Labourers | 37s. 6d. | 60 |
| Gas Works (Company)— | | |
| Gas Stokers | 72s. 11d. | 84 |
| Labourers | 43s. 9d. | 60 |
| Electric Light and Power Works (Company)— | | |
| Switchboard Men | 70s. 10d. | 70 |
| Arc-lamp Trimmers | 51s. 1d. | 70 |
| Linemen | 62s. 6d. | 60 |
| Firemen | 72s. 11d. | 84 |
| Drivers | 62s. 6d. | 60 |
| Electric Tramways (Company)— | | |
| Motormen and Conductors | 58s. 4d. to 64s. 2d. | 70 |

Taking wages at New York as the base, = 100, in each case, the wages in numbers for Louisville are—building trades, skilled men 86, hod carriers and bricklayers' labourers (negroes) 86; foundries and machine shops, skilled men 83, unskilled labourers 97; printing, hand compositors (job work) 89.

HOUSING AND RENTS.

A feature of the distribution of the working classes in Louisville is the tendency for the two principal immigrant races and for the negro population to cluster in certain areas. The German element predominates in the more easterly part of the city, on the south-eastern outskirts and in the north-west, while the Irish are mainly grouped in the outer western district north and south of Broadway and in a quarter named "Limerick" that lies to the south-west of the same dividing line. The negroes are for the most part segregated in the more central districts between Broadway and the Ohio, but their dwellings extend rather to the west than to the east. The public library for their exclusive use lies within this west central area, and here also are the headquarters of their chief social, religious and other organisations.

The great majority of the white working-men's homes are single-family cottages. At the Census of 1900 the average number of families per dwelling-house in the city as a whole was 1.3, and the percentages of families resident in dwelling-houses occupied by one, two and three or more families were respectively 62.8, 20.2 and 17.0. The negroes, who formed 19 per cent. of the whole population at that date, live very largely in tenement or flat dwelling-houses, which are numerous in the central area.

The cottages of the white workpeople contain three, four or five rooms, according to the means of the tenants and the needs of their families. No statistics exist showing the numerical relationship of these three groups, but investigation for the purposes of this enquiry left the impression that dwellings of four rooms were the most numerous. The

commonest type of such cottages is a single-storied dwelling with two rooms at the front and the remaining two immediately behind, additional space being secured by the projection of the rear portion of the building at one or both sides. Another usual type of four-roomed dwelling is a cottage four rooms in depth, each room being therefore as broad as the building. In a third but less common type there are three successive rooms on the ground floor and the fourth room is built over the one at the rear.

The three-roomed cottage is of the ordinary kind met with in Southern cities, the rooms lying one behind the other.

Louisville has evolved a rather unusual type of five and six-roomed house. Where there are five rooms, three are on the ground floor, and two are built over the third or back room. This upper structure projects at one or both sides, the covered space below serving as a verandah, of which the floor is raised above the ground. In the case of the six-roomed house—though houses of this size are not often occupied by working people—the sixth room is obtained either by the insertion of another room in front of the two-storied portion, or two ground-floor rooms are built in this portion, the necessary space being obtained by reducing the size of the verandah.

Whatever their size the cottages are practically all detached or semi-detached, the former kind being more numerous than the latter. These dwellings are usually erected on plots measuring 25 feet by 125 feet, and the bulk of them have open spaces both in front and behind. It is worthy of notice, however, that although these spaces are relatively large, little attempt appears to be made to cultivate them either with vegetables or flowers. Wood is the usual building material, but the number of brick houses is proportionally far larger than in other Southern towns. Another point of difference in Louisville is the absence of the front porches in which Southern people are wont to sit in the summer evenings.

The sanitary conditions of the dwellings leave much to be desired. The vault system of closet prevails in all houses of this class. The city water supply is not laid on to the bulk of the dwellings, which depend for their water upon rain-water cisterns in their yards or upon wells either in these yards or in the street. It is quite unusual to find baths in the homes of the working people. For the storage of coal a wooden shed built in the yard is used in most cases, and in practically all the cottages visited there was a cellar beneath the rear part of the house, to which access was obtained by means of a trap-door in the verandah floor. The walls of this cellar were usually built of brick, and it was mostly used as a place of storage for potatoes, vegetables and other foodstuffs.

Although a considerable number of coloured families live alone in cottages similar in style to those occupied by whites, it is probable that the majority either live in tenement houses or share a cottage with another family. The more thrifty and regularly paid men rent dwellings of two and three rooms, but not a few negro families have only a single room. The older and less desirable houses in the central districts are largely inhabited by negroes. These houses, whether constructed for or converted to tenement use, need no special description. They may be single houses of two or three stories, with a depth of three or four rooms, or they may be double houses with the entrance in the centre, when they have as a rule a depth of two rooms. Many large houses were observed which had apparently been specially built to let in single-roomed tenements, and in some of these from 20 to 35 families were housed in single rooms. These one-roomed tenements are as a rule let singly by the week, but in some cases the whole building is let to a tenant-in-chief, who sub-lets at a profit. In the case of the divided one-storied cottages it is common for one family to take the two or three front rooms, while the other family takes the rooms behind.

The following Table shows the predominant rents paid for dwellings of three, four and five rooms occupied by whites, and for dwellings of one, two and three rooms occupied by negroes :—

Predominant Rents of Working-class Dwellings.

| Number of Rooms per Dwelling. | Predominant Weekly Rents. |
|-------------------------------------|---------------------------|
| One room—Coloured tenants ... | 2s. 5d. to 3s. 4d. |
| Two rooms—Coloured tenants ... | 4s. 10d. ,, 6s. 9d. |
| Three rooms— { Coloured tenants ... | 5s. 9d. ,, 8s. 8d. |
| { White tenants ... | 6s. 9d. ,, 9s. 7d. |
| Four rooms—White tenants ... | 8s. 8d. ,, 11s. 6d. |
| Five rooms—White tenants ... | 11s. 6d. ,, 14s. 5d. |

The level of rents at New York being represented by 100, the rents index number for Louisville is 71.

Although the rentals paid by negro tenants do not show a wide difference from those paid by whites, when the number of rooms only is taken into consideration, the value received is not equal, for, as a rule, the negroes occupy older houses, inferior in convenience and finish to those occupied by the whites. It was more than once remarked to the investigator that negroes very frequently pay more than whites for similar accommodation, simply because they are not careful to estimate the value of the accommodation offered. The point is important, though it may be doubted whether house renting is the only transaction in which want of discrimination tells to the negroes' disadvantage.

The above rentals include the cost of water, when the city water is supplied. As the principle of exempting personal properties of small value is applied in a liberal spirit, working-class tenants as a rule pay no taxes. Rents are paid monthly in advance, and it is usual to sign monthly leases.

The following notes relating to typical working-class dwellings visited in the course of the investigation will serve to illustrate the housing conditions of both white and coloured working people :—

DWELLINGS OF WHITE PEOPLE :—*Griffith Avenue.*—A four-roomed cottage, having two rooms in front co-extensive in breadth with the house, and two parallel rooms behind these. The front rooms were the same size, measuring 15 feet 9 inches by 15 feet 3 inches by 11 feet 6 inches, and the back rooms both measured 14 feet by 12 feet by 11 feet 6 inches. The house had a forecourt and a good garden (uncultivated) behind, and the closet (privy-vault) was at the end of this garden. The water supply was obtained from a cistern built in the ground, but well water was also procurable at a pump in the street. The house was occupied by a bricklayer, who paid 9s. 7d. per week.

Fifth Street.—Nine houses, each of four rooms, in a row, and having the same interior arrangement as in the preceding instance. The two front rooms measured 14 feet by 13 feet by 10 feet; one back room measured 13 feet 6 inches by 8 feet by 10 feet, and the other 13 feet 6 inches by 7 feet by 10 feet. There were water-taps within the houses, which had forecourts and small gardens behind. The rent was 11s. 6d. per week.

Magazine Street.—A four-roomed cottage, let at 11s. 6d. per week. The two front rooms measured 15 feet by 15 feet by 11 feet, the third room 15 feet by 9 feet by 11 feet and the fourth (parallel to the third) 15 feet by 11 feet by 11 feet. The house had a forecourt and a good garden, a water-tap in the yard, a cellar beneath the kitchen and a coal-shed in the yard.

Lee Street.—Ten houses of four rooms, let at 12s. 6d. per week. Three of the rooms, lying one behind the other, were square (14 feet by 14 feet by 10 feet), and the kitchen measured 12 feet by 14 feet by 10 feet. There was water within the cottage and in the yard. The closet was on the privy-vault system.

Fifth Street.—Five cottages of four rooms, one behind the other, let at 10s. 1d. per week. Two rooms measured 13 feet by 14 feet 3 inches by 10 feet, the third 14 feet 3 inches by 14 feet 3 inches by 10 feet and the fourth 10 feet 9 inches by 14 feet 3 inches by 10 feet. There was a water-tap in the yard, where the privy-vault also was placed. The houses had no garden space.

O'Hara Street.—Two new houses of four rooms, with bathroom, pantry and closet indoors. The houses had cost about £150 each to build, the value of the site was about £100, and the rent was 12s. 6d. per week. The two front rooms measured 14 feet 6 inches by 15 feet by 10 feet; a third room, next to which was the bathroom, on the same level, had the same dimensions. The kitchen (adjacent to which was the pantry) measured 12 feet by 14 feet by 10 feet. The kitchen was cellared, and there was a good garden with a coal-shed.

St. Xavier Street.—A three-roomed brick cottage, let at 7s. 3d. per week. The front room measured 15 feet 6 inches by 16 feet by 10 feet, the second room 16 feet by 16 feet by 10 feet and the third 12 feet by 16 feet by 10 feet. The house had a garden behind, a space in front, and there was a cellar beneath the kitchen; water was obtained from a cistern sunk in the ground.

Dumesnil Street.—Two brick houses of three rooms, which all measured 16 feet 3 inches by 15 feet 3 inches by 11 feet. Each house had a good garden, a cistern pump and a coal-shed. The closet was on the vault plan. Rent 9s. 7d. per week.

O'Hara Street.—Two three-roomed houses, let at 8s. 8d. per week. All the rooms measured 15 feet by 15 feet by 10 feet. Water was obtained from a pump; there were no cellars, but in the gardens, which were of good size, there were coal-sheds.

Twenty-First Street.—A five-roomed house, let at 11s. 6d. per week, with three rooms on the ground level, and two upstairs over the kitchen. The measurements of the downstairs rooms were: Front room 15 feet 6 inches by 15 feet by 10 feet; second room 16 feet by 15 feet by 10 feet; kitchen 13 feet 6 inches by 15 feet by 10 feet; the upstairs rooms measured respectively 13 feet by 12 feet by 10 feet and 13 feet by 9 feet by 10 feet. The stairs were in the kitchen, and there was a good garden, but the water supply was from a cistern and a public pump, while the closet was on the vault plan.

DWELLINGS OF NEGROES:—*Seventh Street.*—A house, four rooms deep, containing six families, each occupying two rooms, the tenements being let at 5s. 9d. per week. The rooms measured 16 feet or 16 feet 9 inches by 12 feet 6 inches by 11 feet. The water-tap was in the corridor of the first floor, and the water-closet was in the middle of the corridor, but with no outside ventilation.

Ninth Street.—A negro "ark" of two stories and one room deep, with a gallery running round the outside. The building contained 34 rooms, each let at 3s. 2d. per week. All rooms were of the same size, measuring 13 feet by 12 feet 6 inches by 10 feet, and in most cases accommodated a family. There were two closets (on the vault system) and one water-tap for the entire house.

Pearl Street.—A large house known as the "Tim House," occupied by 32 families, of which only four rented two rooms. The rooms, which were let at 2s. 6d. per week, measured 13 feet by 17 feet by 10 feet 6 inches. One water-tap and four closets (vault system) served for all the tenants. There was no provision for through ventilation in the case of quite half the tenements.

Centre Street.—A two-roomed first-floor dwelling let at 5s. 9d. per week. The front room measured 16 feet by 13 feet by 10 feet, and the kitchen 13 feet by 14 feet 6 inches by 10 feet.

York Street.—A first-floor dwelling of three rooms let at 7s. 8d. per week. All the rooms measured 15 feet by 15 feet by 8 feet. The water supply was obtained from the yard, and the closet (vault system) was also outside.

Zane Street.—Two single-storied cottages, each with four rooms, let to two families, each having two rooms. In each case the two front rooms cost 5s. 9d. per week, and the two back rooms 4s. 10d. per week. The rooms measured 14 or 16 feet by 14 feet 6 inches by 12 feet. Water was obtained from a well, and one closet (vault system) served two families.

Although there are ten sanitary inspectors the inspection of houses is not carried out with any regularity or system. Neither the municipality nor any private company has undertaken any housing schemes for the benefit of the working classes. There are some building loan societies or companies which do an extensive business. In the case of one important company of the kind the amount of the loan is taken out in \$100 (£20 16s. 8d.) shares, upon which dividends at the rate of $7\frac{1}{2}$ per cent. per annum are credited to the borrower, who also pays weekly 0.1 per cent. of the loan by way of instalment and 0.13 per cent. of the loan in interest, which is at the rate of about $6\frac{3}{4}$ per cent. per annum.

The percentage of homes in Louisville owned free of encumbrance by their occupiers at the time of the Census of 1900 was 20.0, while a further 6.4 per cent. were owned encumbered. Among the working classes the Germans specially show a desire to own their homes.

Little interest was shown by the municipality in the question of the housing of the people until 1909, when a Commission was appointed to investigate the condition of the tenement houses. The report of this Commission, as issued the same year, showed that no serious overcrowding of building sites existed; out of 200 houses investigated only five were on plots that had less than 30 per cent. of vacant space. As regards the overcrowding of houses it was found that of a total of 699 households 317 or 45 per cent. lived in single-roomed tenements, which accommodated in the aggregate 661 persons, while 227 or 32 per cent. occupied two rooms. Regarding as overcrowded all rooms containing two or more persons, 46 per cent. of the rooms answered to this description. The privy system was found to be almost general; the 775 families included in the districts studied were provided with 166 privy compartments and 29 water-closet

compartments, the latter being found in 24 houses. The vaults were left to a considerable extent in a very unsatisfactory condition. The water supply was quite insufficient. Of 41 families resident in one district four had hydrants, and the others either depended on cisterns or had to obtain their drinking water from neighbours. In another district 47 taps served for 178 families. The rent per room was ascertained for 602 tenements, and it was found that 66 per cent. of the tenements were held on weekly rentals of from 1s. 11d. to 3s. 4d. per room; in 9 per cent. of the tenements the cost was from 1s. to 1s. 11d. per room, in 7 per cent. the cost was from 3s. 4d. to 3s. 10d. and in a further 7 per cent. it was from 3s. 10d. to 4s. 4d., the rent per room in the remaining 11 per cent. being 4s. 4d. and over. Of the nationalities resident in the tenements investigated the Americans formed 32·3 per cent. of the whole, negroes 52·5 per cent. and other nationalities (principally Russians, Syrians, Italians and Germans) 15·2 per cent.

RETAIL PRICES.

No co-operative societies exist in Louisville, and there is but one retail market with about a score of dealers in meat, poultry, vegetables and some groceries. One "multiple" firm with branches in many parts of the United States is represented by a single shop, where tea, coffee, sugar and a few other articles are sold. The trade of the workpeople is thus in the hands of the small dealers in the various districts, who as a general rule combine a meat and poultry trade with that of a general grocery shop.

Groceries and other Commodities.

Tea is not an article of universal consumption among the wage-earning classes; it is drunk for the sake of change, and at the evening rather than at the morning meal. It finds also a less sale in winter than in summer, when cold tea is a popular beverage amongst all classes. Indian or Ceylon teas are not much in demand; a blend of China tea is almost exclusively sold. *Coffee* is always drunk at least once a day.

Sugar is rarely sold by the single pound, inducements being very generally offered to take large quantities. Thus in 1909 from 18 to 20 lb. of white granulated sugar were often sold for 4s. 2d., while 1s. 0½d. purchased only 4 lb.

In addition to the ordinary American variety, a strong-smelling Limburg cheese is very popular with the Germans; it is sold at 11d. per lb.

Bacon with rib in is practically unknown, boneless bacon called "smoked breakfast" bacon being the kind in general demand.

Potatoes were unusually dear in February, 1909. Sweet potatoes are more eaten by the negroes than by the whites. Canned vegetables have a large sale; two 2 lb. cans of tomatoes are sold for 7½d.; two 1 lb. cans of stringed beans for 7½d.; two 1 lb. bottles of dried peas for 7½d.; sweet corn in 2 lb. cans for 5d. and 7½d., two cans of the latter quality being sold for 1s. 0½d.

Flour is another commodity for which prices rose considerably at about the date to which this enquiry relates; the qualities purchasable in January, 1909, at 10¾d. and 1s. 0¼d. per 7 lb. cost in February 1s. 0¼d. and 1s. 2¼d. A large amount of bread-baking is done in the households of all classes in Louisville, and probably considerably less than half the *bread* eaten is made by the bakers. Bread as understood in England is known in Louisville as "light" bread; in addition to this ordinary bread American households in the South eat several other kinds, baked at home in the form of cakes, waffles, biscuits, maize bread, etc. In Louisville it seems a not unusual custom for a household to buy some bread from the baker—say from seven to ten loaves of under one lb. per week—and to rely upon home-made breads or their substitutes for the rest of its needs. The negroes as a body buy little wheat bread. The price of the loaf did not change as a result of the advance in flour, but its weight was reduced. In May and June, 1909, the 2½d. loaf was weighed for the writer by fourteen dealers in various parts of the city, and it was found to weigh in eight cases 14 oz., in three 15 oz. and in three cases 12 oz. Nevertheless, working people were wont to state that they bought 1 lb. of bread for 2½d.

The price of *milk* varies, and prices of from $3\frac{1}{2}d.$ to $6d.$ per quart were quoted. The best milk cost $6d.$ per quart, and from $1s. 7\frac{1}{4}d.$ to $1s. 9d.$ per gallon; $4\frac{3}{4}d.$ per quart seemed, however, the normal price for good milk. Milk is not in such great demand as might be expected, because coffee is very often drunk without milk by the working people, and it is the exception to mix milk with tea. Many households buy condensed instead of fresh milk during several months of the year, since the great heat quickly turns fresh milk sour. Buttermilk is largely consumed in households of all classes, and its almost invariable price is $3d.$ per quart.

Bituminous *coal* from the Pittsburg district or from Jellicoe, in East Kentucky, is generally used for household purposes. It is sold by the ton of 2,000 lb., which cost in February, 1909, $17s. 3\frac{1}{2}d.$ delivered. The working classes usually buy their coal by the ton. The poorer whites and a large percentage of the negroes, however, obtain it from hawkers, to whom they pay $10d.$ per basket of about 50 lb. Coke is not used in the households of the wage-earning classes.

The following Table shows the predominant prices of certain principal commodities at Louisville in February, 1909 :—

Predominant Prices paid by the Working Classes in February, 1909.

| Commodity. | Predominant Price. |
|-----------------------------------|---|
| Tea per lb. | $2s. 6d.$ |
| Coffee " | $10d.$ |
| Sugar :— | |
| White Granulated " | $2\frac{1}{2}d. \text{ to } 3d.$ |
| Brown " | $2\frac{1}{2}d. \text{ ,, } 3d.$ |
| Bacon, Breakfast—Boneless... .. " | $10d.$ |
| Eggs :— | |
| Fresh per 1s. | 10 |
| Storage " | 12 |
| Cheese, American per lb. | $10d.$ |
| Butter " | $1s. 3d. \text{ to } 1s. 5\frac{1}{2}d.$ |
| Potatoes, Irish... .. per 7 lb. | $7d. \text{ ,, } 8\frac{1}{4}d.$ |
| Flour, Wheaten—Household " | $1s. 0\frac{1}{4}d. \text{ ,, } 1s. 2\frac{1}{4}d.$ |
| Bread, White per 4 lb. | $11\frac{1}{2}d.$ |
| Milk per quart | $4\frac{3}{4}d.$ |
| Coal, Bituminous per cwt. | $11\frac{1}{2}d.*$ |
| Kerosene per gallon | $6d. \text{ to } 7\frac{1}{2}d.$ |

* By the ton of 2,000 lb.

Meat.

No municipal abattoir has been established in Louisville, and that portion of the city meat supply which is grown in the district is killed in the yards of the butchers, or in those of the two local packing-houses. The supervision of the conditions under which animals are slaughtered, and of the sale of meat for the whole city, is exercised by two officials.

Louisville obtains more than half of its meat from Kentucky, which possesses many extensive stock farms; the remainder is furnished by the Chicago packing-houses, two of which have depots in the city. The trade of the latter is mainly in beef, as the local packing-houses provide pork in abundance. Frozen meat is rarely sold, but the bulk of the meat is chilled.

The working classes do not buy much veal or mutton. Beef is the most popular meat, and pork comes next in favour. The negroes are especially fond of pork, both fresh and salted. Corned or salted beef is not sold by the majority of the butchers. Save in the centre of the city, where there are special butchers' shops, the meat trade is carried on in the same shop as a grocery business. The grocery wares are placed usually in the front portion of the shop, while the meat counter and the cold-meat chamber built into the wall are in the inner portion.

The following Table shows the predominant prices of the various cuts of meat (of the qualities most generally consumed by the working classes) at Louisville in February, 1909 :—

Predominant Prices paid by the Working Classes in February, 1909.

| Description of Cut. | Predominant Price per lb. |
|-------------------------------------|---------------------------|
| Beef :— | |
| Roasts—Round | 6¼d. to 7½d. |
| „ Ribs prime | 6¼d. „ 7½d. |
| „ Ribs second cut | 6¼d. |
| „ Chuck or short ribs | 5d. |
| Steaks—Round | 7½d. |
| „ Sirloin | 7½d. to 8¾d. |
| Shin without bone | 4d. „ 5d. |
| Flank | 4d. |
| Plate, Brisket } Fresh | 4d. |
| } Salt or corned | 4d. to 5d. |
| Mutton or Lamb :— | |
| Leg | 7½d. to 8¾d. |
| Breast | 5d. „ 7½d. |
| Loin | 7½d. „ 8¾d. |
| Chops | 10d. |
| Shoulder | 6¼d. to 7½d. |
| Neck | 5d. |
| Veal :— | |
| Cutlets | 10d. to 1s. 0½d. |
| Rib chops | 7½d. |
| Loin chops | 7½d. |
| Breast | 6¼d. to 7½d. |
| Neck | 5d. „ 6¼d. |
| Pork :— | |
| Fresh—Loin | 7½d. |
| „ Spare rib | 5d. to 6¼d. |
| „ Shoulder | 5d. „ 6¼d. |
| „ Chops | 7½d. |
| Corned (wet salt or pickled) | 6¼d. to 7½d. |
| Dry salt | 6¼d. „ 7½d. |
| Ham | 6¼d. „ 7½d. |
| Shoulder, salt or smoked | 5d. „ 6¼d. |

Prices at New York being taken as the base, = 100, in each case, the index number for the price of meat at Louisville is 90, for other food it is 102 and for food prices as a whole 99. For rents and food prices combined the index number is 92.

LOWELL.

Lowell, the fifth city of the State of Massachusetts in point of population, is situated about 25 miles north of Boston. The rise of the city and its importance as a manufacturing centre are due primarily to its location on the Merrimac River, which, as it flows past Lowell, is a broad stream, and has a fall of about 30 feet. It was the possibility of using the power afforded by this fall that attracted the first comers, and led to the establishment of the textile industry of the city at the beginning of the nineteenth century. The growth of the city has been steady, but not rapid. At the date of its incorporation, 1843, its population was about 25,000.

The importance of the city is directly derived from its manufactures, its commercial and financial activities being of small account. The control of the largest enterprises is exercised almost entirely from Boston, and it is from that city that the goods manufactured are sold and distributed. These facts react upon the appearance of Lowell, which is characterised by an absence of large office buildings, the small commercial and professional business which the city transacts being concentrated mainly in two streets, which also form the chief shopping thoroughfares.

Unless it be the imposing line of mills on the water front, seen to great advantage from the bridge, there is little in Lowell to impress the ordinary visitor. Some of the residential portions of the city are, however, very attractive, thanks chiefly to the abundance of trees, while the surrounding country, particularly along the Merrimac Valley, is of marked beauty. An electric car ride from Lowell to Lawrence along this valley reminds an Englishman of some of the best reaches of the Thames, though the Merrimac is wider, and a distinctive American note is struck here and there in small groups of summer "camps," consisting of wooden bungalows, for the most part roughly erected and gaudily painted, where a few of the more enterprising workers from both cities live during the summer months.

The population returned at each Federal Census since 1870 is shown in the following Table :—

| Year. | Population. | Increase. | Percentage Increase. |
|-------|-------------|-----------|----------------------|
| 1870 | 40,928 | — | — |
| 1880 | 59,475 | 18,547 | 45·3 |
| 1890 | 77,696 | 18,221 | 30·6 |
| 1900 | 94,969 | 17,273 | 22·2 |
| 1910 | 106,294 | 11,325 | 11·9 |

In the Table below will be found the total number of births, deaths and deaths of infants under one year of age, in each of the years 1904–8 :—

| Year. | Number of Births. | Number of Deaths. | Number of Deaths under One Year. |
|-------|-------------------|-------------------|----------------------------------|
| 1904 | 2,515 | 1,736 | 498 |
| 1905 | 2,513 | 1,899 | 495 |
| 1906 | 2,538 | 1,918 | 544 |
| 1907 | 2,689 | 2,063 | 537 |
| 1908 | — | 1,963 | 554 |

The percentage of foreign to total population in Lowell is very high, the State Census of 1905 showing that 41·7 per cent. of the inhabitants were foreign-born, while 75·1 per cent. were of foreign parentage. Of the foreign-born inhabitants 29·5 per cent. were French Canadians, 27·8 per cent. were born in Ireland and 13·7 per cent. in Great Britain. English Canadians constituted 10·9 per cent. of the foreign-born population, and persons born in Greece 5·1 per cent. Scots, Portuguese, Swedes and Russians were also found in considerable numbers, the Portuguese being sufficient to maintain a separate church. In contrast with Lawrence, a city but a few miles distant and very similar in its industrial character, Lowell contains but a small number of Germans, Italians and Syrians.

On the other hand, Greeks, who are numerous in Lowell, are represented by a quite insignificant group in Lawrence. These are merely instances of the cohesive power of different non-English-speaking nationalities. The Greeks, and indeed most of the groups from Southern Europe and South-Western Asia, have appeared for the most part during the last fifteen years. That Greeks should have settled in Lowell, and Syrians in Lawrence, was a matter probably of accident in the first instance, but the process when once started was cumulative, and now simply reflects the desire of the foreign-speaking immigrant to go to some centre where he will be among relatives or friends, or at least among those who are not estranged from him by difference of language and traditions.

Considerable though it is, the impress of the foreign-born inhabitants of Lowell upon the appearance and municipal life of the city is not so great as the figures would at first suggest. That two-fifths of the population were born abroad, and that three-quarters of the inhabitants had at least one foreign-born parent, might imply that the city is cosmopolitan to a striking degree in its general character. More than half of the foreign-born population, however, consists of immigrants from the British Isles and the English-speaking parts of Canada. Generally speaking, these people do not bring habits or institutions differing greatly from those of the Americans themselves. Certainly some of the poor Irish are readily distinguishable by the brogue, which they seem never to lose, and which, indeed, they often bequeath in all its richness to their American-born children. Many of them, too, have become confirmed in a mode of life whose impoverishment is perhaps less striking than its improvidence and shiftlessness. On the whole, however, differences between the various national elements of the English-speaking section of the population do not obtrude themselves.

The French Canadian is the most important nationality whose members are readily distinguishable from the Americans. The French have long been present in almost all parts of New England, though there are certain centres—particularly the textile manufacturing districts—where they cluster in larger proportional numbers than in others. At one time the French were regarded with considerable dislike by the native population, but probably the worst that could be said against them was that they did not readily settle in the country, having a tendency to return to Canada in the summer, or whenever work was slack. Whatever may have been the case a quarter of a century ago, however, at the present time the French Canadians appear to be by no means an undesirable class of citizens. It is true that they are very tenacious of their language. Some of the older people take obvious pride in confessing that they have never learnt to speak English, and although the better educated and the American-born among them have acquired English perfectly, French remains the language of the home and of familiar intercourse. Almost without exception they remain staunch Roman Catholics, professing their faith with much of the old-world simplicity that characterises their native Province. Such people naturally draw together wherever they settle. In Lowell a district known for many years as "Little Canada" is peopled almost entirely by them, and here they maintain their own churches and institutions. The district is pre-eminently residential. There are some shops kept by French Canadians, which have a patronage almost exclusively confined to that class, but the bulk of the French Canadian custom probably goes to the larger shops in the two main streets of the city. Like the other and less numerous nationalities, the French Canadians, in spite of their long association with Lowell, are still only settlers, whose language and manners claim no special attention outside their own quarter of the city, the business and official life of which remains essentially American.

Next to the French Canadians, the foreigners who present the strongest claim to attention are the Greeks. In other cities the Greeks are seldom sufficiently numerous to have their own settlement, and are occupied chiefly as hawkers or shoe-blacks. In Lowell, however, they form a distinct colony, and constitute an important class of unskilled workers in the mills. They have practically all arrived during the last fifteen years from the hillsides and small villages of Sparta and Thessaly. Only about one-sixth of the total number of Greeks in Lowell are females. The majority of the Greeks consist of young men who are, however, showing a tendency, as they establish themselves and become sufficiently prosperous, to marry into their own nationality, often visiting their old homes for that purpose. Relatively few of the Greeks who had accumulated money would, however, be likely to stay in Lowell. As the Italian or the Portuguese is ambitious to possess a farm, so the Greek looks forward to owning some small business, and the Greek who had saved sufficient to justify the venture would probably be drawn away by the larger opportunities of Boston. The capacity for saving on the part of the unmarried Greek in Lowell is considerable, low as his wages are when judged by American standards. He will form one of a party of four or five who will share a small tenement in common

and do their own cooking and housework, or he will obtain board and lodging with a Greek family for 14s. 7d. or 16s. 8d. a week. Such accommodation is very rough, but it satisfies his needs. Outside his home he has few expenses. His chief recreation is found in the *café*, but the beverage drunk there, as a rule, is only coffee, and though a good deal of card-playing goes on, the winnings and losings are usually trifling. That the possession of considerable means is compatible with an outward mode of life which in many respects suggests poverty was made manifest by the emigration which took place from the city during the period of industrial depression in 1908. Then many Greeks returned to their own homes to tide over the period of slackness, though in few cases had there been hitherto any visible evidence of the resources which alone made this possible.

The economic importance of Lowell is derived from its manufactures of cotton goods, hosiery and knitted goods, woollens, machinery and boots and shoes. Of these, the first-named are by far the most considerable. According to a report of the Massachusetts State Bureau of Statistics the value of cotton goods manufactured in 1908 was £4,489,525, or 43 per cent. of the value of all the products manufactured in the city. From having originally been engaged chiefly in making the plainer varieties of goods, manufactured mainly for export to the Far East, the mills have acknowledged the competition of the Southern States in these coarser counts by concentrating more upon the finer goods intended for home use. At the same time, more than one company has endeavoured to retain its hold upon both branches of the trade by establishing mills in the Southern States. At present there is great variety in the output, both of the city as a whole and of the individual mills, and no one class of goods can be safely mentioned as being predominant.

The hosiery and knitted goods trade is represented by several firms, one of which, manufacturing its own yarn, is said to be the largest of its kind in the world. In this, as in the cotton industry, there is considerable variety of output, though the bulk appears to consist mainly of hosiery and underwear of the cheaper grades.

Woollen and worsted goods together represented a value in 1908 of £999,889. The size of the individual mills, however, is not large, and the importance of Lowell as a centre for woollen and worsted manufacture is altogether overshadowed by that of the neighbouring city, Lawrence.

The machine shops in Lowell are important, the value of the output of foundry and machine shop products in 1908, a year of marked depression in this industry, being £643,163. The output consists, for the greater part, of openers, pickers and other forms of textile machinery.

Boots and shoes, of which the output in 1908 had a value of £481,264, and patent medicines, including sarsaparilla, with a value of over £244,254, are the only other manufactures that require specific mention. The output of boots and shoes is confined almost entirely to the cheaper grades of goods.

The electric car service at Lowell is part of a system which is one of the most extensive in the country. Communication is easy, not only between the different parts of the city, but also between Lowell and many distant places. Frequent services are maintained to Boston, Lawrence, Haverhill and Nashua, without change of car, while by changing at certain points it is possible to reach Providence, R.I., Worcester and even more distant cities. The cars are an undoubted boon to the working classes in affording access to many unspoiled stretches of country; and in summer special cars are often chartered for picnics to various points. This electric car system, like the gas and electric lighting services, is under the control of a private company. Municipal functions, apart from police, sanitation, &c., are confined to the maintenance of the water works and a public library. The source of the water supply is a large number of driven wells.

The gas supplied to the city is a mixture of water gas and coal gas. The price charged is 4s. 7d. per 1,000 cubic feet, a discount of 10d. being allowed for payment within five days. There are about 5,000 prepayment or slot meters in use, the charge for gas consumed being 3s. 9d. net per 1,000 cubic feet. Gas is in very common use throughout the city both for lighting and cooking. It is estimated that about 15,000 cooking ranges are in use, most of which have been sold by the gas company on the instalment plan.

The charge for electric lighting is 6d. per kilowatt-hour, with a 10 per cent. discount for prompt payment. Electric lighting is not found in many homes of a working-class type.

The sanitary administration in Lowell is under the supervision of a Board of Health, the executive staff consisting of an agent and bacteriologist, a physician and six inspectors, including an inspector for meat and provisions.

The city maintains three parks, with areas of 34, 22 and 11 acres respectively, and also about a dozen open spaces or squares having a combined area of about 4 acres.

Both during the day and evening ample facilities are offered for technical instruction in the staple industry of the city at the Lowell Textile School, which is maintained by the State, and is one of the finest institutions of its kind.

The city revenues are derived mainly from taxation and licence duties. The taxes consist chiefly of those on real and personal property, the poll taxes, the street railway tax, and the tax on incorporated companies. In 1907 real estate was valued at £12,435,606, and personal estate liable to taxation at £3,284,131. The rate of tax levied was 1.94 per cent., yielding £304,963. The number of persons liable to the poll tax was 25,181, and the yield at 8s. 4d. per head was £10,492. The tax levied on shares of stock in the National Banks in Lowell held by non-residents amounted to £2,526. The total amount due in respect of property and poll taxes amounted, therefore, to £317,981. Of this sum, £276,958 was available for city purposes. The street railway tax received either directly or from the State amounted to £3,796, and the corporation tax to £13,219. Liquor licences yielded £37,167, of which £9,297 was paid over to the State. Other licences (on druggists, dogs, paint and chemicals) contributed £841, and special assessments for sewers, street sprinkling, sidewalks and moth extermination amounted to £9,408.

OCCUPATIONS, WAGES AND HOURS OF LABOUR.

The following Table, based on the Federal Census results of 1900, shows the distribution of the population of Lowell according to occupation:—

Number of Persons of 10 years of age and over engaged in Occupations in Lowell in 1900.

| Occupations. | Males. | Females. | Total. |
|--|--------|----------|--------|
| Building | 2,345 | 8 | 2,353 |
| Metalworking and Engineering | 3,430 | 18 | 3,448 |
| Cotton | 3,837 | 4,931 | 8,768 |
| Woollen | 745 | 978 | 1,723 |
| Hosiery | 615 | 2,151 | 2,766 |
| Bleaching and Dyeing | 385 | 30 | 415 |
| Carpet Making | 305 | 384 | 689 |
| Other and not specified Textile | 3,032 | 2,271 | 5,303 |
| Leather | 404 | 16 | 420 |
| Boot and Shoe Making | 532 | 174 | 706 |
| Clothing | 150 | 1,082 | 1,232 |
| Woodworking and Furnishing | 532 | 16 | 548 |
| Paper and Printing | 406 | 133 | 539 |
| Food, Drink and Tobacco | 453 | 10 | 463 |
| Other Manufacturing and Mechanical Pursuits | 1,931 | 278 | 2,209 |
| Trade and Transportation | 6,010 | 1,438 | 7,448 |
| Labourers (not otherwise specified) | 2,547 | 68 | 2,615 |
| Professional, Domestic and Personal Service and Agricultural Pursuits | 2,808 | 3,295 | 6,103 |
| All Occupations | 30,467 | 17,281 | 47,748 |

The Table shows clearly that purely industrial character of the city to which attention has already been directed. The relative importance in 1908 of the principal manufactures as fields for employment is shown by the following Table, compiled from a return published by the Massachusetts Bureau of Statistics:—

Number of Wage-earners employed in 1908 in the Manufacturing Industries of Lowell.

| Industry. | Wage-earners Employed. | | | | |
|--|------------------------|----------|--------|------------------|------------------|
| | Average Number. | | | Smallest Number. | Greatest Number. |
| | Males. | Females. | Total. | | |
| Cotton Goods | 5,572 | 5,383 | 10,955 | 8,801 | 12,313 |
| Woollen Goods | 612 | 340 | 952 | 700 | 1,191 |
| Worsted Goods... .. | 529 | 801 | 1,330 | 1,051 | 1,658 |
| Foundry and Machine Shop Products | 1,921 | 14 | 1,935 | 1,474 | 2,729 |
| Boots and Shoes | 715 | 349 | 1,064 | 702 | 1,478 |
| Other Industries | 5,159 | 4,936 | 10,095 | 8,268 | 11,655 |
| All Industries | 14,508 | 11,823 | 26,331 | 20,996 | 31,024 |

It will be seen that of the average number of 26,331 wage-earners employed in all the manufacturing industries embraced in the return, the cotton industry employed 10,955 or 42 per cent. These 10,955 persons were distributed among as few as seven establishments. The capacity of the mills, however, is much greater than the number of persons employed would indicate, the year 1908 having been one of acute depression. The cotton mills are large red brick structures, five or six stories high, built with one exception alongside the Merrimac River, from which source much of their power is derived. They are all engaged in both spinning and weaving, and usually in dyeing and bleaching. While American-born people probably form the most numerous single class of employees, they are in a very distinct minority as compared with the aggregate of foreign-born workers. An analysis of the staffs at two of the largest mills gave the following result:—First mill—Americans 445, foreign nationalities 2,510, including French Canadians 681, Irish 621, Greeks 568, English 294, Belgians 125, Poles 99, Scots 42, nine other nationalities 80. Second mill—Americans 567, foreign nationalities 1,700, including Poles 427, Irish 321, French Canadians 244, Greeks 242, English 152, Portuguese 114, Scots and Russians 69 each, eight other nationalities 62.

The language difficulty is obviously a handicap to an employer in the supervision of the various branches of a mill, and there is consequently a tendency to group a class of foreigners in order that those who understand a little English may instruct or advise the others. A national group, once represented in a mill, naturally tends to become larger. In the same way certain processes become identified with different nationalities in different mills. In one of the two mills mentioned above, the Greeks are mostly employed in the spinning rooms, but this cannot be regarded as a characteristic of all the other mills in the city. In this particular case the introduction of the first few Greeks was due largely to some temporary consideration, but once they were there, it was found convenient, as the staff increased, to put others with them. It may be mentioned that though official notices and instructions in regard to a few of the chief factory rules are usually printed in four or five different languages, no serious attempt is made to deal with the non-English-speaking workers by means of their own language, except possibly in the case of the French Canadians. Even the workpeople's names often undergo a strange metamorphosis when transcribed in the firm's books. Many a Greek or Portuguese who is known among his countrymen by some polysyllabic title answers in the mill to "John Smith" or some other emphatically English name.

Owing to the presence of a large number of foreign-speaking men, previously used to agricultural pursuits in their native land and utterly untrained in factory work, it is the custom in Lowell for male labour to be employed in several occupations which in England are reserved more exclusively for women. To a very large extent the roving, jack frames, &c., are tended by men, while, as mentioned above, in at least one mill Greek men are employed in ring spinning. Generally speaking, however, the male labour from Central, Eastern and South-Eastern Europe is mostly employed in the picking room and dye houses and in other more or less definitely unskilled capacities. The French Canadians, on the other hand, on account of their longer association with the industry, are employed on the skilled or semi-skilled tasks. In former days they were a somewhat uncertain factor, showing a marked tendency to go back to Canada and engage there in agricultural work. This migration still continues, but it is no longer considerable. The French Canadians are now a permanent element in the population, and are usually regarded as excellent workpeople.

The textile trades are organised to some extent both on the side of the mill-owners and of the workpeople, though the workers' associations represent only a minority of the employees. The Lowell Cotton Manufacturers' Association represents the employers, while the workers' unions consist of English, Belgian and Polish branches of the Textile Workers' Union, and also separate unions for loom fixers, for beamers, fixers and slashers, for weavers, for mule spinners and for bleachery workers. It may be noted here that in Lowell mule spinning is carried on only to a relatively small extent. The tendency to replace mule spindles by ring frames is going rapidly forward, the principal motive being economy, and to some extent, no doubt, the desire to make full use of the plentiful supply of unskilled immigrant labour. No common schedule of wage rates is agreed upon by the various mills, but in practice competition ensures a general uniformity. From time to time during the last ten years negotiations have taken place between the employers' and workpeople's organizations, and certain general changes have been agreed to. During

the last ten years the course of wages in the cotton mills is stated to have been as follows:—

| | | | |
|----------------|-----|-----|---|
| January, 1898 | ... | ... | Reduction of 7 per cent. |
| April, 1899 | ... | ... | Last reduction restored. |
| December, 1899 | ... | ... | General advance of 10 per cent. |
| July, 1906 | ... | ... | Irregular advance averaging 5 per cent. |
| December, 1906 | ... | ... | General advance of 5 per cent. |
| June, 1907 | ... | ... | General advance of 5 per cent. |

As compared with the level of wages at the end of 1897 the rates on this reckoning have, therefore, advanced approximately 27 per cent.

The mills in Lowell combine to maintain a hospital, where the employees and their near or dependent relatives can obtain treatment free. Some of the mills provide lunch rooms and means for heating the workers' dinner pails. This is practically all that is done that can be brought under the heading of what in the United States is usually described as "welfare work." Fifty years ago, when the workpeople were nearly all American, the association of employers and men was much closer than at the present time. Then, many of the employees with families were accommodated in tenement houses built and owned by the mill owners, and the single women workers, many of whom had left homes in country districts, were required to live in the mill boarding houses. A Mechanics' Association which once gathered together both employers and employees in its library and reading room, and at its lecture courses and industrial exhibitions, has long since disappeared.

Though represented by a large number of establishments, the woollen and worsted industry in Lowell is small as compared with the cotton, and the individual mills are also small. As elsewhere in the New England States where the cotton and woollen industries exist side by side, the representation of the French Canadian population is much smaller in the latter than in the former. In Lowell the Irish appear to be by far the most important single national group in the woollen mills. A recent analysis of the staff at two mills of about equal size showed the number of Americans employed to be 28 and 12 respectively, and of persons of foreign nationality 169 and 185; in one mill there were 142 Irish, 16 Swedes, 8 French Canadians, 2 Jews and 1 Scot; and in the other 109 Irish, 22 English, 21 French Canadians, 17 Germans, 14 Italians and 2 Scots.

The machine shops in Lowell are chiefly engaged in the production of cotton manufacturing machinery, though one firm also makes hydraulic presses. In the largest machine shop, out of 1,150 employees at work on a particular date, 977 were foreign-born. The most highly skilled work is done by English-speaking workers, including French Canadians who have acquired the language. Greeks and Poles are largely employed upon machine moulding and other routine tasks that require little or no skill. Both union and non-union men are employed in the various shops. One of the firms formerly worked on a premium bonus system, a premium in addition to wages being paid upon all machines above a certain number made in a specified period. The system resulted, as it was intended to do, in a largely increased output by the same staff. The premium appears to have been fixed at a point which it was difficult to maintain, and when an attempt was made to readjust the rate, friction resulted, and the scheme was abandoned.

The boot and shoe industry in Lowell is small as compared with that in other Massachusetts cities, and is confined to a cheap grade of product. The chief nationalities represented in this industry are the American, Irish and French Canadian.

The building trades are in the hands of comparatively small employers, each of whom confines himself as a rule to but one branch of work. Contracts are therefore usually divided between several firms. In the case of a large mill extension in progress at the time of the investigation the necessary labour was directly engaged by the mill owners. Practically all branches of the trade are unionised, and the union rates are generally operative.

The printing trade is not important, Lowell being too close to Boston to permit the growth of a large general printing industry. Most of the important contracts find their way to the larger city. One daily and two evening newspapers are published locally, but

here, again, the influence of Boston is felt, the Boston newspapers being on sale in the city very soon after their publication.

The following Table shows the predominant weekly wages and hours of labour of men engaged in some of the principal occupations in February, 1909 :—

Predominant Weekly Wages and Hours of Labour of Adult Males in the Principal Occupations in February, 1909.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|---|---------------------------|-------------------------------------|
| <i>Building Trades :—</i> | | |
| Bricklayers | 110s. | 48 |
| Stonemasons | 88s. | 48 |
| Carpenters | 70s. | 48 |
| Plasterers | 87s. 6d. | 48 |
| Plumbers | 81s. 3d. | 50 |
| Painters | 62s. 6d. | 48 |
| Hod Carriers and Bricklayers' Labourers | 60s. | 48 |
| Plasterers' Labourers | 66s. 8d. | 48 |
| General Labourers | 43s. 9d. | 54 |
| <i>Foundries and Machine Shops :—</i> | | |
| Ironmoulders | 58s. 4d. to 79s. 2d. | 55 |
| Machinists | 45s. 10d. ,, 51s. 7d. | 55 |
| Blacksmiths | 50s. ,, 62s. 6d. | 55 |
| Patternmakers | 62s. 6d. ,, 70s. 10d. | 55 |
| Labourers | 32s. 1d. | 55 |
| <i>Cotton Industry :—</i> | | |
| Picking Room Hands | 28s. 2d. to 33s. 9d. | 58 |
| Card Grinders | 33s. 4d. ,, 50s. | 58 |
| Strippers... .. | 30s. ,, 33s. 4d. | 58 |
| Mule Spinners | 50s. ,, 66s. 8d. | 58 |
| Slasher Tenders... .. | 45s. 10d. ,, 52s. 11d. | 58 |
| Slasher Tenders' Helpers | 29s. 2d. ,, 33s. 4d. | 58 |
| Loom Fixers | 50s. ,, 55s. | 58 |
| Weavers | 33s. 4d. ,, 42s. 9d. | 58 |
| <i>Woollen and Worsted Industry :—</i> | | |
| Card Strippers or Grinders | 30s. 3d. to 34s. 5d. | 58 |
| Loom Fixers | 62s. 6d. ,, 66s. 8d. | 58 |
| Mule Spinners | 45s. 10d. ,, 54s. 2d. | 58 |
| Weavers | 50s. ,, 60s. 5d. | 58 |
| Finishers | 31s. 3d. ,, 36s. 3d. | 58 |
| Cloth Dyers | 31s. 3d. ,, 35s. | 58 |
| <i>Hosiery and Knitted Goods Industry :—</i> | | |
| Boarders | 37s. 6d. to 54s. 2d. | 58 |
| <i>Printing Trades :—</i> | | |
| Newspaper— | | |
| Compositors, Hand { Day work | 68s. 9d. | 48 |
| and Machine. { Night work | 81s. 3d. | 48 |
| Book and Job— | | |
| Hand Compositors | 62s. 6d. to 75s. | 48 |
| Pressmen { Cylinder Presses | 81s. 3d. ,, 93s. 9d. | 48 |
| { Small Presses | 56s. 3d. ,, 62s. 6d. | 48 |
| <i>Public Services :—</i> | | |
| Street Construction, Paving and Cleaning (Municipal)— | | |
| Paviors | 100s. | 48 |
| Paviors' Labourers | 50s. to 56s. 3d. | 48 |
| Road Menders | 50s. | 48 |
| Scavengers | 50s. | 48 |
| Road Sweepers | 43s. 9d. | 48 |
| Drivers, Teamsters | 50s. | 48 |
| Water Works (Municipal)— | | |
| Labourers | 44s. to 50s. | 48 |
| Gas Works (Company)— | | |
| Gas Stokers | 68s. 7d. | 84 |
| Labourers | 37s. 6d. | 54 |

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|--|---------------------------|-------------------------------------|
| <i>Public Services—cont.</i> | | |
| Electric Light and Power Works (Company)— | | |
| Electricians, Switchboard Operators | 62s. 6d. | 56 |
| Steam Fitters, Repair Men | 91s. 8d. | 56 |
| Labourers | 33s. 9d. to 45s. | 54 |
| Linemen—Regular | 72s. 11d. | 54 |
| Linemen—Transient | 62s. 6d. | 54 |
| Electric Tramways (Company)— | | |
| Motormen and Conductors*— | | |
| 1st year | 61s. 3d. | 70 |
| 2nd year | 64s. 2d. | 70 |
| 3rd, 4th, and 5th years | 67s. 1d. | 70 |
| 6th and 7th years | 70s. | 70 |
| After 7 years | 72s. 11d. | 70 |

* 67s. 1d. was the rate received by the majority of the men.

Taking wages at New York as the base, =100, in each case, the wages index numbers for Lowell are—building trades, skilled men 77, hod carriers and bricklayers' labourers 87; foundries and machine shops, skilled men 68, unskilled labourers 77; printing, hand compositors (job work) 79.

In the above Table the hours of labour in machine shops have been stated as 55 and the weekly rates of wages have been computed on that basis, since in February, 1909, and for some time previously, these or even shorter hours had constituted the ordinary working week. In the largest machine shop of the city the hours worked since November, 1907, have varied as follows, according to the state of trade:—Week ending November 23, 1907, 58; December 7, 1907, 52½; February 15, 1908, 45; April 25, 1908, 36; December 19, 1908, 50; February 13, 1909, 55. Between February, 1909, and July, 1909, the hours were unchanged. Nominally, the full working week consists of 58 hours, but, having regard to the fluctuations indicated, it is impossible to consider the 58-hour week as being normal, and accordingly the usual hours actually worked in February, 1909, have been stated.

In view of the importance of the cotton industry in Lowell, it may be of interest to supplement the rates of wages quoted above for adult males by some further rates relating more particularly to women and girls. The following rates of earnings are in all cases for a week of 58 hours:—Drawing frame tenders 25s. to 26s. 1d.; slubbers 33s. 4d. to 41s. 8d.; ring spinners (warp and filling) 28s. 2d. to 34s. 5d.; drawing-in hands 25s. to 34s. 5d.; spoolers 29s. 2d. to 33s. 4d. Of the above groups the drawing frame tenders, the spoolers and the drawing-in hands are exclusively women and girls. Ring spinning and slubbing are shared to some extent by men. Weaving is another branch of the trade which is divided between the sexes, and the rates quoted in the summary Table relate to both men and women. In the wages books of the cotton mills no distinction is drawn as a rule between men and women, where both are engaged in the same operation, and a separate rate cannot therefore be given for each sex. As regards weavers, however, the general opinion was that the normal earnings of men and women respectively did not differ to any material extent. In the case of the woollen mills it was possible in two cases to obtain separate rates; in one of these the earnings of the women were somewhat higher than those for men, and in the other the contrary was the case.

HOUSING AND RENTS.

Practically the whole of the working-class population of Lowell is accommodated in tenement houses built of wood. The predominance of wood as a form of building-material is shown by the fact that at the beginning of 1908, out of a total of 18,146 buildings of all kinds in the city, only 1,100 or 6 per cent. were built of brick, stone or iron. In external appearance and in the smaller details of construction working-class houses exhibit a good deal of variety. The older houses are mostly plain, while in the case of the more recently erected buildings an attempt has usually been made to relieve the frontage by means of bay windows, small porches and similar devices.

The long rows of uniform dwellings, characteristic of many English industrial cities, are entirely absent from Lowell if one excepts a number of plain-fronted three-storied houses built by some of the mill owners as tenement or boarding houses for their employees. The buildings of the latter class, however, are not now an important factor in the working-class housing accommodation of the city; for some time the mill owners have followed the policy of selling them or converting them into store-houses, as opinion

is unanimous that they were suited only to a passing phase of the city's industrial development. Originally, much of the mill-help was drawn from the rural districts, and, especially in the case of females, it was thought desirable to require the employees to live in the firms' boarding houses and conform to certain disciplinary regulations. As a relic of a past custom a "curfew," which once required the employees to be indoors at 9 o'clock, still rings at that hour. In addition to these boarding houses, tenements were also provided to some extent for the married men. The coming of the foreigners, a change in the relations of employer to employee, and the desire of the latter to choose his own type of dwelling, and, if necessary, go far afield for it, have all contributed to the breakdown of the system. Most of the houses are now managed by individual owners as boarding or "rooming" houses, and accommodation can be obtained by anyone desirous of it, whether an employee of the mill or not. The large machine shop is now the chief undertaking providing house accommodation for its employees, maintaining about 50 small detached wooden houses, each containing six rooms, and rented at 9s. 2d. per week. The large hosiery firm, though not now financially interested to any extent in the boarding houses, still stipulates with the boarding house proprietor for certain charges to its employees, such charges being below the usual rates current in the city.

A working-class street in Lowell usually presents a very irregular appearance, the houses varying in age, style and height. In spite of this outward diversity, however, working-class homes mostly conform to one general type. No official figures exist showing the relative numbers of families occupying dwellings of different sizes, but it is evident from observation that so far as the working classes are concerned a tenement usually consists of either four or five rooms; the six-roomed tenement is also of some importance. A tenement block usually contains from two to six tenements. With the exception of some particularly large blocks, notably in the French Canadian quarter, the older types of houses are usually only two stories high, but the tendency in the case of the modern tenements is to build three stories high. In the case of the two-storied tenement there is usually one entrance from the street to either two or four tenements according as the house is double or single-fronted. To the modern three-storied block there are usually two doors to every three tenements, one door giving access to a tenement on the street floor and the other to the two tenements above. This latter type of house and to some extent the old three-storied blocks are provided with stairways and balconies at the back, giving a secondary access which for everyday purposes is the one commonly used. The arrangement of the rooms within the tenements is on the whole fairly uniform, all the rooms communicating direct with each other without passages or hallways. In the case of tenements with secondary access from the back, the front door on the stair or hallway usually opens direct into a parlour or sitting room, and the back door into the kitchen or common living room. Where there is only one entrance, as in the older two-storied tenements, it is usually direct to the kitchen. Many of the older houses have attics, these being shared among the tenements, so that in an old type of four-roomed tenement three rooms would be on one floor, and one room would be an attic. As a rule, the kitchen is a large apartment 15 or 16 feet square, and is provided, usually as a tenant's fixture, with the familiar closed American range standing prominently in the middle of the room. In all the better class tenements a small narrow pantry or "sink room" leads off the kitchen. This room is merely a lighted closet containing shelves, etc., for storing food, a sink, and the water supply. In poorer and older tenements the sink and water supply are commonly in the kitchen. Though the kitchen is almost uniformly of ample size, the only exception being in the case of the oldest and poorest houses, the size of the other rooms varies much. In a modern tenement of working-class character the ordinary size of a sitting room is 14 feet square, but in the case of the bedrooms it is impossible to give dimensions that could be regarded as typical.

The newer types of tenements have usually separate sanitary conveniences, mostly provided in a small bathroom, and the plumbing is good. In the older houses separate conveniences are also frequently found, but in many cases the convenience is on the landing, and is shared by two tenants, while in a few cases conveniences are provided in a yard and are used in common by the occupants of several tenements. In the older houses the conveniences often lead direct from the kitchen and have no outside ventilation, and in a number of cases they have been allowed to fall into disrepair. Storage space for coal and wood is usually ample, and the modern three-storied tenements are often provided on each floor with galvanised dust-shoots leading to a bin in the yard. Practically all the houses in the urban portion of the city are connected with the sewers. Gas fittings are frequently provided, except in the old and poor houses.

Except in one or two small areas, there are no signs of serious congestion in the housing accommodation, and though the space surrounding the ordinary tenement block

is not large, it is usually sufficient. The city, of course, is not free from a housing problem, which presents itself in the action and reaction of bad and careless tenants upon old and dilapidated buildings. There are also a few large tenement blocks, exceptional to, rather than typical of, the working-class accommodation as a whole, which were built many years ago, and are decidedly lacking in modern hygienic requirements. There is, for example, a large block in the French Canadian quarter consisting of four-roomed tenements. Only two of the rooms in each tenement face the street or court; the other two are in the middle of the house and have only borrowed lights. The individual tenements are without satisfactory "through" ventilation, the principle of construction being similar to that of the old "back-to-back" type of house in England. Moreover, as the city has grown irregularly, small courts and "rear" houses are not uncommon. Such dwellings are chiefly occupied by European immigrants, and to some extent by the poor Irish.

As a counterpart to these conditions, which are worse than the average, must be mentioned the few small one-family houses which are found here and there. The principal group consists of about fifty cottages not far from the centre of the city. They are two stories high, and contain seven rooms, consisting of a parlour, sitting room, dining room, kitchen and three bedrooms. They have small forecourts and also yards at the rear. The usual rent is 11s. 6d. per week. The small houses previously mentioned as maintained by the machine shop also present an improvement in many respects upon the general standard of housing accommodation.

House property is a popular form of investment among working-class people in Lowell, and the Federal Census of 1900 showed that 22.9 per cent. of the total number of houses were owned by their occupiers, either free or subject to mortgage or other charges. The larger proportion of these owning occupiers, however, would not be of the wage-earning class.

The most usual rentals paid for accommodation of working-class character are shown in the following Table:—

Predominant Rents of Working-class Dwellings.

| Number of Rooms per Dwelling. | Predominant Weekly Rents. |
|-------------------------------|---------------------------|
| Four rooms | 6s. 3d. to 9s. 7d. |
| Five rooms | 7s. 8d. ,, 10s. 7d. |
| Six rooms | 9s. 7d. ,, 11s. 6d. |

The level of rents at New York being represented by 100, the rents index number for Lowell is 52.

The French Canadian population, though confined almost entirely to one district, is housed in tenements which conform on the whole to the general type already described. The Greeks occupy a street and adjacent courts near the City Hall. The tenements in which they find accommodation are mostly old, and most of the Greek homes present a very impoverished appearance. This is probably due less to their having brought a low standard of housing accommodation with them than to the fact that there are relatively few Greek women. Many a Greek household in Lowell consists entirely of men working in the mills by day, and doing their own rudimentary housekeeping in their spare time. In such cases the furniture is of the poorest and most meagre description, and the landlord usually deems it prudent to require the rent to be paid weekly in advance. In the tenements so occupied by men alone cases of overcrowding no doubt occur. Misuse of sanitary conveniences, such as might be charged to any population used to rural conditions, is also said to be common. In most homes of this class which were visited there was a general absence of comfort, and a vigorous housewife would have effected much improvement, but evidence was not wanting to show that some regard was paid at least to the elementary decencies of life.

RETAIL PRICES.

Most of the foreigners in Lowell appear to trade with the general retail traders. In the Greek quarter there are a few shops patronised almost exclusively by Greeks. In the French Canadian district, "Little Canada," also, most of the shops are kept by French Canadians. Otherwise, the various nationalities represented appear to have no difficulty in satisfying most of their needs at the ordinary grocery shops and markets. Even the French Canadian shops are an expression rather of national *esprit de corps* than of any essential difference between the American and the French Canadian dietary.

The peculiarities of the Greek dietary consist principally in the large use of rice, olive oil and various spices or flavourings, such as bay leaves, a bundle of which is usually to be found hanging in a Greek house. As to the consumption of flesh, national habits find expression in the almost exclusive use of mutton. The loaves supplied by the Greek bakers appear to be of the same ingredients as the wheaten bread made by American bakers, and they are also of the same weight. They are fashioned, however, into flat round shapes, each loaf generally weighing 2 lb. before baking.

Groceries and other Commodities.

As in other American cities, wheaten *bread* is usually sold in Lowell in $2\frac{1}{2}d.$ and $5d.$ loaves, the smaller size being by far the more popular of the two. Much variation occurs in the weight of the loaves as between one shop and another, and it is difficult to state the predominant weight of the $2\frac{1}{2}d.$ loaf within narrower limits than 12 to 16 oz. In February, 1909, the largest bakeries usually made the $2\frac{1}{2}d.$ loaf to weigh 16 oz. before baking; this yielded a loaf weighing about 14 oz. as sold. There were, of course, many variations on this practice. Various kinds of rolls (*e.g.*, "Parker House rolls" and "Tea rolls") and buns are sold at a standard price of $5d.$ per dozen, the weight being about the same as that of bread costing this sum.

The prices of the most popular kinds of *tea* vary very widely. This is possibly only a reflexion of the great differences in wage-earning capacity and general economic conditions among the working classes.

Sweet potatoes are popular when in season, *viz.*, in the late autumn. The usual retail price is then about $1s. 0\frac{1}{2}d.$ for 10 lb.

Fresh baked beans and brown bread are sold by many of the bakers on Saturday evenings, this dish being a very popular one throughout the whole of New England both for Saturday's supper and Sunday's breakfast. Baked beans are also sold in cans, weighing from 2 to $2\frac{1}{2}$ lb., for $5d.$ to $6\frac{1}{2}d.$ Mention may also be made of the fact that many of the fruiterers' shops sell "Saratoga chip" potatoes. As commonly used they may be regarded more as a sweetmeat than as a food. There is obviously little nutriment in the thin wafers. They are used to beguile the tedium of a railway or tram-car journey, and probably in most cases merely present an alternative to chewing gum or pea nuts.

The kind of *coal* usually consumed in working-class homes is an anthracite, costing $33s. 4d.$ per short ton of 2,000 lb., in February, and $31s. 3d.$ in August, while half a ton cost $16s. 8d.$ and $15s. 7\frac{1}{2}d.$ respectively, and a quarter of a ton $9s.$ and $8s. 4d.$ respectively at these dates. A quarter-ton was the most popular unit. Bags of coal weighing 100 lb. (constant all the year round) are sold for $2s. 1d.$, but it was said that this method of buying was favoured only by the very poorest. Bags of coal weighing 20 lb. are sold by most grocery and provision shops for $5d.$

Coke is sold at $19s. 9\frac{1}{2}d.$ per chaldron of about 1,440 lb., and $9s. 11d.$ per half-chaldron, the latter measure being the more common. Bags of coke varying slightly in weight, but usually about $17\frac{1}{2}$ lb., are sold by grocery shops for $5d.$

The following Table shows the predominant prices in February, 1909, for certain articles of food, for coal and for kerosene :—

Predominant Prices paid by the Working Classes in February, 1909.

| Commodity. | Predominant Price. |
|------------------------------------|--|
| Tea per lb. | $1s. 0\frac{1}{2}d.$ to $2s. 1d.$ |
| Coffee " | $1s. 0\frac{1}{2}d.$,, $1s. 5\frac{1}{2}d.$ |
| Sugar :— | |
| White Granulated " | $2\frac{3}{4}d.$ |
| Brown " | $2\frac{1}{2}d.$, $2\frac{3}{4}d.$ |
| Bacon, Breakfast—Boneless " | $7\frac{1}{2}d.$ to $10d.$ |
| Eggs :— | |
| Storage per 1s. | 9 ,, 10 |
| Fresh " | 6 ,, 8 |
| Cheese, American per lb. | $10d.$ |
| Butter " | $1s. 3d.$ to $1s. 6d.$ |
| Potatoes, Irish... .. per 7 lb. | $6\frac{1}{2}d.$,, $7d.$ |
| Flour, Wheaten—Household " | $10\frac{3}{4}d.$ to $1s. 1\frac{1}{2}d.$ |
| Bread, White per 4 lb. | $10d.$,, $1s. 1\frac{1}{4}d.$ |
| Milk per quart | $4\frac{1}{4}d.$ |
| Coal, Anthracite per cwt. | $1s. 10\frac{1}{2}d.*$; $2s. 0\frac{1}{4}d.†$ |
| Kerosene per gallon | $7\frac{1}{4}d.$ to $8\frac{1}{2}d.$ |

* By the ton (2,000 lb.) or half-ton (1,000 lb.). † By the quarter-ton (500 lb.).

Meat.

The beef, mutton and veal consumed in Lowell is practically all Western-dressed, though a certain amount of local beef of very poor quality is also on sale at the cheapest shops. The method of cutting does not call for special comment except so far as "rounds" are concerned. This part of the carcass is very seldom cut as a roast, and when cut as a steak is usually divided into three parts, top of the round, bottom of the round and the vein cut. The "top" is the most expensive, and the "bottom" the cheapest cut. As elsewhere in New England the price of veal varies considerably from shop to shop, such variations being principally due to wide differences of quality.

The best pork sold in Lowell is local or Boston killed. A considerable amount of frozen pork is, however, also obtained from the West.

Canned meats have a large sale. Roast beef and corned beef, each sold in cans weighing gross 1 lb., cost $6\frac{1}{2}d.$

The following Table shows the prices most generally paid by the working classes for certain cuts of beef, mutton, veal and pork in February, 1909 :—

Predominant Prices paid by the Working Classes in February, 1909.

| Description of Cut. | Predominant Price per lb. |
|-------------------------------------|--------------------------------|
| Beef :— | |
| Roasts—Ribs prime | $7\frac{1}{2}d.$ to $9d.$ |
| " Ribs second cut | $6d.$,, $7\frac{1}{2}d.$ |
| " Chuck or short ribs | $5d.$ |
| Steaks—Round | $7\frac{1}{2}d.$ to $10d.$ |
| " Sirloin | $1s. 0\frac{1}{2}d.$ |
| Shin without bone | $3d.$ to $5d.$ |
| Flank | $3d.$,, $5d.$ |
| Brisket, "Fancy" | $7d.$,, $8d.$ |
| Mutton or Lamb :— | |
| Leg | $7\frac{1}{2}d.$ to $9d.$ |
| Breast | $4d.$,, $6d.$ |
| Loin | $6d.$,, $8d.$ |
| Chops | $10d.$,, $1s. 0\frac{1}{2}d.$ |
| Shoulder | $6d.$ |
| Neck | $3d.$ to $5d.$ |
| Veal :— | |
| Cutlets | $10d.$ to $1s. 2d.$ |
| Rib chops | $8\frac{1}{2}d.$,, $11d.$ |
| Loin chops | $9d.$,, $11\frac{1}{2}d.$ |
| Breast | $4d.$,, $6d.$ |
| Neck | $4d.$,, $5d.$ |
| Pork :— | |
| Fresh—Loin | $6d.$ to $7\frac{1}{2}d.$ |
| " Spare rib | $4d.$,, $6d.$ |
| " Shoulder | $5d.$ |
| " Chops | $7d.$ to $8d.$ |
| Corned (wet salt or pickled) | $5\frac{1}{2}d.$,, $7d.$ |
| Dry salt | $7d.$ |
| Shoulder, salt or smoked | $4\frac{1}{2}d.$ to $5d.$ |

Prices at New York being taken as the base, = 100, in each case, the index number for the price of meat at Lowell is 99, for other food it is 103 and for food prices as a whole 102. For rents and food prices combined the index number is 90.

MEMPHIS.

Memphis, a city in the south-west corner of the State of Tennessee, is situated wholly upon the left bank of the Mississippi at a distance (by the river) of 454 miles below St. Louis and of 818 miles above New Orleans. It lies in close proximity to the State of Mississippi, and the eastern boundary of the State of Arkansas faces the city upon the opposite bank of the river. Memphis is now the largest city in the State. Incorporated in 1826 as a town, and in 1849 as a city, it had in 1860 a population of 22,623; but the course of its growth was seriously arrested by three epidemics which occurred in the 'seventies. The following Table shows the number of inhabitants at the Federal Censuses of 1870-1910.

| Year. | Population. | Increase or Decrease (—). | Percentage Increase or Decrease (—). |
|------------|-------------|---------------------------|--------------------------------------|
| 1870... .. | 40,226 | — | — |
| 1880... .. | 33,592 | -6,634 | -16.5 |
| 1890... .. | 64,495 | 30,903 | 92.0 |
| 1900... .. | 102,320 | 37,825 | 58.6 |
| 1910... .. | 131,105 | 28,785 | 28.1 |

The effects of the epidemics of 1872, 1878 and 1879 are reflected in the decline of population recorded in 1880. The epidemic of yellow fever in 1878 was the most severe of all: according to the report of the Howard Relief Association the number of persons attacked was 15,000, of whom 5,150 died, more than four-fifths being whites. In the following year there were 1,595 cases and 497 deaths. Business had been prostrated in 1878 by the ravages of the disease, and in January, 1879 the State Legislature repealed the city charter, assumed control of its taxation and finances and placed it under the government of a "legislative council." It was only twelve years later that a new city charter was granted. The city appears to have taken adequate measures against the recurrence of such epidemics. Modern sewerage and an admirable artesian water system have been provided.

It may be noted here that 3.1 square miles were added in September, 1909 to the municipal area, which up to that date covered 16 square miles. This extension increased the population of the city by several thousand, but, in spite of this, the increase during the last decade in the number of inhabitants fell considerably below that in the preceding ten years, this decline in the rate of increase being largely attributable to development beyond the city limits.

The foreign-born element in the population of Memphis is inconsiderable, forming in 1900 but 5 per cent. of the total. Of the 5,110 persons enumerated in 1900 who were foreign-born, 29.5 per cent. were born in Germany, 22.2 per cent. in Ireland, 14.2 per cent. in Italy, 9.2 per cent. in Great Britain and 6.3 per cent. in Russia.

The Germans and the Irish rapidly assimilate to American conditions. The former, in so far as they are found in the ranks of manual workers, are employed mainly in the skilled occupations of the building and machine shop trades, while the Irish are employed notably by the railways both in the handling of goods and on the trains, by the municipality (as policemen, firemen, &c.) and in the lumber mills. The Italians are far more conspicuous. In recent years they have come in increasing numbers to Memphis (as to the South generally), and have met with considerable success in the occupations that they have adopted. A large number of the smaller grocery and meat shops—with a bar often attached—as well as many cheap restaurants, which especially attract negro custom, are kept by Italians. One of their distinctive occupations is market-gardening; in 1909, 36 Italian families owned in the city and suburbs 1,175 acres of land (valued at £45,000) which they cultivated in this way, besides renting 875 acres for similar use. Their carts, stocked with fruits and vegetables, are to be seen daily making their rounds in all quarters. Many Italians also sell fruit, vegetables, ice-cream, popcorn, &c., at street stands. As labourers they work in the streets and on the railways, but some are employed as decorators, plasterers and labourers in the building trades. Greeks are also growing in numbers in Memphis. Several cheap restaurants are kept by them, and in the business of shaving and boot cleaning—much more important as trades

in American than in European cities—they are proving successful competitors to the negroes, who had hitherto enjoyed almost a monopoly.

The negroes formed in 1900 48·8 per cent. of the total population, a larger percentage than in any other city included in the present enquiry save Savannah, where the percentage was 51·8 at the same date, and in the last ten years their increase in numbers has kept pace with the growth of the city. Few relations, save those of a business nature, exist between them and the whites and socially and educationally, not less than in their religious organisations, the two races live apart. Negroes possess political rights, but they are not easily exercised. For a long period they have held no public office. In the tramcars negro passengers are compelled to take the back seats and, although not expressly debarred, an unwritten law excludes them from the principal public parks. They do not frequent the theatres, and have their own recreation grounds. There are two negro cemeteries, but if negroes wish to be buried in the public cemeteries they are restricted to special areas. The whites avoid living in close proximity to them, and when negroes obtain a settlement in streets inhabited by whites, these tend to leave. The negroes, therefore, are usually found congregated in distinct streets and quarters of their own. Distinct signs of advancement in education and in economic well-being are observable among the negro population. In 1909 the city maintained eight free public schools and one high school for negroes, in which over 90 coloured teachers, including 17 male teachers, were employed. As there is no compulsory education law it is difficult to ensure the attendance at school of negro children, and in 1908 only about one-quarter of the negro children of school age were enrolled, but the leaders of the coloured people are doing their utmost to effect an improvement in this respect. In 1907 it was decided to transfer to Memphis the seat of the University of West Tennessee, which was founded in 1900 at Jackson, in the State of Tennessee, for the higher education of coloured youth, and in 1909 the departments of medicine, dentistry, pharmacy, law and nurse training were in active work in the city. There are also two private institutions which provide instruction largely of a commercial and industrial character, the Le Moyne Normal Institute and the Howe Institute. The former, founded in 1871 by the American Missionary Association, and presided over by a white principal, had some 700 students on its books in 1909 and classes were held in, among other subjects, psychology, printing, woodworking, music and needlework. The Howe Institute (which has some 500 students) was organised by the Baptists, and, in addition to ordinary subjects, gives instruction in theology, music, shorthand, typewriting, bookkeeping, printing and needlework. There were in the city in 1908 over forty negro doctors, seven dentists and twelve lawyers. Many negroes keep grocers' and butchers' shops and other small stores, while some have risen to be small contractors. In the outer parts of the city, such as "Klondyke" and "New Chicago," there are considerable colonies of negroes, the members of which nearly all own the houses in which they live, while in certain more central districts, according to a negro writer, "whole subdivisions are being abandoned by the white people and bought up by the ambitious and thrifty classes of coloured people." There are no negro daily newspapers, but two weekly journals are published and the two Institutes above mentioned also publish periodicals for the negroes. In 1906 a banking institution under the exclusive ownership and management of coloured people was established in Memphis, and it has met with considerable success. The negroes have also erected an Old Folk's and Orphans' Home.

The vital statistics for Memphis are defective. No general registration of births is enforced, and in April, 1909, the number of births recorded did not in any single week exceed forty. Both whites and negroes frequently fail to report births, but the latter are more remiss than the former. As a consequence the natural increase of population cannot be stated, nor can an infantile mortality rate be calculated on the usual basis. The following Table shows the total number of deaths, the number of deaths under one year and the number of deaths due to tuberculosis for each of the years 1904 to 1908 inclusive:—

| Year. | Total Number of Deaths. | | Number of Deaths under One Year. | | Number of Deaths due to Tuberculosis. | |
|-------|-------------------------|-----------|----------------------------------|-----------|---------------------------------------|-----------|
| | White. | Coloured. | White. | Coloured. | White. | Coloured. |
| 1903 | 931 | 1,101 | 140 | 157 | 63 | 145 |
| 1904 | 1,071 | 1,239 | 118 | 181 | 98 | 171 |
| 1905 | 1,027 | 1,160 | 137 | 159 | 97 | 197 |
| 1906 | 1,023 | 1,185 | 151 | 191 | 103 | 155 |
| 1907 | 1,036 | 1,410 | 162 | 219 | 88 | 170 |

Memphis is primarily a commercial and distributing centre. It is the largest inland cotton market in the world, and also claims to be the largest hardwood lumber market. As a centre for the wholesale grocery, hardware, shoe, dry goods, agricultural implement and flour trades it is of great importance. In point of industry the woodworking trades predominate, while one of its distinctive manufactures is the production of cotton-seed oil. There are important machine shops in the city and the immediate vicinity, but railway repair work affords the larger part of the employment in them. The remaining trades mainly subserve local needs, and do not supply distant markets.

A period of prosperity set in for Memphis in the 'nineties, and it has continued unbroken to the present time. The following Table, which sets forth for each of the years 1901 to 1907 the receipts of the Bank Clearing House and of the Post Office, and for 1902 to 1907 the value of the transfers in real estate and the total estimated cost of new buildings and house improvements, furnishes evidence of the growing prosperity of the city :—

| Year. | Clearing House Receipts. | Post Office Receipts. | Real Estate Transfers. | New Buildings and Improvements. |
|-------------|--------------------------|-----------------------|------------------------|---------------------------------|
| | £ | £ | £ | £ |
| 1901 | 32,183,945 | 51,519 | — | — |
| 1902 | 37,333,321 | 61,261 | 887,352 | 469,375 |
| 1903 | 44,585,325 | 71,275 | 1,286,258 | 680,257 |
| 1904 | 54,305,068 | 82,004 | 1,484,510 | 957,116 |
| 1905 | 56,963,033 | 91,122 | 2,272,665 | 1,053,668 |
| 1906 | 51,569,803 | 100,558 | 2,346,117 | 1,358,364 |
| 1907 | 51,849,592 | 112,344 | 1,901,981 | 1,548,348 |

Memphis enjoys exceptional means of communication and of transport. Nine distinct railway systems enter the city. The Mississippi is here spanned by a great cantilever railway bridge, which is the only bridge across the river south of Cairo. By this river and its tributaries Memphis has access to a large territory embracing the States of Tennessee, Mississippi, Arkansas, Louisiana and Missouri, and is enabled to obtain cotton, timber and other commodities at low cost. Coal and iron also reach Memphis from Pennsylvania by the Mississippi and its tributary the Ohio. The river acts as a permanent regulator of freight charges, and its presence tends to ensure for the city comparatively low railway rates. Memphis is at the head of the deep water and all-year navigation of the Mississippi, and is the home port of 175 steamboats. The Panama Canal, when completed, will doubtless further the interests of Memphis, more particularly if the projects for connecting the Mississippi with the Great Lakes and for providing a deeper permanent channel in the river should be realised.

As to local transport facilities, Memphis possesses an electric tramway system with 75 miles of track within the city limits and 109 miles if extensions to the various suburbs are included. There are few dwellings on the Arkansas banks of the Mississippi, so that little traffic is carried on between the two sides of the river : one steam ferry makes the passage about fifteen times daily, the service ceasing about six o'clock in the evening.

The city occupies a striking situation upon the fourth Chickasaw Bluffs, some forty feet above the highest water mark, and the site is of an undulating character. The majority of the streets away from the immediate centre are bordered with trees, and the municipality owns nearly 1,100 acres of garden spaces in different parts of the city. Overton Park, which is the finest park, is a little removed from the centre, and about three miles from the river, while Riverside Park, along the Mississippi banks, is almost the same distance from the dividing line between the northern and southern sections of the city. The streets, though wide and regularly laid out, as in the majority of American cities, are badly paved, and much remains to be done in the provision of good roads and footways. Memphis has grown with such rapidity, however, that the authorities have been unable to keep pace with its requirements, and whole streets exist without properly laid roads or footways. Of a total of 235 miles of streets in the urban area in December, 1907, 121 miles, according to the report of the city engineer, were "dirt" streets, *i.e.* composed merely of the natural soil. When the heavy falls of rain, known as wash rains, occur at Memphis, these streets become almost impassable. The footways are also often mere "dirt" paths, relieved in some cases by wooden planks. A sum of £625,000 is, however, to be expended upon street improvements in the immediate future.

With the exception of the buildings devoted to commerce and industry and those in the central parts of the city, the great majority of the houses are built of wood. A few of the more pretentious dwellings are built of brick or stone, while a larger number have a wooden framework covered with a veneer of brick, or have basements of brick or stone. Outside the business quarters, where houses of three and four stories are found, as well as a few lofty structures of from nine to fifteen stories, the houses mainly contain one or two stories. Among the more notable public buildings may be named the new Court House, the Custom House and the Public Library.

The course of the city's expansion is towards the south and east. The latter portion of the city is chiefly inhabited by the well-to-do classes, while industry is moving to the south. Already the area known as New South Memphis, which adjoins the city, yet is independent of it, is a fast developing industrial centre, and in South Memphis proper are numerous factories and the local workshops of the principal railway systems running into Memphis. The projected Union Station, at which all passenger trains will arrive, is to be in this district, which is also at present the headquarters of the wholesale grocery, hardware and other important warehouses. Northern Memphis is almost wholly given over to the timber trade and to one or two branches of the woodworking trade. Expansion on this side has been hindered by Wolf River, and the boyaus that often overflow in the spring. The enterprise of a company which secured a large tract of land to the south of the city greatly stimulated development in that direction; among other inducements the company offered free sites for factories for terms of years.

Municipal enterprise is confined to the care of the streets and the management of the water works. The city has introduced the crematory system for the disposal of garbage. Gas and electric light are provided by private companies. The gas company also supplies electric light, while a second company supplies electric light and power. The principal sources of municipal revenue are taxes on real property and on personal property (with exemption up to £208 in the case of personal property), the privilege or occupation tax and the poll tax. The last-named, amounting to 8s. 4d. per annum, is the sole tax paid by working men whose personal property has a value less than £208 and who do not own real property. The city tax on real and personal property for the year 1908-9 was 1.91 per cent. of the assessed value, while the State and County tax for the same period was 1.43 per cent. In practice a differentiation is made in favour of small property owners, who are assessed at about 40 per cent. of the purchase value, while for property worth over £1,042 the assessment is from 60 to 70 per cent. of the value.

An Act of the State Legislature rendering it "unlawful to conduct a saloon within four miles of a church or a school-house" throughout the State of Tennessee came into effect in Memphis on July 1st, 1909, but breweries and distilleries were allowed until January 1st, 1910, before closing down. One of the prominent arguments for the adoption of prohibition was the alleged proneness to drinking of the coloured section of the population.

OCCUPATIONS, WAGES AND HOURS OF LABOUR.

No more recent classification of the population of Memphis according to occupation exists than that set forth in the following Table, which shows the number of persons of ten years and upwards engaged in occupations at the time of the Census of 1900:—

Number of Persons of 10 years of age and over engaged in Occupations in Memphis in 1900.

| Occupations. | Males. | Females. | Total. |
|---|--------|----------|--------|
| Building | 2,778 | 7 | 2,785 |
| Metalworking and Engineering | 1,466 | 3 | 1,469 |
| Textile | 49 | 87 | 136 |
| Boot and Shoe Making | 149 | 2 | 151 |
| Clothing | 226 | 1,455 | 1,681 |
| Woodworking and Furnishing | 1,226 | 5 | 1,231 |
| Paper and Printing | 288 | 30 | 318 |
| Chemical | 215 | 3 | 218 |
| Food, Drink and Tobacco | 577 | 24 | 601 |
| Other Manufacturing and Mechanical Pursuits | 2,144 | 46 | 2,190 |
| Trade and Transportation | 15,026 | 1,038 | 16,064 |
| Labourers (not otherwise specified) | 5,674 | 82 | 5,756 |
| Professional, Domestic and Personal Service and Agricultural Pursuits | 5,847 | 12,021 | 17,868 |
| All Occupations | 35,665 | 14,803 | 50,468 |

The importance of the commercial interests of Memphis at the date of the return is shown by the fact that 42 per cent. of the occupied males were then engaged in trade and transportation. Nevertheless, the city has greatly benefited by the new industrial movement that has made itself felt in many of the cities of the South during recent years. Well-organised efforts have been made to attract industries and capital from the North, and in regard to the woodworking industry especially these efforts have met with considerable success. With a view to further improving the industrial capacities of the workpeople the municipality in 1909 sanctioned the expenditure of a large sum upon the establishment of a technical school. In 1907 there were eighty-two saw mills in the city and its suburbs, and the many woodworking establishments included factories for barrels, barrel headings, staves, handles, spokes, washboards, screens, sashes, butchers' skewers, window frames, floorings, roofings, boxes, wheelbarrows, carriages, agricultural waggons, medium grade furniture, coffins, &c. Some ten firms produce cotton-seed oil, which is utilized for cooking oil, salad oils and compound lard, and the annual value of this trade is stated to amount to over £400,000. The metal trades have to contend against the powerful competition of St. Louis and Cincinnati, but there are undertakings engaged in the manufacture of saw-milling machinery, cotton-seed hullers and ginning plant and in bridge and other constructive work. Several railway workshops also afford considerable employment in repair work. About five miles from the centre of the city is a branch of a large firm engaged in the building of railway cars, and when business is good over 1,300 men are there employed.

All the unskilled work and the lower paid work in the skilled trades is done by negroes, while the whites occupy the positions of foremen, directing mechanics or skilled men. In the transport trades and also in certain industries, such as the making of bricks and cotton-seed oil, the labour is almost entirely coloured. The negroes are, however, making their way into the skilled trades, and in some woodworking establishments both whites and blacks were to be seen working side by side at skilled occupations. It is not customary to appoint a negro foreman over whites. In general the negroes may be said to occupy in the industrial life of the city a position similar to that occupied by the immigrant Slavs and Southern-European races in cities like Pittsburg and Chicago.

Memphis offers but a limited field for the industrial employment of female labour. White women and girls obtain employment in clerical occupations, in the needle trades, in the manufacture of sweets, bags and biscuits, and in laundries, but the trades in which there is a large outlet for female workers, such as the textile, boot and shoe, and tobacco and cigar trades, are of little importance in Memphis. The negro women are employed for the most part as domestic servants and cooks.

The hours of work in the saw mills and woodworking establishments range from 54 to 60 per week; in the saw mills, pure and simple, 60 hours are the general rule. In the printing trades the standard week consists of 48 hours; in the building trades the union men work either 48 or 44 hours, according to their trade, while non-union men work from 48 to 54 hours, and in the engineering shops 54 hours are most usual. Saturday is a full day as a rule, save in some branches of the building trades, but it is a widespread custom to work ten minutes or more overtime each day at noon, so that work may cease earlier on Saturday afternoon. In the summer months many of the saw mills and woodworking shops cease several hours earlier on Saturdays. Apart from Sundays, the only universally recognized holiday is Christmas Day, but the majority of industrial establishments also close on Independence Day (July 4), while Labour Day (the first Monday in September) and Thanksgiving Day are often observed as holidays. New Year's Day is not a general holiday. Occasional half-holidays occur when circuses come to the town, for the negroes in particular find it difficult to withstand their attraction, and many firms close in the afternoon under such circumstances.

In regard to methods of payment, time rates prevail generally; both the piece and premium bonus systems are rare.

The printing and engineering trades and most of the building trades are strongly organized. The unions in the printing and engineering trades have been able to impose their rates generally; in the printing trade, indeed, it was stated that all the men work under wages agreements. No organizations exist in the saw-milling and transport trades, nor yet in the woodworking trades except in the case of carpenters.

The following remarks relate to certain trades for which wages are quoted below:—

Building Trades.—Union rates and hours of labour are promulgated for all branches of the building trades, but the extent of their acceptance varies. The bulk of the

bricklayers, not a numerous body in a city where most dwelling-houses are made of wood, belong to the union, and obtain the union rate of wages, viz. 2s. 11d. per hour for 44 hours' work per week. The stonemasons and stonecutters, who are also few in number, obtain the same union rates. The union rate for carpenters is 1s. 10½d. per hour for 44 hours per week, but the actual hourly rates paid are frequently lower, and the hours worked are usually longer. Negroes are largely employed in this occupation, and although the union rate is nominally the same for whites and negroes, few negroes receive wages at all approaching those paid to whites. It appears to be the practice to put the negro carpenters on the rough part of the work, while the whites do the finer kind. One important contractor stated that in his opinion no negro on any class of work save bricklaying and plastering (where union rates prevail) receives over 1s. 5½d. per hour. Structural iron workers are generally brought by the contractors from other cities. The painters are loosely organized, and, as in the case of the carpenters, the tendency of the negro to accept lower rates breaks the market. In some trades the negroes work on piece rates, but the better men do not accept work paid by this method.

Foundries and Machine Shops.—Trade union rates are recognised in most shops. Wages are paid fortnightly in the railway shops, but elsewhere weekly payments are the rule.

Timber and Woodworking Trades.—The principal kinds of timber handled at Memphis are oak, poplar, cypress, gum and hickory. The number of highly-skilled men employed in the timber mills is small, as most operations are done by machinery. There is much specialisation in the woodworking factories—for example, individual firms manufacture mainly butcher's skewers, or spokes, or staves, or headings for barrels, or screens, etc.

Cotton-seed Oil Industry.—Negroes are occupied almost exclusively in this industry, which is carried on by semi-skilled and unskilled labour. It is a seasonal occupation of about six months' duration, most mills discharging the bulk of their men towards the end of March. When the mills are in operation, day and night shifts of twelve hours each are worked.

Brickmaking.—This is another local industry more or less exclusively in negro hands, and here also occupation is seasonal, work being far more abundant from April to September than in other months. The kilnmen work seven days per week, but the remaining men do not work on Sundays.

Cotton Warehousing.—The sampling, weighing, compressing, binding and despatching of cotton are done by negro labour, supervised by foremen who belong to the category of clerks rather than of workmen. Great activity prevails in these occupations from September till March, when the trade practically ceases. Even in these months, however, employment is not regular. Hourly rates of wages are paid, but it is customary to take on men for not less than five hours, or half a day's working time.

Transport Trades.—The handling of merchandise, whether at railway depots, in private warehouses or on the banks of the Mississippi, is rarely done by white labour. The drivers and teamsters are also negroes. Dock and wharf labourers are paid at the rate of 1s. 0½d. per hour for most kinds of loading and unloading, but coal unloaders are paid piece rates. Teamsters usually receive weekly wages, but draymen handling cotton are paid by the number of bales carried, while bakery vanmen are paid a percentage on their sales.

Public Services.—The work of street construction is done by contract, but the maintenance and cleansing of the streets are undertaken by the municipality. The men engaged in these occupations are mainly negroes, with in addition a few Italians. No convicts or prisoners are employed in road work in Memphis. At the water works the labourers are also all negroes. The wages of municipal workmen are paid monthly. No pension scheme has been instituted on their behalf. The tramway motormen and conductors are paid the same hourly rates of wages: during the first six months of service they receive 8½d. per hour, and from that period to the completion of their second year 9½d., when the rate for the third and fourth year becomes 10d., for the fifth 10½d. and for the sixth and succeeding years 11d. The majority work 10½ hours per day, including Sunday. All are white men. Their youthfulness is notable. The company is said to pursue the policy of engaging only country-bred men, and of rejecting all applicants who have been already in other occupations in the city. Wages are paid fortnightly.

The following Table shows the predominant weekly wages and hours of labour in certain principal occupations at Memphis in February, 1909. The particulars given

relate to white men, except in the case of the cotton-seed oil industry, cotton warehousing and in the case of general drivers and teamsters and unskilled labourers generally. In those branches of the building trades in which negroes are employed they work under the same conditions of wages and hours as whites, except in the case of carpenters and painters. In the sawmilling and woodworking industries the wages and hours apply to both white and coloured men, except in the more highly-skilled occupations, which are filled solely by whites. Both white and coloured men are employed as sweepers in the municipal service, and they receive the same wages and work the same hours.

Predominant Weekly Wages and Hours of Labour of Adult Males in the Principal Occupations, in February, 1909.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|--|---------------------------|-------------------------------------|
| <i>Building Trades :—</i> | | |
| Bricklayers... .. | 128s. 4d. | 44 |
| Stonemasons | 128s. 4d. | 44 |
| Stonecutters | 128s. 4d. | 44 |
| Carpenters { White | 80s. to 101s. 3d. | 48 to 54 |
| { Coloured | 54s. 2d. to 67s. 6d. | 52 „ 54 |
| Plasterers... .. | 114s. 7d. | 44 |
| Plumbers | 100s. to 125s. | 48 |
| Structural Iron Workers... .. | 100s. to 112s. 6d. | 48 to 54 |
| Painters { White | 80s. to 90s. | 48 |
| { Coloured | 60s. „ 80s. | 48 |
| Hod Carriers and Bricklayers' Labourers | 50s. „ 60s. | 44 to 48 |
| <i>Foundries and Machine Shops :—</i> | | |
| Ironmoulders | 75s. to 81s. 3d. | 54 |
| Machinists | 78s. 9d. „ 87s. 6d. | 54 |
| Blacksmiths | 87s. 6d. | 54 |
| Patternmakers | 87s. 6d. to 95s. 8d. | 54 |
| Labourers | 33s. 9d. „ 37s. 6d. | 54 |
| <i>Railway Repair Shops :—</i> | | |
| Machinists | 87s. 6d. to 95s. | 59 |
| Blacksmiths | 91s. 8d. „ 95s. | 59 |
| Labourers... .. | 31s. 3d. „ 34s. 5d. | 59 |
| <i>Saw Mills :—</i> | | |
| Sawyers and Filers | 125s. to 150s. | 60 |
| Inspectors | 75s. „ 95s. 10d. | 60 |
| Blocksetters | 56s. 3d. „ 62s. 6d. | 60 |
| Assistant Blocksetters | 43s. 9d. „ 50s. | 60 |
| Edger Men... .. | 50s. „ 62s. 6d. | 60 |
| Stackers, Jackers and Labourers | 31s. 3d. „ 37s. 6d. | 60 |
| <i>Other Woodworking Trades :—</i> | | |
| Carpenters, Joiners and Cabinetmakers | 67s. 6d. to 81s. 3d. | 54 to 60 |
| Sawyers | 50s. „ 56s. 3d. | 54 „ 60 |
| Filers (Rotary) | 75s. „ 100s. | 54 „ 60 |
| Labourers | 31s. 3d. „ 37s. 6d. | 54 „ 60 |
| <i>Printing and Bookbinding Trades :—</i> | | |
| Newspaper— | | |
| Hand Compositors { Day work | 100s. | 48 |
| { Night work | 105s. | 48 |
| Machine Compositors—Night work | 125s. to 150s. | 48 |
| Pressmen { Day work | 68s. 9d. | 48 |
| { Night work | 75s. to 91s. 8d. | 48 |
| Book and Job— | | |
| Hand Compositors | 75s. to 83s. 4d. | 48 |
| Pressmen { Cylinder Presses | 75s. „ 83s. 4d. | 48 |
| { Platen Presses | 62s. 6d. | 48 |
| Bookbinding— | | |
| Forwarders | 75s. to 79s. 2d. | 48 |
| Finishers | 83s. 4d. | 48 |
| <i>Cotton-seed Oil Manufacture :—</i> | | |
| Press-room Men | 35s. 10d. to 40s. | 72 |
| Cake-room Men | 33s. 9d. „ 37s. 6d. | 72 |
| Gin-room Men | 31s. 3d. „ 33s. 4d. | 72 |
| <i>Brickmaking :—</i> | | |
| Labourers | 37s. 6d. | 60 |

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|---|---------------------------|-------------------------------------|
| <i>Baking :—</i> | | |
| First Bakers | 83s. 4d. to 104s. 2d. | 54 to 60 |
| Second Bakers and Bench Hands | 62s. 6d. ,, 75s. | 54 ,, 60 |
| <i>Cotton Warehousing :—</i> | | |
| Tiers | 50s. to 56s. 3d. | 60 |
| Sewers | 50s. | 60 |
| Truckers | 37s. 6d. to 41s. 8d. | 60 |
| Samplers | 50s. | 60 |
| Cotton Haulers | 41s. 8d. | 60 |
| <i>Transport Trades :—</i> | | |
| Dock and Wharf Labourers | 1s. 0½d. per hour. | — |
| General Drivers, Teamsters—one horse | 37s. 6d. to 41s. 8d. | 60 |
| <i>Public Services :—</i> | | |
| Street Repairing and Cleaning (Municipal)— | | |
| Paviors | 62s. 6d. to 87s. 6d. | 48 |
| Paviors' Labourers | 37s. 6d. ,, 50s. | 48 |
| Flushers | 50s. | 48 |
| Road Sweepers | 37s. 6d. | 48 |
| Water Works (Municipal)— | | |
| Labourers | 37s. 6d. | 48 |
| Gas Works (Company)— | | |
| Gas Stokers | 78s. 9d. | 60 |
| Labourers | 37s. 6d. | 60 |
| Electric Light and Power Works (Company)— | | |
| Electricians | 96s. 2d. | 56 |
| Linemen | 56s. 3d. | 60 |
| Engineers | 97s. 4d. to 120s. 2d. | 56 to 70 |
| Firemen | 43s. 9d. ,, 58s. 4d. | 56 |
| Labourers | 37s. 6d. | 60 |
| Electric Tramways— <i>see text.</i> | | |

Taking wages at New York as the base, = 100, in each case, the wages index numbers for Memphis are—building trades, skilled men 105, hod carriers and bricklayers' labourers (negroes) 80; foundries and machine shops, skilled men 96, unskilled labourers (negroes) 85; printing, hand compositors (job work) 90.

HOUSING AND RENTS.

The industrial establishments are situated chiefly in the northern and southern portions of the city, and the working classes, to a large extent, live in these localities. North Memphis, with its woodworking undertakings, is mainly working-class in character, and South Memphis (with its prolongation New South Memphis, which is outside the city limits) contains an almost exclusively working-class population. Every district, however, has its quota of workpeople, and negro dwellings in particular are built upon every available space. The hollows due to the configuration of the soil and the backways almost everywhere have been turned to account by landowners who have erected cottages (known as shanties) of two and three rooms for the accommodation of negroes. The tramway system is very complete, and the fare of 2½d. applies to all distances within the city limits, while by means of transfer tickets the passenger may change from one car to another without additional payment. As American people do not walk to and from their work unless this be close at hand, the uniform fare tends to increase the distance at which people may live from their work, while the system of transfer tickets gives them a wide choice of localities.

The single-family dwelling-house greatly preponderates in Memphis. In 1900 the average number of families per dwelling-house was 1·2, while the percentage of families resident in dwelling-houses occupied by one family was 69·9, in dwelling-houses occupied by two families 14·3 and in dwelling-houses occupied by three or more families 15·8. The bulk of the whites appear to live in cottages of three, four and five rooms, and the great majority of the negroes in cottages of two and three rooms.

Dealing first with the housing conditions of the white people, it may be remarked here that the whites avoid proximity to the negroes to the extent that they will not as a rule occupy one of two semi-detached cottages in the same block or even live in the same row of houses in a street. It is generally recognised that a dwelling vacated by a negro tenant will not be rented by a white man.

The three-roomed cottages occupied by the whites are uniform in character, being single-storied frame dwellings with three rooms, one lying behind the other. There is no hall passage, the street door opening directly into the front room. In the majority of cases the cottage of four rooms is built upon the same plan, the four rooms running back in a line. The fourth or back room (kitchen) is often narrower than the other rooms owing to the presence of a porch, or because a portion of the space is used for a small pantry. In another fairly common type of four-roomed dwelling, three rooms succeed one another, while the fourth is parallel to the middle room, additional width being obtained by the projection of the building at one side; or, again, there may be two rooms behind the hall, and two rooms on the other side of the house. Many cottages have five rooms, arranged one behind the other, but these are the older dwellings, and dwellings of this size more generally follow what is called by local estate agents the L-shape: that is, three or more rooms succeed one another, while the hall and one or more rooms lie on the base of the L.

The dwellings of the workpeople are either detached or built in pairs; all dwellings of over four rooms may be said to be detached, save the deep houses of five successive rooms. The houses built in pairs are locally known as "tenement" houses. Rather high-pitched roofs are general, as the space below serves to temper the great heat. With the same object the houses are furnished with verandahs. The building plots are large, generally 25 feet by 100 feet, and there are both forecourts and open spaces behind the houses. The closet, which is as a rule on the water-flush system, is in the yard, although in the more recently built houses it is placed on the verandah or porch at the rear of the house or (where there is a bath) in the bathroom. Water-taps are placed in the kitchen, unless the houses are semi-detached, when standpipes are frequently found in the walls separating the adjacent yards. Within the city limits the majority of white tenants occupying dwellings of three and four rooms have either the separate use of water or joint use with another household; in dwellings of five and six rooms a separate water supply is the rule. The negro tenants are not so fortunate, for they have often to share a water supply with a number of others, and they have not always separate closets. Wooden sheds for coal and firewood are almost always found in the yards. Gas is used by the majority of white families, but in the newer houses containing over five rooms electric fittings are usually found. Gas is used for cooking more by the middle than by the working classes. Stoves are far less common than grates in the homes of the latter.

White tenants will not live in alleys or courts, or down in hollows, nor will they submit to the promiscuous conditions which are accepted by the negroes. They insist upon proper separating walls or barriers between the plots, and upon separate yards and gardens and forecourts, and they will not tolerate the joint use with other families of the closets. The interiors of their houses are better finished as regards woodwork and general equipment than those of the negroes; there is more variety in their external form, and they are as a rule better kept.

The following notes upon dwellings of white families visited in the course of the investigation will give some idea of the accommodation afforded.

West Georgia Street.—Two frame semi-detached houses of four rooms occupied by white railway men, and let at 13s. 6d. per week. The houses had forecourts and yards behind, the closet being in the latter. The water-tap was in the boundary between the yards. The front room was 14 feet 9 inches square, the second room 17 feet by 14 feet 9 inches and the third 12 feet by 14 feet 9 inches, while the kitchen was 10 feet 3 inches by 9 feet 6 inches, the height being 10 feet.

West Georgia Street.—A detached frame cottage of four rooms, let at 14s. 5d. per week. The measurements of three rooms were 14 feet by 15 feet 3 inches by 10 feet, and of the kitchen 9 feet 6 inches by 11 feet 3 inches by 10 feet.

Indiana Avenue.—Two semi-detached houses with three rooms, let at 9s. 7d. per week. The measurements were: front room 16 feet 6 inches by 16 feet 3 inches by 11 feet; middle room 17 feet 9 inches by 16 feet 3 inches by 11 feet; kitchen 14 feet 3 inches by 16 feet 3 inches by 11 feet. The yards were small, and there was no private water supply.

East Iowa Avenue.—Two houses with four rooms and bathroom, let at 15s. 5d. per week, and occupied by a fireman. The kitchen measured 15 feet 3 inches by 14 feet by 12 feet; two other rooms measured 14 feet by 15 feet 3 inches by 12 feet, and the fourth

room measured 15 feet by 15 feet 9 inches by 12 feet. There was a small yard, but no garden space behind; the water-closet was within the house, and there was a good pantry and a hall 6 feet 3 inches broad.

South Third Street.—Two houses of four rooms, let at 14s. 5d. per week. The kitchen measured 10 feet 3 inches by 7 feet 6 inches by 9 feet 9 inches, the front and second rooms 15 feet 9 inches by 15 feet 3 inches by 12 feet and the third room 15 feet by 15 feet 3 inches by 12 feet.

Thomas Street.—A house with four rooms and hall, let at 15s. 5d. per week. The measurements of the rooms were: 14 feet by 15 feet; 13 feet by 15 feet; 9 feet by 12 feet; 10 feet by 9 feet. Each room was 10 feet in height. There was a yard and garden, but no city water, one well serving two houses.

Arkansas Avenue.—Six houses of three rooms, let at 10s. 7d. per week. The measurements of the rooms were: kitchen 12 feet 6 inches by 13 feet 4 inches by 10 feet high; middle room 15 feet by 13 feet 4 inches by 10 feet; front room 13 feet 4 inches square and 10 feet high. There were a water-closet, a tap in the house and a coal house in the yard.

Trigg Avenue.—Four houses with five rooms and bathroom, let at from 17s. 4d. to 19s. 3d. per week. The measurements of the rooms were: hall or lobby, 8 feet 6 inches by 10 feet; two living rooms and one bedroom, each 13 feet 6 inches square; a second bedroom 10 feet by 12 feet; kitchen 10 feet by 12 feet.

North Second Street.—Four detached houses of four rooms, let at 14s. 5d. per week. There were forecourts and gardens (64 feet by 30 feet), but the latter were left in an uncultivated state. The front room measured 15 feet 3 inches by 15 feet, the two middle rooms 14 feet 9 inches by 15 feet 3 inches and 14 feet 9 inches by 15 feet 9 inches and the kitchen 11 feet 3 inches by 15 feet 3 inches.

Marple Street.—Twenty houses of four rooms, let at 9s. 7d. per week. All the rooms had the same breadth of 13 feet 3 inches: two rooms had a length of 13 feet, the third one of 12 feet and the kitchen one of 9 feet 6 inches. The houses were supplied with well water, and the privies and coalhouses were in the yards.

Chelsea Avenue.—Three houses with five rooms and pantry, let at 19s. 3d. per week. The rooms measured: 15 feet 9 inches by 13 feet 3 inches; 13 feet 3 inches by 9 feet 3 inches; 13 feet by 12 feet; 13 feet by 12 feet 6 inches; 10 feet 8 inches by 12 feet 4 inches. The height was 10 feet in each case. There were both back and front porches.

Decatur Avenue.—Two houses with five rooms and bathroom, let at 24s. per week. The dimensions of the rooms were: 12 feet by 8 feet; 14 feet square; 12 feet 6 inches by 14 feet; 12 feet by 13 feet; kitchen 9 feet by 12 feet; bathroom 5 feet by 8 feet. Height of rooms 10 feet.

The great majority of the negro households occupy cottages of two and three rooms; when larger dwellings are taken, a portion is usually sub-let. These cottages are also frame structures of one story with the rooms succeeding one another. Like those of the whites they are either single or double, but when single the space separating the houses is less, and they tend to lie in groups. Sometimes one finds rows of from eight to sixteen or more cottages similar in form and detached, yet with nothing to indicate the boundaries of the building plots. Building speculators find negro dwellings a very profitable form of investment. As a rule they build groups of six, sixteen or twenty such dwellings, using the cheapest material, placing no walls or other boundary marks between the houses and providing a common water supply and a restricted number of closets. The "bottoms" or low grounds, which the undulating and uneven configuration of the land creates in abundance, are often utilized for groups of dwellings for the accommodation of negroes. It is true that large numbers of the negroes are well housed, but the housing conditions in negro quarters are as a rule very inferior, and the prevailing impression produced by an inspection of them is a dismal one. The excessive crowding of their homes in the alleys, in the "bottoms," and in the rears of front houses, where front and back are convertible terms, and where some of the necessary conveniences, primitive though they are, have to be shared in common, can hardly tend to increase the self-respect of the coloured population or conduce to its social betterment.

A feature of negro housing is the existence of many two-storied tenement dwellings built of wood called "arks," where families live in one or two rooms. Access to the upper-stories of these structures is obtained by an external staircase at either end of the building,

along which a gallery runs both on the ground and first floors. Water and conveniences are provided for common use, and the open space about the dwellings is often quite inadequate. The municipal ordinance passed in August, 1908, providing that "no single frame (*i.e.*, wooden) house shall be erected which shall contain accommodation for more than two families," will bring about in time the disappearance of these unsatisfactory dwellings.

Notes are added relating to negro dwellings visited :—

Florida Avenue.—Two negro cottages of three rooms, let at 13s. per week. Two rooms measured 12 feet 6 inches by 13 feet 9 inches by 10 feet, and the kitchen 10 feet 6 inches by 13 feet 9 inches by 10 feet. City water was laid on.

Michigan Avenue.—A row of sixteen detached houses occupied by negroes having two rooms and kitchen and let at 8s. 8d. per week. The front room measured 13 feet 6 inches square; the middle room 12 feet 6 inches by 13 feet 6 inches; the kitchen 10 feet 9 inches by 9 feet 3 inches. Each room was 10 feet high. There were small yards but no gardens, and there was a common water supply.

Texas Avenue.—Ten houses of three rooms, let at 7s. 8d. per week. The front room measured 13 feet by 13 feet by 9 feet, the second room 14 feet by 13 feet by 9 feet and the kitchen 9 feet 9 inches by 13 feet by 9 feet. The closets and water supply were in the yard.

Lenox Street.—Two negro cottages containing two rooms and let at 5s. 9d. per week. Both rooms were 13 feet 3 inches square and 9 feet 6 inches high. There were two closets for the use of six cottages.

South Second Street.—Four negro "arks," each containing sixteen rooms, let at 3s. 4d. a week. The four buildings were two-storied frame structures with stairs at each end leading to an upper gallery, upon which the rooms of the first floor opened. The rooms all measured 14 feet 3 inches by 14 feet 3 inches by 10 feet. There was one water-tap for every eight rooms, and a closet for about every four households. In the same enclosure were two more "arks," each containing eight rooms let at the same rent. When two rooms were taken by one family, the rent charged was 5s. 9d. or 6s. 3d. per week.

McLemore Avenue.—Ten houses (in pairs) let at 7s. 8d. per week, and one house (detached) let at 8s. 8d. per week, all with three rooms. There was one closet for every two houses; each had a separate coal shed, but there was a common yard. There was no city water, one pump serving all the tenants. The two front rooms measured 13 feet by 13 feet by 9 feet, and 14 feet by 13 feet by 9 feet respectively.

Texas Avenue.—A house of two rooms let at 6s. 9d. per week. The front room measured 14 feet by 13 feet 6 inches by 10 feet, and the back room 13 feet 3 inches by 13 feet 6 inches by 10 feet. Next to this house were two blocks of two houses with two rooms each, let at 5s. 9d. per week. In the immediate neighbourhood were ten very old negro shanties of two rooms each, of which the rent was 4s. 10d. per week. In several cases there was only one closet for several houses, and the water supply was obtained from pumps.

Polk Avenue.—Two negro houses of four rooms each, very old and let at 9s. 7d. per week. The first two rooms measured 12 feet 6 inches by 13 feet 6 inches, the third room 11 feet 6 inches by 13 feet 6 inches and the fourth room 10 feet 6 inches by 13 feet 6 inches. The height of the rooms was 11 feet 3 inches. There was an open yard, with water-tap, behind.

Georgia Street.—Eight houses built in pairs containing three rooms each, and let at 8s. 8d. per week. The three rooms were all 14 feet wide and the length of the houses was 38 feet. Each had a water-closet in the yard. This yard was common to all, and in it were two water-taps for the eight houses. In the same row was a single detached house of the same size let at 9s. 7d. per week. The dimensions of the kitchen were 10 feet by 13 feet 6 inches by 10 feet and of the two front rooms 14 feet by 13 feet 6 inches by 10 feet.

Marble Street.—Ten detached houses of two rooms, let at 4s. 10d. per week. The rooms measured 14 feet by 13 feet 3 inches by 8 feet 9 inches. They were old houses; the privies were in the yards, and there was no water supply save a pump in the rear. Hard by there were ten newer houses of the same size, let at 5s. 9d. per week, which also had to depend on pump water.

The predominant weekly rents in February, 1909, of working-class dwellings of one,

two and three rooms occupied by coloured tenants, and of three, four and five rooms occupied by white tenants, are shown in the following Table :—

Predominant Rents of Working-class Dwellings.

| Number of Rooms per Dwelling. | | Predominant Weekly Rents. |
|-------------------------------|------------------------|---------------------------|
| One room—Coloured tenants... | ... | 2s. 11d. |
| Two rooms—Coloured tenants | ... | 4s. 10d to 5s. 9d. |
| Three rooms | { Coloured tenants ... | 5s. 9d. „ 9s. 7d. |
| | { White tenants ... | 7s. 8d. „ 11s. 6d. |
| Four rooms—White tenants | ... | 12s. „ 14s. 5d. |
| Five rooms—White tenants | ... | 14s. 5d. „ 24s. |

The level of rents at New York being represented by 100, the rents index number for Memphis is 93.

The above rentals include the cost of water, which is paid by the landlord. Connexion with the mains is insisted upon by the city authority whenever they are laid down in the street. The minimum annual cost of a water supply is 25s., with an additional 20s. 10d. for a water-closet or for a bath. A discount of 25 per cent. upon these charges is given when payment is made within a specified time after delivery of bill. There is no local tax payable by tenants, unless they possess personal property exceeding in value £208. Rents are paid monthly and generally in advance by white tenants, while negro tenants pay weekly in advance. The collection of rents is almost exclusively in the hands of house agents, who charge 10 per cent. for collecting from coloured tenants and 5 per cent. in the case of white tenants. It is unusual to insist upon the signing of leases for this class of property.

The last Federal Census (1900) showed that 15·3 per cent. of the houses in Memphis were fully owned by their occupiers, and that a further 3·5 per cent. were owned but were encumbered. The working classes—and not less the more regularly employed negroes—evinced a marked desire to become owners of their houses. It is customary, however, to buy houses already built rather than to construct new ones. Several building loan societies are established in the town; they generally charge 6 per cent. interest, and require the borrower to take shares. In most cases the prospective owner is able to enter into possession upon the payment of a sum equal to one-tenth of the combined value of the house and site, and he discharges the balance by monthly instalments extending over a number of years. None of the industrial firms have built houses for their employees, nor has the city interested itself in housing schemes for the working classes. The sanitary inspection is adequate, however, nine officials being employed by the city in the inspection of houses and the superintendence of sanitary conditions generally.

RETAIL PRICES.

The working classes of Memphis have not organised any co-operative societies, and the bulk of their trade falls to small retail dealers. There is in the centre of the city, near to a large district mainly working-class in character, a retail market, containing about half-a-dozen stalls for the sale of meat and an equal number for the sale of vegetables and fruit, but it is too small to be regarded as a trading centre. One “multiple” firm alone is of real importance as far as working-class custom is concerned; it does an exclusively cash business in all the usual grocery commodities, in bread, vegetables, potatoes and certain domestic utensils, but not in fresh meat, and in April, 1909 it had twenty-six branches in the city. Several other provision firms have as many as four establishments and also sell meat in some of the branches, while two large trading companies, with branches in many cities, have each a shop in the town, but sell mainly tea, coffee and sugar.

The sale of fresh meat, poultry, vegetables, potatoes and general groceries is usually carried on in the same establishments. All shops in which meat is sold are called “meat markets,” and while the meat is kept in the inner part of the shop premises, the live poultry lie in large crates in the footways. Shops devoted to the sale of meat alone are rare, and there are few pork butchers’ shops. Germans are numerous in the meat trade, and Italian names are noticeable in the list of grocery businesses. Italians and Sicilians almost monopolise the growing of vegetables in the neighbourhood, and their carts make daily rounds throughout the city.

The dietary of the negro, as contrasted with that of the white working man, lacks variety. The coloured families live for the most part upon beef, pork, dry salt bacon, rice,

beans, turnips, onions, potatoes, yams, maize bread, biscuits and coffee, and there is little difference in their fare whether for breakfast, dinner or supper. When they speak of eating "meat," they mean pork; other meats are called by their usual names. Pork is their favourite meat; mutton and veal are rarely eaten by them, nor indeed by the whites. Poultry has a great attraction for the negro, who will often spend more than his means will allow in the purchase of a chicken. Both whites and negroes eat meat twice, and often three times, each day. Canned or bottled fruits and vegetables are largely consumed. The Mississippi and its tributaries supply a good deal of fish. The whites eat the buffalo fish, the German carp and the catfish, while the negroes eat considerable quantities of the crappie and the sunperch.

Groceries and other Commodities.

Tea is not largely consumed save by Irish households and in the summer, when it is drunk cold by all classes. The ordinary beverage is *coffee*. White granulated *sugar* is rarely bought by single pounds. Some shops in February, 1909, sold 20 lb. of this sugar for 4s. 2d. or at the rate of 2½d. per lb., but the greater number sold 18 lb. for that sum, which is at the rate of 2¾d. per lb.; if bought by the lb. the price is 2¾d. or 3d. *Potatoes* were unusually dear early in 1909 and imports were stated to have been made from Germany and Ireland. Rice is usually sold in quantities of 3 lb. for 1s. 0½d., single pounds costing 4½d. or 5d.

The working classes do not buy wheaten bakery *bread* every day as a rule, and the negroes buy little of this bread. The loaf is sold at 2½d., and, though currently regarded as weighing 1 lb., in reality varies in weight with the price of flour. In February, 1909, its weight was usually about 14 oz. The "biscuits" so largely eaten are made of soft moist white flour, raised by baking powder, and are somewhat similar to the round tea-cakes known in England. Maize bread is much eaten both at middle and working-class tables. Biscuits, maize bread and other forms of bakers' cereals are always made at home.

The *coal* in general use is a bituminous coal from Kentucky and Alabama. Coal is also mined in Tennessee, but the transport conditions from the former centres to Memphis are superior. This coal is sold by the ten barrels, or 1,800 lb. The negroes buy coal to a large extent from hawkers who sell it by the basket, or by the bushel of about 80 lb. Coke is used to a very limited extent for domestic purposes, while wood is rarely used for fuel. Gas is often employed for cooking in the summer months.

The appended Table shows the predominant prices of certain commodities in February, 1909. The prices relate to the qualities most usually bought by working-class households:—

Predominant Prices paid by the Working Classes in February, 1909.

| Commodity. | Predominant Price. |
|----------------------------------|--------------------|
| Tea per lb. | 2s. to 2s. 6d. |
| Coffee " | 10d. ,, 1s. 0½d. |
| Sugar:— | |
| White Granulated... .. " | 2¾d. |
| Brown " | 2½d. |
| Bacon, Breakfast—Boneless .. " | 9d. to 10d. |
| Eggs per 1s. | 10 ,, 12 |
| Cheese, American per lb. | 10d. |
| Butter " | 1s. 3d. |
| Potatoes, Irish per 7 lb. | 7d. to 8½d. |
| Flour, Wheaten—Household .. " | 10¾d. ,, 1s. 0¾d. |
| Bread, White... .. per 4 lb. | 11½d. |
| Milk per quart. | 6d. |
| Coal, Bituminous per cwt. | 1s. 0½d.* |
| Kerosene per gallon. | 5½d., 6d. and 9d. |

* By 1,800 lb. quantities.

Meat.

The greater part of the Memphis meat supply comes from Chicago, Kansas City, St. Joseph (Missouri) and South Omaha, and is conveyed in cold storage freight cars from these packing centres. A certain quantity of beef and mutton is obtained in the neighbourhood, and a large part of the pork consumed is of local origin. Most of the meat sold is subjected to a process of chilling, and a certain percentage is frozen.

There is no municipal abattoir in Memphis, but there are three private slaughter-houses, at one of which some 80 per cent. of the butchers kill their meat. All meat exposed for sale must bear the stamp of the Federal or municipal meat inspectors.

The following Table shows the predominant prices of certain cuts of beef, mutton or lamb, veal and pork in February, 1909 :—

Predominant Prices paid by the Working Classes in February, 1909.

| Description of Cut. | Predominant Price per lb. |
|-------------------------------------|---------------------------|
| Beef :— | |
| Roasts—Round... .. | 6½d. to 7½d. |
| " Rib prime | 7½d. ,, 9d. |
| " Rib second cut | 6½d. ,, 7½d. |
| " Chuck or short ribs | 5d. ,, 6¼d. |
| Steaks—Round | 7½d. |
| " Sirloin | 7½d. to 8¾d. |
| Flank | 3d. to 4d. |
| Plate, Brisket—Fresh | 4d. |
| Mutton or Lamb :— | |
| Leg | 7½d. to 10d. |
| Breast | 5d. ,, 7½d. |
| Loin | 7½d. ,, 10d. |
| Chops | 10d. |
| Shoulder | 5d. to 7½d. |
| Neck | 5d. |
| Veal :— | |
| Cutlets | 10d. |
| Rib chops | 7½d. |
| Loin chops | 7½d. to 10d. |
| Breast | 5d. ,, 6¼d. |
| Neck | 4d. ,, 5d. |
| Pork :— | |
| Fresh—Loin | 7½d. |
| " Spare rib | 6¼d. |
| " Shoulder | 6¼d. |
| " Chops | 7½d. |
| Corned (wet salt or pickled) | 6¼d. |
| Dry salt | 6¼d. |
| Ham | 7½d. |
| Shoulder, salt or smoked | 5½d. to 6¼d. |

Prices at New York being taken as the base, = 100, in each case, the index number for the price of meat at Memphis is 95, for other food it is 103 and for food prices as a whole 101. For rents and food prices combined the index number is 99.

MILWAUKEE.

Milwaukee, the largest city in the State of Wisconsin, is situated 85 miles north from Chicago on the western shore of Lake Michigan, and is one of the three great manufacturing and distributing centres for the vast area of the north-western States east of the Rockies, the other two being Chicago and Minneapolis-St. Paul. Four main trunk railway lines connect Milwaukee with all parts of the country,—goods trains being in one case conveyed in steamers across the lake in order to avoid the detour by way of Chicago,—whilst many lines of cargo steamers ply between the city and other points on the Great Lakes.

For many years the leading industries were tanning and brewing, the lager beer of Milwaukee being famous throughout the United States. During recent years, however, these industries have been surpassed in importance by the manufacture of iron and steel and of machinery, including mining, saw mill and flour mill plant, steam turbine machines, steam shovels, electrical cranes and many other kinds of general machinery. One of the railway companies has a large establishment for the construction and repair of locomotives and cars. The supply of iron ore is brought in steamers from the rich mines upon the northern and southern shores of Lake Superior. Among other considerable industries may be included meat packing, flour milling, and the manufacture of clothing, boots and shoes, tobacco and cigars.

The commercial activities of Milwaukee are also very considerable, the shipping of grain and the unloading of coal and iron ore and of general cargo being conducted on a large scale at the various docks, where the latest labour-saving machinery is in use. Many and extensive jobbing interests concerned in the distribution of the products of both the Western and Eastern States have their headquarters in the city. During 1908 over three-and-a-half million tons of coal were received at the docks (four-fifths of it being transhipped to various points in the States lying to the west and south-west), and 46,000,000 bushels of grain were received and distributed, while the total freight transported by lake into and out of the port of Milwaukee amounted to 6,342,000 tons. Each of these three totals was somewhat less than the corresponding total in 1907, but greater than in any previous year.

The growth of Milwaukee has been very rapid. Prior to 1835 the place was merely an Indian trading post. Hard times in Ireland during 1847 and the political troubles in Germany in 1848 caused a large number of emigrants from those countries to seek a home in Milwaukee, amongst other places, and many of the descendants of these early settlers are to-day numbered amongst the prosperous citizens. The following Table shows the growth of the population as returned by the Federal Censuses of 1870–1910.

| Year. | Population. | Increase. | Percentage Increase. |
|-------------|-------------|-----------|----------------------|
| 1870 | 71,440 | — | — |
| 1880 | 115,587 | 44,147 | 61·8 |
| 1890 | 204,468 | 88,881 | 76·9 |
| 1900 | 285,315 | 80,847 | 39·5 |
| 1910 | 373,857 | 88,542 | 31·0 |

The area of the city is about 22½ square miles.

According to the Census of 1900, 68·5 per cent. of the inhabitants were American-born whites, but three-quarters of these had foreign-born parents. The proportion of the total population formed by foreign-born whites was 31·2 per cent. Of these 60·5 per cent. were born in Germany, and 17·0 per cent. in German Poland. In spite of this large German element in the population the general aspect of the city is typically American, and with the exception of some German churches, a German theatre, one or two newspapers printed in German, and some *cafés* of the Continental type, there are few outward indications of the presence of so large a population of Teutonic origin. The German language is taught in the public elementary schools, but English is the language spoken everywhere outside the home. In the tone and temper of the inhabitants, and in their social life and love of music, however, German influence still persists. Whilst progress is rapid in all directions the atmosphere of business and

social life is less feverish than in most American cities; a love of organisation characteristic of the German bent of mind is also manifest in social, industrial and municipal life. It may be noted that Milwaukee is the strongest centre of Social Democratic organisation in the United States, and was the first large American city to elect a Socialist mayor. A marked feature of the social life of the city is the extent to which the workers frequent the many local "summer gardens," pavilions and parks on Sundays in company with their families.

Of late years the Poles have become a factor of increasing importance in Milwaukee. Two successive waves of Polish immigration, in 1870 and in 1880-2, came from Prussia; a third wave came in 1895-6 from Galicia in Austria; and in 1900 Poles from Russia began to pour into Milwaukee. Though not possessing the same educational advantages as the German Poles, those from Russia are said to exhibit a more vivacious temperament, to acquire more rapidly the speech and habits of their new surroundings and to manifest generally a more progressive spirit than the German section of their race. The Poles form a large colony in the south-west portion of the city, and are very tenacious of their language and religion, striking evidences of which fact are seen in their two Polish newspapers, their many handsome churches and the large schools maintained entirely by their offerings, in which instruction is given in the Polish language, though English is also taught; whilst all the shops of this district use the Polish language for their signs and descriptions of goods. Industry and thrift are peculiarly characteristic of these people, as is generally admitted by employers and evidenced by the strength of their benefit and co-operative building societies. Though not free from a love of spirits, excessive drinking is rarely found to be habitual, being confined mainly to festive occasions, and the whole neighbourhood shows a creditable standard of respectability, sections of it rivalling the best working-class districts of the city as far as the appearance of the dwellings is concerned.

Hungarians, Italians and Greeks have become fairly numerous during recent years, but they form only a relatively small proportion of the total population. A small Jewish district exists in the centre of the city.

The following Table gives the more important vital statistics for the years 1904-8. The estimates of population upon which the rates are based are those of the City Health Department :--

| Year. | Estimated Population. | Birth-rate per 1,000 of Population. | Death-rate per 1,000 of Population. | Infantile Mortality per 1,000 Births. |
|-------------|-----------------------|-------------------------------------|-------------------------------------|---------------------------------------|
| 1904 | 325,000 | 25.2 | 12.9 | 135 |
| 1905 | 335,000 | 23.4 | 12.2 | 139 |
| 1906 | 345,000 | 24.6 | 13.4 | 149 |
| 1907 | 350,000 | 26.8 | 13.2 | 129 |
| 1908 | 360,000 | 26.4 | 12.4 | 132 |

Several factors are conducive to the low death-rate in Milwaukee, including a situation which exposes the city to the healthy breezes from the lake, which is in reality a large inland sea. One effect of this is to moderate very considerably the heat of the summer, while the general custom of building detached houses also leads to a free and abundant circulation of air round almost every dwelling. The disproportionate number of persons in the prime of life, owing to the large influx of immigrants in late years, further assists very materially to keep the death-rate low. The rate of mortality from pulmonary tuberculosis during the five years 1904-8 averaged 1.17 per 1,000 of population.

One of the wards mainly occupied by the poorer class of Poles, and the second largest ward of the city in point of population, is very overcrowded largely owing to the practice of sub-letting by those who are endeavouring to purchase their homes. The report of the Health Department for 1908 showed the density of population in this ward to be 36 persons per acre, the death-rate 15.1, and the birth-rate 49.8 per 1,000 of population (giving a natural increase of 34.7 per 1,000, comparing with 14.0 per 1,000 for the city as a whole), and the infantile mortality 150 per 1,000 births.

The city's water supply is obtained from the lake and is filtered. Up to the present there has been little risk of contamination as there are no cities of any considerable size on the lake near Milwaukee. As the sewage is discharged into the lake, however, and the population of the city is increasing rapidly, the question of sewage disposal is assuming serious importance, and a commission is investigating the whole subject.

The city is bisected from east to west by the River Menomonee, which flows into the Milwaukee River coming from the north, close to its outlet into Lake Michigan. Along the various waterways and canals opening into the Menomonee River are many wharves, those for the unloading of coal being conspicuous by reason of the large iron structures called "rigs," with their mechanical appliances for the rapid unloading of steamers. The Menomonee valley is also the principal factory district, though many large factories are dispersed about the outlying portions of the city. In the centre of the city and in close proximity to the lake front is the business and commercial district, which presents a striking and dignified appearance owing to the large number of lofty and handsome buildings, many of which are constructed of stone, conspicuous amongst them being the Post Office, City Hall, County Court Offices, Public Library, Chamber of Commerce, and some blocks of business offices rising to a height of 15 stories, and faced with white glazed brick and tile.

The city is laid out on the rectangular plan in broad streets, most of which outside the business district are lined with trees. The residences of the wealthier citizens are in the district skirting the lake, and along several fine, broad boulevards, where many handsome churches are also situated.

Municipal enterprise is confined to the making and cleaning of streets (paving being done by private contractors) and the supply of water. The gas and electric light and power services and the tramways belong to private companies. Electric cars maintain communication with all parts of the city and several small suburbs, and a uniform fare of $2\frac{1}{2}d.$ is charged for any distance within the city limits, this fare giving the right to one transfer; no workmen's tickets are issued. A tramway also connects Milwaukee with Chicago and intervening towns, the distance of 85 miles being covered in about three hours. A dining-car service is provided on this route.

Education is compulsory for children between the ages of 7 and 16 years, except in the case of those over 14 years of age to whom permits under the Child Labour Laws have been granted. The system comprises public and denominational schools, the latter being maintained entirely by the religious bodies to which they belong. The public school system includes elementary and high schools, manual training and cooking centres and one trades school. Children unable to keep pace with the ordinary instruction of the schools attend a special "difficulty" school, and in bad weather car fares are paid for those whose homes lie beyond walking distance. Free luncheons are also given to children who are found to be suffering from insufficient nourishment. The trades school, to which all boys between the ages of 16 and 20 years are admitted free, materials only being charged for, provides instruction in patternmaking, machine construction and tool making, carpentry and woodworking, plumbing and gas-fitting, and evening classes are held for students who are unable to attend during the day. In the elementary schools the German language is taught in addition to the ordinary subjects. Evening schools and social centres are also provided by the educational authority; at the social centres public lectures in four languages are given on subjects bearing on American citizenship. A complete system of medical inspection has recently been introduced in all the primary schools under the local educational authorities. The medical director of schools and the teachers co-operate in keeping records of the health and general physical progress of the children, a separate card being used for each child.

Milwaukee is well supplied with public parks, the total area of which is about 812 acres. They are distributed throughout the city, and all are easily accessible to the working classes.

OCCUPATIONS, WAGES AND HOURS OF LABOUR.

The industries which give employment to the largest number of men at Milwaukee are the manufacture of iron and steel and machinery and general metalworking. According to the factory inspector's report for 1907-8, about 30,000 men were employed in these industries in Milwaukee and the suburbs of West Allis and South Milwaukee, which contain several large engineering works. There has been a great development in engineering since the United States Census of 1900. Many firms are engaged in the manufacture of high-class machinery, including turbines, gas, steam and electrical machines, electric cranes, Corliss engines, steam shovels, milling and brewing machinery, &c. The largest works are of modern construction, the one-storied shop with glass roof of saw-tooth pattern being a common feature, whilst the arrangements for ventilating and heating are highly satisfactory.

The industry next in importance is the tanning and preparation of leather, for which Milwaukee is said to be the largest centre in the world, having selling houses in England, France and Germany. This industry is mainly concentrated in a few large firms, and in

1907-8 gave employment to nearly 5,000 males. Whilst practically every kind of leather is tanned except that for upholstering purposes, the principal output is in leather for fine and heavy shoes, including black and coloured leather, patent and enamel leather made from calf skins, cow-hide, horse-hide and goat skin. Several firms are also engaged in tanning saddlery, harness and heavy glove leather. The raw material is obtained principally from the great slaughtering and packing centres of Chicago and Kansas City. The allied industries of saddlery and boot and shoe manufacture are of growing importance, but are relatively small compared with those in other centres in the United States. The tanning industry is carried on in buildings of an older type than many of the engineering establishments, and inferior to them as regards lighting and ventilation. The industry is highly specialised, each worker being confined to one operation, and machinery is largely employed, particularly for removing the flesh and hair from hides and for the splitting, shaving, and buffing of the leather. Both chrome and vegetable tanning are in vogue, and hides are passed from tank to tank in a few days. In the tanning department the only skilled man is the tanner, who acts as superintendent over all the processes, the remainder of the workers being unskilled or semi-skilled. Currying is likewise highly sub-divided, the only skilled men being the splitters, whose work is to detect where the leather is uneven in thickness and to adjust the splitting knife, which works by machinery and reduces the leather to a uniform thickness. The remaining workmen in this department also are semi-skilled and unskilled. The large influx of immigrants has provided manufacturers with an abundant supply of cheap labour, little instruction being necessary to enable these workers to perform the simple operations required.

Next in importance to tanning comes the brewing industry, which is mainly confined to a few large firms, two of the largest together employing 3,000 men. Large amounts of capital have been expended in modernising both the buildings and the plant. In the bottling departments workers are principally engaged in feeding machines which wash, fill and stopper the bottles. The total output of the local breweries amounted in 1908 to 2,630,266 barrels (English), of which more than half was produced by the largest brewery. The output in 1908 was smaller than in any of the three preceding years owing, as stated in the report of the Chamber of Commerce, to the prohibition wave which had swept over the Southern States.

The following Table shows the distribution of the working-class population of Milwaukee by industry and sex according to the United States Census of 1900, all occupied persons of 10 years of age and over being included :—

Number of Persons of 10 years of age and over engaged in Occupations in Milwaukee in 1900.

| Occupations. | Males. | Females. | Total. |
|---|--------|----------|---------|
| Building | 7,474 | 17 | 7,491 |
| Metalworking and Engineering | 10,769 | 183 | 10,952 |
| Hosiery | 123 | 862 | 985 |
| Other and not specified Textile... .. | 280 | 503 | 783 |
| Leather | 2,711 | 221 | 2,932 |
| Boot and Shoe Making | 1,188 | 353 | 1,541 |
| Clothing | 1,589 | 6,010 | 7,599 |
| Woodworking and Furnishing | 2,959 | 89 | 3,048 |
| Paper and Printing | 1,690 | 531 | 2,221 |
| Food, Drink and Tobacco | 4,424 | 982 | 5,406 |
| Other Manufacturing and Mechanical Pursuits | 6,584 | 843 | 7,427 |
| Trade and Transportation | 25,360 | 4,732 | 30,092 |
| Labourers (not otherwise specified) | 10,635 | 170 | 10,805 |
| Professional, Domestic and Personal Service and } Agricultural Pursuits | 9,371 | 10,903 | 20,274 |
| All Occupations | 85,157 | 26,399 | 111,556 |

American-born employees are mainly engaged in mercantile pursuits, in offices and positions of trust connected with the various industries, and in the more highly-skilled occupations, whilst those of foreign origin form the great mass of the manual workers. Those of German birth or of German parentage predominate in skilled occupations and in the breweries, where the wages agreement in operation is printed in German as well as in English. Poles are engaged in occupations requiring a considerable amount of physical strength, a large proportion of the moulders belonging to this nationality, particularly where smaller and less complicated castings are made. This supply of Polish

labour recently enabled local employers to defeat the moulders in a prolonged strike. A large number of Poles also work in machine shops, where the work is highly specialised, and wages vary according to the grade of skill required in each operation. The more recent immigrants, like the Russian Poles and Austrian Slavs, are largely employed in tanneries, where most of the work is unskilled. The Italians, who are not relatively so numerous, are mainly engaged as navvies and labourers, whilst in dock labour the less progressive of the Germans and Irish, as well as the more recent immigrants, are largely represented.

The labour laws of the State of Wisconsin contain important provisions relating to the sanitary conditions of factories and workshops, and the protection of employees where machinery is in use, and where building operations are carried on. In factories and workshops in which any process causes dust or fumes to arise, or the air to become exhausted or impure, efficient fans or other mechanical devices have to be installed. With regard to sweating establishments, the law provides that "no room or apartment in any tenement or dwelling house, or in a building situated in the rear of any tenement or dwelling house, shall be used for the manufacturing, altering, repairing or finishing therein, for wages or for sale," of clothing and other articles specified unless a licence is secured for that purpose. Application for a licence must be made to the Commissioner for Labour, and it is only granted after the factory inspector has inspected and reported satisfactorily on the sanitary state of the premises and the conditions relating to the health of the employees, and the licence may be revoked should the provisions of the law be violated.

In respect of hours of labour the law states that in all engagements to labour in any manufacturing or mechanical business, where there is no express contract to the contrary, a day's work shall consist of eight hours, and all engagements or contracts for labour in such cases shall be so construed; but this provision does not apply to any contract for labour by the week, month or year, and in practice the eight-hour working day is not observed very widely. In the case of women and of young persons under the age of 18 years employed in factories, workshops or other places used for mechanical or manufacturing purposes, the hours of labour must not exceed eight in any one day; no child under the age of 16 years may be employed at any "gainful occupation" longer than 55 hours in any one week, nor more than 10 hours in any one day, nor more than six days in one week; and no child under the age of 14 years may be employed in a factory, workshop, bowling alley or in or about a mine; neither may a child under 14 years of age work at any other gainful occupation at any time except during the school vacation. All employers are required to keep a register of child-workers under 16 years of age in their employ, such register to be subject at all times to examination by the factory inspector. The administration of the labour laws falls on the State Bureau of Labour.

During the 21 months ended July 1st, 1908, the number of prosecutions for violations of the labour laws in Wisconsin was 63, nearly all relating to the employment of child labour. It is stated that it was seldom necessary to take action against employers for failing to comply with orders issued concerning the safety of appliances or buildings, sanitation, &c. In Milwaukee, 3,696 orders were issued, 2,270 relating to machinery and polishing wheels; 675 to ventilation and sanitation; 501 to buildings, &c. (including fire protection); 46 to the employment of children, and 204 to other matters. As to child labour permits, a report of the Wisconsin Bureau of Labour states that since the law of 1907, which reduced the hours of children under 16 years from 60 to 55 per week, a number of establishments which formerly employed children have discontinued the practice, and that an examination of 320 establishments in which children were employed prior to 1907 showed a reduction of 32 per cent. in this class of labour, whilst the reduction in the case of adult workers for the same period was only 8 per cent.

With regard to the liability of employers for industrial accidents the State Law provides that an employee cannot recover damages if he has been even partially responsible for the accident unless he is an employee of a railway company, and with the same exception the law does not make the employer responsible when the accident was caused by the negligence of a fellow servant, or when no one can be proved responsible. A report issued by the Wisconsin Bureau of Labour for 1907-8 states that, according to returns made by doctors to the Bureau of Vital Statistics, the total number of industrial accidents throughout the State to employees while at work was 7,186 during the year ended October 1st, 1907, and 5,003 in the following year. It is stated, however, that doctors fail to report many cases of accident, a Milwaukee newspaper in one year recording at least 50 fatal cases which were not reported. Citing the incomplete returns made by doctors regarding accidents in railway shops as compared with statistics

obtained by the Wisconsin Railway Commission, the report states that if the same incompleteness applied to all classes of accidents the total number of industrial accidents in 1908 would be increased from 5,003 to about 10,000. Of the total number of accidents reported 2·8 per cent. were fatal in 1906-7, and 2·7 per cent. in 1907-8, whilst those resulting in permanent injury formed 14·4 per cent. of the whole in 1906-7 and 11·5 per cent. in 1907-8. Classification of the accidents of 1907-8 according to severity showed that 13·9 per cent. were slight, 70·8 per cent. severe, 12·6 per cent. serious and 2·7 per cent. fatal.

One of the four Free Labour Registries maintained by the State of Wisconsin is located in Milwaukee, and in the year ended 30th June, 1908, this registry was instrumental in filling 5,271 situations as compared with 6,537 in the previous year. Of the 5,271 situations filled, 4,194 were for males, the great majority being for unskilled men, and 1,077 for females.

Very little is done in the way of "welfare work" by local firms. One of the largest engineering works provides its workmen, for the charge of 10*d.*, with a substantial lunch of four courses with coffee in a large and comfortable room on the premises.

The trade union movement is strong in the building, printing and brewing industries, and the various unions are in a position to regulate wages and hours for practically the whole of these industries. Unions exist also for moulders, machinists and leather workers, but, with the exception of men working in the railway shops, they are not sufficiently strong to make union rates of wages effective, sub-division of labour and the extensive use of machinery having enabled employers to introduce immigrant labour to a considerable extent.

According to the State Report on Factory Inspection for 1907-8, out of a total of 73,739 employees included in returns from Milwaukee, 64 per cent. worked ten hours daily, 19 per cent. nine hours and 11·5 per cent. eight hours.

In the building trades rates of wages are fixed annually by the Contractors' Association of each trade in concert with trade union representatives. Printed lists of contractors who are pledged to observe the agreements made with the unions are published, and the "closed shop" is the rule. The eight-hour day is general, and many carpenters and plasterers and most plumbers work only four hours on Saturdays. Bricklayers work on an average about nine months in the year.

In the foundries and machine shops (other than those belonging to the railway company) no agreements regulating wages and conditions of labour are in existence, nor do uniform rates of wages obtain for any class of labour, the wages paid being determined by the degree of skill required for the particular kind of work done by the various firms. The hourly rates for men covered by the term "machinists" vary from 10*d.* to 1*s.* 8*d.* per hour. Rates of from 1*s.* 3*d.* to 1*s.* 8*d.* are paid to the machinists proper—the more skilled men—comparatively few of whom, however, receive more than 1*s.* 5½*d.* per hour; the men receiving from 10*d.* to 11¼*d.*, and in some cases up to 1*s.* 0½*d.*, are drill press men or "handy men," while those receiving from 1*s.* 0½*d.* to 1*s.* 3*d.* are more or less skilled machine operators. Time rates are the general rule for all classes of men except the moulders, though even among these the piece work system does not predominate, as the output of standard parts of machinery is not on a large scale. Two firms, one employing about 1,500 men and the other over 500, have in operation a premium bonus system, but the earnings of the men are not materially affected thereby, except in the case of the more rapid workers, the bonus being counteracted by lower time rates. One large firm has introduced a bonus system by which employees who have worked for the firm one year but less than three years receive 6 per cent. of their total wages for the year; employees of three years' but less than seven years' continuous service receive 7 per cent.; and employees of seven or more years' standing receive 8 per cent. of their total wages for the year. In 1908 300 men received a bonus of 6 per cent., 107 a bonus of 7 per cent., and 25 a bonus of 8 per cent., the first payments of bonus on this system being made on January 10th, 1908. As this firm pays current rates of wages, the bonus can be considered as a real addition to the wages of the men. The usual weekly hours of labour are from 55 to 60 in foundries and 55 in the machine shops, a half-holiday on Saturday being observed in the largest works.

In the railway shops minimum rates of wages and hours of labour are fixed by agreement, as are also the conditions of apprenticeship and the qualifications of competent mechanics. A machinist is defined in this agreement as one who "has served an apprenticeship or has had four years of varied experience at the machinist trade, and by his skill and experience is qualified and capable of fitting together the metal parts of a locomotive or any machine, and is competent to do shaping, or boring, or turning, or skilled drilling, or finishing and adjusting the metal parts of any machine whatsoever."

A blacksmith to be considered a competent man in his class must be able to take a piece of work, and with the use of drawings and blue prints prosecute the same to a successful completion within a reasonable time. The agreement also contains regulations relating to grievances and to the reduction of working hours during slack periods. Overtime pay is at the rate of time-and-a-half, and must be paid for work done on Sundays and legal holidays, which are New Year's Day, Lincoln's Birthday, Washington's Birthday, Decoration Day, Independence Day (July 4), Labour Day, Thanksgiving Day and Christmas Day.

The wages given in the Table for the printing trades are those of the agreements in operation, as the "closed shop" prevails practically throughout the industry, and the scale is very seldom exceeded, except by machine compositors when on piece work.

The wages given for men working in breweries are those fixed for each class of labour by the agreement concluded by the Milwaukee Brewers' Association and the various unions. Free beer, to the extent of one quart at noon and one quart at 5 p.m. after working hours, is given to each man as stipulated in the agreement. The agreement also regulates the general conditions of labour, the most noteworthy provisions being that overtime, Sunday labour, and work done on legal holidays shall be paid at the rate of time-and-a-half, but when it is necessary to work nine hours, the extra hour is to be paid at the rate of single time; wages are to be paid every two weeks after working hours; men are not to be discharged on account of slack work, but to be laid off in rotation for not longer than one week, nor less than four hours; disputes respecting the terms of the agreement are to be settled by a Board of Arbitration consisting of two representatives of each side, who, if unable to agree, are to elect a fifth member, whose decision is to be binding on both parties; while none but union workmen in possession of a member's card may be employed. The agreement remains in force until March, 1912.*

In the case of dock labour the only men who are regularly employed are those engaged in loading cars for the coal companies which ship coal by rail to the West. These labourers receive $8\frac{3}{4}d.$ per hour and work 60 hours per week during open navigation, from the middle of April to the early part of December; during the winter they work 54 hours per week. Casual labour is performed by freight handlers, whose rate is $1s. 3d.$ per hour, very few men being paid on a tonnage basis, and by coal shovellers, who supplement the work of the clam shell bucket at the coal rigs and move round wherever work is to be had, being paid uniformly $1s. 8d.$ per hour during the open season, and working during winter in ice and lumber camps. The great majority of dock labourers are Poles and other Slavs, Irish-Americans and German-Americans. Wages are paid after every boat is loaded or discharged.

With regard to men employed in the public utility services, wages are not quoted for garbage collectors and teamsters, only men who own their own horses being employed by the municipality, which pays wages to cover the hire of the horse and cart. Tramway motormen and conductors are paid according to a scale which in February, 1909, began at $9\frac{1}{2}d.$ per hour for the first year's service and increased $\frac{1}{2}d.$ per hour each year to a maximum of $1s.$ In September, 1909, a new scale was introduced beginning at $10d.$ and reaching a maximum of $1s. 0\frac{1}{2}d.$ Each man when seeking employment signs an agreement binding him to submit to medical examination and to pay the fee of $4s. 2d.$, also to deposit $\pounds 5 4s. 2d.$ as surety with the company, or to deposit $20s. 10d.$ and furnish a surety bond of $\pounds 20 16s. 8d.$ satisfactory to the company. The agreement also requires each man to provide his own uniform.†

The following Table shows the predominant weekly wages and hours of labour in the principal trades and occupations in February, 1909:—

Predominant Weekly Wages and Hours of Labour of Adult Males in the Principal Occupations in February, 1909.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|--|---------------------------|-------------------------------------|
| <i>Building Trades:—</i> | | |
| Bricklayers | 120s. | 48 |
| Stonemasons | 120s. | 48 |
| Stonecutters | 100s. | 48 |
| Carpenters | 73s. 4d. to 75s. | 44 to 48 |
| Plasterers | 110s. to 125s. | 44 „ 48 |
| Plumbers | 103s. 2d. | 44 |
| Structural Iron Workers | 100s. | 48 |
| Painters | 75s. | 48 |
| Hod Carriers, Bricklayers' and Plasterers' Labourers | 60s. | 48 |

* See Appendix, pp. 436-7.

† See Appendix, pp. 438-9.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|--|---------------------------|-------------------------------------|
| <i>Foundries and Machine Shops :—</i> | | |
| Ironmoulders { Time work... .. . | 66s. 3d. to 69s. 10d. | 55 to 60 |
| { Piece work... .. . | 75s. „ 80s. 3d. | 55 „ 60 |
| Machinists | 68s. 9d. „ 80s. 3d. | 55 |
| Machine Operators | 57s. 4d. „ 68s. 9d. | 55 |
| Drill Press Men and Handy Men (Machinists) .. | 45s. 10d. „ 51s. 7d. | 55 |
| Blacksmiths | 66s. 6d. „ 74s. 6d. | 55 |
| Patternmakers | 68s. 9d. „ 80s. 3d. | 55 |
| Labourers | 39s. „ 43s. 9d. | 55 to 60 |
| <i>Railway Shops :—</i> | | |
| Ironmoulders { Time work... .. . | 68s. 9d. | 53 |
| { Piece work... .. . | 88s. 9d. | 53 |
| Machinists | 85s. 6d. | 53 |
| Blacksmiths | 66s. 5d. to 78s. 9d. | 53 |
| Boilermakers | 90s. | 53 |
| Riveters (Pneumatic) | 64s. 2d. | 53 |
| Cabinetmakers | 60s. to 67s. 6d. | 53 |
| Rough Carpenters | 49s. 6d. | 53 |
| Car Repairers | 45s. | 53 |
| Helpers... .. . | 41s. 8d. to 45s. | 53 |
| Labourers | 40s. | 60 |
| <i>Printing Trades :—</i> | | |
| <i>Newspaper—</i> | | |
| Compositors, Hand and Machine { Day work .. | 83s. 4d. | 48 |
| { Night work .. | 100s. | 48 |
| <i>Book and Job—</i> | | |
| Hand Compositors | 70s. 10d. | 48 |
| Machine Compositors | 100s. | 48 |
| Pressmen { Cylinder Presses | 87s. 6d. | 48 |
| { Platen Presses | 50s. to 66s. 8d. | 48 |
| <i>Tanning :—</i> | | |
| Hidehouse Handlers | 41s. 8d. to 45s. 10d. | 59 to 60 |
| Yard and Drum Handlers | 41s. 8d. „ 45s. 10d. | 59 „ 60 |
| Beamhouse Handlers | 43s. 9d. „ 45s. 10d. | 59 „ 60 |
| Finehairers | 50s. | 59 „ 60 |
| Unhairers | 50s. | 59 „ 60 |
| Fleshers | 50s. | 59 „ 60 |
| Setters | 50s. to 54s. 2d. | 59 „ 60 |
| Machine Splitters { Time work | 75s. „ 83s. 4d. | 59 „ 60 |
| { Piece work | 83s. 4d. „ 95s. 10d. | 59 „ 60 |
| Labourers | 37s. 6d. „ 45s. 10d. | 59 „ 60 |
| <i>Brewing and Malting :—</i> | | |
| Malt Millers | 66s. 8d. | 48 |
| Malthouse Men... .. . | 64s. 7d. | 48 |
| Brewhouse Men | 62s. 6d. to 66s. 8d. | 48 |
| Cellar Men | 62s. 6d. „ 66s. 8d. | 48 |
| Bottlers | 50s. | 48 |
| Coopers | 62s. 6d. to 70s. | 48 |
| Keg and Bottle Beer Deliverers | 66s. 8d. | 54 |
| Teamsters | 58s. 4d. | 54 |
| Yardmen | 56s. 3d. | 48 |
| Stablemen | 56s. 3d. | 63 |
| <i>General Drivers, Teamsters :—</i> | | |
| One horse | 41s. 8d. to 50s. | 60 to 72 |
| Two horses | 50s. „ 54s. 2d. | 60 „ 72 |
| Three horses | 58s. 4d. | 60 „ 72 |
| <i>Dock Labour—See text.</i> | | |
| <i>Public Services :—</i> | | |
| <i>Street Construction, Paving and Cleaning—</i> | | |
| Paviors (Contractors' Men) | 112s. 6d. to 125s. | 54 to 60 |
| Paviors' Labourers (Contractors' Men) | 50s. | 54 „ 60 |
| Road Menders (Municipal) | 43s. 9d. | 48 |
| Road Sweepers | 43s. 9d. | 48 |
| <i>Water Works (Municipal)—</i> | | |
| Labourers | 50s. | 48 |
| <i>Gas Works (Company)—</i> | | |
| Gas Stokers | 72s. 11d. | 70 |
| Labourers | 43s. 9d. | 57 |
| <i>Electric Light and Power Works (Company)—</i> | | |
| Wiremen | 52s. 11d. to 72s. 1d. | 70 |
| Stokers | 57s. 8d. | 70 |
| Labourers | 48s. | 70 |
| <i>Electric Tramways—See text.</i> | | |

Taking wages at New York as the base, =100, in each case, the wages index numbers for Milwaukee are—building trades, skilled men 95, hod carriers and bricklayers' labourers 87; foundries and machine shops, skilled men 83, unskilled labourers 99; printing, hand compositors (job work) 81.

Milwaukee provides considerable opportunities for female labour, which is employed principally in the clothing trades, and also in the tanneries, in the bottling departments of breweries and in boot and shoe and cigar factories. The State Bureau of Labour has issued a report of investigations made by a special officer of the Bureau into the conditions of the women workers in the tanneries of Milwaukee. The report states that this particular industry was selected for detailed study, because in it women and girls have only recently supplanted men in some of the occupations, the earliest date of their employment in considerable number being the year 1903, following upon an unsuccessful strike by the men. Most of those now employed belong to the families of later immigrants, mainly of the Slavonic races. In February, 1908, the number of females employed in one of the largest establishments was between 300 and 400, all of whom were engaged in the finishing processes of ironing, sorting, trimming, seasoning, the finer unhairing and glazing. The employment of female labour has been rendered possible by the recent introduction of machinery and the consequent sub-division of labour. The report gives the following summary of earnings, based on pay-rolls for the last six months of 1903 and the first six months of 1904 and of 1906. Of 36 employed continuously for six months in the store and sorting room, where time work is the rule, 53 per cent. earned under 20s. 10*d.* per week, and 47 per cent. 20s. 10*d.* but under 33s. 4*d.*, nearly all of these, however, earning from 20s. 10*d.* to 25s.; in colouring and Russia finishing, out of 31 females who worked for six months without a break, 36 per cent. earned under 20s. 10*d.*, 61 per cent. 20s. 10*d.* but under 33s. 4*d.* and 3 per cent. 33s. 4*d.* but under 41s. 8*d.*; in the chrome finishing room, where practically all of the work is paid by piece, of 112 workers employed for a period of six months 15 per cent. averaged under 20s. 10*d.*, 66 per cent. 20s. 10*d.* but under 33s. 4*d.* and 19 per cent. 33s. 4*d.* but under 41s. 8*d.*; and in the ironing room, where piecework is the rule, out of 36 workers who were employed continuously for six months, 38 per cent. earned 20s. 10*d.* but under 33s. 4*d.*, 56 per cent. 33s. 4*d.* but under 41s. 8*d.* and 6 per cent. 41s. 8*d.* but under 50s.; of the total workers in the above departments, taken together, 22 per cent. earned less than 20s. 10*d.* weekly, 58 per cent. 20s. 10*d.* but less than 33s. 4*d.*, 18 per cent. 33s. 4*d.* but less than 41s. 8*d.* and 2 per cent. 41s. 8*d.* and over. Of the workers whose earnings averaged between 20s. 10*d.* and 33s. 4*d.*, more than half, viz., 57 per cent., averaged 20s. 10*d.* but under 27s. 1*d.* per week. Employment is fairly steady throughout the year, as the industry is not seasonal, though rush seasons occur, when overtime has to be worked, for which only ordinary rates are paid. The report states that a reduction in piece rates is practised not only when earnings are considered to be too high by employers, but also when the output of the machines does not satisfy the manager, a reduction of rates in this case being found to stimulate the workers to greater exertions. These reductions, however, have to be made with discretion, since female workers, although unorganised, have their own standard of wages, and refuse to accept a wage or piece rate which does not approximate to this standard. Girls not living at home, but boarding with families, were found to pay from 9s. 5*d.* to 14s. 7*d.* per week for board and lodging.

HOUSING AND RENTS.

The working-class population of Milwaukee resides mainly in the north-western and southern portions of the city, but the small Ghetto and Italian districts are situated close to the centre. As the houses are distributed over a large area the conditions as regards light and ventilation are on the whole very satisfactory, and there are few congested areas. The working-class districts generally present a pleasing appearance, the streets being as a rule lined with trees, and most of the houses set back from the pavement. The buildings are almost invariably of wood and as a rule detached and provided with front porches or verandahs. "Back" houses are comparatively rare, though rear flats are fairly common in some districts, particularly near the centre of the city. The pleasing appearance of the houses in all save the poorest districts is largely due to the fact that the custom prevalent amongst working-class people of purchasing their homes has led to greater variety of design in structure and ornamentation than is found in English towns. According to the United States Census of 1900, the average number of families per dwelling-house at Milwaukee was 1·3, whilst the percentage of families living in dwelling-houses occupied by one family was 57·9, by two families 31·4 and by three or more families 10·7. The percentage of

homes owned free of debt by their occupants was 16·5, the percentage owned encumbered 19·4 and the percentage rented 64·1. Since the date of the last Census the habit of purchasing the home has continued to spread, until to-day the rental lists of estate and house agents everywhere are small, and in various parts of the city visited in the course of the enquiry a majority of the tenants owned their dwellings. Amongst the Germans and Poles this habit is more marked than is the case with any other nationality, the determination to possess their homes leading them to practise great self-denial, and to accept considerable risks in the confidence that the rapid and continuous development of the city will greatly increase site values.

As a rule a working-class house is constructed in the form of two flats, one upstairs and one downstairs, one of which is sub-let in order that the rent obtained may assist the owner in paying off the purchase-money. In the South Side district, where a large class of the poorer section of the Poles live, the custom is to erect first a four-roomed frame dwelling. When this has been paid for, it is raised on posts to allow a semi-basement dwelling to be constructed underneath, the lower portion being banked round with clay to afford protection against the snow in winter. This basement or the upstairs flat is then let by the owner, who, as soon as his funds permit, substitutes brick walls for the timber of the basement, but the ambition of a Polish house-owner is not crowned until he is able to have cement walks and iron railings in front of his house. In the above district a very large number of these semi-basements of wood can be seen, and although the outer aspect of the dwellings is not unpleasing, they are in general undeniably insanitary, being damp, as the floor of the basement rests on the ground. Such houses, which when completed contain eight rooms, are frequently occupied by four or five families as well as boarders, and as Polish families are generally large this overcrowding is a serious evil. Anxiety to clear off the debt on the home often results in the mother going out to work, and in the sending of children to work at the earliest opportunity, so that considerable vigilance is necessary on the part of factory inspectors to prevent permits being issued to children under age. High infant mortality occurs in a district of this kind, and in the opinion of those who, by reason of their medical and social work, have an intimate knowledge of the prevailing conditions, the higher interests of the family are far too often sacrificed in a struggle to purchase the home.

Five co-operative loan and building societies have been established amongst the Poles, and nearly all save the poorest are said to be members. In these societies each shareholder who receives an advance pays back at the rate of $\$ \frac{1}{4}$ per \$100 share ($\$1 = 4s. 2d.$) per week plus interest at 5 per cent. per annum, until principal and interest amount to the value of the share, the period occupied being six years. The usual site for a house has a frontage of from 25 to 30 feet and a depth of from 70 to 100 feet, and it costs from £125 to £250 according to situation, while the cost of erecting a four-roomed house varies from £200 to £250, a six-roomed house usually costing from £300 to £325.

The majority of the working-class tenants of Milwaukee occupy flats of four, five or six rooms, those consisting of three and seven rooms being exceptional. The more skilled workers, principally of German nationality, live for the most part in the north-western and the western portions of the city, but good houses are met with in every district. The suburbs of West Allis and South Milwaukee, though exclusively working-class in character, are small, and a very large proportion of those who work in these suburbs travel to and from work by the trams, those employed at West Allis paying $7\frac{1}{2}d.$ for the double journey daily.

There is great variety in the character of the housing in the better working-class districts, but the predominating type of house of this kind is a detached frame building of two stories, standing from the pavement at varying distances, and having a frontage of from 22 to 24 feet, and a depth of from 38 to 48 feet. The front of the site is usually 30 feet, and the depth from 120 to 140 feet. Houses are generally 6 feet apart, except in poorer districts where the space is 4 or 5 feet, and rest on a brick or stone foundation, the ground floor being several feet above the street level. At the back is open ground or garden with wood shed and closet. The upstairs and downstairs flats are self-contained, having separate front and back entrances. In Polish districts outside stairs lead to the first-floor flat, in front of which is a porch, but elsewhere the stairs are inside the house and ascend from a small vestibule. The rooms generally open into each other, an arrangement which facilitates the heating of the flat by means of one large stove. Modern flats have, in addition, a bathroom containing a water-closet, and the more expensive of them have a cellar with cemented floor and a large furnace which supplies heat by means of steam pipes to every room above. These dwellings are known as steam-heated flats, and are only occupied by the most highly-paid workmen. Pantries (frequently dark)

and clothes cupboards or closets are generally provided. The kitchen serves the purpose also of a scullery, the sink being placed in it as well as the cooking stove, which is always the property of the tenant. Gas fixtures are general, as are gas cooking stoves, except in the flats of the poor. Typical rooms measure 12 or 13 feet by 11 or 12 feet. Water-closets are now fairly general in all districts.

Tenement blocks are but little inhabited by working-class families. There are only about 300 of these blocks in the city, and most of them are occupied by business and professional people, being of a modern and expensive type. Out of a total of 2,293 houses intended for occupation by more than one family erected during the years 1898 to 1905, those of the two-family type formed 94.0 per cent., three-family houses 0.5 per cent., and four-family houses 2.3 per cent., the remainder containing five or more flats.

The city building regulations require a permit for every building to be erected, direct light for every room, and a minimum of 9 square feet of glass for each 100 square feet of floor space.

The small Ghetto district contains some dilapidated dwellings in dirty surroundings, but the buildings are not so crowded together as is the case in Chicago. The worst types of dwelling are found in the Ghetto and the Italian quarter, but as yet they are not relatively numerous, and as far as air and light are concerned, they compare favourably with slum districts in large European cities. The latest immigrants, from Eastern and South-Eastern Europe, congregate mainly in lodging and boarding-houses scattered about in various districts, and principally situated over drinking saloons, where the boarders spend their leisure time and much of their money. According to a report issued by the State Bureau of Labour, the conditions existing in these houses are bad in the extreme, the dwellings being dilapidated and insanitary, and the rooms crowded with beds.

The following Table shows the predominant weekly rents paid by working-class families of Milwaukee in February, 1909 :—

Predominant Rents of Working-class Dwellings.

| Number of Rooms per Dwelling. | | | | Predominant Weekly Rents. |
|-------------------------------|-----|-----|-----|---------------------------|
| Four rooms | ... | ... | ... | 6s. 9d. to 11s. 6d. |
| Five rooms | ... | ... | ... | 9s. 7d. ,, 14s. 5d. |
| Six rooms | ... | ... | ... | 12s. 6d. ,, 17s. 4d. |

The level of rents at New York being represented by 100, the rents index number for Milwaukee is 66.

These rents include water charges, city water being supplied to most houses. Rent is paid monthly and in advance. No local taxes are paid directly by working-class occupiers unless they own their houses, in which case they are liable to the real property tax.

RETAIL PRICES.

Milwaukee is well situated as regards its food supplies. The State of Wisconsin is largely agricultural, and the authorities of the Experimental Station have been particularly successful in promoting more scientific methods of farming, particularly dairy farming and stock raising. Abundant supplies of grain, vegetables, milk, cheese and cattle are in consequence produced in the State, and the major part of the flour used is milled locally.

Although several large shops in the city have an extensive grocery and provision trade, the lack of branch shops and competing shops of outside "multiple" firms has thrown the working-class trade into the hands of the family grocer, who as a rule sells on the credit system, for which custom the method of paying wages monthly and semi-monthly in the local works is partly accountable. There is no co-operative society.

As regards dietary the Germans have to a large extent become Americanised, and their staple diet is similar to that of the ordinary American workman, except that they eat more veal, half-rye bread, and sausage. The Poles, however, living as they do in a large colony and having their own shops, tend to maintain their old habits as regards food. The bread eaten by them consists mostly of mixed rye and wheat, and the vegetables principally of potatoes and cabbage, after which come carrots, peas and pickles. Poles are not large consumers of milk, which is used principally with coffee. The fish mostly eaten by them are herrings, selling largely at the rate of three for 2½d., lake fish costing 5d. to 6d. per lb. and perch costing 3½d. and 4d. per lb.

Groceries and other Commodities.

Three kinds of *bread* are baked, viz., wheaten, half-rye (a nominal description, the proportion of wheat to rye being one to three), and full-rye, the principal sale being for wheaten bread, next to which comes half-rye. Comparatively little full-rye bread is sold locally. The predominant weight of the wheaten loaf in September, 1909, was 12 to 13 oz., and the price uniformly $2\frac{1}{2}d.$ Half-rye bread sells in $2\frac{1}{2}d.$ loaves weighing from 16 to 18 oz. Double loaves at $5d.$ are also sold. Bread is not sold by weight, but the weighing of a large number of sample loaves sold by the principal bakers in various parts of the city showed the weights stated above to be predominant.

The *milk* supply is obtained within a radius of twenty miles, and public inspectors visit the farms supplying milk to the city. There is a daily supply both by train and by wholesale dealers' wagons, nearly the whole of this being delivered by 9 a.m. Inspectors meet the trains daily and take samples to be analysed in the city laboratory, three per cent. of fat being required to pass the standard. Several large dairy companies (one of which distributes 8,000 gallons daily) pasteurise all their milk. About 1,000 shops (mostly grocers' shops) are licensed for the sale of milk, which they are only allowed to keep in sealed bottles in a separate ice box.

Tea is comparatively little drunk by the working-class population, coffee being preferred, but so far as tea is bought the Japan sorts are most in favour. The cheaper grade of Santos *coffee* sells largely amongst the poorer classes at $7\frac{1}{2}d.$ per lb., but the prices most generally paid are $10d.$ and $1s. 0\frac{1}{2}d.$ per lb.

White granulated is the only kind of *sugar* used to any extent by the working classes.

Bacon is the belly part only, the back not being sold. By the piece, or "strip," it retails at $8d.$ to $9d.$ per lb., but if sliced at $9d.$ to $11d.$ per lb.

In February the price for *eggs* was, for local fresh 7 or 8 a shilling and for cold storage 10 a shilling, the latter being more generally consumed by the working classes.

Much of the *cheese* sold is made in the State, and from full milk, the law not permitting the separation of the cream. An American Limburg of stronger flavour than the cheese of State origin sells largely amongst Germans and Poles. The *butter* sold is mainly local and made in creameries, for which the State is famous.

Both anthracite and bituminous *coal* is in demand amongst the working classes, the poorer households buying exclusively the bituminous variety, which comes mainly from Illinois and Ohio. Both kinds are sold mostly by the ton of 2,000 lb., the bituminous usually costing, in February, 1909, from $18s. 9d.$ to $20s. 10d.$, and the anthracite $33s. 4d.$ per ton, the half-ton being sold at $1s. 0\frac{1}{2}d.$ more than one-half of the price per ton.

The following Table shows the predominant prices paid by the working classes for groceries and other commodities in February, 1909 :—

Predominant Prices paid by the Working Classes in February, 1909.

| Commodity. | Predominant Price. |
|------------------------------------|------------------------------------|
| Tea per lb. | 1s. $5\frac{1}{2}d.$ to 2s. 1d. |
| Coffee " | 10d. ,, 1s. $0\frac{1}{2}d.$ |
| Sugar :— | |
| White Granulated " | $2\frac{3}{4}d.$ |
| Brown " | $2\frac{1}{2}d., 2\frac{3}{4}d.$ |
| Bacon, Breakfast—Boneless " | $8d.$ to $9d.$ |
| Eggs :— | |
| Fresh per 1s. | 7, 8 |
| Storage " | 10 |
| Cheese, American per lb. | $9d.$ |
| Butter " | 1s. 3d. to 1s. 5d. |
| Potatoes, Irish... .. per 7 lb. | $4\frac{3}{4}d.$,, $7d.$ |
| Flour, Wheaten—Household " | $11\frac{1}{2}d.$ |
| Bread, White per 4 lb. | $11\frac{1}{2}d.$ |
| Milk per quart. | $3\frac{1}{2}d.$ |
| Coal :— | |
| Anthracite per cwt. | 1s. $10\frac{1}{2}d.*$ |
| Bituminous " | 1s. $0\frac{1}{2}d.$ to 1s. $2d.*$ |
| Kerosene per gallon | $6d.$ |

* By the ton of 2,000 lb.

Meat.

Part of the meat supply is local and part comes from Chicago, and there is severe competition both in price and quality between the packers of both places, the customers reaping the benefit whilst this competition continues. Inspection of meat is carried out by officers of the Health Department. Meat is sold almost exclusively in butchers' shops, and is invariably hung in cold chambers. The method of cutting differs little from that general in American cities. The consumption of meat in order of importance is beef, pork, veal and mutton, the last-named being little in demand. The cuts of beef most in favour are chuck ribs, pot roast and round steak, flank and brisket being largely bought for stewing. Corned beef is also much in demand.

The following Table shows the prices most generally paid for certain cuts of meat in February, 1909 :—

Predominant Prices paid by the Working Classes in February, 1909.

| Description of Cut. | Predominant Price per lb. |
|-------------------------------------|---------------------------|
| Beef :— | |
| Roasts—Round | 6d. to 7d. |
| „ Ribs prime | 6d. „ 8d. |
| „ Ribs second cut | 5½d. „ 7d. |
| „ Chuck or short ribs | 5d. „ 6½d. |
| Steaks—Round | 6d. „ 7½d. |
| „ Sirloin | 7d. „ 9d. |
| Shin without bone | 4d. „ 6d. |
| Flank | 3d. „ 3½d. |
| Plate, Brisket { Fresh | 3d. „ 3½d. |
| { Salt or corned | 3d. „ 4d. |
| Mutton or Lamb :— | |
| Leg | 7d. to 8d. |
| Breast | 3½d. „ 4½d. |
| Loin | 6½d. „ 9d. |
| Chops | 8d. „ 9d. |
| Shoulder | 6½d. „ 7d. |
| Neck | 4d. „ 6d. |
| Veal :— | |
| Cutlets | 8d. to 10d. |
| Rib chops | 7½d. „ 9d. |
| Loin chops | 8d. „ 9d. |
| Breast | 5d. „ 6½d. |
| Neck | 5d. |
| Pork :— | |
| Fresh—Loin | 7d. to 7½d. |
| „ Spare rib | 4d. „ 5d. |
| „ Shoulder | 5½d. „ 6½d. |
| „ Chops | 7d. „ 7½d. |
| Corned (wet salt or pickled) | 7d. |
| Dry salt | 7d. |
| Ham | 5½d. to 7½d. |
| Shoulder, salt or smoked | 4½d. „ 6d. |

Prices at New York being taken as the base, = 100, in each case, the index number for the price of meat at Milwaukee is 87, for other food it is 95 and for food prices as a whole 93. For rents and food prices combined the index number is 86.

MINNEAPOLIS—ST. PAUL.

Minneapolis and St. Paul, or "The Twin Cities," as they are called, because of their contiguity, are the two largest cities in the State of Minnesota. They are situated on the River Mississippi, at the head of navigation, a little over 400 miles north-west of Chicago. St. Paul is the older city of the two and is the seat of the State Legislature, but it has been outstripped in growth by its younger rival Minneapolis, the population of which in 1910 was 301,408, whilst that of St. Paul was 214,744.

Both cities are important collecting and distributing centres for the great territory of the north-western States east of the Rockies and are served by the same railway systems, four of which connect them with the Pacific coast and seven with Chicago, whilst "Lake and Rail" routes, which utilise the Great Lakes at several points, provide direct communication with the Canadian and American cities of the East. The River Mississippi also forms another valuable trade route to St. Louis, New Orleans and other Southern cities.

As a wheat market Minneapolis holds the premier position in the country, wheat being the principal cereal product not only of the State of Minnesota but also of the adjoining States of North and South Dakota. The city is not only the market to which the grain is shipped but also the financial centre from which the money is sent out to purchase and move the enormous grain crops of the North-West.

Manufacturing industry is of growing importance in both cities, the enterprises of Minneapolis comprising flour milling, the construction of machinery and the making of windows, doors, sashes and general interior woodwork; whilst those of St. Paul, which are very varied and conducted on a correspondingly smaller scale, include manufactures of machinery, boots and shoes, fur garments, linseed oil, saddlery and harness, slaughtering and meat packing. In both cities there are large railway shops for the repair of locomotives and cars and the construction of new parts, also many large printing works.

Minneapolis claims to be the seat of the largest flour milling industry in the world and is known as the "Flour City." The Falls of St. Anthony on the River Mississippi, which supply 40,000 horse power to the mills, are largely responsible for the great development of this industry. In each year since 1897 the annual output of flour has exceeded thirteen million barrels, produced by a score of mills in the neighbourhood of the Falls. The largest of these mills consumes daily over 60,000 bushels of wheat, which are converted into some 16,000 barrels of flour. For the working of the mills two immense turbine water wheels furnish 3,000 horse power, which is supplemented by an 1,800 horse power steam engine.

The following Table shows the growth of population in the Twin Cities since 1870, the figures being those of the Federal Census:—

| Year. | Minneapolis. | | | St. Paul. | | |
|-------|--------------|-----------|----------------------|-------------|-----------|----------------------|
| | Population. | Increase. | Percentage Increase. | Population. | Increase. | Percentage Increase. |
| 1870 | 13,066 | — | — | 20,030 | — | — |
| 1880 | 46,887 | 33,821 | 258·8 | 41,473 | 21,443 | 107·0 |
| 1890 | 164,738 | 117,851 | 251·4 | 133,156 | 91,683 | 221·1 |
| 1900 | 202,718 | 37,980 | 23·1 | 163,065 | 29,909 | 22·5 |
| 1910 | 301,408 | 98,690 | 48·7 | 214,744 | 51,679 | 31·7 |

In 1905 persons of foreign birth constituted 29·6 per cent. of the total population of Minneapolis and 28·9 per cent. of that of St. Paul. From the following statement it will be seen that, while in Minneapolis persons born in Sweden and Norway are between four

and five times as numerous as persons born in Germany, in St. Paul the number of persons born in Germany is about equal to the number born in Sweden and Norway :—

| Country of Birth. | Percentage of Foreign-born Population formed by Persons born in Countries stated in Column 1 in | |
|----------------------------|--|-----------|
| | Minneapolis. | St. Paul. |
| Sweden | 33·0 | 20·9 |
| Norway | 19·3 | 7·3 |
| Germany... .. | 11·7 | 27·9 |
| Canada | 10·1 | 10·0 |
| Ireland | 4·2 | 9·0 |
| Austria-Hungary | 4·9 | 6·8 |
| Great Britain | 4·6 | 5·4 |
| Russia and Finland | 5·0 | 3·6 |
| All other Countries | 7·2 | 9·1 |

During recent years comparatively few German immigrants have come to the Twin Cities, and the Scandinavian immigration is much less pronounced than when the State was originally settled by people of that race. To-day immigrants from Austria-Hungary, Russian Jews and Poles, and Italians form the bulk of the immigrant class and supply the demand for unskilled labour. A considerable class of so-called "Transients" are found at Minneapolis, men who find temporary work on farms during the harvest, and in mines, lumber camps and railway construction in various parts of the State. These men spend the intervals of unemployment in the lodging-houses and saloons of the city. A considerable number of the more recent immigrants show no disposition to settle in the country, being desirous of returning to their homes after having accumulated sufficient money with which to purchase small farms or to start in business there.

The Germans and Scandinavians are markedly frugal and thrifty, and those of the second generation are found in all ranks of business and professional life.

The population of both cities is spread over a large area, that of Minneapolis being about 53 square miles, and that of St. Paul about 55 square miles.

The following Table summarises the birth-rates and death-rates of Minneapolis and St. Paul for the years 1904–8, the rates being based on figures supplied by the State Board of Health :—

| Year. | Birth-rate per 1,000 of Population. | | Death-rate per 1,000 of Population. | |
|-------------|-------------------------------------|-----------|-------------------------------------|-----------|
| | Minneapolis. | St. Paul. | Minneapolis. | St. Paul. |
| 1904 | 17·2 | 18·4 | 9·1 | 10·7 |
| 1905 | 17·2 | * | 9·4 | 10·0 |
| 1906 | 18·1 | 19·0 | 10·0 | 11·1 |
| 1907 | * | * | 10·1 | 11·4 |
| 1908 | 18·0 | 18·7 | 11·3 | 10·9 |

* Figures not available.

Mainly owing to the large proportion of immigrants the age composition of the population is not normal, about one-third of the total population of each city consisting, according to the State Census of 1905, of males of 21 years of age and over. The death-rate is thus exceptionally low.

The climate of the Twin Cities is dry and healthy. The extremes of heat and cold are considerable, however, the summer shade temperature frequently registering over 90 degrees whilst the winter temperature often falls to 20 degrees below zero.

The death-rate from tuberculous diseases during the five years 1903–7 averaged 1·21 per 1,000 of population in Minneapolis and 1·30 in St. Paul.

The Health Department is co-operating with philanthropic agencies in combating the ravages of consumption. Expectoration in cars and on pavements is punishable by fine, and sanitary officers have police powers in dealing with cases. Sputum is examined free in the city bacteriological laboratory and an out-door camp for consumptives has been established for the summer months. Doctors are required to notify all cases of tuberculosis coming under their professional notice, and premises which have been occupied by consumptives are systematically fumigated.

An important factor in the preservation of infant life is stated to be the strict enforcement of the city ordinance which provides that milk cannot be sold in the city unless coming from cows which have been inspected and have passed the tuberculin test. Pamphlets have also been freely circulated by the Health Department giving instruction to mothers on matters of feeding, clothing, bathing, fresh air and sleep. A copy is sent to the mother of every new-born child in the city.

In 1908 a notable experiment in the medical inspection of school children at Minneapolis was undertaken jointly by the Associated Charities and the City Women's Club. Out of 1,400 children examined only 11·43 per cent. were found to be in perfect health, while 88·57 per cent. needed remedial attention of some kind, 31·43 per cent. suffering from malnutrition and 57·14 per cent. requiring special treatment. The publication of these facts has led to the establishment by the school authorities of a complete system of medical inspection for all the public schools.

Minneapolis is divided by the Mississippi into two unequal portions known as East and West Side respectively, the greater part of the municipal area being on the West Side. The city is laid out in broad streets on the rectangular plan, and the streets in the residential neighbourhoods of all classes are lined with trees. The commercial and business quarter lies on the west bank of the river and contains many imposing blocks of brick and stone buildings ranging from five to twelve stories in height. Large "department stores" of the latest and best American type, handsome banks and hotels all emphasise the prosperity of this rapidly growing city of the Middle West. The most important official buildings are the Post Office and the City Hall and Court House, containing the municipal and county offices. The latter building covers a site 300 feet square, is five stories high, built of large blocks of red granite, and surmounted by a tower 400 feet high. The entire cost of the building was between £600,000 and £700,000. The western portion of the city near the boulevards and parks is occupied by handsome stone residences and blocks of modern flats, whilst the districts in the south, north and east are occupied by the frame houses of the less prosperous citizens. A very effective system of electric lighting has been installed in the main thoroughfares in the centre of the city.

A series of lakes and parks, with connecting boulevards, skirts the southern and south-western portion of Minneapolis, including a fine drive along the western bank of the Mississippi, past the Minnehaha Falls. The aggregate area of the existing parks and open spaces is 2,465 acres, but it is intended that the system of parks shall eventually encircle the city. Lake Amelia Park and Lake Harriet Park are the two largest, the area of each exceeding 400 acres, of which area the greater part is water.

St. Paul is built on hilly ground and the major portion lies on the eastern bank of the Mississippi, but both portions have highly picturesque surroundings. Being an older city than Minneapolis the central or business quarter has narrower streets, but it contains many fine blocks of office buildings, "department stores" and several large hotels. The most striking architectural feature of the city is the State Capitol, which houses the State legislative and administrative bodies. The building occupies a commanding site on the highest point of the city, the base is built of Minnesota granite, and the superstructure is covered with Georgia white marble and surmounted by a dome, while marble pillars and mural paintings adorn the interior. The entire cost of the building was about £1,000,000.

The total area of the parks and open spaces of St. Paul is 1,478 acres, the two largest parks being Phalen and Como Parks, the area of each exceeding 400 acres. In both cities there are many playgrounds for children, and in St. Paul a small island in the river is used for the provision of public baths for children.

The chief public utility services in municipal hands in the two cities, in addition to drainage, are street cleaning and maintenance and the water supply, whilst the services for the supply of gas and of electric light, power and traction are private enterprises. The water supply of Minneapolis is obtained from the Mississippi and is unfiltered, in consequence of which serious outbreaks of typhoid have occurred from time to time, so that a large number of the citizens prefer to buy drinking water from local firms, which supply pure spring water in bottles. Notices in the public Press give warning whenever the river water is found by the health authorities to be contaminated. At present a commission is investigating the whole question of water supply and considering the advisability of securing new sources. At St. Paul the water supply is obtained from one of the many lakes in the vicinity, and is filtered before distribution.

A noteworthy feature of the social life of both cities is the restriction of public-houses to certain areas. In the case of Minneapolis this restricted area practically coincides with the central business district. As a result, the low-class public-houses are out of sight of the large majority of the children of the workers, and cases of drunkenness are mainly

noticeable amongst the "Transients" who lodge temporarily in down-town tenements. In the case of St. Paul these restricted areas are distributed irregularly over the city and result not from any system of local option but from the pressure of public opinion in the different wards upon the members of the City Council, which has power to close the public-houses in any given area without compensation. With more or less success the sale of intoxicants is forbidden on Sundays in hotels and public-houses in both cities.

The educational system comprises primary and secondary schools and a State University situated midway between the two cities and attended by about 5,000 students. In the secondary or high schools, in addition to literary, commercial and other studies, a four years' course in manual training is given, and a course of domestic science for girls also forms part of the curriculum. No fees are charged either in the schools or the university, liberal grants being given by the State, which possesses large tracts of land and draws a large revenue from mining royalties. In the neighbourhood of the University is the Agricultural Experimental Station, which is doing much to foster more scientific methods of agriculture and of dairy farming in the State.

OCCUPATIONS, WAGES AND HOURS OF LABOUR.

Minneapolis.—Although flour milling is the industry for which Minneapolis is best known, it employs less labour than does engineering, about 8,000 men being employed in the various foundries, machine shops and railway works. Much of the machinery manufactured is for farming, milling and general purposes. The railway shops are engaged far more in repairs than construction. Woodworking comes next in importance to engineering in the number of men employed, over 5,000 men being engaged in this industry. The sawing of logs, formerly one of the leading local industries, is now carried on nearer to the forests, but Minneapolis still continues to be a large emporium for timber, which is manufactured into doors, windows, sashes and general interior fittings, and furniture. Printing and bookbinding employ 2,200 men and 600 women, a large amount of work being done for other towns.

Flour milling gives employment to over 2,000 men. Science and modern machinery have entirely transformed this industry. In the old process of milling the aim was to grind as finely as possible and thus to produce the maximum quantity of flour in the first grinding. The modern mills accomplish this end by gradual reduction. After the wheat has been freed from foreign substances and screened so as to remove all impurities, it goes to the first set of rollers. These rollers are set just close enough to break the grain, it being desired to get as little flour as possible from the first break. The rollers are of corrugated steel and so set that one revolves about three times as fast as the one paired with it, thus grinding as well as crushing the grain. The product of the break is passed through a set of sieves, which separate it into coarse bran, middlings and a small amount of flour. The coarse bran is sent to a second set of corrugated rollers, which break it still finer, after which it again goes through the sifting process. This breaking and sifting is continued through two to five more sets of rollers, each set crushing the bran finer than the preceding one until the floury part of the grain is entirely separated from the bran. The middlings obtained from the first break, after being put through a purifying machine to remove impurities, are passed through a set of smooth rollers which reduce the particles to a smaller size. This is called the first reduction. The product is sieved and the flour thus obtained is the finest quality or "First Patent." The middlings from this sifting process, together with those of the second break, are passed through a second set of smooth rollers for the second reduction and then sifted again. This process is followed until the flour has been entirely removed from the middlings. The flour obtained from each successive reduction is slightly darker than, and of an inferior quality to, that of the preceding one. The product of the final operation is so fine that it has a tendency to clog in the meshes of the bolting cloth, and centrifugal force and brushes are employed to force the flour through this cloth. The whole process, from the time the wheat enters the first machine until it is packed, is automatic.

The work of milling is carried on in large and lofty buildings, the first process beginning on the top floor, from which the product descends floor by floor until it finally reaches the ground level, where it is packed. Exhaust pipes carry off the major portion of the fine dust which rises from the machinery, and the air of the mills is thus comparatively clear.

Of the remaining industries, the making of clothing, including fur goods, hosiery, and knitted goods, gives employment to 1,100 men and 2,000 women, while in the manufacture of food products (other than flour) 2,000 men and 1,200 women are employed.

St. Paul.—The principal industries of St. Paul are engineering, which employs about 6,000 men, including over 3,000 men in the railway shops, and printing and book-binding, which employ 2,400 men and about 1,000 women, as St. Paul, like Minneapolis, prints for a large area. Woodworking employs 1,700 men. The clothing trades, including the manufacture of fur goods, for which St. Paul is famous, employ altogether over 1,000 men and about 1,600 women in more than 100 establishments. Several boot and shoe factories employ about 900 men and over 400 women in the aggregate. A local branch establishment of one of the Chicago meat-packing firms employs 1,600 men, the total number of persons in the food preparation trades being over 4,000.

Minneapolis—St. Paul.—The following Table, compiled from figures supplied by the State Bureau of Labour, shows the industrial distribution of workpeople employed in establishments subject to inspection in the Twin Cities in 1909 :—

Number of Workpeople employed in Establishments subject to Inspection in Minneapolis and St. Paul in 1909.

| | Males over 16. | Females over 16. | Juveniles under 16. | Total. |
|--|-------------------|---------------------|------------------------|--------|
| Foundries and Machine Shops | 4,469 | 91 | 3 | 4,563 |
| Railway Shops | 6,343 | 24 | 2 | 6,369 |
| General Machine and Metal Work (including Agricultural Implements). | 3,327 | 261 | 8 | 3,596 |
| Woodworking | 6,857 | 286 | 16 | 7,159 |
| Printing, Bookbinding and Publishing ... | 4,593 | 1,585 | 59 | 6,237 |
| Clothing, Fur Goods, Hosiery and Knitting | 2,174 | 3,585 | 12 | 5,771 |
| Boot and Shoe Making | 1,093 | 598 | 24 | 1,715 |
| Flour Milling | 2,159 | 45 | — | 2,204 |
| Other Food Preparation Industries | 5,386 | 1,919 | 41 | 7,346 |
| Other Industries | 11,736 | 5,033 | 57 | 16,826 |
| Total | 48,137 | 13,427 | 222 | 61,786 |

With few exceptions, the later immigrants are employed at first as labourers or as machine feeders. The latter are found in large numbers in the sash and door factories, where they are under the supervision of workmen who adjust the machines for the class of work required and are paid slightly higher rates of wages. All that is required of foreign workmen in these factories is rapidity in handling the material, so that the full output of the machinery may be maintained. The more intelligent are gradually advanced until they can be trusted to manage machines, when they are paid higher rates of wages. Slavs from Austria-Hungary, Poles and Swedes may be found in the same factory. Many of these immigrants work as moulders' helpers, and when they show aptitude are taught the simpler operations of machine and bench moulding. As their skill and intelligence develop, they are entrusted with more complicated work at higher pay. In the machine shops they begin as "handy men" and drill press men, and as they give evidence of capacity are promoted to better work. On the whole, they are said to be sober, industrious and eager to embrace every opportunity of increasing their earnings. The growth of immigration and the adoption by employers of the above methods of work have seriously weakened the power of the local trade unions, particularly those of the moulders and machinists, who have failed to maintain their union rates of wages. In the railway car shops the car carpenters are mostly Scandinavians, who have little skill beyond that involved in the ordinary handling of hammer and saw.

The labour laws of the State of Minnesota contain various provisions restricting the hours of labour, and dealing with conditions in factories and workshops prejudicial to health and safety. In the case of children under 16 years of age, the hours of labour must not exceed ten in any one day, while in the case of adults, unless a shorter time be agreed upon, the standard day is fixed at 10 hours, and for all hours worked in excess of this number extra pay must be given. No female may be employed in a mercantile establishment more than 58 hours in a week, or in a manufacturing or mechanical establishment more than 10 hours in any one day except for the purpose of arranging for a shorter day's work for one day each week, but the total hours worked in any week may not exceed 58. For the noonday meal sixty minutes at least must be allowed unless the Commissioner for Labour sanctions a shorter interval. The employment of children under 14 years in factories, mills and workshops, or in or about mines, is forbidden, and their

employment in any business or service whatever is forbidden during the ordinary school terms. Children between the ages of 14 and 16 years may not be employed in any business or service whatever during school terms unless an employment certificate has been procured from the Superintendent of Schools, who must forward a list of children employed to the Commissioner of Labour every month. No person under the age of 16 years may be employed before 7 a.m. or after 7 p.m. except on Saturday and during ten days before Christmas. Certain occupations prejudicial to health or morals are closed to persons under 16 years of age. A system of factory inspection by inspectors of both sexes appears to be in effective operation.

Trade unions exist for practically all the branches of the building, engineering and printing trades, and for the flour milling industry. With the exception of the printing trades, however, none of the unions are strong enough to impose their conditions on employers, and the principle of the "open shop" is generally maintained.

Time rates of wages are the general rule in Minneapolis and St. Paul, the machine compositors, who are paid sometimes by time and sometimes by piece, constituting the sole exception among the occupations included in the Table below. One small firm has introduced the premium-bonus system for moulders, only a small percentage of whom, however, are able to increase their earnings as a result. Moulders employed by other firms are paid by time.

As a rule, wages are paid by the calendar month or semi-monthly and by cheque. Workmen in the building trades, however, are paid in cash weekly at Minneapolis and fortnightly at St. Paul.

The season in the building trades runs from the beginning of April into November, but work is frequently carried on in winter (the mortar being heated) when contracts for business premises have to be completed to time.

In foundries and machine shops the wages paid to moulders show a wide range, as no two firms do the same class of work, and men are paid according to their skill. Machine moulders, who receive wages lower than those stated in the Table, are not a numerous class. As regards the wages of machinists, there is much variation, there being no recognised system of apprenticeship qualifying men to receive any particular rate of wages. The simplest class of work is done by "handy men" and drill press men, whose rates range from 50s. to 62s. 6d. per week. The wages quoted for machinists are for vice and lathe men of ordinary ability; those whose wages exceed the limit stated in the Table are not a numerous class, and are experts in certain lines or possess all-round training. In railway repair shops work is more uniform than in the other machine shops, and accordingly rates of wages show little variation.

In the printing trades the rates of wages and hours of labour of hand and machine compositors on newspaper work at St. Paul are regulated by agreement between leading newspaper companies and the trade union, while at Minneapolis there is no agreement, but union rates of wages are usually paid. For compositors employed by the day, the St. Paul agreement stipulates 1s. 10½d. per hour on day work and 2s. 1d. per hour on night work, seven hours constituting a minimum day's work. For those employed by the week the scale is 91s. 8d. for day work and 104s. 2d. for night work, a week's work consisting of 48 hours. The union rate at Minneapolis is 95s. 10d. for day work and 108s. 4d. for night work for a week of 48 hours. Machine compositors, whether on time or piece work, generally receive wages in excess of those required by agreement or by the union. Wages and hours agreements exist covering several occupations in the book and job printing and bookbinding trades at Minneapolis, but there are no agreements in these trades at St. Paul. The Minneapolis rate for compositors on day work is 1s. 6¾d. per hour. The wages for pressmen and their assistants vary considerably according to the number and kind of presses operated. The bookbinding scale is also very detailed, but the rates for most of the workmen are either 1s. 5d. or 1s. 7d. per hour, the week's work consisting of 49 hours.

In the woodworking factories the wages of cabinetmakers show a wide range, running from 56s. 3d. to 100s. per week. Of those doing superior work, however, three-quarters receive 75s. per week, whilst of those engaged on ordinary work the great majority receive from 62s. 6d. to 68s. 9d. The setters are men who in large factories adjust machines to various grades of work for the feeders and sawyers.

Work in the flour mills is fairly continuous the whole year round, Minneapolis being well supplied with large stores of both winter and spring wheat, and wages show considerable uniformity. Work is carried on in three eight-hour shifts daily, but millwrights, loaders, packers and nailers, and labourers do not work on the shift system. Packers and nailers, though nominally working a nine-hour day, more generally work only eight hours.

The wages and hours in the brewing industry are entirely regulated by agreement.

The same company works the tramways in both cities. Motormen and conductors are paid according to a scale ranging from 10½*d.* to 1*s.* 0½*d.* per hour, the rate increasing ½*d.* per hour for each year of service. As the proportions of the total number of men receiving the various rates were fairly equal, the whole range of payment has been quoted. The company does not provide uniforms.

The following Table shows the predominant wages paid to adult males in the principal trades and industries of Minneapolis—St. Paul, with the corresponding hours of labour, in February, 1909 :—

Predominant Weekly Wages and Hours of Labour of Adult Males in the Principal Occupations in February, 1909.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|---|---|-------------------------------------|
| <i>Building Trades :—</i> | | |
| Bricklayers | 120 <i>s.</i> | 48 |
| Stonemasons | 100 <i>s.</i> | 48 |
| Stonecutters | 100 <i>s.</i> to 112 <i>s.</i> 6 <i>d.</i> | 48 |
| Carpenters | 90 <i>s.</i> | 48 |
| Plasterers | 112 <i>s.</i> 6 <i>d.</i> | 48 |
| Plumbers | 112 <i>s.</i> 6 <i>d.</i> | 48 |
| Structural Iron Workers | 100 <i>s.</i> | 48 |
| Painters | 85 <i>s.</i> | 48 |
| Bricklayers' Labourers | 45 <i>s.</i> to 56 <i>s.</i> 3 <i>d.</i> | 54 |
| Plasterers' Labourers | 50 <i>s.</i> „ 67 <i>s.</i> 6 <i>d.</i> | 48 to 54 |
| <i>Foundries and Machine Shops :—</i> | | |
| Ironmoulders | 68 <i>s.</i> 9 <i>d.</i> to 90 <i>s.</i> | 51 to 60 |
| Machinists | 68 <i>s.</i> 9 <i>d.</i> „ 75 <i>s.</i> 8 <i>d.</i> | 55 „ 60 |
| Drill Press Men and Handy Men | 50 <i>s.</i> „ 62 <i>s.</i> 6 <i>d.</i> | 55 „ 60 |
| Blacksmiths | 68 <i>s.</i> 9 <i>d.</i> „ 80 <i>s.</i> 3 <i>d.</i> | 55 „ 60 |
| Patternmakers | 74 <i>s.</i> 6 <i>d.</i> „ 90 <i>s.</i> | 55 „ 60 |
| Labourers | 41 <i>s.</i> 3 <i>d.</i> „ 50 <i>s.</i> | 55 „ 60 |
| <i>Railway Works :—</i> | | |
| <i>Locomotive Shops—</i> | | |
| Machinists | 90 <i>s.</i> | 53 to 54 |
| Blacksmiths | 90 <i>s.</i> | 53 „ 54 |
| Blacksmiths' Strikers | 51 <i>s.</i> 3 <i>d.</i> to 52 <i>s.</i> 11 <i>d.</i> | 53 „ 54 |
| Boilermakers | 93 <i>s.</i> 5 <i>d.</i> | 53 „ 54 |
| Boilermakers' Helpers | 49 <i>s.</i> 6 <i>d.</i> to 50 <i>s.</i> 8 <i>d.</i> | 53 „ 54 |
| Labourers | 41 <i>s.</i> 8 <i>d.</i> „ 42 <i>s.</i> 9 <i>d.</i> | 53 „ 54 |
| <i>Car Shops—</i> | | |
| Cabinetmakers | 71 <i>s.</i> 3 <i>d.</i> to 75 <i>s.</i> | 59 |
| Carpenters | 63 <i>s.</i> 9 <i>d.</i> | 59 |
| Car Repairers | 42 <i>s.</i> 9 <i>d.</i> to 50 <i>s.</i> 8 <i>d.</i> | 53 to 59 |
| Labourers | 41 <i>s.</i> 3 <i>d.</i> „ 43 <i>s.</i> 9 <i>d.</i> | 59 |
| <i>Woodworking—Sash and Doormaking :—</i> | | |
| Cabinetmakers | 62 <i>s.</i> 6 <i>d.</i> to 75 <i>s.</i> | 60 |
| Machine Operators { Setters | 62 <i>s.</i> 6 <i>d.</i> „ 75 <i>s.</i> | 60 |
| { Feeders | 37 <i>s.</i> 6 <i>d.</i> „ 50 <i>s.</i> | 60 |
| Frame Makers | 56 <i>s.</i> 3 <i>d.</i> „ 62 <i>s.</i> 6 <i>d.</i> | 60 |
| Labourers | 43 <i>s.</i> 9 <i>d.</i> „ 50 <i>s.</i> | 60 |
| <i>Printing and Bookbinding Trades :—</i> | | |
| <i>Newspaper—</i> | | |
| Hand Compositors { Day work | 78 <i>s.</i> 9 <i>d.</i> to 95 <i>s.</i> 10 <i>d.</i> | 42 to 48 |
| { Night work | 87 <i>s.</i> 6 <i>d.</i> „ 108 <i>s.</i> 4 <i>d.</i> | 42 „ 48 |
| Machine Compositors { Day work | 95 <i>s.</i> 10 <i>d.</i> „ 104 <i>s.</i> 2 <i>d.</i> | 39 „ 48 |
| { Night work | 95 <i>s.</i> 10 <i>d.</i> „ 116 <i>s.</i> 8 <i>d.</i> | 36 „ 48 |
| <i>Book and Job—</i> | | |
| Hand Compositors | 75 <i>s.</i> to 81 <i>s.</i> 3 <i>d.</i> | 48 to 49 |
| Pressmen { Cylinder Presses | 79 <i>s.</i> „ 93 <i>s.</i> | 48 „ 49 |
| { Small Presses | 47 <i>s.</i> „ 66 <i>s.</i> 8 <i>d.</i> | 48 „ 54 |
| Bookbinders | 69 <i>s.</i> 5 <i>d.</i> „ 83 <i>s.</i> 4 <i>d.</i> | 49 |
| <i>Flour Milling :—</i> | | |
| Millers, Bolters and Grinders | 70 <i>s.</i> | 48 |
| Machine Tenders | 58 <i>s.</i> | 48 |
| Smutters... .. | 47 <i>s.</i> to 52 <i>s.</i> | 48 |
| Millwrights | 75 <i>s.</i> „ 75 <i>s.</i> 6 <i>d.</i> | 60 |
| Packers and Nailers | 54 <i>s.</i> „ 62 <i>s.</i> 6 <i>d.</i> | 48 |
| Oilers | 47 <i>s.</i> | 48 |
| Loaders | 55 <i>s.</i> | 54 to 60 |
| Labourers | 50 <i>s.</i> to 55 <i>s.</i> | 60 |

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|---|---------------------------|-------------------------------------|
| <i>Brewing</i> :— | | |
| Brew-house, Malt-house, Wash-house and Cellar Men. | 75s. | 48 |
| Beer Bottlers | 56s. | 48 |
| <i>Baking</i> :— | | |
| Bench Men | 62s. 6d. to 66s. 8d. | 60 |
| Oven Men | 66s. 8d. ,, 70s. 10d. | 60 |
| <i>General Drivers, Teamsters</i> :— | | |
| One horse | 43s. 3d. to 50s. | 60 |
| Two horses | 48s. 1d. ,, 54s. 2d. | 60 |
| <i>Public Services</i> :— | | |
| Street Construction, Paving and Cleaning (Municipal)— | | |
| Paviors { Creosote | 62s. 6d. | 48 |
| { Brick and Stone | 81s. 3d. | 48 |
| Paviors' Labourers, Road Menders and Road Sweepers. | 40s. to 56s. 3d. | 48 |
| Water Works (Municipal)— | | |
| Labourers | 50s. | 48 |
| Gas Works (Company)— | | |
| Gas Stokers | 57s. 8d. | 77 |
| Labourers | 43s. 9d. to 51s. 1d. | 66 to 70 |
| Electric Light and Power Works (Company)— | | |
| Switchboard Men | 74s. 6d. to 86s. 6d. | 84 |
| Linemen | 69s. 9d. ,, 72s. | 54 |
| Labourers | 50s. | 60 |
| Electric Tramways (Company)— | | |
| Motormen and Conductors | 58s. 2d. to 69s. 3d. | 66½ |

Taking wages at New York as the base, =100, in each case, the wages index numbers for Minneapolis—St. Paul are—building trades, skilled men 97, hod carriers and bricklayers' labourers 74; foundries and machine shops, skilled men 88, unskilled labourers 109; printing, hand compositors (job work) 89.

HOUSING AND RENTS.

Minneapolis.—Practically all the working-class dwellings are situated within the city, and are distributed all over its area, with the exception of the business centre and a district in the west which is occupied by the mansions and villas of the wealthy inhabitants. A network of tram-lines reaches all parts of the city, and the fare being uniformly 2½d., the cost of travelling to and from work has little or no effect on the relative rent level of different localities, rent being determined by other conditions. Certain districts, however, are predominantly working-class in character. Thus, the South Side is mainly occupied by the poorer yet respectable Scandinavians, who are mostly Swedish, and in this locality are found the principal churches of the Swedish Lutheran faith, but also several Norwegian churches. The northern district is also to a large extent working-class in character, and is inhabited by the families of men working in lumber yards and sash and door factories. The poorest class of labourers, and particularly the later immigrants of the Slavonic race, live in a small district fringing the western bank of the Mississippi, one portion of which, called "The Flats," situated below the Falls of St. Anthony, lies very low, and is at times flooded by the river.

A large district on the East Side of the river, close to some large woodworking factories and railway shops, employing a considerable number of well-paid mechanics, represents the aristocracy of labour, so far as housing conditions are concerned. In this district the overwhelming majority of the houses are being purchased by the occupants on the instalment plan. They are pretty frame buildings of two stories, detached, and having open grass plots both at the front and back. In other localities, this habit of purchasing the home is characteristic of a large section of the working-class population, especially the Scandinavians, who are home-loving to a remarkable degree. Although Americanised to a considerable extent, the Scandinavians still retain the frugal habits of their race, denying themselves many ordinary amusements, and generally maintaining a simpler standard of dietary and clothing than American workmen of the second generation. According to the Federal Census of 1900, 28·7 per cent. of the homes in the city were in that year owned by their

occupiers, 16·1 per cent. of all homes being owned free of debt, and since that date the percentage of house owners amongst the working classes has probably increased. There are no co-operative or philanthropic building societies, all the purchases being effected through private agents, who foster the system of house purchase, accepting payment by easy instalments, a plan which lessens the risk of bad debts. In times of depression many agents make loans to purchasers, whilst they have always the ultimate right of foreclosure when the debt is mounting too high. The State Law of Exemption, which prevents the distraint of furniture up to a certain value, and the legal difficulties in the way of ejecting tenants naturally cause agents to encourage the purchase system, and none of them has a large rental list. A common practice with agents is to accept an initial deposit of 10 per cent. of the total value of a house and site, and to receive the balance in monthly instalments as low as 41s. 8d. By this means an ordinary house, together with the land, can be bought outright as a rule in ten or twelve years. When, however, the local taxes, special assessments for the cost of street-making and improvements (a large number of streets are still unmade), and the heavy cost of repairs to frame dwellings are taken into consideration, it is evident that house-ownership entails considerable self-denial on the part of those who are not receiving the higher wages of skilled mechanics. The usual size of a site is 40 to 50 feet by 100 to 150 feet, and the cost of such a site varies from £50 to £125, according to situation. The average cost of a frame house of four rooms is about £175, and of one of six rooms from £300 to £425, modern conveniences such as bathroom and basement with heating furnace not being included. Sometimes houses are bought in combination with life insurance. Two marked results of this system of house purchase are variety in style of construction, a matter to which agents pay special attention, and the clean and well-kept appearance of the dwellings which are being bought by their occupants.

Broadly speaking, the working-class housing conditions make a very favourable impression. The prevailing custom of erecting detached houses secures healthy conditions as regards light and ventilation, particularly as Minneapolis is a new city, and is spread over a large area with many intervening open spaces. Congestion of dwellings such as obtains in older cities is almost non-existent. Broad streets and wide passages between back gardens are the general rule, and trees are planted along both sides of all streets in residential districts. There is no large slum area, although houses in a more or less dilapidated condition are by no means infrequent, and there are small blocks of tenement dwellings which leave much to be desired in the matter of cleanliness and sanitary conveniences. The heavy cost of sewerage so large an area as Minneapolis covers and of laying water pipes accounts for somewhat primitive sanitary conditions in certain localities, but these cannot be said to be typical. The only available figures bearing on the question of congestion of population are those of the Federal Census of 1900, which showed that the percentage of families at that date living in dwelling-houses occupied by one family was 56, in dwelling-houses occupied by two families 31 and in dwelling-houses occupied by three or more families 13. Observation of conditions in all parts of the city made in the course of the investigation leads to the conclusion that this favourable state of things still continues.

As the great majority of the houses are built for sale there is no approach to uniformity as regards either appearance, design or dimensions, the aim of the builders and agents being to present as much variety as possible in any given street in order to make the houses attractive to purchasers. Rented dwellings also vary to such an extent that predominant types can hardly be said to exist. The two-storied frame cottage approaches a predominant type as far as it is possible to generalise, but as a rule it is occupied by its owner.

Generally speaking this house is detached and set back from the pavement at varying distances; an open grass plot in front runs unbroken from one end of the street to the other; and each house has open ground behind where the wood shed and in the older type the privy are situated, more modern dwellings having instead of the latter a water-closet in the bathroom. A verandah or "porch" usually extends along the front of the house. The floor of the dwelling usually rests on a stone or cement foundation, raised about three feet above the ground. Lobbies or vestibules are common, and on the ground floor the rooms consist of parlour, dining room and kitchen-scullery, which contains the sink and stove or gas-cooker, the stove being invariably the property of the occupier; a food pantry is also a common feature. The floor above is divided into three or four rooms and in dwellings of the more modern type contains also the bathroom with water-closet. Clothes closets are usually provided, and the walls as a rule are papered. A cellar or basement is general, this in more modern houses having a cemented floor and containing

a heating furnace and laundry facilities. The whole house is heated by the furnace, from which hot air pipes are carried to all the rooms above, steam pipes being only met with in the more expensive houses or blocks of flats occupied by the well-to-do classes.

Rented dwellings are mainly flats of from three to six rooms. The labouring classes generally occupy flats of three or four rooms in dwellings of the older type, whilst mechanics occupy flats of the more modern kind with from three to six rooms. The prevalence of the bathroom and water-closet in the latter class of dwellings is a marked feature in Minneapolis.

Flats are found in two-storied frame dwellings, in rows of brick structures or in detached blocks of two and three stories, and often over shops. Large frame-built tenement blocks exist, but are not numerous. The three or four-roomed flat of the older type is usually found in a seven-roomed frame house, having three or four rooms on each floor. First floor tenants frequently have to carry water and wood upstairs, in which case the inconvenience caused is compensated for by a lower rent being charged, sometimes as much as 1s. 11d. per week less than that for the downstairs flat. One front entrance serves both flats, but separate back entrances are generally provided, wooden stairs with a small landing leading from the open ground behind to the upstairs flat. In many cases water and sink are supplied to upstairs tenants, but the water-closet or privy is as a rule shared by both families.

Modern flats are frequently situated in a brick tenement block having one main entrance admitting to a hall, where flats are entered right and left, while stairs ascend to landings on the upper floors. These flats are conveniently arranged, but as the blocks are built rather close together, defective lighting is fairly frequent, since the lateral windows look out upon the wall of the adjacent block a few feet away. At the back flights of wooden steps with a landing at each floor give access to the various flats from the courtyard. Bathrooms with water-closets are invariably found in these flats.

Measurements of rooms in typical dwellings taken in various parts of the city varied from 11 feet by 12 feet to 11 feet by 16 feet for larger rooms and from 6 feet by 9 feet 6 inches to 9 feet by 12 feet for smaller ones, the height being from 7 to 8 feet.

Modern flats furnished with steam heating, the charge for which is included in the rent, are nearly all occupied by fairly well-to-do households; occasionally a compositor or superior mechanic may be found amongst the tenants, but as a rule working people who can afford the high rents of such flats prefer to purchase their own homes.

The older type of dwelling is heated by a stove in the living room in which anthracite coal is usually burnt; the kitchen stove, in which bituminous coal is burnt, being used for cooking only. Gas cooking stoves were observed to be in common use.

Building regulations do not apply, as regards the structures, in the case of dwelling houses, and builders are not even required to submit plans for approval before beginning operations. The requirements of prospective tenants or owners are the only conditions which builders feel bound to consider.

The collection of ashes and garbage is undertaken by the city, but metal cans to contain the refuse have to be provided by the owners or the tenants.

The sanitary inspection of houses is regularly exercised by a staff of officers belonging to the Health Department. Whenever dwellings are found to be in an insanitary state and the owners or agents neglect to obey the instructions of the Health Department, a large card is affixed to the wall stating that the dwelling is unhealthy and should not be occupied until put in a sanitary condition. This method of dealing with recalcitrant owners is said to be very effective.

Taxes are levied by the municipal authority upon real and personal property, one tax levy covering all State, County and City purposes. Under personal property are included household furniture and effects of every kind, wearing apparel and dogs. Every citizen is required annually to make a written and detailed declaration of the value of his personal property, and the various items are revised by the assessor. Real estate is assessed at from 45 to 55 per cent. of its actual value, personal property at its full value, less a deduction of £21; the tax-rate has varied during the last five years from 2.45 to 2.89 per cent. of the assessed value.

St. Paul.—The foregoing description of housing conditions in Minneapolis will serve also to indicate the general conditions prevailing in St. Paul. In the style and character of the houses, and in the general level of accommodation, there are no material differences, while the rents charged for similar dwellings were found to be the same in both cities.

Minneapolis—St. Paul.—The following Table shows the rents most generally paid by working-class tenants in Minneapolis and St. Paul in February, 1909 :—

Predominant Rents of Working-class Dwellings.

| Number of Rooms per Dwelling. | Predominant Weekly Rents. | |
|-------------------------------|---------------------------|----------------------|
| | Older Dwellings. | Modern Dwellings. |
| Three rooms | 5s. 9d. to 7s. 8d. | 8s. 8d. to 10s. 7d. |
| Four rooms | 7s. 8d. ,, 9s. 7d. | 11s. 6d. ,, 15s. 5d. |
| Five rooms | 9s. 7d. ,, 12s. 6d. | 14s. 5d. ,, 19s. 3d. |
| Six rooms | 11s. 6d. ,, 17s. 4d. | 19s. 3d. ,, 21s. 8d. |

The level of rents at New York being represented by 100, the rents index number for Minneapolis—St. Paul is 77.

These rents include water charges and also local taxes on real estate, in so far as these can be assumed to enter into rent. Rent contracts are rarely used, and the rule is to pay rent monthly and in advance.

RETAIL PRICES.

As the State of Minnesota is largely agricultural, and as Minneapolis and St. Paul form an important railway centre, the Twin Cities are highly favoured in the matter of food supply. Farming grows yearly more varied in character under the stimulus imparted by the Agricultural Experimental Station situated between the two cities. Since the growing of wheat has passed westward to the Dakotas, increased attention has been paid to dairy farming and the growing of vegetables and fruit, and large quantities of farm and garden produce are sent to Minneapolis for distribution in various parts of the country. Fine creameries abound in the State, and Minnesota butter commands a good price in the United States generally. Formerly large consignments were shipped eastward, but of late years the home demand has grown to such an extent, particularly in Minneapolis and St. Paul, that the major portion of this product is now consumed within the State, and since 1905 the price has risen 2½d. per lb. Although Minneapolis is the greatest milling centre in the world, flour is not so cheap as might be expected, the local mills enjoying a monopoly.

In the retail trade of both cities there is keen competition, and prices for the same quality of commodities show very little variation. In addition to numerous small dealers there are also large "department stores," several of which cater for the working-class trade. As wages generally are only paid once or twice monthly, working-class customers mainly purchase on the credit system from the family grocer. There is no co-operative society.

The dietary of the Scandinavians is less varied than that of the American-born, and consists mainly of meat, fish, bread, butter, potatoes, milk and eggs. The Scandinavians retain their partiality for rye bread, most of which is baked at home. Only a small percentage of the bread made in local bakeries is of rye; much of the so-called rye bread contains 60 per cent. of wheat.

Groceries and other Commodities.

A large amount of *bread* is made in local bakeries. One of these, which bakes 13,000 loaves daily, is a model of its kind in regard to cleanliness, the use of modern machinery and the conditions under which the employees work. Over 80 per cent. of the bread baked is said to be wheaten, the remainder being either pure rye or mixed rye and wheat. In 1905, a Minneapolis city ordinance required all loaves to be of the standard weight of one or two lb. This ordinance was amended in 1907, and bakers are now allowed to make loaves of any weight provided that each loaf bears a label giving the weight, and the name and address of the baker. The majority of the bakers by agreement fix the weight of the loaf from time to time, according to the fluctuations in the price of flour. In February, 1909, the weight of the 2½d. loaf was 14 oz., a 28 oz. loaf retailing at 5d. Bread remaining unsold at the grocers' shops at the end of the day is returned next morning to the bakeries, where it may be purchased at 1½d. per small loaf, or 2½d. for two such loaves. As a rule rye bread and bread of mixed wheat and rye have the same weight as wheaten, and retail at the same price. The food inspector confiscates all bread found to weigh less than stated on the label.

The consumption of *tea* is small compared with that of coffee, and prices frequently ranged from 1s. 3d. to 3s. 1½d. per lb., but the kinds most in demand are black and green teas at 2s. 1d. per lb. *Coffee* is sold roasted and ground. Mechanics purchase principally a quality selling at 1s. 3d. per lb., and labourers inferior grades at 1s. 0½d. or 10d.

The only kind of *sugar* consumed to any extent by the working classes is white granulated, costing 4s. 2d. for 16, 17 or 18 lb.

Bacon is mainly supplied by a St. Paul branch of one of the principal Chicago packing firms, and is sold in butchers' shops at from 9d. to 10d. per lb. sliced, and usually at 7½d. or 8d. per lb. by the piece or "strip," which is a cut corresponding to the part called streaky in England.

There is a large supply of local fresh *eggs*, while the *cheese*, *butter* and *potatoes* are mostly the produce of the State of Minnesota. For margarine there is practically no demand.

The price of *milk* per single quart is uniform at the rate of 4¼d. per quart English from September to April, and 3½d. for the remainder of the year. The custom prevails of purchasing a dollar's worth of quart tickets. The number of tickets per dollar (4s. 2d.) was generally 16 during the winter of 1908-9, and 18 during the following summer. (It must be remembered that an American quart is $\frac{5}{6}$ of an English quart.) Since 1905 milk has risen ½d. per quart. Very little skim milk is bought by working-class customers. All cows from which milk is supplied to the city have to be examined annually by the veterinary officer of the Health Department or by a duly licensed veterinary surgeon for the purpose of detecting the presence of tuberculosis. No one is allowed to sell milk who is not duly licensed by the health authorities. Fines may be imposed where milk is found to contain less than 3½ per cent. of fat, and cream to contain less than 20 per cent. of fat. The supply of milk is obtained from the surrounding country, and is mainly distributed by creameries, one of which sells 5,000 gallons a day. Some of the creameries pasteurise the whole of their milk and retail it in sealed bottles, a stock of which is also kept by many grocers.

As the sale of *coal* is entirely in the hands of a few large firms, prices are uniform throughout both cities.

The prices most generally paid by the working classes of Minneapolis and St. Paul for certain groceries and other commodities are shown in the following Table:—

Predominant Prices paid by the Working Classes in February, 1909.

| Commodity. | Predominant Price. |
|----------------------------------|----------------------|
| Tea per lb. | 2s. 1d. |
| Coffee " | 1s. 0½d. to 1s. 3d. |
| Sugar:— | |
| White Granulated... .. " | 2¾d., 3d. |
| Brown " | 2½d. to 3d. |
| Bacon, Breakfast—Boneless .. " | 7½d. ,, 8d. |
| Eggs:— | |
| Fresh per 1s. | 7 ,, 8 |
| Storage " | 10 ,, 12 |
| Cheese, American per lb. | 10d. |
| Butter " | 1s. 3d. to 1s. 5½d. |
| Potatoes, Irish per 7 lb. | 5¾d. |
| Flour, Wheaten—Household .. " | 11½d. to 1s. 0½d. |
| Bread, White per 4 lb. | 11½d. |
| Milk per quart | 4¼d. |
| Coal:— | |
| Anthracite per cwt. | 2s. 0½d.* |
| Bituminous " | 1s. 3½d. to 1s. 4d.* |
| Kerosene per gallon | 6d. |

* By the ton of 2,000 lb.

Meat.

The main sources of the meat supply are the Chicago packing firms, one of which has a large establishment at St. Paul, and those of Omaha and Kansas City. Practically all the meat sold is either chilled or frozen, the latter kind being an inferior grade. Excepting the "department stores," meat is sold as a rule in separate shops called "meat markets," in all of which uncut quarters of meat hang in ice-chambers usually provided with glass panels so that they are in view of the customers. In Minneapolis 40 of the

better-class firms display all their smaller cuts in "refrigerating counters," which are enclosed in glass and provided with ice chambers at both ends, and the sanitary authorities hope to make the use of such counters compulsory.

American-born workmen consume mainly beef and pork, and in a less degree mutton, but veal is little in demand amongst them. The principal sale of veal is to the Scandinavians, who also buy largely the cheaper grades of beef and pork, and show a preference for stewing meat. Inspectors regularly visit all shops where meat is exposed for sale. Veal particularly is examined, as the by-law requires that all calves killed for consumption shall be not less than five weeks old.

The following Table shows the predominant prices paid for meat by the working classes at Minneapolis and St. Paul in February, 1909:—

Predominant Prices paid by the Working Classes in February, 1909.

| Description of Cut. | Predominant Price per lb. |
|-------------------------------------|---------------------------|
| Beef :— | |
| Roasts—Round... .. | 6½d. to 7½d. |
| " Ribs prime | 7½d. |
| " Ribs second cut | 6½d. to 7½d. |
| " Chuck or short ribs | 5d. ,, 6½d. |
| Steaks—Round... .. | 6½d. ,, 7½d. |
| " Sirloin | 7½d. ,, 9d. |
| Flank | 3d. |
| Plate, Brisket { Fresh | 2½d. to 3d. |
| { Salt or corned | 2½d. ,, 3d. |
| Mutton or Lamb :— | |
| Leg | 7½d. |
| Breast | 3d. to 5d. |
| Loin | 7½d. ,, 9d. |
| Chops | 7½d. ,, 9d. |
| Shoulder | 6½d. |
| Neck | 4d. to 5d. |
| Veal :— | |
| Cutlets | 9d. |
| Rib chops | 6½d. to 7½d. |
| Loin chops | 7½d. ,, 9d. |
| Breast | 4d. ,, 5d. |
| Neck | 4d. ,, 5d. |
| Pork :— | |
| Fresh—Loin | 6½d. |
| " Spare rib | 5d. |
| " Shoulder | 5d. |
| " Chop, | 6½d. to 7½d. |
| Corned (wet salt or pickled) | 6½d. ,, 7½d. |
| Dry salt | 6½d. ,, 7½d. |
| Ham | 6½d. ,, 7½d. |
| Shoulder, salt or smoked | 4½d. ,, 5½d. |

Prices at New York being taken as the base, = 100, in each case, the index number for the price of meat at Minneapolis—St. Paul is 85, for other food it is 99 and for food prices as a whole 95. For rents and food prices combined the index number is 91.

MUNCIE.

Muncie, which lies on the south side of the White River, in the State of Indiana, affords a very interesting example of rapid industrial changes during recent years. The city owes its development to the discovery of natural gas in the neighbourhood nearly thirty years ago, a discovery which resulted in the establishment there of important glass works, the products of which raised Muncie to a leading position among the glass manufacturing cities of America. In course of time, however, the supply of natural gas was threatened with exhaustion; gas could no longer be obtained in the same abundance, and the consequence was that glass works tended to move elsewhere. This tendency was strengthened by the introduction of machine processes which were favourable to the concentration of the industry in the hands of large firms. Muncie has retained one of the large bottlemaking firms, which absorbed smaller works in other places, but it has lost a number of other glass works, including those that were engaged in the window-glass industry, which has entirely left the neighbourhood.

Following glass works came steel rolling mills, making sheet steel for the building trade. Concentration, however, affected this industry also, and small works had to close down. At the time of the investigation there were no rolling mills in operation, but one controlled by the United States Steel Corporation was expected to re-open directly the trade depression passed away.

In spite of the vicissitudes of the glass and steel industries, Muncie has had a prosperous career on the whole, apart from the temporary set-back of 1908. Other industries have sprung up to take the place of those which have declined. The manufacture of automobiles and parts has become important, and there are many miscellaneous works which, in the aggregate, give employment to a large number of men. The more important of these works are engaged in boilermaking, the manufacture of structural steel, malleable castings, carriage wheels and coffins and the preparation of canned vegetables.

The following Table gives the population of Muncie at the Censuses of 1890, 1900 and 1910, together with the intercensal increases:—

| Year. | Population. | Increase. | Percentage Increase. |
|-------|-------------|-----------|----------------------|
| 1890 | 11,345 | — | — |
| 1900 | 20,942 | 9,597 | 84·6 |
| 1910 | 24,005 | 3,063 | 14·6 |

Figures showing the extent to which different nationalities enter into the composition of the population are not available, but in so small a place there is not much difficulty in ascertaining the primary facts in a matter of this kind. There is no foreign quarter, but a few foreign-born people were found here and there. Formerly Belgians used to work in the window-glass industry, and Roumanian labourers were employed in the rolling mills, but when these industries declined, nearly all the Belgians and Roumanians migrated elsewhere. As a consequence the American-born population is strongly predominant.

The numbers of births, deaths and deaths of infants under one year old recorded in each of the years 1905–8 are shown in the following Table:—

| Year. | Number of Births. | Number of Deaths. | Number of Deaths under One Year. |
|-------|-------------------|-------------------|----------------------------------|
| 1905 | 491 | 350 | 80 |
| 1906 | 552 | 315 | 80 |
| 1907 | 534 | 310 | 77 |
| 1908 | 466 | 317 | 70 |

Outside a small business centre, Muncie has almost a rural aspect. The streets in the residential quarters are all lined with trees on either side. Dwelling houses of all classes are almost entirely frame-built, and stand detached on plots 30 to 40 feet wide. There is, consequently, no lack of space and air, a circumstance which should be favourable to the public health. Unfortunately these conditions are accompanied, in large portions of the city which are occupied by the working classes, by a corresponding rural simplicity in sanitation and water supply, with the result that typhoid fever and small-pox are not

so rare as they should be. Modern drainage and water supply have been installed in all the districts inhabited mainly by the middle classes and the more highly-paid wage-earners, but elsewhere water is often obtained from wells of shallow depth, whilst privy-vault closets contaminate the soil, which is of a rather porous nature.

All the public services, water, gas, electricity, and tramways, are in the hands of companies. Natural gas is supplied for domestic use at 2s. 1d. per 1,000 cubic feet. In so small a city as Muncie the frequent service of tram cars which exists in larger cities is impossible, and bicycles are used to a great extent by working men for going to and from their work. The extensive use of bicycles is quite rare in larger cities in America, partly owing to the excellent tramcar service, and partly owing to the roughness of the stone setts with which the majority of streets are paved. In Muncie the traffic is light, and the roads, which are macadamised outside the business centre, where asphalt is used, are kept in a sufficiently good state of repair to make the use of bicycles quite practicable. Brick paving is now being laid down in some streets in place of macadam, as being more durable, while smooth enough for cycling.

OCCUPATIONS, WAGES AND HOURS OF LABOUR.

As has been stated, the industries of Muncie have undergone many changes during recent years, and at the present time glassworks, foundries, machine shops and automobile works afford the principal sources of employment.

The glass industry comprises the manufacture of bottles, preserve jars and telegraph insulators. The old system of blowing by mouth has been replaced by a mechanical process, generally known as pressing. The men who work the pressing machines are paid by piece, and earn very high wages. Gatherers also work by piece, but do not earn so much as pressers. General unskilled labourers, of whom a considerable number are employed, are paid from 6 $\frac{3}{4}$ d. to 8d. per hour.

A number of women are employed in the glass works, especially as packers, earning about 20s. 10d. per week. The glass works close down during July and August as a general rule, for repairs to the furnaces. The pressers and gatherers do not work during these months, but a number of the unskilled workers obtain employment on repairs and cleaning.

In addition to two automobile firms quite recently established, there are in Muncie several small jobbing machine shops and foundries, a firm making lawn-mowers and a foundry for malleable steel castings. Ironmoulders in the general machinery shops earn 12s. 6d. per day of nine hours, but those working on malleable steel castings are on piece work, and their earnings show a wide range. On the whole a much lower degree of skill is required for this work, which is largely repetition work, and earnings are less than those of machinery moulders.

The fact, already mentioned, that important industries have left Muncie has naturally been unfavourable to the expansion of the building trades, and workpeople have not, in all cases, been able to maintain union rates of pay. Bricklayers were being paid rates varying from 2s. 1d. to 2s. 6d. per hour in February, 1909, and carpenters on the whole maintained the union rate of 1s. 7d. per hour, and plasterers the rate of 2s. 1d. The hours of work in the building trades are in general 48 per week, but in some cases a nine-hour day is worked. Carpenters and painters have a nine-hour day with a short day on Saturday, making 50 hours for the week. Plasterers sometimes, and plumbers usually, work 54 hours per week.

The printing trade is not very important, though Muncie has both a morning and an evening newspaper. In May, 1907, an agreement fixing rates of pay for newspaper work was concluded by the firms concerned and the men's union, providing for gradual increases each year for the following three or four years, according to the occupation. The rates given in the Table below, for February, 1909, were those of the second year of the agreement. In several cases increases have been made since, in accordance with the agreement, for the third year, commencing May 2nd, 1909.

As natural gas only is used in Muncie, there are no gas works in the sense usually understood. The scale of pay for motormen and conductors on the tramways is 8d. per hour for the first six months, 8 $\frac{1}{2}$ d. for the second six months, 9d. for the second year, 9 $\frac{1}{2}$ d. for the third and fourth years and for the fifth year and afterwards, 10d. per hour. Eleven hours daily represent full time, and men may work seven days per week, though in practice they usually take one day off each week.

The following Table shows the predominant weekly wages and hours of labour in some of the principal occupations in February, 1909 :—

Predominant Weekly Wages and Hours of Labour of Adult Males in the Principal Occupations in February, 1909.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|--|---------------------------|-------------------------------------|
| <i>Building Trades :—</i> | | |
| Bricklayers | 100s. to 120s. | 48 |
| Stonemasons | 100s. | 48 |
| Stonecutters | 100s. | 48 |
| Carpenters | 79s. 2d. | 50 |
| Plasterers | 100s. to 112s. 6d. | 48 to 54 |
| Plumbers | 81s. 3d. | 54 |
| Structural Iron Workers | 62s. 6d. to 68s. 9d. | 60 |
| Painters | 69s. 2d. ,, 72s. 11d. | 50 |
| Hod Carriers | 50s. ,, 60s. | 48 |
| General Labourers | 39s. 5d. ,, 45s. | 54 |
| <i>Foundries and Machine Shops :—</i> | | |
| Ironmoulders | 75s. | 54 |
| Machinists | 50s. to 68s. 9d. | 59 to 60 |
| Blacksmiths | 73s. 9d. ,, 86s. 1d. | 59 ,, 60 |
| Patternmakers | 62s. 6d. ,, 86s. 1d. | 55 ,, 60 |
| Labourers | 37s. 6d. ,, 43s. 9d. | 54 ,, 60 |
| <i>Glass Works :—</i> | | |
| Pressers | 125s. to 141s. 8d. | 53 to 54 |
| Gatherers | 75s. ,, 104s. 2d. | 53 ,, 54 |
| Gasmakers | 58s. 4d. ,, 62s. 6d. | 84 |
| Labourers | 33s. 9d. ,, 40s. | 60 |
| <i>Printing Trades :—</i> | | |
| Newspaper— | | |
| Hand Compositors { Day work | 75s. | 48 |
| { Night work | 79s. 2d. | 48 |
| Machine Compositors { Day work | 79s. 2d. | 48 |
| { Night work | 87s. 6d. | 48 |
| Pressmen ... { Day work | 62s. 6d. | 54 |
| { Night work | 91s. 8d. | 63 |
| Book and Job— | | |
| Hand Compositors | 66s. 8d. to 68s. 9d. | 48 |
| Pressmen (Small Presses) | 62s. 6d. ,, 68s. 9d. | 48 |
| <i>Public Services :—</i> | | |
| Street Construction, Paving and Cleaning— | | |
| Municipal Workmen : | | |
| Road Menders, Scavengers, Road Sweepers and Drivers | 45s. | 54 |
| Contractors' Workmen : | | |
| Paviors | 62s. 6d. to 87s. 6d. | 60 |
| Paviors' Labourers, Road Menders and Drivers... .. | 37s. 6d. ,, 43s. 9d. | 60 |
| Water Works (Company)— | | |
| Labourers | 43s. 9d. | 60 |
| Electric Light and Power Works (Company)— | | |
| Stokers | 57s. 8d. | 84 |
| Linemen... .. | 56s. 3d. | 60 |
| Labourers | 52s. 6d. | 84 |
| Electric Tramways— <i>See text.</i> | | |

Taking wages at New York as the base, = 100, in each case, the wages index numbers for Muncie are—building trades, skilled men 83, hod carriers and bricklayers' labourers 80; foundries and machine shops, skilled men 81, unskilled labourers 97; printing, hand compositors (job work) 77.

HOUSING AND RENTS.

Detached and semi-detached frame houses occupied by single families form the great majority of the homes of wage-earners. Most of the houses containing less than seven rooms are of one story, and are entirely detached, standing on plots 30 to 40 feet wide and 100 to 130 feet deep. As there is practically no smoke nuisance, the houses are usually painted a light colour and look clean and cheerful. The white houses set in an abundance of trees give quite a bright and pleasant aspect to the town, in strong contrast to the dull, monotonous appearance of most industrial towns which are built of brick. All except the very cheapest houses have a verandah, or at least a porch.

The rooms vary in number from three to seven, but four, five or six rooms are most frequently found in working-class houses, five and six rooms predominating. These rooms are seldom large, from 12 to 13 feet square being a common size. Halls

are rarely found. The arrangement of the rooms is exceedingly varied, but usually the front entrance leads into the principal living room or parlour, which communicates directly with the kitchen, the bedrooms being reached through one of these rooms. Cellars are rare. The floors are raised slightly above the level of the ground by brick foundations. The rooms are plastered and ceiled in the usual way, but sometimes there is a "summer kitchen" with unplastered walls and roof.

Gas cooking stoves are used to a considerable extent, as natural gas costs only 2s. 1d. per 1,000 cubic feet. Oil fuel also is used by many households in summer time.

Rents in Muncie were particularly low at the time of this investigation, mainly owing to the fact that the closing down of the steel rolling mills had caused the departure of a number of people from the town. Compared with the level of 1907, rents in 1909 had declined about 20 per cent. Houses without modern sanitation, containing four rooms, were rented at 4s. 10d. to 6s. 9d. per week; those with five rooms cost as a rule from 6s. 9d. to 9s. 7d. per week, but those at the higher figure were usually connected with the city drainage and water, while at rents of 12s. per week, houses with five or six rooms and bathroom could be obtained. A few flats over shops containing five rooms and bathroom also rented for 12s. per week.

In Muncie, as in many American cities, the best types of houses occupied by wage-earners are those which are purchased on the instalment plan. Quite a number of occupying owners were found in the types of houses already mentioned, but the proportion increases with the value of the houses. This is most noticeable in the case of seven-roomed houses. There are really two distinct classes of seven-roomed houses, the two-storied, semi-detached house, which is found to a certain extent in the suburbs, and is without modern sanitation or bathroom, letting for hardly more than houses with five or six rooms on one floor, and the modern-built, detached, two-storied house, containing seven rooms and a bathroom. The last-mentioned type of house is occupied to some extent by the better paid wage-earners, who usually own their dwellings, but a few were found rented at from 14s. 5d. to 15s. 5d. per week. Normally the rent of such houses would be from 16s. 4d. to 17s. 4d. per week, but the trade depression had led to a reduction.

In the Federal Census returns for 1900 the average number of families per dwelling-house is given as 1.1, a ratio which clearly indicates that the one-family house is almost universal. The percentage of houses owned by their occupants free of encumbrance was in that year 17.9, that of houses owned with encumbrance 14.8 and that of rented houses 67.3. These figures indicate a higher proportion of house-owners than in most of the larger towns.

The following Table shows the predominant ranges of rents paid in 1909 for the types of houses usually occupied by wage-earning families :—

Predominant Rents of Working-class Dwellings.

| Number of Rooms per Dwelling. | Predominant Weekly Rents. |
|-------------------------------|---------------------------|
| Four rooms | 4s. 10d. to 6s. 9d. |
| Five rooms | 6s. 9d. ,, 9s. 7d. |
| Six rooms | 7s. 8d. ,, 12s. |

The level of rents at New York being represented by 100, the rents index number for Muncie is 44.

The rents include the charge for water where this is supplied by the city; many households obtain their water from wells. Rents are paid monthly.

RETAIL PRICES.

There is no public market at Muncie. With the exception of one branch of a "multiple" grocery firm, all the shops are individual concerns, which sometimes combine the sale of meat and groceries. As Muncie lies in a fertile agricultural plain, there is a good supply of all kinds of farm produce.

Groceries and other Commodities.

Bread is sold in 2½d. loaves which, at the time of the investigation (June, 1909), weighed from 12 oz. to 14 oz.; in February, 1909, when flour was cheaper, the weight of the loaf was from 14 oz. to 16 oz. The majority of wage-earning families, however, do their own baking. Eggs are consumed largely in early summer, when the price is about 11d. per dozen. Milk, delivered regularly by dairies, cost 4¼d. per quart; retailed over the counter by grocers, or delivered in bottles along with other orders, it cost 3½d. per quart. Both bituminous and anthracite coals are used for domestic purposes,

but most wage-earning families use bituminous, costing from 16s. 8d. to 18s. 9d. per short ton of 2,000 lb. Sometimes this kind of coal is bought in quantities of 400 lb. for 4s. 2d., and in bags of from 80 to 100 lb. for 1s. 0½d. Anthracite coal costs from 31s. 3d. to 32s. 3½d. per short ton.

The following Table shows the predominant prices of some of the principal groceries and other commodities in February, 1909 :—

Predominant Prices paid by the Working Classes in February, 1909.

| Commodity. | Predominant Price. |
|------------------------------------|----------------------|
| Tea per lb. | 2s. 6d. |
| Coffee " | 10d. |
| Sugar :— | |
| White Granulated " | 3d. |
| Brown " | 2½d. |
| Bacon, Breakfast—Boneless... .. " | 10d. |
| Eggs per 1s. | 10 |
| Cheese, American per lb. | 10d. |
| Butter " | 1s. 3d. |
| Potatoes, Irish... .. per 7 lb. | 7d. |
| Flour, Wheaten— Household " | 11½d. to 1s. 0¼d. |
| Bread, White per 4 lb. | 10d. ,, 11½d. |
| Milk per quart | 3½d. ,, 4¼d. |
| Coal :— | |
| Anthracite per cwt. | 1s. 9d. ,, 1s. 9¾d.* |
| Bituminous " | 11¼d. ,, 1s. 0½d.* |
| Kerosene per gallon | 7½d. ,, 9d. |

* By the ton of 2,000 lb.

Meat.

Most of the meat sold in Muncie is killed locally. Beef and pork, especially the latter, are mainly consumed. Veal is bought to a small extent by the families of skilled workers. The predominant prices of the principal cuts of meat in February, 1909, were as follows :—

Predominant Prices paid by the Working Classes in February, 1909.

| Description of Cut. | Predominant Price per lb. |
|-------------------------------------|---------------------------|
| Beef :— | |
| Roasts—Round | 6¼d. to 7½d. |
| " Ribs prime | 6¼d. ,, 7½d. |
| " Ribs second cut | 6¼d. |
| " Chuck or short ribs | 6¼d. |
| Steaks—Round | 7½d. |
| " Sirloin | 7½d. to 9d. |
| Shin without bone | 5d. ,, 6¼d. |
| Flank | 5d. |
| Plate, Brisket—Fresh | 4d. to 5d. |
| Mutton or Lamb :— | |
| Leg | 1s. 0½d. |
| Breast | 6¼d. |
| Loin | 10d. |
| Chops | 10d. to 1s. 0½d. |
| Shoulder | 7½d. |
| Neck | 5d. to 6¼d. |
| Veal :— | |
| Cutlets | 10d. |
| Rib chops | 7½d. to 9d. |
| Loin chops | 9d. |
| Breast | 5d. to 6¼d. |
| Neck | 5d. ,, 6¼d. |
| Pork :— | |
| Fresh—Loin | 7½d. |
| " Spare rib | 5d. to 6¼d. |
| " Shoulder | 6¼d. |
| " Chops | 7½d. |
| Corned (wet salt or pickled) | 6¼d. to 7½d. |
| Dry salt | 6¼d. ,, 7½d. |
| Ham | 7½d. ,, 9d. |
| Shoulder, salt or smoked | 5d. ,, 6¼d. |

Prices at New York being taken as the base, =100, in each case, the index number for the price of meat at Muncie is 97, for other food it is 98 and for food prices as a whole 98. For rents and food prices combined the index number is 85.

NEW ORLEANS.

New Orleans, the largest city in Louisiana, is situated at the same latitude as Cairo in Egypt, 30° N., and lies on the eastern bank of the Mississippi, about 100 miles distant from the mouth of the river, at a point where the river makes a bend, giving the city a crescent shape. The position was selected in 1718 by the early French colonists as the nearest point to the mouth of the river at which tolerably firm and dry land could be found. All the land for several hundred miles from the mouth is alluvial deposit brought down by the river, which has a constant tendency to silt up its bed and raise itself gradually above the level of the surrounding country. A large part of the site of New Orleans is now slightly below the level of the river, which is prevented from overflowing by extensive embankments known as levees. To prevent flooding after rains, there is now in operation a great pumping system, which discharges the surface water into Lake Pontchartrain, a salt water inlet which forms the northern boundary of the city.

To a considerable extent the streets and avenues follow the rectangular plan usual in America, but owing to the bending of the river this plan is modified, many of the streets following the crescent shape of the river bank, whilst the cross avenues tend to converge like the radii of a circle. The business centre of the city is towards the river in Canal Street and the neighbourhood. Canal Street is a very broad thoroughfare, dividing the city into unequal parts, and has four lines of tramway tracks. All the tramway routes converge upon this street, which is therefore exceedingly busy and rather noisy. Excepting for its great width, it is quite of the ordinary modern American type, comprising huge blocks of office buildings, tall hotels and large dry-goods stores. There is nothing about these business buildings that suggests even a different climate from that of Massachusetts or Minnesota, and the same thing may be said of the entire business quarter which lies to the west of Canal Street.

The old quarter lies on the east side of the city. It is commonly known as the French quarter, though nearly all the buildings date from the end of the eighteenth century, when Louisiana belonged to Spain, for a fire in 1788 destroyed almost the whole of the original town. French names and the French language still prevail, however, with a considerable admixture of Italian, whilst the prevailing architecture is predominantly Spanish. The houses and shops are built of brick and stone, in contrast with the all-pervading frame buildings of the American residential districts. Hand-wrought iron railings round the balconies on the first floor are a noticeable peculiarity of the streets, which in other respects are not unlike the older quarters of many European towns. The streets are rather narrow, and many of the houses, built close up to the pavement, which formerly were the homes of the well-to-do, are now let out piecemeal to poor families. In Esplanade Avenue, however, the old houses of the French aristocracy stand in their own grounds, and are inhabited by the descendants of the old families, who lead an exclusive life and have little connexion with the business world of modern New Orleans. A strip of grass planted with trees runs down the centre of this thoroughfare, and within this strip the tramway rails are laid, so that the overhead wires are partially concealed by the foliage. This arrangement has been imitated in a number of the more important residential streets in the newer parts of the city, adding greatly to their attractiveness. St. Charles Avenue, in which are the residences of the wealthy business men, is a particularly fine street, especially when the trees are in leaf and the flowers in bloom.

The poor streets, as might be expected, are found in the neighbourhood of the river, the banks of which are lined with wharves and railway tracks. The streets gradually improve as one goes inland from the river, until St. Charles Avenue is reached. Further inland still are districts occupied mainly by the middle classes and some of the upper working classes. There are areas of some magnitude in which no coloured people live, and some districts which are almost exclusively occupied by them. It is only in this inland district that the two races are separated to any considerable extent. All along the belt between Magazine Street and the river bank, white and coloured people live in close proximity. Beyond the old French quarter, going further east, is another large working-class district, in which there are both white and coloured people, but rather more separated than is the case in the districts near the river on the west side.

The area comprised within the city boundaries, which have not been altered since 1870, is 196 square miles, but a great part of this is uninhabited, and much, in fact, is swampy land. The inhabited area is about 50 square miles.

It is unquestionable that the modern development of the city would have been more rapid but for the fact that the Mississippi river is no longer the great highway for traffic which it used to be. The railways have taken away nearly all the traffic both in passengers and goods. Some coal is floated down in barges all the way from Pittsburg, and cotton is brought by water from those plantations which are close to the river or its tributaries, but the river is only of minor importance as a means of general inland transportation. This is a fact which is always noted with regret in New Orleans, because there are many other ports which have good railway connexions, and the destruction of the river traffic means the loss of the special advantages of situation which New Orleans used to enjoy. It is largely in the hope of regaining some of the trade which has been diverted to a number of rival centres that the people of New Orleans are taking an active part in the project of a "Lakes to the Gulf Deep Waterway." At present only vessels drawing not more than seven to eight feet of water can reach St. Louis regularly, and the shifting of sandbanks makes the voyage precarious. From New Orleans downwards there is already a very good depth of water, and at the mouth of the river a minimum depth of 30 feet is maintained by dredging. A new channel at the mouth is being prepared which is to have a depth of 35 feet.

The principal export trade of New Orleans is in raw cotton, timber, cotton-seed oil and cake, wheat, maize, wheat flour and tobacco. The trade in cotton has been somewhat stationary of late, owing to the development of other ports equally accessible by rail, but the lumber industry has increased. It is a great disadvantage to New Orleans that its import trade is comparatively small, the country within easy reach being thinly populated. For the five years ended June 30th, 1905-9, the total values of imports and exports and the tonnage of vessels entered and cleared in the foreign trade have been as follows :—

| Year ended June 30th. | Tonnage Entered and Cleared in the Foreign Trade. | Value of Imports. | Value of Exports. |
|-----------------------|---|-------------------|-------------------|
| | Tons. | £ | £ |
| 1905 | 3,778,245 | 7,069,437 | 31,445,197 |
| 1906 | 3,555,654 | 8,221,871 | 31,349,860 |
| 1907 | 4,138,541 | 9,593,078 | 35,533,839 |
| 1908 | 4,032,502 | 8,913,676 | 33,219,953 |
| 1909 | 4,186,670 | 9,523,562 | 30,204,505 |

By far the largest item in the list of import values is coffee, the imports of which in the year ended June 30th, 1909, amounted to £4,181,293. Sugar was the next largest item, amounting to £1,595,364. The only other large items were fibres and manufactures of fibres, and bananas.

The population of New Orleans, as returned at the Censuses of 1870-1910 is shown in the following Table :—

| Year. | Population. | Increase. | Percentage Increase. |
|-------|-------------|-----------|----------------------|
| 1870 | 191,418 | — | — |
| 1880 | 216,090 | 24,672 | 12·9 |
| 1890 | 242,039 | 25,949 | 12·0 |
| 1900 | 287,104 | 45,065 | 18·6 |
| 1910 | 339,075 | 51,971 | 18·1 |

The population in 1900 contained 27·1 per cent. of negroes and 10·3 per cent. of foreign-born whites. Of the latter, 28·8 per cent. were born in Germany, 19·3 per cent. in Italy, 17·8 per cent. in Ireland, 14·6 per cent. in France and 5·0 per cent. in Great Britain. Since that date, Italian immigration has been considerable, especially from the South of Italy and Sicily. The natives of France constituted only about 1½ per cent. of the entire population, but there are a number of descendants of the early French settlers,

who are not an important factor in the industries of the city, but are found to a considerable extent in the retail trades. It is probable that in New Orleans there is a larger number of white and negro people in very much the same economic position than in any other American city, or anywhere else in the world. The industries of New Orleans are of a kind which employ mainly unskilled or semi-skilled labour, with the result that both white men and negroes are found doing the same kind of work and earning the same rates of pay. Moreover, the unskilled and semi-skilled white labourers are not merely Italians, but include Americans, German-Americans and still more Irish-Americans. It must not be supposed, however, that social equality of the two races is recognised, even amongst the unskilled labouring population, for on the whole the "colour line" is drawn with all the strictness common to the Southern States. The two races will work side by side, but they will not play together, go to the same schools, or sit together in tramway cars. In the North exactly the opposite conditions are apt to prevail. Amongst children in the streets of New Orleans there is a certain approximation to the Northern attitude. White boys will occasionally play baseball with negro boys, but they will not allow them to compete in the sale of newspapers.

Vigorous and successful efforts have been made in recent years to improve the health of New Orleans. The pumping system already mentioned has greatly diminished the prevalence of malaria, and the number of deaths due to this cause has declined from 300 or 400 per annum twenty or thirty years ago to thirty or forty per annum. It is confidently hoped that yellow fever has been practically eradicated. The dissemination of this disease by the *stegomyia* mosquito is now understood. This mosquito breeds only in clear standing water, so that the task of preventing the occurrence of an epidemic of yellow fever reduces itself to that of seeing that all cisterns are effectively screened and any other standing water covered with a thin layer of paraffin oil. This work is undertaken by the Board of Health at a cost of about £8,000 per annum. The last epidemic of yellow fever occurred in 1905, but there were only 437 deaths from this cause out of a total of 7,329 deaths. The greatest single cause of mortality is tuberculosis, which carries off very large numbers of negroes especially. In recent years about one-seventh of the total deaths have been due to tuberculosis, which is now on the list of diseases which must be notified.

The general death-rate, as estimated by the Board of Health, has ranged from 20 to 22 per thousand of the population during recent years, that amongst the whites only being between 16 and 19 per thousand, including deaths in public institutions and hospitals. Absolute accuracy cannot be claimed for these figures, however, owing to uncertainty regarding the total population and the proportion of negroes since the last Census. Nevertheless, it is clear that the death-rate has diminished during the past twenty years. In the decade 1890 to 1900, the general death-rate was estimated at between 25 and 30 per thousand, and it was much higher in earlier years.

The climate during six months of the year is quite temperate, and frosts and snow-falls are experienced occasionally. The principal drawback is the fact that most rain falls in the hot season, rendering the climate very trying during that period. Mention has already been made of the comprehensive system of surface drainage which has been introduced, with the effect of rendering the land reasonably dry. A sewage system is also being carried out, but as yet the great majority of houses, including almost all those occupied by the wage-earning classes, are without sewer connexions. Owners of property are not compelled to make connexions even when the drains have been laid in the streets. In all middle-class districts such connexions are always made as soon as practicable, because the tenants wish to have them, but many of the poorer families are indifferent and are unwilling to pay any additional rent to compensate the owners of property for the expense of installing modern sanitation. The new city water supply is being pushed forward, and meets with a readier demand than the drainage system, but the majority of working-class homes still depend for their water upon huge butts which collect the rain from the roofs. This supply is liable to give out in a spell of dry weather, especially in crowded tenement districts where many families live under one roof. At the time of the investigation 2,500 out of 70,000 houses had sewer connexions, and 4,000 had water connexions.

The tramway system, the gas supply and the electric lighting works are in the hands of a company. Gas is sold at 4s. 9½d. per thousand cubic feet. Another company has recently been negotiating for the introduction of natural gas, which would be sold at a much lower price than the coal gas. The wharves or docks are public property, with the exception of the Stuyvesant Docks, owned by the Illinois Central Railroad Company. The public docks are administered by a board appointed by the Government of the State of Louisiana.

An important public enterprise is the Public Belt Railroad, which is a railway line along the river front affording a convenient means of transferring freight cars from one railway system to another. This line, which is now about ten miles in length, was built by funds provided by the city, and is managed by a board appointed by the mayor, on the advice of leading business organisations. The cost was small, as the ownership of the river front had been retained by the State. The charges for the haulage of trucks are low, but the revenue is sufficient to pay expenses. The city owns a large number of markets at which most of the retail trade in meat and vegetables is transacted.

A net revenue of about £42,000 per annum is obtained from the markets, but the greater part of the city revenues is derived from the general property tax. The poll tax brings in less than one per cent. of the total revenue, and liquor licences about 3½ per cent. Little revenue is derived from the public utility service companies excepting under the general property tax.

OCCUPATIONS, WAGES AND HOURS OF LABOUR.

The following Table shows the distribution of the population of New Orleans according to employment at the Census of 1900 :—

Number of Persons of 10 years of age and over engaged in Occupations in New Orleans in 1900 :—

| Occupations. | Males. | Females. | Total. |
|--|--------|----------|---------|
| Building | 5,925 | 9 | 5,934 |
| Metalworking and Engineering | 3,068 | 6 | 3,074 |
| Cotton | 225 | 452 | 677 |
| Other and not specified Textile | 117 | 138 | 255 |
| Boot and Shoe Making | 1,147 | 21 | 1,168 |
| Clothing | 480 | 4,700 | 5,180 |
| Woodworking and Furnishing | 1,970 | 18 | 1,988 |
| Paper and Printing | 846 | 56 | 902 |
| Food, Drink and Tobacco | 2,954 | 650 | 3,604 |
| Other Manufacturing and Mechanical Pursuits | 3,744 | 163 | 3,907 |
| Trade and Transportation | 29,313 | 2,478 | 31,791 |
| Labourers (not otherwise specified) | 20,875 | 334 | 21,209 |
| Professional, Domestic and Personal Service and } Agricultural Pursuits... .. | 12,723 | 19,278 | 32,001 |
| All Occupations | 83,387 | 28,303 | 111,690 |

It is not surprising that the largest number of occupied persons come under the headings "Trade and Transportation," "Labourers not otherwise specified" and "Professional, Domestic and Personal Service and Agricultural Pursuits." New Orleans is not a great manufacturing centre, though, like every other large city, it has many miscellaneous industries. Some of the most important of these industries are sugar refining, tobacco manufacture, brewing, sawmilling, printing and general machinery manufacturing and repairing.

One of the most distinctive of local industries, however, is the handling of cotton. The bales come in from the country only partially pressed, and, to save space on board ship, they are put into powerful presses in New Orleans and reduced to much smaller bulk. The men employed at the cotton presses and warehouses, and those who load the bales into the ships, are strongly organised.

The various unions combine in maintaining the Dock and Cotton Council, which dominates the entire business of compressing, carting, and loading cotton. The members of all unions affiliated to the Council contribute 5 per cent. of their earnings towards the support of the unions, and by arrangement with the employers, earnings, as returned by the men to their union officials, are checked by reference to the employers' books. The main part of the work in the cotton compresses is performed by three gangs of men, the compress gang, the yard gang and the truck gang, who are all paid on a piece work basis. These men are busiest, as a rule, in winter, and have not full employment in summer. The growth of rival shipping ports has had a prejudicial effect on the earnings of all workers engaged in pressing and shipping cotton, so that even during the winter season of 1908-9 earnings were poor. A compress gang consists of thirteen men, who divide the earnings amongst themselves on a scale arranged by the trade union. The largest share goes to the tie hands, of whom there are six in a gang. They sometimes earn as much as 125s. each in a week, but average earnings for the whole year, when trade is fairly good, are equal to from 50s. to 54s. 2d. per week, though the average is much

less in a poor year such as 1908-9. During a fairly good winter season earnings average from 66s. 8d. to 70s. 10d. per week. The yard gang consists of three men, half the gangs being white and half coloured men, and by arrangement between the Dock and Cotton Council and the employers, work has to be impartially apportioned between the white gangs and coloured gangs. In a good season earnings average as much as 75s. per week through the winter, and from 58s. 4d. to 62s. 6d. for the twelve months, but in a poor year they may not average half as much. A truck gang consists of from three to five men, and, like the yard gangs, half are white and half are coloured gangs. Their earnings average from 54s. 2d. to 62s. 6d. weekly all the year round, but they fluctuate greatly with the state of trade. In some weeks a man may earn nothing at all, and in other weeks his earnings will be very large. The earnings of the gangs depend to a considerable extent on the activity of speculation in cotton. When dealings are active much cotton has to be moved and the gangs are kept busy. As particular bales, which are numbered, have to be sorted out, there is a very large element of chance in the earnings. If the numbers required happen to be on the top, a large sum of money is quickly made. But it may happen that a few bales are required from the bottom of the stack, and a hard day's work may then yield scarcely anything, since there is no pay for shifting the bales which are not required.

Cotton teamsters, who are all coloured men, are paid at the rate of 12s. 6d. per day, but engagements are by the quarter day of two and a half hours. Work is irregular, like all work connected with the handling of cotton.

The loading of ships with cotton and tobacco is done by a special class of men known as screwmen, from the fact that screws are used to pack the bales tightly together in the hold. This practice is now being abandoned by some of the steamship companies, but the name of screwmen remains. These men work in gangs of five, consisting of a foreman and four helpers. The former are paid at the rate of 25s., and the latter at the rate of 20s. 10d. for a full day of nine hours. Engagements are by the quarter of a day. Longshoremen, who load and unload general cargoes, are paid at the rate of 1s. 8d. per hour during the day. The recognised hours are from seven a.m. to noon and from one p.m. to five p.m. For work after five p.m. the rate of pay is 2s. 6d. per hour, and for Sunday work it is 3s. 4d. Both white and coloured men work as screwmen and longshoremen, each race having its own union, affiliated to the Dock and Cotton Council, and employers have to divide the work evenly between the white men and the coloured men, provided that a sufficient number of each are available. The white and coloured gangs of screwmen work on opposite sides of a ship, but longshoremen have frequently to work together regardless of colour.

Owing to the fact that organised workmen have to contribute a percentage of their earnings to the union funds, a record of earnings has to be kept and it was therefore possible to obtain a fairly correct estimate of the average actual earnings of longshoremen in 1908. These earnings pointed to an average of from 37s. 6d. to 54s. 2d. per week, the mean being just about half the rate of earnings for a full week, viz., 90s. The year 1908 was not a very good year, however, and 50s. per week is considered to be a fair average earnings in ordinary years.

The white longshoremen and screwmen are mainly of Irish descent. Italians, who are not organised, work at the unloading of bananas, which is a special business. The rate of pay for this work is 1s. 0½d. per hour. The work is perhaps rather less irregular than that of longshoremen, but the Italian banana carrier certainly earns less than the negro or Irish longshoreman.

In the building industry both coloured and white men work at some of the skilled trades. There are said to be more coloured than white bricklayers, and, as organisation is fairly strong, the majority receive the union rate of 2s. 7¼d. per hour. Amongst carpenters the greater proportion of the skilled men are white. The union rate is 1s. 10½d. per hour, but many men outside the union receive lower rates. Many coloured men are employed as rough carpenters and helpers. Plasterers are mainly negroes; they are strongly organised and maintain the union rate of pay, which is 2s. 1d. per hour. Plumbers are white men and about half are said to be in the union, receiving 2s. 4¼d. per hour. Structural iron workers, who are not very numerous, are also white men, and are generally paid the standard rate of 2s. 1d. per hour. The majority of painters are white men, but the union is weak; the union rate is 1s. 8d. per hour, but many painters are employed at lower rates. Labourers are all coloured men; the plasterers labourers have a strong union, but the other labourers are not organised effectively.

Skilled labour in the engineering trades is not so easily obtained as in some Northern towns, and union rates are fairly well recognised. Sugar-house machinery is one of the principal machine shop products.

The principal tobacco industries are the manufacture of cigarettes and the preparation of pipe tobacco. The cigarettes are made by a machine which requires little supervision. Stripping and packing are performed by women and girls working by piece.

Cotton manufacturing has not been extensively developed in New Orleans, but one firm owns several mills. All the weaving is done by women, who earn from 4s. 2d. to 6s. 3d. per day. Frame spinners earn from 2s. 6d. to 5s. 2½d. per day. The hours are 60 weekly. The employment of children under 14 years of age is now prohibited, and a lady inspector sees to the enforcement of the law in cotton mills and large shops in New Orleans.

In newspaper printing offices, linotype operators are on piece work, and hand compositors on time work. These men do not work more than six days per week at the most, and many work only four or five days. The actual hours worked daily are usually rather less than eight. The wages quoted in the Table are for a full six days.

The breweries in New Orleans are engaged in the manufacture of light lager beer. The extensive prohibition of the sale of alcoholic liquors in the Southern States has seriously affected this industry.

In saw mills a comparatively small number of skilled men are required; the majority are engaged in feeding machines or moving and stacking timber in the yards. Cypress wood from the swamps of Louisiana is the most important kind of timber dealt with. There is a considerable manufacture of barrels for holding sugar. The bulk of the manufacture is done by machinery, but some hand work is required, especially in making "tight" barrels for molasses, and in "trimming" the casks for sugar.

The gas manufactured in New Orleans is water gas, so that stokers, in the sense usually understood in England in connexion with gas works, are not employed. The wages quoted refer to engine-room stokers, or "coal passers," as they are called. Motormen and conductors on the tramways are all white men. About 25 per cent. of them are "extras," who do not get a full week's work.

The following Table shows the predominant weekly wages and hours of labour in some of the principal occupations in February, 1909. The particulars relate to white men, except in the case of plasterers, road menders and unskilled labourers and drivers and teamsters generally, who are mainly coloured. The wages and hours stated for bricklayers apply equally to white and coloured men.

Predominant Weekly Wages and Hours of Labour of Adult Males in the Principal Occupations in February, 1909.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|--|---------------------------|-------------------------------------|
| <i>Building Trades :—</i> | | |
| Bricklayers... .. | 125s. | 48 |
| Stonemasons | 100s. to 112s. 6d. | 48 |
| Stonecutters | 90s. ,, 100s. | 48 |
| Carpenters... .. | 80s. ,, 90s. | 48 to 54 |
| Plasterers | 100s. | 48 |
| Plumbers | 100s. to 112s. 6d. | 48 |
| Structural Iron Workers... .. | 100s. | 48 |
| Painters | 70s. to 80s. | 48 |
| Hod Carriers and Bricklayers' Labourers | 50s. ,, 70s. | 48 |
| Plasterers' Labourers | 60s. ,, 70s. | 48 |
| <i>Foundries and Machine Shops :—</i> | | |
| Ironmoulders | 81s. 3d. | 54 |
| Machinists | 81s. 3d. | 54 |
| Blacksmiths | 81s. 3d. to 87s. 6d. | 54 |
| Patternmakers | 81s. 3d. ,, 87s. 6d. | 54 |
| Labourers | 43s. 9d. | 54 |
| <i>Saw Mills :—</i> | | |
| Bandsawyers | 125s. to 175s. | 60 |
| Machine Feeders | 37s. 6d. ,, 43s. 9d. | 60 |
| Yard Labourers | 33s. 9d. ,, 37s. 6d. | 60 |
| <i>Drivers—</i> | | |
| One horse | 35s. ,, 37s. 6d. | 60 |
| Two horses | 37s. 6d. ,, 40s. | 60 |

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|--|---|-------------------------------------|
| <i>Coopering :—</i> | | |
| Hand Coopers and Trimmers | 50s. to 62s. 6d. | 54 to 60 |
| Machine Minders and Labourers | 37s. 6d. ,, 43s. 9d. | 60 |
| <i>Printing Trades :—</i> | | |
| Newspaper— | | |
| Hand Compositors—Night work | 116s. 3d. to 118s. 9d. | 46½ to 47½ |
| Machine Compositors—Night work | 120s. 10d. ,, 145s. 10d. | 48 |
| Book and Job— | | |
| Hand Compositors | 75s. ,, 83s. 4d. | 48 to 54 |
| Pressmen } Cylinder Presses | 75s. ,, 83s. 4d. | 48 ,, 54 |
| } Platen Presses | 62s. 6d. | 48 ,, 54 |
| <i>Brewing :—</i> | | |
| Cellar Men and Kettle Men | 68s. 9d. to 75s. | 51 to 70 |
| Wash-house Men | 62s. 6d. ,, 68s. 9d. | 51 ,, 70 |
| <i>Heavy Carting (see also under Saw Mills) :—</i> | | |
| Drivers, Teamsters— | | |
| Two mules | 37s. 6d. to 50s. | 60 to 66 |
| Three or four mules | 54s. 2d. ,, 56s. 3d. | 60 ,, 66 |
| <i>Dock Labour and Cotton Pressing—See text.</i> | | |
| <i>Public Services :—</i> | | |
| Street Construction, Paving and Cleaning— | | |
| Paviors | 87s. 6d. to 100s. 43s. 9d. ,, 50s. 37s. 6d. | 60 |
| Paviors' Labourers } Contractors' Men | | 60 |
| Road Menders | | 60 |
| Road Sweepers (Municipal) | 50s. | 54 |
| Water Works (Municipal)— | | |
| Labourers | 51s. 1d. | 70 |
| Water Gas Works (Company)— | | |
| Engine-room Stokers | 51s. 1d. | 84 |
| Construction Labourers | 37s. 6d. | 60 |
| Electric Light and Power Works (Company)— | | |
| Dynamo Tenders | 115s. 5d. to 120s. 2d. | 56 |
| Stokers | 58s. 4d. | 56 |
| Labourers | 51s. 1d. | 63 |
| Electric Tramways (Company)— | | |
| Motormen and Conductors | 64s. 2d. | 70 |

Taking wages at New York as the base, = 100, in each case, the wages index numbers for New Orleans are—building trades, skilled men 94, hod carriers and bricklayers' labourers (negroes) 87; foundries and machine shops, skilled men 94, unskilled labourers (negroes) 104; printing, hand compositors (job work) 90.

HOUSING AND RENTS.

Although there are tenement house districts of some importance in New Orleans, the predominant type of dwelling occupied by the working classes is the one-family frame house. At the Census of 1900, 77·2 per cent. of the families enumerated lived in dwelling-houses occupied by one family, 11·6 per cent. in dwelling-houses occupied by two families and 11·2 per cent. in dwelling-houses occupied by three or more families. The tenement houses consist almost entirely of old buildings, most of which were formerly the homes of well-to-do families, or retail shops, but are now divided and let as tenements of one, two, three or more rooms. Whilst some of these houses are in good repair, and are occupied by a good class of tenants, many are very dilapidated. The floors frequently rest directly on the earth, and the boards are rotting; the plaster has largely fallen away from the walls and the roofs are in a bad condition. Most of the tenement houses were built long ago, when air and light were not valued very highly, and one may find houses, which evidently have been inhabited by people of means at one time, with very dark rooms in the rear, and only a narrow dark courtyard. Some of the larger houses of this kind in the French quarter are built with a small courtyard in the centre, the rooms opening off this yard on the ground floor, and off a gallery above. Sometimes a house of this type is let off in single rooms to a dozen or more families of negroes or Italians. White families, other than Italians, live in the tenement houses to some extent,

but the Italians are most given to overcrowding. The city government has recently undertaken an enquiry into the condition of tenement houses, with a view to taking steps for their improvement. Rents in these old houses vary considerably. The front room is often very large and well lighted, and may let for 5s. 9d. per week, whilst the small dark rooms at the back may not cost more than 1s. 11d. per week; the usual rent is about 2s. 11d. per week per room.

In the extensive area outside of the older tenement house districts, the intersecting streets and avenues enclose rectangular "blocks," commonly about 300 feet square, occupied by 40 or 50 frame houses. As a general rule the houses face one or other of the streets which form the boundaries of the block. Sometimes, however, an alley leads to some houses built within the block, but this is seldom the case with houses occupied by white tenants, and it is not very common in any class of house in the modern districts.

Frame houses occupied by working men are mainly of the type known as the "gun-barrel." On a site 30 feet wide and 100 to 130 feet deep is built a pair of semi-detached houses, with the rooms all on one floor, one behind the other, with no passage by which the middle rooms can be separately entered, though a narrow passage at the side of the house gives access to the yard in the rear, and affords independent access to the kitchen. When there are five rooms to a house of this kind, the building occupies a large proportion of the total length of the plot. A water-butt, a shed and a privy leave only a small amount of yard space, and there is no room for a garden. Such a semi-detached house is commonly from 12½ to 13 feet wide outside, so that the rooms have a width of about 12 feet. The front room, and perhaps one of the others, may be 14 or 15 feet long, and the remainder about 12 feet square, or 12 feet by 10 feet. The kitchen is often a lean-to erection, and what is known as a "box kitchen," that is to say, the walls are not plastered. Some of the older types of houses have the kitchen detached from the main building, and it is not uncommon for such a detached building to consist of two stories, with stairs outside leading to the upper room, which is used as a bedroom. Sometimes both front and back buildings are two-storied, and a bridge connects the upper floors. This device would appear to have been adopted in the days before electric tramways encouraged the greater diffusion of the population, with the result that the worst-lighted rooms could be avoided by building houses on larger plots. Even in the case of more modern houses, the back portion often consists of two stories when the front has only one, but the rear is not now built detached from the rest of the house. The modern house with a two-storied rear has usually more rooms than the ordinary "gun-barrel" house, and the rent exceeds what working men can pay.

The front of the ordinary type of working man's house has almost invariably a heavy projecting cornice. The better types are set back from the road, and have verandahs in front. Terraces of ten or twenty houses, built connected, exist, but they are rare. These terrace houses as a rule contain two small rooms and are inhabited by negroes.

Basements for furnaces are not required in the climate of New Orleans, and cellars of any kind are very rare; since it is only in recent years that the surface drainage system has been in operation to a sufficient extent to prevent frequent flooding.

Few of the houses occupied by wage-earning families are connected with the sewer system as yet, and not very many have water-laid on. Partly for this reason, rents are not so high in New Orleans as in many American cities. Where these improvements have been added, rents are from 1s. to 1s. 11d. per week higher. Another circumstance of some importance as bearing on the question of rents is the slower rate of increase of population in New Orleans compared with many cities, as a result of which land has not acquired such a high speculative value. Further, as four and five-roomed houses in New Orleans are usually built semi-detached, they do not occupy so large a frontage as houses with the same number of rooms in, for instance, Birmingham.

In the inland portion of the city, away from the dock district and the negro population, rents are higher than they are towards the river front. Four-roomed houses in this district let for 13s. 6d. per week, and five-roomed houses with bathrooms for 19s. 3d. per week, city water being charged for extra when supplied. The number of working men living in these houses is small, however, compared with the great mass who live in the more typically working-class neighbourhoods. Industrially New Orleans is mainly a town of unskilled or semi-skilled workmen, and their houses predominate in determining the level of rents.

The following Table shows the predominant ranges of rents for houses and tenements occupied by wage-earning families, according to the number of rooms, in February, 1909 :—

Predominant Rents of Working-class Dwellings.

| Number of Rooms per Dwelling. | Predominant Weekly Rents. | |
|-------------------------------|---------------------------|------------------------|
| | Paid by Coloured Tenants. | Paid by White Tenants. |
| One room | 2s. 11d. to 3s. 10d. | — |
| Two rooms | 4s. 10d. „ 6s. 9d. | — |
| Three rooms | 7s. 8d. „ 9s. 7d. | 6s. 9d. to 9s. 7d. |
| Four rooms | 8s. 8d. „ 11s. 6d. | 9s. 7d. „ 11s. 6d. |
| Five rooms | — | 11s. 6d. „ 14s. 5d. |

The level of rents at New York being represented by 100, the rents index number for New Orleans is 72.

The one and two-roomed tenements occupied by Italians are scarcely, if at all, better than those occupied by negroes. The white people who occupy the three-roomed class are mainly the poor and unthrifty, and agents prefer letting houses of this type to coloured people, because as a rule only a steady type of coloured tenant takes a three-roomed house. The four-roomed house is the type most commonly occupied by white working men, other than Italians. Negroes also occupy such houses in appreciable numbers, but not uncommonly in family combinations, such as two married sisters, or father and mother and married daughter. The white tenants occupy, on the whole, a slightly higher rented class of four-roomed houses. The difference, which is almost entirely due to situation, is less than one might expect, because many negro families are willing to pay a good rent for a house so situated that the husband can walk to his work and the wife or daughter find employment in a middle-class household not too far away. Five-roomed houses are not occupied by negro wage-earning families to any great extent.

RETAIL PRICES.

The public markets are a very important factor in retail trade. Practically all the meat and most of the fruit and vegetables consumed in New Orleans are purchased in the markets, which are open from 8 a.m. until noon. The stalls are rented largely by persons of French and Italian descent. Goods are sold in a rather primitive fashion, usually without actual weighing, 5, 10 or 25 cents' worth (the cent is equivalent to one half-penny), as the case may be, being judged by eye. It is consequently difficult to ascertain the exact price per lb. of an article so sold. Vegetables in particular are bought by 5 cents' worth. Groceries and meat are more commonly bought in the larger units of 10 and 25 cents' worth, except by negroes who, more than any other class, buy from hand to mouth, and consequently often pay higher prices than they would otherwise, the price per lb. being often much cheaper for the larger quantities. The following quantities at 10 cents and 25 cents respectively, obtained from a shop in a poor quarter by workers at a Social Settlement, illustrate this fact :—flour, 1¼ lb. and 6¼ lb. ; sugar, 1¾ lb. and 4¾ lb. ; grits, 2½ lb. and 7½ lb. ; beans, 1¼ lb. and 3½ lb. ; maize meal, 2½ lb. and 7½ lb. ; tea, 2 oz. and 12 oz. ; soap, 2 lb. and 6 lb. ; rice, 1 lb. and 3 lb. In the cases of coffee, butter, macaroni and lard no loss was incurred through buying the smaller quantities.

Many kinds of canned goods are sold in tins at 5d. per tin, or three tins for 1s. 0½d. The same system of selling applies to meat. Thus, when 1 lb. costs 5d. 3¾ lb. are offered for 1s. 3d. ; 1¾ lb. of roast ribs can be bought for 10d., 2¾ lb. for 1s. 3d., and 3¾ lb. for 1s. 8d. The practice of buying in small quantities is doubtless partly due to the climate, which makes it difficult for poor families to store things, and the difficulty is increased by the swarms of small red ants which find their way into every corner of a building in New Orleans.

Groceries and other Commodities.

Owing, probably, to the warmth of the climate, home baking is not practised so extensively in New Orleans as in many American cities. The bakery business is therefore considerable, and the price of *bread* is lower than in most cities.

Flour is usually retailed in quantities smaller than is general in most American cities; the fixed unit of sale is usually the price, the weight, on the other hand, varying. *Potatoes* are generally sold in similar fashion, 1½ lb. or 2 lb. being retailed for 2½*d.* in February, 1909. When sold by the half-peck, however, the price of potatoes was 7*d.* per 7 lb., and, for purposes of comparison with other places, this latter price has been taken.

Macaroni is a staple food with the Italians, who maintain their customary diet to a greater degree in New Orleans than more northerly cities of America. Two principal kinds of macaroni are used, viz., imported, of which the price is 5*d.* per lb., and American-made, which is considerably cheaper. Many Italians, however, even though poor, prefer to buy the higher-priced imported article, and it is the same with regard to olive oil. Those who have been brought up on the genuine article dislike the cheap substitutes which are produced in America. Quite poor families will pay 2*s.* 6*d.* or more per quart for imported Italian oil, though American substitutes cost only 1*s.* 9*d.* or less. Imported Italian cheese is also bought by all classes of Italians, in spite of the high price which has to be paid for it.

The Italians in New Orleans drink wine in preference to beer, which has become their drink in many places in America. Californian wine is purchased at about 2*s.* per gallon and forms an important item in their family budget.

Negroes are more addicted to the "hog and hominy" diet in this warm climate than in northern places, but a large consumption of cabbage is also characteristic of them.

Vegetables generally are abundant. Italian market-gardeners have established themselves on the western side of the Mississippi opposite New Orleans, and they not only provide vegetables for the neighbouring city, but send them far up the Mississippi Valley and to Chicago, as they are produced early in the latitude of New Orleans.

Milk is expensive, retailing at 6*d.* per quart. The land in the neighbourhood is not suitable for cattle, and the warmth of the climate makes it difficult to keep milk fresh. Hence condensed milk is used extensively.

Coal is not much used by the working classes. The chief fuels used are oil and charcoal, whilst poor families can collect drift wood from the river free of charge.

The following Table shows the predominant prices of some of the principal groceries and other commodities used by the working classes in February, 1909:—

Predominant Prices paid by the Working Classes in February, 1909.

| Commodity. | Predominant Price. |
|-----------------------------------|--|
| Tea per lb. | 1 <i>s.</i> 8 <i>d.</i> |
| Coffee " | 10 <i>d.</i> |
| Sugar:— | |
| White Granulated " | 2½ <i>d.</i> to 3½ <i>d.</i> |
| Brown " | 2 <i>d.</i> „ 2½ <i>d.</i> |
| Bacon, Breakfast—Boneless... .. " | 10 <i>d.</i> |
| Eggs per 1 <i>s.</i> | 8 to 10 |
| Cheese, American per lb. | 10 <i>d.</i> |
| Butter " | 1 <i>s.</i> 5½ <i>d.</i> |
| Potatoes, Irish per 7 lb. | 7 <i>d.</i> |
| Flour, Wheaten—Household " | 11½ <i>d.</i> to 1 <i>s.</i> 2½ <i>d.</i> |
| Bread, White per 4 lb. | 9½ <i>d.</i> „ 10 <i>d.</i> |
| Milk per quart | 6 <i>d.</i> |
| Coal, Bituminous per cwt. | 1 <i>s.</i> 3½ <i>d.</i> to 1 <i>s.</i> 6½ <i>d.</i> * |
| Kerosene per gallon | 6 <i>d.</i> |

* By the barrel of 180 lb.

Meat.

Considerable quantities of meat are shipped to New Orleans from the great packing centres, Chicago and Kansas City, but the Butchers' Association maintains an abattoir at which Texas cattle are slaughtered.

The climate naturally has some influence on the consumption of meat, which is below the average for America, whilst poultry and fish are consumed to a considerable extent. Local poultry is not of good quality, but is cheap. Catfish, a rather coarse fish caught in the river, is consumed largely by negroes. Redsnapper, from the Gulf of Mexico, is a fish of better quality, consumed by the middle classes and the better-paid working-class households.

The following Table shows the prices in February, 1909, of the principal cuts of meat of the qualities mainly consumed by the wage-earning classes :—

Predominant Prices paid by the Working Classes in February, 1909.

| Description of Cut. | Predominant Price per lb. |
|------------------------------|---------------------------|
| Beef :— | |
| Roasts—Round | 6½d. |
| „ Ribs prime | 7½d. |
| „ Ribs second cut | 6¼d. |
| „ Chuck or short ribs | 5d. |
| Steaks—Round | 6¼d. |
| „ Sirloin | 7½d. |
| Plate, Brisket { Fresh... .. | 3½d. to 5d. |
| { Salt or corned | 5d. |
| Mutton or Lamb :— | |
| Leg | 8d. to 10d. |
| Breast | 5d. |
| Loin | 7½d. to 10d. |
| Chops | 10d. |
| Shoulder | 5d. to 7½d. |
| Neck | 5d. |
| Veal :— | |
| Cutlets | 9d. to 1s. 0½d. |
| Rib chops | 7½d. to 10d. |
| Loin chops | 7½d. „ 10d. |
| Breast | 3½d. „ 5d. |
| Neck | 2½d. „ 4d. |
| Pork :— | |
| Fresh—Loin | 7½d. |
| „ Spare rib | 5d. to 6¼d. |
| „ Shoulder | 5d. „ 7½d. |
| „ Chops | 7½d. |

Prices at New York being taken as the base, = 100, in each case, the index number for the price of meat at New Orleans is 88, for other food it is 105 and for food prices as a whole 100. For rents and food prices combined the index number is 93.

NEWARK.

Newark, one of the principal manufacturing cities in the United States and the largest city in the State of New Jersey, lies to the west of New York City, from which it is distant some eight miles by rail and some fifteen miles by water. It is situated on the right bank of the River Passaic, the centre of the city being about three miles above Newark Bay. Being within the immediate zone of influence of New York, like New Jersey, Hoboken and Paterson, and on the direct line of communication between New York and Philadelphia, Newark in its traffic with the South and West shares in most of the advantages of railway communication enjoyed by the chief city of the United States.

One of the characteristics of the industry of Newark is the great variety of manufactures carried on upon an important scale within its area. The most considerable of these are lead and copper smelting and refining (for which industry, however, statistics cannot be shown separately without disclosing the operations of individual establishments), the leather industry, engineering, jewellery and precious metal working, brewing, hatmaking, clothing and the chemical industry (particularly paint and varnish making).

Newark is a settlement of ancient date, having been founded in 1666, while the charter of its incorporation was issued in 1713. Its growth during the last eighty years has been remarkable: in 1830 the inhabitants numbered less than 11,000. The following Table shows the population at each Federal Census 1870-1910 :—

| Year. | Population. | Increase. | Percentage Increase. |
|-------------|-------------|-----------|----------------------|
| 1870 | 105,059 | — | — |
| 1880 | 136,508 | 21,449 | 29·9 |
| 1890 | 181,830 | 45,322 | 33·2 |
| 1900 | 246,070 | 64,240 | 35·3 |
| 1910 | 347,469 | 101,399 | 41·2 |

In 1900 the American-born of native-born parents formed 29·1 per cent. of the population and Americans of foreign-born parents 39·2 per cent., while immigrant aliens (whites) contributed 28·9 per cent. The negroes formed an inconsiderable proportion of the population, being only 2·7 per cent.

Persons born in Germany constituted the largest proportion of the foreign-born element (35·2 per cent.); those born in Ireland came next (17·9 per cent.), and after them the natives of Italy (12·0 per cent.). The percentages of inhabitants born in Great Britain, Austria-Hungary and Russia were respectively 10·8, 7·9 and 7·7.

The following Table shows the general death-rate and the death-rate from tuberculosis in Newark for each of the five years 1904 to 1908. The births were stated to have been incompletely returned up to October, 1908, when registration of birth within five days was made obligatory :—

| Year. | Death-rate per 1,000 of Population. | Death-rate from Tuberculosis per 1,000 of Population. |
|-------------|--|--|
| 1904 | 19·8 | 2·85 |
| 1905 | 17·7 | 2·76 |
| 1906 | 19·1 | 2·93 |
| 1907 | 19·1 | 2·83 |
| 1908 | 17·1 | 2·61 |

The city covers an area of 23·4 square miles, but of this there are eight square miles of undeveloped meadow lands. The surface is mainly level, and the streets, with an average breadth of 60 feet, are wide and well-laid, while many of them are bordered with trees. On January 1st, 1909, there were 194 miles of paved and 86 miles of unpaved streets. Apart from the more central districts and the factory premises, wooden structures

predominate, and in the period from January 1st, 1900, to June 30th, 1909, the permits issued for dwelling-houses to be built of wood were four times as numerous as for those of brick (6,859 as against 1,708).

The appearance of the city suggests very active business life and considerable prosperity. An indication of the rapid development of Newark in recent years is afforded by the great increase in investment in building enterprise. In 1903 and 1904 the estimated cost of buildings for which permits were issued by the city was stated at £1,140,371 and £1,335,893 respectively; both in 1905 and 1906 the corresponding cost exceeded two million pounds; the figures for the two succeeding years showed a decrease, but the estimated cost of buildings for which permits were issued in the six months ending June 30th, 1909, was £1,812,838. The total tax valuation of the city (real and personal property) increased from £31,007,251 in 1900 to £61,620,999 in 1908. The post office receipts have also shown great expansion: in 1900 they were returned at £91,113, while in 1907 and 1908 they amounted respectively to £186,962 and £191,684.

The municipality owns several pretty parks within the urban area, with a total of 655 acres, while there are county parks with an aggregate area of 3,178 acres. There are a number of notable public and private buildings in the centre of the city, and many fine churches exist. The electric tramway system is very complete: twenty-one lines, with 102 miles of track, are in operation. In addition to the public parks, the city owns the water works and the public library (with 140,000 volumes and a circulation of 851,000 volumes in 1908), and maintains the public educational system. The gas works, the electric light and power works and the tramway system are controlled by a single company.

Several important communities, either residential or industrial in character, adjoin Newark or lie near to it. Of these the four Oranges (Orange, and West, East and South Orange), which in 1905 contained 66,026 inhabitants, are to some extent mere suburbs of New York. Bloomfield, with a population in 1905 of 11,668, although mainly residential, has several important industrial establishments, while Harrison, on the left bank of the Passaic opposite Newark, and for all practical purposes one with the city, is an essentially manufacturing centre with a population in 1905 of 12,823. The city of Elizabeth, with 60,509 inhabitants in 1905, is a considerable manufacturing centre—one firm alone employs 8,000 people—some five miles to the south of Newark. These places, with others of importance, are connected with the city by tramways, and by one or more lines of railway with both it and New York. Many of the better residential districts of Newark itself contain a notable number of houses of New York business people.

OCCUPATIONS, WAGES AND HOURS OF LABOUR.

The following Table shows the number of persons of ten years of age and over engaged in occupations in Newark at the time of the Federal Census of 1900:—

Number of Persons of 10 years and over engaged in Occupations in Newark in 1900.

| Occupations. | Males. | Females. | Total. |
|---|--------|----------|---------|
| Building | 7,228 | 33 | 7,261 |
| Metalworking | 9,816 | 874 | 10,690 |
| Cotton | 205 | 655 | 860 |
| Other and not specified Textile | 247 | 472 | 719 |
| Leather | 3,293 | 150 | 3,443 |
| Boot and Shoe Making | 1,636 | 337 | 1,973 |
| Hat and Cap Making | 1,527 | 541 | 2,068 |
| Other Clothing | 1,694 | 3,558 | 5,252 |
| Woodworking and Furnishing... .. | 1,304 | 107 | 1,411 |
| Paper and Printing | 1,295 | 407 | 1,702 |
| Food, Drink and Tobacco | 3,001 | 375 | 3,376 |
| Other Manufacturing and Mechanical Pursuits | 8,004 | 3,532 | 11,536 |
| Trade and Transportation | 22,693 | 4,216 | 26,909 |
| Labourers (not otherwise specified) | 7,578 | 265 | 7,843 |
| Professional, Domestic and Personal Service and } Agricultural Pursuits. | 9,086 | 8,662 | 17,748 |
| All Occupations | 78,607 | 24,184 | 102,791 |

Since the Census of 1900 was taken the population has increased by over 40 per cent. While, therefore, the figures of the Table only approximately represent the occupational classification of the population at the present time, they indicate the essentially industrial character of the city, and this character tends every year to be more marked. Since 1900 the industries which then specially distinguished the city, such as the manufactures of leather, jewellery, celluloid and varnish, have continued to develop; the metal trades, already of great importance, have increased in volume and variety of output, and many new factories for different articles have been established.

The weekly hours of labour show a considerable range. In the building trades a week of 44 hours predominates; in the printing and brewing trades, both highly organized, the weekly hours are 48, in the metal and jewellery trades 54 to 55 and in the leather trade 59 to 60. The short Saturday is not usual, except in the building trades. Work generally begins at seven or eight a.m., and rarely extends beyond six p.m.

Trade organisations are numerous and in some cases strong in Newark. Workers in the printing and brewing trades are able to enforce their union rates of wages, hours of labour and other conditions, and in most branches of the building trades the union conditions are accepted by employers. In the foundries and machine shops the ironmoulders and patternmakers are well organized, while certain classes of the leather workers have obtained recognition of their rates. As in Providence, the workpeople in the jewellery industry are here unorganised. The high degree of specialisation and the great diversity of the production in this trade in Newark, by dividing the workers into numerous small groups, militate against the growth of a close community of interest among bodies of workers sufficiently numerous to exert influence.

Apart from the clothing trade there is no staple industry in Newark in which women predominate or are numerically equal to the male workers, yet in the great variety of industries carried on here a considerable amount of employment is available for them in many directions. In the jewellery trade they form nearly one quarter of all employed, being mainly occupied in certain branches of polishing, in the making of small chains and in enamelling. Among the miscellaneous trades which, according to the report of the State Bureau of Industrial Statistics, afforded employment for women in 1908 may be mentioned boxmaking, threadmaking, the manufacture of cigars, buttons, hats and caps, corsets, confectionery, rubber goods, and watch cases and watch materials, and the needle trades common to every city.

Notes are added regarding the conditions which prevail in the more important trades.

Building Trades.—Most of the labour employed in the skilled occupations is organized and the union rates appear to be fairly well maintained. The unskilled workers consist largely of Irish and Italians. The hod carriers and bricklayers' labourers are organized, and in most cases receive the union rate of 1s. 5½d. per hour, while general labourers receive rates varying from 7½d. to 10d. per hour. Stonecutting is an important industry in Newark, material being worked not only for local needs but also for distant markets. There are three union rates of wages for freestone stonecutters, applicable according to individual skill, viz., 16s. 8d., 18s. 9d. and 20s. 10d. per day, and these rates are usually observed.

Metalworking Trades.—This group of trades employs the largest individual aggregate of industrial workers in Newark. It will be seen from the Table given that the number of those occupied in the metalworking trades in 1900 exceeded 10,000, being about 10 per cent. of the total population engaged in occupations. The foundry and machine shop production of Newark and the adjoining district of Harrison is highly important both as regards volume and variety: machine tool construction is one of the principal branches of this industry.

Jewellery Trades.—Newark is one of the principal seats of the manufacture of gold jewellery in the United States. The output of the Newark industry, which is stated to date from 1805, is on the whole of a higher grade than that of Providence, and in this respect these two cities are said to stand in much the same relation the one to the other as do Hanau and Pforzheim in Germany. The occupations require for the most part skill of a high character. Being largely engaged in the production of articles of luxury, the industry is very sensitive to the general conditions of trade, and it suffered severely in the financial crisis of 1907. The majority of the workers in this trade are American-born. The municipality encourages the trade by giving instruction in jewellery design in the municipal drawing school.

Varnish Manufacture.—The production comprises most of the varieties used for industrial purposes, but the finer kinds are principally made. In some cases the making of varnish is combined with the making or mixing of paints. Although this trade occupies a high place among the Newark industries, some of the firms being among the largest of the kind in the country, the number of persons employed is not great in proportion to the capital invested.

Leather Industry.—This industry is of considerable importance. The chief production is of fancy and enamelled leathers for upholstering, carriage and motor-car linings, fancy goods, etc. Little shoe or boot leather, save tan patent leather, is made. The workers are mainly semi-skilled or unskilled men, but some of the later processes, such as splitting (machine) and japanning, require considerable skill.

Public Services.—The municipality contracts for the bulk of the street paving work, and the number of men directly employed by the city on repair work is small. The rates shown in the Table for paviers are those paid by contractors. The granite block paviers are strongly organised, and receive 20s. 10d. per day of eight hours, only four hours being worked on Saturday, but the vitrified brick paviers have a weak union, and not only are their earnings generally much below those of the granite paviers, but their hours are also longer. The work of collecting and disposing of garbage is also done by contract. Road sweepers are employed by the city, being paid 10d. per hour, but their hours are so irregular that it is not possible to state normal weekly earnings. In February, 1909, one gang worked only 12 hours in the week, a second 11 hours, a third 15 hours and a fourth 20 hours. The hours worked appear rarely to exceed from 30 to 40 weekly. As already stated, the supply of gas and of electric light and power and the tramway system are in private hands. The motormen and conductors on the tramways are paid time wages according to length of service; they receive 10d. per hour during the first year, 10½d. during the three succeeding years, 11d. from the fifth to the tenth year and 11½d. during any subsequent service. They work ten hours a day seven days a week.

The following Table shows the predominant weekly earnings and weekly hours of labour in certain important occupations in Newark in February, 1909 :—

Predominant Weekly Wages and Hours of Labour of Adult Males in the Principal Occupations in February, 1909.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|--|---------------------------|-------------------------------------|
| <i>Building Trades :—</i> | | |
| Bricklayers | 119s. 2d. | 44 |
| Stonemasons | 119s. 2d. | 44 |
| Stonecutters | 91s. 8d. to 114s. 7d. | 44 |
| Carpenters | 91s. 8d. | 44 |
| Plasterers | 119s. 2d. | 44 |
| Plumbers | 100s. 10d. | 44 |
| Structural Iron Workers | 103s. 2d. to 114s. 7d. | 44 |
| Painters | 75s. 2d. | 44 |
| Hod Carriers, Bricklayers' and Plasterers' Labourers | 64s. 2d. | 44 |
| General Labourers | 37s. 6d. to 50s. | 54 to 60 |
| <i>Foundries and Machine Shops :—</i> | | |
| Ironmoulders | 75s. to 87s. 6d. | 54 |
| Coremakers | 75s. | 54 |
| Machinists | 67s. 6d. to 75s. | 54 |
| Blacksmiths | 62s. 6d. to 68s. 9d. | 54 |
| Labourers | 43s. 9d. | 54 to 60 |
| <i>Jewellery Trades :—</i> | | |
| Bench Hands | 75s. to 100s. | 54 to 55 |
| Stone Setters | 125s. ,, 166s. 8d. | 54 ,, 55 |
| Stampers ("Drop" hands) | 63s. ,, 91s. 8d. | 54 ,, 55 |
| Engravers | 100s. ,, 125s. | 54 ,, 55 |
| Die Cutters | 116s. 8d. ,, 145s. 10d. | 54 ,, 55 |
| Small Tool Makers | 83s. 4d. ,, 104s. 2d. | 54 ,, 55 |
| Polishers | 62s. 6d. ,, 83s. 4d. | 54 ,, 55 |

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|--|---------------------------|-------------------------------------|
| <i>Varnish Making:—</i> | | |
| Melters' Helpers, Shippers, Packers | 50s. to 62s. 6d. | 50 |
| Unskilled Men | 41s. 8d. | 50 |
| <i>Printing Trades:—</i> | | |
| Newspaper— | | |
| Compositors, Hand and Machine—Day Work ... | 108s. 4d. | 48 |
| Pressmen | 95s. 10d. | 48 |
| Book and Job— | | |
| Hand Compositors | 76s. 6d. to 87s. 6d. | 48 |
| Machine Compositors | 91s. 8d. „ 100s. | 48 |
| <i>Tanning:—</i> | | |
| Fleshers | 58s. 4d. | 59 to 60 |
| Unhairers | 50s. to 54s. 2d. | 59 „ 60 |
| Limers | 45s. 10d. to 50s. | 59 „ 60 |
| Japanners | 75s. to 104s. 2d. | 59 „ 60 |
| Labourers | 41s. 8d. | 59 „ 60 |
| <i>Brewing:—</i> | | |
| Wash-house Men | 66s. 8d. | 48 |
| Cellar Men | 75s. | 48 |
| Kettle Men | 75s. | 48 |
| Fermenting-room Men | 75s. | 48 |
| Engine Men | 91s. 8d. | 48 |
| Firemen | 75s. | 48 |
| Route Drivers | 75s. | 48 |
| Depot Drivers | 66s. 8d. | 48 |
| Shipping-room Men | 75s. | 48 |
| <i>Public Services:—</i> | | |
| Street Construction, Paving and Cleaning (Contract)— | | |
| Granite Paviers | 114s. 7d. | 44 |
| Brick Paviers | 75s. | 60 |
| Paviors' Labourers | 37s. 6d. | 60 |
| Scavengers | 41s. 8d. | 60 |
| Drivers | 50s. to 58s. 4d. | 60 |
| Water Works (Municipal)— | | |
| Labourers | 41s. 8d. | 50 |
| Gas Works (Company)— | | |
| Gas Stokers | 51s. 1d. | 84 |
| Labourers | 40s. 10d. | 70 |
| Electric Light and Power Works (Company)— | | |
| Electricians | 65s. 8d. | 70 |
| Linemen | 68s. 9d. | 54 |
| Stokers | 71s. 6d. | 56 |
| Labourers | 51s. 1d. | 70 |
| Electric Tramways— <i>See text.</i> | | |

Taking wages at New York as the base, =100, in each case, the wages index numbers for Newark are—building trades, skilled men 98, hod carriers and bricklayers' labourers 93; foundries and machine shops, skilled men 87, unskilled labourers 104; printing, hand compositors (job work) 94.

HOUSING AND RENTS.

The bulk of the wage-earning families in Newark live in houses that contain two or three families. At the Census of 1900, the percentage of families living in dwelling-houses occupied by one family was 30·2, that in dwelling-houses occupied by two families 29·4, that in dwelling-houses occupied by three families 21·3 and that in dwelling-houses occupied by four or more families 19·1. Working people appear to live for the most part in dwellings of four and five rooms, but a small proportion of them, who are in receipt of large and steady wages, occupy dwellings of six rooms.

There are in Newark four fairly distinct types of working-class dwellings. One of these is the tenement dwelling found in blocks containing three and six tenements. These blocks are for the most part of fairly modern construction, but represent a very wide range of convenience and rental. They are three stories in height, and contain one or two tenements on each floor. The second type is found in a much larger tenement block, often built of brick, containing sometimes as many as sixteen dwellings.

Some of these blocks are very old and somewhat irregular in construction, while others are quite modern and conform to a more or less definite plan. The third type consists of old houses of a cottage pattern, many of which were built for occupation by only one family. Some are still so occupied, but others have with slight alteration been adapted so as to contain two families. Others, again, though of the same general type, were originally built for more than one household and are still so occupied. The fourth and last type is the two-family house of modern construction. This is a dwelling of excellent appearance and great convenience. Such houses are found in considerable numbers, but although they cannot be excluded from the list of working-class dwellings, they represent the accommodation of the professional and business classes rather than the manual workers, the workpeople who occupy them being as a rule artisans of exceptional skill and wage-earning power, though a few of these houses, somewhat below the average in quality, bear a more decided working-class stamp.

These four types may now be considered in greater detail.

The three-storied house containing three or six tenements is almost invariably built of wood and is bay-fronted. The tenements on each floor are of the same pattern and of the same size except that the ground-floor dwelling has sometimes one room less than those above, the extra accommodation upstairs consisting of a small room built over the ground floor hall space. The dwellings are, as a rule, accessible from both the front and the back by staircases. The back staircase is often an external one, and the upper tenements have almost invariably small balconies at the back. As a rule there is only one entrance from the street, the hall being used in common by all the tenants. In the better class houses of this type the street door is usually kept latched. Speaking tubes communicating between the front porch and each flat are a common feature, and a caller having announced himself through the tube usually finds the door opened to him by means of a neat electrical appliance controlled from the tenement to which he desires access. Each tenement, though entered from the common hall or staircase, is entirely self-contained, having its own conveniences and all its rooms accessible either from a small interior corridor or hall, or intercommunicable, the latter arrangement being the more common. The flats of this type seldom contain less than four or more than six rooms, which as a rule are of fairly large dimensions. In one typical house three of the five rooms, namely the kitchen, parlour and chief bedroom, each measured about 16 feet by 14 feet; the second bedroom was about 12 feet square, and the third was somewhat smaller. The rent of this tenement was 14s. 5d. per week.

In the older or more central parts of the city are many scattered blocks of tenements of much larger size than the type which has just been described. They are usually four stories high and contain from eight to sixteen dwellings. Some are well placed and well appointed and in appearance suggest the middle-class flat familiar in London, but on the whole their location and general arrangement lead to their becoming the homes of the less well-to-do among the working classes. Many of the blocks have been built under the new Tenement Law and show a wise forethought for health and safety from fire. Others, however, are old and represent housing conditions at their worst so far as Newark is concerned, having many unsatisfactory features in the shape of rooms entirely unlighted or lighted only very dimly from another room or a passage, confined yards and dirty and unventilated conveniences. A type of tenement frequently found in these old blocks is one known colloquially as a "railroad" tenement, *i.e.* one consisting of four rooms all in line from back to front. In such a tenement only the two outer rooms are directly lighted: the others have only borrowed light, and in the case of some that have not yet come under the observation of the tenement house inspectors and been amended in accordance with the law, no light at all. These old tenements, however they may have been adapted in strict compliance with the law relating to old tenement houses, are as a rule very inferior to the dwellings that have been erected according to the elaborate rules of the Tenement House Commission. The rooms in the tenements of this type are generally smaller than those in the three-tenement house previously described, but the fittings and appointments in the more modern ones are very similar. In the old large tenement blocks a water-tap with sink in the kitchen is often the only "improvement" provided in a self-contained dwelling, for as a rule there is no bathroom and the sanitary convenience is shared in common with other tenants in the same block.

The one-family and two-family cottages forming the third type of house were erected before Newark had a large industrial population. They usually have rather high-pitched roofs and contain two or three attics. Structurally they are in all essential features similar to the superior type of two-family house to be described below, but they are without the attractive appearance, the spaciousness and the conveniences of the latter type. The rooms are generally small and bathrooms are rare. Some still contain only one family,

but these are probably the minority ; usually they were either built for two families or they have since with slight adaptation, such as the provision of water-tap and sink in the kitchen, been converted into two-family houses. The single-family cottages that still remain often appear to offer good value for the rent charged.

The fourth and best type of dwelling in Newark is the two-family house of modern construction. These houses are almost invariably fitted with all the usual modern improvements, such as were described above in connexion with the three-family house. In addition they have the advantage, as a rule, of a much superior appearance and also—there being only two tenants—a greater degree of privacy. The rooms in these houses are often heated by a furnace in the basement. In the houses at the lower rentals, the furnaces are in the care of the respective tenants: in the superior houses heating is sometimes included in the rent, but such houses are seldom occupied by the working classes. The two-family houses have usually three attics, which are assigned to the tenants according to arrangement. Sometimes they are unplastered and are used only as store rooms: in other cases they are used as bedrooms. The houses have usually a fairly deep porch in front and often a balcony on the first floor. The style of architecture lends itself to great variety, and the houses of this type represent a wide range of rentals, though comparatively few can be obtained for less than 19s. 3d. per week for a suite of five or six rooms, including one or two attics.

The following Table shows the predominant rents of dwellings containing four, five and six rooms at Newark in February, 1909 :—

Predominant Rents of Working-class Dwellings.

| Number of Rooms per Dwelling. | | | | | Predominant Weekly Rents. |
|-------------------------------|-----|-----|-----|-----|---------------------------|
| Four rooms | ... | ... | ... | ... | 9s. 7d. to 12s. 6d. |
| Five rooms | ... | ... | ... | ... | 12s. 6d. ,, 16s. 4d. |
| Six rooms | ... | ... | ... | ... | 14s. 5d. ,, 19s. 3d. |

The level of rents at New York being represented by 100, the rents index number for Newark is 78.

The above rentals include the cost of water. No taxes fall directly on the tenant.

Tenement houses in Newark, and indeed in the whole of New Jersey, are under the supervision of a State Board which acts in accordance with the Tenement House Act of 1904. This is a rather elaborate measure, containing over two hundred clauses, which regulates with much detail the construction of new tenement houses, and also provides within certain limits for the alteration of existing tenement houses. A tenement house is defined by the law to be a "house or building or portion thereof which is rented, leased, let or hired out to be occupied or is occupied as the house or residence of three families or more living independently of each other and doing their cooking upon the premises, or by more than two families upon any floor so living and cooking, but having a common right in the halls, stairways, yards, water-closets, privies or some of them." The Act pays particular attention to the provision of means of escape in the event of fire, requiring that both new and old tenement houses shall be provided with duly approved and specified fire escapes. These fire escapes usually consist of iron stairways, built outside, and often detract from the appearance of the house, but no one can doubt their value as a precautionary measure in the case of closely packed tenement buildings four stories high. Great attention is also paid to securing sufficient air space around the new tenement blocks, and to the proper ventilation of inner courtyards where such exist. It is also provided in the case of such new houses that every apartment shall open to the outer air. As has already been mentioned, many of the old tenements have dark rooms, and in these cases the Act requires that a sash window of specified size opening into an adjoining room shall be provided. This is probably all that can be done in the circumstances without wholesale rebuilding, but the measure of relief is not great, for in many cases where the law has been complied with the room still remains very unpleasantly dark and close. Among the less technical provisions of the law may be mentioned the following: In every tenement house the owner is required to keep a proper light burning in the entrance hall at night time, and if the house contains more than two stories, another light on the second floor. No basement or cellar dwelling may be occupied without a written permit, and this permit is granted only after compliance with various conditions. No wall paper may be placed upon any wall or ceiling of any tenement house unless all old wall paper is first removed and the wall or ceiling thoroughly cleaned. In every new

tenement house there must be a water-closet within each dwelling, while in every existing tenement house there must be at least one water-closet for every two families. Each dwelling in a new tenement house must also be provided with a sink. A similar provision applies to tenement houses existing at the time of the passing of the Act, except in cases where a sink had already been installed on each floor.

It should be observed that the provisions of the Tenement House Act and the work of the State Board are supplementary to the ordinances and duties of the local sanitary and building authorities. The State Board has its own staff of inspectors, who are engaged on the one hand in supervising the erection of new tenement houses and on the other hand in inspecting old buildings and gradually bringing them into compliance with the law. Occasionally there may be some overlapping of the State and the municipal authority, and instances arise where either authority could take action. These cases are easily settled by agreement, though there is no doubt that where persons of considerable local influence are affected, the cities occasionally find it convenient to leave the exercise of coercive powers to the State Board.

RETAIL PRICES.

There is one retail market in Newark, but, relatively to the size of the city, it is not of great importance. Meat is sold at twenty stalls, and fruits, vegetables, groceries and provisions at about one hundred stalls. One large meat firm, with shops in New Jersey, has eight shops in Newark, while another general shop has nine. Two multiple firms are represented, and two large general shops in particular carry on a considerable trade with the wage-earning classes. There are no co-operative societies.

Groceries and other Commodities.

The bulk of the *bread* consumed at Newark is bought, for there is little home-baking. Wheaten bread is mainly eaten, but the Jews and some recent immigrant races eat a good deal of bread made of rye and wheat mixed. The $2\frac{1}{2}d.$ white loaf is supposed to weigh 16 oz., but loaves tested in different retailers' shops were found to weigh from 14 to 16 oz. A loaf at the somewhat unusual price of $3d.$ was also met with, this loaf weighing 16 oz.

The *sugar* generally purchased is white granulated.

In addition to the ordinary American *cheese*, Limburg and Swiss cheese is much eaten, the Limburg being sold at $10d.$ or $11d.$ per lb., and the Swiss at $1s. 0\frac{1}{2}d.$ if American-made and at $1s. 5\frac{1}{2}d.$ if imported.

Coal is usually bought by the ton (of 2,000 lb.) or the half-ton, but it is also bought from hawkers at the price of $5d.$ for about 20 lb.

The following Table shows the predominant prices for certain commodities in February, 1909 :—

Predominant Prices paid by the Working Classes in February, 1909.

| Commodity. | Predominant Price. |
|-------------------------------------|--|
| Tea per lb. | 1s. 8d. to 2s. 6d. |
| Coffee " | 1s. 0 $\frac{1}{2}d.$ |
| Sugar :— | |
| White Granulated " | 3d. |
| Brown " | 3d. |
| Bacon, Breakfast—Boneless " | 11d. |
| Eggs per 1s. | 8 to 10 |
| Cheese, American per lb. | 9d. ,, 11d. |
| Butter " | 1s. 4d. ,, 1s. 6 $\frac{1}{2}d.$ |
| Potatoes, Irish... .. per 7 lb. | 7d. ,, 7 $\frac{1}{2}d.$ |
| Flour, Wheaten — Household " | 1s. 0 $\frac{1}{2}d.$,, 1s. 1 $\frac{1}{2}d.$ |
| Bread, White per 4 lb. | 10d. ,, 1s. |
| Milk per quart | 4 $\frac{1}{4}d.$,, 4 $\frac{3}{4}d.$ |
| Coal, Anthracite per cwt. | 1s. 5 $\frac{1}{2}d.*$ |
| Kerosene per gallon | 6d. to 7 $\frac{1}{4}d.$ |

* By the ton of 2,000 lb.

Meat.

The beef comes mainly from the Western packing centres, but there are meat packing firms near Newark. Much of the pork consumed is produced in and near the city. There is no municipal slaughter house.

The bulk of the meat sold is chilled. Beef and mutton are in greatest favour, pork being less popular in Newark than elsewhere among the working classes. There is practically no difference in price between mutton and lamb, except in the shops frequented by the wealthier classes, and there a difference of from 1*d.* to 1½*d.* per lb. is made.

The following Table shows the predominant prices of the various cuts in February, 1909 :—

Predominant Prices paid by the Working Classes in February, 1909.

| Description of Cut. | Predominant Price per lb. |
|-------------------------------------|---|
| Beef :— | |
| Roasts—Round | 8 <i>d.</i> to 9 <i>d.</i> |
| " Ribs prime | 8 <i>d.</i> ,, 10 <i>d.</i> |
| " Ribs second cut | 7 <i>d.</i> ,, 8 <i>d.</i> |
| " Chuck or short ribs | 5 <i>d.</i> ,, 7 <i>d.</i> |
| Steaks—Round... .. | 9 <i>d.</i> ,, 10 <i>d.</i> |
| " Sirloin... .. | 10 <i>d.</i> ,, 11 <i>d.</i> |
| Shin without bone | 5 <i>d.</i> |
| Flank | 4 <i>d.</i> to 6 <i>d.</i> |
| Plate, Brisket { Fresh | 3 <i>d.</i> ,, 4 <i>d.</i> |
| { Salt or corned | 3 <i>d.</i> ,, 4 <i>d.</i> |
| Mutton or Lamb :— | |
| Leg | 7 <i>d.</i> to 9 <i>d.</i> |
| Breast | 4 <i>d.</i> ,, 5 <i>d.</i> |
| Loin | 9 <i>d.</i> ,, 10 <i>d.</i> |
| Chops | 10 <i>d.</i> ,, 11 <i>d.</i> |
| Shoulder | 7 <i>d.</i> ,, 9 <i>d.</i> |
| Neck | 4 <i>d.</i> ,, 6 <i>d.</i> |
| Veal :— | |
| Cutlets | 1 <i>s.</i> to 1 <i>s.</i> 0½ <i>d.</i> |
| Rib chops | 8 <i>d.</i> ,, 11 <i>d.</i> |
| Loin chops | 8 <i>d.</i> ,, 11 <i>d.</i> |
| Breast | 6 <i>d.</i> ,, 8 <i>d.</i> |
| Neck | 6 <i>d.</i> ,, 7 <i>d.</i> |
| Pork :— | |
| Fresh—Loin | 8 <i>d.</i> to 9 <i>d.</i> |
| " Spare rib | 4 <i>d.</i> ,, 6 <i>d.</i> |
| " Shoulder | 6 <i>d.</i> ,, 7½ <i>d.</i> |
| " Chops | 8 <i>d.</i> ,, 9 <i>d.</i> |
| Corned (wet salt or pickled) | 7 <i>d.</i> ,, 9 <i>d.</i> |
| Dry salt | 7½ <i>d.</i> ,, 9 <i>d.</i> |
| Ham | 7½ <i>d.</i> ,, 8 <i>d.</i> |
| Shoulder, salt or smoked | 6 <i>d.</i> ,, 7 <i>d.</i> |

Prices at New York being taken as the base, = 100, in each case, the index number for the price of meat at Newark is 108, for other food it is 106 and for food prices as a whole 106. For rents and food prices combined the index number is 99.

PATERSON.

Paterson is in the State of New Jersey, about 16 miles to the north-west of New York, at a point on the Passaic river where there is a considerable fall, affording good opportunity for obtaining water power. It was on this account that the site was selected for the first experiments in founding new industries in America by the Society for the Promotion of Useful Manufactures, an association which had been founded by Alexander Hamilton, the celebrated statesman and advocate of protection for America's infant industries. Cotton manufacture was the industry which it was intended first to introduce into Paterson, but the earliest efforts were unsuccessful. In course of time, however, both cotton manufactures and machinery works were established, and they continued to be the principal industries in Paterson for a considerable time.

About the middle of the nineteenth century silk manufacture was introduced, the first successful venture being that of an Englishman from Coventry. The silk industry steadily increased in importance, receiving considerable impetus from the immigration of Englishmen from Macclesfield, while the cotton industry tended to concentrate in New England. It is said that the nature of the water supply, which is favourable for silk dyeing, has been an important factor in making Paterson the centre of the silk industry.

The engineering trades are now mainly represented at Paterson by locomotive building works and firms making textile machinery.

Paterson differs in appearance from English manufacturing towns mainly on account of the prevalence of light-coloured frame houses and the large area over which they extend. These characteristics, together with the sunnier climate, give to the town a brighter aspect than English people usually associate with manufacturing centres. The silk factories are distributed in all directions. Some of them are near the river, and lease water power from the Society for the Promotion of Useful Manufactures, which still retains the water rights, though not itself engaged directly in manufacturing. The majority of the mills, however, use steam power, yet while chimneys are plentiful they are not very conspicuous, as the silk mills are not of large size.

The business portion of the city was entirely destroyed by fire in 1902, and much damage was done in the following year by a great flood. The city appears, however, to have quite recovered from these disasters. The business quarter has been entirely rebuilt and now contains at least two public buildings with some architectural merit, viz., the City Hall and the Post Office. Tall blocks of office buildings and hotels are noticeably absent, the proximity of New York limiting the need for offices and hotel accommodation. Stone and brick have been used in the re-building, so that this portion of the city has much the same appearance as an English town. The streets are fairly well maintained in the central and better suburban districts, but the poorer and outlying streets are neglected. A certain amount of excuse for this neglect is to be found, no doubt, in the expense of maintaining the great length of streets required by the system of detached frame houses. A compensating feature, however, is afforded by the trees which line many of the residential streets.

The surrounding country consists, towards the south and east, of a fairly level wooded plain, dotted with small towns, mainly residential suburbs of New York, while on the western side are thickly wooded rocky hills, barren but picturesque. The falls of the Passaic at Paterson have been robbed of much of their attraction by the drawing-off of most of the water for power production, but above the town the river is pretty, especially where it flows by the park. The river is not navigable for commercial purposes in the neighbourhood of Paterson.

The growth of population is shown in the Table given below. The great increase shown from 1870 to 1890 was mainly the result of the expansion of the silk industry. The area of the city is approximately $8\frac{1}{2}$ square miles.

| Year. | Population. | Increase. | Percentage Increase. |
|-------------|-------------|-----------|----------------------|
| 1870 | 33,579 | — | — |
| 1880 | 51,031 | 17,452 | 52.0 |
| 1890 | 78,347 | 27,316 | 53.5 |
| 1900 | 105,171 | 26,824 | 34.2 |
| 1910 | 125,600 | 20,429 | 19.4 |

The number of nationalities represented in Paterson is considerable. At the Census of 1900 foreign-born persons formed 36.9 per cent. of the total population. Persons born in Germany, Ireland and England were represented in nearly equal numbers, forming respectively 17.3, 17.0 and 16.2 per cent. of the foreign-born population, while Holland contributed 12.6 per cent., Italy 11.0 per cent. and Scotland 7.2 per cent. The most noticeable fact about the foreign-born population is the unusually large proportion from the British Isles. A considerable Irish element is common in American cities, but the percentage of English and Scottish people is seldom so large as in Paterson. A visitor from England soon perceives that there must be an appreciable number of his countrymen in this city from the fact that boys may frequently be seen kicking Association footballs on vacant spaces, while he may see regular games played in fields in the suburbs. In American cities generally it is quite a rare thing to see games of football or even of baseball played on Saturday afternoon, apart from professional and college games. In a few of the Eastern cities, however, where British immigration has occurred to an appreciable extent in recent years, Association football, both amateur and professional, is said to be making headway.

Many of the Dutch immigrants are dyers' helpers and are comparatively unskilled, but the women and girls are in request in the weaving mills, where they have a reputation for steadiness. The Italians, whose numbers have probably further increased since the last Census, are mainly engaged in unskilled labour of various kinds, but all nationalities are found amongst the silk weavers.

Owing to events which occurred some years ago, there is a prevailing impression that Paterson is specially associated with anarchists of a dangerous type. This is by no means the case at the present day, and probably never was true in the degree commonly supposed. There were, at the time of the memorable strike at the dye works some years ago, Italians who advocated violent attacks on the property of the companies; but appeals to violence of that kind may occur in America during labour disputes, quite independently of the nationality of the workers or of their political labels, and Paterson has no worse record in this respect than other industrial centres in America. In regard to the number of arrests for crimes in ordinary years, Paterson compares favourably with most cities of corresponding size.

The mortality statistics of Paterson indicate fairly healthy conditions. The death-rate during the last few years has been from 15 to 17 per 1,000 of the population. In regard to births, the annual reports of the Board of Health indicate that registration is often neglected, on which account it is impossible to estimate the birth-rate.

The public gas, water and electric light and power supply services, as well as the tramways, are in the hands of companies, which receive their charters from the State. The city derives no revenue from these undertakings, which are not even liable to the local property tax. This tax is the most important source of municipal revenue, but liquor licences provide about ten per cent. of the total. The tramways are part of an extensive system which connects all the principal cities of New Jersey. Apart from the through traffic, there is a considerable local traffic of people going to and from their work, but as the mills are scattered over the city the workers do not need to use the cars so much as in many cities.

OCCUPATIONS, WAGES AND HOURS OF LABOUR.

The nature of the predominant industries in Paterson is clearly indicated in the following Table, based on the Census of 1900, in which all occupied persons over ten years of age are classified according to employment :—

Number of Persons of 10 years of age and over engaged in Occupations in Paterson in 1900.

| Occupations. | Males. | Females. | Total. |
|---|--------|----------|--------|
| Building | 2,816 | 9 | 2,825 |
| Metalworking and Engineering | 3,881 | 25 | 3,906 |
| Silk | 6,536 | 6,066 | 12,602 |
| Bleaching and Dyeing | 2,014 | 12 | 2,026 |
| Other and not specified Textile... .. | 1,363 | 1,060 | 2,423 |
| Boot and Shoe Making | 236 | 3 | 239 |
| Clothing | 374 | 1,303 | 1,677 |
| Woodworking and Furnishing | 275 | 2 | 277 |
| Paper and Printing | 213 | 72 | 285 |
| Food, Drink and Tobacco | 938 | 22 | 960 |
| Other Manufacturing and Mechanical Pursuits | 2,107 | 173 | 2,280 |
| Trade and Transportation | 7,111 | 992 | 8,103 |
| Labourers (not otherwise specified) | 3,051 | 25 | 3,076 |
| Professional, Domestic and Personal Service and } Agricultural Pursuits | 3,324 | 2,504 | 5,828 |
| All Occupations | 34,239 | 12,268 | 46,507 |

The dominant position taken by the silk industry is clearly shown by the foregoing return. The largest works in this industry are in the dyeing branch, which is almost entirely in the hands of two firms. Weaving firms are seldom of any considerable size, the largest number of workpeople employed by any one firm being about eight hundred. Most of the mills are shared by several firms, who rent space and power. The silk-throwing firms are still smaller, the largest having only one hundred and twenty employees. Men and women are employed in about equal numbers at weaving, and their earnings for full time do not differ very widely, the principal difference being that women lose more time than men. Earnings of weavers for a full week are difficult to ascertain with accuracy, because no record is kept of the hours of attendance. All weavers lose a certain amount of time owing to changes of warp, and in silk weaving, where patterns are changed fairly often, the interruptions may make a considerable total. Whenever a firm is at work on orders which require varieties of pattern, the earnings of weavers will vary greatly according to the degree of continuity in their work; but independently of this cause of irregularity, there are seasonal fluctuations affecting all firms, while changes of taste which help one firm hinder another. Ribbon weavers, on the whole, earn more than broad-silk weavers, and those on Jacquard looms earn rather more than those doing plain work. In broad-silk weaving, two looms to a weaver is the general rule, but a system of four looms with automatic stop motion is being tried. Weekly earnings of weavers appear to range mainly from 45s. 10d. to 66s. 8d. for a full week's work. Loom fixers, twisters and male warpers, who are strongly organised, are paid 75s. per week. Women warpers, who are employed to a considerable extent, earn from 52s. 1d. to 62s. 6d. per week.

The younger women and girls, and those who have not the requisite skill to become weavers, are employed as winders and pickers, and earn from 20s. 10d. to 33s. 4d. per week. Silk throwing employs a considerable number of young persons of both sexes. The youngest girls and boys (from 14 years upwards) are employed as bobbin carriers at about 12s. 6d. per week. They then go on to reeling, winding, doubling and twisting. Not much more than 29s. 2d. per week can be earned in the throwing mills, excepting sometimes on piece work, at which some youths earn from 33s. 4d. to 41s. 8d. at twisting and reeling.

By an Act of the Legislature of New Jersey the hours of labour in factories and workshops of young persons under 18 years of age and of women are limited to 55 per week, and this law practically fixes the hours for all persons employed in the silk mills at this number. The minimum age at which children may be employed is fixed at 14 years. Employers seem to favour the law, although the complaint is heard that the longer hours for which children under 16 years may be employed in Pennsylvania give some advantage to silk-throwing firms in that State. The difficulties of enforcing

the age-limit of 14 years mainly arise in New Jersey, as elsewhere in the United States, from the frequent neglect of birth registration, misrepresentation of the age of children by poor parents, especially Italian immigrants, and the keen desire of children themselves to earn money, even when their parents are not too poor to keep them. There is no evidence, however, that the law is seriously evaded.

In the dye works, most of the labour is of a comparatively unskilled type; dyers' helpers, the most numerous class, are paid 45s. 10d. per week of 55 hours. Raw hands are taken on at lower rates, but the majority receive the regular rate and about as many earn above the normal as below it. Finishers have a standard rate of 58s. 4d. per week, but some receive rather more. Head dyers are paid from 62s. 6d. upwards, according to the degree of responsibility attaching to them. There is nothing approaching a standard rate of wages for these men, who are not sharply divided from the salaried class.

The two locomotive-building works are owned now by one firm, which has a number of works in other parts of the country. Up to 1907 the works at Paterson employed between them several thousand men, but at the time of the investigator's visit both were closed, owing to the depression of trade. It was then uncertain whether they would be re-opened as locomotive works or adapted for some other purpose. The other machine shops in Paterson are mainly engaged in making textile machinery.

In the building and printing trades unionism is strong and union rates mostly prevail. Since the trade depression of 1907-9, however, there has been a movement on the part of employers in favour of the "open shop," but so far without any important effect on wages. The 44-hour week is general in the building trades. Russian Jews have begun to get a footing in the building trades, in the erection and painting of cheap houses. At present they are few in number, but their entry into the building trade is a matter of serious concern to the trade unionists, as the Russian Jews, unlike the Englishmen and Scotchmen who are frequently met with in the skilled trades, are not easily persuaded to join the unions or to refrain from cutting rates of wages.

As already stated, the supply of water, gas, electric light and power and the tramway system are in private hands. The motormen and conductors on the tramways receive 10d. per hour during the first year of service, 10½d. during the three succeeding years, 11d. from the fifth to the tenth year and 11½d. in subsequent years. They work ten hours a day seven days a week.

The following Table shows the predominant weekly wages and hours of labour in February, 1909:—

Predominant Weekly Wages and Hours of Labour of Adult Males in the Principal Occupations in February, 1909.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|--|---------------------------|-------------------------------------|
| <i>Building Trades:—</i> | | |
| Bricklayers | 110s. | 44 |
| Stonemasons | 110s. | 44 |
| Stonecutters | 91s. 8d. to 110s. | 44 |
| Carpenters | 82s. 6d. „ 87s. 1d. | 44 |
| Plasterers | 100s. 10d. to 110s. | 44 |
| Plumbers | 91s. 8d. | 44 |
| Structural Iron Workers | 100s. 10d. | 44 |
| Painters | 75s. 2d. | 44 |
| Hod Carriers, Bricklayers' and Plasterers' Labourers | 45s. 10d. to 55s. | 44 |
| <i>Foundries and Machine Shops:—</i> | | |
| Ironmoulders | 72s. 3d. | 55 |
| Machinists | 51s. 7d. to 68s. 9d. | 55 |
| Blacksmiths | 68s. 9d. „ 75s. | 55 |
| Patternmakers | 74s. 6d. „ 87s. 6d. | 55 |
| Labourers | 32s. 1d. „ 36s. 8d. | 55 |
| <i>Silk Manufacture:—</i> | | |
| Warpers | 75s. | 55 |
| Twisters | 75s. | 55 |
| Loom Fixers | 75s. | 55 |
| Weavers | 45s. 10d. to 66s. 8d. | 55 |
| <i>Silk Dyeing:—</i> | | |
| Dyers' Helpers | 45s. 10d. | 55 |
| Finishers | 58s. 4d. | 55 |
| Labourers | 33s. 4d. | 55 |

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|---|------------------------------|-------------------------------------|
| <i>Printing Trades:—</i> | | |
| Newspaper— | | |
| Hand Compositors | { Day work 75s. | 48 |
| | { Night work 87s. 6d. | 48 |
| Machine Compositors | { Day work 81s. 3d. | 48 |
| | { Night work 93s. 9d. | 48 |
| Book and Job— | | |
| Hand Compositors | 75s. | 48 |
| Machine Compositors | 81s. 3d. | 48 |
| <i>Public Services:—</i> | | |
| Street Construction, Paving and Cleaning (Municipal)— | | |
| Road Menders | 40s. | 55 |
| Scavengers | 40s. | 55 |
| Road Sweepers | 40s. | 55 |
| Water Works (Company)— | | |
| Labourers | 37s. 6d. to 43s. 9d. | 60 |
| Gas Works (Company)— | | |
| Gas Stokers | 51s. 1d. | 84 |
| Labourers | 40s. 10d. | 70 |
| Electric Light and Power Works (Company)— | | |
| Electricians | 65s. 8d. | 70 |
| Linemen | 68s. 9d. | 54 |
| Stokers | 71s. 6d. | 56 |
| Labourers | 51s. 1d. | 70 |
| Electric Tramways— <i>See text.</i> | | |

Taking wages at New York as the base, = 100, in each case, the wages index numbers for Paterson are—building trades, skilled men 91, hod carriers and bricklayers' labourers 73; foundries and machine shops, skilled men 80, unskilled labourers 82; printing, hand compositors (job work) 86.

HOUSING AND RENTS.

Tenement houses, two-family houses and one-family houses are all fairly numerous in Paterson, but the two-family frame house is the most frequent type of working-class dwelling. The report of the United States Census of 1900 throws some light on the comparative importance of the different types.

The average number of families per dwelling-house at the date of that Census was 1·7, and of the total number of families 46·5 per cent. were resident in dwelling-houses occupied by two families, 27·1 per cent. in dwelling-houses occupied by one family, 16·3 per cent. in dwelling-houses occupied by three families and 10·1 per cent. in dwelling-houses occupied by four or more families. When it is considered that these figures relate to the city as a whole, it is safe to say that more than half of the wage-earning population occupied the two-family type of dwelling-house.

Tenement houses are occupied mainly by Italians and foreign Jews, and they include a number of quite good dwellings. Paterson, however, has a legacy of old, unsatisfactory tenement houses, built before State building regulations came into force. The State of New Jersey has had for several years an elaborate code of regulations and a large staff of tenement house inspectors, who are actively engaged in examining premises both with a view to preventing the erection of new tenement houses of a bad type, and to improving those which exist. In Paterson the evils of overcrowding and dark rooms are relatively less serious than in the larger cities of New Jersey, but there are a number of dilapidated old tenements. Some good new tenement buildings of brick, with plenty of light in all rooms, staircases and halls, have been built recently, but the cost is greater than that of similar accommodation in two-storied frame houses. Some of the Jews and Italians, however, prefer this class of building to the suburban house. In a new tenement house four rooms measuring about 11 feet by 12 feet cost from 10s. 7d. to 12s. 6d. per week, whereas four rooms of larger size can be obtained in two-family frame houses for from 7s. 8d. to 10s. 7d. per week.

The frame houses are built on plots of very varying size. They are usually detached, with a space ranging from 3 feet to 15 feet between two houses, the usual distance approximating to the larger figure in the suburban districts. Access to the upper floor is generally obtained by a stairway at the back of the house, but in the better houses the stairway is inside and is reached by a door at the side of the house. Water is almost always laid on inside the house, while the closet is usually in the garden, and is connected with the sewers. There is seldom any scullery, but cellars are usual. Rooms open off one another without the intervention of passages.

Some idea of the accommodation provided in flats in two-family houses may be obtained from the following notes regarding dwellings visited in the course of the enquiry :—

1. Two-family house, upper floor, five rooms, rent 11s. 1d. per week ; kitchen 13 feet by 11 feet, dining room 13 feet by 11 feet, parlour 15 feet by 12 feet, bedroom 8 feet by 11 feet and attic bedroom.
2. Two-family house, each floor four rooms, rent 7s. 8d. per week ; kitchen 8 feet by 12 feet, dining room 15 feet by 12 feet, bedrooms 13 feet by 12 feet and 7 feet by 10 feet, also a very small room, only large enough for a baby's cot.
3. Two-family house, the owner occupying the upper half, which had five rooms and a small bathroom, estimated rent 12s. 6d. per week ; kitchen 10 feet by 15 feet, dining room 10 feet by 15 feet, parlour 10 feet by 14 feet and two bedrooms 8 feet by 10 feet ; the kitchen and bathroom were built out on pillars. Lower half similar minus kitchen and bathroom, the four rooms being let at 9s. 7d. per week ; kitchen 10 feet by 15 feet, parlour 10 feet by 14 feet and two bedrooms 8 feet by 10 feet.

Newly built one-family houses, containing five or six rooms and a bathroom, are rented at about 17s. 4d. per week. They are not occupied by wage-earning people to any considerable extent, though in some cases such houses are built to the order of better paid working men who have saved some money and can borrow the remainder of the cost. In Paterson, however, it is more usual for such men to purchase or build a two-family house, living in one half and letting the other. By this means five rooms and a bathroom can be obtained at less expense than in a one-family house. It might be thought that difficulty over the use of the garden would arise between tenants of the upper and lower flats, as there is no partition such as is sometimes seen in the gardens of London suburbs where the two-storied flat system is adopted. Little difficulty arises, however, because no use is made of the garden. Occasionally there may be "clothes-line quarrels," but if one tenant should, by a rare chance, wish to plant flowers, the other tenant would not be likely to insist on planting them himself. According to the Census of 1900, 76·8 per cent. of all houses in Paterson were hired by their occupiers, 14·0 per cent. were owned subject to encumbrance and 9·2 per cent. were owned absolutely.

The following Table shows the predominant weekly rents for working-class dwellings in Paterson. The rents include the charge for water and are paid monthly :—

Predominant Rents of Working-class Dwellings.

| Number of Rooms per Dwelling. | Predominant Weekly Rents. |
|-------------------------------|---------------------------|
| Three rooms | 5s. 9d. to 6s. 9d. |
| Four rooms | 7s. 8d. ,, 10s. 7d. |
| Five rooms | 9s. 7d. ,, 13s. 6d. |
| Six rooms | 11s. 6d. ,, 16s. 4d. |

The level of rents at New York being represented by 100, the rents index number for Paterson is 62.

RETAIL PRICES.

Several "multiple" firms have grocery shops in Paterson, and do a considerable business, but the greater part of the retail trade falls to local men with individual shops.

As the city is not very large, most of the shopping of all classes is done in the central business streets, but the "corner grocery" exists to some extent in the residential districts.

Groceries and other Commodities.

Coffee is the popular drink with Americans, Germans and Dutch. Italians drink coffee to a less extent, taking cocoa and chocolate instead. The British races maintain to a considerable extent their national taste for *tea*, but they also drink much coffee.

Sugar—of the white granulated variety—is retailed principally in bags of $3\frac{1}{2}$ lb., selling for $9\frac{1}{2}d.$

To an appreciable extent the Italians maintain their national preferences in diet. A common price for macaroni is $1s. 0\frac{1}{2}d.$ for $3\frac{1}{2}$ lb. Olive oil costs from $1s. 6d.$ to $1s. 9d.$ per pint, but some qualities are dearer. Italian cheese, which is preferred, costs from $1s. 4d.$ to $1s. 6d.$ per lb. Wine is bought at from $3s.$ to $3s. 6d.$ per gallon. Italians buy more bakers' *bread* than the majority of Americans, patronising bakers of their own race, who retail at rather lower prices than the ordinary American bakers, a $2\frac{1}{2}d.$ Italian wheaten loaf weighing slightly over 1 lb.

The English and Scotch buy bread from the bakers more than other races, in preference to baking at home. Germans buy some rye bread, but they buy more *flour* than bread on the whole. The Dutch buy very little bread, but considerable quantities of flour for home baking.

Anthracite *coal* is the principal fuel used for domestic purposes. It is frequently bought several tons at a time, to last through the winter. Charcoal is retailed by grocers in bags of $3\frac{1}{2}$ lb. for $2\frac{1}{2}d.$, and is much used by poor people when they have not enough money or sufficient storage accommodation for a ton or half-ton of coal.

The following Table shows the predominant prices of certain commodities of common consumption in February, 1909 :—

Predominant Prices paid by the Working Classes in February, 1909.

| Commodity. | Predominant Price. |
|-------------------------------------|---|
| Tea per lb. | 1s. $5\frac{1}{2}d.$ to 2s. 1d. |
| Coffee " | 1s. $0\frac{1}{2}d.$ |
| Sugar :— | |
| White Granulated " | $2\frac{3}{4}d.$ |
| Brown " | $2\frac{1}{2}d.$ |
| Bacon, Breakfast—Boneless... .. " | 10d. |
| Eggs per 1s. | 8 to 10 |
| Cheese, American per lb. | 9d. ,, 10d. |
| Butter " | 1s. 5d. ,, 1s. $5\frac{1}{2}d.$ |
| Potatoes, Irish per 7 lb. | 7d. ,, $9\frac{1}{2}d.$ |
| Flour, Wheaten — Household " | $11\frac{1}{2}d.$,, 1s. $0\frac{1}{4}d.$ |
| Bread, White per 4 lb. | 11d. ,, $11\frac{1}{2}d.$ |
| Milk per quart | $4\frac{3}{4}d.$ |
| Coal, Anthracite per cwt. | 1s. $5\frac{1}{2}d.*$ |
| Kerosene per gallon | 6d. to $7\frac{1}{4}d.$ |

* By the ton of 2,000 lb.

Meat.

A large proportion of the meat supply comes from the West. The State of New Jersey supplies much of the veal consumed locally, but the consumption of this meat is small, so far as the working classes are concerned. Beef forms a larger proportion of the total meat consumption in Paterson than in most cities.

The Italians are not great meat-eaters, but in Paterson poultry constitutes a noticeable feature in their dietary. They purchase the fowls alive and dress for themselves.

The following Table shows the predominant prices of the various cuts of meat of the kinds mostly consumed by the wage-earning classes in February, 1909 :—

Predominant Prices paid by the Working Classes in February, 1909.

| Description of Cut. | Predominant Price per lb. |
|-------------------------------------|---------------------------|
| Beef :— | |
| Roasts—Round... .. | 6d. to 7d. |
| „ Ribs prime | 6d. „ 7d. |
| „ Ribs second cut | 5d. „ 6d. |
| „ Chuck or short ribs | 5d. |
| Steaks—Round... .. | 7d. to 8d. |
| „ Sirloin... .. | 8d. „ 9d. |
| Shin without bone | 4d. „ 5d. |
| Flank | 4d. |
| Plate, Brisket { Fresh | 2½d. to 3d. |
| { Salt or corned | 2½d. „ 3d. |
| Mutton or Lamb :— | |
| Leg | 6½d to 7d. |
| Breast | 3d. „ 3½d. |
| Loin | 7d. „ 8d. |
| Chops | 8d. |
| Shoulder | 5d. to 6d. |
| Neck | 3d. „ 4d. |
| Veal :— | |
| Cutlets | 9d. to 1s. |
| Rib chops | 7d. „ 8d. |
| Loin chops | 8d. „ 10d. |
| Breast | 4d. „ 6d. |
| Neck | 4d. „ 6d. |
| Pork :— | |
| Fresh—Loin | 7d. to 8d. |
| „ Spare rib | 4d. „ 6d. |
| „ Shoulder | 5d. „ 7d. |
| „ Chops | 7d. „ 8d. |
| Corned (wet salt or pickled) | 6d. „ 8d. |
| Dry salt | 6d. „ 8d. |
| Ham | 6d. „ 8d. |
| Shoulder, salt or smoked | 5d. „ 7d. |

Prices at New York being taken as the base, = 100, in each case, the index number for the price of meat at Paterson is 87, for other food it is 105 and for food prices as a whole 100. For rents and food prices combined the index number is 91.

PHILADELPHIA.

Philadelphia was founded under royal patent granted to William Penn in 1681, and the city was laid out by commissioners acting under his instructions in the following year. As then planned, Philadelphia had an area of about two square miles. The two main intersecting thoroughfares, now called Broad and Market Streets, were of the exceptional width of 120 and 100 feet, but of the rest of the streets none were more than 50 feet wide, and these narrow streets alternated with others still narrower—an arrangement believed by many to have had the object in view of providing permanently for the juxtaposition of the richer and the poorer members of the community. Upon this small original site the figure of the founder now looks down from the tower, 548 feet in height, of the great City Hall which has been erected at the point, originally forming a central square, where Broad and Market Streets cross.

The two square miles as first planned have now become a great city, and since the Consolidation Act of 1854 the total municipal area has covered 130 square miles. The township originally planted by the River Delaware has spread for many miles along its banks, while west from the Delaware it has crossed the Schuylkill River, and in the part known as West Philadelphia, lying on the other side of this river, possesses now a population that is a city in itself. Northwards many townships, including Germantown, have been absorbed by the extension of Philadelphia; southwards, in the broad tongue of land formed by the confluence of the two rivers, the city is also spreading towards the United States Naval Yard at League Island, while east of the Delaware, on the New Jersey side of the river, is the city of Camden, which, according to the State Census of 1905, had then a population of 83,363.

Camden, although a place of considerable manufacturing importance, owes its development to a large extent to that of Philadelphia, and lies indeed much nearer to the centre of that city than does much of Philadelphia itself, while a project, already sanctioned, for the construction of a tunnel under the Delaware will make this New Jersey neighbour of increasing importance to Philadelphia by, in effect, increasing a central area available for residential purposes. At present communication is by ferry with a charge of $1\frac{1}{2}d.$, or ten tickets for $1s. 0\frac{1}{2}d.$

The area covered by Philadelphia is generally level, rising gently to the northwards, and the site, lying 90 miles south-west of New York, is about 50 miles in a direct line from the ocean and 96 miles by the Delaware. Three trunk lines, including that of the Pennsylvania Railroad Company, of which Philadelphia is the headquarters, establish connexion with most parts of the country.

The symmetrical arrangement of the streets has been retained throughout the greater part of the city, with the result that, apart from a very few avenues running diagonally and districts lying at some distance north-east and north-west of the centre, nearly the whole of the city is laid out on a rectangular plan. Streets running east and west are given distinctive names such as those contained in an old mnemonic rhyme of the three chief streets lying to the north and the four to the south of Market Street—

“Market, Arch, Race and Vine,
Chestnut, Walnut, Spruce and Pine,”

while those running north and south are simply numbered. The numerical system starts from the Delaware and is adopted throughout with two exceptions, First Street being known as “Front,” and Fourteenth by its more distinctive name of “Broad.” Running north and south, that is along the numbered streets, from eight to fourteen—according to locality—of the blocks or squares made by the chief intersecting thoroughfares go to the mile, while east and west ten or twelve similar squares make up the same distance. The numbering of the houses is as systematic as the naming of the streets, and the River Delaware and Market Street are the starting points in the plan adopted. Each square begins a new hundred, continuously from the river westwards, but from Market Street commencing at the unit both north and south. West from the river and north of Market Street, where the areas available for expansion are greatest, the numbering of the houses thus runs up to several thousands, but when once mastered the plan adopted makes it possible with great ease approximately to localise an address in most parts of the city.

With the two exceptions mentioned, no streets at the centre being more than 50 feet wide, there is no room for a double line of tramway, and thus the cars in nearly all cases

run always in one direction along any single street ; for instance, always north along Thirteenth Street and always south along Fifteenth Street, or always east along Spruce Street and always west along Pine Street.

Philadelphia is in various ways celebrated in the annals of American history. It was here, for instance, that the first Congresses were held, and that the Declaration of Independence was signed, while for about ten years Philadelphia was the Capital City of the New Federation. In finance and industry, as in political history, Philadelphia has a distinguished record. The first bank in America and the first mint were established here. Here in 1685 the first printing press set up in the middle colonies was constructed, and in 1784 the first daily newspaper in the United States was published. The first American steamboat was built at Philadelphia in 1790, and the first American locomotive was built here, on an English model, in 1827.

In the middle of the 18th century Philadelphia assumed the first place in population which had previously been held by Boston, but since 1810 New York has led. Twenty years ago Chicago also outstripped Philadelphia in point of population, but although the latter now ranks as the third city in the Federation it is still one of the great cities of the world.

Philadelphia is pre-eminently an industrial centre, but the position of the city as a seaport must not be overlooked, and the following statistics afford some indication of the extent of the oversea trade of Philadelphia :—

| Year ended June 30th. | Tonnage Entered and Cleared in the Foreign Trade. | Value of Imports. | Value of Exports. | Number of Passengers arriving at the Port. |
|-----------------------|---|-------------------|-------------------|--|
| | Tons. | £ | £ | |
| 1905 | 3,651,624 | 12,537,688 | 13,182,931 | 27,929 |
| 1906 | 4,331,533 | 14,750,265 | 17,200,914 | 27,839 |
| 1907 | 4,665,059 | 16,639,571 | 19,756,767 | 34,767 |
| 1908 | 4,916,556 | 13,215,001 | 22,762,799 | 20,049 |
| 1909 | 4,500,011 | 14,350,864 | 17,559,675 | 18,335 |

It is, however, as perhaps the first manufacturing city of America that the distinctive position of Philadelphia can be best understood. Invaluable and even essential as an adjunct to many of its productive operations, the port nevertheless occupies a position of secondary importance in the economy of the city, of which the dominating characteristic is a scope of manufacturing enterprise of almost unequalled distinction and range.

As with many other world cities, for instance, London, New York, Paris, Berlin, which are apt not to be regarded as manufacturing centres because no single industry assumes dominating importance, so it is with Philadelphia. But in this city the mass of its industries is the outstanding feature of the situation, and while in some directions, as, for instance, in its manufacture of locomotives, carpets and worsted goods, industries almost "staple" in their character may be mentioned, the great fact is the comprehensiveness of its manufacturing interests and their general supremacy as compared with all other of the component elements of the life of great cities—social, political, financial or commercial.

With few great natural advantages, apart from the port and the facilities for obtaining raw materials for many of its manufactures that are offered by that channel, the early start in industry has been profited by, and the momentum of a prolonged experience and the trading connexions established still secure for Philadelphia its great position. Productive industry is, indeed, supreme in Philadelphia, and the annual output of its works, yards, factories and workshops is, from the economic point of view, its chief claim to attention.

From a sociological point of view Philadelphia is of special interest on account of the character of its housing and, in spite of deterioration in some districts, its superior claim to the title of "A City of Homes" may still be justified—not, however, because the proportion of home-owners is greater than in any other city, but rather because of the great numbers who are living in separate dwellings. Philadelphia may or may not be pre-eminently "The City of Brotherly Love," its other well-known descriptive name, but the claims made on its behalf that it is "The world's greatest workshop" and "America's largest home city" are less disputable.

The business centre of the city may be said to lie along both sides of Market Street, chiefly to the south, from Third or Fourth Street to about Sixteenth Street, and the tendency has been for the area around the intersecting point of Broad and Market Streets to increase in importance. Market Street itself is a great shopping thoroughfare as also is its neighbour to the south, Chestnut Street, and on less expensive lines Eighth Street. The part of Chestnut Street lying further west, together with two or three other streets to the south of it, are the fashionable central streets of Philadelphia. Themselves maintaining for the most part an air of distinction, the district for which they stand nevertheless abuts on some of the poorest quarters of the city, and while in some directions north of Market Street the same congested and unsatisfactory area is spreading, it is to the south, mainly on the east side of Broad Street, that the largest and best-known foreign and coloured districts are found. As usual these are not far either from the older parts of the city or from the points of arrival.

Although the above-mentioned is a typical foreign and coloured quarter, Philadelphia is nevertheless rightly regarded as being one of the most "American" of the great cities. At the Census of 1900, 40·4 per cent. of the total population were American-born whites of American-born parents, or about twice the proportion, for instance, in either New York or Chicago. Of the remainder, 32·0 per cent. were American-born whites of foreign-born parents and 22·7 per cent. were foreign-born whites. Of the foreign-born whites themselves 33·3 per cent. were born in Ireland, 24·2 per cent. in Germany, 15·7 per cent. in Great Britain, 9·8 per cent. in Russia and 6·0 per cent. in Italy. In the most thickly populated ward of the district just referred to the predominant foreign population was described in 1904 as being composed of Italians, Jews from Slavonic countries, Poles and Swedes, and the salient features have not greatly changed in the interval. The number of immigrants who actually land at this port is comparatively small, and in 1908 and 1909 an average of only about 15,000 came.

The following Table gives the population of the city, the area of which has remained unaltered during the period covered, in each Census year 1870-1910 :—

| Year. | Population. | Increase. | Percentage Increase. |
|-------|-------------|-----------|----------------------|
| 1870 | 674,022 | — | — |
| 1880 | 847,170 | 173,148 | 25·7 |
| 1890 | 1,046,964 | 199,794 | 23·6 |
| 1900 | 1,293,697 | 246,733 | 23·6 |
| 1910 | 1,549,008 | 255,311 | 19·7 |

In Philadelphia, although there are many houses in multiple occupation, there is no district of large tenement dwellings, and the city is thus free even in its most populous wards from any abnormal congestion of population. The greatest density reached is about 205 per acre in the Third Ward. The health conditions of the city are generally satisfactory and show signs of improvement, the death-rate of 17·2 for 1908 being the lowest ever recorded in Philadelphia. Since 1892, when the rate was 22·3, the movement has not been uniformly downwards, but this has been the general tendency. The completion of a new filtration plant at a cost of about £5,500,000 is expected to secure greater immunity from typhoid fever than the city has enjoyed in the past. In 1908 there were 533 deaths from this cause, but a considerable proportion were then attributed officially to contaminated milk and to individuals who had contracted the disease during holiday absences.

The number of deaths from tuberculosis of the lungs in 1908 was 3,068, or 2·0 per thousand of the population, a rate which, although showing an improvement, still leaves the Bureau of Health anxious for greater preventive powers, including that of compulsory removal and the establishment of a corps of health missionaries. Pulmonary tuberculosis, pneumonia and congestion of the lungs between them accounted for 5,916 deaths or 22·5 per cent. of the total.

No death from smallpox was recorded during the four years 1905-8, this immunity following on a period of four years in which the average number of deaths from this disease had been about 220. There has been no year of serious smallpox epidemic since 1881, when the number of deaths was 1,336.

The following Table gives the official rates of births, deaths and infant mortality for the years 1904-8 :—

| Year. | Birth-rate per 1,000 of Population. | Death-rate per 1,000 of Population. | Infantile Mortality per 1,000 Births. |
|-------------|--|--|--|
| 1904 | 22·8 | 18·4 | 157 |
| 1905 | 23·0 | 17·2 | 153 |
| 1906 | 23·5 | 18·6 | 168 |
| 1907 | 23·1 | 18·3 | 159 |
| 1908 | 23·7 | 17·2 | 146 |

Direct municipal enterprise in Philadelphia proceeds mainly upon what for America are normal lines, one exception being found, however, in the gas works which, first established in 1835, were taken over by the city a few years later, and until 1897 were under municipal management. Since that year the works have been leased to the United Gas Improvement Company. The lease was for 30 years but included the option of resumption in 1907, which option was not exercised. An alternative proposal was, indeed, put forward in 1905 which would have extended the period of the lease until 1980. Terms were included, however, which were disapproved and became the immediate cause of an agitation that led to a period of municipal reform in this city. Although this period was of short duration the fresh gas proposals were dropped.

The channel of the river has been deepened in recent years from 26 to 30 feet by means of Federal, State and Municipal grants, and the way has thus been prepared for an increasing use of this port. Other subsidiary improvements are projected, but the Mayor's Annual Message for 1908 contains the admission that "Philadelphia's neglect of her harbour improvements has been more marked than that of any other American municipality." More than 90 per cent. of the eight miles of water front of the Delaware was either in the hands of the railway companies, which control about half of the total, or of private owners—"a condition which," it is said, "would not be allowed in any active port were the citizens alive to the interests of the city."

The water supply is a great municipal undertaking and the filtration system recently completed, and made necessary by the previous pollution of the water supply, was described in the Mayoral Message for 1908 as "the greatest undertaking the city of Philadelphia has ever planned or executed."

Other important municipal responsibilities are the public schools, of which there are 320 ; hospitals, including an extensive municipal hospital for contagious diseases, to which 2,783 patients, about half of them suffering from diphtheria, were admitted during 1908, and a large general hospital in which 14,470 patients were treated during 1908 ; a fire department ; public baths ; museums ; and a free library. The last-mentioned dates only from 1894, but there are now in addition to the main library 19 branches, together with a department for the blind, more than 70 collections of books distributed in various places, including the fire stations and police stations, and other features. Building extension has been aided by a great bequest from Mr. Andrew Carnegie, and the rapidly increasing usefulness of this recent enterprise has been marked. During 1908 more than two million volumes were taken out by readers and many others were consulted.

The playground system of Philadelphia is in its infancy and small squares and parks are not numerous, but in the Fairmont Park, covering 3,341 acres and extending along both banks of the Schuylkill River for about four miles, Philadelphia possesses one of the largest city parks in the world and one of which it is justly proud.

Some of the very numerous private endowments of Philadelphia, including the Girard College, for the education and maintenance of orphan boys, and the Drexel Institute, are well known, and the Pennsylvania University ranks now as one of the largest in America.

The telephone system, which is in the hands of two companies, and electric lighting are private enterprises.

The tramway system is now controlled by the Philadelphia Rapid Transit Company. The company is private but under the complicated terms of a concession granted in 1897 the Mayor and two citizens chosen by the City Council sit as representatives of the city upon the Board of Directors. A service of only moderate efficiency is provided and on more than one occasion during quite recent years the management has become involved in serious labour disputes.

There are 866 churches in the city, and in addition to the public schools there are 223 other centres of education composed of other schools under religious control, colleges and libraries. The licensed theatres number 36, but a few of these have been converted, at least temporarily, into moving picture shows. The total number of these shows, a form of amusement that began in a small way in 1903 and at first increased slowly, had reached to 180 by 1909. There are 336 hotels and apartment houses; 350 hospitals, asylums and buildings used for benevolent and charitable purposes; 134 breweries, distilleries and malt-houses; and in 1909 1,965 saloons were licensed.

In the assessment of real estate no analysis is made of the values as between land and "improvements," (*i.e.*, buildings). The total receipt from the tax levy on real estate in 1908 was over £3,800,000, raised on 345,253 buildings of all kinds at an assessed valuation, including the land, of over £260,000,000. The net public debt of the city at the beginning of 1909 was about £16,600,000, and the balance of the local borrowing capacity, which is fixed by law at seven per cent. of the assessed value of taxable real estate, stood at £1,200,000.

OCCUPATIONS, WAGES AND HOURS OF LABOUR.

The industries of Philadelphia are widely scattered and, with partial exceptions in South and West Philadelphia, are found in almost every direction. Some find a natural localisation along the water front; the printing trades are as usual mainly at or near the centre of the city; northwards are the Midvale steel works; while the main Baldwin locomotive works, with Cramp's shipbuilding yards, perhaps the best known of all the industrial enterprises of Philadelphia, are only about half a mile from the City Hall and hence in a situation that, in view of the development of the city, appears strangely close to its business centre. The Baldwin works cover several acres, and although the numbers employed have on occasion exceeded 18,000 they were then overcrowded, and 15,000 was regarded as about the number with which the most efficient working could be obtained.

While the general character of this spacious city is industrial, and although in moving about in most directions it is a common experience to come across some factory or works tending to become a nucleus of localised industrial life, one quarter is in an exceptional degree the manufacturing district of Philadelphia. This lies to the north-east of the city in and around Kensington. Although the River Delaware forms the eastern boundary of this district, and the river-side industries include the extensive Cramp's shipbuilding yards, the quarter is predominantly a centre of factory enterprise, including not only the various textile industries, of which in the aggregate it is perhaps the greatest centre in the United States, but the metal, hat, leather and many other industries.

In various instances the existence of important industries in Philadelphia appears to be traceable to fortuitous causes, which gather weight with years and success, but are distinct in kind from an industrial development that can be explained largely by the command of natural resources. Thus shipbuilding, sometimes regarded as the premier industry of the city, although relatively less important now than formerly, dates from its promotion almost at the outset by the founder of the city himself. It is recorded that from 1781 to 1790 162 ships were built in Philadelphia, and that just before the outbreak of the Civil War the pioneer armoured battleship of the American navy was built in the Cramp ship and engine-building works, which had been started in 1830. The extensive yards of the New York Shipping Company are a little further down the river on the New Jersey side of the Delaware.

The founder of the well known Baldwin locomotive works was a manufacturing jeweller of great mechanical ability, and his engagement to put together one of the first locomotives imported from England quickly led to the construction of one of domestic manufacture, and thus in later years to the growth of what have become the largest works of the kind in the world. The carpet industry of Philadelphia is mainly the growth of the last sixty years.

Of the more general causes that explain the localisation of industries—chance, personal initiative, experience, momentum, a supply of the necessary labour, including an unusually varied body of skilled labour, and of the necessary capital, with, as regards some industries, nearness to a considerable market—appear to afford a more complete explanation of the growth of Philadelphia than do such causes as the nearness of the sources of supply of the raw material, or any special advantages such as those traceable to climate or natural water power. Thus apart from the command of a good but imperfectly developed harbour, and the not very distant Pennsylvanian coalfields, the

expansion and the industrial magnitude of Philadelphia appear now to be due to an extent above the ordinary to the human and personal factors in industry, rather than to those more obviously traceable to physical and geographical causes.

The Census of 1900 is still the latest authority for the numbers of persons engaged in occupations of every kind and in certain broad classes the following Table gives information on this point :—

Number of Persons of 10 years of age and over engaged in Occupations in Philadelphia in 1900.

| Occupations. | Males. | Females. | Total. |
|--|---------|----------|---------|
| Building | 33,637 | 124 | 33,761 |
| Metalworking and Engineering | 40,608 | 760 | 41,368 |
| Textile :— | | | |
| Cotton | 1,035 | 1,408 | 2,443 |
| Woollen | 1,971 | 1,391 | 3,362 |
| Silk | 426 | 1,022 | 1,448 |
| Hosiery | 1,702 | 5,175 | 6,877 |
| Bleaching and Dyeing... .. | 3,148 | 77 | 3,225 |
| Carpet Making | 3,827 | 2,045 | 5,872 |
| Other and not specified Textile | 11,309 | 11,621 | 22,930 |
| Leather | 5,269 | 598 | 5,867 |
| Boot and Shoe Making | 5,171 | 931 | 6,102 |
| Clothing | 10,978 | 25,252 | 36,230 |
| Woodworking and Furnishing | 8,669 | 500 | 9,169 |
| Paper and Printing | 9,967 | 3,725 | 13,692 |
| Brick and Tile | 1,204 | 2 | 1,206 |
| Glass | 1,611 | 95 | 1,706 |
| Food, Drink and Tobacco | 16,557 | 2,165 | 18,722 |
| Other Manufacturing and Mechanical Pursuits | 36,783 | 8,434 | 45,217 |
| Trade and Transportation | 129,992 | 22,270 | 152,262 |
| Labourers (not otherwise specified) | 41,082 | 635 | 41,717 |
| Professional, Domestic and Personal Service and Agricultural Pursuits. | 56,324 | 59,423 | 115,747 |
| All Occupations | 421,270 | 147,653 | 568,923 |

Among the occupied classes the native whites, including those born in America with one or both parents foreign, are the mainstay of industry in Philadelphia. The great exception to this rule is found in the case of labourers, and there are also a few skilled occupations of which the statement does not hold good, as, for instance, cabinetmakers and tailors, but in general it is true in spite of the large minority of foreigners often found.

Among foreigners, Irish, Germans and English rank next in importance to the native-born and the occupations followed by these three nationalities are unusually varied. In few of the more important occupations followed by males is any one of the three predominant in any marked degree, but in the case of carters, teamsters, steam and street railway employees, plumbers and blacksmiths, and a few other occupations of less importance, the foreign element appears to be predominantly Irish. Among bakers, cabinetmakers and butchers the chief foreign element appears to be German, while carpenters and joiners, machinists, boot and shoe makers, tailors, and tobacco and cigar workers may be mentioned as instances in which the nationalities employed are unusually mixed.

Apart from unskilled labourers and teamsters, bricklayers and stonemasons and brick and tile makers are among the very few instances in which the minority of coloured labour assumes other than diminutive proportions, and although the occupations followed by the coloured race are, as usual, varied, the numbers by which it is represented in the skilled trades are very small. In Philadelphia as in the cities lying further to the north, the industrial field open to the negro, although somewhat wider in the building trades, remains extremely narrow.

Italians, mainly from the south, and Russian Jews appear to be the foreign races that have been increasing most rapidly during the past decade, and it is in areas occupied mainly by these two nationalities, by the coloured people, and on their confines by Irish and Americans, that the silent conflict for local predominance is taking place in and around the most distinctly foreign district in Philadelphia to which reference has been already made.

In the textile industries the nationalities employed are becoming more mixed, and the past relative predominance of the English-born is diminishing. The present position may be illustrated by the following general information furnished by three employers with reference to those in their service :

- (1) "English or those of English descent form the majority";
- (2) "The Americans predominate now, that is, there are fewer English-born. A few Poles are employed, but Italians form the chief foreign element and in the weaving department young Italian girls are employed in spinning and reeling";
- (3) "All nationalities are found in the mill, but those employed are now mostly American-born."

On dock work comparatively few Irish are now employed, but there is a good deal of coloured, Polish and Italian labour. In the garment industry Russian Jews are numerous.

The most generally recognised working week for unskilled labour in Philadelphia is 60 hours, and the same number still holds good for many skilled workers, including those in various grades employed in the metal and textile industries. In the former group the 56½-hours week is becoming common, however, and in some cases the 54-hours week is observed, 9¾ hours being then generally worked on five days and the balance of 5½ hours on the Saturday.

In the textile group the predominant range appears to be from 57 to 60 hours per week. The short Saturday is often conceded even when 60 hours are worked, as, for instance, by adopting the following time table:—Monday to Friday, 6.45 a.m. to noon and from 12.40 to 6.15 p.m.; and on Saturday from 6.45 a.m. to 12.35 p.m.

In the felt hat trade the week is usually from 50 to 55 hours.

In the printing trades the 48-hours week prevails generally, but in the building trades, while the working week is often longer, 44 hours predominate. This is especially true in the superior branches of the trade known as "construction" work as distinguished from those branches concerned with the erection of small dwellings, which are still multiplying in Philadelphia. In London the counterpart of these two branches of the trade might be illustrated by, on the one hand, a contract for the erection of a large block of City offices, and on the other by that for a street of cottage dwellings in the suburbs.

In a 44-hours week in the building trades the usual hours are from 8 a.m. to 4.30 p.m., with an interval of half an hour at noon, from Monday to Friday, and from 8 to 12 on Saturday. 48, 50 and 54 hours per week are also mentioned in the returns obtained, and sometimes when 44 hours are exceeded the length of the working week in the hottest summer months is shorter than during the rest of the year. In an ordinary year bricklayers were considered to be employed on an average for about 9 months, but for 1908 the average period was estimated at from 7 to 8 months.

In Philadelphia the most usual holidays are New Year's Day, Easter Monday, Memorial Day, Independence Day, Labour Day, Thanksgiving Day and Christmas Day. Under a trade agreement the brewers have a special trade holiday in September known as Brewers' Day. For this day they are paid, but as a rule for this class of worker as for others holidays involve loss of pay.

The brewing trade is one of the few trades in Philadelphia in which labour is completely organised, those ranking with it in this respect being a few of the smaller sections of the building trades, including tile-layers, tile-layers' helpers, elevator constructors, granite cutters and two specialised sections of painters; and several miscellaneous occupations, as, for instance, theatrical stage employees and tramway men. The strength of the trade union formed among the last is quite recent, and followed on a successful strike in 1909 that, despite its violence, was accompanied by much public sympathy, which, apparently alienated by the company through the withdrawal of privileges with regard to fares to which the public considered itself entitled, was diverted to those in the tramway service.

Among the strongly but less completely organised bodies of wage-earners are the main sections of the building trades, particularly in the more important "construction" branches to which reference has been made. Among these sections may be mentioned plasterers and bricklayers, and to a less extent structural iron workers, carpenters and house painters. Bricklayers as compared with such a grade as carpenters are generally in a stronger position as being mainly a city product, while carpenters, on the other hand, can be drawn from the country districts, where they are relatively far more numerous and where their rates of wages are lower.

In the cities generally, where frame houses are becoming less common, the position of the carpenter, both employer and employed, is becoming relatively of less importance,

and as one consequence of this the former is now found to be less generally the chief contractor, who sub-lets the other branches of the building work and with whom the client deals.

The plasterers' labourers and hod carriers also have strong societies, the latter being composed of coloured men.

In general the employers in the building trades appear to be more closely associated than the workpeople.

The printing trades were more strongly organised than they are at present up to 1906, when a strike for a reduction of hours took place. Most of the newspaper and printing firms in Philadelphia are now non-union, but there appears, nevertheless, to be a general observance of trade union rates of wages so far as ordinary time is concerned, although not of the whole body of trade union conditions.

The Hatters' Society is said to have about a thousand members, but employers in several of the factories, including the largest, do not recognise the union. The attempt to enforce the trade union label led to difficulties in this trade recently.

In the metal trades, moulders and patternmakers appear to possess the strongest organisations and machinists and blacksmiths the weakest. The largest firms employing the above grades are non-union and there is much piece work.

Apart from the cutters, organisation in the garment industry is not strong, and the "open shop" is also the general practice in most branches of the textile and leather industries. In the carpet industry, however, there is a strong union among the Wilton and Brussels weavers and its rates prevail.

Altogether Philadelphia is not a strong centre of trade unionism and a City Ordinance approved in December, 1901, requiring that no person shall be employed on municipal contracts who is not qualified to receive and is not paid "such rates of wages and for such hours of work as shall be the established and current rates of wages paid for such hours by employers of organised labour in the doing of similar work," has less practical importance than would otherwise be the case.

The following Table shows the predominant weekly wages and hours of labour for adult males engaged in certain of the principal trades and industries of Philadelphia in February, 1909 :—

Predominant Weekly Wages and Hours of Labour of Adult Males in the Principal Occupations in February, 1909.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|--|---------------------------|-------------------------------------|
| <i>Building Trades :—</i> | | |
| Bricklayers | 114s. 7d. | 44 |
| Stonemasons | 91s. 8d. | 44 |
| Stonecutters | 87s. 7d. to 91s. 8d. | 44 |
| Carpenters | 82s. 6d. | 44 |
| Plasterers | 108s. 10d. | 44 |
| Plumbers | 80s. 3d. | 44 |
| Structural Iron Workers | 103s. 2d. | 44 |
| Painters | 64s. 2d. to 73s. 4d. | 44 |
| Hod Carriers and Bricklayers' Labourers | 55s. to 64s. 2d. | 44 |
| Plasterers' Labourers | 68s. 9d. | 44 |
| <i>Metal, Engineering and Shipbuilding Trades :—</i> | | |
| Ironmoulders | 72s. 6d. to 80s. | 54 to 60 |
| Machinists | 58s. 7d. ,, 68s. 9d. | 54 ,, 60 |
| Blacksmiths | 68s. 9d. ,, 87s. 6d. | 54 ,, 60 |
| Patternmakers | 81s. 3d. ,, 83s. 4d. | 54 ,, 60 |
| Riveters { Hand | 62s. 6d. ,, 68s. 9d. | 56 ,, 60 |
| { Machine | 83s. 4d. ,, 91s. 8d. | 56 ,, 60 |
| Caulkers... .. . | 62s. 6d. ,, 70s. 4d. | 56 ,, 60 |
| Holder-up | 35s. 2d. ,, 40s. 10d. | 56 ,, 60 |
| Labourers | 37s. 6d. ,, 39s. 5d. | 54 ,, 60 |
| <i>Woollen and Worsted Industry :—</i> | | |
| Wool Sorters | 66s. 8d. to 75s. | 57 to 60 |
| Wool Scourers | 41s. 8d. ,, 50s. | 57 ,, 60 |
| Warpers | 66s. 8d. ,, 77s. 1d. | 57 ,, 60 |
| Loom Fixers | 75s. ,, 77s. 1d. | 57 ,, 60 |
| Weavers | 55s. 10d. ,, 62s. 6d. | 57 ,, 60 |
| Menders... .. . | 50s. | 57 ,, 60 |
| <i>Hosiery :—</i> | | |
| Boarders... .. . | 58s. 4d. | 59 to 60 |
| <i>Tapestry and Curtains :—</i> | | |
| Loom Fixers | 66s. 8d. to 79s. 2d. | 57 |
| Beamers | 70s. 10d. ,, 75s. | 57 |
| Weavers... .. . | 62s. 6d. ,, 75s. | 57 |

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|---|---------------------------|-------------------------------------|
| <i>Carpets and Rugs</i> :— | | |
| Loom Fixers | 66s. 8d. to 75s. | 58 to 60 |
| Weavers | 50s. „ 83s. 4d. | 58 „ 60 |
| Dyers | 50s. „ 75s. | 58 „ 60 |
| <i>Felt Hats</i> :— | | |
| Sizers | 66s. 8d. to 83s. 4d. | 50 to 55 |
| Finishers | 75s. „ 83s. 4d. | 50 „ 55 |
| <i>Leather Trades</i> :— | | |
| Semi-skilled Men | 50s. to 62s. 6d. | 55 to 60 |
| Unskilled Labourers | 37s. 6d. „ 43s. 9d. | 55 „ 60 |
| <i>Printing and Bookbinding Trades</i> :— | | |
| Newspaper— | | |
| Hand Compositors { Day work | 81s. 3d. | 48 |
| { Night work | 83s. 4d. | 48 |
| Machine Compositors { Day work | 91s. 8d. | 48 |
| { Night work | 104s. 2d. | 48 |
| Book and Job— | | |
| Hand Compositors | 75s. | 48 |
| Pressmen { Cylinder Presses | 83s. 4d. to 91s. 8d. | 48 |
| { Small Presses | 45s. 10d. „ 58s. 4d. | 48 |
| Bookbinders—Forwarders | 66s. 8d. „ 75s. | 48 |
| Bookbinders—Finishers | 83s. 4d. | 48 |
| <i>Brewing</i> :— | | |
| Kettle, Cellar and Fermenting Room Men | 66s. 8d. to 75s. | 54 |
| Washers | 62s. 6d. „ 75s. | 54 |
| Maltsters | 75s. | 54 |
| Coopers | 66s. 8d. | 54 |
| Engineers | 87s. 6d. | 56 |
| Firemen | 66s. 8d. | 56 |
| Route-Drivers | 75s. | 54 to 60 |
| Labourers | 41s. 8d. to 50s. | 54 „ 60 |
| <i>Cigarmakers</i> | 62s. 6d. to 83s. 4d. | 50 „ 60 |
| <i>Transport Trades</i> :— | | |
| Dock Labourers— | | |
| On shore | 1s. 0½d. per hour | Variable |
| On ships... .. | 1s. 3d. „ | „ |
| General Drivers, Teamsters— | | |
| One horse | 41s. 8d. | 60 |
| Two horses | 50s. | 60 |
| <i>Public Services</i> :— | | |
| Street Construction, Paving and Cleaning (Contract work)— | | |
| Paviors | 62s. 6d. to 75s. | 54 |
| Paviors' Labourers | 33s. 9d. „ 43s. 9d. | 54 |
| Road Menders | 37s. 6d. | 60 |
| Scavengers and Road Sweepers | 33s. 9d. | 60 |
| Drivers— | | |
| One horse | 37s. 6d. | 60 |
| Two horses | 41s. 8d. to 43s. 9d. | 60 |
| Water Works (Municipal)— | | |
| Firemen and Oilers | 64s. 1d. | 56 |
| Labourers | 50s. | 48 |
| Gas Works (Company)— | | |
| Gas Makers | 64s. 2d.* ; 80s. 3d.† | 56* ; 70† |
| Coal Gas Floormen | 72s. 8d. | 56 |
| Labourers | 43s. 9d. | 60 |
| Electric Light Works (Company)— | | |
| Switchboard and Dynamo Attendants | 78s. 9d. | 84 |
| Engineers | 85s. 9d. | 84 |
| Firemen | 70s. | 84 |
| Oilers | 63s. | 84 |
| Wiremen | 67s. 6d. | 54 |
| Linemen... .. | 65s. 4d. | 57 |
| Ground Hands | 37s. 6d. | 57 |
| Labourers | 37s. 6d. | 60 |
| Electric Tramways (Company)—Surface Lines†— | | |
| Motormen and Conductors | 52s. 6d. | 60 |

* In summer.

† In winter.

‡ Most of the employees of the Rapid Transit Company are engaged on its surface lines; the "elevated" system, largely underground, being almost entirely represented at present by a service along Market Street.

Taking wages at New York as the base, = 100, in each case, the wages index numbers for Philadelphia are—building trades, skilled men 86, hod carriers and bricklayers' labourers (negroes) 87; foundries and machine shops, skilled men 85, unskilled labourers 92; printing, hand compositors (job work) 86.

Philadelphia is normally a prosperous city, but the financial crisis of 1907 and the ensuing depression necessarily made themselves felt at a centre the foundation of which rests upon industrial progress and confidence. The year 1909 was a period of steady if slow recovery. There had, however, been considerable distress and it is instructive to note that in the autumn of 1908 the Society for Organizing Charity, reflecting perhaps the most competent opinion on such points in Philadelphia, arranged the various channels of escape from the difficulties of the year in the following order of importance: (1) emigration, [*i.e.*, the return of immigrants to Europe]; (2) migration; (3) change of occupation; (4) part-time work; (5) savings; (6) credit; (7) the neighbourly help of kindred and friends; (8) the individual help of the relatively well-to-do to those already known to them; (9) the help of churches and of social organisations with which the recipient had some natural connexion before the emergency developed; and, (10) the help given through relief agencies. The position of the items placed first and last in this list is perhaps of peculiar significance.

The use of "idle city land" or the "cultivation of vacant lots" as "an opportunity for self-help of the needy," although originating in a suggestion that emanated from Detroit, is associated rather with Philadelphia owing to the prominence secured by the "Vacant Lots Cultivation Society" of this city. The actual undertakings of the Society are not extensive, and as a temporary resource in time of unemployment the experiment has not so far amounted to very much. Those who use the land placed at the disposal of the Society are of both sexes, and of all ages, and many of them are more or less permanent holders of the gardens allotted to them. No rent is charged for these and seeds and fertilisers are also provided free, but voluntary contributions are invited from the garden holders. In 1907 when there were about 800 allotments, and when the total produce was estimated to be worth over £10,000, the sum of £63 was thus contributed, and in 1908 this amount had increased to £116. The cash value of the annual produce of the gardens, which average about one-fifth of an acre in size, is said to average from £12 to £14.

More temporary assistance in the way of employment is provided by the Society on a small "co-operative farm," in the preparation of extra land for use by the Society, and in other ways. On this work in 1908 the men were paid "the current rate for day labourers" —6s. 3d. In the same year of depression it is reported that "a number of gardeners who had cultivated their gardens for several seasons and had received great help from them . . . surrendered their gardens voluntarily in order that they might be given to others in greater need of them." The incident is a reminder that the indirect results and the educative influence of this interesting Society may be of more importance even than its direct achievements.

HOUSING AND RENTS.

The most salient fact with regard to housing conditions in Philadelphia is contained in the statement that in this city there are more than 300,000 separate dwellings, and that of these 85 per cent. are occupied by single families. About one-fifth of the dwellings in the city have been built during the past ten or twelve years and the vast majority of these newer erections as well as a considerable majority of all the dwellings in Philadelphia are of two stories. These are scattered widely, north, west and south, and almost the only considerable parts of the working-class quarters of the city in which houses of this description are not the predominant type are older districts lying in or near the centre. Here the non-residential area is extending, however, and as has been stated the business centre is shifting slightly westwards and near the City Hall a little to the south and north. South of Market Street beyond the few fashionable streets already referred to, and beyond the adjacent area of deterioration, an extensive district, mainly working-class, stretches in a southerly and south-westerly direction.

North of Market Street a considerable area of lodging houses, furnished rooms, &c., largely occupied by a somewhat transient population, is found. This district, like the more crowded districts lying to the south, was once in better occupation and is in a transitional and declining stage. The houses here are largely of three stories.

Further out westwards, and still more in the north and north-east, are districts becoming in the main more frankly working-class; the houses being mainly of two and three stories, with the former in the majority and still being much more rapidly constructed. An exception to this predominating working-class element is found in the eastern end of West Philadelphia in the neighbourhood of the University. Germantown may be also mentioned as a mixed residential area with many large and attractive homes.

Perhaps the most representative areas of small homes are those found in the older district of Kensington, and over the greater part of West Philadelphia, which has been more recently settled. But streets and rows of little houses are found very widely and are the predominating features of the working-class accommodation of the city.

Roughly the tendency holds good that removal from the centre secures, so far as the dwelling is concerned, greater value for the rent paid. This is but the natural consequence of newness, accompanied, on the one side, by active competition among builders to provide what will attract, and on the other by an effective demand for improved accommodation or at any rate for variety and freshness. From this twofold influence a considerable force for betterment results, counteracted though it sometimes is by the specious attractiveness of meretricious devices and by defective speculative building. This is, indeed, the canker in the rose and induces the fear that a decade or two hence many streets that are at present bright and trim will not only have lost their first freshness but will have rapidly deteriorated. In Philadelphia, where small houses are marketable to an unusual degree, and built in large numbers to sell rather than to rent, this danger arising from hasty and careless construction is especially grave.

Although this consideration is a serious one, however, it does not at the moment affect the truth of the above statement that as a general rule movement outwards secures better accommodation. There is also a converse movement towards those areas, not at but nearer the centre, where older, less convenient and less attractive homes can be secured at somewhat lower rentals. This double movement can be clearly traced, and among those who take their place in the outward stream are many from the foreign districts themselves, Philadelphia, like other great cities, having its graded residential areas, for Russian Jews, Italians, Negroes and others, as well as for the white American-born.

The idle shiftless class of the coloured people naturally take no share in this movement towards better conditions, but apart from them there is perhaps no section of the community that presents such difficulties as the poor class of Irish. Some of the least satisfactory parts of Philadelphia are occupied by those of this nationality who have dropped out of the channel of advancement along which most of their fellow countrymen have travelled, and are travelling, and who, losing the ambition and hopefulness that are in general characteristic of such peoples as the Jews and the Italians, stagnate at a low level in the midst of a progressive and active community.

The chief material used in house construction in Philadelphia is brick, the soil in the neighbourhood affording an excellent clay suitable for brickmaking. The colour of the houses is frequently red and frequently mottled. Galvanized iron, generally painted brown, is being freely used for porches, verandahs, and other parts, but never possessing artistic merit it becomes unsightly when, as often happens, the paint peels off in patches. Stone facings are also a good deal used for window sills, and a veneer of brown stone is not infrequently introduced as a kind of external dado reaching perhaps up to the sill of the lower windows. The little flight of white marble steps characteristic of very many of the houses and often regarded as one of the distinctive features of the Philadelphia homes is being discarded in favour of brown stone or wood, the white marble being said to have fallen out of favour because of the trouble involved in keeping it clean.

The windows of the house are frequently shuttered; but a much pleasanter, and for the lower rooms a more effective, protection from the heat is afforded by the verandahs which are now common. These usually run along the whole of the front, and when, as is often the case, the building line is withdrawn slightly from the line of the street, become a very desirable feature of the house. In warm weather they are much used. Chairs are put out and the verandah becomes one of the favourite spots for reading and chatting. Little children can sleep there, and when the grown-up members of the family do not want quiet it can become a pleasant nursery. Altogether the verandah life, often markedly neighbourly in character in the Philadelphia dwellings, is a feature which it is pleasant to recall.

The building depth ranges from about 30 to 60 feet and the width for two-storied houses, built in pairs, is often from 18 to 20 feet, or in rows, which are much more common, from 14 to 16 feet. The depth of the plot may be anything up to 100 feet.

The following is the total number of dwellings in Philadelphia at January, 1909, classified according to the number of stories: one story 681; two stories 177,087; three stories 130,214; four stories and over 5,940. The total number of buildings of all kinds was 345,253. During the ten years 1899-1908, 52,209 two-storied dwellings were erected at a total cost of £20,100,000, 8,703 three-storied dwellings at a cost of £7,600,000 and 438 four-storied dwellings at a cost of £850,000. Beyond the fire zone, the limits of which are several miles from the centre of the city, frame dwellings are allowed, and of these 556 were erected in the above period at a cost of £200,000. This type of house is unimportant in Philadelphia, which is essentially a brick-built city.

Four, six and seven-roomed houses appear to be most common among two-storied dwellings, although the first of these are not being built to any great extent at the present time. The five-roomed houses, with two rooms on the ground floor and three above, are relatively exceptional, and the three-roomed houses, which are fairly numerous in some of the small streets and courts of the centre, are relatively old in construction and type. They are frequently little dwellings of three stories, built in rows, one room per floor. Houses of nine rooms, in working-class occupation generally, and houses of eight rooms, often so occupied, are of an older three-storied middle-class type which has changed in character. They are frequently not in the occupation of single families, and the former in any case cannot be regarded as one of the representative types of working-class dwellings in family occupation. The commonest type of the working-class dwelling appears to be the six-roomed house.

No wards in which building is most active at the present time are less than three miles from the City Hall, while two are six miles from that point, and the great area that is being covered by the settled parts of a city which for its size has not a very large population is destined to direct attention to some drawbacks that attend the luxury of the small dwelling. Already the multiplication of the apartment house for the middle class, largely as an escape from the servant difficulty, is being anticipated; a few two-family houses for the same class are also being constructed, and there is danger lest the adoption of the unit of the single dwelling for the single family should be also threatened or at any rate become less general. Widely scattered centres of employment are doing much to facilitate continued development on present lines, but, even so, distance is for many a serious matter and the question of transit is thus of perhaps unusual importance in a straggling city like Philadelphia.

Before describing in greater detail the single-family houses which are the local predominant types, it will be convenient to refer to such forms of tenement house as are found in Philadelphia. These in as far as they are important and numerous are in nearly all cases comparatively small houses diverted, with or without satisfactory adaptation, from single to multiple occupation. The genuine tenement house built as such is so exceptional as to be an almost negligible quantity. Few are really large, but some that are genuinely tenement house in construction and design have a kind of annexe in the yard behind in the shape of little dwellings that form, as they have been described, "a tenement house arranged on a horizontal plan."

In one tenement house so planned, in Jewish occupation, the main building facing the street contained six tenements of five rooms, two to each floor, rented at from 10s. 7d. to 12s. 6d. per week. Cold water was laid on, and water-closets, one for each tenement, were provided. The rooms were of fair size, the smallest measured in one tenement being 10 feet by 12 feet by 9 feet 11 inches. In the rear, eleven little dwellings flanked the two sides of what would otherwise have been the yard of the front house. Each of these dwellings was of three stories, with one room on each floor, that on the ground floor measuring 13 feet by 12 feet by 7 feet 3 inches. The height was 3 inches less on the first floor in the dwelling measured, and the top room was an attic. Only one hydrant and six water-closets in the yard were provided for the eleven families. The dwelling seen was tidy; a group of children in the yard were clean; and it was evident that at least in many cases the drawbacks of defective sanitary arrangements and bad design were being overcome by the character of the occupants. The rent of the small house was 6s. 9d. per week.

In another building, very similarly planned, cold water as well as gas was laid on to the dwellings, and the rent of similar small houses was 7s. 3d. per week. In this case the front house, occupied by four Italian, one Polish and one Jewish family, was less satisfactory. Four rooms, including two miserable apartments taken by a lodger, were being occupied by Italians at a rent of 10s. 7d. per week, and in two rooms rented at 5s. 9d. per week a husband, wife and six children were found. The stairway was dark and the lamp unlit.

In the tenement house district three-storied houses appear to be predominant, but there is great irregularity of outline and as compared with the corresponding district in New York, both in Manhattan and even in Brooklyn, the much lower height of the dwellings is a marked feature. Red brick is common, but the tints of the houses, like the outlines, are various. Most of the windows have shutters. Fire escapes, so conspicuous a feature in the New York tenement houses, are not in evidence. Frame houses may be occasionally seen. No impression is conveyed that occupiers are necessarily being robbed either of sunlight or of air, and save at times, as on occasion in a busy shopping street, there is no great press of people.

In one house in this district somewhat larger than most the landlord (an Italian carpenter), his wife and son, who was a tailor, occupied the third floor of the dwelling, for the whole of which they were paying a rent of 38s. 6d. per week. On the ground floor one room was sub-let and occupied by an Italian barber, his wife and five children, and 9s. 7d. per week was being paid. The room was, however, large, being about 28 feet by 16 feet by 10 feet. It was untidy but showed fair comfort. Water had to be obtained from the yard behind the dwelling, where the water-closet, with automatic seat flushing, was also placed. Two rooms on the first floor were occupied by a shoe-black, his wife and two children, and the rent was 6s. 3d. per week. On the top floor three sets of tenants occupied four rooms, two rooms at the back being let at 6s. 3d. per week, and two single rooms at 3s. 10d. and 4s. 10d. respectively. In these three cases the occupiers were husband and wife without children. Water was obtained from a tap on the landing, but the water-closet was in the yard. It will be observed that at the time of the visit the net rental of the landlord stood at 7s. 8d. per week for the rooms reserved by him for his own use.

Cold water supplied by hydrants in the yard and antiquated though not necessarily unhealthy sanitary arrangements are common, and drainage is often defective. The rents vary greatly according to size, position, &c., and from 3s. 10d. to 7s. 8d. per week for two rooms, from 5s. 9d. to 10s. 7d. for three rooms and from 5s. 9d. to 13s. 6d. for four rooms per week are among the ranges covered by the figures obtained.

Single-roomed dwellings are frequent in this district and furnished rooms are also found. Rooms of the latter description in small three-storied three-roomed houses in a narrow court occupied by coloured people were being let at from 4s. 2d. to 6s. 3d. per week, and in a larger house in a main street containing 13 rooms from 7s. 4d. to 9s. 5d. per week per room was being paid, also by coloured people.

It is in the foregoing district that a society known as the Octavia Hill Association carries out a modest programme in the interests of the improvement of housing conditions. The Association, incorporated in 1897 and modelled on the work of the English lady whose name it bears, has embarked on a two-fold task—that of buying old properties which are not beyond repair and can thus be transformed into decent dwellings, and of managing properties in the capacity of agents. The total gross amount collected in rent in 1907 was, for the properties directly controlled by the Association, £13,208 and for those belonging to 23 other owners £5,504.

The problem of insanitary housing in Philadelphia with which the Association endeavours to deal is regarded as being due to “inadequate and defective municipal regulation and control; the use and overcrowding of ‘converted’ houses without proper alterations; sub-letting and careless landlordism.” The general aim of the Association is “to make living conditions as cheap as is possible where proper light, air and cleanliness are observed,” and it was claimed that in 1907, through the action of the Association, 350 families in the poor parts of the city were living in well-repaired and wholesome houses.

Ordinarily the tenement house, which is defined by an Act of 1907 as any building occupied as a residence by three or more families “living independently of each other and doing their cooking upon the premises,” has been a private dwelling, and estimates vary considerably as to the number of houses thus occupied and thus legally tenement houses. In 1908 just over 2,000 licences, most of them conditional and subject to inspection, were issued to conduct such houses, but it is improbable that these represented much more than one-fifth of the total. Up to the summer of 1909 the staff formed under the Act was quite inadequate and, although heavy penalties were imposed by the statute for those who conducted tenement houses without licences, contravention was general and was indeed inevitable. The attention of the authorities was forced to the matter in the course of 1909, but partly because of inertness in these matters, partly because of an attitude of complacency towards the general housing conditions of the city, and partly because the local tenement house problem, although demanding much more attention than it has received, cannot be regarded as one of very great magnitude, conditions have not yet reached such a point as to be considered in Philadelphia, as in New York, of undeniable urgency, and the city is thus from a variety of causes still in the early stages of its tenement house administration.

The contrast between such a district as that to which reference has just been made and those which are still happily the most typical of Philadelphia is very great, and a pride is often manifested in the more representative “home” districts of the city that doubtless to some extent blinds people to the needs, the defects and the risks of the area of deterioration.

The typical "homes" of Philadelphia are, as has been stated, small self-contained dwellings, and some of their characteristics may now be described. They vary necessarily not only according to the common sources of difference in type and standing, such as those which are due to the character of the streets, to the age and state of repair of the building, to the size of the building plot, to their arrangement in rows or otherwise, and according to the conveniences provided, but also according to the presence or absence of certain qualities that are more peculiar to the city, such as whether the street ranks as one of the main and wider or one of the small and narrower streets; whether or not the houses are set back from the street line; whether or not a heater is provided; whether the cellar gives abundant room for storage and for coal; whether there is a "porch" or verandah; and whether there is, in addition to the main kitchen of the building forming part of the structure, an extension known locally as the "shed" or "summer" kitchen. In some cases the interior planning of the house differentiates it, and among new types somewhat in request are those in which on the ground floor the small conventional separate hall is no longer found but in which the stairway opens directly into a room that can thus be designed more spaciously and is sometimes known as a "saloon parlour" or again as a "Dutch hall." Thus there is great scope, quite apart from the question of the conveniences that may or may not be provided, for variety in type and in attractiveness.

The conveniences themselves when liberally provided would include gas and water; a fixed range, with, in the more highly-rented houses, arrangements for a hot and cold water supply; a dresser which would be part of the fixtures of the kitchen; a stationary wash tub, and sometimes in the more expensive houses a small laundry at the back of the kitchens and a bathroom. The water-closet would be inside the house. In the cellar there would be a heater and the house would be warmed by hot air. Steam heat is at present exceptional in Philadelphia in working-class dwellings, but in some of the newer small houses this system is now being introduced.

In the six-roomed dwelling, which, as has been seen, is the most numerous type, a common arrangement is for the ground floor to be divided into parlour, dining room and kitchen, all three rooms being entered from the hall passage. Facing the street is the parlour, and the middle room is the dining room, often connected with the parlour by a doorway and lighted by a window at the corner of the passage at the side of the house formed by narrowing the width of the kitchen behind. One of the kitchen windows would look into this passage and the other into the garden or yard behind the house. If a shed kitchen had been added to the dwelling this latter window would be deprived of part of its lighting value. A door leads from the kitchen into the yard or garden, and this again leads into a narrow alley-way forming the dividing line between the yards or gardens of the houses of the corresponding parallel street. These narrow passage-ways are common and are open at each end, the formation of new blind ways being now prohibited.

Upstairs in front would be the best bedroom of the house, and if the bathroom and water-closet adjoin they are lighted and ventilated by a skylight. The second bedroom is over the dining room, with a similar corner window, and over the kitchen is the third bedroom. Cupboards are part of the ordinary construction of the dwelling. In the cellar, which provides store room for fuel, &c., is the heater and, apart from any heat that may come from the kitchen the hot air from this is the chief means for heating the house. At the back of the house upstairs another feature as distinctive as the summer kitchen is likely to be found, viz., a "bay extension." This has resulted from a building regulation which permitted the construction of a bay window projecting four feet from the outer wall, and this window has itself developed, sometimes into a tiny bathroom or bedroom, and sometimes into what is more in accordance with the original concession, a simple enlargement of the bedroom itself. The extension may be of wood, and wood being cheaper and more suited for this purpose, these bay extensions are generally made of this material. The building site of such a house as that described, without allowing for the shed kitchen or bay extension, both of which lie beyond the main brick-planning of the dwelling, would often measure about 15 feet by not less than 30 feet. The rooms are generally about nine feet in height.

Modern small dwellings may all be regarded as variants—sometimes smaller, sometimes larger—from such a type as that described. Thus the four-roomed house would have one room less on each floor, the parlour and dining room being merged in a single living room, while in the seven-roomed house four bedrooms would be planned upstairs instead of three. In essentials, however, and apart from the degree of excellence maintained in construction, little difference would be manifested, save when occasionally there might be no bathroom or when the water-closet was placed outside the house.

In the following paragraphs particulars of some of the dwellings and districts visited in the course of the present enquiry are given.

North.

1. In one of the older districts in which the dwellings were mainly of two and three stories, 30 years or more old, and mostly with six and seven rooms but with occasional rows of smaller dwellings :

(a.) A two-storied brick house containing six rooms with a shed kitchen, standing on a plot 15 feet by 70 feet. Dimensions of three bedrooms :—10 feet by 14 feet, 8 feet by 9 feet and 8 feet by 12 feet ; height 8 feet 6 inches. In the second bedroom a fixed bath. Water-closet in garden. Rent 13s. 6d. per week.

(b.) Three-storied brick house. Seven rooms with bathroom and shed kitchen. Dimensions of four bedrooms :—Two 15 feet by 12 feet and two 8 feet by 12 feet, height 8 feet 6 inches. Two water-closets—one in house and one in garden (flushed). Chickens kept. Occupiers, a Yorkshire moulder, out of health, wife and five children. He had moved in from a more suburban district to cheaper accommodation. Rent 17s. 4d. per week.

(c.) Two-storied brick house. Four white marble steps, projecting on pathway, to front door. House flush with street. Built in a row. Shutters. Trees planted in roadway, which was macadamised. Six rooms and bath. Water-closet in yard. Occupier Irish. Owner of house. Rent put at 14s. 5d. per week.

2. In a new building area about $4\frac{1}{2}$ miles north-east of the City Hall. Two-storied brick house, containing six rooms and bathroom. One water-closet inside the dwelling and a second one outside. Heater in cellar for hot air system. Rent, which had been recently reduced from 19s. 3d., 17s. 4d. per week.
3. Two-storied brick house. Plot 15 feet by 85 feet. Depth of building 47 feet. Six rooms, including a "reception hall," but exclusive of bathroom and small laundry. Verandah along the front of the house. Fixed range and dresser. Built on certificate and by advance to speculative builder from one of the local Trusts. Rent put at 22s. 1d. per week. For sale at £700.

Many dwellings are being built in Philadelphia on a plan such as that indicated above and the financial operation involved apparently explains the general description of this class of building as "operation" work, as distinct from the "construction" work to which reference has been already made. It is in this speculative cottage building that there appears to be the greatest departure from the more recognised wage scale and wage conditions of the city. It is also on such building that showy and unsatisfactory workmanship is often noticeable, threatening, in the absence of early demolition, trouble in the future.

4. Two-storied brick houses built in a row. Porch, balcony and bay windows. Dimensions :—of sitting room 13 feet 6 inches by 11 feet by 9 feet ; of building 14 feet by 27 feet ; of plot 14 feet by 43 feet. Four rooms and bathroom. Rent 13s. 11d. per week.
5. New two-storied brick dwellings in a principal street. Built in row. Porch and verandah. Six rooms, bathroom and laundry. Dimensions :—Parlour 10 feet by 13 feet 6 inches ; dining room 11 feet 3 inches by 14 feet ; kitchen 12 feet by 10 feet ; laundry 5 feet by 10 feet ; bedrooms :—15 feet by 14 feet, 9 feet by 13 feet and 11 feet by 10 feet ; bathroom 5 feet 6 inches by 7 feet. Height 9 feet. Size of building site 15 feet by 44 feet. Size of plot 15 feet by 70 feet. For sale at £580 or probably for cash £540. Rent 19s. 3d. per week.
6. Small two-storied brick dwellings, built about 25 years ago. Supplied with heater, but this out of order. Four rooms, bathroom and shed kitchen ; water-closet in yard. Occupier, insurance agent, with wife, mother and one child. Comfortable home. Rent 11s. 6d. per week.
7. Small two-storied brick houses in a small street. Four rooms, with water-closet in yard. Rent from 8s. 8d. to 9s. 7d. per week.
8. In Germantown new two-storied brick houses with large hall, saloon parlour, dining room and kitchen on ground floor, with shed kitchen behind, and upstairs four bedrooms and bathroom. Rent 20s. 2d. per week.

Houses of exactly the same size, but with smaller hall and with the saloon parlour divided into two small rooms, were rented, although nominally containing one room more, at 19s. 3*d.* per week.

South.

1. Two-storied red brick dwellings, built about 20 years ago, constructed without heaters, but with fixed range for hot and cold water. Gas. Dimensions of plot : 14 feet by 48 feet; of building : 14 feet by 36 feet. Houses flush with street. Front door approached by the conventional marble steps. Small comfortable home. Occupier American. Six rooms and bathroom with shed kitchen. Rent 13s. 6*d.* per week ; if fitted with heater 14s. 5*d.* per week.
2. Two-storied brick houses ; marble steps. Parlour and kitchen on ground floor ; three bedrooms on first floor including one formed above the " bay extension." Water-closet underdrained in yard. Occupiers American, a few Italians, &c. Rent, without fixed range and leaving tenant to buy both stove and gas stove, 10s. 7*d.* per week ; with fixed range 11s. 6*d.* per week.
3. In a main street two-storied brick dwelling with 16 feet frontage. Seven rooms, one a large comfortable saloon parlour, bathroom and shed kitchen ; rent 19s. 3*d.* a week.

West.

West Philadelphia contains in part the most compact area of small dwellings to be found in Philadelphia and has witnessed the most rapid expansion in recent years. From a slight elevation a great part of this district, with its long stretches of almost flat roofs, presents a remarkable semi-oriental appearance. Although other districts, both north and even south, are not very dissimilar, West Philadelphia is perhaps the most interesting and distinctive development and represents an area that as much as, if not more than, any other helps to maintain the claim of Philadelphia to be still regarded as pre-eminently a " city of homes."

1. Two-storied brick dwellings in a side street. Dimensions of plot :—14 feet 6 inches by 71 feet 6 inches. Seven rooms, bathroom, small laundry, porch and verandah. Water-closet in the house. Rent 17s. 4*d.* per week.
2. In a main street new two-storied brick houses, containing seven rooms, bathroom, small laundry, and fitted with steam heat. Porch and verandah. Dimension of plot :—15 feet by 70 feet. Rent 24s. per week.
3. In a side street a row of two-storied brick dwellings. On ground floor : parlour, dining room (dark) and kitchen. On first floor, three bedrooms and bathroom. Comfortable home, not of recent type. Porch and verandah. Grass in the small yard behind. Rent 15s. 5*d.* per week.
4. In an older part : two-storied brick houses with porch and verandah. Heater in cellar. Fixed range. Gas laid on. Water-closet in yard. On ground floor a parlour and dining room. Kitchen just outside the main building but in permanent use, constructed of galvanised iron and not of wood as is the case with the real shed kitchen. On first floor, two bedrooms and bathroom. Rent 13s. 6*d.* per week.
5. In a pleasant side street well planted with trees a row of two-storied brick dwellings with porch and verandah. On the ground floor : parlour, dining room, kitchen and shed kitchen. On the first floor, three bedrooms and bathroom. Rent 16s. 4*d.* to 17s. 4*d.* per week.
6. In a side street a row of two-storied mottled brick dwellings. Dimensions :—of plot, 15 feet by 42 feet ; of building, 15 feet by 32 feet (including the verandah). Only four rooms and bathroom, but these of good size. Rent 13s. 6*d.* to 14s. 5*d.* per week.

For purposes of the present enquiry, numerous rentals were obtained of working-class dwellings mainly in the occupation of single families, and the predominant figures shown in the following Table are the results thus yielded. The shed kitchen has not been counted as a " room." The high maximum reached for the five-roomed dwelling is doubtless explained by the fact that dwellings of this size are relatively scarce in the city. It will be observed that the predominant range of rentals for six-roomed dwellings—the most important class—was from 13s. 6*d.* to 17s. 4*d.* per week.

The apparent discrepancy in the case of seven and eight-roomed dwellings is explained by the fact that those of the latter size in the occupation of wage-earners are often of an older and relatively less expensive type, and also by the more liberal planning of the rooms that is often adopted in the modern seven-roomed dwellings.

Predominant Rents of Working-class Dwellings.

| Number of Rooms per Dwelling. | Predominant Weekly Rents. |
|-------------------------------|---------------------------|
| Three rooms | 7s. 8d. to 11s. 6d. |
| Four rooms | 9s. 7d. „ 14s. 5d. |
| Five rooms | 10s. 7d. „ 17s. 4d. |
| Six rooms | 13s. 6d. „ 17s. 4d. |
| Seven rooms | 14s. 5d. „ 20s. 2d. |
| Eight rooms | 17s. 4d. „ 19s. 3d. |

The level of rents at New York being represented by 100, the rents index number for Philadelphia is 79.

Rents paid by the coloured race for dwellings of the same character appear, as in many other cities, to be somewhat in excess of those paid by whites. When a street is solely occupied by the coloured race, however, this disparity becomes less marked, and in the opinion of some as regards the more central and poorer districts no longer holds good. In the coloured tenements controlled by the Octavia Hill Association the average rental per room in 1906 was 3s. 6d. per week, as compared with a general average for all the tenements of the Association of 3s. 3½d. It was among the coloured people, however, that the largest number of single-room tenements existed, and this fact would tend to raise the average per room. But in any case the excess shown is very slight.

The more general tendency has been for rents to rise somewhat since 1905, but in those properties managed on a purely competitive basis of rapidly changing rentals there has been a considerable set-back from the level reached in 1907. In new dwellings a free month was being often given.

Rents in all cases include water and taxes. The water-rate, including 12s. 6d. for a bath, is usually 37s. 6d. per annum. Save for a poll tax of 2s. 1d., legally due every year, but in practice only paid once in two years, working-class tenants are thus free from all direct taxation.

Written agreements are the general rule, with three months' notice on either side, but, usually, the law making the recovery of arrears difficult, rents are fixed on a monthly basis and are paid in advance.

According to the Census of 1900, 12·1 per cent. of the houses were owned by their occupiers free of encumbrance, and 10·0 per cent. were owned but not free, while the remaining 77·9 per cent. were hired. The percentage of dwellings owned by their occupiers in Philadelphia is unexpectedly low for a city where not only are the individual homes small and thus more easily acquired than in some cities, but where also the building and loan associations were first started in the United States and where, without the intervention of these societies, builders and trust companies also offer their own special inducements for the purchase of real estate.

It may be observed, however, that ownership of a dwelling does not necessarily involve its occupancy, and it appears to be an open question both at Philadelphia and elsewhere whether, in the belief that a greater mobility is secured thereby, the practice of purchasing dwellings by wage-earners as an investment rather than as a home is or is not increasing.

The first building and loan association in Philadelphia is said to have been established in 1831, and of these associations there are now some 600 in the city. In 1907 their resources were returned at £14,423,930, £12,409,606 being represented by loans on real estate. Of the liabilities £12,048,819 was represented by the amounts due to shareholders on account of instalments paid for stock held. The receipts for the year amounted to £8,646,438, including £1,740,354 borrowed. The other chief items of the receipts were dues and other charges incidental to the holding of stock, returned at £3,839,790, and mortgage, stock and other loans repaid, returned at £2,513,271. None of the societies in Philadelphia are individually of great size, a feature that is regarded by some as being more in keeping with the character of these institutions than great concentration, but it is evident from the above figures that in the aggregate their transactions are extensive.

These institutions began as "terminating" societies, and the practices adopted have been described as follows in the proceedings (1908) of the United States League of Local Building and Loan Associations:—

"The early societies were small neighbourhood affairs, managed at night with the utmost economy. The members agreed to contribute to a fund, to be advanced to so-called borrowers among their own number; that the shares should have a par value of

\$200 (£41. 13s. 4d.), and should be paid for in instalments of one dollar (4s. 2d.) per month; that borrowers should pay six per cent. interest on their loans; that loans should be made only on real estate or society stock security; that if two or more wanted to borrow the available funds, they should bid premiums (*i.e.*, a higher rate of interest) for priority; that members neglecting to pay their dues should be fined; that all shares of stock should participate equally in the gains of the society, and that when the dues paid, together with the gains, should reach the par value of \$200 (£41 13s. 4d.), the funds should be distributed and the society dissolved."

With the important difference that societies are generally perpetual and not terminating, the practices outlined in the above quotation are still in general observed. Shares generally take about twelve years to mature, and if no loan has been granted in the interval holders are then entitled to receive \$200 (£41 13s. 4d.) in cash. Loans are not limited to members, but members have the first claim.

The English principle known as tenant co-partnership, where ownership consists in easily transferable shares in a joint enterprise and not in the individual dwelling, has not yet been introduced.

While the potential social value of the building and loan association and cognate institutions is peculiar to themselves, alternative methods for purchasing a dwelling are numerous, and are being constantly brought to the attention of the public. A common plan involves (1) the payment of a certain proportion of the price down—say \$500 on a house and site, the price of which is \$3,500, and which is rented at \$25 per month; (2) taking out a first mortgage for say \$2,200 on such a house as the above; and (3) a second mortgage for the balance of \$800, repayable in equal annual instalments in eight years. On such a plan as the above, the combined yearly charges for the first eight years, including taxes and water-rate, amount to just over \$25 per month, and after the eighth year to a little less than \$13 per month—an obvious economy, assuming that the house can be kept in good repair at reasonable cost, over the method of simple renting.

RETAIL PRICES.

Philadelphia is not far removed from a farming district that is still of importance in America, and although the value of this to the city has diminished with the growth of its own population, and with the increasing concentration of the sources of the agricultural and pastoral food supplies westwards, Philadelphia is still, from the point of view of the consumer, a rather favourably situated place.

The machinery of distribution which it possesses requires only brief comment. As regards foods, the individual shop is of chief importance, although the "chain" or "multiple" cash stores are tending to weaken the position of the more old-fashioned "corner" or "neighbourhood" store. On the whole, modern changes are beneficial to the working-class consumer, tending as they do to weaken the practice of giving credit in all branches of the trade, *cæteris paribus* to lower prices, and incidentally to introduce a more uniform level of prices throughout the city. These tendencies are strengthened by the practice of free delivery by large stores more centrally placed.

The "department store" itself is not important as regards the sale of foods, only one of the large central establishments having retained this branch. On the other hand, as regards the dress and household requisites of various kinds, the "department stores" of Philadelphia are famous, and the interesting suggestion has been made in explanation of their comparative magnitude that, while the great area covered by the city tends to make people more willing to buy food in their own neighbourhoods, the purchase of dress is regarded as having a greater degree of importance, and inducing as it does the desire to compare what is being sold, the force of fashion thus makes itself felt, and that this makes for centralisation. But as regards meat and groceries, &c., since it is then rather a mere question of quality and quantity, requirements can be more easily met and met anywhere.

Although the importance of the "multiple" shop is tending to increase, and the use of the "trading stamp," also connected with cash payments, is also for the present affecting the shopping practices of considerable numbers, the "neighbourhood store" is in general holding its own, and the store-keepers have a strong association of their own.

Notwithstanding that cash payments are becoming more common in the trade generally, it is noteworthy that the credit given by the "neighbourhood store" during the depression of 1908 was accorded a prominent place by the local Society for Organising Charity among the various aids by which the difficulties of that year were surmounted.

The old-fashioned grocer is no longer the more common class of retailer, however, and, although there are a large number of separate butchers, groceries, meat, fish, poultry, provisions, vegetables and fruit are all now apt to be sold at a single establishment. In the hot weather little meat is exposed for sale, and stock is usually kept in the cool chamber. In the home the ice-chest is in common use. Separate fishmongers are much more exceptional than separate butchers, and owing partly to traditional custom and partly to the practices of the Roman Catholic Church, the sale of fish is largely a Friday trade, and is thus comparatively unsuitable as the sole source of livelihood. Including these combined establishments or "markets," there are in all some 6,000 retailers of meat throughout the city.

In certain sections of the city the Italians, and still more the Jews, are opening shops, largely for the sale of fruit and vegetables and special commodities of racial consumption.

Markets in the English sense of the word have been of considerable importance in the past, but, although still found, are falling relatively into disuse. This appears to be mainly explained by the diminished importance of the neighbouring farmers who, by attending the markets, played a far greater part formerly in supplying the city. Some of the covered markets are still busy centres of trade, and the South Street open market is, on occasion, one of the busiest shopping streets to be found anywhere. But, in general, the markets are of secondary importance, and the one that is best known and most used is frequented by the middle-class rather than the working-class consumer.

Co-operative stores have secured no foothold.

Groceries and other Commodities.

Wheaten *bread* is generally consumed, and although cheaper bread could be obtained, the predominant price per 16 oz. loaf in February, 1909, was $2\frac{1}{2}d.$ Rye bread, when sold, was somewhat cheaper than wheaten, and in the summer a "rough rye" loaf of various weights was being sold at $1\frac{1}{2}d.$ per lb. as in New York. At the large factories two wheaten $2\frac{1}{2}d.$ loaves "one day old" were being sold at half-price. Home baking appears to be chiefly confined to the smaller forms of bread substitutes, such as rolls and biscuits. By the Italians noodles and macaroni are, as usual, often made at home.

For *tea*, which is much less consumed than coffee, a common unit of sale is $\frac{1}{4}$ lb., whereas for *coffee*, mainly sold in the berry, it is the full pound. *Milk* is sold with great uniformity at $4\frac{3}{4}d.$ per quart, and in the regulation of its price a Milk Exchange appears to be an effective influence. Storage *eggs* are consumed largely.

Potatoes are frequently sold by the "basket," a circular receptacle, the inside measurements of which are $13\frac{1}{2}$ inches across at the top, 9 inches at the bottom and 13 inches in height, and which contains about 2 pecks when filled. The predominant price of potatoes in February was $7d.$ to $8d.$ per 7 lb. At the beginning of September prices noted were per quarter-peck (about $3\frac{3}{4}$ lb.) $3\frac{1}{2}d.$, per half-peck $6\frac{1}{2}d.$ and per "basket" $2s. 1d.$ and $2s. 6d.$ Tomatoes were at that date in full season and, as being a perishable commodity, much cheaper than potatoes. Thus, at one establishment where potatoes were priced at $2s. 6d.$ per "basket," tomatoes were $1s. 5\frac{1}{2}d.$ Turnips were being sold at the same place for $2s. 6d.$ per "basket," and cabbages at $1s. 0\frac{1}{2}d.$

Anthracite *coal* is in general used, and by State law the "long" ton of 2,240 lb. is adopted. For this quantity the price in February, 1909, was $28s. 1\frac{1}{2}d.$ for any of the domestic sizes known as "egg," "stove" or "nut," and $19s. 7d.$ for that known as "pea" coal; nut (or chestnut) and pea coal are the sizes in most usual consumption. The price of the former is reduced to $26s. 0\frac{1}{2}d.$ in April, and by monthly advances of $5d.$ the maximum of $28s. 1\frac{1}{2}d.$ is reached again in September. For this variety there has been no change in price since October, 1905, but pea coal has advanced $1s. 0\frac{1}{2}d.$ in the interval, having been $18s. 6\frac{1}{2}d.$ at the earlier date. In this variety there is no seasonal variation in price.

The advance of the price of pea coal since 1905 is explained by the fact that its consumption has increased in recent years, largely owing to the modern construction of the ranges, in which the spaces between the bars are now being made narrower, so that the smaller variety of coal can thus be used. The standard square mesh used for this coal is $\frac{3}{4}$ -inch as compared with $1\frac{3}{8}$ -inch in the case of nut coal. Pea coal is still regarded by the collieries as of the nature of a by-product, but now ranks really as a domestic coal of low price. Many consumers are said to mix the two sizes, as doubtless some small dealers

also do. The large dealers do not as a rule sell less than half a ton, and the ton or half-ton appears to be the more common amount purchased. In small quantities coal is often sold by the bucket of from 18 to 22 lb. for about 4*d.*

Apart from its petty branches, uniform prices and uniform movements of prices in the coal trade are secured by a general understanding among the coal producing companies.

The following Table shows the predominant prices paid by wage-earning families in February, 1909 :—

Predominant Prices paid by the Working Classes in February, 1909.

| Commodity. | Predominant Price. |
|--------------------------------------|--|
| Tea per lb. | 1 <i>s.</i> 8 <i>d.</i> |
| Coffee " | 10 <i>d.</i> to 1 <i>s.</i> 0½ <i>d.</i> |
| Sugar :— | |
| White Granulated " | 2½ <i>d.</i> |
| Brown " | 2¼ <i>d.</i> , 2½ <i>d.</i> |
| Bacon, Breakfast—Boneless .. " | 8 <i>d.</i> to 10 <i>d.</i> |
| Eggs, Storage per 1 <i>s.</i> | 12, 13 |
| Cheese, American per lb. | 9 <i>d.</i> to 10 <i>d.</i> |
| Butter " | 1 <i>s.</i> 3 <i>d.</i> .. 1 <i>s.</i> 7 <i>d.</i> |
| Potatoes, Irish per 7 lb. | 7 <i>d.</i> .. 8 <i>d.</i> |
| Flour, Wheaten—Household .. " | 1 <i>s.</i> 0¾ <i>d.</i> |
| Bread, White per 4 lb. | 10 <i>d.</i> |
| Milk per quart | 4¾ <i>d.</i> |
| Coal, Anthracite :— | |
| Nut per cwt. | 1 <i>s.</i> 5 <i>d.</i> .* |
| Pea " | 11¾ <i>d.</i> .* |
| Kerosene per gallon | 5½ <i>d.</i> to 6 <i>d.</i> |

* * By the ton of 2,240 lb.

Meat.

Although there are more than 150 private slaughter-houses in Philadelphia, most of the meat consumed, especially of beef, comes from the West, and the explanation of the extent to which live meat is brought from there to this city is again found in the local Jewish demand. "Kosher" meat was described as being the backbone of the local industry.

In the retail trade the distinction between mutton and lamb is very often quite loosely drawn, but in the "legitimate" trade there is said to be a difference of about 2*d.* per lb. as between the two kinds of meat. A partial explanation of this frequent lack of clear distinction appears to be the ignorance both of retailers and of the public, but a more important cause is a change that is said to have taken place during the last ten years in the age of killing. The practice of rearing the wether to full growth is being abandoned, and those parts of the flock which are destined primarily for meat and not for breeding being killed earlier, "lamb" becomes the most common description dealt with in the meat shops. Real lamb, however, in February would be from lambs dropped in the previous autumn and would be of prohibitive price as regards the general run of working-class consumers.

An explanation is given by the foregoing of such remarks as those made by one butcher who "only sold lamb," that most of it would be "about a year old," and of another that "the real mutton of the two-year-old wether is hardly obtainable," and that "much yearling meat is sold as lamb." At one establishment prices were in fact given separately for "mutton" and for "yearling meat." For these reasons no distinction has been drawn in the following Table of the predominant prices as between mutton and lamb.

A considerable advance in the price of meat took place during the summer of 1909, and this advance had not been arrested in 1910. The local agitation in connexion with increased cost of living appears to have been connected primarily with the prices of agricultural and dairy produce. By one firm, employing about 1,000 persons, conditions were met in the spring of 1910 by a uniform percentage advance on previous time rates that was equivalent in this case to about 2*s.* 6*d.* per week for adult male workers.

The following Table shows the predominant prices for various cuts of meat paid by working-class consumers in February, 1909 :—

Predominant Prices paid by the Working Classes in February, 1909.

| Description of Cut. | Predominant Price per lb. |
|-------------------------------------|---------------------------|
| Beef :— | |
| Roasts—Round | 6d. to 8d. |
| „ Ribs prime | 7d. „ 8d. |
| „ Ribs second cut | 6d. „ 8d. |
| „ Chuck or short ribs | 5d. „ 6d. |
| Steaks—Round | 8d. „ 9d. |
| „ Sirloin... .. | 9d. „ 11d. |
| Shin without bone | 4d. „ 5d. |
| Flank | 4d. |
| Plate, Brisket { Fresh | 3d. to 3½d. |
| { Salt or corned | 3½d. „ 4d. |
| Mutton or Lamb :— | |
| Leg | 7d. to 8d. |
| Breast | 3d. „ 3½d. |
| Loin | 8d. „ 10d. |
| Chops | 8d. „ 11d. |
| Shoulder | 5d. „ 6d. |
| Neck | 4d. „ 5d. |
| Veal :— | |
| Cutlets | 10d. to 1s. 0½d. |
| Rib chops | 8d. „ 9d. |
| Loin chops | 9d. „ 10d. |
| Breast | 6d. |
| Neck | 6d. |
| Pork :— | |
| Fresh—Loin | 7d. to 8d. |
| „ Spare Rib | 5d. |
| „ Shoulder | 6d. |
| „ Chops | 7½d. to 8d. |
| Corned (wet salt or pickled) | 7d. |
| Dry salt | 7d. to 8d. |
| Ham | 6½d. „ 8d. |
| Shoulder, salt or smoked | 5d. „ 6d. |

Prices at New York being taken as the base, =100, in each case, the index number for the price of meat at Philadelphia is 95, for other food it is 97 and for food prices as a whole 96. For rents and food prices combined the index number is 92.

Philadelphia does not appear to be very favourably situated for the supply of fish, but in this trade, as in many others, the practice of cold storage is common, and thus dependence upon local supply is diminished. Prices noted in September, 1909, were for haddock 5d. per lb. and for halibut 1s. 0½d. per lb.

Poultry is often sold undressed, and prices also noted in September were for fowls 10d. and for chickens 1s. 0½d. per lb.

PITTSBURG.

Pittsburg, the second largest city in Pennsylvania, is situated in the south-west of that State at the point where the rivers Allegheny and Monongahela meet to form the Ohio, and in proximity to the States of Ohio and West Virginia. The distances to other great cities by rail are—to New York and Philadelphia respectively 439 and 349 miles to the east, to Chicago 468 miles to the west, to St. Louis 613 miles to the south-west and to Cleveland on Lake Erie 139 miles to the north-west.

Pittsburg, which was originally the French settlement Fort Duquesne, passed into English hands in 1758, when it was named Fort Pitt (after William Pitt the elder), and was from the first the centre of a considerable trade with the Indians. It received its charter of incorporation in 1816, and, owing to its situation both at the head of the Ohio and on the main trade routes to the West, its commerce grew rapidly. Industry quickly took root in the city, coal being easily obtained from the surrounding hills, while ore was brought from the Allegheny mountains; but its great expansion began with the development of the Lake ore regions, the proximity of great supplies of coal, petroleum, good limestone and, later, natural gas leading to the establishment of the great industries for which it is conspicuous.

During the past thirty years Pittsburg has not only increased continuously in importance as an industrial city, but it has also seen the growth of many manufacturing towns in its neighbourhood, and the name of Pittsburg, industrially speaking, is indeed commonly understood to include the area comprised within a radius of some forty miles from the city. The predominating industries of this district, for the most part situated in Allegheny County, are the production of iron and steel, and the mining of bituminous coal. In Allegheny County alone the output of pig iron in 1907 was 5,438,232 tons and in 1908 (a year of great depression) 3,917,924 tons, being respectively 48·1 and 56·2 per cent. of the total output in the State of Pennsylvania; the production of steel in 1907 amounted to 6,444,804 tons and in 1908 to 3,943,524 tons, being 53·3 and 53·4 per cent. respectively of the total State production; and the manufactures of rolled iron and steel in 1907 to 6,739,834 tons and in 1908 to 4,356,624 tons, representing respectively 52·0 and 55·3 per cent. of the total produced in the State. Although the main output of Allegheny County in iron and steel is the crude material (blooms, billets, &c.), which is worked elsewhere into finished products, the manufactures of rails and structural material, and foundry and machine shop products of very many kinds, including electric machinery and supplies, gas engines, steel cars, nuts, bolts, &c. are highly important.

The bituminous coal mined in Allegheny County amounted to 17,443,122 net tons (2,000 lb.) in 1907 and to 14,186,542 net tons in 1908, this output forming 11·7 per cent. of the total bituminous coal production of Pennsylvania in 1907 and 12·0 per cent. in 1908. There was no production of anthracite coal in Allegheny County.

According to a statement furnished by the Chamber of Commerce, there were in Pittsburg and district in September, 1909, 51 blast furnaces, 190 open hearth furnaces, 14 Bessemer converters and 33,036 coke ovens.

No coal mines are now in operation in the city, and the glass factories are now situated almost exclusively in the outlying towns. Some years ago glass factories were numerous in and about the city, especially on the left bank of the Monongahela, but, partly owing to the increased valuation of city sites, and partly owing to improved facilities for obtaining supplies of gas, fuel and other materials, they have been transferred to the country districts. One steel company, employing 12,000 workpeople in the heart of the city, had almost completed in the autumn of 1909 large new works (with twelve blast furnaces, billet and blooming mills, &c.) some miles down the Ohio, and it was stated that other companies also contemplate removing their works into the country in the near future. This general movement of industry outwards has been encouraged by the fact that the railway companies charge the same freight rates which apply to the city proper for goods carried to and from all points within the Pittsburg District. There is, indeed, much evidence that Pittsburg is fast becoming primarily the administrative and commercial headquarters of the local iron, steel, coal, coke and glass industries, and the general distributing centre for commodities required in the surrounding manufacturing area. The industrial establishments in the towns along the rivers and upon the railway systems have already for the most part their central offices in the city.

The population of Pittsburg, which was only 21,115 in 1840, had grown to 86,076 in 1870. Shortly after the Census of that year the city received a large accession of

population by the incorporation of the district on the left bank of the Monongahela known as Birmingham; other enlargements of the city area, together with influx of people from other districts and natural increase, brought its population in 1900 to 321,616. In December, 1907, Allegheny City, which lies on the opposite bank of the river of the same name, and which was already socially and commercially one with Pittsburg, was incorporated along with other less important areas, with the result that the inhabitants of the Pittsburg of 1910 numbered 533,905. The following Table shows the population of Pittsburg (and Allegheny) at each of the Federal Censuses 1870 to 1910:—

| Year. | Population. | | Increase. | | Percentage Increase. | |
|-------------|-------------|------------|------------|------------|----------------------|------------|
| | Pittsburg. | Allegheny. | Pittsburg. | Allegheny. | Pittsburg. | Allegheny. |
| 1870 | 86,076 | 53,180 | — | — | — | — |
| 1880 | 156,389 | 78,682 | 70,313 | 25,502 | 81·7 | 48·0 |
| 1890 | 238,617 | 105,287 | 82,228 | 26,605 | 52·6 | 33·8 |
| 1900 | 321,616 | 129,896 | 82,999 | 24,609 | 34·8 | 23·4 |
| 1910 | 533,905 | | 82,393 | | 18·2 | |

At the Census of 1900, Americans of American-born parents formed 32·6 per cent. of the combined population of Pittsburg and Allegheny, and the percentage of Americans of foreign-born parentage was 37·4, while white inhabitants of foreign birth formed 25·5 per cent. of the whole and negroes 4·5 per cent. Of the foreign-born population, persons born in Germany formed 28·9 per cent., in Ireland 20·6 per cent., in Great Britain 15·5 per cent., in Poland 10·3 per cent., in Austria-Hungary 9·6 per cent. and in Italy 5·6 per cent.

In the early days of the city's development the Irish from Ulster—Scotch-Irish, as they are called in the United States—were the principal immigrants, and after them came the Southern and Western Irish, Welsh, English and Germans. The first immigrants are stated by American observers to have left the most marked impress upon the character of the city. In certain matters obvious to visitors, such as the rigid observance of Sunday and the closing of all licensed houses on that day, Pittsburg might well be a large Ulster or Scottish town. Since the 'eighties, however, a strong stream of immigration has set in from Eastern and Southern Europe, and since 1900 this immigration has particularly increased in the industrial towns of the district, where the percentage of the foreign-born is now probably greater than in the city. In one representative steel mill, employing over 6,700 workpeople in 1907, there were only 1,900 white Americans and 800 British and Irish, while 1,900 were Slovaks, 500 Magyars, 400 Roumanians, 300 Russians and 200 Poles. At another metalworking establishment in the district, of over 9,500 men employed in March, 1909, 5,940 were of foreign race, 4,210 of these not being naturalised. Among them, as enumerated, 910 were Slavs of different races, 660 Austrians, 540 Hungarians, 650 Poles, 370 Russians, 190 Italians, 170 Magyars and 110 Croatians, while of the Northern Europeans 390 were born in England, 360 in Ireland, 510 in Germany, 290 in Scandinavia and 140 in Scotland. Of some 38,000 workpeople employed in 1907 in a group of iron and steel mills situated in Pennsylvania and Ohio (about 21,000 of them being in the Pittsburg District), only 10,700 were classed as Americans. Of a staff of between 7,000 and 8,000 men employed by an electrical works in 1909 only one-third were found to have been born in America.

In the coal mines of the district foreign-born labour forms a still higher proportion of the whole, the Poles and other Slavs and the Italians alone forming a majority. The nationality of 137,647 white workpeople occupied in bituminous mining in Pennsylvania in 1908 was reported to the State Bureau of Industrial Statistics and it was found that there were only 42,353 Americans (American-born or naturalised) as against 95,294 foreigners. In the Pittsburg district the relative strength of the foreign element in the mines is still greater; the secretary of the district miners' union stated that it was sometimes a matter of difficulty to secure suitable English-speaking men to fill the offices in local unions.

The negro population in Allegheny County in 1900 numbered 27,753 (showing more than a six-fold increase since 1870), and 73 per cent. lived in Pittsburg and Allegheny City. During the last ten years the negroes have been settling in the city and district in increasing numbers, and they appear to be advancing both materially and in social importance. The negro children have attended the public schools with the white children since 1874, and all the educational facilities offered in the city are open to them. A special trade school for their benefit was established and endowed by a Methodist clergyman two

generations ago. Some negroes have entered the learned professions, and at the present time some twenty practise medicine in the district, and a few are lawyers and dentists. Quite a hundred negroes are employers in business, as printers, grocers, hairdressers, keepers of restaurants, carters, &c. Many are employed by the municipality as policemen, firemen, messengers, postmen and clerks. A large number of workpeople in the building and iron and steel trades are negroes, some being found in highly-skilled occupations, but they show little disposition to work in the coal mines. Driving is a favourite employment with the negroes, and almost half of all the drivers and carters in the city belong to the coloured race. Some forty churches and missions exist in Pittsburg to meet the religious needs of the negroes; more than three-fourths of them are Baptist, but the list includes ten Methodist churches, one Presbyterian, one Protestant Episcopal and one Roman Catholic church. They have also many clubs and some houses of a charitable character (for orphans, aged women, &c.), and they publish two small newspapers.

The flat tongue of land known as the Point, which lies between the Allegheny and Monongahela rivers, was the site of early Pittsburg, and business is now concentrated in this vicinity within an area measuring about a mile by half-a-mile. Here are located many lofty office buildings of the "sky-scraper" type, several of which have over twenty stories, the great wholesale and retail firms, the railway termini, the principal river bridges connecting the North and South Sides with the main city, the public buildings (City Hall, Court House and Post Office), the large banks and trust companies, and the leading hotels and clubs, theatres and other places of amusement. There are over sixty tramway routes radiating from Pittsburg to various points in the district, and nearly all the tramcars start within this area. The heavy traffic incidental to this centre leads to a constant congestion of the streets, many of which are narrow, yet relief has hitherto been impossible owing to the fact that the eminences known as Grant's Hill and Herron Hill have acted as barriers to the extension of the business district inwards from the water, while behind them is a succession of hills and valleys, upon the slopes only of which are built dwelling houses and shops. The situation is a serious one when it is remembered that within a radius of some fifty miles there is a large number of towns, with up to 40,000 inhabitants, all dependent upon Pittsburg as a business centre. In November, 1909, a loan was authorised for the purpose of many municipal improvements, including the removal of the Hump, a portion of Grant's Hill, and the completion of this undertaking will afford considerable relief to the congested district.

The North Side, which is the former city of Allegheny, is also extremely hilly. The river is crossed by several bridges, and in 1909 tolls were still levied on some of them. At some points the hills enclosing the river valleys recede, leaving spaces of varying width and evenness upon which factories and dwellings have been built. The river banks are lined by an almost unbroken series of iron and steel mills and machine shops, and railway lines run along both banks of the Monongahela. The steep rocky bluffs along this river are traversed by two tunnels, one being used by the tramway system, while inclined railways for passengers or for passengers and vehicles ascend at several points. The hills overlooking the rivers are bare, largely owing to the effects of smoke and ore dust, and present a desolate aspect; *débris* of all sorts lies in heaps upon the river banks, and the rambling wooden steps and mean wooden houses which clamber up the hillsides at convenient points add to the general appearance of neglect. The atmosphere at Pittsburg is generally charged with smoke which, arising mainly from the riverside mills, is confined within the high and narrow valleys. The use of bituminous coal in the mills, furnaces and coke ovens largely accounts for the great murkiness of the city—throughout the United States Pittsburg is popularly known as the "Smoky City"—for whatever the original colour of the houses it is quickly changed to a dark drab. Organised efforts are now being made to remedy the smoke evil, however, and large powers have been given to the four officials recently appointed to deal with the matter. Natural gas, first used in Pittsburg in 1886, was for some years the ordinary domestic and factory fuel, but the local supplies were soon exhausted and West Virginia is now the principal source of supply. Its cost, however, makes the use of coal more advantageous in steel and other mills.

The professional and well-to-do classes of the population live in the eastern portion of the city, of which Schenley Park and Highland Park form roughly the boundaries, while the working classes as a rule inhabit the districts adjoining the business area already mentioned and the banks of the Monongahela, the Allegheny and the Ohio. In these parts there is a great deal of dingy squalor and overcrowding of sites, and the bad housing conditions generally prevalent create upon the visitor a very

depressing effect. The impression of dinginess is intensified by the predominance in these quarters of wooden dwellings which, unless kept in good repair and frequently painted, soon acquire a mean and squalid aspect.

The death-rates per 1,000 of population for the five years 1904-8 were as follows:—1904, 19·7; 1905, 19·5; 1906, 19·2; 1907, 18·3; 1908, 16·0. The figures for 1904-7 relate to the city of Pittsburg as then constituted, while the rate for 1908 refers to the enlarged area, including the former city of Allegheny.

The decrease in the number of deaths from typhoid fever was the most remarkable feature in the mortality returns of 1908, inasmuch as this disease had been almost endemic for a number of years. The decline was probably attributable in large measure to the establishment of a municipal filtration system, by which all the water furnished to the inhabitants of old Pittsburg (as distinguished from Allegheny) is filtered, but also to the temporary removal, owing to trade depression, of a considerable portion of the foreign population, especially young unmarried men, among whom typhoid has always been very common, and to the energy with which certain sanitary improvements were insisted upon by the public health authorities in the tenement house districts inhabited by the foreign population and elsewhere. The filtration system is to be extended to Allegheny.

Pittsburg is a very important railway centre, and its means of communication with all parts of the country are extensive and rapid. As regards goods, apart from its considerable local traffic, it is a meeting-point for a large traffic, passing to and from the East, West and North; two of the greatest railway systems in the United States, the Pennsylvania and the Baltimore and Ohio, pass all their business between East and West through the Pittsburg district. The rivers are also of great importance, especially for the transportation of coal. The Monongahela gives access to the immense and fast developing coalfields of West Virginia, and the Allegheny to the coal and oil district of Western Pennsylvania, navigation being possible in both cases for about one hundred miles. The Ohio opens up communication with the whole Mississippi system, and barges laden with coal from Pittsburg may be seen as far south as New Orleans. Difficulties occur in river navigation at periods of slack water, and fleets of barges may run aground when the rises in the river outstrip and leave them behind. Large sums have been spent in building dams and locks on the rivers to provide against this danger. Besides the transport of heavy goods, passengers and light merchandise are carried by regular services of steamers plying on the three rivers.

One of the serious problems confronting the city is the provision of efficient and cheap means of communication between the various parts of Pittsburg and the neighbouring towns. At present no underground or elevated railways for passenger or goods traffic exist, in contrast to Chicago, for instance, where relief is afforded to street traffic by the tunnels from the railway depots which run direct to the great wholesale and retail shops. At Pittsburg the conformation of the land, the rivers and the concentration of business within a restricted area of the city and of industrial activity upon the available strips of land on the river banks create a problem of great difficulty. Great congestion of traffic is also caused by the arrangement whereby the tramway services for the most part converge in a narrow area. The inadequacy of the tramway accommodation itself is evidenced by the fact that in the morning hours, and still more in the evening after five o'clock, the cars are crowded both inside and outside, every foot of standing space, even to the steps and the ledge encircling the outside platform, being occupied. No reduction of fares is made to working men, and no transfer tickets are issued to serve between Pittsburg proper and the North and South Sides, although transfers are allowed within either of the three sections of the city and between these sections and their adjacent suburbs. The effect of the limited transfer arrangements is that a working-man student living on the North Side desiring to attend evening classes at the Carnegie Technical Schools would have to pay 5*d.* each way, although the distance from the boundary of Allegheny is not quite three miles.

The public services in the hands of the municipality are the water supply and the cleansing of the streets; the gas works, electric light and power works and tramway system belong to companies, while street construction and paving are done by contract. The city water, except in Allegheny, as already stated, has been filtered since 1907. The price of artificial gas is 5*s.* per 1,000 cubic feet (or 4*s.* 2*d.* if the bill is paid within ten days), but the consumption of artificial gas is not great owing to the use of natural gas for cooking and of electricity or oil for light. Electric light costs 5*d.* per kilowatt and kerosene from 7½*d.* to 9*d.* per gallon.

Although prohibition laws have not been enacted for Pittsburg, the public sale of liquor is not permitted on Sundays, and public places of amusements are closed on that day. There appears, however, to be much Sunday drinking in the foreign quarters, especially in the boarding houses, beer being the beverage most in favour with the mill workers.

There are several public parks and open spaces in the city, only four of which, however, are of considerable extent. Two of these lie between the Allegheny and the Monongahela, viz., Highland Park (366 acres), in the extreme north-eastern limits of the city, some five miles up the Allegheny and Schenley Park (422 acres), in the south-east nearly three miles from the centre, not far from the Monongahela River; while River View Park (240 acres) is a beautiful natural park near the boundaries of the city on the North Side. The only park readily accessible to the working-class district is Allegheny Park (100 acres), situated in the centre of the North Side. A feature of American cities is the amusement park, generally situated on the outskirts, where concerts, scenic railways, donkey and pony riding, facilities for dancing, swinging and other popular forms of entertainment are provided in the summer months, and are mainly patronised by working people. There are six of these parks in and around Pittsburg, only one being actually within the city. Where admission to these places of resort is not free the charge is very small, while the various entertainments range in cost from $2\frac{1}{2}d.$ to $1s. 0\frac{1}{2}d.$

Great interest is taken in the national game of baseball at Pittsburg by the middle and relatively leisured classes, but the mill workers have little opportunity for watching the games played by the professional players or playing themselves, as there is no free half-day on Saturdays. The general apathy of the working classes as regards physical exercise is partly explained by the fact that the bulk of the wage-earners come from countries where outdoor games are little in vogue, but the long hours worked in the mills and the difficulty of procuring suitable open spaces are contributory causes.

Places of indoor amusement for the workpeople are numerous in Pittsburg. There are sixteen theatres and music halls, of which four or five are large, while moving picture exhibitions are abundant and are largely patronized. The charge for admission to the moving picture halls is $2\frac{1}{2}d.$ or $5d.$, a charge which generally gives the right to stay through a programme lasting half-an-hour or an hour. Skating rinks are also numerous.

As regards educational preparation for industrial life Pittsburg contains the Carnegie Technical School, one of the most important foundations of the kind in the United States. There are four separate departments, viz., (1) a School of Applied Science giving instruction in engineering (electrical, chemical, civil, mechanical, metallurgical, mining and commercial, in the sense of training commercial travellers for their function as salesmen of commodities produced by this industry); (2) a School of Apprentices and Journeymen; (3) a School of Applied Design; and (4) a School for the education and training of women for the home as well as for trades requiring technical knowledge. No students under sixteen years are admitted to the day courses, or under eighteen years to the night courses; persons belonging to Pittsburg pay tuition fees amounting to £4 3s. 4d. per annum for the day courses and 20s. 10d. for the night courses, while others pay £6 5s. and 29s. 2d. respectively. In addition to the tuition fees, general fees, amounting to 41s. 8d. for day and 20s. 10d. for night courses, are also charged, these fees being required to defray the cost of material, apparatus, etc. The present number of students exceeds 2,000 and there are 135 teachers. The first diplomas were awarded in 1908. The Technical School is part of a large building scheme, for which the funds were provided by Mr. Andrew Carnegie and the site by the Corporation. The city has also a School of Fine Arts (which holds an important annual exhibition), a Museum (with picture gallery), one of the four great museums of America, and a public library, well housed and equipped. The library, which is a municipal institution, has seven branches in various parts of the city and over a hundred distributing agencies—for the most part clubs and reading rooms. Pittsburg is also the seat of a growing University, with art, law, medical and engineering faculties, as well as a School of Mining. There are four theological seminaries, two of which are Presbyterian. The public or council schools are numerous, but there is little co-ordination in their administration owing to the educational independence of each ward, and the school buildings, interior equipment and staffs in the various wards present marked contrasts.

One of the factors operating against the speedy assimilation of the immigrant races is the absence of public evening schools for adults offering instruction in English and other subjects of special interest to the immigrant races. Some social settlements and quasi-religious organisations endeavour to meet the need, but their number and means are unequal to the demand.

OCCUPATIONS, WAGES AND HOURS OF LABOUR.

The following Table shows the number of persons of ten years of age and upwards engaged in occupations in Pittsburg and in Pittsburg with Allegheny as enumerated at the Federal Census of 1900 :—

Number of Persons of 10 years of age and over engaged in Occupations in Pittsburg and in Pittsburg with Allegheny in 1900.

| Occupations. | Pittsburg. | | | Pittsburg with Allegheny. | | |
|--|------------|----------|---------|---------------------------|----------|---------|
| | Males. | Females. | Total. | Males. | Females. | Total. |
| Building | 7,277 | 42 | 7,319 | 10,962 | 48 | 11,010 |
| Metalworking and Engineering | 15,513 | 141 | 15,654 | 22,814 | 217 | 23,031 |
| Textile | 76 | 24 | 100 | 131 | 52 | 183 |
| Boot and Shoe Making | 452 | 8 | 460 | 662 | 14 | 676 |
| Clothing | 784 | 3,296 | 4,080 | 1,170 | 5,063 | 6,233 |
| Woodworking and Furnishing... | 773 | 288 | 1,061 | 1,507 | 440 | 1,947 |
| Paper and Printing | 1,075 | 236 | 1,311 | 1,562 | 383 | 1,945 |
| Brick and Tile | 475 | 11 | 486 | 541 | 11 | 552 |
| Glass | 1,859 | 125 | 1,984 | 1,972 | 142 | 2,114 |
| Food, Drink and Tobacco | 2,128 | 629 | 2,757 | 3,552 | 1,629 | 5,181 |
| Other Manufacturing and Me- chanical Pursuits | 12,858 | 338 | 13,196 | 17,740 | 622 | 18,362 |
| Trade and Transportation | 29,703 | 4,889 | 34,592 | 42,461 | 7,495 | 49,956 |
| Labourers (not otherwise specified) | 23,430 | 319 | 23,749 | 31,213 | 409 | 31,622 |
| Professional, Domestic and Personal Service and Agri- cultural Pursuits | 11,499 | 13,272 | 24,771 | 15,646 | 18,038 | 33,684 |
| All Occupations | 107,902 | 23,618 | 131,520 | 151,933 | 34,563 | 186,496 |

The importance of the metal and engineering trades is clearly shown by this Table. The large numbers included under the heading of trade and transportation are explained both by the enormous traffic originating at or passing through Pittsburg, and by the fact that the city is a distributing centre for a district containing about a million inhabitants. Among other trades which employ large numbers of workpeople may be particularly mentioned the food (canning of meats, fruit and vegetables, preserves, pickles and baking), drink (brewing and distilling) and tobacco trades.

Although Pittsburg is the commercial headquarters of the American glass trade, the manufacture of glass within the city limits has practically ceased, save as regards glass bottles, in the making of which some six hundred persons are employed. The transference of glassmaking from Pittsburg to other centres was mainly due to the discovery of cheaper fuel and to the less difficult labour conditions elsewhere, and also to the increased valuation of city sites. The leather industry, which formerly flourished on the right bank of the Allegheny, is now in a languishing condition.

The foregoing Table shows that in 1900 female workers were numerous in the clothing, food, drink and tobacco trades. The industrial employment of women has increased in recent years, and in Pittsburg at the present time they are engaged not only in the clothing, laundry, tobacco, canning, confectionery, cork, paper, soap, paint and printing trades, but also in the glass industry as decorators, packers, riveters and foot press operators in lamp works, and in the metal trades as coremakers in foundries, in screw and bolt factories, in mica-splitting, in electrical works as coilers and insulators, in sheet and tinplate mills as openers and in various other metal works.

There are no public labour registries in Pittsburg, but a number of employment agencies are maintained by private individuals of different races, and the larger industrial establishments have their own special registries. Workpeople in the coal and metal industries do not stay long at any particular place of work, and employers assert that the number of new men whom a firm has to engage in the course of a year is often equal to or even greater than the normal number employed. This restlessness of the workers is largely attributed to the readiness with which unskilled or semi-skilled steelworkers, forming together quite seventy per cent. of all workers in the steel mills, are able to find fresh employment, to the fact that the majority are immigrants without fixed local ties and that a large

proportion of them are unmarried, but also to the high pressure and dangerous character of much of the work in Pittsburg mills, and the unusually high rents which have to be paid even for houses of an unsatisfactory character.

The number of accidents, both fatal and non-fatal, in the industrial life of Pittsburg appears to be unduly large. Attention has been called in more than one Report of the Pennsylvania State Bureau of Industrial Statistics to the "startling" number of accidents occurring in connexion with the various industries in the State. In 1907 and 1908 respectively there were reported 1,422 and 1,348 fatal accidents; and in 1908 12,610 non-fatal accidents were notified. As the result of a comprehensive enquiry made under the auspices of the Russell Sage Foundation known as "The Pittsburgh Survey" it was ascertained that in Allegheny County alone in the year July 1, 1906 to June 30, 1907, 526 men were killed by accidents when at work. During the same year the hospitals of the county received over 2,000 men injured in such accidents. Of those killed 195 were engaged in steel manufacture, 125 on the railways, 71 in coal mining and 135 in other industries. An analysis of the ages showed that 42 per cent. were from 21 to 30, and 26 per cent. from 31 to 40. The weekly wages received were ascertained for 440 of those killed, showing that 16 per cent. were earning under 41s. 8d. per week, 16 per cent. 41s. 8d. but under 50s., 20 per cent. 50s. but under 62s. 6d., 36 per cent. 62s. 6d. but under 83s. 4d. and 12 per cent. 83s. 4d. or over. The accidents were attributed to various causes: thus, according to the examination of the available indications by the investigators of "The Pittsburgh Survey," responsibility lay in 32 per cent. of the cases with the victim, in 14 per cent. with his fellow workmen, in 12 per cent. with foremen, in 36 per cent. with the employer (meaning thereby his neglect to provide proper protection for his machinery, or the crowding of his machinery within too narrow limits, inadequate inspection or absolute defects in plant or appliance), while in 29 per cent. of the cases the evidence did not justify any definite assignment of cause.

The system of factory inspection in the city and district appears to be in a state of transition. At present the headquarters are located at Harrisburg, which lies five hours distant by express train from Pittsburg, and there is no local office of the State Factory Inspection Department in the city.

Working-class organisation is weak in the dominant iron and steel trades. Prior to 1892 the principal organisation for the skilled workers engaged in these trades was the Amalgamated Association of Iron and Steel Workers, but from that date, the year of the Homestead strike, its power began to wane, and gradually the mills shook themselves free of union restrictions. The complete non-recognition of unionism in the steel industry appears to have followed on the formation of the United States Steel Corporation, which little by little has eliminated unionism from its works. To-day union rates and conditions are recognised in none of the Pittsburg steel works, and in only four iron works. In the engineering trades there are several unions, but they are unable to make their rates effective.

On the other hand, union rates are recognised in all the coal mines in the Pittsburg district, yearly agreements being signed. The workpeople in certain of the building trades are well organised and are able to enforce union rates, and in the newspaper printing trade and the brewery trade union rates are also paid; in the latter trade closed shops are general.

Works rarely rest on Saturday afternoon, although in some trades work ceases earlier on that day. In the iron and steel trades only two days in the year—Christmas Day and Independence Day—are recognised holidays, but in other trades three or four additional days are generally observed.

In the following paragraphs reference is made to special conditions prevailing in the more important industries of Pittsburg:—

Building Trades.—The large contractors employ union labour, and in many non-union or open shops the union rates are paid to the majority of skilled men. Bricklayers, stonemasons and plumbers had the strongest unions in 1909 and were able to secure their rates, but the plasterers' unions were not so strong as formerly, and the painters' and carpenters' unions were weak. The slackening in building operations in 1908 adversely affected the unions in general, but a revival took place in 1909 and the General Council of the Building Trades was successful in obtaining in August signed agreements from three important firms for all trades except that of the bricklayers. The bricklayers' organisation holds aloof from the other organisations in this group of trades. The hod carriers—who in America are, like the bricklayers, not so numerous relatively to the other

occupations as in England—are largely negroes and have a fairly strong union. Many of the building trades work only four hours on Saturday during the summer months, the 48-hours week being made up in some cases by working additional time on other days. It is usual to pay time-and-a-half for overtime and double time for Sundays and holidays.

Coal Mining.—There are no coal mines within the city limits, but several pits are worked at a distance of seven or eight miles. The mines are for the most part situated in the hills, but many are close to the rivers, and the coal, which is entirely bituminous, lies near the surface in seams mostly ranging from four to eight feet in thickness. In the Pittsburg district yearly agreements* are signed with the employers, but in the adjoining coalfields of Irwin and Connellsville, each of which has a larger mining population than Pittsburg, the miners are unorganised. In the Pittsburg (No. 5) District of the United Mine Workers of America there are some 35,000 organised workers. The hours of work for underground men are eight daily, viz., from 7 to 12 o'clock and from 1 to 4. The men go in about 6.30 a.m. as they undertake to maintain the mines in operation for eight hours. One shift only is worked as a rule, but day and night work is paid at the same rates. Men employed at the surface usually work eight or ten hours daily, but enginemen and firemen have a day of twelve hours. The recognised holidays are New Year's Day, April 1 (in commemoration of the establishment of the eight-hour day), Decoration Day (in May), Independence Day, Labour Day, Thanksgiving Day and Christmas Day.

Wages are paid every two weeks in the mines, on the second and fourth Saturdays, but if there are five Saturdays in the calendar month, payments are made on the third and fifth Saturdays. Owing to the variety of conditions and the wide ranges in earnings it was found impossible to obtain satisfactory evidence as to the predominant weekly earnings of men working with electric and other mining machines, and accordingly the wages of these men do not appear in the Table on p. 347.

A considerable number of the mines are owned by steel companies, and although the companies refuse to recognise the unions in their mills they conclude agreements with the miners. Other manufacturing concerns, as well as railways, also possess mining properties, but the greater part of the coal production is in the hands of a few large companies.

The percentage of foreign-born miners in the Pittsburg district is greater than in the other bituminous fields of Pennsylvania. The Americans are generally employed as engineers, foremen, weigh and check men, and in the better surface positions, while the foreigners mostly work underground. The Poles, Hungarians, Slovaks, Russians, Lithuanians and Italians are the chief foreign elements, the Slavonic races predominating. The Italians are largely employed as cutters and loaders. There are small numbers of Belgians, and also of Germans from the Ruhr district.

Some notes on the organisation of the miners in America may be given conveniently here. The federation known as the United Mine Workers of America has a total membership of some 300,000, and its scheme of organisation comprises national, district, sub-district and local unions. The jurisdiction of the national union extends over the coal-producing States, while the district unions generally have jurisdiction over single States, though States where coal mining is of unusually great importance, as Pennsylvania and Indiana, are subdivided. Thus in Pennsylvania there are several districts for both the anthracite and bituminous coal fields, and District 5 covers only the Pittsburg or western bituminous field of this State. The sub-district unions are subject to the district unions, and under the jurisdiction of the sub-district unions are the local unions, which are generally composed of the workers at a single mine, the minimum number of members to constitute a local union being ten. Every January a convention is held consisting of representatives elected by all the local unions on the basis of one vote for each hundred members (or less), but no delegate can give more than five votes upon any question. The powers of this assembly are absolute, and it can legislate upon any subject relating to the organisation of the unions. The officers are elected every December, and hold office from April 1 to March 31. The powers of the president are very great; in matters of policy his decision is final, and on due cause shown he can suspend or remove members of the executive board itself. No strike in any district can be ordered without his written consent, unless in the event of his refusal appeal has been made successfully to the board. The financial position of the national union is strong, each member of a local union contributing 5*d.* per month out of regular *per capita* dues of 1*s.* 0½*d.* in addition to any other levy which may be made by the national board. The various

* See Appendix, pp. 437-8.

district unions are also often well provided with funds, and at various times they have contributed large sums towards the carrying on of strikes.

Blast Furnaces and Steel Works.—There were in the Pittsburg district in 1909 fifty-one blast furnaces, of which some forty were in Allegheny County. Work is continuous and is arranged in twelve hour shifts, which are changed every week: on Sunday morning the men in the day shift of the previous week, having worked twenty-four hours without a break (from Saturday morning to Sunday morning), give place to the night shift of the previous week. The work, therefore, alternates between six periods of twelve hours and six periods of twelve hours and one of twenty-four within a fortnight. More than one-half of the workmen at blast furnaces are unskilled labourers, and time rates of wages apply to these, to keepers, hot-blast men and nearly all other men. Wages are paid twice monthly in this and all other branches of the iron and steel industry.

Of the 190 open-hearth furnaces in the district in 1909, 140 were situated in Allegheny County. The majority of the men at these furnaces work six shifts of twelve hours per week, but a large number are also obliged to work on Sunday afternoons. Tonnage rates of payment are usual for skilled men in this branch of steel production, but labourers, who constitute about one-third of the total number of workmen, are on time rates. Bessemer converters are not numerous in the Pittsburg district.

In the rolling mills payment by output predominates for skilled and semi-skilled workers, but the unskilled men are paid by time. The earnings of the highly skilled men such as rollers show a wide range according to the nature of the production as well as the capacity and the regular working of the individual mills. The hours worked by the majority of the men are 72 weekly, though in certain mills 66 hours are usual, but some Sunday work also falls to the lot of some men in most steel mills. In 1910 definite instructions were issued by the executive head of the Steel Corporation to the effect that in all mills under his authority Sunday work was to be restricted to absolutely essential operations, exception being made in the case of the blast furnaces.

In respect to systems of remuneration bonuses are not paid to workmen in steel mills, but foremen and superintendents, when paid regular wages, as they usually are, often receive considerable gratuities. The United States Steel Corporation in particular maintains a fund out of which such rewards are paid. The amount distributable varies according to the profits of the Corporation: when the annual profits reach £16,666,667, one per cent. of this amount is allocated; when the profits are greater, a higher percentage is set aside, the maximum being $2\frac{1}{2}$ per cent. should the profits reach £31,250,000. The Corporation has also established a scheme under which its work-people may purchase stock of the Corporation at an advantageous price and pay for it by instalments to be deducted from their wages.

The statistics of population already given show the strength of the foreign elements in the population of Pittsburg, and the composition of the working staff of large and typical steel mills has already been cited in illustration of the predominance of foreigners in the steel industry.

Iron Works.—The production of iron has fallen into quite a secondary position in the Pittsburg district, and it is estimated that not more than 6,500 men are now employed in the trade, compared with 65,000 in the steel trade. Union rates of wages are usually paid. The rates for puddling are fixed for periods of sixty days, and in 1909 they ranged from 21s. 11d. to 24s. per ton (2,240 lb.). Formerly the puddler always divided his earnings with his helper, who received $36\frac{2}{3}$ per cent. (one-third plus five per cent. of the balance), but most puddlers now share in equal parts with a second man; if they have two helpers, the first is paid in the old manner as stated above, and the second receives merely a labourer's rate of pay. Puddlers' earnings now average from 12s. 6d. to 14s. 7d. per day. Unskilled labourers at iron works are paid $7\frac{1}{2}$ d. or 8d. per hour for 59 or 60 hours a week. Wages are paid every two weeks. The firms which recognise the union observe Christmas Day, Decoration Day, Independence Day, Labour Day and Thanksgiving Day as holidays.

Engineering and other Metalworking Trades.—The more important branches of these trades include the manufacture of steel cars, air brakes, bridges, tubes and pipes, electrical machinery and supplies, rolling mill machinery, locomotives, and rivets, nuts and bolts. Over 8,000 men are employed in steel car making in the immediate vicinity upon the banks of the Ohio, and there is another large works within the district. Air brakes and electrical machinery and supplies are manufactured in separate works by a firm located

some twelve miles from the city. The town of Ambridge (about sixteen miles down the Ohio) owes its existence to the admirably designed bridge works there, which employ from 2,500 to 2,800 men. Nuts, rivets and bolts are made in great quantities in the city, the largest firm being able to manufacture alone from 300 to 400 tons in a day. The manufacture of pipes and tubes is carried on in two establishments in the city and is the predominant industry of McKeesport, where 7,500 men are employed therein.

The great railway systems have repair shops at Pittsburg and afford a large amount of employment.

The machinists had a strong organisation until a few years ago, but in 1907 and 1909 general or partial strikes in these trades resulted in the defeat of the men, and the open shop now prevails throughout the district. Time rates predominate.

Printing Trades.—Although the newspaper offices pay union rates, all maintain open shops. The hours vary from 42 to 48 per week and time rates are general. Eight daily newspapers are published, one of which is in German. In the jobbing offices, where the principal work is general commercial printing, the workpeople are for the greater part unorganised; the working week is nominally 54 hours, but often only 52 or 53 hours are actually worked. Some women are employed both at hand and machine composition and as feeders. In bookbinding the business is mainly in blank books, ledgers, &c., and time rates are paid.

Cigar Manufacture.—Pittsburg is noted for the manufacture of rough and cheaply-made cigars, known as "stogies," which have a very large local sale. There are in the city half-a-dozen important factories, mostly controlled by the tobacco combination, where "stogies" and other cheap cigars are made, but the number of small workshops employing from four to ten or twelve persons is very large. Women are largely employed in this industry, and in the large factories they predominate. Russian and Polish Jews resident in the Hill District of the city form the bulk of the "stogie" and cheap cigar makers.

Food and Drink Trades.—Women are largely employed in the food-canning establishments. They sort and bottle pickles, prepare and bottle vegetables, fruits, &c., and label the bottles and cases. At certain seasons much overtime has to be worked in order to prevent the loss of perishable raw material. The manufacture of sweets, including chewing gum, also affords women a large amount of employment. Biscuits are manufactured in several establishments, employing a total of some 1,500 people, the majority of whom are women, men being engaged as oven hands and in the occupations requiring physical strength. The brewery workers are well organised, and wages agreements covering every class of worker are signed by the unions and the employers. There are seventeen breweries in Pittsburg, and four more in two neighbouring towns, employing altogether over 1,500 men. One company employs over two-thirds of this total.

Transport Trades.—Save the brewery men, the drivers, carters and other workers employed in the handling of goods are not well organised. The ordinary carter is paid from 41s. 8d. to 50s. per week of no fixed hours. The various railway companies employ a large number of men for the handling of their great traffic; the freight handlers, who are usually paid on a tonnage basis, earn from 52s. 11d. to 54s. 10d., the many classes of men engaged in the switching operations and in the yards are paid time rates, and the men working the trains (engineers, firemen, brakemen and conductors) are paid a combination wage based on time and distance travelled.

Public Services.—The construction and repair of the streets is usually undertaken by contractors, though sometimes such work is performed by the municipality, which also carries out the cleaning of the streets. The water works belong to the city, but the gas and electric light works and the tramways are in the hands of companies. Gas production is small in amount owing to the supplies of natural gas, and only about 100 men are employed in the gas works. The motormen and conductors on the tramways are paid 1s. 0¼d. per hour for the first two years, 1s. 0¾d. for the third year, and 1s. 1¼d. for succeeding years. Agreements with the company are signed yearly. The number of hours worked is irregular, but the longest per day is 10 hours 40 minutes, and men may take a day off once a week. Few men stay long in this employment. The great majority are Americans; in 1909, out of a total of 2,950, only about 200 were foreign-born, principally Jews from Eastern Europe and Italians.

The following Table shows the predominant weekly wages and hours of labour of men engaged in some of the principal occupations of Pittsburg in February, 1909 :—

Predominant Weekly Wages and Hours of Labour of Adult Males in the Principal Occupations in February, 1909.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|---|---|-------------------------------------|
| <i>Building Trades :—</i> | | |
| Bricklayers | 119s. 2d. | 44 |
| Stonemasons | 110s. | 48 |
| Stonecutters | 100s. | 48 |
| Carpenters | 87s. 6d. | 48 |
| Plasterers | 112s. 6d. | 48 |
| Plumbers | 112s. 6d. | 48 |
| Structural Iron Workers | 112s. 6d. | 48 |
| Painters | 80s. to 85s. | 48 |
| Hod Carriers and Plasterers' Labourers | 70s. | 48 |
| General Labourers | 43s. 9d. | 48 |
| <i>Coal Mining :—</i> | | |
| Hewers (Pickmen) | 60s. to 75s. | 48 |
| Roadmen | 64s. | 48 |
| Timbermen | 64s. | 48 |
| Drivers | 64s. | 48 |
| Labourers, Underground | 59s. | 48 |
| <i>Blast Furnaces* :—</i> | | |
| Keepers | 72s. 11d. to 77s. 4d. | 84 |
| Hot-blast Men | 58s. 4d. ,, 67s. 1d. | 84 |
| Keepers' Helpers and Labourers | 52s. 6d. ,, 61s. 3d. | 84 |
| <i>Steel Making (Open Hearth Process)* :—</i> | | |
| Melters | 108s. 4d. to 125s. | 72 |
| Melters' Helpers | 70s. 10d. ,, 79s. 2d. | 72 |
| Steel Pourers | 79s. 2d. ,, 89s. 7d. | 72 |
| Labourers | 45s. ,, 49s. 6d. | 72 |
| <i>Steel Rolling* :—</i> | | |
| Heaters | 137s. 6d. to 150s. | 72 |
| Heaters' Helpers | 64s. 7d. ,, 70s. 10d. | 72 |
| Rollers | 145s. 10d. ,, 208s. 4d. | 72 |
| Shearmen | 83s. 4d. ,, 104s. 2d. | 72 |
| Labourers | 45s. ,, 49s. 6d. | 72 |
| <i>Foundries and Machine Shops :—</i> | | |
| Ironmoulders | 82s. 1d. to 90s. | 54 |
| Machinists | 72s. ,, 73s. 2d. | 54 |
| Patternmakers | 81s. 3d. ,, 84s. 5d. | 54 |
| Labourers | 33s. 9d. ,, 41s. 3d. | 54 to 60 |
| <i>Printing and Bookbinding Trades :—</i> | | |
| Newspaper— | | |
| Compositors, Hand and Machine | { Day work ... 96s. 3d. to 110s. Night work ... 105s. ,, 120s. | 42 to 48 |
| | | 42 ,, 48 |
| Book and Job— | | |
| Hand Compositors | 75s. ,, 83s. 4d. | 52 ,, 54 |
| Pressmen (Cylinder Presses)... .. | 75s. ,, 83s. 4d. | 52 ,, 54 |
| Bookbinders | 75s. ,, 83s. 4d. | 54 |
| <i>Fruit and Vegetable Canning :—</i> | | |
| Preserve Men | 45s. 10d. | 58½ |
| Coopers | 50s. to 62s. 6d. | 58½ |
| Labourers | 37s. 6d. | 58½ |
| <i>Brewing :—</i> | | |
| Brew-house and Cellar Men | 70s. 10d. | 48 |
| Wash-house Men | 66s. 8d. | 48 |
| Bottlers | 62s. 6d. | 48 |
| Route Drivers | 79s. 2d. to 87s. 6d. | 49 |
| Bottle Beer Drivers | 75s. | 49 |
| Stablemen | 62s. 6d. | 52 |
| Labourers and Yardmen | 58s. 4d. | 48 |
| <i>Transport Trades :—</i> | | |
| General Drivers, Teamsters | 41s. 8d. to 50s. | Variable |
| Railway Freight Handlers | 52s. 11d. ,, 54s. 10d. | — |

* The hours of labour stated for men employed at blast furnaces, open hearth furnaces and steel rolling mills are inclusive of intervals.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|---|---------------------------|-------------------------------------|
| <i>Public Services :—</i> | | |
| Street Construction, Paving and Cleaning— | | |
| Municipal Workmen— | | |
| Paviors | 125s. | 48 |
| Paviors' Labourers | 75s. | 48 |
| Road Menders | 50s. | 48 |
| Scavengers | 50s. | 48 |
| Road Sweepers | 50s. | 48 |
| Drivers, Teamsters | 56s. 3d. | 48 |
| Contractors' Workmen— | | |
| Paviors | 140s. | 60 |
| Paviors' Labourers | 93s. 9d. | 60 |
| Road Menders | 43s. 9d. | 60 |
| Drivers, Teamsters | 45s. 10d. | 60 |
| Gas Works (Company)— | | |
| Gas Stokers | 62s. 6d. | 84 |
| Labourers | 37s. 6d. | 60 |
| Electric Light and Power Works (Company)— | | |
| Electricians | 79s. 1d. | 80 |
| Engineers | 72s. 11d. | 80 |
| Stokers | 59s. 5d. | 62 |
| Repair Men | 57s. 9d. | 65 |
| Labourers | 51s. 10d. | 65 |
| Electric Tramways— <i>See text.</i> | | |

Taking wages at New York as the base, = 100, in each case, the wages index numbers for Pittsburg are—building trades, skilled men 98, hod carriers and bricklayers' labourers 102; foundries and machine shops, skilled men 95, unskilled labourers 90; printing, hand compositors (job work) 90.

HOUSING AND RENTS.

The majority of the wage-earning classes live in those inner districts of Greater Pittsburg that surround the "down-town" or business centres, and in the quarters clustering along the river fronts. Although there is a certain diffusion of races, most nationalities show a tendency to live together in distinct localities. The Hill district, which begins close to the Union Station, is inhabited by negroes, Russian Jews and a sprinkling of Italians and Syrians. In 1900 72 per cent. of the negroes in Old Pittsburg lived in seven wards, 49 per cent. living in the Seventh, Eighth, Eleventh and Thirteenth wards of the Hill district. The influx of negroes from the South in recent years has increased their number in these wards. The white Americans move when negroes come into a street inhabited by them, but the Russian Jews do not appear to object to them as neighbours. Poles are very numerous in the Pennsylvania Avenue and Butler Street area along the Allegheny as far as Fiftieth Street, but they also inhabit other parts of the city. Other Slavs, while numerous along the left bank of the Allegheny, form the leading element of the population in Woods Run, in the streets near the river on the South Side, and in the Second Avenue district. Bohemians concentrate for the most part in the North Side, and Italians in various parts of the original Pittsburg. Germans predominate in the better streets of the South Side and in parts of the North Side, such as the East Street and Spring Garden districts, but in recent years they have moved to less central districts and to suburbs like Knoxville. Although at the Census of 1900 they formed the largest single group of foreign-born inhabitants, viz., 28.9 per cent. of the whole, they have not maintained this proportion. Immigration from Germany into the United States has greatly diminished, and its direction has been mainly to the West. Irish immigrants to Pittsburg have also decreased in numbers, the labour formerly done by them in the mills and in construction and railway work falling now for the most part to Slavs, Italians and other South-Europeans.

The housing problem has become a serious one at Pittsburg during the last decade. The development of the manufacturing industries has led to a large influx of immigrants, and as the housing accommodation has fallen far short of the demand, much overcrowding has taken place, an evil which has been intensified by the low standard of comfort to which the majority of the immigrants have been accustomed. The natural peculiarities of the site of Pittsburg have further accentuated the difficulty, as they prevent the easy passage of people from the factory districts to the suburbs, while the long and irregular hours (changing shifts, &c.) worked at the iron and steel mills make it inconvenient for the workers to live at a distance. As a result there is much congestion of buildings upon

sites, and much overcrowding of the dwellings themselves in the districts near the mills. The Poles and Slavs generally are much addicted to living in boarding houses, and the practice conduces to very unsatisfactory conditions. A large proportion of the immigrants of these races are unmarried, and accordingly live with people of their own nationality, generally a man and his wife, who lodge and board any number of them up to twenty. Each lodger pays from 10s. 5*d.* to 14s. 7*d.* per month for sleeping accommodation (which may consist of a bed for his exclusive use, though quite as often he may have to share a bed or allow his bed to be used by another lodger in his absence), for the cooking of his food and the washing of his clothes. The food is bought by the woman, and the food bill is settled every fortnight. The amount paid for food in some twenty houses of this kind visited in the course of the investigation ranged from 14s. 7*d.* to 20s. 10*d.* per man per fortnight. The crowding of the sites is worst along the rivers, where all available space left between the workshops and the hills is utilised for dwellings, so that little yard space remains for the tenants. Congestion of this kind, however, is common in most working-class districts in Pittsburg.

The Census of 1900 showed that in the combined cities of Pittsburg and Allegheny 62·4 per cent. of all families lived in dwelling-houses occupied by one family, 26·6 per cent. in dwelling-houses occupied by two families and 11·0 per cent. in those occupied by three or more families. The figures showed that at Pittsburg nearly 7 per cent. more families (64·3 as compared with 57·5) lived in dwelling-houses occupied by single families than at Allegheny, but the percentage in dwelling-houses occupied by three or more families was almost identical in the two cities, viz., 11·1 and 11·0 respectively. Since 1900 a considerable number of additional flat buildings have been erected in the working-class and other districts, and many houses once occupied by single families now contain two or more families. Considerable light is thrown upon present aspects of the housing question by the results of an enquiry into the tenement houses made in 1908 by the Bureau of Health, a tenement house being defined as a building occupied by three or more families. These results showed that the total number of persons living in such dwelling-houses was 45,899, made up of 12,300 families containing 42,699 persons, and of 3,200 boarders, who were living in the houses of 1,532 families. About 8 per cent. of the total population of the city, therefore, lived in tenement houses. The families were classified as follows:—47·4 per cent. American, 16·7 per cent. Polish, 8·8 per cent. Hebrew, 7·8 per cent. German, 4·9 per cent. Negro and 3·6 per cent. Italian.

It follows from the two enumerations just given that the predominant type of dwelling at Pittsburg is the single-family house, though the double-family house is also important. As regards the working classes in particular, several weeks of investigation into housing conditions clearly pointed to the continued predominance of the single-family house, and showed that dwellings containing four, five and six rooms are most typical of American and German working-men, while the small two-family houses, containing from five to seven rooms, are occupied in the main by the later immigrant races, principally from Austria-Hungary, Italy and Russia.

The single-family house of four or five rooms has two or three rooms on the ground floor and two on the first floor, while the six-roomed house generally has three rooms on the ground floor and three on the first floor. On the second floor there is often an attic, but unless of good height it is not counted as a room, though it is sometimes used for sleeping when there is a large family. Most houses have a lobby or vestibule entrance, but only those more recently built and letting at a good rent have corridors as well. The staircase is mostly placed either in the kitchen or between the front and second rooms; less commonly it faces the street entrance. Forecourts to workmen's houses are practically unknown in Pittsburg, and the rear spaces are small. Both gas and coal ranges are used in the kitchen, gas ranges being generally supplied when the rent exceeds 17s. 4*d.* per week. As natural gas is obtainable at a reasonable price, gas ranges are probably more used than coal ranges for cooking. Until recently the closets were mostly of the privy-vault kind and almost invariably outside the houses. In the case of the older houses the majority are still in the yards, but the water-flush system has been installed. During the administrative year 1908-9, 10,000 privy-vaults were replaced by water-closets in various parts of the city, and the authorities are rapidly discarding the vault system. In the case of the newer houses the closets are generally inside, often in the cellars of the single-family houses. Bathrooms are rare in working men's houses, builders having only just begun to put them in dwellings of this class. A water-tap is found in the kitchen in the better houses, but often the only water supply is from a hydrant in the yard, sometimes so placed in the boundary between two houses that it may serve for both.

The two-family houses are mainly of two and three stories, or two stories with an

attic story. When built or adapted for the accommodation of two families, the family living upstairs has usually a separate entrance, generally in the yard, access to which is sometimes obtained by a tunnel passage running from the street. When the house contains seven rooms, four generally fall to the upstairs tenement, three only being on the ground floor. The newer houses have an independent inside water supply and separate closets, but in the older houses these conveniences are generally used by both families. A considerable number of four and five-roomed houses are occupied by two families, implying that dwellings of two and three rooms are numerous.

The tenement houses, that is, the houses occupied by three or more families, are very diverse in character, but they fall into two main groups, viz., flat buildings constructed as such, with self-contained dwellings, and buildings in which sets of rooms lying more or less compactly together have been arranged as tenements, but where conveniences such as water supply and closets are often shared by at least two tenants.

The houses of wage-earners are for the most part built in terraces, few being detached or semi-detached, and the greater number are probably still frame, although the use of timber for building is going out of fashion, the newer houses being of brick. There is no appreciable difference in the letting value of a brick as compared with a frame house, but the sale value of the former is considerably higher, mainly owing to its superior durability. The frame buildings are more easily erected on the hilly sites which abound in the district. Owing to the conformation of the land there is considerable irregularity in structure, and houses with at least one story more at the front than at the rear, or *vice versa*, are numerous in the hilly districts. Bay-windows are rare, and the roofs are either flat or slightly pitched, with, in many cases, projecting attic windows. Cellars or basement rooms are universal, and in many houses the basement rooms are used for living purposes. The municipal by-laws define a cellar as a "story more than one-half below the street or ground level," and the use of cellars for habitation is forbidden. If the basement rooms are 8 feet 6 inches high and properly lighted and ventilated, they may be so used. Basements may contain one or two rooms, the entrance being usually beneath the steps leading to the street door. In the foreign quarter these basement rooms are usually supplementary to rooms rented in the body of the house.

In 1901 the municipal authorities took an important step forward in the improvement of housing conditions by the adoption of a by-law making unlawful the existence of cess-pools and privy-vaults on any building site contiguous to a public sewer, and the rigorous enforcement of this by-law during the last three years has had excellent results. The previous condition of great numbers of the yards, owing to the privy-vaults not being systematically cleansed, was not only highly discreditable to a great city but was a menace to public health. In new tenement houses a separate water supply is required for every dwelling, and in existing buildings one is required for every floor. A water-closet must be placed in every dwelling in new tenement buildings, except where the dwelling contains only one or two rooms, while in existing tenement buildings one is necessary for every two dwellings. All tenement houses in the city must be registered under penalty, in order that the by-laws affecting them may be enforced. In all new dwellings, whether in tenement buildings or in single and two-family houses, the cellars must extend under the whole structure, must be ventilated from both ends, and in the case of low, damp ground must be paved with bricks, concreted or asphalted to the depth of three inches. All new dwelling houses must have an open space at the back or side not less than 144 square feet in area.

The following Table shows the rents most usually paid by the working classes in February, 1909, for dwellings of two, three, four, five and six rooms :—

Predominant Rents of Working-class Dwellings.

| Number of Rooms per Dwelling. | Predominant Weekly Rents. |
|-------------------------------|---------------------------|
| Two rooms | 6s. 9d. to 8s. 8d. |
| Three rooms | 8s. 8d. ,, 12s. 6d. |
| Four rooms | 11s. 6d. ,, 17s. 4d. |
| Five rooms | 14s. 5d. ,, 19s. 3d. |
| Six rooms | 17s. 4d. ,, 21s. 2d. |

The level of rents at New York being represented by 100, the rents index number for Pittsburg is 94.

These rents include the water charges and also the local taxes, in so far as the property taxes can be said to affect the tenants. Rents are paid monthly in advance. Leases are customary, and a month's notice is usual on both sides. Sub-letting is generally allowed, but landlords often exact an additional payment of about 2s. per week for each family taken in, while in the case of professional boarding houses a small rent is sometimes fixed, and the tenant pays 1s. per week more for each boarder. The immigrants in general, like the negroes, appear to pay more in rent than Americans or German-Americans for similar accommodation. When Poles, the poorer immigrants, enter a neighbourhood in which English-speaking people live the property depreciates, for, just as in Southern cities houses once occupied by negroes cannot afterwards find white tenants, so in Pittsburg, houses occupied by Poles and other Slavs or Italians are rarely taken later by American, German or British-American tenants.

In the Tenement House Enquiry of 1908 it was found that the rents per room per month showed an extreme range of from 11s. to 33s. 4d. and averaged 21s. 3d.

In four of the "down-town" wards of Allegheny, mainly occupied by the working classes, viz., the Third, Fourth, Seventh and Eighth, the average monthly rents per room were 19s. 2d., 18s. 5d., 14s. 9d. and 15s. 7d. respectively, while in three wards a little removed from the river, the Twelfth, Thirteenth and Fourteenth, the average rents were 15s. 3d., 15s. 8d. and 15s. respectively. In the Monongahela River wards of Pittsburg, the Twenty-fourth, Twenty-seventh, Twenty-eighth and Twenty-ninth, the average rents per room in tenement houses were 15s. 5d., 13s. 11d., 16s. 3d. and 16s. 6d. respectively.

The following notes relate to working-class dwellings in Pittsburg which were visited in the course of this enquiry :—

Spring Alley.—Six brick houses in the down-town foreign district containing four rooms with attic and let at 13s. 6d. per week. There were no halls or passages, the street door opening into a room, and the staircases were in the back rooms. The back and front rooms measured 12 feet by 13 feet by 9 feet, but the size of the back room was reduced by the staircase. The closets and water supply were in the small yard.

Fifteenth Street.—A court containing six brick houses, each with three tenements of two rooms, let at 7s. 8d. per week. Poles lived in sixteen of the eighteen tenements, and many tenants had boarders. In one dwelling there lived a family consisting of parents and two children, with another married couple as boarders, paying 6s. 9d. per week for lodging, cooking and washing. All the rooms were alike in size (14 feet 6 inches by 11 feet 6 inches by 8 feet 6 inches), and the closets and water were in a narrow court between the houses.

Butler Street near Thirty-sixth Street.—Two brick houses containing five rooms and an attic room which were let at 21s. 2d. per week. The measurements were : parlour and dining room 11 feet by 13 feet ; kitchen 17 feet 6 inches by 10 feet ; front bedroom 15 feet by 13 feet ; back bedroom 11 feet 6 inches by 12 feet, while the attic was 25 feet by 15 feet, with a height of from 4 to 6 feet. On the ground and first floors the height was 9 and 8 feet respectively.

Leech Street, near Thirty-fifth Street.—Four brick houses occupied by Americans, containing three rooms on the ground floor and three rooms on the first floor, and rented at 17s. 4d. per week. There was a hall 4 feet wide in each house, but no bathroom. The measurements were : ground floor, front room 12 feet by 10 feet by 9 feet ; middle room 14 feet by 12 feet by 9 feet ; kitchen 14 feet by 10 feet by 8 feet. Upstairs, front and middle rooms 14 feet by 12 feet by 8 feet ; back room 12 feet by 9 feet 6 inches by 8 feet. In the same street there were ten houses containing four rooms and attic also occupied by Americans, and let at 13s. 6d. per week.

Charlotte Street, near Thirty-seventh Street.—Three houses of four rooms and an attic, let at 14s. 5d. per week. There were no halls. The front rooms on the ground and upper floors measured 12 feet by 13 feet by 8 feet and the back rooms 13 feet by 13 feet by 8 feet, the attic being 25 feet by 13 feet, with a height varying from 4 to 6 feet.

Forty-sixth Street, near Davison Street.—Two small houses built of wood, containing four rooms, and let at 9s. 7d. per week. The front and rear rooms on the ground floor measured 11 feet by 11 feet by 8 feet, while the upper rooms were 12 feet by 11 feet by 7 feet and 13 feet by 11 feet by 7 feet.

Pennsylvania Avenue, near Thirty-third Street.—Five houses built of wood, containing five rooms and let at 15s. 5d. per week. The front and middle rooms on the ground floor measured 12 feet by 11 feet by 8 feet and the kitchen 9 feet by 11 feet by 7 feet, while the upper rooms measured respectively 14 feet by 11 feet by 8 feet and 13 feet by 11 feet by 8 feet. The street door opened into the front room.

Main Street (on the North Side).—Two rows of thirteen new brick houses containing four rooms, and let at 12s. 6d. per week. The front rooms on the ground and first floors

measured 14 feet by 11 feet by 9 feet, while the back rooms were 11 feet by 11 feet by 9 feet. There was water in the kitchen, but the closets were in the yards, which were very small.

East Street (on the North Side).—Two houses merged in one and occupied by four American families. There were two dwellings of four rooms let at 12s. 6d. and 13s. 6d. per week respectively, one of three rooms let at 10s. 1d. and one of two rooms let at 8s. 8d. per week. The four water-closets were in the yard, which had been newly concreted, and there was cellar space for each tenant. The dimensions of the three rooms in the tenement on the ground floor were : kitchen 10 feet by 9 feet, back room 14 feet by 13 feet and front room 13 feet 6 inches by 12 feet 6 inches, the height being 9 feet 9 inches.

Howard Street.—Two inferior tenements of three rooms in a frame building let at 9s. 2d. per week. The rooms measured 15 feet by 11 feet by 9 feet. A third tenement of three rooms let at 9s. 7d. per week, two of the rooms measuring 14 feet by 10 feet and the third 14 feet by 11 feet, the height being 10 feet. The houses here are built on a declivity, and in this case while there were four stories in the rear, there were only two stories in Howard Street. On the opposite side of the street were other houses with one more story at the back than at the front. In one of these were three tenements of three rooms, two let at 7s. 8d. and one at 8s. 8d. weekly. The occupants were Germans. The dimensions of the rooms in the dwelling on the first floor were 14 feet 6 inches by 13 feet, 13 feet 6 inches by 7 feet 6 inches and 15 feet by 14 feet, the height in each case being 8 feet 6 inches.

Glenwood Avenue.—Twenty-eight red brick houses in a row containing four rooms each, fourteen let at 13s. and fourteen let at 11s. 6d. weekly, the latter houses being farther up the hillside. The houses were occupied for the most part by workmen employed in the railway repair shops, mainly Americans. The street door opened into the parlour, and there were no yards. The closet was in a cellar or basement room behind, which was well lighted, owing to the steep slope of the ground. The rooms measured 12 feet by 11 feet 9 inches by 9 feet.

Renova Avenue.—Five good red brick houses with open spaces in front (but with little space behind owing to the declivity) containing five rooms with a bathroom and let at 19s. 3d. per week. Each house had a hall and passage. The front room on the ground floor measured 15 feet by 10 feet, the middle room 17 feet by 13 feet, and the kitchen 12 feet by 10 feet, the height in each case being 9 feet 6 inches. The tenants were Americans, employed in the railway repair shop and in a large machine shop.

Herbert Alley.—Four houses built of wood, containing four rooms, rented at 11s. 6d. per week, and occupied by Italians. The front rooms measured 14 feet 6 inches by 11 feet by 9 feet and the kitchen 13 feet 6 inches by 11 feet by 9 feet, the stairs reducing the available space of the latter. The closets (vault system) were in the yard. In the rear were four frame houses of four rooms in very bad condition let to Syrians and Slavs at 8s. 8d. per week.

Manner and Seventh Street (South Side).—Two rooms occupied by a Polish pipe-worker earning about 16s. 8d. per day, let at 8s. 2d. per week. Although there were two children, four and sometimes six boarders were kept, each paying 3s. 2d. per week for sleeping accommodation, cooking and washing. Two men slept in each bed. For board they paid according to what they ate, but the housewife, who bought everything for them, stated that the cost varied from 16s. 8d. to 25s. per fortnight. The dimensions of the rooms were 14 feet by 15 feet and 12 feet by 13 feet, with a height of 9 feet.

Manner Street.—A house occupied by three Polish families. One family occupied two rooms on the ground floor and a basement room, and paid 8s. 2d. per week, another paid 7s. 8d. for two rooms on the first floor and a third paid 6s. 3d. for two rooms on the second floor. In each case the two rooms measured 18 feet by 12 feet and 16 feet by 12 feet, with a height of 8 feet on the second floor, of 8 feet and 9 feet on the other floors. In the same street in a house occupied by four Polish families, one basement room was let at 3s. 4d. weekly ; two tenements of two rooms (on the ground and first floors) were let at 7s. 8d. weekly ; while the two attic rooms cost 6s. 3d. The rooms on the first floor measured 15 feet by 14 feet by 9 feet and 15 feet by 12 feet by 9 feet respectively and there were six boarders in addition to the husband and wife. Each boarder paid 2s. 11d. per week for sleeping accommodation, cooking and washing.

Jane Street.—Twelve brick houses, each with two dwellings containing three rooms on the ground floor and four rooms on the upper floors. The three-roomed dwellings were let at 9s. 7d. weekly and the four-roomed dwellings at 10s. 7d. The entrance to the latter was from the rear, access being had to the small yard by a tunnel passage. The following were the dimensions of the ground floor rooms : front room 14 feet by

14 feet, middle room 10 feet by 16 feet and kitchen 10 feet by 12 feet, the height being 9 feet 6 inches. Water supply and privy-closet were in the yard. The rooms of the upper tenement measured : first floor—front room 14 feet by 14 feet by 9 feet, kitchen 14 feet by 16 feet by 9 feet ; second floor—front room 14 feet by 14 feet by 8 feet, back 14 feet by 11 feet by 8 feet. There was a water-tap in the kitchen.

Larkins Alley.—Twelve red brick houses, containing four rooms and let at 12s. weekly. There were no vestibules nor passages (the street door opening into a room), no gas fixtures and the water supply was in the yard. The staircases were in the kitchens. The rooms measured 10 feet 6 inches by 13 feet 6 inches by 9 feet, except that the available space in the back room was curtailed by the stairs. These were all one-family houses and were occupied by eight German, two English and two Polish families.

Rebecca Street.—A block of 60 flats, called Phipps Model Tenements, erected in 1908, 50 flats containing four rooms and bathroom and ten containing three rooms and bathroom. The flats with four rooms were let at from 15s. 8d. to 17s. 9d. per week ; 30 flats on the ground, first and third floors costing 17s. 9d., ten on the fourth floor 16s. 8d. and ten on the fifth floor 15s. 8d. ; while the rent of the three-roomed flats on the fifth floor was 11s. 6d., on the fourth 12s. 6d. and on the remaining lower floors 13s. 7d. The dimensions of the four-roomed flats were : parlour and bedroom 12 feet 3 inches by 7 feet 6 inches, third room 12 feet 8 inches by 10 feet 3 inches, kitchen 12 feet 8 inches by 9 feet 6 inches, bathroom 5 feet by 9 feet 6 inches, entrance lobby 6 feet 6 inches by 5 feet 3 inches, the height being 8 feet 6 inches. The rooms in the ten three-roomed flats were smaller, viz., kitchen 10 feet 3 inches square, bedroom 9 feet 3 inches square, third room 9 feet 3 inches by 10 feet 3 inches and the bathroom 10 feet 3 inches by from 4 feet 3 inches to 6 feet 3 inches, the height being 8 feet 6 inches. Gas ranges were supplied in the kitchen, and steam-heat radiators were placed in all rooms instead of fire-places. There were sinks with hot and cold water-taps in the kitchen, and in the bathroom, which contained the closet, was a lavatory with hot and cold water. These flats were occupied by Americans.

Smallman Street.—A house of five rooms, let at 14s. 5d. weekly. The dimensions of the two ground-floor rooms were 15 feet by 12 feet and of the kitchen 10 feet by 11 feet, the height being 9 feet. There was a through passage containing the staircase. Eight Croatians boarded in the house, sleeping in the two bedrooms upstairs, and each paying 22s. 11d. per fortnight for board and lodging. In the same street were visited :—(1) A house containing four rooms and an attic and let at 15s. 5d. per week. It was occupied by a man and wife, and fourteen Slovak boarders, who divided eight beds between them, each paying 10s. 5d. for sleeping accommodation and from 18s. 9d. to 20s. 10d. for food per fortnight. (2) Another house of six rooms with attic, the two rooms and kitchen on the ground floor being let at 12s. 6d. per week to Poles, who took in boarders, and the three upper rooms with attic at 13s. 6d. to Slavs (husband and wife), who lodged 14 boarders at 12s. 6d. per head per fortnight for sleeping accommodation, washing and cooking, their board costing 14s. 7d. to 16s. 8d. per head for the same period. The front bedroom contained four beds. The rooms were close and squalid in the extreme.

Spruce Alley.—Houses containing four rooms, let at 11s. 6d. per week and occupied by Slavs and Croatians. The rooms were small, being 11 feet by 12 feet and the closets were all vault privies, while the yard was badly paved with bricks and full of holes and dirt. In one house there lived, in addition to a man and his wife and two children, four boarders, in another there were no children but four boarders and in the third one child and five boarders.

Off Spruce Alley.—A row of houses containing three rooms, one above the other, and let at 8s. 8d. per week. All the rooms measured 10 feet by 12 feet by 9 feet, and the inhabitants were all Slavs. In one house there were six boarders, in two others there were four, in addition in each case to man, wife and child. The sum charged for sleeping accommodation, with cooking and washing, was 12s. 6d. per man per fortnight, while the cost of boarding, with meat at three meals daily, was stated to vary between 20s. 10d. and 25s. for the same period.

Mulberry Alley, near Twenty-Ninth Street.—One tenement of two rooms occupied by Italians, who paid 7s. 8d. per week. The rooms measured 14 feet by 14 feet by 9 feet and 14 feet by 16 feet by 9 feet respectively. Three similar tenements of two rooms, at the same rent, were occupied by Poles, while there was one house with four rooms let at 11s. 6d. per week and tenanted by English people.

Prebel Street.—Three tenements with three rooms each in a large frame building (one of several similar buildings in the neighbourhood) rented at 6s. 9d. per week. The rooms of one dwelling measured : 19 feet by 16 feet by 9 feet, 14 feet by 12 feet by 9 feet and 7 feet by 11 feet by 9 feet ; the family consisted of husband, wife and child, and

there were two boarders. The use of the closets was shared with another tenant. The street is situated on a steep hillside, and is a Polish settlement.

Webster Avenue.—Six red brick houses at the top of a steep hill, each containing three flats of four rooms and bathroom, let at 21s. 2d. to 22s. 1d. per week to negro tenants. The rooms were small, having the following dimensions: kitchen 10 feet by 7 feet 6 inches, other rooms 10 feet 3 inches by 10 feet, 13 feet 6 inches by 10 feet and 11 feet by 10 feet, with a height of 9 feet 3 inches. The bathroom contained a lavatory with hot and cold water. There was no yard space.

Webster Avenue.—A flat building in a working-class locality occupied by whites, largely Jews, and erected in 1908. The flats, some 12 in number, contained four rooms and bathroom, and were let at about 23s. per week each. The measurements were: kitchen 11 feet by 9 feet, two rooms 13 feet by 12 feet and the fourth room 11 feet by 12 feet, the height being 9 feet. The kitchens had sinks and were fitted with gas stoves.

The municipality has not undertaken any housing schemes for the benefit of the working classes, but some manufacturing firms have built dwellings which they let to their workpeople. One company in a near suburb owns some 250 houses which contain four and five rooms and are let at 11s. 6d. and 12s. 6d. per month, but these houses have nothing to recommend them. They lie in rows with no dividing line between them, and are without modern inside conveniences. The houses owned by the United States Steel Corporation in Pittsburg are not numerous, nor are they of a high standard, though improvements have been effected lately. Some of the railway companies own working-class house property, much of it of an inferior kind. The companies have often bought existing houses near their lines partly to avoid claims for possible damage, and partly to provide for extensions, but as these houses are avoided by the workmen of the better class on account of their situation, and gradually come to be occupied by South-Europeans of an inferior type, there is little inducement to keep them in good condition.

Working-class property in the more central parts of the city and along the rivers is to a large extent concentrated in the hands of a few landlords, who appear to go to little expense on account of maintenance. In the case of one large estate, great improvements have been taken in hand recently, but strong measures are needed to remedy thoroughly the bad housing conditions which exist in these districts.

Working people do not own their homes to any considerable extent. In the combined cities of Pittsburg and Allegheny in 1900 only 15.5 per cent. of all homes—whether working-class or otherwise—were owned by their occupiers free of liability, 11.2 per cent. were owned encumbered, while 73.3 per cent. were rented. Many Americans in easy circumstances buy or build their houses, and of the immigrant races the Germans in particular show a desire to own their homes, while the Lithuanians, Poles and Negroes often buy (but rarely build) houses on the instalment plan by the aid of building societies.

The municipal inspection of dwelling houses is recognised as inadequate. There are a number of inspectors of tenement houses (that is, houses in which three or more families live separately), but they have no authority to examine regularly the single and two-family dwellings which form the predominant types and house about ninety per cent. of the population.

The housing conditions in the mill towns of the Pittsburg district closely resemble those existing in the city. Single and two-family houses predominate here likewise, and while the Americans and the skilled workers of other nationalities live in houses containing from four to six rooms (rarely with bathrooms), the semi-skilled and unskilled workers occupy dwellings containing from two to four rooms. In many of these towns—notably McKeesport, Homestead and McKees Rocks—there is serious congestion of building space and overcrowding of dwellings in the districts inhabited by the later immigrants, and the boarding system largely prevails among the Slavonic races.

The mining communities lie generally isolated in the valleys and hills, and the main body of the workers at a particular pit live in houses belonging to the company. In one typical mining village the company owned a large area around the mine and had erected thereon nearly 200 houses, of which 160 contained four rooms, and the remainder three rooms and an attic. The larger dwellings were let at 7s. 8d. and the smaller at 6s. 9d. per week. The four-roomed dwellings had two rooms downstairs and two above, all of the same dimensions, 13 feet by 14 feet by 8 feet, while in the other houses the two rooms downstairs measured 11 feet 3 inches square and 15 feet by 14 feet respectively, both rooms being 8 feet in height and the upper room 15 feet by 14 feet 6 inches by 7 feet 6 inches. All the houses were built of wood, painted red, were semi-detached and had plots of ground adjacent. The closets (privy-vaults) were outside, and the water was obtained from pumps, but city water also was supplied to the village. The miners of

different nationalities lived apart as far as possible, the Italians being in one quarter, the Poles in another and the Hungarians in a third. The company had erected a school-house and a church in which monthly services were held. In some newer mining villages the housing conditions are of a superior kind. At Mariana brick houses containing four, five and six rooms with bathrooms are provided for the miners at a rental of 1s. 11d. per room per week, which is indeed the accepted rate in mining villages throughout the district. The mining company owns a large area around the mines. It has given a park, an amusement hall and other advantages to the miners, but it refuses to allow the introduction of a public-house.

RETAIL PRICES.

The workpeople have not organised any co-operative societies, and the retail provision trade is mainly in the hands of the small dealers. There are two important national "multiple" firms selling groceries and provisions, one of which has twenty-two shops and the second nineteen in the district, and one local firm has six branches. Several meat dealers have two or more establishments—one has six—and some of the large general stores sell groceries and other foodstuffs, including, in at least one case, meat. Three of the five public markets are large, and are frequented by all classes; one of these is situated in the centre of the city near the Point, another on the North Side, and the third on the South Side; the two small markets are in the city proper.

Truck shops are rare, save in the mining communities, where they are practically the sole source of supply, the companies as a rule not permitting the establishment of retail shops within the areas owned by them around the mines. Carts are sent regularly once or twice a week from neighbouring towns to many of the villages, but the miners complain that they are almost compelled to buy the bulk of their goods at the companies' stores. The check system is in vogue, *i.e.*, when a sum is earned the man may draw a check up to that amount before pay day for use at the store. In one typical mining village from 20 to 25 per cent. of the monthly wages bill was regularly spent at the truck store, where meat, groceries, provisions, clothes and various household necessaries were stocked.

The inspection of food in Pittsburg is carried out by four meat inspectors, four milk inspectors, one dairy inspector and one fruit and vegetable inspector. There is no municipal abattoir, but in the city animals are slaughtered at over seventy establishments, of which six, under Federal inspection, are stated to kill the greater part of the home-killed meat.

In dealing with retail prices, an important feature of the American retail trade must be borne in mind. In the interest of a quick turnover of their stock the retailers resort not only to special sales and to season sales, but also to special day or even special hour sales. Moreover, inducements are held out to customers to buy two or more units of a commodity instead of one unit; for example, it is common to sell two or more pounds of coffee at a considerable reduction on the price of a single pound. Thus, as an extreme instance, of a quality of coffee quoted at 10d. per lb., 2 lb. were being sold for as low as 1s. 3d.

Groceries and other Commodities.

Coffee is the almost universal domestic drink of the working classes, *tea* being little consumed even by the Russians. The *sugar* sold is almost exclusively granulated, and, owing to the special inducements offered, it is generally bought in large quantities.

Several kinds of *cheese* are in demand, but American cheese is most popular, varieties of Limburg and Swiss cheese being also much bought. Butter substitutes are in considerable demand among certain sections of the workpeople.

Bread is sold at various prices according to its weight, but the weight given for 2½d. in February, 1909, was from 14 oz. to 15 oz., save in the Jewish and some Slav districts, where the weight was 16 oz. A cut-price in the city was 14 oz. for 2d., but when bread is sold at this price the object is to attract custom for other goods. A good deal of rye bread is eaten by the Poles and other Slavs.

Bituminous *coal* mined in the district is used in the city, but natural gas takes its place to a great extent as a fuel. Coal usually costs 5½d. or 5¾d. per bushel of 76 lb. on the level ground when a minimum of 50 bushels is taken, the price on the hill being 6d. to 6¼d. for at least the same quantity. For under 50 bushels 6¼d. per bushel is charged on the level, but the coal merchants do not make a delivery of less than 50 bushels on the hill.

The following Table shows the predominant prices paid in February, 1909, for groceries and other commodities by the working classes of Pittsburg:—

Predominant Prices paid by the Working Classes in February, 1909.

| Commodity. | Predominant Price. |
|------------------------------------|--------------------|
| Tea per lb. | 1s. 8d. to 2s. 6d. |
| Coffee " | 10d. |
| Sugar :— | |
| White Granulated " | 2½d. to 3d. |
| Brown " | 2½d. „ 3d. |
| Bacon, Breakfast—Boneless " | 10d. „ 1s. 0½d. |
| Eggs per 1s. | 9, 10 |
| Cheese, American per lb. | 9d. to 10d. |
| Butter " | 1s. 3d. „ 1s. 8d. |
| Potatoes, Irish per 7 lb. | 5¾d. „ 7d. |
| Flour, Wheaten—Household " | 11½d. „ 1s. 0¾d. |
| Bread, White... .. per 4 lb. | 10¾d. „ 11½d. |
| Milk per quart. | 4¼d. „ 4¾d. |
| Coal, Bituminous per cwt. | 8d. „ 9¼d.* |
| Kerosene per gallon. | 7¼d. „ 9d. |

* By quantities of 50 bushels (34 cwt).

Meat.

The beef and pork supply comes mainly from Chicago meat firms, but a considerable quantity of meat is also killed in the local slaughter houses. Beef and pork are the most popular kinds of meat. The consumption of veal is larger than that of mutton. The following Table shows the predominant prices paid for the principal cuts of beef, mutton, veal and pork at Pittsburg in February, 1909. The prices of home-killed and Western meat do not show much difference in the city. Most of the meat eaten by the working classes is chilled Western meat.

Predominant Prices paid by the Working Classes in February, 1909.

| Description of Cut. | Predominant Price per lb. |
|-------------------------------------|---------------------------|
| Beef :— | |
| Roasts—Round | 7½d. |
| „ Ribs prime | 7½d. to 9d. |
| „ Ribs second cut | 6½d. „ 7½d. |
| „ Chuck or short ribs | 6½d. |
| Steaks—Round | 7½d. to 9d. |
| „ Sirloin | 9d. „ 10d. |
| Shin without bone | 5d. |
| Flank | 5d. |
| Plate, Brisket { Fresh | 4d. |
| { Salt or corned | 5d. |
| Mutton or Lamb :— | |
| Leg | 9d. |
| Breast | 6½d. |
| Loin | 9d. |
| Chops | 10d. |
| Shoulder... .. | 6½d. to 7½d. |
| Neck | 5d. „ 6½d. |
| Veal :— | |
| Cutlets | 10d. to 1s. 0½d. |
| Rib chops | 9d. |
| Loin chops | 9d. to 10d. |
| Breast | 6½d. „ 7½d. |
| Neck | 6½d. |
| Pork :— | |
| Fresh—Loin | 7½d. to 10d. |
| „ Spare rib | 5d. „ 6½d. |
| „ Shoulder | 6½d. „ 7½d. |
| „ Chops | 7½d. „ 10d. |
| Corned (wet salt or pickled) | 6½d. „ 7½d. |
| Dry salt | 6½d. „ 8d. |
| Ham | 7½d. |
| Shoulder, salt or smoked | 6½d. to 7½d. |

Prices at New York being taken as the base, = 100, in each case, the index number for the price of meat at Pittsburg is 103, for other food it is 102 and for food prices as a whole 102. For rents and food prices combined the index number is 100.

PROVIDENCE.

Providence is the capital and chief city of the small but industrially important State of Rhode Island. It is situated on the main railway route between Boston and New York, being nearly 50 miles from the former and over 180 miles from the latter. Standing at the head of a long inlet, Narragansett Bay, Providence was formerly of considerable importance as a port, but this is no longer the case, its shipping activities being now overshadowed by its large and varied industries, and by its position as the financial centre of the State.

The city is of attractive appearance. It has large well-to-do residential districts, both on the east and west sides, the former containing the old residences of many of the wealthier families, and the latter the equally pleasing villas and apartment houses of the middle classes. The east and west portions of the city are separated by a river or creek, which forms the northern arm of the bay. The first settlements were built along the eastern bank of this inlet, but the commercial and industrial importance of the east side is now small as compared with that of the west. The central or business district of the city is immediately to the west of the river. Practically the whole of this area consists of land which, in the early part of last century, was gradually reclaimed from what was then a shallow bay, bordered by salt marshes. The central district contains a number of large office blocks, some of which have decided architectural merit, and several fine public buildings—notably, the imposing State House, which, surrounded by a carefully tended green plot, stands on an eminence a short distance from the busiest thoroughfares of the city.

Little or no regularity is observable in the general plan on which the city is laid out, and the narrow and tortuous character of some of the most important business streets sufficiently indicates the considerable age of the city and its somewhat casual growth. Nearly 200 miles of the streets are laid with gravel and crushed stone; but in the central districts granite blocks are much used, about 33 miles of streets being laid with this material.

Providence possesses a number of open spaces having a total area of over 600 acres; but several of these spaces, which have been purchased or provided for the purposes of parks or playgrounds, have not yet been laid out. The principal park, named after Roger Williams, who founded the city in 1636, is a large well-wooded and carefully-kept tract on the western edge of the city, somewhat beyond convenient reach on foot by any large section of the working classes.

The population of Providence, as returned at the Federal Censuses of 1870–1910, is shown in the following Table:—

| | Year. | Population. | Increase. | Percentage Increase. |
|------|--------|-------------|-----------|----------------------|
| 1870 | | 68,904 | — | — |
| 1880 | | 104,857 | 35,953 | 52.2 |
| 1890 | | 132,146 | 27,289 | 26.0 |
| 1900 | | 175,597 | 43,451 | 32.9 |
| 1910 | | 224,326 | 48,729 | 27.8 |

Two changes in the area of the city have been made during the period covered by the above Table. In 1870 the area of the city was only about 9 square miles, or less than half its present area. In 1874 part of the town of North Providence was added, increasing the area of the city by 6.7 square miles, and the population by about 15,000. A further increase took place in 1898, when a portion of Johnston, with a population of about 8,000, and an area of about 2.5 square miles, was absorbed. The area of the city is now 18.29 square miles. Taking into account the increase in the area of the city, the growth of population has not been very rapid relatively to that of some other American cities. This is largely due to the fact that much of the increase has been

drawn off by the neighbouring and almost contiguous urban areas of North Providence, East Providence, Cranston, Johnston and Pawtucket, where the possibilities of expansion are much greater. The most considerable of these areas is Pawtucket, which is itself a city, and which had in 1905 a population of over 43,000. Pawtucket, though only a short car ride from Providence, and though connected in many ways with the larger city, has nevertheless its own economic and social life, and can properly be considered as an independent unit from the point of view of the present investigation.

The proportion of foreign-born persons in Providence is high, amounting to 33·1 per cent. of the total number of inhabitants in 1905. Of the foreign-born population at that date, 26·1 per cent. were born in Ireland, 18·4 per cent. in Italy, 18·0 per cent. in Great Britain, 12·5 per cent. in Canada (6·4 per cent. English Canadians, 6·1 per cent. French Canadians), 5·6 per cent. in Russia and 5·1 per cent. in Sweden. It will be noticed that Irish, British and English Canadians constitute just over one-half of the foreign-born population. This fact is important, since the differences between these nationalities and the Americans are slight. The poor section of the Irish form a group which can be readily distinguished; but, speaking generally, those of British birth do not form an immigrant type presenting, by contrast to the native-born people, any very distinctive characteristics.

The strongest tendency towards segregation on the part of the foreign elements in Providence is shown by the Italians, who have two or three large and distinctive colonies. The other nationalities, with certain exceptions, also keep more or less together, but as a rule their special quarters do not arrest the attention of the casual visitor like those of the Italians.

The industrial importance of Providence arises chiefly from its manufactures of jewellery, woollen and worsted goods, machinery and tools and cotton goods. As regards the first named, Providence is the principal seat of manufacture in the country for cheap and medium grade goods. The cotton industry is carried on to only a comparatively small extent in the city itself, the manufacture being spread over the whole of the surrounding district and particularly along the Blackstone Valley, which stretches northward from the city and which furnishes water power for many of the mills. The first cotton mill in America—that established by Samuel Slater in 1790—had its site at Pawtucket in this region. It was also at Providence, at works which are still in existence, that the Corliss steam engine was invented and first manufactured. In addition to its industrial importance Providence is also a centre of considerable commercial and financial activity and as the capital of the State it contains a numerous population engaged in official and professional pursuits.

Like most American cities Providence is the centre of an elaborate electric tramway system. Not only are the city and suburbs well served, but distant towns are also brought into communication. In summer a popular method of travelling from Boston to New York is by means of the trolley car to Providence, and thence by boat.

The tramways and the gas and electric lighting services are under the control of private corporations. The tramway company pays 5 per cent. of its gross earnings to the city, a contribution which for the year ending 30th June, 1908, amounted to £16,853. The company also keeps in repair the space between and for eighteen inches on each side of the rails, and pays a portion of the cost of paving streets along which tracks are newly laid. The gas company has an exclusive concession for twenty years, subject to a tax of 3 per cent. of its gross earnings, and in 1908 it contributed over £5,967 to the city revenues. The electric lighting company pays 5 per cent. of its gross earnings, this being equal in 1908 to £8,911. The charge for gas to consumers is 4s. 7d. per 1,000 cubic feet, with a discount of 5d. for payment within ten days. The water supply is municipal and is obtained from the Pawtucket River. The following are the more important rates charged in the case of dwelling-houses occupied by one family:—One faucet 25s.; each additional faucet 8s. 4d.; one bath tub 20s. 10d.; one water-closet of approved kind 20s. 10d.; each additional water-closet 12s. 6d.; set wash tub 12s. 6d.; each additional set wash tub 4s. 2d. No dwelling-house can be charged more than £8 6s. 8d. Each family having separate fixtures is charged as if living in a separate house, but if using the same fixtures an extra fixed charge of 20s. 10d. per family is made. For measured or estimated water a charge of 10d. per 1,000 gallons is made for quantities up to 100,000 cubic feet, and for quantities in excess of this amount the charge diminishes to 5d. per 1,000 gallons.

Many of the houses have conveniences of the vault or cesspool type. The work of emptying and cleaning these is done by private persons, being a matter of arrangement

between the landlord and the tenant. House refuse, however, is removed by the city, the work being done under contract with a private firm.

The principal vital statistics for the years 1903-7, as shown in the report of the City Registrar, are reproduced in the following Table :—

| Year. | Birth-rate per 1,000 of Population. | Death-rate per 1,000 of Population. | Infantile Mortality per 1,000 Births. |
|-------------|-------------------------------------|-------------------------------------|---------------------------------------|
| 1903 | 26·7 | 21·1 | 182 |
| 1904 | 26·7 | 18·6 | 156 |
| 1905 | 26·2 | 17·5 | 133 |
| 1906 | 26·9 | 18·8 | 158 |
| 1907 | 28·3 | 19·2 | 142 |

The average death-rate from phthisis during the same period was 2·0 per 1,000 of population. As in many other American cities, the prevention and cure of tubercular diseases have attracted much attention in Providence during recent years, and three organisations, a District Nursing Association, the League for the Suppression of Tuberculosis and the Charity Organisation Society, co-operate closely with one another and with the hospitals in prophylactic and curative work. The State maintains a sanatorium for curable cases, and provision is also made for cases at the State almshouse.

Public assistance to the indigent in Providence consists for the most part of outdoor relief. Its administration is for practical purposes in the hands of the Overseer of the Poor. Although this officer is elected and holds his position from year to year, there have been only two overseers during nearly 50 years. Relief is given usually in the form of food, fuel, medical care and shoes for school children. Money is rarely given. The city possesses an institution known as the Dexter Asylum, where a certain number of aged persons and other classes of the more or less incapacitated poor are accommodated. The benefits of this institution are confined to those having legal settlement in Providence, and as settlement is in some respects difficult to obtain, many of the city poor who cannot be properly relieved in their own homes are sent to the almshouse maintained by the State. In the winter between October and May a lodge, with a wood-yard adjoining, is maintained in which relief is given to casuals. A wandering man can obtain shelter and food here for two or three nights on the condition that he does a certain task of work. This work may be done either in the afternoon before or in the morning after relief is given, an option which gives the man an opportunity, should he be disposed, of seeking work during the early hours of the day, but which at the same time does not exclude from relief the man who arrives too late to do his task in the afternoon.

The city revenues are derived principally from taxes, licence duties and receipts from concessions of public utility undertakings. The tax levied on real and personal property in 1908 was at the rate of 1·65 per cent., of which 0·18 per cent. was levied on account of State expenditure. The total valuation of personal property in 1908 was £12,091,175, and that of real property £36,366,513. The *per capita* valuation of personal property is less than half what it was in the year 1868, a fact which results rather from a change in the practice and rigour of assessment than from a diminution of individual wealth. There is also a poll tax of 4s. 2d. per head on all male citizens 21 years of age and upwards who do not pay property tax, with certain exemptions for those in extreme poverty, those who served in the Civil War, &c. Wholesale and retail liquor licences yielded in 1908 £52,208, of which sum one-quarter was paid to the State. By an Act of 1908 the number of licences is limited to one for each 500 inhabitants. The maximum tax on liquor manufacturers and wholesale dealers is £312 10s. and on first-class retail dealers £208 6s. 8d. The franchise taxes, so far as the tramway, gas and electric lighting companies are concerned, have already been mentioned. In addition, the telephone company pays 3 per cent. of its gross earnings, this being equal in 1908 to £3,914.

OCCUPATIONS, WAGES AND HOURS OF LABOUR.

The relative importance of the principal industries of Providence is shown by the results of a Census made by the State of Rhode Island in 1905, according to which the following numbers of persons 13 years of age and upwards were engaged in the occupations named :—

Number of Persons of 13 years of age and over engaged in Industrial Occupations in Providence in 1905, classified according to Occupation and Sex.

| Occupations. | Males. | Females. | Total. |
|--|--------|----------|--------|
| Building | 5,029 | — | 5,029 |
| Metalworking (non-precious) and Engineering .. | 8,582 | 704 | 9,286 |
| Gold and Silver Working | 1,166 | 48 | 1,214 |
| Jewellery, Clock and Watch Making | 3,807 | 2,005 | 5,812 |
| Cotton | 483 | 1,303 | 1,786 |
| Woollen and Worsted | 4,164 | 5,154 | 9,318 |
| Dyeing | 1,111 | 220 | 1,331 |
| Other and Unspecified Textiles | 1,064 | 506 | 1,570 |
| Clothing | 1,401 | 3,739 | 5,140 |
| Woodworking and Furnishing | 770 | 29 | 799 |
| Paper and Printing | 895 | 193 | 1,088 |
| Food, Drink and Tobacco | 1,116 | 69 | 1,185 |
| Transport | 5,313 | 1 | 5,314 |
| Labourers | 5,275 | 42 | 5,317 |
| Other and Insufficiently Defined | 4,548 | 743 | 5,291 |
| * Total | 44,724 | 14,756 | 59,480 |

It will be seen that the textile trade group of occupations takes the first place in this enumeration, employing 14,005 persons, or 23·5 per cent. of the total classified above, while the second place is taken by the metalworking (non-precious) and engineering trades with a total of 9,286, equal to 15·6 per cent. of the whole and the third place by the gold, silver, jewellery, &c., trade group with a total of 7,026, equal to 11·8 per cent. of the whole. The cotton mill operatives present, in contrast to those employed in the woollen and worsted mills, a comparatively small group in Providence. This is, however, no indication of the relative importance of cotton manufacturing in the State of Rhode Island as a whole. The Census of 1905 showed the total number of persons employed in woollen and worsted manufacture in the whole of the State to be 20,307, while those employed in cotton manufacture numbered 22,349.

The fact has already been mentioned that most of the cotton mills are found along the Blackstone Valley, stretching away from the north of the city through Pawtucket and Woonsocket, where water power is available to a considerable extent. On suitable sites mill villages have grown up, peopled chiefly by French Canadians. Statistics of the wages paid in several mills so situated have been obtained, the results being shown in a subjoined Table, and it must be borne in mind, therefore, that these figures relate not strictly to Providence itself but to the district around, and indicate the earnings of a population living in rural rather than urban surroundings.

Within the borders of Providence itself the woollen and worsted is the most important single industry. In this industry there is much variety of output, and no one class of goods can be described as predominant. The mills are mostly situated in the Olneyville district, on the north-west side of the city. The employees as a rule live in independently owned dwellings, though a number of workers, mostly of the unskilled class, still find accommodation in some tenement blocks which were originally part of the mill property.

The foreign-born population and those born to foreign fathers are largely represented in the textile mills of Rhode Island. Here, as elsewhere in New England, it is the cotton much more than the woollen and worsted industry that attracts the French Canadians; while the total number employed in the former industry in the whole State was 34 per cent. of the total of all nationalities, in the latter industry it was only 18 per cent. The Irish and English and those born to Irish and English fathers form important groups in the textile trades, but while the Irish show preference for the woollen trades, the English are more numerous in the cotton industry than in the woollen. Though the three nationalities mentioned, together with persons of American parentage, constitute the great bulk of the workers employed, the balance is made up of a great variety of nationalities, among whom the Italians are the most important. Italians, however, are mostly found in Providence, where, so far as the textile trades are concerned, they are employed principally in the woollen and worsted industry.

The varied admixture of nationalities in the textile trades is regarded by many manufacturers as a heavy handicap. The difficulty of language no doubt places obstacles in the way of supervision and instruction. On the other hand it probably exempts the

employer from a good deal of the pressure on the part of labour organisations which might be expected if all the workers were of one nationality and if the stream of immigration did not offer an alternative supply of labour. As it is, the organisations in the textile trades of Providence appear to exercise but little influence in determining wages.

As regards the city of Providence itself, the following Table shows the distribution by nationality of persons employed in the various occupation-groups. The total number employed in each group, classified according to sex, is given in the Table on the preceding page.

Number of Persons of 13 years of age and over engaged in Industrial Occupations in Providence in 1905, classified according to Occupation and Birth-place of Father.

| Occupations. | United States. | Canada. | | Ireland. | Great Britain. | Italy. | Other Countries. |
|--|----------------|----------|---------|----------|----------------|--------|------------------|
| | | English. | French. | | | | |
| Building | 1,468 | 257 | 422 | 1,261 | 621 | 389 | 611 |
| Metalworking (non-precious) and Engineering | 2,211 | 324 | 308 | 2,870 | 1,671 | 384 | 1,518 |
| Gold and Silver Working | 368 | 28 | 24 | 193 | 402 | 6 | 193 |
| Jewellery, Clock and Watch Making | 1,870 | 158 | 207 | 1,607 | 677 | 237 | 1,056 |
| Cotton | 551 | 21 | 527 | 368 | 136 | 139 | 44 |
| Woollen and Worsted | 1,134 | 183 | 501 | 2,953 | 1,541 | 2,103 | 903 |
| Dyeing... .. | 218 | 17 | 19 | 386 | 566 | 38 | 87 |
| Other and Unspecified Textiles | 296 | 45 | 108 | 467 | 229 | 100 | 325 |
| Clothing | 1,608 | 162 | 178 | 1,356 | 361 | 521 | 954 |
| Woodworking and Furnishing | 278 | 43 | 68 | 152 | 69 | 17 | 172 |
| Paper and Printing | 560 | 30 | 24 | 224 | 154 | 9 | 87 |
| Food, Drink and Tobacco | 266 | 20 | 69 | 227 | 81 | 175 | 347 |
| Transport | 2,109 | 162 | 178 | 1,605 | 336 | 129 | 795 |
| Labourers | 695 | 64 | 170 | 1,401 | 245 | 2,201 | 541 |
| Other and Insufficiently Defined | 2,048 | 218 | 195 | 1,240 | 742 | 214 | 634 |
| Total | 15,680 | 1,732 | 2,998 | 16,310 | 7,831 | 6,662 | 8,267 |

It will be seen that persons born of American fathers are fairly evenly distributed throughout the various occupational groups and are proportionately most numerous in the paper and printing trades—the only group in which they constitute more than one-half of the total number employed—and in the transport trades, while the number of American labourers is comparatively very small. English Canadians are in no group very numerous, but the French Canadians are present in considerable numbers in the cotton and woollen and worsted industries. Persons of Irish and British descent are numerous in all branches of employment, particularly in the metal and engineering and in the woollen and worsted groups. While, however, the number of British labourers is not large, the Irish labourers outnumber those of any nationality except the Italian, which furnishes over 40 per cent. of all labourers. About one-third of the Italians are labourers, and a similar proportion are found in the woollen and worsted industry. As regards nationalities not distinguished in the above Table, the only point worthy of remark is the employment in the metal and engineering trades of 568 persons of Swedish descent.

After the manufacture of woollen and worsted goods, the most distinctive of local industries is the making of jewellery, together with the allied trade of silversmithing. The grade of jewellery made is chiefly that known as "medium," but there is also a large manufacture of cheap and imitation wares. As a jewellery making centre Providence is usually coupled with North Attleborough and South Attleborough, two towns a few miles distant over the Massachusetts border, where the manufacture of jewellery and jewellers' findings is practically the sole industry. Most of the jewellery making establishments in Providence and the surrounding neighbourhood are comparatively small, as there is a constant tendency for the more highly-skilled and original workmen to set up in business for themselves and trade upon their own specialised knowledge and ideas. In Providence and the Attleboroughs there are about 450 jewellery making establishments, and according to the estimate of a member of the trade, well qualified to judge, not more than one-tenth of these are of more than twenty years standing, such is the rapidity with which concerns dependent mainly upon the energy or ability of one or two individuals come and go. The output of the industry comprises rings, chains and general jewellery work. As might be expected the trade fluctuates greatly both with the general state of business and with the seasons. The amount of local unemployment in

this industry in 1908, a year of depression, was proportionately much greater than in any other clearly defined trade. From returns made by employers in connexion with an investigation by the State into the subject of unemployment it appeared that 262 establishments, which employed 12,163 persons in 1907, employed only 9,704 on a corresponding date in 1908. The seasonal fluctuation is also considerable, though there are no accurate means of measuring it. No definite answer can be given to the question as to what is usually done during slack times by those thrown out of employment in this trade, though more than once in reply to such an enquiry the occupation of motorman or conductor on the street cars was mentioned, a reply which at least illustrates the facility with which the American workman in case of need turns from one field of employment to another.

In addition to the manufacture of jewellery, there is also a large silver and plated ware industry. One large firm in this industry, whose output is noted both for its extent and its high quality, is well known for the enterprise which it has shown in carrying out various schemes for the benefit of its employees.

Toolmaking and engineering are represented by some large works. One firm, engaged in making machine tools, employs from 3,000 to 4,000 men, its establishment being one of the largest of its kind in the world. This and most of the other engineering firms in Providence are "open," that is to say, they employ both union and non-union labour. There are relatively few shops where none but trade unionists are employed. In Providence, as in many other cities in the United States, the trade unionists are confronted with a difficulty in the machine shops in the fact that the work is much more minutely sub-divided than under the English principle of working. Men performing mechanical and only semi-skilled tasks are known as "machinists" equally with the most highly-skilled operatives, and there is consequent difficulty in so fixing a standard rate of wages that it will be adequate, and no more than adequate, for all degrees of efficiency.

Besides a large number of small firms, there are in Providence several building contractors who undertake extensive forms of work both in the city and elsewhere. The building trades are somewhat closely organised. There are sixteen unions representing various building trades, and these are federated into a local Building Trades Council.

The brewing industry in Providence is important, the products having a sale throughout a large part of New England. The total number of employees is not large, but they form a completely organised body. All the breweries are covered by a comprehensive agreement which determines wages and conditions of employment, not only for the brewers properly so called, but also for the firemen, engineers, draymen, &c.

Coal teamsters form another group of workers who are highly organised, practically all of them working under a trade agreement. Other unions having agreements which affect a considerable proportion of the members of the trades affected are those of the carpenters, painters, bar tenders, compositors and other workers in the printing trade, musicians and ironmoulders.

A system of factory inspection is enforced in Rhode Island, and the employment of children in the mills is also controlled by law. The principal provisions relating to child labour are as follows. A child before being employed must show a certificate to the effect that he or she is not less than 14 years of age. No young person under 16 years of age may work before 6 a.m. or after 8 p.m. Children employed in shops, however, may work any number of hours on Saturday and also during the four days preceding Christmas. These provisions have been in force only since 1st January, 1907; before that date much child labour was employed. No educational qualification is imposed as in the neighbouring State of Massachusetts.

Those benevolent and social activities known in America under the general title of "welfare work" are displayed in Providence by a few large firms. The principal machine tool factory has established a sickness and provident society. The large silver-smith works maintain a "casino" containing a meeting and dining hall and a library. A "regular" dinner is served each day to employees for 1s. 0½d., and meals are also served *à la carte* at low prices. The factory is attractively situated upon a well-kept estate, where an athletic field for employees is provided. Two benefit societies are managed by the workmen, each having as its principal aim the provision of medical advice. The individual contributions amount to about 8s. 4d. a year. The company has also a pension scheme financed entirely by itself. The scale of pension payments is one per cent. of the monthly wage paid at the time of superannuation for each year of service, but no pension may exceed £20s 6s. 8d. a year. The age of retirement varies from 60 to 70 years, according to length of service. One of the largest woollen mills maintains a lunch room, a gymnasium and recreation hall, and a library and reading room.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|---|---------------------------|-------------------------------------|
| <i>General Drivers, Teamsters :—</i> | | |
| One horse | 50s. | 60 |
| Two horses | 54s. 2d. | 60 |
| Three horses | 58s. 4d. | 60 |
| <i>Public Services :—</i> | | |
| Street Construction, Paving and Cleaning (Municipal)— | | |
| Paviors | 63s. | 54 |
| Paviors' Labourers | 38s. 3d. | 54 |
| Scavengers | 38s. 3d. | 54 |
| Road Sweepers | 38s. 3d. | 54 |
| Drivers { One horse | 43s. 9d. | 54 |
| { Two horses | 50s. | 54 |
| Water Works (Municipal)— | | |
| Labourers | 38s. 3d. | 54 |
| Gas Works (Company)— | | |
| Gas Stokers | 80s. 3d. | 84 |
| Labourers | 51s. 1d. | 84 |
| Electric Light and Power Works (Company)— | | |
| Electricians | 75s. | 48 |
| Linemen | 68s. 9d. | 60 |
| Stokers | 58s. 4d. | 60 |
| Labourers | 37s. 6d. | 60 |
| Electric Tramways— <i>see text.</i> | | |

Taking wages at New York as the base, = 100, in each case, the wages index numbers for Providence are—building trades, skilled men 79, hod carriers and bricklayers' labourers 73; foundries and machine shops, skilled men 79, unskilled labourers 90; printing, hand compositors (job work) 90.

The above rates relate only to adult male labour. Female labour in Providence is however, very important. The Census figures already quoted show that in the textile trades the female workers outnumber the male by a considerable proportion; while in the jewellery-making shops female labour forms more than one-third of the total. In the cotton mills men and women are employed in common in several occupations. The women's more exclusive employment, however, is found in tending the first and second intermediate and the jack or fly frames, in warping, ring spinning, spooling and drawing-in. The usual earnings of ring or frame spinners are from 20s. 10d. to 33s. 4d. per week. The weekly earnings of women warpers range from about 29s. 2d. to 35s. 5d. In the woollen mills women combers earn about 29s. 2d. per week, and women weavers from 41s. 8d. to 62s. 6d. per week. Carding machine feeders are mostly women, though in some mills men also are employed. The earnings of the women are usually about 29s. 2d. to 33s. 4d. per week. In the jewellery manufactories women and girls are employed as carders, enamellers, casemakers and to some extent as stonemasons. The wages of the carders are usually from 25s. to 37s. 6d. for a full week.

With regard to the tramways it may be noted that the staff of motormen and conductors is usually increased during the summer by about 200 men in order to meet the necessities of heavier traffic. About half of these men remain on and become regular employees. They are paid 10d. per hour during the first year of service, and receive an increase of $\frac{1}{2}$ d. per hour for each year of service, rising to a maximum of 1s. 0 $\frac{1}{2}$ d. per hour after five years' service.

HOUSING AND RENTS.

The typical working-class dwelling in Providence is a flat. The disposition to favour dwellings of this type is not confined, however, to the wage-earners. Many large, well-equipped, and sometimes handsome houses of the kind exist in various parts of the city for the accommodation of a well-to-do, if not a rich class. With the exception of a few large blocks of the New York "apartment" or London "mansion" type of dwelling, which are to be found in the fashionable East Side of the city, the flats of this superior type seldom accommodate more than two families. Among the working classes, however, while the two-family house is very common, larger blocks containing four, six or even more separate dwellings under one roof must also be considered as typical. The buildings are almost invariably of wood, and show that entire lack of uniformity in the smaller details of construction and finish which appears to be characteristic of American housing conditions.

There is a wide variation in age as well as in the other features of the working-class houses. Considered generally, the oldest houses are, as would be expected, in the more central parts of the city; but the tendency which Providence has shown to grow by absorbing neighbouring villages and clusters of houses surrounding old-established mills, once beyond the city boundaries, makes necessary a qualification of this rule and, in almost all parts, houses manifestly upwards of fifty years old stand side-by-side with modern structures. The old houses are seldom more than two stories in height, and with the exception of a hood over the doorway are usually of quite plain appearance. A type which occurs frequently has the entrance in the middle of the house, with two dwellings, one upstairs and one downstairs, on each side. Such houses usually offer little in the way of general conveniences. The old houses seldom have baths and usually the "toilet" is in the cellar. A faucet and sink are as a rule provided in the kitchen. Very frequently, in the case of both the old and the new houses, there are attics, which are shared among the occupiers of the tenements and are used as sleeping rooms or store rooms.

The newer types of houses are as a rule more pretentious in frontage appearance than the old, and generally attract a better class of tenants. A common modern type of dwelling is three stories high and is bay-fronted. The tenements in such a house are usually large, containing five, six or seven rooms, often with a bathroom and separate "toilet." Sometimes the third story is built in a steeply sloping roof, and is let as a separate tenement, but though providing the same nominal accommodation it is of course much less desirable and is less highly rented than the lower dwellings. A six-roomed tenement on the ground or first floor in a building of this type in a fair neighbourhood is usually rented at from 13s. 6d. to 16s. 4d. per week. At and beyond the upper limit of the range, however, such a dwelling is typical of an exceptionally skilled workman, a shopkeeper or a clerk rather than of the wage-earning class as a whole.

Tenement houses are in practically all cases detached buildings. On the old and fashionable East Side, previously mentioned, there are a few rows of "terrace" houses, but both as regards single-family houses and tenements, the building almost invariably stands by itself. Yard spaces, often irregular in shape and usually small, are generally provided, and there appears to be a tendency in the case of the more modern houses to fence off these yards so as to secure some degree of privacy. As a rule, the yard is easily accessible, and the house is more commonly entered by the back than the front way. Except in the case of a small Italian colony on the outskirts of the city, little attempt is made to cultivate gardens.

The general arrangement of the rooms within a tenement is fairly uniform whatever the number of rooms may be, and in view of the climate of the New England States it presents many advantages. In a typical small tenement all the rooms open off one another: there are no passages. As a rule the kitchen—usually a large room 14 to 16 feet square—is the centre of the dwelling, and its large stove, standing well out in the room, distributes its occasionally oppressive warmth among the other apartments. In tenements of three or four rooms, for example, all the apartments are directly accessible from the kitchen, and the stove in the latter is often the only means of heating the dwelling. In the larger tenements, however, one or two of the rooms may be accessible from the kitchen only through some intervening room, and in such cases the room used as a parlour is also provided with a stove. In summer the usual arrangement of communicating rooms, which in winter facilitates the warming of the tenement, is also useful, since the communicating doors can be opened and an uninterrupted draught of air be secured through the whole dwelling.

The foreign nationalities in Providence, as has been remarked, show a tendency to live together, and all of them have their distinctive "quarters." With the exception of the Italians and to a less extent the Jews, however, there is no such degree of concentration as necessitates special description. The Poles, for example, are found in a number of small clusters, anywhere, in fact, near the mills, where accommodation cheap enough for their narrow means and frugal habits can be secured. The French Canadians similarly, though coalescing in small groups here and there, are distributed throughout the city as a whole. The Jews, however, have a considerable colony in the neighbourhood of the State Capitol. The houses are mostly old and present no special characteristics. The Italians have three well-marked settlements: by far the largest is that bordering on Attwell's Avenue, not far from the centre of the city. Here the general impression is decidedly foreign. The shops bear almost exclusively Italian names and Italian labels, and the faces seen in the street are swarthy. In the middle of the district is an Italian theatre. The houses, though conforming to the ordinary tenement type, have a

distinctive appearance due, in many cases, no doubt to Italian ownership. The fronts are frequently ornate and the variety of construction and aspect which is characteristic of the city as a whole here becomes so prodigal as to be picturesque.

Though of great social interest the character of the various foreign homes in Providence is not a matter that lends itself to easy or confident generalisation.. Certain features, however, appear to stand out with some distinctness. The Polish homes are for the most part bare and impoverished, pointing to three important facts regarding their occupiers, namely, their poverty, their frugality and their low standard of comfort. The poor Irish homes are also very unattractive, though here the fault is more often traceable to a shiftlessness on the part of the housewife. As a rule there is a sufficiency—sometimes indeed a superfluity—of furniture, but it is badly arranged and ill kept. On the other hand the French Canadians, though often found in juxtaposition to the Irish, appear to be possessed of considerable house-pride. Their homes, though sometimes very poor and usually selected with a view to a rigid economy in rental, are clean and neat. The Italians in their principal quarters show a tendency to overcrowd. As regards the appearance of their homes wide differences exist. Sometimes in the same house and even on the same floor two tenements will be found, one dirty and untidy in the extreme and reeking with bad odours, the other clean, fresh and wholesome.

According to an investigation made by the State Government in 1905 it appears that the 44,648 families resident in Providence at the time were distributed among tenements and other dwellings of various sizes as follows :—

| Number of Rooms Occupied. | Number of Families. |
|------------------------------|------------------------|
| 1 | 348 |
| 2 | 645 |
| 3 | 3,339 |
| 4 | 7,613 |
| 5 | 8,364 |
| 6 | 8,634 |
| 7 | 4,857 |
| 8 | 4,388 |
| 9 | 2,220 |
| 10 | 1,523 |
| 11 | 557 |
| 12 | 739 |
| Over 12 | 1,421 |

So far as the wage-earning classes are concerned the dwellings of four, five and six rooms must be considered as the predominant types. Three-roomed tenements, though numerous, are usually somewhat poor in character.

Of the 44,648 families above enumerated, 21·7 per cent. lived in houses which they owned. It should be observed that these figures relate to the number of families, and not to the number of separate houses. In a city where the tenement system prevails, and where two or more families to one house is accordingly the general rule, it is obvious that it is possible for only a certain proportion of families to own their own dwellings, and that the percentage quoted is therefore significantly high. It is a common form of investment for a workman to buy or build a two or three-family house and to occupy one of the tenements and let the others. Loan associations and real estate agencies are usually ready to afford the necessary financial assistance.

As regards rentals, investigation showed that the most usual amounts charged for accommodation of a working-class character and of the general types already described were as follows :—

Predominant Rents of Working-class Dwellings.

| Number of Rooms per Dwelling. | Predominant Weekly Rents. |
|-------------------------------|---------------------------|
| Four rooms | 7s. 8d. to 9s. 7d. |
| Five rooms | 8s. 8d. ,, 11s. 6d. |
| Six rooms | 11s. 6d. ,, 14s. 5d. |

The level of rents at New York being represented by 100, the rents index number for Providence is 59.

Though there are some signs of congestion in the more central parts of the city, and though overcrowding often takes place in individual tenements, especially among some of the foreign-born populations, the practice of building each tenement house as a detached block usually secures to the tenants a sufficiency of light and air. Nevertheless, the sanitary arrangements of the dwellings leave much to be desired. Even in the most populous quarters they are often of a very primitive type, and since their proper maintenance is not a municipal function, a good deal of neglect occurs.

Mention should be made of a quasi-philanthropic association known as the Improved Tenement Corporation, which was established about eight years ago and has built a few tenement houses of a type somewhat above the usual working-class standard but intended for and occupied by working-class tenants. The collectors appointed by the Corporation interest themselves in the lives of the tenants, and a beneficial influence is said to be exerted in this direction.

RETAIL PRICES.

In addition to the ordinary smaller retail shops in Providence, there is a large establishment with four branches doing a strictly cash trade. The part which this store plays in the retail food trade of Providence is very important. All kinds of food, including meat and provisions, are sold, and a specialty is made of fruits and vegetables not in common use among the working classes but which, owing to favourable conditions in the wholesale market, can be brought within their means. Much of the vegetable food consumed in Providence comes from a distance, but the city is fortunate in having an important local source of supply, one of the largest market gardens in the country—having an area of about 1,000 acres—being in the neighbourhood.

Groceries and other Commodities.

There is a well-marked Italian quarter in Providence where a number of shops cater exclusively to the national taste. The *bread* consumed by the Italians requires special mention, not so much on account of difference in composition as difference in weight and appearance. Though varying greatly as between different Italian shops, the bread is much cheaper than that used by the English-speaking people. The following details regarding the form, weight and price of bread sold were obtained from three Italian bakers :—

| | | | | | | |
|--------|--|-----|-----|-----|-----|------|
| (i.) | Long loaf (about 18 inches), 2 lb. 14 oz. | ... | ... | ... | ... | 5d. |
| | Round loaf (about 12 inches in diameter), 2 lb. 14 oz.* | ... | ... | ... | ... | 5d. |
| | Large round loaf (18 inches in diameter), 6 lb. 1 oz. | ... | ... | ... | ... | 10d. |
| | Small round loaf, 2 lb. | ... | ... | ... | ... | 3½d. |
| | Round loaf, 3 lb. 4 oz. | ... | ... | ... | ... | 6d. |
| (ii.) | Round loaf, 1 lb. 4 oz. | ... | ... | ... | ... | 2d. |
| | „ 2 lb. 9 oz.* | ... | ... | ... | ... | 5d. |
| | „ 5 lb. 10 oz. | ... | ... | ... | ... | 10d. |
| | Long loaf, 1 lb. 6 oz. | ... | ... | ... | ... | 2d. |
| | „ 2 lb. 8 oz. | ... | ... | ... | ... | 5d. |
| | „ 14 oz. ... | ... | ... | ... | ... | 1½d. |
| (iii.) | Long loaf (about 24 inches long and 4 inches section), 2 lb. 8 oz. | ... | ... | ... | ... | 5d. |
| | „ („ 15 „ 4 „), 1 lb. 2 oz. | ... | ... | ... | ... | 2½d. |
| | „ („ 11 „ 5 „), 14 oz. ... | ... | ... | ... | ... | 1½d. |
| | Round loaf (14 inches diameter), 2 lb. 8 oz. | ... | ... | ... | ... | 5d. |
| | „ (17 „), 5 lb. 8 oz. | ... | ... | ... | ... | 10d. |

Macaroni, which is of course largely in use among the Italians, is retailed at the large cash stores at 4½d. per lb. (3 lb. for 1s. 0½d.) first quality, and 3½d. per lb. (4 lb. for

* This is the most popular.

1s. 0½d.) second quality. Broken macaroni is sold at 2½d. per lb. Olive oil is also largely used, and the kind sold is usually of good quality.

The coal commonly used in Providence is a small anthracite known as "White Ash." In February, 1909, the price was uniform among nearly all retailers, namely 30s. 2½d. per ton of 2,000 lb. or 8s. 1½d. per quarter-ton. There is also a considerable trade in coal sold by the "basket," this measure containing about 80 lb. The uniform price for a basket of coal was 1s. 8d., a rate which differs little from that for larger quantities. The basket, however, is not the smallest unit by which coal is purchased. Most grocery shops sell bags of coal containing about 17½ lb. and selling at a uniform price of 5d. Coke also is sold to a very large extent by grocers. The weight of a bag varies somewhat more than that of a bag of coal, the usual weight being from 16 to 17½ lb. The usual price of a bag of coke is 5d., though in a few shops it may be obtained for 4d.

The predominant prices of various articles are shown in the following Table:—

Predominant Prices paid by the Working Classes in February, 1909.

| Commodity. | Predominant Price. |
|----------------------------------|-------------------------|
| Tea per lb. | 1s. 0½d. to 1s. 8d. |
| Coffee " | 11d. ,, 1s. 0½d. |
| Sugar:— | |
| White Granulated " | 2½d. ,, 3d. |
| Brown " | 2½d. ,, 3d. |
| Bacon, Breakfast — Boneless .. " | 7½d. ,, 9d. |
| Eggs per 1s. | 8 ,, 12 |
| Cheese, American per lb. | 9d. ,, 10d. |
| Butter " | 1s. 2d. ,, 1s. 4d. |
| Potatoes, Irish per 7 lb. | 5½d. ,, 7d. |
| Flour, Wheaten — Household .. " | 11½d. ,, 1s. 0¾d. |
| Bread, White per 4 lb. | 10d. ,, 1s. 0¼d. |
| Milk per quart | 4½d. |
| Coal, Anthracite per cwt. | { 1s. 8¼d.*; 1s. 9¾d.†; |
| Kerosene per gallon | { 2s. 4d.‡; |
| | { 7¼d. |

* By the ton of 2,000 lb.

† By the quarter-ton (500 lb.).

‡ By the basket (80 lb.).

In the above Table the predominant price of bread is based upon the returns of bakers having either a mixed trade or a trade exclusively among the English-speaking classes. The cheaper bread made by the Italian bakers is not sufficient in quantity to affect materially the predominant price for the city as a whole.

Meat.

The meat consumed in Providence is mostly Western-dressed, with the exception of veal, most of which is local. Much variation exists in regard to the price of veal, since much which is too young or too old to provide good eating is put on the market and sold by the poorer-class butchers. One butcher questioned was selling the best cuts of veal at 8d. per lb. at a time when medium quality calves were worth 6½d. per lb. whole.

The local method of cutting up meat requires no special comment, being generally similar to that adopted in other New England cities. Rounds of beef are not often sold for roasts, but are usually cut into steaks. As regards mutton, the front leg usually goes with the breast and is not sold separately as a shoulder.

The consumption of meat among Italians in Providence appears to be somewhat less than among the same nationality in many other American cities, and is decidedly less than among American and British working-class families in Providence, though it probably cannot be considered low from European standpoints. It must be borne in mind that in Providence the Italians find their chief employment in the textile mills, where the work, although often arduous and unpleasant, makes no particularly great demand on muscular energy. The Italians usually buy the cheapest cuts of meat.

The following Table shows the predominant prices of the principal cuts of meat as sold at working-class shops in Providence :—

Predominant Prices paid by the Working Classes in February, 1909.

| Description of Cut. | Predominant Price per lb. |
|-------------------------------------|---------------------------|
| Beef :— | |
| Roasts—Ribs prime | 8d. to 9d. |
| „ Ribs second cut | 7½d. „ 8d. |
| „ Chuck or short ribs | 5d. „ 7d. |
| Steaks—Round | 7½d. „ 11½d. |
| „ Sirloin | 1s. 0½d. „ 1s. 3d. |
| Shin without bone | 4d. „ 5d. |
| Flank | 2½d. |
| Brisket, “Fancy” | 6d. to 6½d. |
| Mutton or Lamb :— | |
| Leg | 7½d. to 9d. |
| Breast | 4d. „ 5d. |
| Loin | 6d. „ 7½d. |
| Chops | 9d. „ 1s. 0½d. |
| Shoulder | 5d. |
| Neck | 2½d. to 3½d. |
| Veal :— | |
| Cutlets | 9d. to 1s. 3d. |
| Rib chops | 7½d. „ 1s. 0½d. |
| Loin chops | 9d. „ 1s. 0½d. |
| Breast | 5d. |
| Neck | 3½d. to 5d. |
| Pork :— | |
| Fresh—Loin | 6d. to 7½d. |
| „ Spare rib | 5d. |
| „ Shoulder | 5d. |
| „ Chops | 6½d. to 8d. |
| Corned (wet salt or pickled) | 6d. |
| Dry salt | 5d. to 7d. |
| Ham | 6d. „ 7d. |
| Shoulder, salt or smoked | 5d. |

Prices at New York being taken as the base, = 100, in each case, the index number for the price of meat at Providence is 103, for other food it is 95 and for food prices as a whole 97. For rents and food prices combined the index number is 88.

ST. LOUIS.

St. Louis, in the State of Missouri, lies on the western bank of the Mississippi, 20 miles below the junction of that river with the Missouri, nearly 300 miles by rail south-south-west of Chicago, and over 1,000 miles by rail from New York. Originally a French fur-trading post, and subsequently a great river port, when river traffic was at its height, it is now a railway, distributing and manufacturing centre of growing importance. The main east and west traffic goes through Chicago, but St. Louis holds an important position in relation to the increasing traffic between the northern and southern portions of the Mississippi Valley, and to that of the rapidly growing States of the South-West, Arkansas and Oklahoma. The extensive coal fields of Southern Illinois lie close at hand across the river, furnishing cheap fuel for manufacturing purposes.

The city has a broad front on the Mississippi, extending almost twenty miles. Inland the city boundary forms an arc, the greatest distance of which from the river is about seven miles, enclosing an area of $62\frac{1}{2}$ square miles. Practically all this land is well above the level of the river, rising gradually higher towards the west, but with no hills steep enough to form any obstacle to the expansion of the city.

At present the river is spanned by only one road bridge, upwards of a mile in length, across which tramway cars are run far into the State of Illinois; but as a toll of $2\frac{1}{2}d.$ is charged for the journey over the bridge alone, there is not very much inducement for working men employed in St. Louis to live on the other side of the river, while the low-lying character of the land renders it unattractive as a residential place for the wealthy. The city of East St. Louis is on that side of the river; it has its own industries (meat-packing in particular) and can scarcely be regarded as a suburb of the larger city, nor can it ever be incorporated with St. Louis, inasmuch as it lies in a different State.

The movement of population which has resulted everywhere from the introduction of electric traction has been, in St. Louis, towards the south, west and north, where suburban building has taken place to an enormous extent. The tramways in 1908 had 350 miles of single track within the city boundary and 120 miles within the county area outside the city. The municipal boundaries are so wide, however, that they include very nearly all the population which depends on the city for employment. The steam railways have not developed suburban traffic, and as it takes fully three-quarters of an hour to reach the city limits in any direction by tramway car from the centre, and as the cars are always overcrowded in the mornings and evenings, there is not much inducement for people to live further out.

Population has grown rapidly since 1880, as the following Table shows. Additions were made to the area included within the city limits from time to time in the decades 1880 to 1890 and 1890 to 1900, but since the latter year there has been no further addition.

| Year. | Population. | Increase. | Percentage Increase. |
|-------------|-------------|-----------|----------------------|
| 1870 | 310,864 | — | — |
| 1880 | 350,518 | 39,654 | 12·8 |
| 1890 | 451,770 | 101,252 | 28·9 |
| 1900 | 575,238 | 123,468 | 27·3 |
| 1910 | 687,029 | 111,791 | 19·4 |

At the Census of 1900 74·5 per cent. of the population were returned as American-born and 19·3 per cent. as foreign-born whites, but since that date there has been a considerable influx of immigrants from South-Eastern and Central Europe, viz., Italians, Poles, Hungarians, Bohemians, Russian Jews and Greeks. Of the foreign-born population in 1900, 52·8 per cent. were born in Germany, 17·4 per cent. in Ireland, 6·5 per cent. in Great Britain and 5·1 per cent. in Austria-Hungary. Until the last decade, St. Louis received its immigrants in two streams, one from the Southern States, the other from the Northern. The former stream, which was strongest in the first half of last century, consisted of American-born whites and negro slaves: the latter stream, which predominated during the second half of the century, consisted of Americans of British descent and of more

recently arrived Germans. The German stream has declined very much in recent years, and has been replaced by immigrants from South-Eastern Europe.

Most of the labour employed on street and tramway construction is Slavonic and Italian, and the same races supply the unskilled labour of the car shops, foundries, and brickworks. Negroes, who in 1900 formed 6·2 per cent. of the total population, are employed largely as carters and at the wharves on the river front, and to some extent on street work. In the building trade they constitute the great majority of hod carriers, having the muscular strength required for this work. Germans and men of German descent are found both as employers and employed in the great breweries, but they are met with in most trades and professions. Of the original French influence, practically nothing remains except in the names of streets and public places.

The south side of St. Louis, near the river, used to be the German quarter, and to some extent it is so still; but latterly this quarter has been invaded by the newer immigrants, whilst the Germans have tended to move still further south, where newer and better housing accommodation is found. The Slavonic and Italian immigrants are found in small scattered communities in many parts of the city, especially in the older and comparatively inferior districts round the centre and towards the river front. A few isolated communities are found in the more outlying parts, where large works exist. There is, for instance, a considerable body of Italians near the brick works in the extreme west.

The death-rates for the years 1903-7, based upon the local estimates of population, have been as follows:—1903, 17·3 per 1,000 of population; 1904, 16·8; 1905, 14·9; 1906, 14·0; 1907, 14·5. It is noticeable that the rate of mortality shows a tendency to decline. In regard to this the report of the Health Department for 1908 states—"The general decrease in disease and death-rate may be very properly attributed to the increased efficiency in the city's sewer system, the oiling and general elimination of ponds, the marked progress in street paving and cleaning, the excellent water supply and the more rigid enforcement of the general sanitary and quarantine laws."

Sanitation is still by no means all that might be desired. The old-fashioned privy-vault system is still extensively used. Although the sewer system in 1908 embraced 639 miles of sewers, many unconnected vaults exist in the older crowded districts and most of the connexions which exist in these districts are untrapped. The Italian settlement near the brick works, being situated in an outlying district, has no sewer connexions, and the vaults are emptied only once a year, so that they overflow for some time before that operation takes place, causing offensive streams along the roadside. The inhabitants of this district, who happen to be occupied to a large extent in the manufacture of sewer pipes, have petitioned to have sewers put in, but so far without success.

The sanitary conditions of the city generally, in fact, are such as would lead one to expect a higher rate of mortality than is actually experienced. There are two important facts which possibly help to explain the moderate death-rate. One is that St. Louis, like all the rapidly-growing cities in America, has not a normal proportion of infants and old persons in its population. The other is the fact that the immigrants—largely South Italians and Russian Jews—who occupy the worst tenement districts in the city come from conditions which are often much worse than those of their present surroundings, and it is probable that in the course of generations they have acquired some degree of immunity from the diseases incidental to overcrowding and defective sanitation. On coming to America these people are also much better fed and it is not surprising to find that they are fairly healthy. Further, St. Louis, in the main, is a town of detached buildings, having a sufficiency of air and light. There are comparatively few of the tall closely-packed tenements which are found in New York, and this circumstance must have a favourable influence on the rate of mortality.

Of the public services the water supply is undertaken by the municipality, being drawn from the river some miles above the town. Gas, electric lighting and tramways are in the hands of companies, but the municipality draws revenue from them.

Parks are not very conveniently situated. Forest Park, where the great Exhibition was held in 1904, is a splendid domain, but to reach it entails a considerable journey. There are a number of small parks here and there and recently several recreation grounds for children have been opened in the more crowded districts. These grounds are equipped with gymnastic apparatus and appliances for games and amusements, which are under the supervision of a director and assistants employed by the municipality.

OCCUPATIONS, WAGES AND HOURS OF LABOUR.

The following Table shows the distribution of occupations in St. Louis as recorded at the Federal Census of 1900. As might be expected in a great mercantile centre, large numbers of persons are employed in "trade and transportation" and in "professional, domestic and personal service":—

Number of Persons of 10 years of age and over engaged in Occupations in St. Louis in 1900.

| Occupations. | Males. | Females. | Totals. |
|---|---------|----------|---------|
| Building | 15,995 | 28 | 16,023 |
| Metalworking and Engineering... | 14,978 | 53 | 15,031 |
| Textile | 339 | 576 | 915 |
| Leather | 1,079 | 30 | 1,109 |
| Boot and Shoe Making | 4,383 | 1,777 | 6,160 |
| Clothing | 2,964 | 10,871 | 13,835 |
| Woodworking and Furnishing | 5,789 | 207 | 5,996 |
| Paper and Printing | 3,630 | 1,232 | 4,862 |
| Brick and Tile | 950 | 2 | 952 |
| Glass... .. | 452 | 12 | 464 |
| Food, Drink and Tobacco | 8,836 | 1,900 | 10,736 |
| Other Manufacturing and Mechanical Pursuits | 14,931 | 1,602 | 16,533 |
| Trade and Transportation | 69,191 | 8,761 | 77,952 |
| Labourers (not otherwise specified) | 20,663 | 434 | 21,097 |
| Professional, Domestic and Personal Service and } Agricultural Pursuits | 26,662 | 27,021 | 53,683 |
| All Occupations | 190,842 | 54,506 | 245,348 |

The foregoing Table may be supplemented by a return for 1907, based on figures published by the Bureau of Labour Statistics of the State of Missouri, showing in greater detail the numbers employed in the important manufacturing industries of St. Louis:—

| Industries. | Males over 16 years. | Females over 16 years. | Children under 16 years. | Total. |
|------------------------------------|----------------------|------------------------|--------------------------|--------|
| Boot and Shoe Making | 7,109 | 4,107 | 593 | 11,809 |
| Car Works | 10,083 | 296 | 20 | 10,399 |
| Foundries and Machine Shops | 6,836 | 68 | 40 | 6,944 |
| Brewing... .. | 6,156 | 624 | 1 | 6,781 |
| Tailoring | 2,310 | 4,059 | 64 | 6,433 |
| Brick and Tile Making | 4,008 | 8 | 88 | 4,104 |
| Printing and Bookbinding | 2,649 | 1,217 | 99 | 3,965 |
| Furniture | 3,015 | 120 | 43 | 3,178 |
| Tobacco | 1,700 | 1,439 | 21 | 3,160 |

The building trade has been very active during the greater part of the last decade, owing to the growth of population and to the demand for better housing. The stream of immigrants has consisted mainly of peasants and of miscellaneous workpeople who are unable to work at the skilled trades, even in building, for as a rule they have not been accustomed to the kind of building in vogue in American cities. This immigration, therefore, has been a factor tending to raise rather than to lower wages in the skilled trades, and above all in the building trade, because all these new arrivals increase the demand for houses. The strength of the demand for skilled workmen naturally tends to raise the level of wages, not only in the ordinary way in which an increasing demand for a commodity tends to raise its price, but also by enabling trade unions to secure a firm footing and to enforce their rates. All branches of the building trade in St. Louis are strongly organised. The various unions are represented on the Building Trades Council, and they support one another in cases of dispute. The depression of 1907 had not very much effect on the majority of the recognised rates. Bricklayers, however, suffered a reduction from 2s. 11d. to 2s. 8½d. per hour, but the former rate was restored in the summer of 1909. The plasterers' labourers, who have a union, were unable to maintain their rate of 2s. 4¼d. per hour all through the period of depression. Throughout the building trade the working hours are 44 per week.

In the brewing and printing trades also the unions are very strong. Brewery workers have printed agreements fixing wages and hours. The eight-hour day is recognised in most departments, but drivers' hours are liable to be longer. Route drivers, according to the agreement, "shall not make more than two trips per day, but on short routes more if necessary, six days to constitute a week's work; they should also clean their team on Sunday between the hours of 7 a.m. and 9 a.m." Other drivers "shall not exceed eleven consecutive hours, including one hour for meals. Stablemen and extra drivers working seven days per week shall receive one holiday every two weeks."

Both in job and newspaper printing union rates of pay are general. Where they are departed from, it is only because some particular kind of skilled labour is scarce, and the best men are paid more than the union rate. Machine compositors in the newspaper offices are paid by piece, and earn very high wages. The strain, however, is rather severe, so that many men do not regularly work six days per week, the maximum number allowed. Nominally the hours are eight per day, but compositors in the newspaper offices usually work rather less. Pressmen in job offices have a long schedule of rates for different kinds of presses, but the majority of the men earn the highest rate of 93s. 9d. per week, and some receive more than the union rate owing to scarcity of experienced men. The importance of this industry is great and is growing, as the city is acquiring an increasingly metropolitan character.

There are three large car building works in St. Louis, employing about 10,000 men altogether, when in full employment. At the time of the enquiry business was very dull in this trade, and the works were almost closed. Steel cars for the mineral traffic on railways are one of the most important manufactures, and tramway cars also are made in great numbers. Piece work is very general in this industry, and the range of earnings is somewhat wide. Unskilled labourers are largely recruited from the stream of newly arriving immigrants who cannot speak English, and whose usefulness is therefore limited. The wages of this class of unskilled labour are influenced more than those of any other class by the state of trade. During the period of great activity in 1907 better wages were paid to the raw immigrants. The poorest earnings for men are made by such immigrants, who begin their industrial training by feeding bolt-threading machines, being paid by the piece. A few earn up to 6s. 3d. per day, but the majority earn about 4s. 2d. per day of ten hours.

In the foundries and machine shops a considerable variety of work is done. The car building firms have their own foundries and machine shops, and there are a number of general machinery works and stove foundries. Some of the principal works produce woodworking machinery, air-compressors, hoists, dynamos and motors and railway pneumatic brakes. There is practically no apprenticeship system in St. Louis, and consequently the line between skilled mechanics and semi-skilled machine hands is not clearly drawn. There is, in fact, an unusually wide range of pay for machinists, varying from 8½d. to 1s. 10d. per hour, though a range of from 1s. 0½d. to 1s. 4½d. includes the majority.

The premium bonus system is in operation at one rather large works, and is being experimented with at another. Earnings under this system are apparently much higher than those of the majority of time workers, but as the system has been tried so partially and for so short a time as yet, it is impossible to draw any conclusion as to the ultimate effect which it would have on the earnings of machinists if it were more generally adopted and maintained for a considerable period. In St. Louis the arrangement is that the worker receives half the value of the time which he saves. The supposition is that he is rated at the hourly wage which he would receive if he worked only by time, but in the absence of any recognised standard time rates, it would be impossible to say whether, as time went on, the hourly rates would continue to be unaffected by the existence of the premium system. Partly for this reason the system is not regarded with favour by the trade unions, which, however, have little if any influence amongst machinists in St. Louis. In machine shops the usual hours are 54 per week.

The brick and fireclay works are situated at the extreme west of St. Louis, where a good quality of clay is found. Clay miners earn about 58s. 4d. per week on piece work, and tile moulders about 62s. 6d. Most of the other labour is unskilled, and is paid by time at 8d. per hour. A large proportion of the workers in this industry are Italians, many of them from the north of Italy, though in recent years southern Italians and Sicilians have been introduced.

Almost throughout the boot and shoe industry, piece work is the rule and good earnings are made. Upper cutters, who work entirely by hand, are now mainly on piece work, but until recently time rates were paid. Outsole cutters use machines, and are mainly paid by time. The list of occupations in this trade for which wages are given in the Table below is not exhaustive. Work is very much subdivided, so that it was not practicable to include the whole range of male occupations, but the list selected covers the more important skilled operations. Operations for which only a few men are required in any one factory, and miscellaneous helpers and learners, have not been included. Amongst other occupations omitted are those of lining cutting, for which earnings are much less than for upper cutting, and rough stuff cutting, *i.e.*, cutting the inferior parts of the leather for the inside of the soles and heels, work often done by youths, together with various minor operations connected with lasting and finishing. It is probable that if the wages of all males had been taken, the average rate of earnings would have been less than the average of the occupations for which earnings are quoted.

The Bureau of Labour Statistics of the State of Missouri takes a yearly census of wages which enables it to give roughly the distribution of earnings in various manufacturing industries. The following figures relating to the St. Louis boot and shoe trade in 1907 are taken from the report of the Bureau for 1908:—

Weekly Earnings of Wage-earners, skilled and unskilled, in the Boot and Shoe Trade in 1907.

| Limits of Weekly Earnings. | Males over 16 years. | Females over 16 years. | Children under 16 years. |
|--------------------------------------|----------------------|------------------------|--------------------------|
| Under 12s. 6d. | 244 | 104 | 94 |
| 12s. 6d. and under 16s. 8d. | | 173 | 211 |
| 16s. 8d. " " 20s. 10d. | 326 | 363 | 128 |
| 20s. 10d. " " 25s. | 314 | 495 | 101 |
| 25s. " " 29s. 2d. | 462 | 579 | 59 |
| 29s. 2d. " " 33s. 4d. | 485 | 539 | — |
| 33s. 4d. " " 37s. 6d. | 518 | 423 | — |
| 37s. 6d. " " 41s. 8d. | 514 | 418 | — |
| 41s. 8d. " " 50s. | 852 | 494 | — |
| 50s. " " 62s. 6d. | 1,167 | 326 | — |
| 62s. 6d. " " 83s. 4d. | 1,584 | 187 | — |
| 83s. 4d. " " 104s. 2d. | 482 | 6 | — |
| 104s. 2d. and over... .. . | 161 | | |
| Total | 7,109 | 4,107 | 593 |

Motormen and conductors on the tramway cars are paid on a scale which begins at 10d. per hour for the first year, rising $\frac{1}{2}$ d. per hour each year until the maximum of 1s. 0 $\frac{1}{2}$ d. per hour is reached. In February, 1909, more than half the men were stated to be earning 1s. 0 $\frac{1}{2}$ d. per hour. Street construction and paving are done by contract. Granite paviors have a strong union, and receive 2s. 6d. per hour, working eight hours daily. Wood block and brick paviors are not organised to the same extent; they receive 1s. 3d. to 1s. 5 $\frac{1}{2}$ d. per hour and work ten hours daily.

The predominant weekly wages and hours of labour in certain principal trades and industries of St. Louis are shown in the following Table:—

Predominant Weekly Wages and Hours of Labour of Adult Males in the Principal Occupations in February, 1909.

| Occupation | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|----------------------------------|---------------------------|-------------------------------------|
| <i>Building Trades:—</i> | | |
| Bricklayers | 119s. 2d. | 44 |
| Stonemasons | 110s. | 44 |
| Stonecutters | 103s. 2d. to 114s. 7d. | 44 |
| Carpenters | 110s. | 44 |
| Plasterers | 137s. 6d. | 44 |
| Plumbers | 114s. 7d. to 137s. 6d. | 44 |
| Structural Iron Workers | 110s. ,, 119s. 2d. | 44 |

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|--|---------------------------|-------------------------------------|
| <i>Building Trades—cont.</i> | | |
| Painters | 91s. 8d. to 103s. 2d. | 44 |
| Hod Carriers and Bricklayers' Labourers | 77s. 11d. ,, 82s. 6d. | 44 |
| Plasterers' Labourers | 91s. 8d. | 44 |
| <i>Foundries and Machine Shops :—</i> | | |
| Ironmoulders | 78s. 9d. | 54 |
| Machinists | 56s. 3d. to 74s. 3d. | 54 |
| Blacksmiths | 76s. 6d. ,, 90s. | 54 |
| Patternmakers | 87s. 6d. ,, 94s. 6d. | 54 |
| Labourers | 37s. 6d. ,, 43s. 9d. | 54 |
| <i>Car Building :—</i> | | |
| Steel Car Builders | 65s. to 77s. 6d. | 60 |
| Box and Tramway Car Body Builders | 50s. ,, 70s. | 50 to 60 |
| Machine Woodworkers | 45s. ,, 62s. 6d. | 50 ,, 60 |
| Painters | 50s. ,, 66s. 9d. | 50 ,, 60 |
| Labourers | 31s. 3d. ,, 33s. 9d. | 50 ,, 60 |
| <i>Printing and Bookbinding Trades :—</i> | | |
| Newspaper— | | |
| Hand Compositors { Day work | 96s. 11d. | 46 |
| { Night work | 108s. 9d. | 45 to 47½ |
| Machine Compositors { Day work | 118s. 9d. to 137s. 6d. | 39 ,, 42 |
| { Night work | 137s. 6d. ,, 156s. 3d. | 43 ,, 47½ |
| Pressmen { Day work | 81s. 3d. | 50 |
| { Night work | 81s. 3d. | 47½ |
| Book and Job— | | |
| Hand Compositors | 76s. | 48 |
| Machine Compositors | 100s. to 104s. 2d. | 48 |
| Pressmen (Cylinder Presses) | 93s. 9d. | 48 |
| Bookbinders | 66s. 8d. to 79s. 2d. | 48 |
| <i>Brick and Fireclay Works :—</i> | | |
| Tilemoulders | 62s. 6d. | 60 |
| Kiln Firemen | 50s. to 65s. 8d. | 70 to 72 |
| Clay Miners | 58s. 4d. | 48 |
| Labourers | 40s. | 60 |
| <i>Boot and Shoe Making :—</i> | | |
| Upper Cutters | 62s. 6d. to 79s. 2d. | 59 |
| Outsole Cutters | 75s. | 59 |
| Inseamers (Goodyear Welters) | 87s. 6d. to 116s. 8d. | 59 |
| Goodyear Stitchers | 75s. ,, 87s. 6d. | 59 |
| McKay Operators | 62s. 6d. ,, 70s. 10d. | 59 |
| Lasters and Pullers-over | 62s. 6d. ,, 75s. | 59 |
| Edge Trimmers and Setters | 83s. 4d. ,, 100s. | 59 |
| Treers | 61s. 4d. ,, 69s. 5d. | 59 |
| <i>Brewing :—</i> | | |
| Cellar Men, Maltsters, Kettle Men and Fermenters | 72s. 11d. | 48 |
| Wash-house Men | 68s. 9d. | 48 |
| Bottlers | 50s. | 48 |
| Fillers and Corkers | 56s. 3d. | 48 |
| Firemen | 70s. | 56 |
| Boiler Washers | 62s. 6d. | 58½ |
| Engineers | 95s. 10d. | 56 |
| Oilers | 62s. 6d. | 48 to 56 |
| Freight Handlers | 55s. | 48 |
| Ice-plant Workers | 50s. | 48 |
| Labourers | 50s. | 48 |
| Draymen— | | |
| City Drivers and Four-horse Shipping Drivers ... | 72s. 11d. | Variable |
| Stablemen and Extra Drivers | 54s. 2d. | " |
| Two-horse Bottle-Beer Drivers | 62s. 6d. | " |
| One-horse Bottle-Beer Drivers | 54s. 2d. | " |
| <i>Tobacco Manufacture :—</i> | | |
| Lumpmakers | 41s. 3d. | 60 |
| Twisters | 61s. 6d. | 60 |
| Wrappers-off | 62s. 6d. | 60 |
| Labourers | 36s. 8d. | 60 |

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|--|---------------------------|-------------------------------------|
| <i>Public Services:—</i> | | |
| Street Construction and Paving (Contract)— | | |
| Paviors (granite) | 120s. | 48 |
| Paviors (wood and brick) | 75s. to 87s. 6d. | 60 |
| Paviors' Labourers | 43s. 9d. to 45s. | 60 |
| Road Menders | 35s. to 43s. 9d. | 60 |
| Drivers | 43s. 9d. | 60 |
| Road Sweepers (Municipal) | 37s. 6d. | 48 |
| Water Works (Municipal)— | | |
| Labourers | 50s. | 48 |
| Gas Works (Company)— | | |
| Gas Stokers | 72s. 11d. | 84 |
| Labourers | 43s. 9d. | 70 |
| Electric Light and Power Works (Company)— | | |
| Switchboard Men | 68s. 9d. to 83s. 4d. | 56 to 70 |
| Dynamo Men | 86s. 6d. | 70 |
| Stokers | 65s. 8d. | 84 |
| Overhead Linemen | 72s. 1d. to 93s. 9d. | 48 to 70 |
| Labourers | 43s. 9d. ,, 50s. | 60 ,, 70 |
| Electric Tramways (Company)— | | |
| Motormen and Conductors | 72s. 11d. | 70 |

Taking wages at New York as the base, = 100, in each case, the wages index numbers for St. Louis are—building trades, skilled men 108, hod carriers and bricklayers' labourers (negroes) 117 ; foundries and machine shops, skilled men 89, unskilled labourers 97 ; printing, hand compositors (job work) 87.

HOUSING AND RENTS.

The strong German influence which prevailed in St. Louis at an early period of its history and the proximity of good brickmaking clay probably account for the fact that brick flats predominate instead of the frame houses which are so common in America. The type of dwelling most commonly inhabited by the working classes is a flat of three rooms, in a red brick building, generally two stories in height, but sometimes three stories, each flat, as a rule, going right through from front to back, an arrangement which enables the middle rooms to be lighted from the side, though it may be rather imperfectly in many cases where the space between two buildings is narrow. A great many of the buildings, especially the more modern ones, contain only two flats, one on each floor, this being what is usually known in America as a "two-family house." Comparatively few buildings contain more than four flats when the building has two stories, or more than six flats when it has three stories, and in these cases front and back flats are seldom found. Large blocks of flats with front and back tenements are rare, and even continuous terraces are not very numerous, in comparison with small detached blocks, except in the more central districts.

At the Census of 1900 the average number of families per dwelling-house in the city as a whole was 1.5. The proportion of families living in dwelling-houses occupied by one family was 41.4 per cent., whilst 40.2 per cent. lived in dwelling-houses occupied by two and 18.4 per cent. in dwelling-houses occupied by three or more families. At the same date 14.2 per cent. of all homes were owned free by their occupiers and 5.6 per cent. were owned encumbered, 77.6 per cent. being rented.

Like most large and growing cities St. Louis has its slum districts, where old houses are insanitary and overcrowded, and no very active steps have yet been taken by the authorities to deal with structural defects. A private association, the Civic League, has caused a careful investigation to be made in one district, proving the existence of the evils which are almost invariably found in the older portions of great cities, and a particularly bad state of sanitation. The trouble in St. Louis, as elsewhere, is that many of the old and unsatisfactory buildings are on land which is becoming valuable for business purposes, and the owners are therefore unwilling to spend money on repairs and structural alterations. The following paragraph from the report of the Housing Committee of the Civic League summarises their conclusions regarding the district which they investigated :

"In St. Louis the old residences down town on Washington Avenue and Olive Street are in process of rapid elimination, after a period of dilapidation, cheap rents and cheap boarding houses, by large wholesale mercantile establishments. Wash, Carr,

Biddle and O'Fallon Streets are waiting for the factories. Meanwhile, the aged houses are in a state of almost complete decrepitude, and the system of sanitation held over from the time of village gardens and stable lots has scarcely altered to suit the conditions of even town life, and is outrageously ineffective in a crowded city."

The Committee further express the opinion—which the present investigation confirmed—that "the same evils, though in a lesser degree, are to be found in half a dozen other sections of the city."

New building regulations are now in force, but it is only very recently that a law has been passed prohibiting dark rooms, of which there is a considerable number, many being found even in what are, in other respects, quite good modern flats. Sanitary regulations also have been adopted, and as there is a corps of inspectors to see to their enforcement they should ensure good conditions in new buildings, but the expense of remedying the structural defects of old houses has yet to be undertaken.

Fortunately since the introduction of electric tramways there has been ample facility for the growth of the city, so that excessively close building is not generally found outside the old quarters.

The ground-floor flats of houses occupied largely by Poles and other foreign immigrants, in the quarter which was originally the German quarter but which now contains many nationalities, consist of a front room, entered directly from the street without passage or hall, a middle room, entered through the front room, and a small kitchen. The two principal rooms are commonly about thirteen feet square. The kitchen varies considerably in size, but is usually smaller than the other rooms, and is used only for cooking and washing. The upper story flat is similar, excepting that entrance is obtained by a staircase at the rear of the building, and the kitchen is the room by which the flat is entered. The rents of such flats range from 6s. 9d. to 9s. 7d. per week. Flats of three rooms, renting for 9s. 7d. to 11s. 6d. per week, which are the most typical and numerous kind, are similar to those already described, excepting that they are in better neighbourhoods and are more modern, that the kitchens are not so small and that gas is generally supplied. Flats at 11s. 6d. and over have generally separate entrances in front, but most of those under 14s. 5d. are rather poorly provided with pantries, cupboards and sculleries. To some extent the commodious cellar makes up for these deficiencies.

Heating is effected by stoves provided by the tenants. As a general rule the stoves are in the rooms, not in the basement; the great majority of flats which have basement stoves are too expensive for wage-earners.

Basement cellars are almost invariably found, and in the modern buildings they are used for laundry work and are quite commodious. An attic room is also common, but it is very low and is used only for drying clothes in winter. Its use is shared by the tenants of the flats. The attic is less common in the modern than in the older types of dwelling. The modern building has generally a flat tarred roof, this being the most noticeable external difference between buildings in St. Louis and in red brick English towns.

An important type of three-roomed dwelling is the modern flat having three rooms and a bathroom, with a fair-sized garden shared by the tenants of the block. Such flats rent for 14s. 5d., 15s. 5d. and 16s. 10d. per week, according to the size of rooms and the situation. Buildings containing only two such flats, one on each floor, are very common, the owner frequently living in one flat and letting the other. Blocks of four are also numerous, the owner living in one of them. Many of the better paid working men prefer three rooms and a bathroom to four rooms without a bathroom, but this type of dwelling is occupied to a considerable extent also by clerks, shop managers, travelling salesmen, &c. The fronts of these flats are more ornamental than those of the cheaper kind, marble steps and porches are not uncommon, but the bay window is very rare.

It is noticeable that even good flats of three and four rooms with bathroom commonly have no hall, entrance to the middle room being through the front room or the kitchen. Four-roomed flats are mainly modern built, in twos and fours, like the flats containing three rooms and bathroom. All sorts of rents may be paid for them, but genuine working men seldom pay more than 19s. 3d. per week and more frequently from 14s. 5d. to 17s. 4d. A good modern flat containing four rooms and bathroom costs 17s. 4d. and upwards per week. These flats and also the modern three-roomed flats are provided with cupboards and the bathroom also has a water-closet, sometimes with no ventilation, excepting into the bedroom. In general, when there is no bathroom, there is no water-closet inside the house, but a vault-closet in the yard connected with the sewers.

Flats of five rooms are practically outside the range of working-class dwellings, unless they happen to be old, or in some neighbourhood where property has depreciated.

Single-family houses have been built in considerable numbers in recent years in the outer suburbs, at a distance involving a car ride of from 40 to 50 minutes to reach the centre of the city. These houses are seldom rented in the ordinary way. It is customary to build them for sale on the gradual payment plan. They are particularly numerous in South St. Louis, where they are occupied very largely by people of German descent.

Frame houses containing three good rooms on a plot 30 feet by 120 feet can be purchased for about £310, but sometimes for rather less where gas and sewers are not available. Frame houses with three or four rooms and bathroom, where sewers and gas have been put in, can be bought for between £420 and £520. Brick houses containing five rooms and bathroom on one floor and a commodious cellar underneath cost about £670; they are rather beyond the reach of most working men, but are bought by foremen and sometimes by working-class families when there are several wage-earners. Some brick houses consisting of five rooms and a bathroom have kitchen, dining room and bathroom in the basement, and in that case the cost is about £580. Houses of this kind containing four rooms and bathroom cost from £520 to £560.

The methods of payment vary considerably, but are based on the principle of paying 6 per cent. interest on the unpaid portion of the price. If the cost of the house is £520, the purchaser will pay perhaps £104 in cash, and the balance of £416 is divided into two halves. One half will be paid off by instalments of 6s. 6d. per month, together with the accrued interest on each instalment only, so that the monthly payments increase slightly each month. The other half of the balance is not paid off by instalments, but either remains as a mortgage or is paid off in one sum, interest being paid half-yearly.

Legally, if a purchaser fails to meet his payments, he may lose all he has already paid, so that people whose incomes are liable to suffer through trade depression incur some risk when they purchase in this way. Reputable firms, who wish to work up a good business, are willing to accommodate purchasers who get into difficulties, provided there is a prospect of their meeting their payments ultimately; but it sometimes happens that a purchaser cannot continue his payments and has to find some one to take the house off his hands at short notice, and that may mean the loss of a great part of what he has paid.

As a general rule, those who purchase homes are steady people who are ready to make great sacrifices to secure full possession, and often they improve the value of their properties by laying out pretty gardens and adding outbuildings.

Rented one-family houses let for about the same amount per room as flats. For both classes of dwellings rents are high, even for America. Most of the conditions which tend to make rents high are present in St. Louis. It is a large Western city, with the high level of wages characteristic of the West; it is also growing rapidly, with a good prospect of future expansion, with the consequence of high land values, and capital is in great demand for all kinds of enterprises and commands a higher rate of interest than in older and less progressive places, a circumstance which has much to do with the level of rents. In addition, the houses are built of brick, a more expensive method of obtaining a given amount of cubic space for dwellings than building with wood. This fact probably helps to account for the higher level of rents in St. Louis than in Chicago, where frame buildings are numerous.

Another circumstance which accounts in some degree for the higher rent per room in St. Louis than in some other large cities where brick is the principal building material, such as Baltimore and Philadelphia, is the fact that more land is used by the method of building which is in vogue in St. Louis than by the terrace system which has been followed in the two cities mentioned. The size of rooms also is larger in St. Louis than in, for example, New York and Philadelphia. Some idea of the accommodation in typical medium-priced flats in St. Louis can be obtained from the following particulars relating to a few of those visited in the course of the investigation:—

1. A one-family house of brick; three rooms 13 feet square, with porch and verandah, no passages. Rent 11s. 6d. per week.

2. Modern-built flats in a two-storied detached brick building; kitchen 12 feet by 15 feet, middle room (dark) 14 feet square, front room 14 feet by 16 feet, no bathroom. Occupied by motormen. Rents 10s. 7d. and 11s. 6d. per week.

3. Flats, similar to above; front room 15 feet by 12 feet, middle room 13 feet by 12 feet, kitchen 13 feet by 9 feet. Rent 10s. 7d. per week.

4. Flats, similar to above, but with four rooms and attic for drying clothes; measurement of rooms 15 feet by 13 feet, and 13 feet square. Rent 13s. 6d. per week for the upper flats and 14s. 5d. per week for the lower.

5. Flats, in two-storied terrace houses, with three rooms and bathroom; measurement of rooms 13 feet by 14 feet, 11 feet by 12 feet and 13 feet by 14 feet. Rent 17s. 4d. per week.

6. Flat containing four rooms and bathroom; measurement of kitchen and two bedrooms 13 feet square, front room 14 feet by 13 feet, no passage through, poor light in middle rooms. Bathroom, containing w.c., opened into one of the bedrooms, which had no window to the outside. Rent 17s. 4d. per week.

The following Table shows the predominant rents for dwellings of two, three and four rooms. The rent per room in the four-roomed class is higher than in the other classes, because four-roomed dwellings are for the most part of a modern type, and hardly any but well-paid working men have dwellings of this size in St. Louis. The rents stated include the charge for water.

Predominant Rents of Working-class Dwellings.

| Number of Rooms per Dwelling. | | | | Predominant Weekly Rents. |
|-------------------------------|-----|-----|-----|---------------------------|
| Two rooms | ... | ... | ... | 4s. 10d. to 7s. 8d. |
| Three rooms | ... | ... | ... | 8s. 8d. „ 12s. 6d. |
| Four rooms | ... | ... | ... | 14s. 5d. „ 17s. 4d. |

The level of rents at New York being represented by 100, the rents index number for St. Louis is 101.

RETAIL PRICES.

There are no special features in the shopping conditions in St. Louis. Meat and groceries are sold almost entirely by independent shopkeepers. Vegetables are sold to a considerable extent at the Union Market and at a few smaller markets; a meat business also is carried on at the Union Market, but it is mainly wholesale. "Multiple" firms are not of any appreciable importance either in the meat or grocery retail trade.

Groceries and other Commodities.

Granulated *sugar* is sold at prices varying according to the quantity bought and the class of shop. In large shops doing a considerable popular trade, working-class and middle-class, the price is commonly 1s. 0½d. for 4 lb., whilst a single pound is sold for 3½d. At cheaper shops, doing a trade with the poorer classes, the price works out at 2½d. per lb. when several pounds are bought at one time, or 2 lb. for 5½d.

Bread is made by several large bakeries and also by small "corner bakeries." The usual price in February, 1909, was 2½d. for a loaf weighing from 14 to 16 oz. and made with some skimmed milk and a little lard or cotton-seed oil. The smaller bakeries doing a trade with Italians, Poles, etc., have frequently a ticket system, that is to say, from 24 to 30 tickets can be bought for a dollar (4s. 2d.) and the loaves are purchased as required with the tickets. Stale bread is bought by poor families at half or nearly half price. Rye bread is bought by many of the Slavonic peoples and some Germans, at a price slightly lower than that of wheaten bread.

Milk is sold at very varying prices from 9d. per quart downwards. Skimmed milk, which is used to a considerable extent, sells for from 2d. to 3d. per quart. The 9d. milk is known as "guaranteed milk," *i.e.*, milk which is produced by dairies which are regularly inspected by a private society of medical men to ensure the complete freedom of the herds from disease and scrupulous cleanliness in the handling of the milk at all stages of transportation. All milk sold in St. Louis must be bottled. The popular price of full milk, containing at least 3 per cent. of fat, is 4¼d. per quart.

Sweet potatoes are consumed to a considerable extent in the autumn and winter months. Green maize is a popular vegetable. In the season cobs are sold at 5d. per dozen in the market, but there is a wide range in qualities, and the choicer varieties cost 1s. 0½d. to 1s. 3d. per dozen.

Coal is quoted by the bushel of 80 lb., but is mainly sold by the ton and half-ton. The price for popular qualities is from 10s. 5d. to 13s. 6½d. per ton of 2,000 lb. This coal is bituminous and comes from Southern Illinois; it is not of so good a quality as most of the domestic coal produced in the Pittsburg district.

The following Table shows the predominant prices in February, 1909, of some of the principal groceries and other commodities consumed by the wage-earning classes :—

Predominant Prices paid by the Working Classes in February, 1909.

| Commodity. | Predominant Price. |
|------------------------------------|--------------------|
| Tea per lb. | 2s. 1d. to 2s. 6d. |
| Coffee " | 10d. ,, 1s. 0½d. |
| Sugar :— | |
| White Granulated " | 2½d. ,, 3¼d. |
| Brown " | 2½d. ,, 3d. |
| Bacon, Breakfast—Boneless " | 7½d. ,, 10d. |
| Eggs per 1s. | 7 ,, 10 |
| Cheese, American per lb. | 10d. |
| Butter " | 1s. 5½d. |
| Potatoes, Irish... .. per 7 lb. | 7d. |
| Flour, Wheaten—Household " | 11d. to 11¾d. |
| Bread, White per 4 lb. | 10d. ,, 11½d. |
| Milk per quart | 4¼d. |
| Coal, Bituminous per cwt. | 7d. to 9d.* |
| Kerosene per gallon | 6d. ,, 9d. |

* By the ton of 2,000 lb., or the half-ton.

Meat...

— There are large branches of the great packing-houses of Chicago in East St. Louis, from which the city of St. Louis is supplied with a considerable part of its meat, but much comes also from Kansas City and Chicago, and some is slaughtered in the town.

The following Table shows the predominant prices in February, 1909, of the principal cuts of meat of the qualities mainly consumed by the wage-earning classes :—

Predominant Prices paid by the Working Classes in February, 1909.

| Description of Cut. | Predominant Price per lb. |
|-------------------------------------|---------------------------|
| Beef :— | |
| Roasts—Round | 6¼d. |
| " Ribs prime | 6¼d. to 7½d. |
| " Ribs second cut | 5d. ,, 6¼d. |
| " Chuck or short ribs | 5d. |
| Steaks—Round | 6¼d. to 7½d. |
| " Sirloin... .. | 7½d. |
| Shin without bone | 5d. to 6¼d. |
| Flank | 3d. ,, 4d. |
| Plate, Brisket { Fresh | 3d. ,, 4d. |
| Salt or corned | 4d. |
| Mutton or Lamb :— | |
| Leg | 7½d. |
| Breast | 5d. to 6¼d. |
| Loin | 7½d. ,, 10d. |
| Chops | 7½d. ,, 10d. |
| Shoulder | 6¼d. |
| Neck | 5d. |
| Veal :— | |
| Cutlets | 10d. to 1s. 0½d. |
| Rib chops | 7½d. |
| Loin chops | 7½d. to 8¾d. |
| Breast | 6¼d. |
| Neck | 5d. to 6¼d. |
| Pork :— | |
| Fresh—Loin | 6¼d. to 7½d. |
| " Spare rib | 5d. |
| " Shoulder | 5d. |
| " Chops | 6¼d. to 7½d. |
| Corned (wet salt or pickled) | 6¼d. |
| Dry salt | 6¼d. |
| Ham | 6d. to 7½d. |
| Shoulder, salt or smoked | 4½d. ,, 5d. |

Prices at New York being taken as the base, = 100, in each case, the index number for the price of meat at St. Louis is 86, for other food it is 102 and for food prices as a whole 97. For rents and food prices combined the index number is 98.

SAVANNAH.

Savannah is the chief port of the Southern States on the Atlantic coast. It is situated on the Georgia bank of the Savannah River, about eighteen miles from the open sea, this river forming for the whole of its course the boundary between Georgia and South Carolina. The country around Savannah is flat and low-lying, and to a large extent swampy, but the city itself stands for the most part on rising ground well above the river and offers no special difficulties as regards drainage. The Savannah River (which is of an intense yellow colour as it flows past the city), while not very wide, offers to vessels a depth of water of about 26 feet 6 inches at mean high tide, and allows steamers of about 4,500 tons net register to reach the wharves. Regular steamboat passenger service is maintained between Savannah and New York, Boston, Philadelphia and Baltimore. There is at present no regular passenger service established with any European port. Four important railway systems converge on the city, and Savannah has thus direct communication with all parts of the country. The fastest through train from New York covers the distance to Savannah—about 850 miles—in about twenty hours. The distance of Savannah from Atlanta, the capital of the State, is 294 miles.

The following Table shows the total population of the city in the Census years 1870–1910 :—

| Year. | Population. | Increase. | Percentage Increase. |
|-------|-------------|-----------|----------------------|
| 1870 | 28,235 | — | — |
| 1880 | 30,709 | 2,474 | 8·8 |
| 1890 | 43,189 | 12,480 | 40·6 |
| 1900 | 54,244 | 11,055 | 25·6 |
| 1910 | 65,064 | 10,820 | 19·9 |

With the exception of Charleston, S.C., Savannah is the only considerable city in the United States which shows an actual excess of coloured over white inhabitants, the negroes forming 51·8 per cent. of the total population in 1900. As elsewhere in the Southern States, the presence of this large coloured population gives rise to many special problems. As the proportion of negroes to the total population is larger in Savannah than elsewhere, it might be assumed that these problems are accordingly graver and more difficult of solution. This, however, is not altogether the case. Savannah is a city strongly imbued with the old ideas and traditions of the South. The question of the inferiority of the coloured race goes to a large extent by default; the negroes are assigned and accept a position relative to that of the whites which few people of either race think of challenging. Fundamentally the negro problem exists with all its difficulties and complications, but in this city, thanks largely to the absence of local leadership of a partisan character on the negro side, it is not forced with any insistence on public notice, and an equilibrium is preserved which would not be possible where the prevailing condition of the negroes, from an economic and educational point of view, was higher. There is nothing to indicate that the coloured race is treated in Savannah with exceptional harshness; on the contrary, instances are frequent where ties of a most cordial nature exist between some coloured person and a white family. Such a relation, however, suggests to neither party the idea of equality. It is simply the kind of indulgent affection which formerly was frequently entertained by a kindly disposed master towards a faithful and well-behaved slave. This attitude of the one race towards the other is due not merely to the distinctly Southern spirit which, as stated, rules the city, but also to the absence of any really large class of "Poor White" labour. Racial troubles of a serious form are at present most likely to arise at the point of greatest economic friction, that is to say, where the two races, in their competition for employment, regard each other with jealousy. There is, it is true, in Savannah a considerable number of "Crackers," as the poor white working people drawn from the country districts are usually called, who are engaged in the less skilled occupations, but it is doubtful whether the distinctively "Poor White" class from the upland regions of Georgia and the Carolinas is represented to any large extent, and in any case the number of semi-skilled and unskilled white labourers is small when compared with that in many other Southern cities, particularly those where cotton manufacturing is carried on.

Savannah is laid out on a very regular plan, the scheme being that devised by General Oglethorpe, who settled the city in 1733. The streets run at right angles to each other, and the more important crossings are widened out into open grassy squares,

usually well shaded with trees. There are about twenty-five of these squares, the area of which varies from about half an acre to an acre. They appear originally to have been corrals for the horses of the soldiers and other inhabitants of the city, and to have served as rendezvous for the different military companies in the days when the city was subject to surprise attacks by the Indians. They are now a very distinctive and picturesque feature of the city. They are unrailed, and footpaths cross them in two directions. Wheeled traffic must pass round on either side, however, and it is at present a matter of local dispute as to whether appearance shall be sacrificed and the squares be broken by cross roads. Some of the squares are carefully tended, particularly those along the main street, Bull Street, which is kept as a kind of boulevard, and from a considerable section of which heavy traffic is excluded. Other squares have been allowed to fall into neglect, but most of these also have a picturesqueness of their own. Other features of the city contribute to its attractive appearance. Except in one or two of the main shopping centres, practically all the streets are lined with trees, palmettos, magnolias and other sub-tropical species being common. Often a grass plot two or three yards wide separates the footpath from the road, while in the case of two of the chief thoroughfares another broad green belt runs along the centre of the road. The views obtainable down these avenues, especially in the spring of the year, suggest a well-kept park rather than a residential street.

The architecture of most of the larger residences in Savannah is distinctive and attractive, the light colours employed in decoration and the spacious piazzas and balconies being suggestive of the sunny and warm climate which the city enjoys. The streets are either very well paved or not paved at all. Those of the former class are laid with asphalt, vitrified brick, cobble stones or, less frequently, with granite blocks, shell or gravel. There are within the city limits about 210 miles of streets and lanes, and of these about 42 miles are paved. The unpaved streets are simply tracks of rough loose earth, but the absence of paving in many of the streets is a matter of less inconvenience than at first might be supposed, as, owing to the regular plan of the city, ordinary traffic proceeding across town in any direction is able to keep to the paved thoroughfares. The streets are kept very clean and in good order. The paved streets, with the exception of those asphalted, are cleaned twice a week, while the asphalt streets are cleaned twice daily.

Much is being done by the city authorities to make the city as attractive as possible as a resort, and in recent years a considerable tourist traffic has in fact been drawn there. The city has its "season" in the spring of the year, and forms a convenient halting place on the route between the North and the winter resorts of Florida and Cuba. As a resort, Savannah depends entirely upon its own charms, for there are few points of interest in the neighbourhood. Tybee beach at the mouth of the river offers sea bathing, and there are also a small casino and pleasure gardens at Thunderbolt, nearer the city. But these attractions are rather for local residents than for tourists. Apart from the squares, the city is fairly well supplied with parks and open spaces. The principal park is Forsyth Park, which with its extension occupies 31 acres. The best residences of the city surround this park. As is common in American cities, the cemeteries are also largely used as parks. The Laurel Grove and Bonaventure Cemeteries are both beautiful and well-kept.

Savannah derives its economic importance chiefly from the position which it occupies as a port and commercial centre. Its manufactures are relatively small. The following statistics afford a general indication of the importance of the trade of Savannah:—

| Year ended June 30th. | | | | Tonnage Entered and Cleared in the Foreign Trade. | Value of Imports. | Value of Exports. |
|-----------------------|-----|-----|-----|---|-------------------|-------------------|
| | | | | Tons. | £ | £ |
| 1905 | ... | ... | ... | 603,069 | 310,144 | 12,967,674 |
| 1906 | ... | ... | ... | 624,594 | 313,139 | 13,508,240 |
| 1907 | ... | ... | ... | 664,820 | 459,139 | 13,133,297 |
| 1908 | ... | ... | ... | 713,051 | 425,801 | 12,853,194 |
| 1909 | ... | ... | ... | 669,884 | 448,425 | 10,604,199 |

The countries sharing principally in the trade of Savannah are Germany, Great Britain, France and Spain.

The principal articles of export are cotton and naval stores (rosin and turpentine). The value of upland cotton exported in the year ended June 30th, 1909, was £8,551,510, and in addition to this export of upland cotton there was an export of Sea Island cotton valued at £129,627.

The export of rosin in the same year was 699,287 barrels of 280 lb. each, the total value being £472,592, while the export of spirits of turpentine was valued at £450,104. The naval stores dealt in by Savannah are obtained from the large pine forests which cover much of the interior of the State. The distillation and other work involved in the manufacture is usually done near the sources of supply, the spirits and rosin being brought into Savannah ready for export.

In addition to the above principal articles there is also a considerable export trade in phosphate rock, cotton-seed oil, oilcake and meal, cotton seed and timber. The timber shipped from the port is almost entirely Georgia pine, which is used largely for building purposes. On the whole, it is not of very high quality, much of it being from "cut" trees, *i.e.*, trees from which the rosin has been extracted.

The wharves are for the most part in the east of the city, many of them being just outside the city boundaries, where they are exempt from the city taxes. The growth of the city has been mainly from north to south, that is, away from the river; the growth from east to west has been relatively very small. The business centre is in the north of the city but, except immediately upon the water front, the important activities of the city as a shipping centre do not obtrude themselves. The cotton wharves and the naval stores yards, with their acres of closely packed barrels, reveal themselves to the ordinary visitor only if he goes expressly in search of them.

The annual mean temperature of Savannah calculated from the experience of the last 37 years is 66 degrees. The seasonal temperature means are 52 degrees for December, January and February; 66 degrees for March, April and May; 81 degrees for June, July and August; and 67 degrees for September, October and November. The annual mean rainfall is about 50 inches. The city has adapted itself to a fairly hot climate both in regard to the character of its residential buildings and also its business habits. Practically all commercial, professional and official business is suspended between 2 and 4 o'clock in the afternoon, luncheon being taken at this time and usually combined with a siesta. After 4 o'clock business is resumed until about 6 o'clock. This practice of resting during the heat of the afternoon does not affect the manual working classes. In their case work goes on uninterruptedly from morning till evening, the only break being the dinner interval from 1 till 2 o'clock.

The whole of the water supply of Savannah is obtained from artesian wells which, with a minimum depth of about 400 feet, can be profitably sunk in this region. Some of the wells are natural flowing, while others must be pumped. Being obtained from this source, the water is quite pure and forms one of the best supplies in the United States. The water works are owned and controlled by the city authorities.

The following is the scale of water charges for the smaller dwelling-houses:—

| Valuation. | | | | Charge per annum. |
|----------------------------------|-----|------|-----|-------------------|
| £104 and under | ... | ... | ... | 20s. 10d. |
| Over £104 and not exceeding £208 | ... | ... | ... | 31s. 3d. |
| „ £208 | „ | £313 | ... | 41s. 8d. |
| „ £313 | „ | £417 | ... | 50s. |

For these charges all dwellings are allowed the use of water for yard, kitchen, pantry, wash tubs, two bath tubs and two water-closets.

The sanitary administration of the city is under the practical control of a Health Officer appointed by the Mayor and Aldermen. In this capacity he acts as the executive officer of a Board of Sanitary Commissioners. This Board is appointed by the Mayor and consists of two Aldermen and three citizens, together with the Health Officer and the Mayor himself as *ex officio* members. In addition to the Health Officer and the clerical staff, the sanitary force consists of one chief inspector, eight inspectors for the investigation of ordinary nuisances, and one food inspector. A system of house-to-house inspection is established, and the sanitary requirements are enforced with vigour, especially in the poorer coloured quarters. The proper supervision of such portions of the city is no doubt a difficult task, but a large measure of success appears to have been achieved. After much schooling at least an outward conformity to the law has been secured on the part of some of the most unpromising subjects, and the lanes and yards in the coloured quarters are kept free from litter, &c., to an extent which is very creditable to those responsible.

The principal vital statistics for the period 1904-8 are shown in the following Table :—

| Year. | Number of Births. | | Number of Deaths. | | Number of Deaths under one year. | |
|-------|-------------------|-----------|-------------------|-----------|----------------------------------|-----------|
| | White. | Coloured. | White. | Coloured. | White. | Coloured. |
| 1904 | 745 | 904 | 521 | 1,107 | 73 | 223 |
| 1905 | 677 | 899 | 546 | 1,073 | 80 | 205 |
| 1906 | 762 | 990 | 517 | 980 | 65 | 214 |
| 1907 | 797 | 998 | 547 | 1,025 | 94 | 265 |
| 1908 | 896 | 986 | 467 | 939 | 93 | 213 |

When it is considered that the negroes, according to the Census of 1900, formed 51·8 per cent. of the total population, it will be seen from the above Table how marked is the difference between the vital statistics for the coloured and for the white sections of the population. As regards infantile mortality the difference is most striking. The deaths under one year among white children yield an average rate of 105 per 1,000 births, a very satisfactory figure; while among coloured children the rate was as high as 235. Tuberculosis is a much more prolific cause of mortality among the coloured than among the white population. The average annual number of deaths from this disease alone during the period 1904-8 was 53 among the whites and 145 among the negroes.

In addition to discharging the ordinary functions of a corporation, Savannah has the power of making regulations in regard to the harbour and wharves, and it also appoints inspectors for the examination of naval stores passing through the port. It is provided by State law that "no person shall ship or put on board any vessel for exportation from this State any pitch, tar, rosin or turpentine, before the same is inspected and marked, provided there be at the port of exportation a sworn inspector of such articles." In its own charter the city has power to appoint "inspectors of every sort, gaugers and measurers," but in practice only the Naval Stores Inspectors are appointed. It is also interesting to note that the jurisdiction of the city extends for special purposes beyond the corporate limits. Municipal control of the river extends as far as Tybee. For one mile beyond the corporate limits the Mayor and Aldermen have power to prohibit rice culture if regarded as injurious to the health of any portion of the inhabitants of the city. For sanitary and certain police purposes, including the "preserving of peace and good order on the Sabbath," the limits of jurisdiction extend two miles beyond the corporate boundaries. Savannah maintains a public market, a public library (for the whites) and a "Pest House," or infectious diseases hospital. The tramways and the gas and electric supplies are controlled by private enterprise.

The city charter gave Savannah plenary powers in respect of taxation and borrowing, no limits being set as to amount. The city revenues are derived principally from the taxes on real and personal property, from licences and to a small extent from market and harbour dues, the sale of cemetery plots and other miscellaneous sources. The taxation of property is similar in its essential features to the system prevailing in most American cities, a percentage levy being made on the capital value of all property with the exception of certain forms specially exempted by State or Federal law. Real estate is assessed by the tax assessors, the basis of valuation in the case of new property being two-thirds of the cost. Personal property is declared on forms supplied for the purpose to all residents in the city. In practice, personalty under £10 8s. 4d. is exempt, and no special steps are taken to secure returns from those who are not likely to be liable. On this account most of the negroes and many of the poorer whites escape this form of direct taxation. In 1907, the city tax-rate was $1\frac{1}{4}$ per cent. of assessed value, and the valuation of real estate and personalty together amounted to £9,873,136.

From the other important source of the city's revenues, namely the licences, the amount derived in 1907 was £22,984. In that year the licences were those granted to retail liquor dealers, druggists, keepers of dogs, auctioneers and a few others. From the 1st January, 1909 a new Ordinance came in force, chiefly as the result of the prohibition of the sale of alcoholic liquors, and the consequent loss of revenue from the lapse of saloon keepers' licences. Under this new ordinance practically all kinds of businesses industrial, commercial and professional, are subject to licence duties.

In addition to the city taxes, taxes are levied by the county both on its own account and on behalf of the State. The subject of taxation is real and personal property and

the general principles of assessment, &c., are similar to those which apply in the case of the city taxes. The total rate thus levied is also $1\frac{1}{4}$ per cent. of assessed value, of which $\frac{3}{4}$ per cent. represents the county levy and $\frac{1}{2}$ per cent. the State levy. This latter rate is the maximum which may be imposed by the State according to the present law. In addition to the tax on property, the county raises a sum by means of a poll tax of 4s. 2d. on every male between the ages of 21 and 60 years, with exemptions in the case of the blind, the maimed, &c., soldiers who served in the Confederate Army and also those persons who have been assessed to property tax. In the whole of Chatham County, in which Savannah is situated, the number of persons assessed to property tax in the year 1907 was—white 5,351, coloured 2,038; while the number assessed to poll tax was—white 4,026, coloured 826.

The same difficulties in regard to the assessment of personal property exist in Savannah as elsewhere in the United States where this system of taxation obtains. Owing to the ease with which personal property can be concealed, especially where the holding of stocks, bonds, &c., is concerned, much evasion is possible. It is said, and the number of taxpayers indicates, that much evasion takes place also in regard to the poll tax, though the payment of the poll tax (in the absence of assessment to property tax) is a practical preliminary to the enjoyment of the right to vote at elections, seeing that as soon as a man is registered on the voting list he becomes known to the taxing authorities.

The sale of intoxicants is forbidden in Savannah by State law. The weight of local feeling, however, appears to be against the prohibition, and a good deal of traffic in liquors among both the white and the coloured people is still carried on.

OCCUPATIONS, WAGES AND HOURS OF LABOUR.

As is apparent from its general appearance, Savannah is a commercial rather than an industrial centre. Any claim made by the city to industrial importance would be based principally on the manufactures of fertilisers and cotton-seed oil which are carried on in several large factories a short distance beyond the corporate limits. These give employment almost exclusively to coloured labour. Within the city itself the most important works are the railway shops at which rolling stock is made and repaired for one of the lines having its terminus at Savannah. These give employment to a considerable amount of white labour. There are also three foundries and machine shops, two of which are engaged principally on repairs to the vessels putting into the port. A small cotton mill, some tin can works, a cigar factory, a buggy manufactory and some lumber mills practically complete the list of the manufacturing industries of the city.

The following Table, based upon the Federal Census figures for 1900, shows the relative importance of the principal occupations in that year:—

Number of Persons of 10 years of age and over engaged in Occupations in Savannah in 1900.

| Occupation. | Males. | Females. | Total. |
|---|--------|----------|--------|
| Building | 1,322 | — | 1,322 |
| Metalworking and Engineering | 687 | 1 | 688 |
| Textile | 39 | 23 | 62 |
| Boot and Shoe Making | 93 | — | 93 |
| Clothing | 91 | 947 | 1,038 |
| Woodworking and Furnishing | 226 | 9 | 235 |
| Paper and Printing | 134 | 16 | 150 |
| Food, Drink and Tobacco | 363 | 12 | 375 |
| Other Manufacturing and Mechanical Pursuits | 658 | 22 | 680 |
| Trade and Transportation | 7,342 | 638 | 7,980 |
| Labourers (not otherwise specified) | 4,241 | 103 | 4,344 |
| Professional, Domestic and Personal Service and } Agricultural Pursuits. | 2,519 | 7,299 | 9,818 |
| All Occupations | 17,715 | 9,070 | 26,785 |

The white proletariat in Savannah is comparatively small, the bulk of the low-skilled or rough labour being supplied by the negroes. The demand for labour of this character comes principally from the docks, where, with the exception of the superintendents, the stevedore and general labour is exclusively coloured; but the number of labourers employed in connexion with the shipping trade cannot be stated. Employment in certain branches of this trade is very uncertain, since, in addition to the irregularity incidental to merchant shipping generally, there is also a seasonal fluctuation, due chiefly to the fact that the cotton exports are made mostly between the beginning of September and the end of February. In 1907, which appears to be a typical year in this respect, over 80 per cent. of the export of upland cotton for the whole year was made in this period. There is consequently a very slack season of six months for the labour employed in this branch of the city's trade. It is not possible to give any exhaustive answer to the question what the men do for their maintenance during this time. Some, though probably only a small proportion, have small farm plots outside the city which they cultivate as a secondary source of employment, while others combine industry with a varying degree of pleasure by fishing with a line in the river, a fair number of sea trout, bass, &c., being obtainable. On the whole, the labour employed in handling each of the three chief articles of export, viz., cotton, naval stores and lumber, is fairly distinct. The men get used to one branch of the work, and as a rule do not pass readily to the other branches. Many of the cotton labourers, however, are also capable of dealing with lumber, and these compete for such work when their own special business is slack.

The labour engaged in wharf and shipping work is of two kinds. The stevedores, or longshoremen as they are usually called, do much more expert work than the wharf hands, and their rates are considerably higher. They work in gangs consisting of a "header" or foreman, and a certain number of followers. Very often, and particularly in the cotton trade, the "header" is allowed to choose his gang, and the wages for all are paid to him, he being obliged, however, to pay his followers at a stipulated rate. For "headers" working in the hold of a vessel the rate of wages is 1s. 3d. to 1s. 5½d. per hour, and for the followers 1s. 0½d. For "headers" working outside the ship the rates are 1s. 0½d. to 1s. 3d. and for the followers 10d. to 1s. 0½d. Usually the highest rates are paid in connexion with the loading of cotton and the lowest for the loading of naval stores. In addition to the stevedores or longshoremen there is a large class of labourers employed in doing various jobs about the wharves, unloading railway trucks, &c. The rate for labourers of this class is 7½d. to 8¾d. per hour.

The longshoremen have a trade union, but it is doubtful to what extent it is effective. The principal employers profess to have no knowledge of it or to ignore it. No union appears to exist among the general labourers employed about the wharves.

Though a number of the wharf labourers are employed in work which is subject to few fluctuations, and can be carried on in all weathers, and in which therefore a full day of 10 hours can usually be made, work, on the whole, is made irregular by many circumstances, especially so far as the stevedores are concerned. From an analysis of the books of one lumber firm it appeared that the average working day, taking the whole year round and excluding Sundays, was about 6½ hours. In addition to its foreign trade Savannah has a very important coasting trade, especially in lumber. Of the vessels so engaged in 1906 nearly a third, according to the published figures, were sailing craft, in regard to the arrivals and clearances of which much uncertainty inevitably prevails.

In addition to the irregularity of work the irregularity of the worker must be also taken into account in estimating the economic condition of the coloured labouring classes in Savannah. Though there are doubtless exceptions to the general rule, the stevedore does not work a full week even when he has the opportunity. It is impossible to ascertain the exact amount of time lost, but the opinion of many who employed or had experience of this class of labourers was that as a rule work was done on only four days out of six. The view was often expressed that the negro labourer worked as a rule to satisfy a fixed and not very high standard of comfort, and that when his usual wants had been satisfied he was not disposed to work longer. Allowance must be made also for the very arduous character of the work. The handling of bales of cotton each weighing about 500 lb. is probably a task which for physical reasons cannot be performed for many days in succession, except by the very strongest. Testimony was as a rule given to the effect that the coloured dock labour was very efficient, and compared well with the white labour at other ports. The general superintendence of a white man is usually considered absolutely necessary, and a good deal is stated to depend upon whether this white supervisor has the right manner of handling his men. Under normal conditions, however, the negro gang, crooning in

unison their monotonous songs, work hard and steadily. They are muscular and appear to have very little thought for their personal safety, moving heavy weights with the flimsiest of tackle.

Skilled labour in Savannah is on the whole well organised, and trade union minimum rates are as a rule paid. In the machine shops and printing establishments the skilled labour is almost wholly white. It is doubtful, indeed, whether coloured members would be admitted to membership of the unions in these trades. In the building trades both white and coloured workers are employed in several occupations, and where this is the case separate unions exist for the two races. The Carpenters' Union, for example, has five branches, of which two are for coloured workers and three for white. Two classes of carpentering work are recognised, namely, house or constructional work and bench work, the latter being paid more highly. The minimum rates for the two branches respectively are 9s. 4½d. and 10s. 5d. per day, but these rates are usually exceeded in practice. It is estimated that about 75 per cent. of the carpenters employed in the city are coloured. The range of wages stated in the Table below for carpenters covers both white and coloured men, though the tendency is for the coloured men to receive less than the white. The bricklayers are mostly coloured, and have their own union, a separate union existing for the few white bricklayers. Painters are mostly white, and are well organised. A coloured union also exists with ten or a dozen members. Plasterers are nearly all coloured and the stonemasons are nearly all white. Plumbers are mostly white, and form one branch of the building trades that is poorly organised in this city.

None of the local unions pay out-of-work benefit but sick and death benefits are usual, if not common to all. In the Machinists' Union the benefits paid to members are not fixed according to any general scale, but are determined by a relief committee which considers each case on its merits, and in the opinion of the officers the arrangement works well. The allowances in deserving cases are usually generous, extra liberality being possible in suitable cases owing to the fact that many members who are not in financial difficulties make no claim on the society in case of illness of short duration.

The following Table shows the predominant weekly wages and hours of labour of adult males in the principal occupations in February, 1909.

Predominant Weekly Wages and Hours of Labour of Adult Males in the Principal Occupations in February, 1909.

| | Predominant Weekly Wages. | Predominant Weekly Hours of Labour. |
|--|---------------------------|-------------------------------------|
| <i>Building Trades :—</i> | | |
| Bricklayers | 80s. to 90s. | 48 |
| Carpenters | 62s. 6d. ,, 75s. | 48 |
| Plasterers | 62s. 6d. ,, 90s. | 48 |
| Plumbers | 87s. 6d. ,, 100s. | 48 |
| Painters | 62s. 6d. ,, 68s. 9d. | 48 |
| Hod Carriers, Bricklayers' and Plasterers' Labourers | 31s. 3d. ,, 37s. 6d. | 48 |
| <i>Foundries and Machine Shops :—</i> | | |
| Ironmoulders | 75s. | 60 |
| Machinists | 87s. 6d. | 60 |
| Blacksmiths | 87s. 6d. to 96s. 3d. | 60 |
| Patternmakers | 87s. 6d. ,, 100s. | 60 |
| Labourers | 31s. 3d. ,, 37s. 6d. | 60 |
| <i>Boilermaking, Shipbuilding, &c. :—</i> | | |
| [Repairs] | | |
| Boilermakers | 93s. 9d. | 60 |
| Boilermakers' Helpers | 43s. 9d. | 60 |
| Caulkers | 87s. 6d. | 54 |
| Labourers | 31s. 3d. to 37s. 6d. | 54 to 60 |
| <i>Printing Trades :—</i> | | |
| Newspaper— | | |
| Hand Compositors { Day work | 83s. 4d. | 48 |
| { Night work | 107s. 11d. | 56 |
| Machine Compositors { Day work | 125s. | 48 |
| { Night work | 135s. 4d. | 56 |
| Book and Job— | | |
| Hand Compositors | 62s. 6d. to 75s. | 48 |
| Machine Compositors | 93s. 9d. ,, 95s. 10d. | 48 |

| | | | | | | Predominant Hourly Wages. | Predominant Weekly Hours of Labour. |
|---|------|------------------|-----|-----|----------------------|------------------------------|--|
| <i>Wharf and Dock Labour :—</i> | | | | | | | |
| Stevedores | Dock | "Headers" | ... | ... | 1s. 0½d. to 1s. 3d. | } Variable. (See text). | |
| | | Followers... .. | ... | ... | 10d. ,, 1s. 0½d. | | |
| | Hold | "Headers" | ... | ... | 1s. 3d. ,, 1s. 5½d. | | |
| | | Followers | ... | ... | 1s. 0½d. | | |
| Wharf Labourers | | ... | ... | ... | 7½d. to 8¾d. | | |
| <i>Fertiliser, &c. Works :—</i> | | | | | | | |
| Unskilled Labourers | | ... | ... | ... | 23s. 4d. to 31s. 3d. | 56 to 60 | |
| <i>Public Services :—</i> | | | | | | | |
| Street Construction, Paving and Cleaning (Municipal)— | | | | | | | |
| Paviors | | ... | ... | ... | 75s. | 54 | |
| Paviors' Labourers | | ... | ... | ... | 37s. 6d. to 43s. 9d. | 54 | |
| Road Menders | | ... | ... | ... | 75s. | 51 | |
| Scavengers | | ... | ... | ... | 37s. 6d. | 54 | |
| Road Sweepers | | ... | ... | ... | 37s. 6d. | 54 | |
| Drivers | | ... | ... | ... | 37s. 6d. | 54 | |
| Labourers | | ... | ... | ... | 37s. 6d. | 54 | |
| Water Works (Municipal)— | | | | | | | |
| Enginemmen | | ... | ... | ... | 96s. 2d. | 56 | |
| Stokers | | ... | ... | ... | 43s. 9d. | 70 | |
| Labourers | | ... | ... | ... | 37s. 6d. | 60 | |
| Gas Works (Company)— | | | | | | | |
| Firemen and Gasmakers | | ... | ... | ... | 58s. 4d. | 70 | |
| Labourers | | ... | ... | ... | 37s. 6d. | 60 | |
| Electric Light and Power Works (Company)— | | | | | | | |
| Electricians | | ... | ... | ... | 62s. 6d. | 70 | |
| Stokers | | ... | ... | ... | 43s. 9d. | 70 | |
| Labourers | | ... | ... | ... | 36s. 6d. | 70 | |
| Electric Tramways (Company)— | | | | | | | |
| Motormen and Conductors | | ... | ... | ... | 50s. | 77 | |

Taking wages at New York as the base, = 100, in each case, the wages index numbers for Savannah are—building trades, skilled men 76, hod carriers and bricklayers' labourers (negroes) 50; foundries and machine shops, skilled men 96, unskilled labourers (negroes) 82; printing, hand compositors (job work) 79.

The Saturday half-holiday is not a common institution among the manual working classes in Savannah, the daily hours worked being usually the same throughout the week.

It should be noted that the wages quoted in the above Table for the foundry and machine shop trades relate to shops other than those belonging to the railway company. The rates for boilermakers and caulkers are based principally upon information furnished by the two shipyards, which between them carry out all necessary repairs to vessels putting into the port. These firms have also a general foundry trade. Practically no new shipbuilding work is executed in Savannah.

The only important fields of employment for women in Savannah are dressmaking and domestic service, the latter occupation being, as elsewhere in the South, almost entirely appropriated by coloured women. In accordance with old-established custom, these coloured domestic servants seldom sleep in their employer's house. The small textile mill and a few cigar factories provide employment for a few white women.

HOUSING AND RENTS.

In Savannah the sharp distinction between the negroes and the whites, which is discernible in so many phases of their life, must also be drawn in any study of their housing conditions. In the first place the grade of labour represented by the coloured section is lower than that represented by manual working whites, and consequently the predominant types of dwellings in the two cases are different. In the second place there seems to be no doubt that what may be called the voluntary standard differs also, being lower among the negroes than among the whites of a corresponding grade; for example, a coloured bricklayer will often live in a house very much inferior to that of a white bricklayer in receipt of similar earnings.

It may be said generally that the coloured people congregate on the borders of the city, their houses forming a fringe that practically encircles it. This fringe is, however,

of varying width, and widens out at two places into considerable areas. The first, which probably forms the most distinctive coloured quarter in Savannah, is in the west, and forms a district known as Yamacraw, which stretches back from the city and extends into a contiguous district parallel to West Broad Street, a main thoroughfare that runs from the north to the south of the city. The second important coloured quarter is in the north-east, again near the river, corresponding roughly to Yamacraw in the west. In addition to these districts the smaller groups of coloured houses scattered throughout the city always form distinct clusters, separated from the houses of the whites.

It may be stated as a rule, to which there are very few exceptions, that the two races do not share the same house, and seldom the same square or block. Contiguity to coloured dwellings is accounted a drawback in a house, and usually means a lower rental than would otherwise be the case. The few exceptions to the general rule are to be found in the case of some of the very poorest whites, native or immigrant, who occasionally are found occupying houses which may be considered as in a stage of transition from the occupancy of the whites to that of the negroes. It very frequently happens that as property deteriorates it passes over from white to negro tenants, and there comes therefore a time in the history of such a house, or group of houses, when the two races are found living in much closer proximity than can be considered as usual. Mention may also be made here of a small number of old houses scattered about the more central parts of the city which have basement dwellings. In some cases these basement dwellings are occupied by coloured tenants, while the upper floors are occupied by fairly respectable white people. The basement dwelling in such cases is entered direct from the street by a separate door, and is entirely shut off from the tenements above.

So far as the bulk of the coloured people are concerned, the predominant type of dwelling is a wooden cottage or shanty, built on brick piles, and only one story in height. This general type prevails, whether the number of rooms be three, four or five. Many of these houses front upon unpaved streets and alleys, and, especially in the Yamacraw district, reach a very low level of housing accommodation.

The door of a typical house is two or three feet above the ground, and is reached by wooden steps and a small porch or "stoop." The better class houses have entrance passages or "hallways," but in other cases the front room is entered direct. Three-roomed houses are as a rule single-fronted, and consist of two rooms, each about 10 to 12 feet square, and a small kitchen, six or seven feet square. The four-roomed house consists of two rooms of fair size, one very small room leading off the front room, and the usual small kitchen. The five-roomed house is as a rule double-fronted, two rooms being built on each side of the hallway, and a kitchen in the rear of the house.

In the poorer localities the coloured houses, small as they are, are usually divided between two or more tenants. This is more particularly the case with the four-roomed cottages, a very large number of which are shared by two tenants, the rent being divided equally.

The interiors of the negro houses are as a rule very poorly furnished, and often are squalid in the extreme, while the habit of keeping rooms entirely dark is at times responsible for accumulations of dirt and unpleasant smells. In their essential features many of the negro houses represent nothing more than flimsy huts, affording a sleeping place and shelter from occasional inclement weather. The advantages of civilisation take concrete shape in a bedstead, a kitchen stove and a decent water-closet, which a wise sanitary administration has made obligatory. For the rest of the equipment the barest make-shifts suffice to satisfy a small number of primitive daily wants.

How far the poor character of the negro's accommodation is due to an essentially low standard of comfort, for which he himself is responsible, and how far it is due to difficulties created by social organisation, is at present an unsolved question. Two important facts must, however, be borne in mind. The first is that, as already stated in a previous part of this report, the coloured class as a whole is the relatively poorly-paid labouring class and the low standard of life which this class exhibits is not a feature peculiar to Savannah; that there is a distinction of colour as well as of economic condition only makes it the more readily distinguishable. The second consideration is that Savannah possesses a sub-tropical climate, that hard frosts are here almost unknown and that many of the poorer people never light a fire except for cooking purposes. In such climatic conditions, the problem of shelter is less serious than in districts where severe weather is usual, and some features of the houses—notably the small number of rooms per tenant—are not so unconditionally bad as they would be in a city where a larger part of life is spent indoors.

The foregoing remarks apply to the majority of the negro dwellings in Savannah, but they are not true of all. Among the coloured people themselves there is an

upper class, distinguished less, perhaps, by a command of greater wages than by superior education and tastes. The homes of these people, though usually small and of the general type already described, are often comfortable and scrupulously clean, the distinctive note being a display of the bright colours usually dear to the negro woman's heart.

In contrast with the accommodation for coloured people, which on the whole is very uniform, the dwellings occupied by the white workpeople show great variety. With scarcely any exceptions the residential buildings in Savannah are built of wood, and the use of such material allows a variety of design and treatment in the case of even the moderately rented houses which might not otherwise be possible. A working-class street in Savannah, so far as the white people are concerned, therefore presents a strong contrast in appearance to the uniformly built working-class streets of an English town. Variety is also present in the convenience and general desirability of the houses, and the range of rentals for dwellings containing the same number of rooms is wide. For example, the extreme range of rentals for five-roomed dwellings is from less than 6s. 9d. per week to more than 19s. 3d., and at both of these figures the accommodation is indisputably of a working-class standard. The accommodation of the dwellings as expressed by the mere number of rooms appears to be of less importance in determining rent than a number of other considerations taken cumulatively, such as the location of the house, its appearance, the extent of its ground space, its interior appointments and general convenience. Spacious verandahs or porches, door and window mosquito screens, a well-fitted bathroom and other features all have a marked influence in determining the rent obtainable for working-class dwellings.

The dwellings of the bulk of the white working-class people in Savannah comprise flats, "apartments" and one-storied and two-storied cottages. The terms "apartment" and "flat" are used in Savannah in a sense somewhat contrary to that in England. As in some other American cities a flat is a floor of a house which may or may not have been built for occupation by more than one family, and in which the entrance hall is used in common by all the tenants. On the other hand an "apartment" in Savannah is a dwelling of a type now familiar in many of the working-class neighbourhoods of the outlying districts of London, in which a separate entrance is provided for each tenant, and in which, therefore, each tenant enjoys all the privacy of an independent house. The "apartments" in Savannah represent a rather higher standard of housing than the flats, and are nearly all well appointed. They form the typical dwellings of clerks, salesmen, etc., rather than of the working classes, though a considerable number of mechanics engaged in the more skilled occupations are found in the smaller "apartments."

The three-roomed working-class dwelling of the whites usually consists of half a six-roomed house originally built for one family. There is also a certain number of flats expressly designed for occupation by separate families. These are for the most part self-contained and have their own conveniences, but there is only one entrance from the street for every two tenants. The houses are two stories in height and contain a dwelling on each floor.

Four-roomed dwellings consist of "apartments," flats and self-contained cottages. A four-roomed "apartment," even when at a considerable distance from the business portion of the city, rents at from 12s. 6d. to 14s. 5d. per week, and though such dwellings are in many cases undoubtedly of a working-class character they cannot be regarded as truly typical. More commonly a four-roomed working-class dwelling consists of the upper story of a seven-roomed one-family house, one of the rooms being small and built over the hall below. Such a dwelling, together with the four-roomed cottage, must be regarded as the chief type of working-class dwelling for this number of rooms. The four-roomed cottage is similar in many of its features to the type already described as inhabited by the coloured population. It is of the bungalow type, with a fairly spacious porch. It is usually of rather more substantial construction and better finish than the corresponding house in the coloured districts. The rooms also are larger, hallways are more common, and in many cases there is a bathroom.

Five-roomed dwellings comprise one-family cottages and also the cheaper types of "apartments." An "apartment," as already described, consists of one floor of a two-storied house. The rooms are usually of large size, most of them being 14 feet square. Bathrooms are almost always found in this type of dwelling and both the upper and lower floors usually have spacious verandahs in front. Five-roomed houses are of one story, and are very varied in appearance and construction. Some are plain and of poor character: others are very picturesque and commodious, and afford accommodation to well-to-do families. The houses are detached and have, as a rule, a fair amount of ground around them. A common feature of this type of house is a deep piazza, on which are

usually found one or two rocking chairs and possibly a hammock, articles of furniture common to most American homes.

Six and seven-roomed houses are usually two stories in height, and differ as a rule only in the fact that in the seven-roomed house the space over the hall allows of the addition of a small room. The better class houses have the verandah or balcony which is so characteristic of the domestic architecture of the South. Many of the six and seven-roomed houses are bay-fronted.

The following Table shows the rents most generally paid for the leading types of working-class accommodation :—

Predominant Weekly Rents of Working-class Dwellings.

| Number of Rooms per Dwelling. | Predominant Weekly Rents. | |
|-------------------------------|---------------------------|---------------------------|
| | Paid by White Tenants. | Paid by Coloured Tenants. |
| Two rooms | — | 2s. 11d. to 4s. 10d. |
| Three rooms | 7s. 3d. to 10s. 7d. | 4s. 10d. |
| Four rooms | 7s. 8d. „ 12s. | 5s. 9d. to 6s. 9d. |
| Five rooms | 9s. 7d. „ 14s. 5d. | 6s. 9d. „ 10s. 1d. |
| Six rooms | 14s. 5d. „ 16s. 4d. | — |
| Seven rooms | 17s. 4d. „ 19s. 3d. | — |

The level of rents at New York being represented by 100, the rents index number for Savannah is 71.

It will be seen that the rentals for dwellings inhabited by coloured tenants are much below those for dwellings of corresponding nominal accommodation occupied by whites, but the difference is no greater than can be accounted for by the inferiority of the former as regards both construction and general convenience.

In the dwellings of the white working classes bathrooms are common, but they are seldom found in the houses of the predominant types inhabited by the coloured population. In most cases the water is laid on in the houses, and the water charges are included in the rentals, which are almost always paid monthly. Standpipes in the yards are not common even in the case of the smaller houses. Practically all the houses in Savannah have conveniences on the water carriage system. The sewage is discharged without treatment into the river.

The yard space at the rear of the houses is almost invariably small, and in many instances is decidedly cramped. In some of the coloured districts where the front street is narrow this is probably a real evil, but as a rule the streets are very wide and the total air space available to the houses is ample.

Except in a few instances on the borders of the city there appears to be no attempt to cultivate gardens. Many of the houses have small green plots in front, however, and frequently clematis or other creepers are trained over the porch, while everywhere the abundance of grass and trees about the streets usually prevents any appearance of dreariness or monotony.

RETAIL PRICES.

The dietary in Savannah has fairly well marked characteristics, of which probably the most prominent is the large consumption of rice and other cereals. Among both the white and the coloured people rice and hominy, the latter known locally as “grits,” are used in large quantities, both taking the place of potatoes to a considerable extent. Maize, both on the “cob” and as meal, is also very popular, particularly with the coloured section of the population. “Grits” can be obtained for 1s. 3½d. per peck and rice for 2s. 7d. to 3s. 5d. per peck, the former price being for what is known as “cracked” rice. A popular old-time dish among the negroes, known as “Hop and John,” is formed by a mixture of peas and rice. The consumption of tomatoes and lemons among the coloured people is also very large. Sweet potatoes are popular and are obtainable practically all the year round. Oatmeal and various patented breakfast foods have an extensive sale among the white people, the statements of food consumption made by working-class families showing that a particularly large use is made of these articles of diet.

None of the retail shops in Savannah are of very large size, and the predominant prices shown in the subjoined Table are based chiefly upon returns supplied by shops of moderate size situated conveniently near the working-class residential districts, and represent various grades of custom.

Though there are a few shops kept by negroes, they represent only a small part of

the total trade among the coloured people. Some shops in close proximity to the negro quarters are patronised chiefly or almost entirely by coloured people, but shopping is not a matter in which the "colour line" is closely drawn. Though the promiscuous mixing of white and coloured people is out of the question in theatres, railway waiting rooms, churches and hospitals, it occurs freely in retail shops.

In regard to many commodities it is usual to allow a substantial discount from the price when a quantity, not always large, is taken. Three loaves sold at $2\frac{1}{2}d.$ each can often be obtained for $5d.$ or four for $7\frac{1}{2}d.$, and potatoes are often sold at $1s. 6d.$ a peck when half a peck would cost $10\frac{1}{4}d.$ The practice is also common of selling some articles by the "nickel's-worth" or "quarter's-worth" or "dollar's-worth," instead of by the pound or quart. This is notably the case as regards sugar. Among the poorer coloured people tea also is often sold by the packet, an ounce packet costing $2\frac{1}{2}d.$

Groceries and other Commodities.

Sugar.—Among the working classes white granulated and brown are the only kinds in use. Loaf sugar is used only by the middle classes and well-to-do, the principal kind being a proprietary brand known as "Domino" sugar, the name being descriptive of the shape of the pieces. At most shops having mainly a working-class trade it is not stocked.

Bread.—There is much variety in the weight and price of the loaves sold. A single loaf, whatever its size, almost invariably costs $2\frac{1}{2}d.$ Sometimes the price is "straight," that is to say, there is no reduction on taking a larger number of loaves. Frequently, however, as mentioned above, the reduction is given and at some shops seven loaves can be obtained for $1s. 0\frac{1}{2}d.$ As a rule, the loaf sold for " $2\frac{1}{2}d.$ straight" weighs 1 lb., while those sold at four for $7\frac{1}{2}d.$ weigh about 12 oz., equal likewise to $2\frac{1}{2}d.$ per lb.

Coal.—The coal mostly used is a bituminous coal from the Tennessee or Alabama fields, and the price, which is subject to little seasonal variation, is $27s. 1d.$ per ton of 2,000 lb. Among the poorest negroes coal is not an important item of expenditure and many families never buy it. Wood suffices for cooking purposes, while, as already pointed out in the general introduction, the climate is not sufficiently rigorous to make the artificial heating of houses a matter of absolute necessity. The price of wood, as sold in large quantities, is $25s.$ per cord for pine and $29s. 2d.$ per cord for oak, a cord measuring 8 feet by 4 feet by 4 feet.

The following Table shows the predominant prices of various articles in February, 1909 :—

Predominant Prices paid by the Working Classes in February, 1909.

| Commodity. | Predominant Price. |
|-------------------------------------|--|
| Tea per lb. | $2s. 1d.$ to $2s. 6d.$ |
| Coffee " | $10d.$.. $1s. 0\frac{1}{2}d.$ |
| Sugar :— | |
| White Granulated " | $2\frac{3}{4}d.$, $3d.$ |
| Brown " | $2\frac{1}{2}d.$ to $3d.$ |
| Bacon, Breakfast—Boneless " | $8\frac{3}{4}d.$.. $10d.$ |
| Eggs per 1s. | 10 .. 12. |
| Cheese, American per lb. | $10d.$ |
| Butter " | $1s. 5\frac{1}{2}d.$ |
| Potatoes, Irish per 7 lb. | $8\frac{1}{4}d.$ to $9\frac{1}{4}d.$ |
| Flour, Wheaten — Household " | $1s. 0\frac{1}{4}d.$.. $1s. 0\frac{3}{4}d.$ |
| Bread, White per 4 lb. | $10d.$ |
| Milk per quart | $6d.$ |
| Coal, Bituminous per cwt. | $1s. 6\frac{1}{4}d.*$ |
| Kerosene per gallon | $9d.$ |

* By the ton of 2,000 lb.

Meat.

The principal centre for the retailing of meats and provisions of all kinds is the city market. This market opens at 4 a.m. and closes at 10.30 or 11 a.m., according to the season of the year. It is governed by an elaborate code of regulations which have the effect of protecting purchasers in the matter of weights and measures and the quality of goods sold, and of securing the observance of certain hygienic conditions. The market is patronised by both the poor and the well-to-do. The butchers having stalls in the market usually have also shops somewhere in the city, and the same qualities of goods are sold in both places. The butchers selling meat in the market are required by regulation

to cut up joints of beef to suit the requirements of purchasers. "The butchers shall if required by any person or persons, with the approbation of the Market Committee, divide their small meats as follows: Every calf, heifer, hog, goat or lamb, the quarters thereof shall be divided into two parts, the loin from the leg or the breast from the quarters, and the quarters of beef shall be cut up into pieces so as to suit the buyers." The sale of dead poultry, meat or sausage in the streets is prohibited. Nearly all the meat sold in Savannah is Western-dressed, though a certain amount of Georgia or local pork is sold. This, as a rule, is cheaper than the cold storage pork.

Among the negroes especially pork is an important article of flesh food. The meat is usually fried and the fat used for soaking the rice or "grits" which is eaten with it, the dish of "hog meat and hominy" being very popular among coloured people. The pork consumed is mostly fresh. Dry salt pork or "white meat" is sold only to a limited extent, often taking the place of bacon, while wet salt pork is not sold at all.

Salt or corned beef has practically no sale in the city.

The following Table shows the predominant prices for various cuts of meat in February, 1909:—

Predominant Prices paid by the Working Classes in February, 1909.

| Description of Cut. | Predominant Price per lb. |
|------------------------------|---------------------------|
| Beef:— | |
| Roasts—Round | 6¼d. |
| „ Ribs prime | 6¼d. to 7½d. |
| „ Ribs second cut | 6¼d. |
| „ Chuck or short ribs | 5d. to 6¼d. |
| Steaks—Round | 6¼d. „ 7½d. |
| „ Sirloin | 7½d. „ 10d. |
| Flank | 3¾d. „ 5d. |
| Plate, Brisket—Fresh | 3¾d. „ 5d. |
| Mutton or Lamb:— | |
| Leg | 8¾d. to 10d. |
| Breast | 7½d. |
| Loin | 10d. |
| Chops | 10d. |
| Shoulder | 6¼d. to 7½d. |
| Neck | 5d. |
| Veal:— | |
| Cutlets | 10d. to 1s. 0½d. |
| Rib chops | 10d. |
| Loin chops | 10d. |
| Breast | 5d. to 7½d. |
| Neck | 5d. |
| Pork:— | |
| Fresh—Loin | 7½d. to 10d. |
| „ Spare rib | 6¼d. „ 7½d. |
| „ Shoulder | 6¼d. „ 7½d. |
| „ Chops | 8¾d. „ 10d. |
| Dry salt | 6¼d. „ 7½d. |

No price is given in the above Table for shin of beef, as this part is generally sold whole, sometimes at almost a nominal price, and quotations generally were not sufficiently definite to justify their use.

Prices at New York being taken as the base, = 100, in each case, the index number for the price of meat at Savannah is 98, for other food it is 106 and for food prices as a whole 104. For rents and food prices combined the index number is 96.

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DETAILED STATISTICAL TABLES.

I. PREDOMINANT WEEKLY WAGES AND HOURS OF LABOUR OF ADULT MALES
IN 1909.

(A.) SKILLED BUILDING TRADE OPERATIVES.*

| Town. | Bricklayers. | | Stonemasons. | | Stonecutters. | |
|----------------------|---------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|
| | Weekly Wages. | Weekly Hours of Labour. | Weekly Wages. | Weekly Hours of Labour. | Weekly Wages. | Weekly Hours of Labour. |
| Atlanta... .. | 90s. to 101s. 3d. † | 54 to 60 † | — | — | — | — |
| Augusta | 90s. † | 54 † | 90s. | 54 | 75s. | 48 |
| Baltimore | 114s. 7d. to 125s. | 44 to 48 | 103s. 2d. to 112s. 6d. | 44 to 48 | 82s. 6d. to 91s. 8d. | 44 |
| Birmingham | 125s. † | 48 † | — | — | — | — |
| Boston | 75s. to 100s. † | 54 to 60 † | — | — | — | — |
| Brockton | 110s. ,, 120s. | 44 ,, 48 | 110s. | 44 | 91s. 8d. | 44 |
| Chicago | 110s. | 48 | 100s. | 48 | — | — |
| Cincinnati | 123s. 9d. | 44 | 123s. 9d. | 44 | — | — |
| Cleveland | 114s. 7d. | 44 | 99s. | 44 | 103s. 2d. | 44 |
| Detroit | 120s. | 48 | 100s. to 120s. | 48 | 91s. 8d. | 44 |
| Duluth | 100s. to 110s. | 48 | 100s. | 48 | 100s. | 48 |
| Fall River | 130s. | 48 | 120s. | 48 | 112s. 6d. | 48 |
| Lawrence | 105s. | 48 | 105s. | 48 | 75s. to 87s. 6d. | 48 |
| Louisville | 100s. 10d. | 44 | 90s. | 48 | — | — |
| Lowell | 120s. | 48 | 110s. | 48 | 70s. to 100s. | 48 |
| Memphis | 110s. | 48 | 88s. | 48 | — | — |
| Milwaukee | 128s. 4d. | 44 | 128s. 4d. | 44 | 128s. 4d. | 44 |
| Minneapolis—St. Paul | 120s. | 48 | 120s. | 48 | 100s. | 48 |
| Muncie | 120s. | 48 | 100s. | 48 | 100s. to 112s. 6d. | 48 |
| New Orleans | 100s. to 120s. | 48 | 100s. | 48 | 100s. | 48 |
| New York | 125s. | 48 | 100s. to 112s. 6d. | 48 | 90s. to 100s. | 48 |
| Newark | 128s. 4d. | 44 | 91s. 8d. ,, 100s. 10d. | 44 | 91s. 8d. ,, 114s. 7d. | 44 |
| Paterson | 119s. 2d. | 44 | 119s. 2d. | 44 | 91s. 8d. ,, 114s. 7d. | 44 |
| Philadelphia | 110s. | 44 | 110s. | 44 | 91s. 8d. ,, 110s. | 44 |
| Pittsburg | 114s. 7d. | 44 | 91s. 8d. | 44 | 87s. 7d. ,, 91s. 8d. | 44 |
| Providence | 119s. 2d. | 44 | 110s. | 48 | 100s. | 48 |
| St. Louis | 100s. 10d. | 44 | 82s. 6d. | 44 | — | — |
| Savannah | 119s. 2d. | 44 | 110s. | 44 | 103s. 2d. to 114s. 7d. | 44 |
| | 80s. to 90s. † | 48 † | — | — | — | — |

| Town. | Carpenters. | | Plasterers. | | Plumbers. | |
|----------------------|------------------------|-------------------------|-------------------------|-------------------------|------------------------|-------------------------|
| | Weekly Wages. | Weekly Hours of Labour. | Weekly Wages. | Weekly Hours of Labour. | Weekly Wages. | Weekly Hours of Labour. |
| Atlanta... .. | 61s. 11d. to 75s. | 54 to 60 | 90s. † | 54 † | 90s. | 54 |
| Augusta | 62s. 6d. | 60 | 90s. | 54 | 81s. 3d. to 87s. 6d. | 60 |
| Baltimore | 75s. | 48 | 100s. | 48 | 87s. 6d. | 48 |
| Birmingham | 80s. † | 48 † | — | — | — | — |
| Boston | 62s. 6d. to 75s. † | 60 † | 114s. 7d. † | 44 † | 125s. | 47 |
| Brockton | 80s. 3d. ,, 90s. | 44 to 48 | 110s. | 44 | 87s. 6d. to 100s. | 48 |
| Chicago | 82s. | 48 | 110s. | 48 | 91s. 8d. | 44 |
| Cincinnati | 110s. | 44 | 126s. 1d. | 44 | 126s. 1d. | 44 |
| Cleveland | 82s. 6d. | 44 | 114s. 7d. to 115s. 11d. | 44 to 44½ | 92s. 9d. to 103s. 2d. | 44 to 44½ |
| Detroit | 80s. to 90s. | 48 | 103s. 2d. | 44 | 112s. 6d. | 44 |
| Duluth | 60s. ,, 70s. | 48 | 100s. | 48 | 81s. 3d. to 93s. 9d. | 48 |
| Fall River | 90s. | 48 | 125s. | 48 | 125s. | 48 |
| Lawrence | 75s. | 48 | 105s. | 48 | 81s. 3d. | 48 |
| Louisville | 57s. 4d. to 75s. | 44 to 48 | 100s. 10d. | 44 | 75s. | 48 |
| Lowell | 62s. 6d. ,, 75s. | 48 | 114s. 7d. | 44 | 75s. to 100s. | 48 to 54 |
| Memphis | 70s. | 48 | 87s. 6d. | 48 | 81s. 3d. | 50 |
| Milwaukee | 80s. to 101s. 3d. † | 48 to 54 † | — | — | 100s. to 125s. | 48 |
| Minneapolis—St. Paul | 54s. 2d. ,, 67s. 6d. † | 52 ,, 54 † | 114s. 7d. | 44 | — | — |
| Muncie | 73s. 4d. ,, 75s. | 44 ,, 48 | 110s. to 125s. | 44 to 48 | 105s. 2d. | 44 |
| New Orleans | 90s. | 48 | 112s. 6d. | 48 | 112s. 6d. | 48 |
| New York | 79s. 2d. | 50 | 100s. to 112s. 6d. | 48 to 54 | 81s. 3d. | 54 |
| Newark | 80s. to 90s. | 48 to 54 | 100s. † | 48 † | 100s. to 112s. 6d. | 48 |
| Paterson | 103s. 2d. ,, 114s. 7d. | 44 | 126s. 1d. | 44 | 114s. 7d. | 44 |
| Philadelphia | 91s. 8d. | 44 | 119s. 2d. | 44 | 100s. 10d. | 44 |
| Pittsburg | 82s. 6d. to 87s. 1d. | 44 | 100s. 10d. to 110s. | 44 | 91s. 8d. | 44 |
| Providence | 82s. 6d. | 44 | 108s. 10d. | 44 | 80s. 3d. | 44 |
| St. Louis | 87s. 6d. | 48 | 112s. 6d. | 48 | 112s. 6d. | 48 |
| Savannah | 75s. 2d. | 44 | 91s. 8d. to 100s. 10d. | 44 | 91s. 8d. | 44 |
| | 110s. | 44 | 137s. 6d. | 44 | 114s. 7d. to 137s. 6d. | 44 |
| | 62s. 6d. to 75s. | 48 | 62s. 6d. to 90s. † | 48 † | 87s. 6d. ,, 100s. | 48 |

* The wages and hours of labour in the building trades relate to the summer period of 1909.

† White men.

‡ Coloured men.

(A.) SKILLED BUILDING TRADE OPERATIVES*—continued.

| Town. | Structural Iron Workers. | | Painters. | |
|-----------------------------|--------------------------|-------------------------|-----------------------|-------------------------|
| | Weekly Wages. | Weekly Hours of Labour. | Weekly Wages. | Weekly Hours of Labour. |
| Atlanta | 90s. to 101s. 3d. | 54 | 61s. 11d. to 68s. 9d. | 54 to 60 |
| Angusta | — | — | 56s. 3d. | 54 |
| Baltimore | 100s. | 48 | 62s. 6d. to 75s. | 48 |
| Birmingham | 112s. 6d. | 54 | { 70s. ,, 80s. † | 48 † |
| Boston | 90s. to 100s. | 48 | { 50s. ,, 75s. † | 60 † |
| Brockton | — | — | 72s. 5d. ,, 77s. | 44 |
| Chicago | 114s. 7d. | 44 | 75s. | 48 |
| Cincinnati | 100s. | 48 | 100s. 10d. | 44 |
| Cleveland | 120s. | 48 | 85s. | 48 |
| Detroit | 62s. 6d. and 75s. | 48 and 60 | 75s. | 48 |
| Duluth | 87s. 6d. to 100s. | 48 | 60s. to 70s. | 48 |
| Fall River | — | — | 87s. 6d. ,, 90s. | 48 |
| Lawrence | — | — | 68s. 9d. | 48 |
| Louisville | 67s. 6d. to 90s. | 54 | 62s. 6d. | 48 |
| Lowell | — | — | 75s. | 48 |
| Memphis | 100s. to 112s. 6d. | 48 to 54 | { 62s. 6d. | 48 |
| Milwaukee | 100s. | 48 | { 80s. to 90s. † | 48 † |
| Minneapolis—St. Paul | 100s. | 48 | { 60s. ,, 80s. † | 48 † |
| Muncie | 62s. 6d. to 68s. 9d. | 60 | 75s. | 48 |
| New Orleans | 100s. | 48 | 85s. | 48 |
| New York | 103s. 2d. | 44 | 69s. 2d. to 72s. 11d. | 50 |
| Newark | 103s. 2d. to 114s. 7d. | 44 | 70s. ,, 80s. | 48 |
| Paterson | 100s. 10d. | 44 | 80s. 3d. | 44 |
| Philadelphia | 103s. 2d. | 44 | 75s. 2d. | 44 |
| Pittsburg | 112s. 6d. | 48 | 75s. 2d. | 44 |
| Providence | — | — | 64s. 2d. to 73s. 4d. | 44 |
| St. Louis | 110s. to 119s. 2d. | 44 | 80s. ,, 85s. | 48 |
| Savannah | — | — | 64s. 2d. ,, 68s. 9d. | 44 |
| | | | 91s. 8d. ,, 103s. 2d. | 44 |
| | | | 62s. 6d. ,, 68s. 9d. | 48 |

* The wages and hours of labour in the building trades relate to the summer period of 1909.
 † White men. ‡ Coloured men.

(B.) SKILLED MEN IN FOUNDRIES AND MACHINE SHOPS.*

| Town. | Weekly Wages. | | | | Weekly Hours of Labour. | |
|-----------------------------|---------------------------|------------------------|-----------------------|-----------------------|-------------------------|--|
| | Ironmoulders. | Machinists. | Blacksmiths. | Patternmakers. | Iron-moulders. | Machinists, Blacksmiths and Patternmakers. |
| Atlanta | 62s. 6d. to 79s. 11d. | 61s. 6d. to 81s. 3d. | — | 68s. 9d. to 86s. 1d. | 59 to 60 | 59 to 60 |
| Angusta | 68s. 9d. | 68s. 9d. | — | 62s. 6d. ,, 75s. | 59 and 60 | 59 and 60 |
| Baltimore | 68s. 9d. to 75s. | 63s. 4d. to 75s. | 62s. 6d. to 75s. | 75s. ,, 87s. 6d. | 64 | 54 |
| Birmingham | 78s. 9d. | 78s. 9d. | 78s. 9d. ,, 103s. 9d. | 78s. 9d. ,, 85s. | 60 | 60 |
| Boston | 75s. | 61s. 11d. to 72s. | 56s. 3d. ,, 67s. 6d. | 68s. 9d. ,, 90s. | 54 | 54 to 55 |
| Brockton | — | 62s. 6d. ,, 67s. 6d. | 62s. 6d. | — | — | 54 |
| Chicago | 81s. 3d. | 81s. 3d. | 81s. 3d. to 101s. 3d. | 101s. 3d. | 54 | 54 |
| Cincinnati | 75s. to 80s. | 56s. 3d. to 70s. 10d. | 67s. 6d. ,, 103s. 2d. | 72s. 11d. to 81s. 3d. | 55 | 55 |
| Cleveland | 75s. | 62s. 6d. ,, 75s. | 70s. ,, 75s. | 85s. ,, 95s. | 54 | 54 to 60 |
| Detroit | 68s. 9d. †; 75s. ‡ | 63s. ,, 68s. 9d. | 63s. ,, 66s. 3d. | 68s. 9d. ,, 87s. 6d. | 60 | 54 ,, 60 |
| Duluth | 78s. 9d. to 81s. 3d. | 78s. 9d. ,, 87s. 6d. | 75s. ,, 79s. 11d. | 92s. 2d. ,, 93s. 9d. | 54 to 59 | 54 ,, 59 § |
| Fall River | 62s. 6d. ,, 75s. | 50s. ,, 70s. 10d. | — | 75s. | 58 | 58 |
| Lawrence | 70s. 10d. | 57s. 4d. ,, 62s. 6d. | 60s. 5d. to 75s. | — | 54 | 55 to 60 |
| Louisville | 68s. 9d. to 75s. | 68s. 9d. ,, 75s. | 68s. 9d. ,, 75s. | 75s. | 60 | 60 |
| Lowell | 58s. 4d. ,, 79s. 2d. | 45s. 10d. ,, 51s. 7d. | 50s. ,, 62s. 6d. | 62s. 6d. to 70s. 10d. | 55 | 55 |
| Memphis | 75s. ,, 81s. 3d. | 78s. 9d. ,, 87s. 6d. | 87s. 6d. | 87s. 6d. ,, 95s. 8d. | 54 | 54 |
| Milwaukee | { 66s. 3d. to 69s. 10d. † | { 68s. 9d. ,, 80s. 3d. | 66s. 6d. to 74s. 6d. | 68s. 9d. ,, 80s. 3d. | 55 to 60 | 55 |
| Minneapolis—St. Paul | { 75s. ,, 80s. 3d. ‡ | { 68s. 9d. ,, 80s. 3d. | 66s. 6d. to 74s. 6d. | 68s. 9d. ,, 80s. 3d. | 55 to 60 | 55 |
| Muncie | 68s. 9d. ,, 90s. | 68s. 9d. ,, 75s. 8d. | 68s. 9d. ,, 80s. 3d. | 74s. 6d. ,, 90s. | 54 ,, 60 | 55 to 60 |
| New Orleans | 75s. | 50s. ,, 68s. 9d. | 73s. 9d. ,, 86s. 1d. | 62s. 6d. ,, 86s. 1d. | 54 | 55 ,, 60 \|\| |
| New York | 81s. 3d. | 81s. 3d. | 81s. 3d. ,, 87s. 6d. | 81s. 3d. ,, 87s. 6d. | 54 | 54 |
| Newark | 81s. 3d. | 66s. 8d. to 81s. 3d. | 90s. ,, 112s. 6d. | 90s. ,, 112s. 6d. | 54 | 54 |
| Paterson | 75s. to 87s. 6d. | 67s. 6d. ,, 75s. | 62s. 6d. ,, 68s. 9d. | — | 54 | 54 |
| Philadelphia | 72s. 3d. | 51s. 7d. ,, 68s. 9d. | 68s. 9d. ,, 75s. | 74s. 6d. to 87s. 6d. | 55 | 55 |
| Pittsburg | 72s. 6d. to 80s. | 58s. 7d. ,, 68s. 9d. | 68s. 9d. ,, 87s. 6d. | 81s. 3d. ,, 83s. 4d. | 54 to 60 | 54 to 60 |
| Providence | 82s. 1d. ,, 90s. | 72s. ,, 73s. 2d. | — | 81s. 3d. ,, 84s. 5d. | 54 | 54 |
| St. Louis | 68s. 9d. ,, 81s. 3d. | 56s. 3d. ,, 66s. 8d. | 56s. 3d. to 79s. 2d. | 62s. 6d. ,, 83s. 4d. | 54 to 55 | 54 to 55 |
| Savannah | 75s. | 56s. 3d. ,, 74s. 3d. | 76s. 6d. ,, 90s. | 87s. 6d. ,, 94s. 6d. | 54 | 54 |
| | | 87s. 6d. | 87s. 6d. ,, 96s. 3d. | 87s. 6d. ,, 100s. | 60 | 60 |

* The wages and hours of labour relate to February, 1909.

† Time.

‡ Piece.

§ Machinists and blacksmiths, 54 to 59 hours; patternmakers, 59 hours.

|| Machinists and blacksmiths, 59 to 60 hours; patternmakers, 55 to 60 hours

(C.) LABOURERS IN THE BUILDING TRADES, AND IN FOUNDRIES AND MACHINE SHOPS.*

| Town. | Hod Carriers and Bricklayers' Labourers. | | Plasterers' Labourers. | | Labourers in Foundries and Machine Shops. | |
|----------------------|--|--------------------------------|------------------------|-------------------------|---|-------------------------|
| | Weekly Wages. | Weekly Hours of Labour. | Weekly Wages. | Weekly Hours of Labour. | Weekly Wages. | Weekly Hours of Labour. |
| Atlanta... | 30s. to 31s. 3d.† | 60† | 30s. to 31s. 3d.† | 60† | 27s. 6d. to 31s. 3d.† | 59 to 60† |
| Augusta | 22s. 6d.† | 54† | 22s. 6d.† | 54† | 25s.† | 59 „ 60† |
| Baltimore | 56s. 3d. to 62s. 6d.† | 48† | 56s. 3d. to 62s. 6d.† | 48† | 31s. 3d. to 40s. 6d. | 54 |
| Birmingham | 31s. 3d. „ 50s.† | 60† | 31s. 3d. „ 50s.† | 60† | 25s. „ 31s. 3d.† | 60† |
| Boston | 45s. 10d. „ 60s. | 44 to 48 | 69s. 8d. | 44 | 41s. 8d. „ 43s. 9d. | 54 to 55 |
| Brockton | 70s. | 48 | 70s. | 48 | 37s. 6d. „ 43s. 9d. | 54 |
| Chicago | 64s. 2d. | 45 ⁵ / ₆ | — | — | 38s. 9d. „ 52s. 1d. | 54 to 58½ |
| Cincinnati | 64s. 2d. to 73s. 4d. | 44 | — | — | 37s. 6d. „ 41s. 8d. | 55 |
| Cleveland | 50s. | 48 | 55s. | 44 | 37s. 6d. „ 43s. 9d. | 60 |
| Detroit | 37s. 6d. to 50s. | 60 | — | — | 40s. „ 45s. | 54 to 60 |
| Duluth | 67s. 6d. | 54 | 67s. 6d. | 54 | 45s. „ 50s. | 54 „ 59 |
| Fall River | 43s. 9d. | 54 | 43s. 9d. | 54 | 33s. 4d. „ 37s. 6d. | 58 |
| Lawrence | 56s. 3d. | 48 to 54 | — | — | 37s. 6d. „ 50s. | 54 to 60 |
| Louisville | 56s. 3d. to 62s. 6d.† | 48†* | — | — | 37s. 6d. „ 43s. 9d. | 60 |
| Lowell | 60s. | 48 | 66s. 8d. | 48 | 32s. 1d. | 55 |
| Memphis | 50s. to 60s.† | 44 to 48† | — | — | 33s. 9d. to 37s. 6d.† | 54† |
| Milwaukee | 60s. | 48 | 60s. | 48 | 39s. „ 43s. 9d. | 55 to 60 |
| Minneapolis—St. Paul | 45s. to 56s. 3d. | 54 | 50s. to 67s. 6d. | 48 to 54 | 41s. 3d. „ 50s. | 55 „ 60 |
| Muncie | 50s. „ 60s. | 48 | — | — | 37s. 6d. „ 43s. 9d. | 54 „ 60 |
| New Orleans | 50s. „ 70s.† | 48† | 60s. to 70s.† | 48† | 43s. 9d.† | 54† |
| New York | 68s. 9d. | 44 | 74s. 6d. | 44 | 33s. 9d. to 50s. | 54 |
| Newark | 64s. 2d. | 44 | 64s. 2d. | 44 | 43s. 9d. | 54 to 60 |
| Paterson | 45s. 10d. to 55s. | 44 | 45s. 10d. to 55s. | 44 | 32s. 1d. to 36s. 8d. | 55 |
| Philadelphia | 55s. „ 64s. 2d.† | 44† | 68s. 9d. | 44 | 37s. 6d. „ 39s. 5d. | 54 to 60 |
| Pittsburg | 70s. | 48 | 70s. | 48 | 33s. 9d. „ 41s. 3d. | 54 „ 60 |
| Providence | 50s. | 48 | — | — | 33s. 4d. „ 41s. 8d. | 54 „ 55 |
| St. Louis | 77s. 11d. to 82s. 6d.† | 44† | 91s. 8d.† | 44† | 37s. 6d. „ 43s. 9d. | 54 |
| Savannah | 31s. 3d. „ 37s. 6d.† | 48† | 31s. 3d. to 37s. 6d.† | 48† | 31s. 3d. „ 37s. 6d.† | 60† |

* The wages and hours of labour in the building trades relate to the summer period of 1909, in the foundries and machine shops to February, 1909.

† The wages and hours of labour quoted relate to coloured men.

(D.) PRINTING TRADE, HAND COMPOSITORS (JOB WORK).‡

| Town. | Hand Compositors (Job Work). | |
|----------------------|------------------------------|-------------------------|
| | Weekly Wages. | Weekly Hours of Labour. |
| Atlanta | 75s. | 48 to 54 |
| Augusta | 75s. | 48 |
| Baltimore | 64s. 2d. to 75s. | 48 |
| Birmingham | 75s. | 48 |
| Boston | 79s. 2d. | 48 |
| Brockton | 72s. 11d. | 48 |
| Chicago | 87s. 6d. | 48 to 54 |
| Cincinnati | 75s. | 48 |
| Cleveland | 75s. to 87s. 6d. | 48 to 54 |
| Detroit | 70s. 10d. to 75s. | 48 |
| Duluth | 75s. to 90s. 10d. | 48 to 54 |
| Fall River | 66s. 8d. | 48 |
| Lawrence | 62s. 6d. | 48 |
| Louisville | 72s. 11d. to 83s. 4d. | 54 |
| Lowell | 62s. 6d. „ 75s. | 48 |
| Memphis | 75s. „ 83s. 4d. | 48 |
| Milwaukee | 70s. 10d. | 48 |
| Minneapolis—St. Paul | 75s. to 81s. 3d. | 48 to 49 |
| Muncie | 66s. 8d. „ 68s. 9d. | 48 |
| New Orleans | 75s. „ 83s. 4d. | 48 to 54 |
| New York | 87s. 6d. | 48 |
| Newark | 76s. 6d. to 87s. 6d. | 48 |
| Paterson | 75s. | 48 |
| Philadelphia | 75s. | 48 |
| Pittsburg | 75s. to 83s. 4d. | 52 to 54 |
| Providence | 75s. „ 83s. 4d. | 48 |
| St. Louis | 76s. | 48 |
| Savannah | 62s. 6d. to 75s. | 48 |

‡ The wages and hours of labour relate to February, 1909.

II. PREDOMINANT WEEKLY RENTS OF WORKING-CLASS DWELLINGS.

| Town. | Predominant Weekly Rents for Dwellings of | | | | |
|-----------------|--|----------------------|----------------------|----------------------|---|
| | Two Rooms. | Three Rooms. | Four Rooms. | Five Rooms. | Six Rooms. |
| Atlanta | { White tenants — | 5s. 9d. to 8s. 3d. | 8s. 2d. to 12s. 7d. | 12s. to 17s. 11d. | 17s. 11d. to 19s. 10d. |
| | { Coloured tenants 3s. 10d. to 4s. 10d. | 5s. 9d. ,, 7s. 3d. | — | — | — |
| Augusta | 2s. 11d. ,, 4s. 2d. | 4s. 2d. ,, 6s. 9d. | 6s. 9d. to 9s. 7d. | 11s. 6d. to 13s. 6d. | — |
| Baltimore | — | 4s. 10d. ,, 7s. 8d. | 6s. 9d. ,, 7s. 8d. | — | { 9s. 7d. to 11s. 6d.* 11s. 6d. ,, 14s. 5d.† |
| Birmingham | { White tenants — | 7s. 3d. ,, 10s. 7d. | 10s. 1d. ,, 13s. | 13s. to 18s. 9d. | — |
| | { Coloured tenants 4s. 4d. to 5s. 9d. | 6s. 9d. ,, 8s. 8d. | — | — | — |
| Boston | 6s. 9d. ,, 8s. 8d. | 7s. 8d. ,, 10s. 7d. | 9s. 7d. to 13s. 6d. | 13s. 6d. to 16s. 4d. | 15s. 5d. to 22s. 1d. |
| Brockton | — | — | 10s. 7d. ,, 14s. 5d. | 12s. 6d. ,, 17s. 4d. | 15s. 5d. ,, 19s. 3d. |
| Chicago | — | 5s. 9d. to 7s. 8d. | 6s. 9d. ,, 11s. 6d. | 11s. 6d. ,, 15s. 5d. | 15s. 5d. ,, 21s. 2d. |
| Cincinnati | 5s. 9d. to 7s. 8d. | 9s. 7d. ,, 11s. 6d. | 11s. 6d. ,, 15s. 5d. | — | — |
| Cleveland | — | 5s. 9d. ,, 7s. 8d. | 7s. 8d. ,, 9s. 7d. | 9s. 7d. to 14s. 5d. | 14s. 5d. to 15s. 5d. |
| Detroit | — | — | 5s. 9d. ,, 7s. 8d. | 8s. 8d. to 11s. 6d. | { 9s. 7d. to 11s. 6d.* 17s. 4d. ,, 21s. 2d.† |
| | { Older dwellings — | 6s. 9d. to 7s. 3d. | 7s. 8d. ,, 11s. 6d. | 11s. 6d. to 15s. 5d. | — |
| Duluth | { Partly modern dwellings | — | — | 15s. 5d. ,, 18s. 3d. | — |
| | { Modern dwellings — | 13s. 6d. to 15s. 5d. | — | 20s. 2d. to 24s. | 21s. 2d. to 25s. |
| Fall River | — | — | 7s. 4d. to 8s. 4d. | 8s. 4d. to 11s. 6d. | 10s. 5d. to 13s. 7d. |
| Lawrence | — | — | 7s. 4d. ,, 10s. 5d. | 10s. 5d. ,, 12s. 6d. | 12s. 6d. ,, 16s. 8d. |
| Louisville | { White tenants — | 6s. 9d. to 9s. 7d. | 8s. 8d. ,, 11s. 6d. | 11s. 6d. ,, 14s. 5d. | — |
| | { Coloured tenants 4s. 10d. to 6s. 9d. | 5s. 9d. ,, 8s. 8d. | — | — | — |
| Lowell | — | — | 6s. 3d. to 9s. 7d. | 7s. 8d. to 10s. 7d. | 9s. 7d. to 11s. 6d. |
| Memphis | { White tenants — | 7s. 8d. to 11s. 6d. | 12s. ,, 14s. 5d. | 14s. 5d. to 24s. | — |
| | { Coloured tenants 4s. 10d. to 5s. 9d. | 5s. 9d. ,, 9s. 7d. | — | — | — |
| Milwaukee | — | — | 6s. 9d. to 11s. 6d. | 9s. 7d. to 14s. 5d. | 12s. 6d. to 17s. 4d. |
| Minneapolis— | { Older dwellings — | 5s. 9d. to 7s. 8d. | 7s. 8d. ,, 9s. 7d. | 9s. 7d. ,, 12s. 6d. | 11s. 6d. ,, 17s. 4d. |
| St. Paul. | { Modern dwellings | — | 8s. 8d. ,, 10s. 7d. | 11s. 6d. ,, 15s. 5d. | 14s. 5d. ,, 19s. 3d. |
| | | — | 8s. 8d. ,, 10s. 7d. | 11s. 6d. ,, 15s. 5d. | 14s. 5d. ,, 19s. 3d. |
| Muncie | — | — | 4s. 10d. ,, 6s. 9d. | 6s. 9d. ,, 9s. 7d. | 7s. 8d. ,, 12s. |
| New Orleans | { White tenants — | 6s. 9d. to 9s. 7d. | 9s. 7d. ,, 11s. 6d. | 11s. 6d. ,, 14s. 5d. | — |
| | { Coloured tenants 4s. 10d. to 6s. 9d. | 7s. 8d. ,, 9s. 7d. | 8s. 8d. ,, 11s. 6d. | — | — |
| New York | — | — | 9s. 7d. ,, 13s. 6d. | 12s. 6d. ,, 16s. 4d. | 15s. 5d. to 21s. 2d. |
| Newark | — | — | 9s. 7d. ,, 12s. 6d. | 12s. 6d. ,, 16s. 4d. | 14s. 5d. ,, 19s. 3d. |
| Paterson | — | — | 5s. 9d. to 6s. 9d. | 7s. 8d. ,, 10s. 7d. | 9s. 7d. ,, 13s. 6d. |
| Philadelphia... | — | — | 7s. 8d. ,, 11s. 6d. | 9s. 7d. ,, 14s. 5d. | 10s. 7d. ,, 17s. 4d. |
| Pittsburg | 6s. 9d. to 8s. 8d. | 8s. 8d. ,, 12s. 6d. | 11s. 6d. ,, 17s. 4d. | 14s. 5d. ,, 19s. 3d. | 17s. 4d. ,, 21s. 2d. |
| Providence | — | — | 7s. 8d. ,, 9s. 7d. | 8s. 8d. ,, 11s. 6d. | 11s. 6d. ,, 14s. 5d. |
| St. Louis | 4s. 10d. to 7s. 8d. | 8s. 8d. to 12s. 6d. | 14s. 5d. ,, 17s. 4d. | — | — |
| Savannah | { White tenants — | 7s. 3d. ,, 10s. 7d. | 7s. 8d. ,, 12s. | 9s. 7d. to 14s. 5d. | 14s. 5d. ,, 16s. 4d. |
| | { Coloured tenants 2s. 11d. to 4s. 10d. | 4s. 10d. | 5s. 9d. ,, 6s. 9d. | 6s. 9d. ,, 10s. 1d. | — |

* Older dwellings.

† Modern dwellings.

NOTE.—Dwellings of one room are frequently occupied by coloured working-class tenants in Louisville, Memphis and New Orleans, and dwellings of more than six rooms are frequently occupied by white working-class tenants in Cleveland, Philadelphia and Savannah. (For rents in these cases see the respective town reports.)

III. PREDOMINANT PRICES PAID BY THE WORKING CLASSES AT FEBRUARY, 1909.

(A.) TEA, COFFEE, SUGAR AND BACON.

| Town. | Tea. | Coffee. | Sugar, White Granulated. | Sugar, Brown. | Bacon, Breakfast—Boneless. |
|----------------|---------------------|----------------------|--------------------------|---------------|----------------------------|
| | Per lb. | Per lb. | Per lb. | Per lb. | Per lb. |
| Atlanta ... | 2s. 6d. | 1s. 0½d. | 3¼d. to 3¾d. | — | 10d. to 1s. 0½d. |
| Augusta ... | 2s. 6d. | 10d. | 2½d. ,, 3d. | 2d. to 2¾d. | 8¾d. ,, 11¼d. |
| Baltimore ... | 1s. 8d. to 2s. 6d. | 9d. to 10d. | 2½d., 2¾d. | 2½d. | 9d. ,, 10d. |
| Birmingham | 2s. 1d. ,, 2s. 6d. | 10d. | 3d., 3¼d. | 2½d. to 3¼d. | 9d. ,, 10d. |
| Boston ... | 1s. 8d. ,, 2s. 1d. | 1s. 3d. to 1s. 5½d. | 2¾d. | 2½d. | 7½d. ,, 9d. |
| Brockton ... | 1s. 8d. ,, 2s. 6d. | 1s. 0½d. ,, 1s. 5½d. | 2½d. to 3d. | 2½d. to 3d. | 9d. ,, 10d. |
| Chicago ... | 1s. 8d. ,, 2s. 1d. | 10d. ,, 1s. 0½d. | 2¾d. | 2½d. to 2¾d. | 9d. ,, 11d. |
| Cincinnati... | 2s. 6d. | 10d. | 2½d., 2¾d. | 2½d. | 7½d. ,, 9d. |
| Cleveland ... | 2s. 1d. | 10d. to 1s. 0½d. | 2¾d., 3d. | 2½d. | 8d. ,, 9d. |
| Detroit ... | 1s. 5½d. to 1s. 8d. | 1s. 0½d. ,, 1s. 3d. | 2¾d., 3d. | 2½d. | 7½d. ,, 10d. |
| Duluth ... | 1s. 8d. ,, 2s. 1d. | 10d. ,, 1s. 0½d. | 3d. | 3d. | 7½d. ,, 10d. |
| Fall River... | 1s. 3d. ,, 1s. 8d. | 1s. 0½d. | 2½d., 2¾d. | 2½d. | 8d. ,, 9d. |
| Lawrence ... | 2s. 1d. | 1s. 0½d. to 1s. 5½d. | 2¾d., 3d. | 2½d. to 3d. | 9d. |
| Louisville ... | 2s. 6d. | 10d. | 2½d. to 3d. | 2½d. ,, 3d. | 10d. |
| Lowell ... | 1s. 0½d. to 2s. 1d. | 1s. 0½d. to 1s. 5½d. | 2¾d. | 2½d., 2¾d. | 7½d. to 10d. |
| Memphis ... | 2s. ,, 2s. 6d. | 10d. ,, 1s. 0½d. | 2¾d. | 2½d. | 9d. ,, 10d. |
| Milwaukee .. | 1s. 5½d. ,, 2s. 1d. | 10d. ,, 1s. 0½d. | 2¾d. | 2½d., 2¾d. | 8d. ,, 9d. |
| Minneapolis | 2s. 1d. | 1s. 0½d. ,, 1s. 3d. | 2¾d., 3d. | 2½d. to 3d. | 7½d. ,, 8d. |
| —St. Paul. | | | | | |
| Muncie ... | 2s. 6d. | 10d. | 3d. | 2½d. | 10d. |
| New Orleans | 1s. 8d. | 10d. | 2½d. to 3½d. | 2d. to 2½d. | 10d. |
| New York... | 1s. 5½d. to 2s. 1d. | 1s. 0½d. | 2½d. ,, 3d. | 2½d. ,, 3d. | 10d. |
| Newark ... | 1s. 8d. ,, 2s. 6d. | 1s. 0½d. | 3d. | 3d. | 11d. |
| Paterson ... | 1s. 5½d. ,, 2s. 1d. | 1s. 0½d. | 2¾d. | 2½d. | 10d. |
| Philadelphia | 1s. 8d. | 10d. to 1s. 0½d. | 2½d. | 2¼d., 2½d. | 8d. to 10d. |
| Pittsburg ... | 1s. 8d. to 2s. 6d. | 10d. | 2½d. to 3d. | 2½d. to 3d. | 10d. ,, 1s. 0½d. |
| Providence .. | 1s. 0½d. ,, 1s. 8d. | 11d. to 1s. 0½d. | 2½d. ,, 3d. | 2½d. ,, 3d. | 7½d. ,, 9d. |
| St. Louis ... | 2s. 1d. ,, 2s. 6d. | 10d. ,, 1s. 0½d. | 2½d. ,, 3¼d. | 2½d. ,, 3d. | 7½d. ,, 10d. |
| Savannah ... | 2s. 1d. ,, 2s. 6d. | 10d. ,, 1s. 0½d. | 2¾d., 3d. | 2½d. ,, 3d. | 8¾d. ,, 10d. |

(B.) EGGS, CHEESE, BUTTER, FLOUR AND BREAD.

| Town. | Eggs.* | Cheese, American. | Butter. | Flour, Wheaten. | Bread, White. |
|----------------|-------------------|-------------------|----------------------|----------------------|----------------------|
| | Per 1s. | Per lb. | Per lb. | Per 7 lb. | Per 4 lb. |
| Atlanta ... | 10 | 10d. to 1s. 0½d. | 1s. 3d. to 1s. 5½d. | 11½d. to 1s. 0¾d. | 10d. to 1s. 1¼d. |
| Augusta ... | 12 | 10d. | 1s. 5½d. | 10¾d. ,, 1s. 0¾d. | 1s. 0¼d. ,, 1s. 2½d. |
| Baltimore ... | 9, 10 | 9d. to 10d. | 1s. 2½d. to 1s. 5½d. | 1s. 0¼d. ,, 1s. 0¾d. | 10¾d. ,, 11½d. |
| Birmingham | 12 to 14 | 10d. | 1s. 3d. ,, 1s. 5½d. | 1s. 0¼d. ,, 1s. 1½d. | 10d. ,, 1s. 0¼d. |
| Boston ... | 8 ,, 10 | 10d. | 1s. 5½d. | 1s. 0¾d. ,, 1s. 2¼d. | 11½d. |
| Brockton ... | 7 to 8; 10 to 12 | 9d. to 10d. | 1s. 4d. to 1s. 5½d. | 1s. 0¼d. ,, 1s. 2¼d. | 11½d. to 1s. 0¾d. |
| Chicago ... | 8 to 12 | 10d. | 1s. 4d. ,, 1s. 7d. | 11¾d. ,, 1s. 0¼d. | 11½d. |
| Cincinnati... | 9 ,, 10 | 9d. to 10d. | 1s. 5½d. ,, 1s. 6d. | 1s. 0¼d. ,, 1s. 0¾d. | 6d. to 10d. |
| Cleveland ... | 10 | 9d. ,, 10d. | 1s. 6d. ,, 1s. 7d. | 11½d. | 11½d. |
| Detroit ... | 9 to 10; 13 to 14 | 10d. | 1s. 3d. ,, 1s. 4d. | 10¾d. | 10¼d. to 11½d. |
| Duluth ... | 8 to 12 | 9d. to 11d. | 1s. 3d. ,, 1s. 5½d. | 11½d., 11¾d. | 11½d. |
| Fall River... | 7 ,, 9 | 9d. ,, 10d. | 1s. 2½d. ,, 1s. 4d. | 1s. 0¾d., 1s. 0¾d. | 10d. to 1s. 1¼d. |
| Lawrence ... | 7 ,, 10 | 9d. ,, 10d. | 1s. 3d. ,, 1s. 6d. | 1s. 0¾d. | 11½d. |
| Louisville ... | 10; 12 | 10d. | 1s. 3d. ,, 1s. 5½d. | 1s. 0¼d. to 1s. 2¼d. | 11½d. |
| Lowell ... | 6 to 8; 9 to 10 | 10d. | 1s. 3d. ,, 1s. 6d. | 10¾d. ,, 1s. 1½d. | 10d. to 1s. 1¼d. |
| Memphis ... | 10 to 12 | 10d. | 1s. 3d. | 10¾d. ,, 1s. 0¾d. | 11½d. |
| Milwaukee .. | 7 to 8; 10 | 9d. | 1s. 3d. to 1s. 5d. | 11½d. | 11½d. |
| Minneapolis | 7 to 8; 10 to 12 | 10d. | 1s. 3d. ,, 1s. 5½d. | 11½d. to 1s. 0¾d. | 11½d. |
| —St. Paul. | | | | | |
| Muncie ... | 10 | 10d. | 1s. 3d. | 11½d. ,, 1s. 0¼d. | 10d. to 11½d. |
| New Orleans | 8 to 10 | 10d. | 1s. 5½d. | 11¾d. ,, 1s. 2½d. | 9½d. ,, 10d. |
| New York... | 8 ,, 12 | 10d. | 1s. 4d. to 1s. 5½d. | 1s. 0¼d. ,, 1s. 0¾d. | 10d. ,, 11½d. |
| Newark ... | 8 ,, 10 | 9d. to 11d. | 1s. 4d. ,, 1s. 6½d. | 1s. 0¼d. ,, 1s. 1½d. | 10d. ,, 1s. |
| Paterson ... | 8 ,, 10 | 9d. ,, 10d. | 1s. 5d. ,, 1s. 5½d. | 11½d. ,, 1s. 0¾d. | 11d. ,, 11½d. |
| Philadelphia | 12, 13 | 9d. ,, 10d. | 1s. 3d. ,, 1s. 7d. | 1s. 0¾d. | 10d. |
| Pittsburg ... | 9, 10 | 9d. ,, 10d. | 1s. 3d. ,, 1s. 8d. | 11½d. to 1s. 0¾d. | 10¾d. to 11½d. |
| Providence .. | 8 to 12 | 9d. ,, 10d. | 1s. 2d. ,, 1s. 4d. | 11½d. ,, 1s. 0¾d. | 10d. ,, 1s. 0¼d. |
| St. Louis ... | 7 ,, 10 | 10d. | 1s. 5½d. | 11d. ,, 11¾d. | 10d. ,, 11½d. |
| Savannah ... | 10 ,, 12 | 10d. | 1s. 5½d. | 1s. 0¼d. ,, 1s. 0¾d. | 10d. |

* In cases in which two figures or ranges separated by a semi-colon are stated, the figure or range given first relates to "fresh" eggs and the other to "storage" eggs.

(C.) BEEF.

| Town. | Roasts. | | | | Steaks. |
|----------------------|--------------|--------------|------------------|----------------------|------------------|
| | Round. | Ribs Prime. | Ribs Second Cut. | Chuck or Short Ribs. | Round. |
| | Per lb. | Per lb. | Per lb. | Per lb. | Per lb. |
| Atlanta ... | 7½d. | 7½d. | 6¼d. to 7½d. | 5d. to 7½d. | 7½d. |
| Angusta ... | 6¼d. to 7½d. | 7½d. | 5d. ,, 7½d. | 5d. | 7½d. |
| Baltimore ... | 7d. ,, 7½d. | 7d. to 8d. | 6d. ,, 7d. | 5d. to 6d. | 7d. to 7½d. |
| Birmingham ... | 7½d. | 7½d. ,, 8¾d. | 6¼d. ,, 7½d. | 6¼d. | 7½d. |
| Boston ... | — | 7½d. ,, 9d. | 7½d. | 5d. to 6¼d. | 10d. to 1s. 0½d. |
| Brockton ... | — | 9d. ,, 10d. | 8d. to 9d. | 5d. ,, 7d. | 8d. ,, 1s. 0½d. |
| Chicago... .. | 5d. to 6¼d. | 6d. ,, 7d. | 5d. ,, 6¼d. | 4d. ,, 5d. | 5½d. ,, 7d. |
| Cincinnati ... | 6¼d. ,, 7d. | 7d. ,, 7½d. | 5d. ,, 6¼d. | 3½d. ,, 5d. | 7d. ,, 7½d. |
| Cleveland ... | 6d. ,, 7d. | 6d. ,, 8d. | 6d. ,, 7d. | 6d. | 6d. ,, 8d. |
| Detroit ... | 5½d. ,, 6¼d. | 6d. ,, 7½d. | 5d. ,, 7d. | 4d. to 5d. | 5½d. ,, 6½d. |
| Duluth ... | 6d. ,, 7½d. | 7½d. | 6¼d. ,, 7½d. | 5d. ,, 6¼d. | 7½d. |
| Fall River ... | — | 8d. to 9d. | 7d. ,, 8d. | 5d. ,, 6d. | 8d. to 10d. |
| Lawrence ... | — | 7d. ,, 10d. | 6d. ,, 8d. | 6d. ,, 7d. | 7½d. ,, 10d. |
| Louisville ... | 6¼d. to 7½d. | 6¼d. ,, 7½d. | 6¼d. | 5d. | 7½d. |
| Lowell ... | — | 7½d. ,, 9d. | 6d. to 7½d. | 5d. | 7½d. to 10d. |
| Memphis ... | 6¼d. to 7½d. | 7½d. ,, 9d. | 6¼d. ,, 7½d. | 5d. to 6¼d. | 7½d. |
| Milwaukee ... | 6d. ,, 7d. | 6d. ,, 8d. | 5½d. ,, 7d. | 5d. ,, 6¼d. | 6d. to 7½d. |
| Minneapolis—St. Paul | 6¼d. ,, 7½d. | 7½d. | 6¼d. ,, 7½d. | 5d. ,, 6¼d. | 6¼d. ,, 7½d. |
| Muncie ... | 6¼d. ,, 7½d. | 6¼d. to 7½d. | 6¼d. | 6¼d. | 7½d. |
| New Orleans ... | 6¼d. | 7½d. | 6¼d. | 5d. | 6¼d. |
| New York ... | 8d. | 8d. | 7d. | 5d. to 7d. | 8d. to 10d. |
| Newark... .. | 8d. to 9d. | 8d. to 10d. | 7d. to 8d. | 5d. ,, 7d. | 9d. ,, 10d. |
| Paterson ... | 6d. ,, 7d. | 6d. ,, 7d. | 5d. ,, 6d. | 5d. | 7d. ,, 8d. |
| Philadelphia ... | 6d. ,, 8d. | 7d. ,, 8d. | 6d. ,, 8d. | 5d. to 6d. | 8d. ,, 9d. |
| Pittsburg ... | 7½d. | 7½d. ,, 9d. | 6¼d. ,, 7½d. | 6¼d. | 7½d. ,, 9d. |
| Providence ... | — | 8d. ,, 9d. | 7½d. ,, 8d. | 5d. to 7d. | 7½d. ,, 11½d. |
| St. Louis ... | 6¼d. | 6¼d. ,, 7½d. | 5d. ,, 6¼d. | 5d. | 6¼d. ,, 7½d. |
| Savannah ... | 6¼d. | 6¼d. ,, 7½d. | 6¼d. | 5d. to 6¼d. | 6¼d. ,, 7½d. |

| Town. | Steaks. | Shin without bone. | Flank. | Plate, Brisket. | |
|----------------------|---------------------|--------------------|-------------|-----------------|-----------------|
| | Sirloin. | | | Fresh. | Salt or corned. |
| | Per lb. | Per lb. | Per lb. | Per lb. | Per lb. |
| Atlanta ... | 7½d. to 10d. | — | 3¾d. to 5d. | 3¾d. to 5d. | — |
| Angusta ... | 7½d. | — | 2½d. ,, 3d. | 3¾d. ,, 4d. | — |
| Baltimore ... | 8d. to 9d. | 4d. to 5d. | 3d. ,, 4d. | 3d. to 4d. | 3d. to 4d. |
| Birmingham ... | 8¾d. | — | 3¾d. ,, 5d. | 3¾d. ,, 5d. | — |
| Boston ... | 1s. 0½d. | 4d. to 5d. | 2½d. ,, 4d. | — | 7d. to 7½d.* |
| Brockton ... | 1s. 0½d. to 1s. 3d. | 4d. ,, 5d. | 3d. ,, 4d. | — | 6d. ,, 7½d.* |
| Chicago... .. | 6¼d. ,, 9d. | 4d. ,, 5d. | 3d. ,, 3½d. | 3d. to 3½d. | 3d. ,, 4d. |
| Cincinnati ... | 7½d. ,, 9d. | 4d. ,, 5d. | 3½d. ,, 4d. | 3½d. ,, 4d. | 3½d. |
| Cleveland ... | 7d. ,, 10d. | 4½d. ,, 5½d. | 4d. ,, 5d. | 3½d. ,, 4d. | 3½d. to 4d. |
| Detroit ... | 7d. ,, 7½d. | 4d. ,, 5d. | 3d. ,, 4d. | 3d. ,, 4d. | 3½d. ,, 4d. |
| Duluth ... | 9d. ,, 10d. | 5d. | 2½d. ,, 4d. | 2½d. ,, 3d. | 2½d. ,, 3d. |
| Fall River ... | 1s. to 1s. 1d. | 4d. | 4d. | — | — |
| Lawrence ... | 1s. 2d. ,, 1s. 3d. | 4d. to 5d. | 3½d. to 4d. | — | 6d. to 7d.* |
| Louisville ... | 7½d. ,, 8¾d. | 4d. ,, 5d. | 4d. | 4d. | 4d. ,, 5d. |
| Lowell ... | 1s. 0½d. | 3d. ,, 5d. | 3d. to 5d. | — | 7d. ,, 8d.* |
| Memphis ... | 7½d. to 8¾d. | — | 3d. ,, 4d. | 4d. | — |
| Milwaukee ... | 7d. ,, 9d. | 4d. to 6d. | 3d. ,, 3½d. | 3d. to 3½d. | 3d. to 4d. |
| Minneapolis—St. Paul | 7½d. ,, 9d. | — | 3d. | 2½d. ,, 3d. | 2½d. ,, 3d. |
| Muncie ... | 7½d. ,, 9d. | 5d. to 6¼d. | 5d. | 4d. ,, 5d. | — |
| New Orleans ... | 7½d. | — | — | 3½d. ,, 5d. | 5d. |
| New York ... | 9d. to 10d. | 5d. to 6d. | 4d. to 6¼d. | 4d. ,, 6d. | 3½d. to 4d. |
| Newark... .. | 10d. ,, 11d. | 5d. | 4d. ,, 6d. | 3d. ,, 4d. | 3d. ,, 4d. |
| Paterson ... | 8d. ,, 9d. | 4d. to 5d. | 4d. | 2½d. ,, 3d. | 2½d. ,, 3d. |
| Philadelphia ... | 9d. ,, 11d. | 4d. ,, 5d. | 4d. | 3d. ,, 3½d. | 3½d. ,, 4d. |
| Pittsburg ... | 9d. ,, 10d. | 5d. | 5d. | 4d. | 5d. |
| Providence ... | 1s. 0½d. to 1s. 3d. | 4d. to 5d. | 2½d. | — | 6d. to 6½d.* |
| St. Louis ... | 7½d. | 5d. ,, 6¼d. | 3d. to 4d. | 3d. to 4d. | 4d. |
| Savannah ... | 7½d. to 10d. | — | 3¾d. ,, 5d. | 3¾d. ,, 5d. | — |

* "Fancy" Brisket.

(D.) MUTTON OR LAMB.

| Town. | Leg. | Breast. | Loin. | Chops. | Shoulder. | Neck. |
|----------------------|--------------|--------------|------------------|---------------------|--------------|--------------|
| | Per lb. | Per lb. | Per lb. | Per lb. | Per lb. | Per lb. |
| Atlanta | 10d. | 6½d. | 10d. | 10d. to 1s. 0½d. | 6¼d. to 8¾d. | 5d. |
| Augusta | 10d. | 7½d. | 10d. | 10d. ,, 1s. 0½d. | 7½d. | 5d. |
| Baltimore | 6d. to 9d. | 4d. to 6d. | 7½d. to 10d. | 9d. to 10d. | 5d. to 6d. | 4d. to 5d. |
| Birmingham | 10d. | 5d. ,, 7½d. | 7½d. to 1s. 0½d. | 10d. to 1s. 0½d. | 7½d. | 5d. |
| Boston | 7½d. to 9d. | 5d. ,, 6d. | 7½d. to 8d. | 10d. ,, 1s. 0½d. | 6d. | — |
| Brockton | 7d. ,, 9d. | 4d. ,, 6d. | 6d. ,, 8d. | 1s. 0½d. to 1s. 3d. | 5d. to 7d. | — |
| Chicago | 6d. ,, 7½d. | 3d. ,, 4½d. | 6d. ,, 9d. | 6d. to 9d. | 5d. ,, 7d. | 4d. to 5d. |
| Cincinnati | 7d. ,, 9d. | 5d. | 10d. ,, 11d. | 10d. to 1s. 0½d. | 5d. ,, 7½d. | 4d. ,, 6¼d. |
| Cleveland | 6d. ,, 9d. | 4d. | 7d. ,, 9d. | 8d. to 9d. | 6d. ,, 7d. | 4d. ,, 5d. |
| Detroit | 7d. ,, 7½d. | 4d. to 5d. | 7½d. ,, 10d. | 9d. ,, 10d. | 6d. ,, 7½d. | 4d. ,, 5d. |
| Duluth | 7½d. | 4d. | 7½d. ,, 9d. | 7½d. ,, 9d. | 5d. ,, 7½d. | 4d. ,, 5d. |
| Fall River | 7d. to 9d. | 5d. | 7d. ,, 9d. | 7½d. ,, 10d. | 5d. ,, 6d. | 4d. ,, 5d. |
| Lawrence | 7½d. ,, 10d. | 5d. | 7½d. | 10d. to 1s. 3d. | 5d. ,, 7½d. | 3½d. ,, 5d. |
| Louisville | 7½d. ,, 8¼d. | 5d. to 7½d. | 7½d. to 8¼d. | 10d. | 6¼d. ,, 7½d. | 5d. |
| Lowell | 7½d. ,, 9d. | 4d. ,, 6d. | 6d. ,, 8d. | 10d. to 1s. 0½d. | 6d. | 3d. to 5d. |
| Memphis | 7½d. ,, 10d. | 5d. ,, 7½d. | 7½d. ,, 10d. | 10d. | 5d. to 7½d. | 5d. |
| Milwaukee | 7d. ,, 8d. | 3½d. ,, 4½d. | 6½d. ,, 9d. | 8d. to 9d. | 6¼d. ,, 7d. | 4d. to 6d. |
| Minneapolis-St. Paul | 7½d. | 3d. ,, 5d. | 7½d. ,, 9d. | 7½d. ,, 9d. | 6¼d. | 4d. ,, 5d. |
| Muncie | 1s. 0½d. | 6¼d. | 10d. | 10d. to 1s. 0½d. | 7½d. | 5d. ,, 6¼d. |
| New Orleans | 8d. to 10d. | 5d. | 7½d. to 10d. | 10d. | 5d. to 7½d. | 5d. |
| New York | 6¼d. ,, 8d. | 4d. to 5d. | 8d. ,, 11d. | 10d. to 11d. | 5d. ,, 8d. | 4d. to 6d. |
| Newark | 7d. ,, 9d. | 4d. ,, 5d. | 9d. ,, 10d. | 10d. ,, 11d. | 7d. ,, 9d. | 4d. ,, 6d. |
| Paterson | 6¼d. ,, 7d. | 3d. ,, 3½d. | 7d. ,, 8d. | 8d. | 5d. ,, 6d. | 3d. ,, 4d. |
| Philadelphia | 7d. ,, 8d. | 3d. ,, 3½d. | 8d. ,, 10d. | 8d. to 11d. | 5d. ,, 6d. | 4d. ,, 5d. |
| Pittsburg | 9d. | 6¼d. | 9d. | 10d. | 6¼d. ,, 7½d. | 5d. ,, 6¼d. |
| Providence | 7½d. to 9d. | 4d. to 5d. | 6d. to 7½d. | 9d. to 1s. 0½d. | 5d. | 2½d. ,, 3½d. |
| St. Louis | 7½d. | 5d. ,, 6¼d. | 7½d. ,, 10d. | 7½d. to 10d. | 6¼d. | 5d. |
| Savannah | 8¼d. to 10d. | 7½d. | 10d. | 10d. | 6¼d. to 7½d. | 5d. |

(E.) VEAL.

| Town. | Cutlets. | Rib Chops. | Loin Chops. | Breast. | Neck. |
|----------------------|------------------|------------------|------------------|--------------|-------------|
| | Per lb. | Per lb. | Per lb. | Per lb. | Per lb. |
| Atlanta | 10d. to 1s. 0½d. | 10d. | 10d. | 5d. to 7½d. | — |
| Augusta | 10d. | 7½d. to 10d. | 7½d. to 10d. | 6¼d. ,, 7½d. | 5d. |
| Baltimore | 10d. to 11d. | 7½d. ,, 9d. | 7½d. ,, 10d. | 5d. ,, 6¼d. | 4d. to 6d. |
| Birmingham | 10d. | 7½d. | 7½d. | 4d. ,, 6½d. | 4d. ,, 5d. |
| Boston | 1s. 3d. | 7½d. to 10d. | 10d. to 1s. 0½d. | 5d. | 4d. ,, 5d. |
| Brockton | 1s. 2d. | 10d. to 1s. 0½d. | 10d. ,, 1s. 2d. | 5d. to 6d. | 4d. ,, 5d. |
| Chicago | 8d. to 10d. | 6d. to 7½d. | 6d. to 9d. | 5d. ,, 6d. | 4d. ,, 5d. |
| Cincinnati | 10d. ,, 11d. | 7½d. ,, 9d. | 7½d. ,, 9d. | 6¼d. | 5d. ,, 6¼d. |
| Cleveland | 11d. | 8d. | 8d. ,, 9d. | 5d. to 8d. | 5d. ,, 6¼d. |
| Detroit | 9d. to 10d. | 7d. to 8d. | 7d. ,, 8d. | 4½d. ,, 6¼d. | 4½d. ,, 5d. |
| Duluth | 9d. | 7½d. | 7½d. ,, 9d. | 5d. | 5d. |
| Fall River | 10d. to 1s. 3d. | 8d. to 11d. | 9d. ,, 1s. | 5d. to 7d. | 4d. to 5d. |
| Lawrence | 10d. ,, 1s. 3d. | 8d. ,, 10d. | 9d. ,, 1s. | 5d. ,, 6d. | 4d. |
| Louisville | 10d. ,, 1s. 0½d. | 7½d. | 7½d. | 6¼d. ,, 7½d. | 5d. to 6¼d. |
| Lowell | 10d. ,, 1s. 2d. | 8½d. to 11d. | 9d. to 11½d. | 4d. ,, 6d. | 4d. ,, 5d. |
| Memphis | 10d. | 7½d. | 7½d. ,, 10d. | 5d. ,, 6¼d. | 4d. ,, 5d. |
| Milwaukee | 8d. to 10d. | 7½d. to 9d. | 8d. ,, 9d. | 5d. ,, 6¼d. | 5d. |
| Minneapolis—St. Paul | 9d. | 6¼d. ,, 7½d. | 7½d. ,, 9d. | 4d. ,, 5d. | 4d. to 5d. |
| Muncie | 10d. | 7½d. ,, 9d. | 9d. | 5d. ,, 6¼d. | 5d. ,, 6¼d. |
| New Orleans | 9d. to 1s. 0½d. | 7½d. ,, 10d. | 7½d. to 10d. | 3½d. ,, 5d. | 2½d. ,, 4d. |
| New York | 11d. | 8d. ,, 10d. | 9d. ,, 10d. | 6d. ,, 8d. | 6d. ,, 7d. |
| Newark | 1s. to 1s. 0½d. | 8d. ,, 11d. | 8d. ,, 11d. | 6d. ,, 8d. | 6d. ,, 7d. |
| Paterson | 9d. to 1s. | 7d. ,, 8d. | 8d. ,, 10d. | 4d. ,, 6d. | 4d. ,, 6d. |
| Philadelphia | 10d. to 1s. 0½d. | 8d. ,, 9d. | 9d. ,, 10d. | 6d. | 6d. |
| Pittsburg | 10d. ,, 1s. 0½d. | 9d. | 9d. ,, 10d. | 6¼d. to 7½d. | 6¼d. |
| Providence | 9d. ,, 1s. 3d. | 7½d. to 1s. 0½d. | 9d. to 1s. 0½d. | 5d. | 3½d. to 5d. |
| St. Louis | 10d. ,, 1s. 0½d. | 7½d. | 7½d. to 8¼d. | 6¼d. | 5d. ,, 6¼d. |
| Savannah | 10d. ,, 1s. 0½d. | 10d. | 10d. | 5d. to 7½d. | 5d. |

(F.) PORK.

| Town. | Fresh. | | | |
|----------------------|--------------|--------------|--------------|--------------|
| | Loin. | Spare rib. | Shoulder. | Chops. |
| | Per lb. | Per lb. | Per lb. | Per lb. |
| Atlanta | 7½d. to 8¾d. | 6¼d. to 7½d. | 6¼d. to 7½d. | 7½d. to 10d. |
| Augusta | 7½d. ,, 10d. | 7½d. | 6¼d. ,, 7½d. | 7½d. |
| Baltimore | 7d. ,, 8d. | 5d. | 5d. ,, 7d. | 7d. to 9d. |
| Birmingham... .. | 7½d. | 6¼d. | 6¼d. | 7½d. |
| Boston | 6¼d. to 7½d. | 5d. | 5d. to 5½d. | 7½d. |
| Brockton | 6d. ,, 7½d. | 5d. | 5d. ,, 6¼d. | 8d. |
| Chicago | 6d. ,, 7d. | 4d. to 5d. | 5d. ,, 6d. | 6d. to 7½d. |
| Cincinnati | 6d. ,, 7½d. | 4½d. ,, 5d. | 4½d. ,, 5d. | 6½d. ,, 7½d. |
| Cleveland | 8d. | 5d. ,, 6¼d. | 6¼d. ,, 7d. | 8d. ,, 8½d. |
| Detroit | 6d. to 7d. | 4½d. ,, 5d. | 5d. ,, 5½d. | 6d. ,, 7½d. |
| Duluth | 6¼d. | 5d. | 5d. | 6¼d. ,, 7½d. |
| Fall River | 6d. to 7½d. | 5d. | 5d. to 5½d. | 6½d. ,, 7½d. |
| Lawrence | 7d. ,, 7½d. | — | 5d. ,, 6d. | 7d. ,, 8d. |
| Louisville | 7½d. | 5d. to 6¼d. | 5d. ,, 6¼d. | 7½d. |
| Lowell | 6d. to 7½d. | 4d. ,, 6d. | 5d. | 7d. to 8d. |
| Memphis | 7½d. | 6¼d. | 6¼d. | 7½d. |
| Milwaukee | 7d. to 7½d. | 4d. to 5d. | 5½d. to 6¼d. | 7d. to 7½d. |
| Minneapolis—St. Paul | 6¼d. | 5d. | 5d. | 6¼d. ,, 7½d. |
| Muncie | 7½d. | 5d. to 6¼d. | 6¼d. | 7½d. |
| New Orleans | 7½d. | 5d. ,, 6¼d. | 5d. to 7½d. | 7½d. |
| New York | 6¼d. to 7d. | 4½d. ,, 5d. | 6d., 6¼d. | 7d. to 8d. |
| Newark | 8d. ,, 9d. | 4d. ,, 6d. | 6d. to 7½d. | 8d. ,, 9d. |
| Paterson | 7d. ,, 8d. | 4d. ,, 6d. | 5d. ,, 7d. | 7d. ,, 8d. |
| Philadelphia | 7d. ,, 8d. | 5d. | 6d. | 7½d. ,, 8d. |
| Pittsburg | 7½d. ,, 10d. | 5d. to 6¼d. | 6¼d. to 7½d. | 7½d. ,, 10d. |
| Providence | 6d. ,, 7½d. | 5d. | 5d. | 6½d. ,, 8d. |
| St. Louis | 6¼d. ,, 7½d. | 5d. | 5d. | 6¼d. ,, 7½d. |
| Savannah | 7½d. ,, 10d. | 6¼d. to 7½d. | 6¼d. to 7½d. | 8½d. ,, 10d. |

| Town. | Corned (wet salt or pickled). | Dry Salt. | Ham. | Shoulder, salt or smoked. |
|----------------------|-------------------------------|--------------|--------------|---------------------------|
| | | Per lb. | Per lb. | Per lb. |
| Atlanta | — | 6¼d. to 7½d. | — | — |
| Augusta | — | 5½d. ,, 6¼d. | — | — |
| Baltimore | 6d. to 7½d. | 6d. ,, 7½d. | 7d. to 8½d. | 6d. to 7½d. |
| Birmingham... .. | — | 6¼d. | 7½d. ,, 8d. | 6¼d. ,, 7½d. |
| Boston | 7d. | — | 7d. ,, 7½d. | 5d. |
| Brockton | 6d. to 7d. | — | 6½d. ,, 8½d. | 5d. to 6d. |
| Chicago | 6d., 6¼d. | 6d. to 8d. | 6d. ,, 7½d. | 5d. ,, 6¼d. |
| Cincinnati | 7½d. | 6¼d. ,, 7½d. | — | 4½d. ,, 6¼d. |
| Cleveland | 8d. | 8d. | 7d. to 8d. | 6d. ,, 7d. |
| Detroit | 6d., 6¼d. | 5½d. to 6d. | 6¼d., 6½d. | 5d. ,, 5½d. |
| Duluth | 6¼d. to 7½d. | 6¼d. ,, 7½d. | 7½d. | 5d. |
| Fall River | 6d. ,, 7d. | 6d. ,, 7d. | 6½d. to 7½d. | 4½d. to 5d. |
| Lawrence | 6½d. ,, 7d. | — | 7d. | 5d. ,, 5½d. |
| Louisville | 6¼d. ,, 7½d. | 6¼d. to 7½d. | 6¼d. to 7½d. | 5d. ,, 6¼d. |
| Lowell | 5½d. ,, 7d. | 7d. | — | 4½d. ,, 5d. |
| Memphis | 6¼d. | 6¼d. | 7½d. | 5½d. ,, 6¼d. |
| Milwaukee | 7d. | 7d. | 5½d. to 7½d. | 4½d. ,, 6d. |
| Minneapolis—St. Paul | 6¼d. to 7½d. | 6¼d. to 7½d. | 6¼d. ,, 7½d. | 4½d. ,, 5½d. |
| Muncie | 6¼d. ,, 7½d. | 6¼d. ,, 7½d. | 7½d. ,, 9d. | 5d. ,, 6¼d. |
| New Orleans | — | — | — | — |
| New York | 7d. to 8d. | 7d. | 7d. to 8d. | 5d. to 6¼d. |
| Newark | 7d. ,, 9d. | 7½d. to 9d. | 7½d. ,, 8d. | 6d. ,, 7d. |
| Paterson | 6d. ,, 8d. | 6d. ,, 8d. | 6d. ,, 8d. | 5d. ,, 7d. |
| Philadelphia... .. | 7d. | 7d. ,, 8d. | 6½d. ,, 8d. | 5d. ,, 6d. |
| Pittsburg | 6¼d. to 7½d. | 6¼d. ,, 8d. | 7½d. | 6¼d. ,, 7½d. |
| Providence | 6d. | 5d. ,, 7d. | 6d. to 7d. | 5d. |
| St. Louis | 6¼d. | 6¼d. | 6d. ,, 7½d. | 4½d. to 5d. |
| Savannah | — | 6¼d. to 7½d. | — | — |

(G.) POTATOES, MILK, COAL AND KEROSENE.

| Town. | Potatoes, Irish. | Milk. | Coal. | | Kerosene. | |
|---------------------------|------------------|--------------|--------------------------|---|---|----------------|
| | | | Unit of Sale.* | Price. | | |
| | | | | Anthracite. | | Bituminous. |
| | Per 7 lb | Per quart. | | Per cwt. | Per cwt. | Per gallon. |
| Atlanta ... | 8½d. | 6d. | { Ton ¼-ton 80 lb. | — — — | 1s. 0½d. 1s. 2d. 1s. 5½d. | } 9d. |
| Augusta ... | 8½d. | 6d. | { ¼-ton Ton | — — | 1s. 4¾d. | |
| Baltimore ... | 5½d. to 7d. | 4¾d. | { Ton ½-ton 80 lb. | 1s. 6¾d. to 1s. 7½d. 1s. 6¾d. ,, 1s. 8½d. 1s. 7½d. ,, 1s. 10½d. | — | } 5½d. to 6d. |
| Birmingham | 7d. ,, 9¼d. | 6d. | Ton | — | 9¾d. to 1s. 0½d. | |
| Boston ... | 7d. | 4¼d. to 4¾d. | { Ton 25 lb. | 1s. 9¾d. 1s. 10½d. to 2s. 3d. | — | } 6d. to 7¼d. |
| Brockton ... | 5¾d. to 7d. | 4¾d. | Ton | 1s. 9¾d. ,, 1s. 11¾d. | — | |
| Chicago ... | 5½d. ,, 7d. | 4¼d. | Ton | 1s. 9¾d. | 11¼d. to 1s. 0½d. | } 5½d. ,, 6d. |
| Cincinnati ... | 5½d. ,, 7d. | 3½d. | { Ton 80 lb. | — — | 8½d. ,, 11¼d. 1s. 0½d. | |
| Cleveland ... | 7d. | 4¼d. to 4¾d. | Ton | — | 10½d. to 1s. | } 6d. |
| Detroit ... | 5½d. to 7d. | 4¼d. | { Ton ¼-ton | 1s. 7½d. 1s. 9¼d. | 11¼d. to 1s. 3½d. 1s. 1d. to 1s. 5d. | |
| Duluth ... | 5¾d., 6d. | 4¼d. to 4¾d. | { Ton ½-ton ¼-ton | 1s. 11¼d. 2s. 1¾d. 2s. 0¼d. to 2s. 1¾d. | 1s. 1¼d. 1s. 2¾d. 1s. 5¼d. | } 7¾d. to 8½d. |
| Fall River ... | 6d. to 7d. | 4¾d. | ½-ton | — | — | |
| Lawrence ... | 5¾d. ,, 7d. | 4¼d. to 4¾d. | { Ton ½-ton ¼-ton | 1s. 9d. 1s. 9d. 1s. 10½d. | — | } 7¼d. ,, 7¾d. |
| Louisville ... | 7d. ,, 8¼d. | 4¾d. | Ton | — | 11½d. | |
| Lowell ... | 6½d. ,, 7d. | 4¼d. | { Ton ½-ton ¼-ton | 1s. 10½d. 1s. 10½d. 2s. 0¼d. | — | } 7¼d. ,, 8½d. |
| Memphis ... | 7d. ,, 8¼d. | 6d. | 1,800 lb. | — | 1s. 0½d. | |
| Milwaukee... | 4¾d. ,, 7d. | 3½d. | Ton | 1s. 10½d. | 1s. 0½d. to 1s. 2d. | 6d. |
| Minneapolis —St. Paul. | 5¾d. | 4¼d. | Ton | 2s. 0½d. | 1s. 3½d. ,, 1s. 4d. | 6d. |
| Muncie ... | 7d. | 3½d. to 4¼d. | Ton | 1s. 9d. to 1s. 9¾d. | 11¼d. ,, 1s. 0½d. | 7½d. to 9d. |
| New Orleans | 7d. | 6d. | 180 lb. | — | 1s. 3½d. ,, 1s. 6¾d. | 6d. |
| New York ... | 7d. to 9¼d. | 3½d. | { Ton 80 lb. | 1s. 2d. ; 1s. 6¼d. 1s. 5½d. | — | } 7¼d. to 7¾d. |
| Newark ... | 7d. ,, 7½d. | 4¼d. to 4¾d. | Ton | 1s. 5½d. | — | |
| Paterson ... | 7d. ,, 9¼d. | 4¾d. | Ton | 1s. 5½d. | — | 6d. ,, 7¼d. |
| Philadelphia | 7d. ,, 8d. | 4¾d. | Ton | 11½d. ; 1s. 5d. | — | 5½d. ,, 6d. |
| Pittsburg ... | 5¾d. ,, 7d. | 4¼d. to 4¾d. | 3,800 lb. | — | 8d. to 9¼d. | 7¼d. ,, 9d. |
| Providence... | 5¾d. ,, 7d. | 4¼d. | { Ton ¼-ton 80 lb. | 1s. 8¼d. 1s. 9¾d. 2s. 4d. | — | } 7¼d. |
| St. Louis ... | 7d. | 4¼d. | { Ton ½-ton | — — | 7d. to 9d. 7d. ,, 9d. | |
| Savannah ... | 8¼d. to 9¼d. | 6d. | Ton | — | 1s. 6¼d. | 9d. |

* The ton is of 2,000 lb., except at Baltimore and Philadelphia, at which towns it is of 2,240 lb.

IV.—BUDGETS OF WORKING-CLASS FAMILIES.

(A. 1.) AMERICAN-BRITISH (NORTHERN) GROUP.

Weekly Expenditure per Family.

| | Limits of Weekly Family Income. | | | | | | | |
|---|---------------------------------|---------------------|---------------------|------------------------|------------------------|---------------------|------------------------|--------------------|
| | Under £2. | £2 and under £3. | £3 and under £4. | £4 and under £5. | £5 and under £6. | £6 and under £7. | £7 and under £8. | £8 and over. |
| | (1.) | (2.) | (3.) | (4.) | (5.) | (6.) | (7.) | (8.) |
| Number of Returns | 67 | 532 | 1,036 | 545 | 437 | 224 | 131 | 243 |
| Average Weekly Family Income | £ s. d. 1 16 | £ s. d. 2 11 0½ | £ s. d. 3 9 10 | £ s. d. 4 8 5 | £ s. d. 5 7 3 | £ s. d. 6 8 11½ | £ s. d. 7 8 6 | £ s. d. 10 6 10 |
| Average Number of Children living at home. | 1.78 | 2.06 | 2.46 | 2.88 | 3.07 | 3.63 | 3.82 | 4.20 |
| Average Number of Persons per Family.* | 3.78 | 4.08 | 4.54 | 5.02 | 5.27 | 5.82 | 6.10 | 6.38 |
| | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. |
| Bread, Wheaten | 1 1½ | 1 5½ | 1 8½ | 1 11½ | 2 0½ | 2 0¾ | 2 4 | 2 7¾ |
| „ Rye | 0 1½ | 0 2½ | 0 2½ | 0 1¾ | 0 2 | 0 2¼ | 0 1½ | 0 3½ |
| „ Other | — | 0 0¼ | 0 0¼ | 0 0½ | 0 0¼ | 0 1 | 0 0¼ | 0 0¼ |
| Flour, Wheaten | 1 6 | 1 3¼ | 1 5 | 1 7¾ | 1 10 | 2 2¾ | 2 1½ | 2 2¼ |
| „ Rye | — | 0 0¼ | 0 0¼ | 0 0¼ | 0 0¼ | 0 0¼ | 0 0¼ | 0 0¼ |
| „ Buckwheat and Other ... | 0 0½ | 0 0½ | 0 0¾ | 0 1 | 0 1¼ | 0 1 | 0 0¾ | 0 2 |
| Maize and Maize Meal ... | 0 1¼ | 0 1 | 0 1¼ | 0 1¼ | 0 1¼ | 0 1¾ | 0 1¾ | 0 2 |
| Cakes, Crackers, Doughnuts ... | 0 4½ | 0 7 | 0 10 | 0 11½ | 1 1¼ | 1 3¼ | 1 4½ | 1 7½ |
| Rolls, Buns, Biscuits ... | 0 2¼ | 0 4¾ | 0 6¼ | 0 6¼ | 0 8¼ | 0 8 | 0 10 | 1 0 |
| Macaroni, Noodles, Spaghetti ... | 0 1½ | 0 1¾ | 0 2½ | 0 2½ | 0 2¾ | 0 2 | 0 3¼ | 0 3 |
| Rice, Barley, Sago, &c. ... | 0 2¾ | 0 2¾ | 0 3¾ | 0 3¾ | 0 4 | 0 4½ | 0 4¼ | 0 4¾ |
| Oatmeal and Breakfast Cereals | 0 2½ | 0 3¼ | 0 4¼ | 0 5 | 0 5½ | 0 5¾ | 0 5¾ | 0 6½ |
| Potatoes (Irish) | 1 2¾ | 1 4¾ | 1 5¾ | 1 8¾ | 1 9¾ | 1 11¾ | 2 5½ | 2 4 |
| Sweet Potatoes, &c. | 0 0¼ | 0 0¼ | 0 1¼ | 0 2 | 0 1¾ | 0 3 | 0 2½ | 0 4¼ |
| Dried Peas and Beans | 0 3¾ | 0 3½ | 0 3¼ | 0 3¾ | 0 4¼ | 0 4¾ | 0 5¼ | 0 4¾ |
| Sweet Corn | 0 1¼ | 0 1½ | 0 2 | 0 3¼ | 0 3 | 0 4½ | 0 5 | 0 7 |
| Green Vegetables, &c. | 0 9 | 1 1¼ | 1 5¾ | 1 8¾ | 1 10¼ | 2 2 | 2 2¾ | 2 7 |
| Canned Vegetables | 0 4¾ | 0 4½ | 0 6¼ | 0 7¾ | 0 9 | 0 9½ | 0 10½ | 0 9¾ |
| Beef (fresh and corned) ... | 2 1¼ | 3 1 | 3 8½ | 4 3½ | 5 0½ | 5 2 | 6 3¼ | 7 0¼ |
| Mutton and Lamb | 0 3¼ | 0 5¾ | 0 7¼ | 0 10¼ | 1 0¾ | 1 4½ | 1 9 | 1 9¼ |
| Pork (fresh and salt) | 0 10¾ | 1 2¼ | 1 3¼ | 1 3½ | 1 4¼ | 1 8¾ | 1 10½ | 2 1 |
| Bacon, Ham, Brawn, &c. ... | 0 8¾ | 0 10¾ | 1 0½ | 1 3½ | 1 4 | 1 7½ | 1 10½ | 2 2½ |
| Veal | 0 2¾ | 0 3½ | 0 6¼ | 0 7 | 0 8 | 0 9½ | 0 9½ | 0 11 |
| Sausage | 0 2 | 0 3 | 0 4 | 0 4¾ | 0 5 | 0 5¾ | 0 7¼ | 0 6¼ |
| Poultry | 0 0¼ | 0 2¾ | 0 5¼ | 0 6¼ | 0 8½ | 0 7¾ | 0 11 | 1 5¾ |
| Fish of all kinds | 0 3¾ | 0 5 | 0 7½ | 0 9¼ | 0 8½ | 0 10½ | 0 11½ | 1 1½ |
| Lard, Suet, Dripping | 0 7 | 0 7¾ | 0 8¼ | 0 10 | 0 10¼ | 1 0¼ | 1 0½ | 1 1¼ |
| Butter | 1 4½ | 1 8¼ | 2 3 | 2 9¾ | 3 1½ | 3 6 | 4 0 | 4 2¾ |
| Oleomargarine | 0 0¾ | 0 1 | 0 0½ | 0 0¾ | 0 1 | 0 1 | 0 1½ | 0 0¼ |
| Olive Oil | — | 0 0¼ | 0 0¼ | 0 0¼ | 0 1 | 0 1 | 0 1¼ | 0 1¼ |
| Cheese | 0 2¼ | 0 2¼ | 0 4½ | 0 5½ | 0 5¾ | 0 6¾ | 0 7 | 0 8 |
| Milk (fresh) | 1 0½ | 1 4¼ | 1 9 | 1 11½ | 2 2¾ | 2 5¼ | 2 6½ | 2 11¼ |
| „ (condensed) | 0 3 | 0 4 | 0 4¼ | 0 4¼ | 0 4 | 0 4 | 0 5 | 0 3¼ |
| Eggs | 0 11 | 1 4½ | 1 10¾ | 2 3½ | 2 5½ | 2 10 | 3 1 | 3 4 |
| Tea | 0 4½ | 0 6¼ | 0 7 | 0 9 | 0 9¾ | 0 11½ | 1 0½ | 1 0¼ |
| Coffee | 0 6¼ | 0 8½ | 0 11 | 0 11¾ | 1 1 | 1 1½ | 1 1¾ | 1 4½ |
| Cocoa and Chocolate | 0 0¼ | 0 0¾ | 0 1½ | 0 1¾ | 0 2 | 0 2¾ | 0 3½ | 0 3¾ |
| Sugar | 0 10¼ | 0 10¾ | 1 0¾ | 1 4 | 1 4½ | 1 7¼ | 1 9 | 1 8¾ |
| Molasses and Syrup | 0 1 | 0 1½ | 0 1¾ | 0 2¼ | 0 2 | 0 2¾ | 0 2¾ | 0 2¾ |
| Vinegar, Pickles and Condiments | 0 1 | 0 1½ | 0 2½ | 0 3 | 0 3¼ | 0 4¼ | 0 4½ | 0 5¼ |
| Fruits and Jams | 0 5½ | 0 9¼ | 1 1¾ | 1 6¼ | 1 7¼ | 1 11½ | 2 1 | 2 3 |
| Other items | 0 1 | 0 1¼ | 0 1¾ | 0 1¾ | 0 2¼ | 0 2 | 0 3 | 0 2½ |
| Meals away from home ... | 0 0½ | 0 3½ | 0 8¼ | 0 11¼ | 1 7½ | 1 11 | 2 2 | 4 11¼ |
| Total | 18 6 | 24 3½ | 30 10 | 36 5 | 40 6½ | 45 9¾ | 51 2½ | 58 9 |

* This figure includes boarders sharing the family food.

IV.—BUDGETS OF WORKING-CLASS FAMILIES—*continued.*

(A. 1.) AMERICAN-BRITISH (NORTHERN) GROUP.

Weekly Consumption per Family.

| | Limits of Weekly Family Income. | | | | | | | |
|--|---------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------------------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5. (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and over. (8.) |
| Number of Returns | 67 | 532 | 1036 | 545 | 437 | 224 | 131 | 243 |
| Average Weekly Family Income | £ 1 16 | £ 2 11 0½ | £ 3 9 10 | £ 4 8 5½ | £ 5 7 3½ | £ 6 8 11½ | £ 7 8 6 | £ 10 6 10 |
| Average Number of Children living at home. | 1.78 | 2.06 | 2.46 | 2.88 | 3.07 | 3.63 | 3.82 | 4.20 |
| Average Number of Persons per Family.* | 3.78 | 4.08 | 4.54 | 5.02 | 5.27 | 5.82 | 6.10 | 6.38 |
| | lb. | lb. | lb. | lb. | lb. | lb. | lb. | lb. |
| Bread, Wheaten | 5.02 | 6.53 | 7.64 | 8.74 | 9.09 | 9.06 | 10.02 | 11.27 |
| „ Rye | 0.65 | 0.96 | 0.87 | 0.74 | 0.85 | 0.96 | 0.68 | 1.51 |
| „ Other | — | 0.05 | 0.13 | 0.16 | 0.10 | 0.38 | 0.12 | 0.21 |
| Flour, Wheaten | 9.52 | 7.94 | 8.99 | 10.51 | 11.77 | 14.10 | 13.47 | 13.80 |
| „ Rye | — | 0.04 | 0.07 | 0.06 | 0.09 | 0.08 | 0.09 | 0.12 |
| „ Buckwheat and Other... .. | 0.21 | 0.26 | 0.31 | 0.41 | 0.57 | 0.49 | 0.32 | 0.89 |
| Maize and Maize Meal... .. | 0.88 | 0.68 | 0.73 | 0.81 | 0.93 | 1.00 | 1.23 | 1.27 |
| Cakes, Crackers, Doughnuts | 0.96 | 1.57 | 2.19 | 2.38 | 2.73 | 3.07 | 3.33 | 3.86 |
| Rolls, Buns, Biscuits | 0.80 | 1.37 | 1.80 | 1.95 | 2.26 | 2.24 | 3.01 | 3.80 |
| Macaroni, Noodles, Spaghetti... .. | 0.37 | 0.42 | 0.53 | 0.57 | 0.56 | 0.47 | 0.72 | 0.64 |
| Rice, Barley, Sago, &c.... .. | 0.60 | 0.67 | 0.91 | 0.89 | 0.96 | 1.09 | 1.02 | 1.17 |
| Oatmeal and Breakfast Cereals | 0.77 | 0.96 | 1.23 | 1.40 | 1.48 | 1.56 | 1.59 | 1.67 |
| Potatoes (Irish)... .. | 15.69 | 17.43 | 18.59 | 21.18 | 22.99 | 24.83 | 29.98 | 27.98 |
| Sweet Potatoes, &c. | 0.18 | 0.43 | 1.00 | 1.46 | 1.38 | 1.91 | 1.50 | 2.92 |
| Dried Peas and Beans | 1.38 | 1.24 | 1.11 | 1.27 | 1.35 | 1.60 | 1.70 | 1.54 |
| Beef (fresh and corned) | 3.59 | 5.09 | 6.04 | 6.71 | 7.81 | 7.93 | 9.38 | 10.43 |
| Mutton and Lamb | 0.39 | 0.69 | 0.91 | 1.23 | 1.48 | 2.04 | 2.43 | 2.53 |
| Pork (fresh and salt) | 1.55 | 1.94 | 2.15 | 2.17 | 2.24 | 2.81 | 2.81 | 3.32 |
| Bacon, Ham, Brawn, &c. | 1.04 | 1.26 | 1.46 | 1.83 | 1.81 | 2.26 | 2.53 | 3.06 |
| Veal | 0.38 | 0.46 | 0.80 | 0.91 | 1.00 | 1.15 | 1.23 | 1.33 |
| Sausage | 0.27 | 0.51 | 0.69 | 0.75 | 0.82 | 0.84 | 1.19 | 1.01 |
| Poultry | 0.03 | 0.30 | 0.54 | 0.72 | 0.89 | 0.83 | 1.37 | 1.83 |
| Fish of all kinds | 0.68 | 1.13 | 1.40 | 1.64 | 1.54 | 1.88 | 2.00 | 2.49 |
| Lard, Suet, Dripping | 1.08 | 1.16 | 1.29 | 1.48 | 1.54 | 1.81 | 1.82 | 2.01 |
| Butter | 1.14 | 1.35 | 1.74 | 2.15 | 2.36 | 2.65 | 3.01 | 3.27 |
| Oleomargarine | 0.08 | 0.09 | 0.05 | 0.06 | 0.09 | 0.09 | 0.13 | 0.02 |
| | pints. | pints. | pints. | pints. | pints. | pints. | pints. | pints. |
| Olive Oil... .. | — | 0.03 | 0.03 | 0.04 | 0.05 | 0.05 | 0.08 | 0.09 |
| | lb. | lb. | lb. | lb. | lb. | lb. | lb. | lb. |
| Cheese | 0.24 | 0.31 | 0.45 | 0.56 | 0.60 | 0.69 | 0.73 | 0.82 |
| | qts. | qts. | qts. | qts. | qts. | qts. | qts. | qts. |
| Milk (fresh) | 2.96 | 3.75 | 4.77 | 5.46 | 5.92 | 6.79 | 7.04 | 8.08 |
| „ (condensed) | 0.54 | 0.71 | 0.76 | 0.78 | 0.68 | 0.72 | 0.89 | 0.57 |
| | No. | No. | No. | No. | No. | No. | No. | No. |
| Eggs | 9.03 | 14.49 | 19.90 | 24.09 | 25.34 | 28.88 | 31.53 | 34.39 |
| | lb. | lb. | lb. | lb. | lb. | lb. | lb. | lb. |
| Tea | 0.21 | 0.27 | 0.28 | 0.36 | 0.38 | 0.45 | 0.48 | 0.46 |
| Coffee | 0.63 | 0.77 | 0.93 | 0.99 | 1.07 | 1.09 | 1.10 | 1.38 |
| Cocoa and Chocolate | 0.02 | 0.04 | 0.07 | 0.10 | 0.12 | 0.15 | 0.21 | 0.21 |
| Sugar | 3.56 | 3.78 | 4.45 | 5.67 | 5.81 | 6.81 | 7.20 | 7.28 |
| | pints. | pints. | pints. | pints. | pints. | pints. | pints. | pints. |
| Molasses and Syrup | 0.25 | 0.33 | 0.40 | 0.45 | 0.41 | 0.56 | 0.57 | 0.54 |

* This figure includes boarders sharing the family food.

IV.—BUDGETS OF WORKING-CLASS FAMILIES—*continued.*

(A. 2.) AMERICAN-BRITISH (SOUTHERN) GROUP.

Weekly Expenditure per Family.

| | Limits of Weekly Family Income. | | | | | | | |
|--|---------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-------------------------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5. (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and over. (8.) |
| | | | | | | | | |
| Number of Returns ... | 32 | 116 | 131 | 109 | 80 | 42 | 27 | 43 |
| Average Weekly Family Income. | £ s. d. 1 14 7½ | £ s. d. 2 9 10½ | £ s. d. 3 10 6½ | £ s. d. 4 7 8½ | £ s. d. 5 7 11 | £ s. d. 6 8 3 | £ s. d. 7 8 5 | £ s. d. 10 3 10½ |
| Average Number of Children living at home. | 1·81 | 2·33 | 2·68 | 3·07 | 3·43 | 3·92 | 4·11 | 4·04 |
| Average Number of Persons per Family.* | 3·84 | 4·42 | 4·84 | 5·16 | 5·60 | 6·09 | 6·48 | 6·37 |
| | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. |
| Bread, Wheaten ... | 0 6½ | 0 11¼ | 1 6¾ | 1 7¼ | 1 9¼ | 1 10 | 2 2 | 2 7 |
| „ Rye ... | 0 0½ | 0 0¼ | 0 0¼ | 0 0 | 0 0½ | 0 0¼ | 0 2 | 0 0½ |
| „ Other ... | — | 0 0¼ | 0 0½ | 0 0½ | 0 0¼ | 0 0¼ | — | 0 0¾ |
| Flour, Wheaten ... | 1 8¼ | 1 8¾ | 2 2¼ | 2 0¼ | 2 4¼ | 2 2¾ | 3 1¼ | 2 9 |
| „ Rye ... | — | — | 0 0¼ | 0 0¼ | † | 0 0¼ | — | — |
| „ Buckwheat and Other. | — | 0 0½ | 0 1¼ | 0 0¾ | 0 1¼ | 0 0½ | 0 2¼ | 0 1¼ |
| Maize and Maize Meal ... | 0 8 | 0 7 | 0 7¼ | 0 6¼ | 0 5¾ | 0 6 | 0 6¾ | 0 8 |
| Cakes, Crackers, Dough-nuts. | 0 2½ | 0 3¾ | 0 7¾ | 0 8¾ | 0 11 | 1 3¾ | 1 4¼ | 1 0¾ |
| Rolls, Buns, Biscuits ... | 0 0¾ | 0 1 | 0 2¼ | 0 2 | 0 2¾ | 0 3½ | 0 2¾ | 0 3½ |
| Macaroni, Noodles, Spaghett. | 0 2½ | 0 4 | 0 4¼ | 0 4 | 0 4 | 0 5½ | 0 7¼ | 0 6½ |
| Rice, Barley, Sago, &c. ... | 0 5¼ | 0 7½ | 0 8 | 0 8 | 0 8¼ | 0 7¾ | 0 10¾ | 1 1¼ |
| Oatmeal and Breakfast Cereals. | 0 1¾ | 0 3¼ | 0 3¾ | 0 5¾ | 0 5 | 0 6¼ | 0 6¼ | 0 6¾ |
| Potatoes (Irish) ... | 0 6¾ | 0 9 | 1 0¼ | 1 1½ | 1 2 | 1 1½ | 1 5¾ | 1 4¼ |
| Sweet Potatoes, &c. ... | 0 3½ | 0 7¾ | 0 8¾ | 0 9½ | 0 11½ | 0 10½ | 1 0¼ | 0 10 |
| Dried Peas and Beans ... | 0 5¾ | 0 7 | 0 6¼ | 0 6 | 0 6¾ | 0 7¾ | 0 7½ | 0 8¾ |
| Sweet Corn ... | 0 0¼ | 0 1 | 0 1½ | 0 2 | 0 2 | 0 2¼ | 0 3½ | 0 4¼ |
| Green Vegetables, &c. ... | 0 10 | 0 11 | 1 3 | 1 5¾ | 1 9½ | 1 11 | 2 4¾ | 3 1 |
| Canned Vegetables ... | 0 5½ | 0 7½ | 0 9¾ | 1 0¼ | 1 0½ | 1 2¼ | 1 2 | 1 4 |
| Beef (fresh and corned)... | 1 5 | 2 1¼ | 3 6¼ | 3 8¼ | 4 3¾ | 5 8½ | 5 11¾ | 6 9 |
| Mutton and Lamb ... | 0 2¼ | 0 1¼ | 0 2 | 0 2¼ | 0 2¼ | 0 5 | 0 3¼ | 0 3½ |
| Pork (fresh and salt) ... | 0 10¼ | 1 3 | 1 7 | 1 9½ | 2 4¼ | 1 6 | 2 4¼ | 2 10½ |
| Bacon, Ham, Brawn, &c. | 1 1½ | 1 4 | 1 8¾ | 1 11¾ | 1 10 | 2 4¼ | 2 10¼ | 3 0¼ |
| Veal ... | 0 1 | 0 2½ | 0 1¾ | 0 3 | 0 2 | 0 2¾ | 0 1 | 0 6 |
| Sausage ... | 0 2 | 0 5¼ | 0 4¼ | 0 5 | 0 6¼ | 0 6½ | 0 8½ | 1 1½ |
| Poultry ... | — | 0 2¼ | 0 3½ | 0 6½ | 0 8½ | 1 5¾ | 1 2¼ | 1 9½ |
| Fish of all kinds... | 0 4½ | 0 6 | 0 6¼ | 0 9½ | 0 7½ | 0 8¾ | 0 10½ | 1 2¾ |
| Lard, Suet, Dripping ... | 0 10¾ | 1 1¾ | 1 7¼ | 1 6¾ | 1 9 | 1 11 | 1 11¼ | 2 1¾ |
| Butter ... | 0 8¾ | 1 4½ | 2 2¼ | 2 7¾ | 2 10½ | 2 9¾ | 2 10¼ | 4 3¼ |
| Oleomargarine ... | — | 0 0¼ | 0 0¼ | — | 0 0¾ | 0 1½ | 0 3 | 0 1¼ |
| Olive Oil ... | 0 0¾ | 0 0¾ | 0 0½ | 0 1¼ | 0 1½ | 0 0¾ | 0 0¾ | 0 2½ |
| Cheese ... | 0 2¾ | 0 5 | 0 5½ | 0 8¼ | 0 8 | 0 10½ | 0 10½ | 0 11¾ |
| Milk (fresh) ... | 0 4¼ | 0 9 | 1 1¼ | 1 1¼ | 1 3¾ | 1 0½ | 1 5½ | 2 0½ |
| „ (condensed) ... | 0 6½ | 0 7¼ | 0 7½ | 0 8 | 0 10½ | 0 10 | 0 11¼ | 0 10¾ |
| Eggs ... | 0 6½ | 0 11¼ | 1 5¼ | 1 8¼ | 1 8¾ | 2 0¼ | 2 1 | 2 6¼ |
| Tea ... | 0 1½ | 0 3 | 0 4 | 0 5¼ | 0 4½ | 0 5 | 0 7¼ | 0 7¼ |
| Coffee ... | 0 9 | 0 10¾ | 1 1½ | 1 0½ | 1 1¼ | 1 5 | 1 4¼ | 1 7 |
| Cocoa and Chocolate ... | 0 0¼ | 0 0¾ | 0 1¼ | 0 1¾ | 0 1¾ | 0 1 | 0 2½ | 0 3 |
| Sugar ... | 0 9¼ | 0 11¾ | 1 3½ | 1 5½ | 1 7¼ | 1 8½ | 1 10 | 1 11½ |
| Molasses and Syrup ... | 0 3¾ | 0 5¼ | 0 5¾ | 0 6½ | 0 8¼ | 0 7¼ | 0 7¾ | 0 8½ |
| Vinegar, Pickles and Con-diments. | 0 1 | 0 2¼ | 0 3¼ | 0 4¼ | 0 4 | 0 6 | 0 5¼ | 0 6 |
| Fruits and Jams ... | 0 2 | 0 4¾ | 0 6¾ | 0 10¼ | 0 11¾ | 1 4 | 1 3¾ | 1 5½ |
| Other items ... | — | 0 0¾ | 0 1 | 0 1¼ | 0 2¼ | 0 3¾ | 0 0¾ | 0 3 |
| Meals away from home ... | 0 1½ | 0 3 | 0 6¼ | 0 7 | 1 9¼ | 0 8 | 1 5¼ | 2 5¾ |
| Total ... | 16 6¾ | 23 6¾ | 31 10 | 35 7¾ | 40 4½ | 43 7¾ | 49 5¾ | 58 0¼ |

* This figure includes boarders sharing the family food.

† Value under ½d.

IV.—BUDGETS OF WORKING-CLASS FAMILIES—*continued.*

(A. 2.) AMERICAN-BRITISH (SOUTHERN) GROUP.

Weekly Consumption per Family.

| | Limits of Weekly Family Income. | | | | | | | |
|--|---------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-------------------------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5. (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and over. (8.) |
| Number of Returns ... | 32 | 116 | 131 | 109 | 80 | 42 | 27 | 43 |
| Average Weekly Family Income. | £ s. d. 1 14 7½ | £ s. d. 2 9 10½ | £ s. d. 3 10 6½ | £ s. d. 4 7 8½ | £ s. d. 5 7 11 | £ s. d. 6 8 3 | £ s. d. 7 8 5 | £ s. d. 10 3 10½ |
| Average Number of Children living at home. | 1·81 | 2·33 | 2·68 | 3·07 | 3·43 | 3·92 | 4·11 | 4·04 |
| Average Number of Persons per Family.* | 3·84 | 4·42 | 4·84 | 5·16 | 5·60 | 6·09 | 6·48 | 6·37 |
| | lb. | b. | lb. | lb. | lb. | lb. | lb. | lb. |
| Bread, Wheaten ... | 2·37 | 4·20 | 9·28 | 7·45 | 7·77 | 8·19 | 9·78 | 11·56 |
| " Rye ... | 0·22 | 0·12 | 0·14 | 0·57 | 0·14 | 0·34 | 0·97 | 0·18 |
| " Other ... | — | 0·05 | 0·19 | 0·14 | 0·08 | 0·07 | — | 0·34 |
| Flour, Wheaten ... | 10·19 | 10·74 | 13·32 | 12·79 | 14·76 | 13·78 | 19·83 | 17·23 |
| " Rye ... | — | — | 0·10 | 0·07 | 0·03 | 0·12 | — | — |
| " Buckwheat and Other. | — | 0·19 | 0·47 | 0·26 | 0·50 | 0·19 | 0·85 | 0·41 |
| Maize and Maize Meal ... | 5·53 | 5·19 | 5·31 | 4·27 | 4·05 | 4·57 | 5·56 | 5·88 |
| Cakes, Crackers, Doughnuts. | 0·64 | 0·91 | 1·62 | 1·62 | 1·82 | 1·85 | 2·53 | 2·31 |
| Rolls, Buns, Biscuits ... | 0·17 | 0·28 | 0·61 | 0·45 | 0·57 | 0·78 | 0·77 | 0·98 |
| Macaroni, Noodles, Spaghetti. | 0·80 | 1·21 | 0·92 | 0·83 | 0·80 | 1·08 | 1·37 | 1·29 |
| Rice, Barley, Sago, &c. ... | 1·64 | 2·44 | 2·31 | 2·42 | 2·15 | 2·40 | 3·46 | 4·66 |
| Oatmeal and Breakfast Cereals. | 0·81 | 1·81 | 1·47 | 2·13 | 1·32 | 2·97 | 2·18 | 2·49 |
| Potatoes (Irish) ... | 5·23 | 6·79 | 10·37 | 10·42 | 12·68 | 10·81 | 16·07 | 14·63 |
| Sweet Potatoes, &c. ... | 2·88 | 6·67 | 7·35 | 7·55 | 10·75 | 8·45 | 10·88 | 10·08 |
| Dried Peas and Beans ... | 2·30 | 2·76 | 2·01 | 2·23 | 2·09 | 2·23 | 2·20 | 2·83 |
| Beef (fresh and corned)... | 2·65 | 3·92 | 5·60 | 6·13 | 6·97 | 9·26 | 9·36 | 10·68 |
| Mutton and Lamb ... | 0·27 | 0·15 | 0·26 | 0·25 | 0·26 | 0·55 | 0·41 | 0·47 |
| Pork (fresh and salt) ... | 1·60 | 2·13 | 2·63 | 3·03 | 3·92 | 2·38 | 3·74 | 4·68 |
| Bacon, Ham, Brawn, &c. | 2·07 | 2·37 | 2·93 | 3·01 | 3·11 | 3·61 | 4·51 | 4·61 |
| Veal ... | 0·16 | 0·28 | 0·25 | 0·34 | 0·24 | 0·32 | 0·11 | 0·66 |
| Sausage ... | 0·35 | 0·81 | 0·84 | 0·90 | 1·00 | 1·14 | 1·30 | 2·04 |
| Poultry ... | — | 0·23 | 0·31 | 0·65 | 1·00 | 1·94 | 1·48 | 2·63 |
| Fish of all kinds... .. | 0·78 | 0·98 | 0·91 | 1·60 | 1·27 | 1·29 | 1·83 | 2·14 |
| Lard, Suet, Dripping ... | 1·87 | 2·43 | 3·21 | 3·31 | 3·40 | 3·92 | 3·80 | 4·08 |
| Butter ... | 0·55 | 1·10 | 1·76 | 2·09 | 2·25 | 2·16 | 2·19 | 3·20 |
| Oleomargarine ... | — | 0·03 | 0·02 | — | 0·04 | 0·12 | 0·15 | 0·07 |
| Olive Oil ... | pints. 0·03 | pints. 0·04 | pints. 0·04 | pints. 0·07 | pints. 0·07 | pints. 0·03 | pints. 0·03 | pints. 0·10 |
| Cheese ... | lb. 0·26 | lb. 0·49 | lb. 0·54 | lb. 0·81 | lb. 0·81 | lb. 1·06 | lb. 0·99 | lb. 1·11 |
| Milk (fresh) ... | qts. 1·22 | qts. 2·01 | qts. 2·84 | qts. 2·95 | qts. 3·73 | qts. 2·17 | qts. 3·30 | qts. 5·50 |
| " (condensed) ... | lb. 1·18 | lb. 1·26 | lb. 1·35 | lb. 1·42 | lb. 1·92 | lb. 1·75 | lb. 1·98 | lb. 1·79 |
| Eggs ... | No. 5·78 | No. 11·34 | No. 16·85 | No. 20·43 | No. 18·78 | No. 25·05 | No. 25·04 | No. 31·40 |
| Tea ... | lb. 0·06 | lb. 0·13 | lb. 0·16 | lb. 0·20 | lb. 0·17 | lb. 0·18 | lb. 0·24 | lb. 0·27 |
| Coffee ... | 0·87 | 1·07 | 1·28 | 1·20 | 1·25 | 1·53 | 1·45 | 1·64 |
| Cocoa and Chocolate ... | 0·01 | 0·08 | 0·07 | 0·13 | 0·12 | 0·06 | 0·13 | 0·14 |
| Sugar ... | 3·11 | 4·18 | 4·53 | 6·09 | 6·40 | 6·91 | 7·62 | 7·66 |
| Molasses and Syrup ... | pints. 0·92 | pints. 1·06 | pints. 1·34 | pints. 1·41 | pints. 1·87 | pints. 1·51 | pints. 1·80 | pints. 1·85 |

* This figure includes boarders sharing the family food.

IV.—BUDGETS OF WORKING-CLASS FAMILIES—*continued.*

(A. 3.) AMERICAN (SOUTHERN)—BROKEN FAMILIES.

Weekly Expenditure per Family.

| | Limits of Weekly Family Income. | | | | | | | |
|--|---------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-------------------------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5. (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and over. (8.) |
| Number of Returns ... | 13 | 7 | 12 | 9 | 4 | 1 | 0 | 0 |
| Average Weekly Family Income. | £ s. d. 1 12 11½ | £ s. d. 2 9 7 | £ s. d. 3 14 6½ | £ s. d. 4 8 6 | | | | |
| Average Number of Children living at home. | 2.46 | 3.00 | 3.00 | 3.78 | | | | |
| Average Number of Persons per Family.* | 3.46 | 4.29 | 4.17 | 4.89 | | | | |
| | s. d. | s. d. | s. d. | s. d. | | | | |
| Bread, Wheaten ... | 1 0¾ | 1 7 | 1 6 | 2 11¾ | | | | |
| „ Rye ... | — | — | — | 0 2¼ | | | | |
| „ Other ... | — | — | — | — | | | | |
| Flour, Wheaten ... | 1 9¼ | 0 11¾ | 2 0 | 1 8¾ | | | | |
| „ Rye ... | — | — | — | — | | | | |
| „ Buckwheat and Other. | 0 1¼ | 0 2½ | 0 0½ | 0 0½ | | | | |
| Maize and Maize Meal ... | 0 8 | 0 2¾ | 0 6¼ | 0 7½ | | | | |
| Cakes, Crackers, Doughnuts. | 0 0½ | 0 0¾ | 0 7½ | 0 7¾ | | | | |
| Rolls, Buns, Biscuits ... | 0 1¼ | 0 3½ | 0 1½ | 0 2¾ | | | | |
| Macaroni, Noodles, Spaghetti. | 0 3¼ | 0 2½ | 0 3½ | 0 4½ | | | | |
| Rice, Barley, Sago, &c. ... | 0 4½ | 0 9¾ | 0 7 | 1 6 | | | | |
| Oatmeal and Breakfast Cereals. | 0 2 | 0 1 | 0 4½ | 0 4¾ | | | | |
| Potatoes (Irish) ... | 0 4½ | 0 8¼ | 1 1 | 1 0¾ | | | | |
| Sweet Potatoes, &c. ... | 0 7¾ | 0 6¾ | 0 9 | 0 6¾ | | | | |
| Dried Peas and Beans ... | 0 4¾ | 0 3¼ | 0 5½ | 0 7¾ | | | | |
| Sweet Corn ... | — | — | 0 1¾ | 1 1 | | | | |
| Green Vegetables, &c. ... | 0 9½ | 1 0½ | 1 8 | 1 1¾ | | | | |
| Canned Vegetables ... | 0 3¾ | 0 2¾ | 1 2¼ | 0 9 | | | | |
| Beef (fresh and corned)... | 1 1 | 3 5 | 2 5½ | 3 10½ | | | | |
| Mutton and Lamb ... | — | 0 0¾ | 0 4¼ | 0 8¼ | | | | |
| Pork (fresh and salt) ... | 0 10½ | 0 7¼ | 3 8½ | 2 10¾ | | | | |
| Bacon, Ham, Brawn, &c. | 1 0¼ | 0 9¾ | 1 3¾ | 2 5½ | | | | |
| Veal ... | 0 1¼ | — | 0 0¾ | 1 4¼ | | | | |
| Sausage ... | 0 1¾ | 0 0¾ | 0 1¾ | 0 5½ | | | | |
| Poultry ... | — | — | 0 7¼ | 0 9½ | | | | |
| Fish of all kinds ... | 0 3¼ | — | 0 8¾ | 1 0¼ | | | | |
| Lard, Suet, Dripping ... | 0 10 | 1 1 | 1 5 | 1 3 | | | | |
| Butter ... | 0 10¾ | 1 3¾ | 2 0¼ | 2 8¾ | | | | |
| Oleomargarine ... | — | — | — | — | | | | |
| Olive Oil ... | 0 0¾ | 0 1¾ | 0 2 | — | | | | |
| Cheese ... | 0 4 | 0 2¾ | 0 6¼ | 2 0 | | | | |
| Milk (fresh) ... | 0 9½ | 0 2½ | 0 9¾ | 0 11¼ | | | | |
| „ (condensed) ... | 0 4½ | 0 7¾ | 0 6½ | 0 10½ | | | | |
| Eggs ... | 0 11¼ | 1 0½ | 1 2½ | 1 5½ | | | | |
| Tea ... | 0 1¼ | 0 4¼ | 0 3¾ | 0 9¼ | | | | |
| Coffee ... | 0 9¾ | 0 11½ | 1 4¼ | 1 8 | | | | |
| Cocoa and Chocolate ... | — | 0 0¾ | 0 0½ | 0 1 | | | | |
| Sugar ... | 0 10½ | 1 2¾ | 0 11 | 1 6¼ | | | | |
| Molasses and Syrup ... | 0 2 | 0 4¾ | 0 2¾ | 0 3½ | | | | |
| Vinegar, Pickles and Condiments. | 0 1¾ | 0 1¾ | 0 3 | 0 3¼ | | | | |
| Fruits and Jams ... | 0 2½ | 0 4¼ | 0 9½ | 0 5½ | | | | |
| Other items ... | — | 0 1¾ | 0 4½ | — | | | | |
| Meals away from home... | — | 0 6½ | 0 4¼ | 2 3¾ | | | | |
| Total ... | 17 2 | 21 0¾ | 32 0½ | 44 1¾ | | | | |

Not sufficiently represented.

Not sufficiently represented.

Not represented.

Not represented.

* This figure includes boarders sharing the family food.

IV.—BUDGETS OF WORKING-CLASS FAMILIES—*continued.*

(A. 3.) AMERICAN (SOUTHERN)—BROKEN FAMILIES.

Weekly Consumption per Family.

| | Limits of Weekly Family Income. | | | | | | | |
|--|---------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-------------------------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5. (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and over. (8.) |
| Number of Returns ... | 13 | 7 | 12 | 9 | 4 | 1 | 0 | 0 |
| Average Weekly Family Income. | £ s. d. 1 12 11½ | £ s. d. 2 9 7 | £ s. d. 3 14 6½ | £ s. d. 4 8 6 | | | | |
| Average Number of Children living at home. | 2.46 | 3.00 | 3.00 | 3.78 | | | | |
| Average Number of Persons per Family.* | 3.46 | 4.29 | 4.17 | 4.89 | | | | |
| | lb. | lb. | lb. | lb. | | | | |
| Bread, Wheaten ... | 5.03 | 7.14 | 6.82 | 14.33 | | | | |
| „ Rye ... | — | — | — | 0.89 | | | | |
| „ Other ... | — | — | — | — | | | | |
| Flour, Wheaten ... | 10.69 | 5.89 | 12.77 | 11.61 | | | | |
| „ Rye ... | — | — | — | — | | | | |
| „ Buckwheat and Other. | 0.46 | 1.00 | 0.17 | 0.22 | | | | |
| Maize and Maize Meal ... | 6.31 | 2.29 | 4.67 | 6.28 | | | | |
| Cakes, Crackers, Doughnuts. | 0.10 | 0.14 | 1.50 | 1.44 | | | | |
| Rolls, Buns, Biscuits ... | 0.27 | 0.71 | 0.46 | 0.78 | | | | |
| Macaroni, Noodles, Spaghetti. | 1.35 | 0.64 | 0.75 | 1.11 | | | | |
| Rice, Barley, Sago, &c. ... | 1.50 | 3.29 | 1.98 | 4.89 | | | | |
| Oatmeal and Breakfast Cereals. | 0.58 | 0.14 | 1.21 | 1.89 | | | | |
| Potatoes (Irish) ... | 4.79 | 5.30 | 10.33 | 10.61 | | | | |
| Sweet Potatoes, &c. ... | 5.84 | 6.17 | 6.70 | 5.33 | | | | |
| Dried Peas and Beans ... | 1.73 | 1.14 | 1.58 | 2.64 | | | | |
| Beef (fresh and corned)... | 1.90 | 5.64 | 4.00 | 5.89 | | | | |
| Mutton and Lamb ... | — | 0.14 | 0.58 | 0.94 | | | | |
| Pork (fresh and salt) ... | 1.54 | 1.00 | 6.03 | 4.92 | | | | |
| Bacon, Ham, Brawn, &c. | 2.15 | 1.50 | 2.19 | 4.22 | | | | |
| Veal ... | 0.18 | — | 0.08 | 1.94 | | | | |
| Sausage ... | 0.31 | 0.14 | 0.25 | 1.42 | | | | |
| Poultry ... | — | — | 1.13 | 1.11 | | | | |
| Fish of all kinds... .. | 0.54 | — | 1.46 | 1.96 | | | | |
| Lard, Suet, Dripping ... | 2.19 | 2.29 | 3.00 | 2.50 | | | | |
| Butter ... | 0.69 | 1.00 | 1.73 | 2.00 | | | | |
| Oleomargarine ... | — | — | — | — | | | | |
| Olive Oil ... | pints. 0.03 | pints. 0.06 | pints. 0.15 | pints. — | | | | |
| Cheese ... | lb. 0.37 | lb. 0.29 | lb. 0.69 | lb. 2.39 | | | | |
| Milk (fresh) ... | qts. 2.27 | qts. 0.83 | qts. 3.11 | qts. 2.03 | | | | |
| „ (condensed) ... | lb. 0.74 | lb. 1.31 | lb. 1.13 | lb. 1.94 | | | | |
| Eggs ... | No. 10.92 | No. 13.71 | No. 14.50 | No. 18.00 | | | | |
| Tea ... | lb. 0.05 | lb. 0.14 | lb. 0.15 | lb. 0.27 | | | | |
| Coffee ... | 0.85 | 1.14 | 1.58 | 1.94 | | | | |
| Cocoa and Chocolate ... | — | 0.04 | 0.02 | 0.11 | | | | |
| Sugar ... | 3.35 | 4.34 | 3.67 | 7.39 | | | | |
| Molasses and Syrup ... | pints. 0.42 | pints. 1.30 | pints. 0.59 | pints. 0.74 | | | | |

* This figure includes boarders sharing the family food.

IV.—BUDGETS OF WORKING-CLASS FAMILIES—*continued.*

(B.) GERMAN GROUP.

Weekly Expenditure per Family.

| | Limits of Weekly Family Income. | | | | | | | |
|--|---------------------------------|----------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-------------------------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5. (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and over. (8.) |
| Number of Returns ... | 15 | 163 | 246 | 167 | 123 | 60 | 43 | 89 |
| Average Weekly Family Income. | £ s. d. 1 16 0 $\frac{3}{4}$ | £ s. d. 2 10 10 $\frac{3}{4}$ | £ s. d. 3 9 2 $\frac{1}{2}$ | £ s. d. 4 8 0 $\frac{1}{2}$ | £ s. d. 5 7 5 | £ s. d. 6 8 4 | £ s. d. 7 7 5 | £ s. d. 10 16 3 |
| Average Number of Children living at home. | 1.73 | 2.26 | 2.44 | 2.88 | 3.38 | 3.73 | 3.72 | 4.65 |
| Average Number of Persons per Family.* | 3.67 | 4.27 | 4.54 | 5.01 | 5.47 | 5.95 | 5.86 | 6.72 |
| | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. |
| Bread, Wheaten ... | 0 11 $\frac{1}{2}$ | 1 4 $\frac{3}{4}$ | 1 4 $\frac{1}{2}$ | 1 5 $\frac{1}{4}$ | 1 7 $\frac{1}{2}$ | 1 5 $\frac{3}{4}$ | 1 7 | 2 0 $\frac{3}{4}$ |
| „ Rye ... | 0 9 | 0 10 $\frac{1}{2}$ | 0 9 $\frac{1}{4}$ | 0 9 | 0 7 $\frac{3}{4}$ | 1 0 $\frac{3}{4}$ | 1 0 $\frac{1}{4}$ | 0 7 $\frac{1}{4}$ |
| „ Other ... | — | —† | 0 0 $\frac{1}{2}$ | 0 0 $\frac{1}{4}$ | 0 1 | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ |
| Flour, Wheaten ... | 1 4 | 1 2 | 1 3 | 1 3 $\frac{1}{2}$ | 1 6 $\frac{1}{2}$ | 2 1 $\frac{3}{4}$ | 1 6 $\frac{1}{2}$ | 1 10 $\frac{1}{2}$ |
| „ Rye ... | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{4}$ | 0 0 $\frac{3}{4}$ | 0 0 $\frac{1}{2}$ | 0 1 $\frac{1}{4}$ | 0 1 | 0 1 $\frac{3}{4}$ | 0 0 $\frac{1}{4}$ |
| „ Buckwheat and Other. | — | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{4}$ | 0 0 $\frac{1}{4}$ | 0 1 |
| Maize and Maize Meal ... | 0 0 $\frac{1}{4}$ | 0 1 | 0 1 | 0 1 | 0 0 $\frac{3}{4}$ | 0 0 $\frac{1}{2}$ | 0 0 $\frac{3}{4}$ | 0 1 $\frac{3}{4}$ |
| Cakes, Crackers, Doughnuts. | 0 2 $\frac{3}{4}$ | 0 6 $\frac{1}{4}$ | 0 11 | 0 10 | 1 2 $\frac{1}{2}$ | 1 3 $\frac{3}{4}$ | 1 2 $\frac{1}{4}$ | 1 8 |
| Rolls, Buns, Biscuits ... | 0 2 | 0 5 $\frac{1}{2}$ | 0 8 $\frac{1}{4}$ | 0 9 | 0 10 $\frac{3}{4}$ | 1 3 $\frac{1}{4}$ | 1 4 $\frac{1}{2}$ | 1 11 |
| Macaroni, Noodles, Spaghetti. | 0 0 $\frac{3}{4}$ | 0 1 $\frac{3}{4}$ | 0 2 $\frac{1}{2}$ | 0 1 $\frac{3}{4}$ | 0 2 $\frac{3}{4}$ | 0 2 $\frac{3}{4}$ | 0 2 $\frac{1}{2}$ | 0 3 |
| Rice, Barley, Sago, &c. ... | 0 4 $\frac{1}{2}$ | 0 4 $\frac{1}{4}$ | 0 4 $\frac{1}{4}$ | 0 4 $\frac{1}{4}$ | 0 5 $\frac{1}{4}$ | 0 4 $\frac{1}{2}$ | 0 4 $\frac{3}{4}$ | 0 5 $\frac{3}{4}$ |
| Oatmeal and Breakfast Cereals. | 0 1 $\frac{1}{4}$ | 0 2 $\frac{3}{4}$ | 0 3 $\frac{3}{4}$ | 0 3 $\frac{1}{2}$ | 0 3 $\frac{3}{4}$ | 0 3 | 0 5 $\frac{1}{4}$ | 0 4 $\frac{1}{4}$ |
| Potatoes (Irish) ... | 0 10 $\frac{3}{4}$ | 1 3 $\frac{1}{2}$ | 1 6 $\frac{1}{4}$ | 1 9 | 1 11 | 2 3 $\frac{3}{4}$ | 2 1 $\frac{3}{4}$ | 2 3 $\frac{3}{4}$ |
| Sweet Potatoes, &c. ... | 0 0 $\frac{1}{4}$ | 0 1 | 0 1 $\frac{1}{2}$ | 0 1 | 0 1 $\frac{1}{2}$ | 0 2 | 0 3 $\frac{1}{2}$ | 0 2 $\frac{1}{2}$ |
| Dried Peas and Beans ... | 0 3 $\frac{1}{4}$ | 0 4 $\frac{1}{4}$ | 0 3 $\frac{1}{2}$ | 0 3 $\frac{1}{2}$ | 0 4 $\frac{1}{2}$ | 0 4 $\frac{1}{2}$ | 0 4 | 0 4 |
| Sweet Corn ... | — | 0 1 $\frac{1}{2}$ | 0 1 $\frac{1}{4}$ | 0 1 $\frac{1}{4}$ | 0 2 $\frac{1}{2}$ | 0 2 $\frac{1}{4}$ | 0 2 | 0 4 $\frac{1}{4}$ |
| Green Vegetables, &c. ... | 0 9 | 1 0 $\frac{1}{2}$ | 1 5 $\frac{1}{4}$ | 1 8 $\frac{1}{2}$ | 1 7 $\frac{1}{2}$ | 2 6 $\frac{1}{2}$ | 1 10 $\frac{3}{4}$ | 2 2 |
| Canned Vegetables | 0 2 $\frac{1}{4}$ | 0 3 $\frac{3}{4}$ | 0 4 $\frac{1}{4}$ | 0 4 $\frac{1}{4}$ | 0 6 | 0 6 $\frac{1}{4}$ | 0 5 $\frac{1}{4}$ | 0 8 |
| Beef (fresh and corned)... | 2 7 | 2 11 $\frac{3}{4}$ | 3 7 $\frac{1}{4}$ | 3 11 $\frac{1}{4}$ | 4 4 | 5 0 $\frac{3}{4}$ | 4 10 $\frac{1}{4}$ | 5 8 $\frac{1}{2}$ |
| Mutton and Lamb ... | 0 1 $\frac{3}{4}$ | 0 4 $\frac{1}{2}$ | 0 6 | 0 8 $\frac{1}{2}$ | 0 10 $\frac{3}{4}$ | 0 10 | 1 4 $\frac{1}{2}$ | 1 7 |
| Pork (fresh and salt) ... | 1 2 $\frac{1}{4}$ | 1 3 $\frac{3}{4}$ | 1 6 $\frac{1}{4}$ | 1 10 $\frac{1}{2}$ | 1 7 | 2 5 $\frac{3}{4}$ | 2 1 $\frac{1}{4}$ | 2 6 |
| Bacon, Ham, Brawn, &c. | 0 6 | 0 8 $\frac{1}{2}$ | 0 10 $\frac{3}{4}$ | 1 1 $\frac{1}{4}$ | 1 0 $\frac{1}{2}$ | 1 5 $\frac{1}{4}$ | 1 3 | 1 6 $\frac{1}{2}$ |
| Veal ... | 0 2 | 0 5 $\frac{3}{4}$ | 0 11 | 0 11 $\frac{1}{2}$ | 1 4 $\frac{1}{4}$ | 1 8 $\frac{1}{4}$ | 1 3 $\frac{3}{4}$ | 1 7 $\frac{1}{2}$ |
| Sausage ... | 0 2 $\frac{1}{2}$ | 0 7 $\frac{3}{4}$ | 0 7 $\frac{1}{4}$ | 0 6 $\frac{1}{4}$ | 0 6 $\frac{1}{4}$ | 0 7 $\frac{3}{4}$ | 0 8 $\frac{1}{4}$ | 0 9 $\frac{1}{2}$ |
| Poultry ... | — | 0 2 $\frac{1}{2}$ | 0 5 | 0 8 $\frac{1}{4}$ | 0 11 $\frac{1}{4}$ | 0 9 | 1 6 $\frac{3}{4}$ | 1 8. |
| Fish of all kinds... .. | 0 2 $\frac{1}{4}$ | 0 4 $\frac{1}{4}$ | 0 6 $\frac{1}{4}$ | 0 6 | 0 8 | 0 7 | 0 9 $\frac{1}{2}$ | 0 9 $\frac{1}{4}$ |
| Lard, Suet, Dripping ... | 0 9 $\frac{1}{2}$ | 0 8 $\frac{1}{2}$ | 0 9 $\frac{1}{2}$ | 0 9 $\frac{3}{4}$ | 0 10 $\frac{1}{4}$ | 1 0 $\frac{1}{4}$ | 0 11 | 1 0 $\frac{1}{2}$ |
| Butter ... | 1 1 $\frac{1}{4}$ | 1 2 $\frac{1}{4}$ | 1 10 $\frac{1}{2}$ | 2 4 $\frac{1}{2}$ | 2 8 | 3 7 $\frac{1}{4}$ | 2 11 $\frac{1}{2}$ | 4 0 $\frac{1}{2}$ |
| Oleomargarine ... | — | 0 0 $\frac{3}{4}$ | 0 1 | 0 1 | 0 0 $\frac{1}{4}$ | — | 0 0 $\frac{1}{4}$ | 0 0 $\frac{3}{4}$ |
| Olive Oil ... | 0 0 $\frac{1}{4}$ | 0 0 $\frac{3}{4}$ | 0 0 $\frac{3}{4}$ | 0 1 | 0 1 | 0 1 $\frac{1}{4}$ | 0 2 | 0 2 |
| Cheese ... | 0 3 $\frac{1}{4}$ | 0 4 $\frac{1}{4}$ | 0 5 $\frac{3}{4}$ | 0 7 | 0 8 | 0 8 $\frac{1}{4}$ | 0 6 $\frac{3}{4}$ | 0 9 $\frac{3}{4}$ |
| Milk (fresh) ... | 1 4 $\frac{1}{2}$ | 1 4 $\frac{1}{4}$ | 1 9 $\frac{1}{2}$ | 2 0 $\frac{3}{4}$ | 2 3 | 2 6 $\frac{3}{4}$ | 2 8 $\frac{1}{2}$ | 2 10 $\frac{3}{4}$ |
| „ (condensed) ... | 0 2 $\frac{1}{4}$ | 0 3 $\frac{1}{4}$ | 0 2 $\frac{3}{4}$ | 0 3 $\frac{1}{4}$ | 0 2 $\frac{1}{4}$ | 0 4 | 0 4 $\frac{1}{4}$ | 0 2 |
| Eggs ... | 0 9 $\frac{3}{4}$ | 1 2 $\frac{1}{2}$ | 1 7 $\frac{3}{4}$ | 1 11 | 2 4 | 2 8 $\frac{1}{4}$ | 2 7 $\frac{3}{4}$ | 3 8 |
| Tea ... | 0 3 $\frac{3}{4}$ | 0 2 $\frac{3}{4}$ | 0 3 $\frac{1}{2}$ | 0 4 $\frac{1}{4}$ | 0 4 $\frac{3}{4}$ | 0 6 $\frac{1}{4}$ | 0 5 $\frac{1}{4}$ | 0 6 |
| Coffee ... | 0 9 $\frac{1}{2}$ | 0 11 $\frac{1}{2}$ | 1 1 | 1 2 $\frac{1}{4}$ | 1 4 $\frac{1}{2}$ | 1 9 $\frac{1}{2}$ | 1 6 $\frac{1}{2}$ | 1 10 $\frac{1}{4}$ |
| Cocoa and Chocolate ... | 0 1 $\frac{1}{4}$ | 0 0 $\frac{3}{4}$ | 0 1 $\frac{1}{4}$ | 0 2 | 0 2 $\frac{1}{4}$ | 0 1 $\frac{3}{4}$ | 0 2 | 0 2 $\frac{1}{2}$ |
| Sugar ... | 0 8 | 0 9 | 0 10 $\frac{1}{2}$ | 1 0 $\frac{1}{2}$ | 1 1 | 1 3 $\frac{1}{2}$ | 1 3 | 1 4 |
| Molasses and Syrup ... | 0 1 $\frac{1}{4}$ | 0 2 $\frac{1}{4}$ | 0 1 $\frac{1}{2}$ | 0 2 | 0 1 $\frac{3}{4}$ | 0 1 $\frac{1}{2}$ | 0 2 $\frac{1}{2}$ | 0 2 $\frac{1}{4}$ |
| Vinegar, Pickles and Condiments. | 0 3 | 0 2 $\frac{3}{4}$ | 0 2 $\frac{1}{2}$ | 0 3 $\frac{1}{2}$ | 0 3 $\frac{1}{2}$ | 0 3 $\frac{1}{4}$ | 0 3 $\frac{1}{2}$ | 0 4 |
| Fruits and Jams ... | 0 4 $\frac{1}{4}$ | 0 6 $\frac{3}{4}$ | 1 0 $\frac{1}{4}$ | 1 2 $\frac{3}{4}$ | 1 4 $\frac{1}{2}$ | 1 10 $\frac{1}{4}$ | 1 11 $\frac{3}{4}$ | 2 2 $\frac{3}{4}$ |
| Other items ... | 0 0 $\frac{3}{4}$ | 0 0 $\frac{3}{4}$ | 0 0 $\frac{1}{2}$ | 0 1 | 0 2 | 0 1 $\frac{1}{2}$ | 0 1 $\frac{3}{4}$ | 0 1 $\frac{1}{4}$ |
| Meals away from home... | — | 0 6 $\frac{1}{4}$ | 0 11 | 1 0 | 1 5 $\frac{1}{2}$ | 2 3 $\frac{3}{4}$ | 3 5 | 4 3 $\frac{1}{4}$ |
| Total ... | 18 4 $\frac{1}{2}$ | 24 4 $\frac{3}{4}$ | 30 7 $\frac{3}{4}$ | 31 5 $\frac{3}{4}$ | 38 9 $\frac{3}{4}$ | 47 4 $\frac{1}{4}$ | 47 0 $\frac{3}{4}$ | 55 7 $\frac{3}{4}$ |

* This figure includes boarders sharing the family food.

† Value under $\frac{1}{4}d.$

IV. BUDGETS OF WORKING-CLASS FAMILIES—*continued.*

(B.) GERMAN GROUP.

Weekly Consumption per Family.

| | Limits of Weekly Family Income. | | | | | | | |
|--|---------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-------------------------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5. (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and over. (8.) |
| Number of Returns ... | 15 | 163 | 246 | 167 | 123 | 60 | 43 | 89 |
| Average Weekly Family Income. | £ s. d. 1 16 0½ | £ s. d. 2 10 10½ | £ s. d. 3 9 2½ | £ s. d. 4 8 0½ | £ s. d. 5 7 5 | £ s. d. 6 8 4 | £ s. d. 7 7 5 | £ s. d. 10 16 3 |
| Average Number of Children living at home. | 1.73 | 2.26 | 2.44 | 2.88 | 3.38 | 3.73 | 3.72 | 4.65 |
| Average Number of Persons per Family.* | 3.67 | 4.27 | 4.54 | 5.01 | 5.47 | 5.95 | 5.86 | 6.72 |
| | lb. | lb. | lb. | lb. | lb. | lb. | lb. | lb. |
| Bread, Wheaten ... | 4.37 | 6.00 | 6.22 | 6.53 | 7.49 | 6.81 | 6.90 | 8.91 |
| „ Rye ... | 4.22 | 4.76 | 4.07 | 3.77 | 3.22 | 5.08 | 5.24 | 2.98 |
| „ Other ... | — | 0.01 | 0.18 | 0.18 | 0.48 | 0.10 | 0.09 | 0.22 |
| Flour, Wheaten ... | 9.46 | 7.55 | 8.23 | 8.60 | 10.00 | 12.86 | 10.32 | 12.12 |
| „ Rye ... | 0.07 | 0.20 | 0.37 | 0.25 | 0.52 | 0.47 | 0.88 | 0.21 |
| „ Buckwheat and Other. | — | 0.37 | 0.32 | 0.27 | 0.14 | 0.06 | 0.47 | 0.48 |
| Maize and Maize Meal ... | 0.13 | 0.58 | 0.66 | 0.70 | 0.50 | 0.33 | 0.58 | 0.96 |
| Cakes, Crackers, Doughnuts. | 0.60 | 1.50 | 2.45 | 2.09 | 2.99 | 3.45 | 3.52 | 4.25 |
| Rolls, Buns, Biscuits ... | 0.67 | 1.48 | 2.20 | 2.57 | 2.88 | 3.53 | 3.88 | 5.78 |
| Macaroni, Noodles, Spaghetti. | 0.13 | 0.38 | 0.55 | 0.34 | 0.54 | 0.58 | 0.57 | 0.67 |
| Rice, Barley, Sago, &c. ... | 1.12 | 1.06 | 1.05 | 0.94 | 1.20 | 1.01 | 1.08 | 1.32 |
| Oatmeal and Breakfast Cereals. | 0.40 | 0.68 | 0.94 | 0.91 | 1.03 | 0.82 | 1.22 | 1.01 |
| Potatoes (Irish) ... | 11.37 | 18.25 | 21.36 | 23.35 | 25.66 | 29.48 | 29.70 | 30.59 |
| Sweet Potatoes, &c. ... | 0.13 | 0.59 | 1.06 | 0.67 | 1.23 | 0.93 | 2.19 | 1.94 |
| Dried Peas and Beans ... | 1.13 | 1.33 | 1.04 | 1.08 | 1.29 | 1.45 | 1.30 | 1.23 |
| Beef (fresh and corned)... | 5.47 | 5.06 | 6.17 | 6.55 | 7.00 | 7.94 | 7.14 | 8.77 |
| Mutton and Lamb ... | 0.27 | 0.66 | 0.77 | 1.06 | 1.40 | 1.12 | 2.01 | 2.19 |
| Pork (fresh and salt) ... | 2.10 | 2.14 | 2.52 | 2.99 | 2.55 | 3.84 | 3.22 | 3.85 |
| Bacon, Ham, Brawn, &c. | 0.83 | 1.04 | 1.17 | 1.41 | 1.31 | 1.90 | 1.46 | 1.98 |
| Veal ... | 0.27 | 0.78 | 1.34 | 1.44 | 2.01 | 2.54 | 1.94 | 2.46 |
| Sausage ... | 0.40 | 1.26 | 1.15 | 1.04 | 1.01 | 1.21 | 1.53 | 1.65 |
| Poultry ... | — | 0.27 | 0.59 | 0.88 | 1.17 | 1.20 | 1.92 | 2.06 |
| Fish of all kinds... .. | 0.40 | 0.85 | 1.11 | 1.09 | 1.42 | 1.28 | 1.70 | 1.68 |
| Lard, Suet, Dripping ... | 1.43 | 1.28 | 1.38 | 1.38 | 1.60 | 1.66 | 1.60 | 1.80 |
| Butter ... | 0.85 | 0.90 | 1.44 | 1.84 | 2.04 | 2.75 | 2.34 | 3.19 |
| Oleomargarine ... | — | 0.07 | 0.09 | 0.08 | 0.02 | — | 0.02 | 0.06 |
| | pints. | pints. | pints. | pints. | pints. | pints. | pints. | pints. |
| Olive Oil ... | 0.03 | 0.06 | 0.05 | 0.09 | 0.08 | 0.10 | 0.25 | 0.10 |
| | lb. | lb. | lb. | lb. | lb. | lb. | lb. | lb. |
| Cheese ... | 0.43 | 0.47 | 0.64 | 0.67 | 0.80 | 0.85 | 0.72 | 1.04 |
| | qts. | qts. | qts. | qts. | qts. | qts. | qts. | qts. |
| Milk (fresh) ... | 3.43 | 3.97 | 5.18 | 6.05 | 6.45 | 7.10 | 7.66 | 8.16 |
| „ (condensed) ... | 0.41 | 0.63 | 0.44 | 0.65 | 0.42 | 0.69 | 0.72 | 0.33 |
| | No. | No. | No. | No. | No. | No. | No. | No. |
| Eggs ... | 10.00 | 12.83 | 17.94 | 20.37 | 24.71 | 28.03 | 28.12 | 39.28 |
| | lb. | lb. | lb. | lb. | lb. | lb. | lb. | lb. |
| Tea ... | 0.14 | 0.12 | 0.14 | 0.16 | 0.21 | 0.24 | 0.21 | 0.22 |
| Coffee ... | 1.00 | 1.08 | 1.15 | 1.27 | 1.47 | 1.75 | 1.58 | 1.85 |
| Cocoa and Chocolate ... | 0.05 | 0.04 | 0.08 | 0.10 | 0.14 | 0.10 | 0.12 | 0.12 |
| Sugar ... | 2.80 | 3.19 | 3.66 | 4.28 | 4.48 | 5.21 | 5.33 | 5.53 |
| | pints. | pints. | pints. | pints. | pints. | pints. | pints. | pints. |
| Molasses and Syrup ... | 0.28 | 0.46 | 0.34 | 0.53 | 0.37 | 0.31 | 0.49 | 0.39 |

* This figure includes boarders sharing the family food.

IV. BUDGETS OF WORKING-CLASS FAMILIES—*continued*.

(C.) SCANDINAVIAN GROUP.

Weekly Expenditure per Family.

| | Limits of Weekly Family Income. | | | | | | | |
|--|---------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-------------------------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5. (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and over. (8.) |
| Number of Returns ... | 0 | 35 | 89 | 73 | 61 | 28 | 17 | 32 |
| Average Weekly Family Income. | | £ s. d. 2 11 11 | £ s. d. 3 9 6½ | £ s. d. 4 8 3½ | £ s. d. 5 6 10 | £ s. d. 6 8 4½ | £ s. d. 7 7 7½ | £ s. d. 10 0 6½ |
| Average Number of Children living at home. | | 2·06 | 2·54 | 3·04 | 3·59 | 3·78 | 4·23 | 3·69 |
| Average Number of Persons per Family * | | 4·09 | 4·60 | 5·15 | 6·02 | 5·89 | 6·35 | 6·00 |
| | | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. |
| Bread, Wheaten ... | | 0 8¾ | 0 7¼ | 0 9½ | 0 8 | 0 5½ | 0 9¾ | 1 3 |
| „ Rye ... | | 0 4¼ | 0 6¼ | 0 6¾ | 0 1¾ | 0 7½ | 1 0 | 0 7¾ |
| „ Other ... | | — | — | 0 0¼ | 0 0¼ | — | 0 0¼ | — |
| Flour, Wheaten ... | | 1 5 | 1 10 | 1 8 | 2 6 | 2 5¼ | 2 5¾ | 2 6½ |
| „ Rye ... | | 0 2½ | 0 3¼ | 0 3½ | 0 4½ | 0 6¼ | 0 2½ | 0 2 |
| „ Buckwheat and Other. | | 0 1 | 0 0¾ | 0 0½ | 0 0½ | 0 0½ | 0 0¼ | 0 1½ |
| Maize and Maize Meal ... | | 0 1¼ | 0 0¾ | 0 0¾ | 0 0¾ | 0 0¾ | 0 1¾ | 0 0¾ |
| Cakes, Crackers, Doughnuts. | | 0 4¼ | 0 7¼ | 0 8¾ | 0 9¼ | 0 9¾ | 0 10¼ | 0 10¼ |
| Rolls, Buns, Biscuits ... | | 0 4½ | 0 4½ | 0 7½ | 0 3½ | 0 5½ | 0 8½ | 0 8½ |
| Macaroni, Noodles, Spaghetti. | | 0 1¾ | 0 1½ | 0 2 | 0 2 | 0 2¼ | 0 2¼ | 0 1¾ |
| Rice, Barley, Sago, &c. ... | | 0 3¾ | 0 4 | 0 4½ | 0 3¾ | 0 5 | 0 4½ | 0 5½ |
| Oatmeal and Breakfast Cereals. | | 0 4½ | 0 6 | 0 5½ | 0 6¼ | 0 7¼ | 0 6½ | 0 5¾ |
| Potatoes (Irish) ... | | 1 0¾ | 1 4 | 1 7¾ | 1 10½ | 1 10¾ | 1 6 | 1 10 |
| Sweet Potatoes, &c. ... | | 0 0¾ | 0 0¼ | 0 0¼ | 0 1 | 0 1¼ | 0 1½ | 0 3 |
| Dried Peas and Beans ... | | 0 3 | 0 3¾ | 0 3½ | 0 3½ | 0 3 | 0 5½ | 0 4¾ |
| Sweet Corn ... | | 0 1½ | 0 1 | 0 1¾ | 0 2¼ | 0 1½ | 0 3¼ | 0 4¼ |
| Green Vegetables, &c. ... | | 1 0¾ | 1 0¼ | 1 4¾ | 1 2¾ | 1 7½ | 1 11 | 2 0¼ |
| Canned Vegetables ... | | 0 4¾ | 0 5½ | 0 7¼ | 0 6½ | 0 9½ | 0 10 | 0 6 |
| Beef (fresh and corned)... | | 3 5½ | 3 1 | 3 3½ | 4 1¾ | 4 9¼ | 5 10 | 5 0¼ |
| Mutton and Lamb ... | | 0 8¼ | 0 10¼ | 1 0¼ | 1 4½ | 1 4¾ | 0 11 | 2 0¼ |
| Pork (fresh and salt) ... | | 1 2½ | 1 6½ | 1 5¼ | 2 0¼ | 1 9¼ | 1 10¾ | 2 3½ |
| Bacon, Ham, Brawn, &c. ... | | 0 8¼ | 0 10 | 0 11½ | 1 1½ | 1 3¼ | 0 11½ | 1 5½ |
| Veal ... | | 0 3½ | 0 5 | 1 1½ | 0 9¾ | 0 9 | 1 1¾ | 0 9 |
| Sausage ... | | 0 4¾ | 0 5 | 0 5½ | 0 5 | 0 5 | 0 2½ | 0 6½ |
| Poultry ... | | 0 3 | 0 3¼ | 0 6¼ | 0 8 | 0 8½ | 0 6 | 1 2¼ |
| Fish of all kinds ... | | 0 7½ | 0 9 | 0 9¼ | 0 7¼ | 0 10¼ | 1 1¾ | 1 4 |
| Lard, Suet, Dripping ... | | 0 5¼ | 0 7¼ | 0 7 | 0 8½ | 0 10½ | 0 10¾ | 1 0 |
| Butter ... | | 2 2¼ | 2 11¼ | 3 8¾ | 4 3½ | 4 5¼ | 4 7½ | 4 1¾ |
| Oleomargarine ... | | — | 0 0¼ | 0 0¾ | 0 0¼ | — | — | 0 0¾ |
| Olive Oil ... | | 0 0¼ | 0 0¼ | 0 0½ | 0 0½ | 0 1¼ | 0 0½ | 0 2¼ |
| Cheese ... | | 0 4 | 0 6 | 0 7½ | 0 6¾ | 0 9 | 0 6½ | 1 0 |
| Milk (fresh) ... | | 1 11¼ | 2 6¾ | 2 9 | 3 1¼ | 2 11¼ | 3 8 | 2 11¼ |
| „ (condensed) ... | | 0 3 | 0 2¼ | 0 2 | 0 1 | 0 2 | 0 0½ | 0 2¼ |
| Eggs ... | | 1 8½ | 1 11 | 2 2 | 2 8 | 2 7¾ | 2 11¾ | 3 4¾ |
| Tea ... | | 0 2¼ | 0 2¼ | 0 2½ | 0 2¼ | 0 4 | 0 3¾ | 0 5¾ |
| Coffee ... | | 1 0 | 1 2½ | 1 4¼ | 1 5 | 1 9¼ | 1 4¼ | 1 7¾ |
| Cocoa and Chocolate ... | | 0 1 | 0 2 | 0 2½ | 0 3¼ | 0 2¾ | 0 4 | 0 2¾ |
| Sugar ... | | 1 0¾ | 1 2¾ | 1 3½ | 1 7¼ | 1 11 | 2 4¼ | 1 11¼ |
| Molasses and Syrup ... | | 0 2½ | 0 2¼ | 0 1¾ | 0 2½ | 0 4¼ | 0 3¾ | 0 2 |
| Vinegar, Pickles and Condiments. | | 0 1 | 0 2¼ | 0 3½ | 0 3 | 0 3½ | 0 3 | 0 2½ |
| Fruits and Jams ... | | 0 7¼ | 1 2½ | 1 3¼ | 1 4 | 2 1¾ | 2 5¼ | 2 3½ |
| Other items ... | | — | 0 0¾ | 0 2¼ | 0 1½ | 0 0½ | 0 3 | 0 5¼ |
| Meals away from home ... | | — | 0 4¼ | 0 10 | 1 6¾ | 1 4¼ | 3 0¾ | 4 1¼ |
| Total ... | | 25 2 | 30 5 | 35 4¾ | 39 9½ | 43 9 | 48 6½ | 51 9½ |

* This figure includes boarders sharing the family food.

IV. BUDGETS OF WORKING-CLASS FAMILIES—*continued.*

(C.) SCANDINAVIAN GROUP.

Weekly Consumption per Family.

| | Limits of Weekly Family Income. | | | | | | | |
|--|---------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-------------------------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5. (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and over. (8.) |
| Number of Returns ... | 0 | 35 | 89 | 73 | 61 | 28 | 17 | 32 |
| Average Weekly Family Income. | | £ s. d. 2 11 11 | £ s. d. 3 9 6½ | £ s. d. 4 8 3½ | £ s. d. 5 6 10 | £ s. d. 6 8 4½ | £ s. d. 7 7 7½ | £ s. d. 10 0 6½ |
| Average Number of Children living at home. | | 2·06 | 2·54 | 3·04 | 3·59 | 3·78 | 4·23 | 3·69 |
| Average Number of Persons per Family.* | | 4·09 | 4·60 | 5·15 | 6·02 | 5·89 | 6·35 | 6·00 |
| | | lb. | lb. | lb. | lb. | lb. | lb. | lb. |
| Bread, Wheaten ... | Not represented. | 3·30 | 2·68 | 3·27 | 2·85 | 1·83 | 3·51 | 5·41 |
| „ Rye ... | | 1·86 | 2·38 | 2·55 | 0·67 | 2·90 | 4·81 | 3·07 |
| „ Other ... | | — | — | 0·14 | 0·06 | — | 0·06 | — |
| Flour, Wheaten ... | | 8·90 | 11·47 | 10·77 | 16·07 | 15·38 | 15·07 | 15·57 |
| „ Rye ... | | 1·59 | 1·86 | 1·92 | 3·01 | 3·95 | 1·35 | 1·31 |
| „ Buckwheat and Other. | | 0·49 | 0·34 | 0·24 | 0·21 | 0·21 | 0·12 | 0·75 |
| Maize and Maize Meal ... | | 0·83 | 0·49 | 0·38 | 0·56 | 0·39 | 0·94 | 0·50 |
| Cakes, Crackers, Doughnuts. | | 0·87 | 1·57 | 1·87 | 1·56 | 1·77 | 2·25 | 2·13 |
| Rolls, Buns, Biscuits ... | | 1·61 | 1·13 | 1·84 | 0·98 | 1·70 | 2·47 | 2·76 |
| Macaroni, Noodles, Spaghetti. | | 0·34 | 0·32 | 0·38 | 0·41 | 0·48 | 0·41 | 0·30 |
| Rice, Barley, Sago, &c. ... | | 0·84 | 0·95 | 1·08 | 0·84 | 1·12 | 1·00 | 1·39 |
| Oatmeal and Breakfast Cereals. | | 1·43 | 1·90 | 1·75 | 1·80 | 2·31 | 1·69 | 1·49 |
| Potatoes (Irish) ... | | 13·71 | 18·10 | 22·73 | 27·73 | 25·23 | 21·15 | 26·69 |
| Sweet Potatoes, &c. ... | | 0·40 | 0·20 | 0·27 | 0·58 | 0·70 | 1·47 | 2·91 |
| Dried Peas and Beans ... | | 1·09 | 1·09 | 1·07 | 1·13 | 1·07 | 1·88 | 1·59 |
| Beef (fresh and corned) | | 5·20 | 5·26 | 5·25 | 6·26 | 7·13 | 8·88 | 7·53 |
| Mutton and Lamb ... | | 1·09 | 1·47 | 1·56 | 2·03 | 1·91 | 1·35 | 2·72 |
| Pork (fresh and salt) ... | | 1·96 | 2·61 | 2·27 | 3·53 | 2·96 | 2·79 | 3·42 |
| Bacon, Ham, Brawn, &c. | | 0·95 | 1·19 | 1·29 | 1·60 | 1·63 | 1·29 | 2·00 |
| Veal ... | | 0·47 | 0·65 | 1·77 | 1·27 | 1·07 | 1·77 | 1·17 |
| Sausage ... | | 0·74 | 0·81 | 0·87 | 0·76 | 0·78 | 0·65 | 0·95 |
| Poultry ... | | 0·34 | 0·37 | 0·64 | 0·86 | 0·89 | 0·59 | 1·47 |
| Fish of all kinds... | | 1·61 | 1·87 | 1·45 | 1·18 | 2·09 | 2·59 | 2·61 |
| Lard, Suet, Dripping ... | | 0·84 | 1·04 | 1·02 | 1·22 | 1·54 | 1·53 | 1·81 |
| Butter ... | | 1·80 | 2·36 | 2·96 | 3·48 | 3·44 | 3·79 | 3·24 |
| Oleomargarine ... | | — | 0·02 | 0·07 | 0·02 | — | — | 0·06 |
| Olive Oil ... | | pints. 0·02 | pints. 0·02 | pints. 0·02 | pints. 0·03 | pints. 0·04 | pints. 0·02 | pints. 0·11 |
| Cheese ... | lb. 0·44 | lb. 0·61 | lb. 0·80 | lb. 0·71 | lb. 0·90 | lb. 0·74 | lb. 1·30 | |
| Milk (fresh) ... | qts. 5·92 | qts. 7·62 | qts. 8·02 | qts. 9·61 | qts. 9·13 | qts. 11·01 | qts. 8·86 | |
| „ (condensed) ... | lb. 0·53 | lb. 0·40 | lb. 0·35 | lb. 0·18 | lb. 0·33 | lb. 0·10 | lb. 0·41 | |
| Eggs ... | No. 17·77 | No. 21·08 | No. 24·12 | No. 29·31 | No. 31·29 | No. 33·77 | No. 35·56 | |
| Tea ... | lb. 0·09 | lb. 0·09 | lb. 0·10 | lb. 0·09 | lb. 0·14 | lb. 0·15 | lb. 0·24 | |
| Coffee ... | 0·93 | 1·15 | 1·29 | 1·38 | 1·57 | 1·21 | 1·52 | |
| Cocoa and Chocolate ... | 0·06 | 0·11 | 0·15 | 0·17 | 0·13 | 0·19 | 0·13 | |
| Sugar ... | 4·50 | 5·14 | 5·38 | 6·74 | 7·75 | 9·82 | 8·52 | |
| Molasses and Syrup ... | pints. 0·42 | pints. 0·52 | pints. 0·35 | pints. 0·59 | pints. 0·67 | pints. 0·59 | pints. 0·54 | |

* This figure includes boarders sharing the family food.

IV. BUDGETS OF WORKING-CLASS FAMILIES—*continued.*

(D.) SOUTH EUROPEAN GROUP.

Weekly Expenditure per Family.

| | Limits of Weekly Family Income. | | | | | | | |
|--|---------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-------------------------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5. (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and over. (8.) |
| Number of Returns ... | 60 | 195 | 151 | 73 | 50 | 29 | 15 | 26 |
| Average Weekly Family Income. | £ s. d. 1 13 9½ | £ s. d. 2 10 0½ | £ s. d. 3 8 9 | £ s. d. 4 8 1 | £ s. d. 5 6 5½ | £ s. d. 6 7 8½ | £ s. d. 7 7 11 | £ s. d. 9 11 2 |
| Average Number of Children living at home. | 2·33 | 2·85 | 2·93 | 3·66 | 3·82 | 4·55 | 4·41 | 4·54 |
| Average Number of Persons per Family.* | 4·33 | 4·92 | 5·09 | 5·96 | 6·14 | 6·90 | 6·60 | 7·27 |
| | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. |
| Bread, Wheaten ... | 2 0¼ | 1 10¾ | 2 3 | 3 3¾ | 3 9½ | 5 7¾ | 3 2½ | 4 3¼ |
| „ Rye ... | 0 0½ | 0 1¾ | 0 1½ | 0 2¼ | 0 1¼ | 0 2¼ | 0 6 | 0 4¾ |
| „ Other ... | — | 0 0½ | 0 1½ | 0 0¼ | 0 1¼ | 0 0¼ | — | — |
| Flour, Wheaten ... | 0 8¾ | 1 2¼ | 1 4½ | 1 3 | 1 5 | 1 6¾ | 1 3 | 1 5¾ |
| „ Rye ... | —† | 0 0¼ | — | — | — | 0 0½ | — | — |
| „ Buckwheat and Other. | — | 0 0¼ | 0 0¼ | 0 0¼ | 0 0½ | 0 0½ | 0 0½ | 0 1½ |
| Maize and Maize Meal ... | 0 0¼ | 0 1¼ | 0 0¾ | 0 1½ | 0 1½ | 0 0½ | 0 1 | 0 1¾ |
| Cakes, Crackers, Doughnuts. | 0 4¼ | 0 4¼ | 0 6 | 0 8 | 0 10¼ | 0 6¼ | 0 10¼ | 1 2¼ |
| Rolls, Buns, Biscuits ... | 0 0½ | 0 2 | 0 5½ | 0 5¾ | 0 5½ | 0 4½ | 0 7¾ | 0 8¼ |
| Macaroni, Noodles, Spaghetti. | 1 0½ | 1 7¾ | 1 6½ | 1 10 | 2 7½ | 2 5½ | 1 9¼ | 1 10 |
| Rice, Barley, Sago, &c. ... | 0 4½ | 0 4 | 0 4¾ | 0 7 | 0 6¾ | 0 8 | 0 4½ | 0 8 |
| Oatmeal and Breakfast Cereals. | 0 0¾ | 0 1¼ | 0 1 | 0 1¼ | 0 1¾ | 0 0¾ | 0 1¾ | 0 1¼ |
| Potatoes (Irish) ... | 0 6 | 0 8 | 0 11 | 1 0½ | 1 3¼ | 1 8 | 1 1¾ | 1 2¾ |
| Sweet Potatoes, &c. ... | 0 0¼ | 0 0¾ | 0 1 | 0 1½ | 0 3 | 0 11¼ | 0 0¾ | 0 3¾ |
| Dried Peas and Beans ... | 0 5¾ | 0 5¾ | 0 6½ | 0 8 | 0 10 | 1 5¼ | 0 10¾ | 1 0½ |
| Sweet Corn ... | 0 0½ | 0 1 | 0 1¼ | 0 2¼ | 0 5 | 0 7¾ | 0 3½ | 0 4½ |
| Green Vegetables, &c. ... | 0 8¾ | 1 1¾ | 1 9¾ | 1 10½ | 2 8½ | 4 0¼ | 2 8¾ | 3 11½ |
| Canned Vegetables ... | 0 3½ | 0 3¾ | 0 4½ | 0 7 | 0 6¾ | 0 5¼ | 0 5½ | 1 2 |
| Beef (fresh and corned)... | 1 8¾ | 2 2¼ | 2 6¾ | 2 11 | 3 4¾ | 3 8¼ | 4 2 | 3 6¼ |
| Mutton and Lamb ... | 0 2½ | 0 3¾ | 0 11¼ | 3 0 | 1 9¼ | 4 9 | 2 10¾ | 5 0½ |
| Pork (fresh and salt) ... | 0 3½ | 0 6¾ | 0 8¼ | 0 10 | 0 9¾ | 0 11 | 1 11¼ | 1 1½ |
| Bacon, Ham, Brawn, &c. | 0 1½ | 0 3½ | 0 6 | 0 8½ | 0 9¾ | 0 8¼ | 1 0 | 0 8¼ |
| Veal ... | 0 4½ | 0 7¾ | 0 11¾ | 1 0½ | 1 0¾ | 1 2 | 2 0½ | 1 8¼ |
| Sausage ... | 0 3½ | 0 4¾ | 0 4½ | 0 6 | 0 8 | 0 5½ | 0 11¾ | 0 4 |
| Poultry ... | 0 0½ | 0 4¾ | 0 6¼ | 0 7¾ | 0 5¾ | 0 10½ | 0 9½ | 1 8¾ |
| Fish of all kinds ... | 0 5¾ | 0 7¾ | 0 9¾ | 1 2½ | 1 1 | 1 5 | 1 8¾ | 1 10 |
| Lard, Suet, Dripping ... | 0 8 | 0 8¼ | 0 10¼ | 0 11½ | 0 11¾ | 1 1 | 1 4¼ | 1 4¾ |
| Butter ... | 0 2¼ | 0 6½ | 0 9¾ | 1 5¾ | 1 5 | 2 3½ | 1 6¾ | 2 6¾ |
| Oleomargarine ... | 0 0¼ | 0 0¼ | 0 0¾ | 0 0½ | —† | 0 4½ | — | 0 0¼ |
| Olive Oil ... | 0 9 | 1 2¼ | 1 6 | 2 0½ | 2 1½ | 2 8 | 3 7¼ | 2 8 |
| Cheese ... | 0 7¾ | 0 11¾ | 1 2 | 1 6½ | 1 6 | 2 0¾ | 1 6½ | 1 11 |
| Milk (fresh) ... | 1 1¼ | 1 5¼ | 1 8½ | 2 7¾ | 2 2½ | 2 9¼ | 2 10¾ | 3 3¾ |
| „ (condensed) ... | 0 1¾ | 0 2¾ | 0 2¼ | 0 3 | 0 0¾ | 0 0¾ | 0 1 | 0 5½ |
| Eggs ... | 0 8 | 1 3¾ | 1 7½ | 2 1½ | 2 7 | 2 2½ | 3 2¾ | 3 5 |
| Tea ... | 0 1¾ | 0 2½ | 0 3¼ | 0 2 | 0 3¼ | 0 3½ | 0 3¼ | 1 8¼ |
| Coffee ... | 0 7 | 0 8¾ | 0 10¼ | 1 0 | 0 11 | 1 0¾ | 0 10¾ | 1 6½ |
| Cocoa and Chocolate ... | 0 0¼ | 0 0¾ | 0 1 | 0 2 | 0 1¾ | 0 2 | 0 1¾ | 0 4¼ |
| Sugar ... | 0 7¾ | 0 8¾ | 0 9¼ | 1 0¾ | 0 11¾ | 1 4 | 1 2¾ | 1 5¼ |
| Molasses and Syrup ... | 0 0½ | 0 1 | 0 0¾ | 0 1 | 0 0¾ | 0 0¾ | 0 1¼ | 0 0¼ |
| Vinegar, Pickles and Condiments. | 0 0¾ | 0 1½ | 0 2¼ | 0 3½ | 0 3¾ | 0 4¾ | 0 4 | 0 4¼ |
| Fruits and Jams ... | 0 6¾ | 0 8 | 1 1 | 1 5¼ | 1 8½ | 2 8½ | 2 9¾ | 2 6¾ |
| Other items ... | —† | 0 1¼ | 0 1¾ | 0 1½ | 0 0¾ | 0 1½ | — | — |
| Meals away from home... | — | 0 4¼ | 0 8½ | 0 7¾ | 2 4½ | 1 2¼ | 3 2 | 2 0¾ |
| Total ... | 16 7 | 23 9½ | 30 3¼ | 39 8¾ | 44 1½ | 54 9 | 52 5¾ | 59 2½ |

* This figure includes boarders sharing the family food.

† Value under ¼d.

IV. BUDGETS OF WORKING-CLASS FAMILIES—*continued.*

(D.) SOUTH EUROPEAN GROUP.

Weekly Consumption per Family.

| | Limits of Weekly Family Income. | | | | | | | |
|--|---------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-------------------------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5. (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and over. (8.) |
| Number of Returns ... | 60 | 195 | 151 | 73 | 50 | 29 | 15 | 26 |
| Average Weekly Family Income. | £ s. d. 1 13 9½ | £ s. d. 2 10 0½ | £ s. d. 3 8 9 | £ s. d. 4 8 1 | £ s. d. 5 6 5½ | £ s. d. 6 7 8½ | £ s. d. 7 7 11 | £ s. d. 9 11 2 |
| Average Number of Children living at home. | 2·33 | 2·85 | 2·93 | 3·66 | 3·82 | 4·55 | 4·41 | 4·54 |
| Average Number of Persons per Family.* | 4·33 | 4·92 | 5·09 | 5·96 | 6·14 | 6·90 | 6·60 | 7·27 |
| | lb. | lb. | lb. | lb. | lb. | lb. | lb. | lb. |
| Bread, Wheaten ... | 9·58 | 9·12 | 11·08 | 15·44 | 19·26 | 27·87 | 17·57 | 22·10 |
| „ Rye ... | 0·20 | 0·74 | 0·79 | 1·02 | 0·80 | 1·19 | 2·09 | 2·62 |
| „ Other ... | — | 0·29 | 0·73 | 0·07 | 0·56 | 0·07 | — | — |
| Flour, Wheaten ... | 4·94 | 7·84 | 8·96 | 7·51 | 9·04 | 9·93 | 7·33 | 8·67 |
| „ Rye ... | 0·03 | 0·16 | — | — | — | 0·24 | — | — |
| „ Buckwheat and Other. | — | 0·13 | 0·28 | 0·04 | 0·14 | 0·21 | 0·13 | 0·39 |
| Maize and Maize Meal ... | 0·26 | 0·90 | 0·48 | 0·83 | 1·17 | 0·28 | 0·33 | 0·96 |
| Cakes, Crackers, Doughnuts. | 0·81 | 1·02 | 1·49 | 1·74 | 2·40 | 1·25 | 2·53 | 2·62 |
| Rolls, Buns, Biscuits ... | 0·12 | 0·62 | 1·54 | 1·83 | 1·81 | 1·33 | 2·93 | 2·26 |
| Macaroni, Noodles, Spaghetti. | 3·73 | 5·14 | 4·74 | 5·36 | 7·97 | 6·79 | 5·03 | 5·12 |
| Rice, Barley, Sago, &c. ... | 1·20 | 1·15 | 1·25 | 1·89 | 2·04 | 2·07 | 1·07 | 1·96 |
| Oatmeal and Breakfast Cereals. | 0·23 | 0·49 | 0·26 | 0·38 | 0·66 | 0·24 | 0·53 | 0·39 |
| Potatoes (Irish) ... | 5·10 | 7·08 | 11·71 | 11·56 | 14·94 | 22·25 | 12·57 | 14·44 |
| Sweet Potatoes, &c. ... | 0·30 | 0·69 | 0·95 | 1·52 | 3·24 | 1·40 | 0·67 | 3·92 |
| Dried Peas and Beans ... | 2·16 | 1·92 | 2·15 | 2·61 | 3·07 | 5·75 | 3·50 | 3·35 |
| Beef (fresh and corned)... | 3·50 | 3·85 | 4·18 | 4·95 | 5·42 | 5·62 | 6·20 | 5·27 |
| Mutton and Lamb ... | 0·43 | 0·51 | 1·53 | 4·50 | 2·69 | 7·45 | 4·30 | 7·27 |
| Pork (fresh and salt) ... | 0·55 | 0·98 | 1·08 | 1·36 | 1·31 | 1·40 | 1·50 | 1·83 |
| Bacon, Ham, Brawn, &c. | 0·20 | 0·37 | 0·73 | 0·94 | 1·25 | 0·99 | 1·33 | 1·01 |
| Veal ... | 0·60 | 1·06 | 1·52 | 1·49 | 1·62 | 1·71 | 3·10 | 2·62 |
| Sausage ... | 0·46 | 0·66 | 0·56 | 0·74 | 1·15 | 0·62 | 1·23 | 0·41 |
| Poultry ... | 0·06 | 0·52 | 0·70 | 0·81 | 0·64 | 1·10 | 0·93 | 2·04 |
| Fish of all kinds... .. | 1·41 | 1·84 | 2·11 | 2·72 | 2·73 | 3·50 | 4·57 | 4·23 |
| Lard, Suet, Dripping ... | 1·51 | 1·42 | 1·67 | 1·92 | 1·86 | 2·38 | 2·53 | 2·71 |
| Butter ... | 0·15 | 0·42 | 0·62 | 1·07 | 1·10 | 1·62 | 1·17 | 1·81 |
| Oleomargarine ... | 0·02 | 0·02 | 0·05 | 0·03 | 0·01 | 0·28 | — | 0·01 |
| | pints. | pints. | pints. | pints. | pints. | pints. | pints. | pints. |
| Olive oil ... | 0·59 | 0·86 | 1·10 | 1·54 | 1·58 | 2·28 | 2·83 | 2·42 |
| | lb. | lb. | lb. | lb. | lb. | lb. | lb. | lb. |
| Cheese ... | 0·54 | 0·78 | 0·99 | 1·24 | 1·28 | 1·62 | 1·23 | 1·57 |
| | qts. | qts. | qts. | qts. | qts. | qts. | qts. | qts. |
| Milk (fresh) ... | 3·16 | 4·09 | 4·93 | 7·68 | 6·20 | 7·84 | 8·44 | 9·51 |
| „ (condensed) ... | 0·30 | 0·51 | 0·37 | 0·56 | 0·11 | 0·12 | 0·18 | 0·93 |
| | No. | No. | No. | No. | No. | No. | No. | No. |
| Eggs ... | 7·55 | 14·59 | 18·05 | 23·45 | 28·95 | 24·10 | 34·53 | 36·00 |
| | lb. | lb. | lb. | lb. | lb. | lb. | lb. | lb. |
| Tea ... | 0·08 | 0·11 | 0·13 | 0·09 | 0·14 | 0·14 | 0·14 | 0·06 |
| Coffee ... | 0·71 | 0·78 | 0·85 | 1·01 | 0·90 | 1·10 | 0·81 | 1·40 |
| Cocoa and Chocolate ... | 0·03 | 0·05 | 0·05 | 0·10 | 0·10 | 0·10 | 0·12 | 0·19 |
| Sugar ... | 2·85 | 3·18 | 3·30 | 4·50 | 4·15 | 5·30 | 4·97 | 5·84 |
| | pints. | pints. | pints. | pints. | pints. | pints. | pints. | pints. |
| Molasses and Syrup ... | 0·11 | 0·19 | 0·13 | 0·18 | 0·14 | 0·06 | 0·39 | 0·06 |

* This figure includes boarders sharing the family food.

IV. BUDGETS OF WORKING-CLASS FAMILIES—*continued*.

(E.) SLAVONIC AND ALLIED PEOPLES GROUP.

Weekly Expenditure per Family.

| | Limits of Weekly Family Income. | | | | | | | |
|---|---------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-------------------------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5. (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and over. (8.) |
| Number of Returns ... | 35 | 182 | 162 | 82 | 59 | 33 | 20 | 25 |
| Average Weekly Family Income. | £ s. d. 1 15 5½ | £ s. d. 2 11 2 | £ s. d. 3 9 4½ | £ s. d. 4 8 2½ | £ s. d. 5 6 8½ | £ s. d. 6 10 0½ | £ s. d. 7 8 5½ | £ s. d. 10 4 7½ |
| Average Number of Child- ren living at home. | 1·86 | 2·30 | 2·77 | 3·05 | 3·49 | 4·36 | 4·50 | 4·56 |
| Average Number of Per- sons per Family.* | 3·86 | 4·34 | 5·05 | 5·61 | 6·27 | 7·09 | 6·85 | 6·76 |
| | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. |
| Bread, Wheaten ... | 1 3¾ | 1 2 | 1 6¼ | 1 7½ | 1 2¾ | 2 4¾ | 1 7¾ | 1 10¼ |
| „ Rye ... | 0 8¼ | 1 2½ | 1 3¼ | 1 0½ | 1 9½ | 1 10½ | 1 5 | 1 2¾ |
| „ Other ... | — | 0 0¾ | 0 0½ | — | 0 0¾ | 0 1 | 0 0¾ | 0 1¼ |
| Flour, Wheaten ... | 0 10¼ | 1 0¾ | 1 6 | 1 7¼ | 1 10¼ | 1 11½ | 2 2¼ | 1 5 |
| „ Rye ... | 0 3¼ | 0 1 | 0 1¾ | 0 1¾ | 0 3¼ | 0 1¼ | 0 6½ | 0 4½ |
| „ Buckwheat and Other. | — | 0 0¼ | 0 0¾ | 0 0¾ | 0 1 | 0 1¼ | 0 1½ | 0 3 |
| Maize and Maize Meal .. | 0 2¼ | 0 2¼ | 0 2½ | 0 1¾ | 0 1¼ | 0 1¾ | 0 1¾ | 0 3 |
| Cakes, Crackers, Dough- nuts. | 0 4 | 0 6½ | 0 9½ | 0 11¼ | 1 0 | 1 5 | 1 10 | 1 5½ |
| Rolls, Buns, Biscuits ... | 0 2 | 0 5¾ | 0 7¼ | 0 10½ | 1 2¾ | 1 3¼ | 1 6 | 2 1½ |
| Macaroni, Noodles, Spa- ghetti. | 0 2¼ | 0 3½ | 0 3¾ | 0 4¼ | 0 2¾ | 0 3 | 0 5¾ | 0 3 |
| Rice, Barley, Sago, &c. ... | 0 4¾ | 0 5¾ | 0 6¼ | 0 7¼ | 0 6 | 0 7¾ | 0 8¼ | 0 8¼ |
| Oatmeal and Breakfast Cereals. | 0 2¼ | 0 1¾ | 0 2¾ | 0 3¼ | 0 3¾ | 0 3½ | 0 5½ | 0 5½ |
| Potatoes (Irish) ... | 1 1¼ | 1 3¾ | 1 7¼ | 1 11¼ | 2 1½ | 2 2¾ | 3 0½ | 2 11¼ |
| Sweet Potatoes, &c. ... | 0 0½ | 0 0¾ | 0 1¾ | 0 1¾ | 0 1¾ | 0 2 | 0 3½ | 0 2¼ |
| Dried Peas and Beans ... | 0 3½ | 0 4½ | 0 5 | 0 5 | 0 4¼ | 0 5¾ | 0 4¼ | 0 7¼ |
| Sweet Corn ... | 0 0¼ | 0 0½ | 0 1 | 0 1 | 0 1½ | 0 1 | 0 3¾ | 0 2¾ |
| Green Vegetables, &c. ... | 0 6 | 0 9¼ | 0 11 | 0 11¼ | 1 2 | 1 2 | 1 2¾ | 0 9¾ |
| Canned Vegetables ... | 0 1¾ | 0 2¼ | 0 4 | 0 5 | 0 5¾ | 0 8 | 0 6¾ | 0 5 |
| Beef (fresh and corned)... | 2 2 | 2 4¾ | 3 3¼ | 3 6¼ | 4 1¾ | 4 2½ | 4 1¼ | 3 5 |
| Mutton and Lamb ... | 0 1½ | 0 4 | 0 6½ | 0 10 | 0 9½ | 0 7¾ | 0 10¾ | 1 0¾ |
| Pork (fresh and salt) ... | 0 9½ | 1 9½ | 1 11¼ | 2 5 | 3 0 | 3 9½ | 3 1 | 3 1 |
| Bacon, Ham, Brawn, &c. | 0 3¾ | 0 8 | 1 0 | 1 1½ | 1 5¼ | 1 10 | 1 7½ | 1 6¼ |
| Veal ... | 0 2¾ | 0 6 | 0 9½ | 1 3½ | 1 4½ | 1 3¼ | 1 7¼ | 1 4¼ |
| Sausage ... | 0 10½ | 0 9¼ | 0 10½ | 0 9¾ | 0 11 | 1 7¾ | 1 9½ | 1 3 |
| Poultry ... | — | 0 2¾ | 0 6 | 0 5¾ | 0 11¾ | 0 10½ | 1 1 | 1 9½ |
| Fish of all kinds... .. | 0 2¾ | 0 4¼ | 0 7¼ | 0 9¼ | 0 9¼ | 1 1¼ | 1 3½ | 1 9½ |
| Lard, Suet, Dripping ... | 0 6¼ | 0 8¼ | 0 10¼ | 1 0½ | 1 1¼ | 1 1¾ | 1 9¼ | 1 0½ |
| Butter ... | 0 6¼ | 0 9¼ | 1 1¼ | 1 7¼ | 1 7¼ | 2 4 | 2 6½ | 2 8½ |
| Oleomargarine ... | 0 2½ | 0 1½ | 0 2¼ | 0 1 | 0 1 | — | 0 0¾ | 0 1¼ |
| Olive Oil ... | 0 0¾ | 0 1 | 0 1 | 0 1¼ | 0 0½ | 0 1 | 0 2 | 0 2 |
| Cheese ... | 0 2½ | 0 2¾ | 0 4 | 0 5¼ | 0 5 | 0 8½ | 0 7½ | 0 10 |
| Milk (fresh) ... | 1 3 | 1 6¼ | 1 10¾ | 2 3 | 2 9¾ | 2 10¾ | 3 4 | 3 0 |
| „ (condensed) ... | 0 2½ | 0 2¼ | 0 3 | 0 1¾ | 0 1½ | 0 0¾ | 0 1 | 0 2½ |
| Eggs ... | 0 7¾ | 1 3¼ | 1 7¼ | 2 4½ | 2 9¼ | 2 9¼ | 3 5½ | 2 10 |
| Tea ... | 0 1¼ | 0 2 | 0 3 | 0 3¾ | 0 6½ | 0 6½ | 1 1½ | 0 7¼ |
| Coffee ... | 0 10¼ | 0 10¾ | 1 0¼ | 1 2¼ | 1 2¼ | 1 5½ | 1 5 | 1 4 |
| Cocoa and Chocolate ... | — | 0 0¾ | 0 0¾ | 0 1¼ | 0 1½ | 0 2 | 0 4¼ | 0 4¾ |
| Sugar ... | 0 9 | 0 9¾ | 1 0½ | 1 2 | 1 3 | 1 6¾ | 1 11¼ | 1 5¼ |
| Molasses and Syrup ... | 0 0½ | 0 1¼ | 0 1¾ | 0 1¾ | 0 1 | 0 1¾ | 0 1¾ | 0 1½ |
| Vinegar Pickles and Con- diments. | 0 2¼ | 0 2½ | 0 2¾ | 0 3½ | 0 3½ | 0 5¼ | 0 7¼ | 0 5 |
| Fruits and Jams ... | 0 2½ | 0 5¾ | 0 9½ | 0 10½ | 1 2¾ | 1 6 | 1 0¼ | 1 4 |
| Other items ... | 0 0½ | 0 1 | 0 1¼ | 0 1 | 0 1½ | 0 1½ | 0 1½ | 0 1¼ |
| Meals away from home... | 0 1 | 0 6¾ | 1 1¼ | 1 1¾ | 1 5¼ | 1 3½ | 6 9¾ | 10 1¾ |
| Total ... | 17 5 | 23 8¼ | 31 3½ | 36 2¼ | 41 9 | 47 11¼ | 57 11¼ | 56 10¼ |

* This figure includes boarders sharing the family food.

IV. BUDGETS OF WORKING-CLASS FAMILIES—*continued.*

(E.) SLAVONIC AND ALLIED PEOPLES GROUP.

Weekly Consumption per Family.

| | Limits of Weekly Family Income. | | | | | | | |
|--|---------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-------------------------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5. (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and over. (8.) |
| Number of Returns ... | 35 | 182 | 162 | 82 | 59 | 33 | 20 | 25 |
| Average Weekly Family Income. | £ s. d. 1 15 5½ | £ s. d. 2 11 2 | £ s. d. 3 9 4½ | £ s. d. 4 8 2½ | £ s. d. 5 6 8½ | £ s. d. 6 10 0½ | £ s. d. 7 8 5½ | £ s. d. 10 4 7½ |
| Average Number of Children living at home. | 1·86 | 2·30 | 2·77 | 3·05 | 3·49 | 4·36 | 4·50 | 4·56 |
| Average Number of Persons per Family.* | 3·86 | 4·34 | 5·05 | 5·61 | 6·27 | 7·09 | 6·85 | 6·76 |
| | lb. | lb. | lb. | lb. | lb. | lb. | lb. | lb. |
| Bread, Wheaten ... | 5·50 | 4·92 | 6·70 | 6·98 | 5·30 | 11·42 | 7·44 | 8·14 |
| „ Rye ... | 3·29 | 5·86 | 6·20 | 5·06 | 8·98 | 9·39 | 7·72 | 6·09 |
| „ Other ... | — | 0·31 | 0·20 | — | 0·31 | 0·39 | 0·30 | 0·55 |
| Flour, Wheaten ... | 4·68 | 6·79 | 9·65 | 10·27 | 11·64 | 12·77 | 13·80 | 8·92 |
| „ Rye ... | 1·94 | 0·68 | 1·07 | 1·20 | 2·14 | 0·87 | 3·65 | 2·64 |
| „ Buckwheat and Other. | — | 0·14 | 0·35 | 0·28 | 0·42 | 0·39 | 0·60 | 1·17 |
| Maize and Maize Meal ... | 1·77 | 1·29 | 1·42 | 0·83 | 0·67 | 0·80 | 0·85 | 1·26 |
| Cakes, Crackers, Doughnuts. | 0·93 | 1·47 | 2·10 | 2·48 | 2·72 | 3·49 | 4·89 | 3·40 |
| Rolls, Buns, Biscuits ... | 0·39 | 1·57 | 1·90 | 2·61 | 3·89 | 3·58 | 4·65 | 7·88 |
| Macaroni, Noodles, Spaghetti. | 0·47 | 0·77 | 0·82 | 0·92 | 0·64 | 0·65 | 1·30 | 0·60 |
| Rice, Barley, Sago, &c. ... | 1·19 | 1·50 | 1·56 | 1·82 | 1·51 | 1·83 | 1·78 | 2·14 |
| Oatmeal and Breakfast Cereals. | 0·62 | 0·55 | 0·84 | 0·99 | 1·10 | 1·14 | 1·31 | 1·12 |
| Potatoes (Irish) ... | 13·05 | 16·97 | 21·49 | 25·02 | 26·23 | 28·03 | 38·90 | 25·08 |
| Sweet Potatoes, &c. ... | 0·33 | 0·56 | 1·41 | 1·58 | 1·29 | 2·00 | 2·85 | 1·54 |
| Dried Peas and Beans ... | 0·98 | 1·33 | 1·51 | 1·54 | 1·42 | 1·53 | 1·40 | 2·12 |
| Beef (fresh and corned) | 4·71 | 4·54 | 5·94 | 6·58 | 7·33 | 7·56 | 8·14 | 5·54 |
| Mutton and Lamb ... | 0·20 | 0·55 | 0·90 | 1·39 | 1·30 | 1·08 | 1·45 | 1·61 |
| Pork (fresh and salt) ... | 1·47 | 3·06 | 3·36 | 4·09 | 4·84 | 5·83 | 4·95 | 4·70 |
| Bacon, Ham, Brawn, &c. | 0·49 | 1·05 | 1·47 | 1·67 | 2·29 | 2·51 | 2·15 | 2·27 |
| Veal ... | 0·34 | 0·84 | 1·23 | 2·01 | 2·15 | 1·94 | 2·68 | 2·14 |
| Sausage ... | 1·85 | 1·50 | 1·74 | 1·78 | 1·92 | 3·20 | 3·28 | 2·56 |
| Poultry ... | — | 0·32 | 0·67 | 0·64 | 1·30 | 1·21 | 1·28 | 2·60 |
| Fish of all kinds... .. | 0·45 | 0·91 | 1·45 | 1·91 | 1·97 | 2·36 | 2·98 | 4·02 |
| Lard, Suet, Dripping ... | 1·03 | 1·28 | 1·64 | 2·04 | 2·07 | 2·08 | 3·30 | 2·04 |
| Butter ... | 0·36 | 0·57 | 0·84 | 1·26 | 1·27 | 1·83 | 2·08 | 2·10 |
| Oleomargarine ... | 0·26 | 0·14 | 0·18 | 0·10 | 0·14 | — | 0·05 | 0·16 |
| | pints. | pints. | pints. | pints. | pints. | pints. | pints. | pints. |
| Olive Oil ... | 0·11 | 0·14 | 0·11 | 0·12 | 0·05 | 0·10 | 0·16 | 0·08 |
| | lb. | lb. | lb. | lb. | lb. | lb. | lb. | lb. |
| Cheese ... | 0·34 | 0·39 | 0·51 | 0·76 | 0·70 | 1·02 | 0·74 | 1·14 |
| | qts. | qts. | qts. | qts. | qts. | qts. | qts. | qts. |
| Milk (fresh) ... | 3·28 | 4·47 | 5·61 | 6·57 | 8·17 | 8·29 | 8·74 | 8·83 |
| „ (condensed) ... | 0·41 | 0·39 | 0·55 | 0·29 | 0·32 | 0·13 | 0·20 | 0·60 |
| | No. | No. | No. | No. | No. | No. | No. | No. |
| Eggs ... | 6·37 | 13·75 | 17·82 | 24·99 | 30·63 | 28·73 | 39·65 | 26·40 |
| | lb. | lb. | lb. | lb. | lb. | lb. | lb. | lb. |
| Tea ... | 0·06 | 0·11 | 0·15 | 0·16 | 0·26 | 0·27 | 0·56 | 0·31 |
| Coffee ... | 1·20 | 1·19 | 1·28 | 1·46 | 1·41 | 1·73 | 1·43 | 1·18 |
| Cocoa and Chocolate ... | — | 0·02 | 0·04 | 0·08 | 0·08 | 0·11 | 0·24 | 0·23 |
| Sugar ... | 3·01 | 3·29 | 4·31 | 4·70 | 5·11 | 6·36 | 7·26 | 5·62 |
| | pints. | pints. | pints. | pints. | pints. | pints. | pints. | pints. |
| Molasses and Syrup ... | 0·11 | 0·25 | 0·34 | 0·33 | 0·18 | 0·41 | 0·19 | 0·24 |

* This figure includes boarders sharing the family food.

IV. BUDGETS OF WORKING-CLASS FAMILIES—*continued.*

(F.) JEWISH GROUP.

Weekly Expenditure per Family.

| | Limits of Weekly Family Income. | | | | | | | |
|--|---------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------------------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5. (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and over. (8.) |
| Number of Returns ... | 5 | 119 | 242 | 148 | 88 | 57 | 36 | 63 |
| Average Weekly Family Income. | £ s. d. 2 12 5½ | £ s. d. 3 8 9 | £ s. d. 4 7 10 | £ s. d. 5 6 7 | £ s. d. 6 7 7½ | £ s. d. 7 7 7 | £ s. d. 10 0 9½ | |
| Average Number of Children living at home. | 2.45 | 2.79 | 3.36 | 4.10 | 4.71 | 4.28 | 4.93 | |
| Average Number of Persons per Family.* | 4.50 | 4.88 | 5.49 | 6.19 | 6.88 | 6.25 | 7.11 | |
| | | | | | | | | |
| Bread, Wheaten ... | s. d. 0 10½ | s. d. 1 5¾ | s. d. 1 8½ | s. d. 2 1½ | s. d. 2 3¾ | s. d. 2 4¾ | s. d. 3 1¾ | s. d. 3 1¾ |
| „ Rye ... | 1 9 | 1 7¼ | 1 6¾ | 1 6½ | 2 3 | 1 9¾ | 1 9¾ | 1 9¾ |
| „ Other ... | 0 1 | 0 0½ | 0 1½ | 0 0¼ | 0 0¼ | 0 0¾ | 0 0¾ | 0 2¼ |
| Flour, Wheaten ... | 0 7 | 0 0 | 0 9¾ | 0 10 | 1 3 | 1 0¾ | 1 2¼ | 1 2¼ |
| „ Rye ... | — | 0 0¼ | 0 0¼ | 0 0¼ | — | — | 0 0¼ | 0 0¼ |
| „ Buckwheat and Other. | 0 0¼ | 0 0½ | 0 0¾ | 0 1 | 0 0½ | 0 1½ | 0 1½ | 0 1½ |
| Maize and Maize Meal ... | 0 0½ | 0 0¾ | 0 0½ | 0 1½ | 0 1½ | 0 1½ | 0 1½ | 0 1¾ |
| Cakes, Crackers, Doughnuts. | 0 6¼ | 0 7½ | 0 9¼ | 0 9¾ | 1 0¾ | 1 2½ | 1 7 | 1 7 |
| Rolls, Buns, Biscuits ... | 0 10 | 1 0¼ | 1 4½ | 1 8½ | 1 9¼ | 1 8¼ | 2 3 | 2 3 |
| Macaroni, Noodles, Spaghetti. | 0 0¾ | 0 1½ | 0 1 | 0 0¾ | 0 1½ | 0 1½ | 0 2 | 0 2 |
| Rice, Barley, Sago, &c. ... | 0 4¼ | 0 5¾ | 0 6½ | 0 6 | 0 6¼ | 0 6¾ | 0 8¼ | 0 8¼ |
| Oatmeal and Breakfast Cereals. | 0 2½ | 0 3¾ | 0 4 | 0 3½ | 0 5¼ | 0 4¾ | 0 9¼ | 0 9¼ |
| Potatoes (Irish) ... | 0 11½ | 1 1 | 1 3½ | 1 4½ | 1 10¼ | 1 5¾ | 1 8½ | 1 8½ |
| Sweet Potatoes, &c. ... | 0 0¾ | 0 1 | 0 1½ | 0 2½ | 0 3 | 0 3¾ | 0 2¼ | 0 2¼ |
| Dried Peas and Beans ... | 0 3¾ | 0 4 | 0 4½ | 0 3½ | 0 4½ | 0 5¼ | 0 5½ | 0 5½ |
| Sweet Corn ... | 0 1½ | 0 1½ | 0 2¼ | 0 3½ | 0 2¾ | 0 5¼ | 0 3¾ | 0 3¾ |
| Green Vegetables, &c. ... | 0 11½ | 1 0¼ | 1 4½ | 1 5 | 2 0½ | 1 7¾ | 2 0 | 2 0 |
| Canned Vegetables ... | 0 0¾ | 0 1¾ | 0 3¼ | 0 2¾ | 0 5¼ | 0 4¼ | 0 7½ | 0 7½ |
| Beef (fresh and corned)... | 4 2¼ | 5 5½ | 6 4¾ | 7 2¾ | 7 6¾ | 6 4½ | 10 2¼ | 10 2¼ |
| Mutton and Lamb ... | 0 1 | 0 2½ | 0 6¼ | 0 3¼ | 0 7½ | 1 6¼ | 1 1¼ | 1 1¼ |
| Pork (fresh and salt) ... | — | — | — | — | — | — | — | — |
| Bacon, Ham, Brawn, &c. | — | — | — | — | — | — | — | — |
| Veal ... | 0 8¼ | 0 6¾ | 1 0½ | 0 10¾ | 1 0¼ | 1 2¾ | 1 6¾ | 1 6¾ |
| Sausage ... | 0 2¼ | 0 3¾ | 0 4½ | 0 4 | 0 7 | 0 6½ | 0 3¼ | 0 3¼ |
| Poultry ... | 1 2½ | 1 9 | 2 6½ | 2 11¾ | 3 8½ | 3 6¾ | 4 1½ | 4 1½ |
| Fish of all kinds... .. | 0 10½ | 1 3 | 1 6¾ | 1 8¾ | 2 0¾ | 2 2 | 2 3½ | 2 3½ |
| Lard, Suet, Dripping ... | 0 1¼ | 0 1¼ | 0 1¼ | 0 2½ | 0 4 | 0 3¼ | 0 2¼ | 0 2¼ |
| Butter ... | 1 7½ | 2 2½ | 2 8½ | 2 10½ | 3 7½ | 3 0½ | 3 10½ | 3 10½ |
| Oleomargarine ... | — | — | — | — | — | — | — | — |
| Olive Oil ... | 0 0¾ | 0 1 | 0 1½ | 0 1½ | 0 1½ | 0 1½ | 0 2½ | 0 2½ |
| Cheese ... | 0 3¼ | 0 4¾ | 0 6¼ | 0 6¼ | 0 9¼ | 0 7¾ | 0 10 | 0 10 |
| Milk (fresh) ... | 2 3½ | 2 3 | 2 8¾ | 2 7¼ | 2 11¾ | 3 1 | 4 0½ | 4 0½ |
| „ (condensed) ... | 0 0¼ | 0 0¾ | 0 1 | 0 1¼ | 0 0½ | 0 0¾ | 0 1¼ | 0 1¼ |
| Eggs ... | 1 6¼ | 2 3¾ | 2 8 | 2 9¼ | 3 6¼ | 3 3½ | 4 3 | 4 3 |
| Tea ... | 0 3½ | 0 5¼ | 0 5¼ | 0 7 | 0 11 | 0 9½ | 0 8¼ | 0 8¼ |
| Coffee ... | 0 6¼ | 0 8¾ | 0 11½ | 0 10¼ | 1 0¾ | 1 0¼ | 1 3 | 1 3 |
| Cocoa and Chocolate ... | 0 1¾ | 0 2 | 0 3 | 0 3 | 0 4¼ | 0 4½ | 0 4 | 0 4 |
| Sugar ... | 0 11¾ | 1 0¾ | 1 2¼ | 1 2¾ | 1 7¼ | 1 7¾ | 1 10¾ | 1 10¾ |
| Molasses and Syrup ... | 0 0¾ | 0 0¼ | 0 0½ | 0 1 | 0 1¼ | 0 1 | 0 1½ | 0 1½ |
| Vinegar, Pickles and Condiments. | 0 2¼ | 0 3 | 0 3½ | 0 3 | 0 4 | 0 4¾ | 0 5¼ | 0 5¼ |
| Fruits and Jams ... | 0 10 | 1 2 | 1 3½ | 1 4¼ | 2 0¾ | 2 1¼ | 2 1½ | 2 1½ |
| Other items ... | 0 2 | 0 2¾ | 0 1½ | 0 3 | 0 3 | 0 3½ | 0 3½ | 0 3½ |
| Meals away from home... | 0 8¾ | 0 10¼ | 2 1¾ | 3 4½ | 2 11¾ | 3 10¼ | 6 2½ | 6 2½ |
| Total ... | 24 11 | 31 2¾ | 39 2¼ | 42 10¼ | 51 11½ | 50 7 | 63 10¾ | 63 10¾ |

* This figure includes boarders sharing the family food.

IV. BUDGETS OF WORKING-CLASS FAMILIES.—*continued.*

(F.) JEWISH GROUP.

Weekly Consumption per Family.

| | Limits of Weekly Family Income. | | | | | | | |
|--|---------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------------------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5. (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and over. (8.) |
| Number of Returns ... | 5 | 119 | 242 | 148 | 88 | 57 | 36 | 63 |
| Average Weekly Family Income. | | £ s. d. 2 12 5½ | £ s. d. 3 8 9 | £ s. d. 4 7 10 | £ s. d. 5 6 7 | £ s. d. 6 7 7½ | £ s. d. 7 7 7 | £ s. d. 10 0 9½ |
| Average Number of Children living at home. | | 2.45 | 2.79 | 3.36 | 4.10 | 4.71 | 4.28 | 4.93 |
| Average Number of Persons per Family.* | | 4.50 | 4.88 | 5.49 | 6.19 | 6.88 | 6.25 | 7.11 |
| | | lb. | lb. | lb. | lb. | lb. | lb. | lb. |
| Bread, Wheaten ... | | 3.91 | 6.71 | 7.62 | 9.21 | 10.07 | 10.00 | 13.98 |
| „ Rye ... | | 9.39 | 8.25 | 7.60 | 7.39 | 9.61 | 8.76 | 8.14 |
| „ Other ... | | 0.59 | 0.28 | 0.91 | 0.08 | 1.29 | 0.31 | 0.92 |
| Flour, Wheaten .. | | 3.63 | 4.39 | 4.91 | 5.16 | 7.82 | 6.30 | 6.84 |
| „ Rye ... | | — | 0.06 | 0.07 | 0.16 | — | — | 0.06 |
| „ Buckwheat and Other. | | 0.15 | 0.25 | 0.30 | 0.51 | 0.21 | 0.59 | 0.71 |
| Maize and Maize Meal ... | | 0.29 | 0.37 | 0.37 | 0.91 | 0.96 | 1.03 | 1.07 |
| Cakes, Crackers, Doughnuts. | | 1.35 | 1.71 | 2.24 | 2.17 | 3.11 | 3.03 | 4.13 |
| Rolls, Buns, Biscuits ... | | 2.75 | 4.25 | 5.52 | 7.25 | 6.04 | 7.07 | 9.80 |
| Macaroni, Noodles, Spaghetti. | | 0.14 | 0.32 | 0.20 | 0.19 | 0.31 | 0.31 | 0.50 |
| Rice, Barley, Sago, &c. ... | | 1.07 | 1.52 | 1.62 | 1.56 | 1.71 | 1.86 | 2.06 |
| Oatmeal and Breakfast Cereals. | | 0.71 | 1.11 | 1.19 | 0.78 | 1.60 | 1.19 | 1.87 |
| Potatoes (Irish) ... | | 12.02 | 13.41 | 15.99 | 16.08 | 22.51 | 17.89 | 18.75 |
| Sweet Potatoes, &c. ... | | 0.68 | 1.05 | 1.22 | 1.98 | 2.84 | 2.81 | 1.44 |
| Dried Peas and Beans ... | | 1.08 | 1.24 | 1.42 | 1.05 | 1.49 | 1.57 | 1.58 |
| Beef (fresh and corned) .. | | 7.22 | 9.24 | 10.37 | 11.67 | 12.28 | 9.81 | 15.70 |
| Mutton and Lamb ... | | 0.14 | 0.34 | 0.77 | 0.43 | 0.98 | 2.01 | 1.47 |
| Pork (fresh and salt) ... | | — | — | — | — | — | — | — |
| Bacon, Ham, Brawn, &c. | | — | — | — | — | — | — | — |
| Veal ... | | 1.05 | 0.87 | 1.49 | 1.24 | 1.46 | 1.83 | 2.17 |
| Sausage ... | | 0.29 | 0.47 | 0.56 | 0.52 | 0.87 | 0.75 | 0.43 |
| Poultry ... | | 1.64 | 2.38 | 3.31 | 3.70 | 4.49 | 4.58 | 5.35 |
| Fish of all kinds... | | 2.26 | 3.02 | 3.63 | 4.05 | 4.59 | 4.87 | 4.59 |
| Lard, Suet, Dripping ... | | 0.24 | 0.26 | 0.28 | 0.48 | 0.81 | 0.65 | 0.55 |
| Butter ... | | 1.18 | 1.61 | 1.96 | 2.09 | 2.55 | 2.23 | 2.85 |
| Oleomargarine ... | | — | — | — | — | — | — | — |
| Olive Oil ... | | pints. 0.11 | pints. 0.14 | pints. 0.14 | pints. 0.12 | pints. 0.16 | pints. 0.09 | pints. 0.26 |
| Cheese ... | | lb. 0.63 | lb. 0.71 | lb. 0.87 | lb. 0.98 | lb. 1.33 | lb. 1.17 | lb. 1.36 |
| Milk (fresh) ... | | qts. 6.81 | qts. 6.91 | qts. 8.51 | qts. 8.21 | qts. 8.95 | qts. 9.48 | qts. 12.87 |
| „ (condensed) ... | | lb. 0.05 | lb. 0.16 | lb. 0.17 | lb. 0.20 | lb. 0.11 | lb. 0.12 | lb. 0.25 |
| Eggs ... | | No. 16.67 | No. 24.18 | No. 28.44 | No. 29.93 | No. 34.18 | No. 35.83 | No. 44.83 |
| Tea ... | | lb. 0.15 | lb. 0.21 | lb. 0.20 | lb. 0.26 | lb. 0.37 | lb. 0.33 | lb. 0.28 |
| Coffee ... | | 0.55 | 0.73 | 0.93 | 0.82 | 1.08 | 1.01 | 1.26 |
| Cocoa and Chocolate ... | | 0.25 | 0.10 | 0.19 | 0.28 | 0.24 | 0.25 | 0.23 |
| Sugar ... | | 4.07 | 4.40 | 4.76 | 5.07 | 6.68 | 6.74 | 7.94 |
| Molasses and Syrup ... | | pints. 0.17 | pints. 0.07 | pints. 0.10 | pints. 0.23 | pints. 0.24 | pints. 0.17 | pints. 0.23 |

* This figure includes boarders sharing the family food.

IV. BUDGETS OF WORKING-CLASS FAMILIES.—*continued.*

(G. 1.) NEGRO (NORTHERN) GROUP.

Weekly Expenditure per Family.

| | Limits of Weekly Family Income. | | | | | | | |
|---|---------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-------------------------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5. (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and over. (8.) |
| Number of Returns ... | 14 | 115 | 96 | 39 | 20 | 13 | 4 | 2 |
| Average Weekly Family Income. | £ s. d. 1 17 5½ | £ s. d. 2 9 6½ | £ s. d. 3 8 5 | £ s. d. 4 8 1 | £ s. d. 5 7 1 | £ s. d. 6 8 0½ | | |
| Average Number of Child- ren living at home. | 2·07 | 2·22 | 2·91 | 3·16 | 3·70 | 4·16 | | |
| Average Number of Per- sons per Family.* | 3·93 | 4·30 | 5·01 | 5·31 | 6·05 | 6·62 | | |
| | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. | | |
| Bread, Wheaten ... | 0 5½ | 0 10 | 1 3¼ | 1 2¼ | 1 4¼ | 0 9¾ | | |
| „ Rye ... | — | — | —† | — | — | — | | |
| „ Other ... | — | —† | — | — | — | — | | |
| Flour, Wheaten ... | 1 5¼ | 1 5¾ | 1 9 | 1 11 | 2 7¾ | 3 9 | | |
| „ Rye ... | — | — | — | — | — | — | | |
| „ Buckwheat and Other. | — | 0 0¼ | 0 0½ | 0 0¾ | 0 2½ | 0 0¾ | | |
| Maize and Maize Meal ... | 0 3¼ | 0 3½ | 0 4 | 0 4¼ | 0 4¼ | 0 8½ | | |
| Cakes, Crackers, Dough- nuts. | 0 2¼ | 0 4¼ | 0 4½ | 0 6¾ | 0 8¼ | 0 8¼ | | |
| Rolls, Buns, Biscuits | 0 0¼ | 0 1½ | 0 2¼ | 0 1¾ | 0 3¼ | 0 0¾ | | |
| Macaroni, Noodles, Spa- ghetti. | 0 1½ | 0 1 | 0 2¼ | 0 2¼ | 0 2½ | 0 3¾ | | |
| Rice, Barley, Sago, &c. ... | 0 3 | 0 3½ | 0 5¼ | 0 5 | 0 6 | 0 8¼ | | |
| Oatmeal and Breakfast Cereals. | 0 2 | 0 2½ | 0 3¼ | 0 6 | 0 5½ | 0 4¼ | | |
| Potatoes (Irish) ... | 0 9 | 0 10¼ | 1 2¼ | 1 3¼ | 1 1 | 1 7½ | | |
| Sweet Potatoes, &c. ... | 0 3 | 0 4¾ | 0 4¼ | 0 6¼ | 0 9¼ | 0 9¾ | | |
| Dried Peas and Beans ... | 0 3 | 0 3¾ | 0 3¾ | 0 5¾ | 0 7 | 0 8 | | |
| Sweet Corn ... | — | 0 1 | 0 1¼ | 0 1¼ | 0 1 | 0 3½ | | |
| Green Vegetables, &c. ... | 0 8 | 1 2¼ | 0 11¾ | 0 11¼ | 1 4 | 0 10¾ | | |
| Canned Vegetables | 0 6¼ | 0 4¾ | 0 7¼ | 0 9¼ | 1 0½ | 1 3½ | | |
| Beef (fresh and corned)... | 1 0¾ | 1 6¾ | 2 7¾ | 3 6¼ | 3 5 | 2 8 | | |
| Mutton and Lamb ... | 0 10 | 0 4¼ | 0 9½ | 1 0¼ | 0 11½ | 1 1¼ | | |
| Pork (fresh and salt) ... | 0 5¼ | 1 3¼ | 1 6¾ | 1 0 | 2 3 | 2 6½ | | |
| Bacon, Ham, Brawn, &c. | 1 5¾ | 1 8¼ | 2 0 | 2 9 | 1 6¼ | 2 0¾ | | |
| Veal ... | — | 0 1¾ | 0 3½ | 0 4½ | 0 7 | 0 6¼ | | |
| Sausage ... | 0 2¾ | 0 6¼ | 0 5¾ | 0 7¾ | 0 7½ | 1 0¾ | | |
| Poultry ... | 0 3¼ | 0 7½ | 1 5 | 2 0½ | 2 2¼ | 2 6½ | | |
| Fish of all kinds... .. | 0 8 | 0 10¼ | 1 2¼ | 1 6¾ | 2 3½ | 1 7¼ | | |
| Lard, Suet, Dripping ... | 0 11 | 1 0 | 0 11¾ | 1 4 | 1 7½ | 1 8½ | | |
| Butter ... | 1 0¾ | 1 1¼ | 1 6 | 1 11 | 2 1½ | 2 7½ | | |
| Oleomargarine ... | — | 0 0¼ | 0 0¼ | — | — | — | | |
| Olive Oil ... | — | 0 0¼ | 0 1 | 0 1 | 0 2¾ | — | | |
| Cheese ... | 0 2 | 0 1¾ | 0 2½ | 0 3¼ | 0 3¾ | 0 3¼ | | |
| Milk (fresh) ... | 0 4 | 0 10 | 1 2½ | 0 9½ | 1 0½ | 1 1¼ | | |
| „ (condensed) ... | 0 2 | 0 2 | 0 2¼ | 0 3¼ | 0 1½ | 0 2 | | |
| Eggs ... | 0 7 | 0 10½ | 1 2 | 1 2¼ | 1 4½ | 1 4½ | | |
| Tea ... | 0 5¾ | 0 3½ | 0 4½ | 0 7¼ | 0 5½ | 0 6 | | |
| Coffee ... | 0 3¾ | 0 5½ | 0 9¼ | 0 7¼ | 0 9¾ | 0 9¾ | | |
| Cocoa and Chocolate ... | — | 0 0½ | 0 1 | 0 0¾ | 0 1¾ | 0 2¼ | | |
| Sugar ... | 0 8¾ | 0 11¼ | 1 0¾ | 1 3½ | 1 5¾ | 1 9 | | |
| Molasses and Syrup ... | 0 0¼ | 0 2¼ | 0 1½ | 0 2 | 0 1½ | 0 2¾ | | |
| Vinegar, Pickles and Con- diments. | 0 1¼ | 0 1½ | 0 1¼ | 0 2¼ | 0 1½ | 0 3¼ | | |
| Fruits and Jams ... | 0 6½ | 0 9¼ | 0 7¼ | 0 9½ | 1 0¼ | 0 6¼ | | |
| Other items ... | — | 0 1¼ | 0 3½ | 0 2 | 0 2¾ | 0 1¼ | | |
| Meals away from home... | — | 0 9 | 0 7 | 1 4½ | 3 5½ | 0 4½ | | |
| Total ... | 15 9½ | 21 9 | 28 1½ | 33 5¼ | 40 1½ | 39 1½ | | |

Not sufficiently represented.

Not sufficiently represented.

* This figure includes boarders sharing the family food.

† Value under ½d.

IV. BUDGETS OF WORKING-CLASS FAMILIES.—*continued.*

(G. 1.) NEGRO (NORTHERN) GROUP.

Weekly Consumption per Family.

| | Limits of Weekly Family Income. | | | | | | | |
|--|---------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-------------------------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5. (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and over. (8.) |
| Number of Returns ... | 14 | 115 | 96 | 39 | 20 | 13 | 4 | 2 |
| Average Weekly Family Income. | £ s. d. 1 17 5½ | £ s. d. 2 9 6½ | £ s. d. 3 8 5 | £ s. d. 4 8 1 | £ s. d. 5 7 1 | £ s. d. 6 8 0½ | | |
| Average Number of Children living at home. | 2·07 | 2·22 | 2·91 | 3·16 | 3·70 | 4·16 | | |
| Average Number of Persons per Family.* | 3·93 | 4·30 | 5·01 | 5·31 | 6·05 | 6·62 | | |
| | lb. | lb. | lb. | lb. | lb. | lb. | | |
| Bread, Wheaten ... | 2·13 | 3·66 | 5·70 | 5·14 | 5·98 | 3·48 | | |
| „ Rye ... | — | — | 0·01 | — | — | — | | |
| „ Other ... | — | 0·03 | — | — | — | — | | |
| Flour, Wheaten ... | 8·39 | 8·85 | 10·45 | 11·64 | 15·85 | 23·12 | | |
| „ Rye ... | — | — | — | — | — | — | | |
| „ Buckwheat and Other. | — | 0·09 | 0·27 | 0·36 | 1·10 | 0·31 | | |
| Maize and Maize Meal ... | 2·46 | 2·75 | 2·89 | 3·23 | 3·23 | 6·39 | | |
| Cakes, Crackers, Doughnuts. | 0·56 | 0·83 | 0·94 | 1·25 | 1·74 | 1·77 | | |
| Rolls, Buns, Biscuits ... | 0·04 | 0·34 | 0·44 | 0·39 | 0·63 | 0·18 | | |
| Macaroni, Noodles, Spaghetti. | 0·31 | 0·21 | 0·50 | 0·51 | 0·57 | 1·15 | | |
| Rice, Barley, Sago, &c. ... | 0·76 | 0·87 | 1·28 | 1·28 | 1·54 | 1·87 | | |
| Oatmeal and Breakfast Cereals. | 0·71 | 0·74 | 1·16 | 2·10 | 1·78 | 1·27 | | |
| Potatoes (Irish) ... | 9·44 | 11·10 | 15·06 | 16·95 | 15·51 | 21·73 | | |
| Sweet Potatoes, &c. ... | 2·91 | 4·31 | 4·65 | 7·42 | 10·09 | 10·33 | | |
| Dried Peas and Beans ... | 1·02 | 1·17 | 0·99 | 1·69 | 2·24 | 2·39 | | |
| Beef (fresh and corned)... | 1·96 | 2·95 | 4·63 | 6·17 | 5·45 | 5·08 | | |
| Mutton and Lamb ... | 1·68 | 0·57 | 1·39 | 1·53 | 1·25 | 1·54 | | |
| Pork (fresh and salt) ... | 0·71 | 2·10 | 2·66 | 1·65 | 3·25 | 4·04 | | |
| Bacon, Ham, Brawn, &c. | 2·23 | 2·70 | 2·96 | 4·30 | 2·55 | 3·37 | | |
| Veal ... | — | 0·24 | 0·49 | 0·56 | 0·83 | 0·85 | | |
| Sausage ... | 0·54 | 1·09 | 1·03 | 1·34 | 1·14 | 2·42 | | |
| Poultry ... | 0·25 | 0·78 | 1·74 | 2·39 | 2·43 | 2·85 | | |
| Fish of all kinds... | 2·34 | 2·24 | 2·58 | 3·40 | 4·24 | 3·54 | | |
| Lard, Suet, Dripping ... | 1·71 | 1·80 | 1·79 | 2·50 | 2·95 | 2·53 | | |
| Butter ... | 0·79 | 0·88 | 1·14 | 1·53 | 1·44 | 1·54 | | |
| Oleomargarine ... | — | 0·02 | 0·02 | — | — | — | | |
| | pints. | pints. | pints. | pints. | pints. | pints. | | |
| Olive Oil ... | — | 0·01 | 0·07 | 0·06 | 0·13 | — | | |
| | lb. | lb. | lb. | lb. | lb. | lb. | | |
| Cheese ... | 0·20 | 0·19 | 0·26 | 0·35 | 0·39 | 0·33 | | |
| | qts. | qts. | qts. | qts. | qts. | qts. | | |
| Milk (fresh) ... | 0·89 | 2·24 | 3·19 | 2·05 | 2·55 | 2·75 | | |
| „ (condensed) ... | 0·34 | 0·32 | 0·38 | 0·52 | 0·26 | 0·34 | | |
| | No. | No. | No. | No. | No. | No. | | |
| Eggs ... | 5·79 | 8·91 | 11·75 | 11·31 | 12·60 | 13·39 | | |
| | lb. | lb. | lb. | lb. | lb. | lb. | | |
| Tea ... | 0·22 | 0·16 | 0·22 | 0·33 | 0·22 | 0·25 | | |
| Coffee ... | 0·37 | 0·54 | 0·83 | 0·61 | 0·78 | 0·82 | | |
| Cocoa and Chocolate ... | — | 0·03 | 0·05 | 0·04 | 0·11 | 0·12 | | |
| Sugar ... | 3·04 | 3·77 | 4·62 | 5·42 | 6·40 | 7·35 | | |
| | pints. | pints. | pints. | pints. | pints. | pints. | | |
| Molasses and Syrup ... | 0·03 | 0·58 | 0·40 | 0·50 | 0·37 | 0·74 | | |

Not sufficiently represented.

Not sufficiently represented.

* This figure includes boarders sharing the family food.

IV. BUDGETS OF WORKING-CLASS FAMILIES.—*continued.*

(G. 2.) NEGRO (SOUTHERN) GROUP.

Weekly Expenditure per Family.

| | Limits of Weekly Family Income. | | | | | | | |
|--|---------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------------------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5. (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and over. (8.) |
| Number of Returns ... | 52 | 90 | 50 | 28 | 18 | 12 | 5 | 21 |
| Average Weekly Family Income. | £ s. d. 1 13 6½ | £ s. d. 2 9 4 | £ s. d. 3 9 1½ | £ s. d. 4 7 10½ | £ s. d. 5 7 11 | | | £ s. d. 9 18 7 |
| Average Number of Children living at home. | 1·79 | 1·83 | 2·10 | 3·21 | 2·78 | | | 4·10 |
| Average Number of Persons per family.* | 3·79 | 3·90 | 4·20 | 5·29 | 4·83 | | | 6·10 |
| | s. d. | s. d. | s. d. | s. d. | s. d. | | | s. d. |
| Bread Wheaten ... | 0 7¼ | 0 7½ | 0 11½ | 1 1½ | 0 11¼ | | | 1 5 |
| „ Rye ... | —† | 0 0¼ | 0 0¼ | 0 0¼ | — | | | 0 0¼ |
| „ Other ... | — | 0 0¼ | 0 1 | — | — | | | — |
| Flour, Wheaten ... | 1 3¼ | 1 7 | 1 7½ | 2 0 | 2 4 | | | 2 6¾ |
| „ Rye ... | — | — | — | 0 0¾ | — | | | — |
| „ Buckwheat and Other. | —† | 0 0½ | 0 1¾ | 0 0¾ | 0 3 | | | 0 2¾ |
| Maize and Maize Meal ... | 0 8¼ | 0 8½ | 0 5½ | 0 11 | 0 9¼ | | | 0 10¾ |
| Cakes, Crackers, Doughnuts. | 0 1 | 0 2½ | 0 4½ | 0 5¼ | 1 0¼ | | | 1 4¾ |
| Rolls, Buns, Biscuits ... | 0 1 | 0 1 | 0 0½ | 0 2¼ | 0 4 | | | 0 5½ |
| Macaroni, Noodles, Spaghetti. | 0 2½ | 0 3½ | 0 4 | 0 4½ | 0 5 | | | 0 7¼ |
| Rice, Barley, Sago, &c. ... | 0 7¼ | 0 9½ | 0 10¼ | 1 0 | 0 9¼ | | | 1 3¼ |
| Oatmeal and Breakfast Cereals. | 0 1½ | 0 2¾ | 0 2¾ | 0 4¾ | 0 4 | | | 0 3¼ |
| Potatoes (Irish) ... | 0 4 | 0 5¾ | 0 8¼ | 0 9 | 0 8½ | | | 1 0½ |
| Sweet Potatoes, &c. ... | 0 4¾ | 0 6¼ | 0 9¼ | 0 10 | 0 9½ | | | 1 4¼ |
| Dried Peas and Beans ... | 0 4¼ | 0 6 | 0 6½ | 0 6¾ | 0 6¼ | | | 0 8½ |
| Sweet Corn ... | 0 0¾ | 0 1¼ | 0 2¾ | 0 4 | 0 4 | | | 0 9¾ |
| Green Vegetables, &c. ... | 0 6¾ | 0 8¾ | 1 0¾ | 1 1½ | 1 3¼ | | | 2 0¼ |
| Canned Vegetables ... | 0 1¼ | 0 4½ | 0 6¼ | 0 11 | 0 7 | | | 1 1½ |
| Beef (fresh and corned)... | 1 0¼ | 1 6½ | 2 2 | 3 2¾ | 4 9¾ | | | 6 10 |
| Mutton and Lamb ... | 0 0¼ | 0 1 | 0 4 | 0 2¾ | — | | | 1 2 |
| Pork (fresh and salt) ... | 1 7½ | 1 5 | 1 7¼ | 2 3½ | 1 3¼ | | | 2 2 6¾ |
| Bacon, Ham, Brawn, &c. | 0 8¼ | 1 5 | 1 5 | 1 10¼ | 1 3½ | | | 2 7¼ |
| Veal ... | 0 0¾ | 0 1 | 0 0¾ | 0 1¼ | 0 4 | | | 0 3¼ |
| Sausage ... | 0 3¾ | 0 5 | 0 5¼ | 0 8¼ | 0 8½ | | | 1 5¾ |
| Poultry ... | 0 3¼ | 0 2¼ | 0 9¾ | 1 0½ | 1 5¾ | | | 2 5¼ |
| Fish of all kinds ... | 0 6¾ | 0 10¼ | 0 9¼ | 1 5¾ | 1 4¼ | | | 1 4¼ |
| Lard, Suet, Dripping ... | 0 10¾ | 1 0¾ | 1 2¼ | 1 5¾ | 1 8¼ | | | 1 11¼ |
| Butter ... | 0 6¾ | 0 11 | 1 2¼ | 1 9¾ | 1 11 | | | 2 1½ |
| Oleomargarine ... | —† | — | 0 0¼ | 0 1¼ | — | | | 0 0¼ |
| Olive Oil ... | — | 0 0¼ | 0 0½ | 0 0¼ | 0 0½ | | | 0 4 |
| Cheese ... | 0 2¼ | 0 3¾ | 0 6 | 0 9½ | 0 8¾ | | | 0 8 |
| Milk (fresh) ... | 0 2 | 0 4¼ | 0 7¾ | 0 10 | 1 2 | | | 1 4¼ |
| „ (condensed) ... | 0 4¾ | 0 6½ | 0 7 | 0 6½ | 0 6 | | | 0 10 |
| Eggs ... | 0 4½ | 0 7¾ | 0 11¾ | 1 4¾ | 1 4¾ | | | 1 11¾ |
| Tea ... | 0 2 | 0 2½ | 0 5 | 0 4¾ | 0 6½ | | | 0 8½ |
| Coffee ... | 0 7 | 0 9 | 0 9¼ | 0 9 | 0 9¾ | | | 1 1½ |
| Cocoa and Chocolate ... | 0 0¼ | 0 0½ | 0 0¾ | 0 2¼ | 0 1 | | | 0 2¼ |
| Sugar ... | 0 8¾ | 0 10¾ | 1 1½ | 1 4 | 1 5½ | | | 1 10 |
| Molasses and Syrup ... | 0 3 | 0 4¼ | 0 4 | 0 6 | 0 5¾ | | | 0 8½ |
| Vinegar, Pickles and Condiments. | 0 1 | 0 1½ | 0 3 | 0 3¾ | 0 2¾ | | | 0 9¼ |
| Fruits and Jams ... | 0 2 | 0 2¾ | 0 5¾ | 0 7½ | 0 6½ | | | 1 2½ |
| Other items ... | 0 0¾ | 0 0¼ | 0 3¼ | 0 2¼ | 0 1½ | | | 0 8¼ |
| Meals away from home... | 0 2½ | 0 1¼ | 0 4 | 0 3½ | 0 4¾ | | | 1 0¾ |
| Total ... | 14 11 | 19 11¼ | 25 9¼ | 33 6¾ | 34 8¼ | | | 52 5¼ |

Not sufficiently represented.

Not sufficiently represented.

* This figure includes boarders sharing the family food.

† Value under ¼d.

IV. BUDGETS OF WORKING-CLASS FAMILIES—*continued.*

(G. 2.) NEGRO (SOUTHERN) GROUP.

Weekly Consumption per Family.

| | Limits of Weekly Family Income. | | | | | | | |
|---|---------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-------------------------|
| | Under £2. (1.) | £2 and under £3. (2.) | £3 and under £4. (3.) | £4 and under £5. (4.) | £5 and under £6. (5.) | £6 and under £7. (6.) | £7 and under £8. (7.) | £8 and over. (8.) |
| Number of Returns ... | 52 | 90 | 50 | 28 | 18 | 12 | 5 | 21 |
| Average Weekly Family Income. | £ s. d. 1 13 6½ | £ s. d. 2 9 4 | £ s. d. 3 9 1½ | £ s. d. 4 7 10½ | £ s. d. 5 7 11 | | | £ s. d. 9 18 7 |
| Average Number of Child- ren living at home. | 1·79 | 1·83 | 2·10 | 3·21 | 2·78 | | | 4·10 |
| Average Number of Per- sons per Family.* | 3·79 | 3·90 | 4·20 | 5·29 | 4·83 | | | 6·10 |
| | lb. | lb. | lb. | lb. | lb. | | | lb. |
| Bread, Wheaten ... | 2·64 | 2·83 | 4·25 | 4·43 | 3·90 | | | 6·22 |
| „ Rye ... | 0·02 | 0·07 | 0·08 | 0·05 | — | | | 0·11 |
| „ Other ... | — | 0·07 | 0·50 | — | — | | | — |
| Flour, Wheaten ... | 7·70 | 9·78 | 9·47 | 10·85 | 13·28 | | | 13·83 |
| „ Rye ... | — | — | — | 0·18 | — | | | — |
| „ Buckwheat and Other. | 0·02 | 0·19 | 0·70 | 0·32 | 1·22 | | | 1·67 |
| Maize and Maize Meal ... | 5·63 | 6·53 | 3·79 | 8·98 | 6·58 | | | 9·88 |
| Cakes, Crackers, Dough- nuts. | 0·30 | 0·45 | 1·25 | 0·93 | 1·85 | | | 3·43 |
| Rolls, Buns, Biscuits ... | 0·21 | 0·20 | 0·13 | 0·64 | 0·92 | | | 1·60 |
| Macaroni, Noodles, Spa- ghetti. | 0·90 | 1·09 | 1·25 | 1·13 | 1·11 | | | 1·83 |
| Rice, Barley, Sago, &c. ... | 2·25 | 3·07 | 3·47 | 3·10 | 2·82 | | | 5·10 |
| Oatmeal and Breakfast Cereals. | 0·61 | 0·82 | 0·97 | 1·45 | 0·97 | | | 1·07 |
| Potatoes (Irish) ... | 3·02 | 4·33 | 5·92 | 6·89 | 7·17 | | | 9·49 |
| Sweet Potatoes, &c. ... | 3·28 | 4·70 | 6·22 | 6·58 | 7·35 | | | 12·08 |
| Dried Peas and Beans ... | 1·75 | 2·07 | 2·24 | 1·66 | 2·47 | | | 2·82 |
| Beef (fresh and corned)... | 2·37 | 3·10 | 4·62 | 4·86 | 8·47 | | | 12·21 |
| Mutton and Lamb ... | 0·02 | 0·14 | 0·42 | 0·25 | — | | | 1·62 |
| Pork (fresh and salt) ... | 3·28 | 2·56 | 2·67 | 4·03 | 2·25 | | | 4·42 |
| Bacon, Ham, Brawn, &c. | 1·44 | 2·64 | 2·49 | 3·16 | 2·10 | | | 4·12 |
| Veal ... | 0·06 | 0·15 | 0·08 | 0·14 | 0·53 | | | 0·35 |
| Sausage ... | 0·78 | 0·90 | 0·90 | 1·48 | 1·48 | | | 2·86 |
| Poultry ... | 0·37 | 0·26 | 1·11 | 1·43 | 2·11 | | | 2·63 |
| Fish of all kinds... .. | 1·24 | 1·72 | 1·52 | 2·84 | 2·81 | | | 2·81 |
| Lard, Suet, Dripping ... | 1·99 | 2·24 | 2·56 | 3·00 | 2·72 | | | 4·12 |
| Butter ... | 0·49 | 0·75 | 0·95 | 1·57 | 1·48 | | | 1·77 |
| Oleomargarine ... | 0·01 | — | 0·04 | 0·14 | — | | | 0·02 |
| Olive Oil ... | pints. — | pints. 0·01 | pints. 0·03 | pints. 0·02 | pints. 0·02 | | | pints. 0·28 |
| Cheese ... | lb. 0·25 | lb. 0·40 | lb. 0·60 | lb. 0·98 | lb. 0·90 | | | lb. 0·80 |
| Milk (fresh) ... | qts. 0·74 | qts. 1·24 | qts. 1·56 | qts. 1·99 | qts. 2·88 | | | qts. 3·09 |
| „ (condensed) ... | lb. 0·81 | lb. 1·14 | lb. 1·30 | lb. 1·19 | lb. 1·07 | | | lb. 1·73 |
| Eggs ... | No. 4·21 | No. 7·68 | No. 11·56 | No. 16·68 | No. 17·56 | | | No. 25·38 |
| Tea ... | lb. 0·09 | lb. 0·11 | lb. 0·21 | lb. 0·18 | lb. 0·24 | | | lb. 0·32 |
| Coffee ... | 0·66 | 0·85 | 0·76 | 0·77 | 0·78 | | | 1·19 |
| Cocoa and Chocolate ... | 0·02 | 0·04 | 0·09 | 0·14 | 0·07 | | | 0·12 |
| Sugar ... | 3·02 | 3·68 | 4·64 | 5·44 | 6·17 | | | 8·21 |
| Molasses and Syrup ... | pints. 0·58 | pints. 1·04 | pints. 0·85 | pints. 1·35 | pints. 1·29 | | | pints. 1·27 |

Not sufficiently represented.

Not sufficiently represented.

* This figure includes boarders sharing the family food.

APPENDICES.

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APPENDIX I.

A.—WAGES AGREEMENTS, WORKSHOP AND COLLIERY RULES AND PROVISIONS FOR SETTLING DISPUTES.

(1.) RULES AND REGULATIONS FOR MACHINISTS AND MACHINISTS' APPRENTICES, CHARLESTON AND WESTERN CAROLINA RAILWAY COMPANY (January 1, 1907).

1. Ten hours will constitute a day's work.
 2. One hour and one-half will be allowed for each hour's service in excess of ten hours.
 3. One hour and one-half will be allowed for each hour's service on Sunday, January 1st, February 22nd, Memorial Day, July 4th, Labour Day, Thanksgiving Day and December 25th; when legal holidays fall on Sunday the above will apply on the following Monday.
 4. Employees called back to the shop after having performed their regular day's work will be paid for not less than five hours.
 5. When employes are sent out on the road, they shall be allowed time and one-half from time they are called out until they return, they to pay their own expenses. This does not apply to the wrecking forces, or to others regularly assigned to road service.
 6. There will be one apprentice for each shop, and in addition, not more than one apprentice for every five mechanics. It is understood that in shops where the ratio is more than the above, no change will be made until the ratio has reduced itself to the proper ratio by elapse or expiration of existing contracts. The apprentices at large will be confined to the districts in which the shops to which they are assigned are located. In computing the number of apprentices to be employed in each divisional shop, all of the mechanics employed at outlying points under the jurisdiction of that shop shall be counted.
 7. When a reduction in force is necessary, employees who have others dependent upon them for support will be given preference of employment, seniority and proficiency to govern.
 8. Except for intoxication, insubordination, gross negligence, incompetency or reduction of force, employees will not be discharged without a hearing.
 9. When an employee has a grievance he shall make a personal effort to adjust same with the general foreman and the master mechanic; if not settled in this manner satisfactorily he may then place it in the hands of a committee of employees who shall try to settle it with the master mechanic; failing to do so the committee may appeal the matter through the master mechanic to the general superintendent.
- If an employee considers he has been unjustly discharged he may appeal to the general foreman and master mechanic within three days after his dismissal; if the matter is not satisfactorily adjusted he may appeal higher in accordance with the preceding paragraph. If it is decided that he has been unjustly discharged, or suspended, he will be reinstated and be paid for the time lost.
10. When vacancies occur, employees will be given consideration for promotion—proficiency, character and seniority to prevail.
 11. Shop employees will be given the same privilege in regard to free transportation over this line as other employees.
 12. When an employee is discharged or leaves the service, he shall be paid his wages within three days.
 13. Handy men will not be used to the detriment of machinists.

(2.) WORKING RULES OF BRICKLAYERS AND STONEMASONS IN CHICAGO.

Section 1.—Working Hours.—Eight hours shall constitute a day's work to be performed between the hours of 8 a.m. and 5 p.m., except on Saturdays, when work may stop at 12 o'clock noon, with four hours' pay for that day. All bricklayers shall be on the scaffold ready to start work at starting time.

Section 2.—Night Work.—Eight hours shall constitute a night's work, which shall commence at 7 p.m., when two gangs are employed but when three gangs are employed, one shift may follow the other immediately and in that way work may be continuous. Shifts to start as follows: First at 8 a.m., second at 4 p.m. and third at 12 midnight.

Section 3.—Overtime.—Time and one-half to be paid for overtime. Work done between the hours of 5 p.m. and 8 a.m., also on Saturday afternoons, shall be paid for as overtime, when one or two shifts of men are employed on the job. No contractor shall work his men overtime except in case of actual necessity, the contractor to be the judge of the necessity, and for such overtime time and one-half shall be paid. Notice shall be given to the office of the Bricklayers' Union before 12 noon when a contractor desires to carry on his work on Saturday afternoons.

Section 4.—Double Time Holidays.—Double time to be paid for work done on Sundays throughout the year, and also for work done on the following five holidays (or days celebrated as such): New Year's Day, Decoration Day, Fourth of July, Thanksgiving Day and Christmas Day.

Section 5.—Shift Work.—Where work is carried on with three shifts of men, working eight hours each, then only single time shall be paid for both night and day work during week days and double time for Sundays and the above-mentioned holidays; this does not apply to cupola lining, retort or conduit work. No work shall be done in the 24 hours on Labour Day. Work done

between the hours of twelve o'clock Saturday night and twelve o'clock Sunday night, shall be considered as Sunday work and be paid for at the rate of double time. This applies also to the five holidays before mentioned.

Section 6.—Wages.—The minimum rate of wages to be paid bricklayers and stone masons shall be sixty-seven and one-half cents [2s. 9½d.] per hour, payable in lawful money of the United States, or checks.

Section 7.—Reduction of Premium Wages.—Hereafter, when more than the minimum rate of wages is paid, no employer shall make a reduction in the wages of a bricklayer or stone mason without giving said man or men due notice the day previous to making said reduction. If an employee, upon receiving such notice, desires to terminate his employment he shall be paid the same as though he had been discharged.

Section 8.—Pay Day.—It is hereby agreed that the journeymen shall be paid on the job and before one p.m. every week on Saturdays. When a journeyman is discharged he shall be paid in full, and also when he is laid off if he demands it, except when the lay-off is caused by bad weather or joists high. When a journeyman quits of his own accord he shall receive his pay at the next regular day. Journeymen shall receive no subs. Journeymen shall be paid up to Thursday night.

Section 9.—Time Checks.—Time checks payable at the office of the employer shall be considered valid, providing the journeyman be allowed a half hour's extra time for each mile he has to travel to get to the office; said travelling time shall be added to the time check by person issuing same. If he is not paid promptly upon his arrival at the office, and if he remains there during working hours until he is paid, he shall be paid the regular wages for such waiting time.

Section 10.—Branches of Work.—The following branches of work are covered by this agreement: Laying of rubble stone and bridge masonry; all kinds of brick work (except main sewer work); setting of cut stone and setting and trimming of terra cotta.

Section 11.—Stone Work.—The stone masons shall cut and trim all broken ashlar, range, rock-faced and worm work, and all rough jambs and quoins in building work, and all rough, pitched face, bridge, viaduct and pier work, cut from limestone in the County of Cook, provided that there can be had a sufficient number of competent stone masons to do said work; otherwise the contractor or contractors, after giving previous notice to the president of the U.O.A.B. & S.M., No. 21, of the City of Chicago, County of Cook, of the B. & M.I.U. to furnish said men, has the right to employ stone cutters to finish said job.

Section 12.—The levelling off of all footing stone shall be done by stone masons. No stone cut by convict labour will be set.

Section 13.—Cutting of all window and door openings and joist holes in brick, stone or tile walls, and bedding of all iron plates shall be done by a practical mason.

Section 14.—The line on brick work shall be put up but one course at a time, except in case of obstruction of piers, and then only with the consent of the masons doing the work.

Section 15.—Members of the O.U. of A.B. & S.M., No. 21, of Cook County, City of Chicago, of the B. & M.I.U. holding a bricklayer's card, will not lay stone, and those holding a stone mason's card will not lay brick, but the foreman and apprentice may do both. The exceptions to this rule are in case of areas, or step or pier foundations, that do not exceed one cord of stone, and then only in case no stone mason is at hand, when a bricklayer may lay the stone in said areas or pier foundation. Plastering and pointing of foundation walls shall be done by stone masons, but may be done by bricklayers if stone masons are not on the job when the above work is ready to be done.

Section 16.—No stone setting contractor that does not employ one journeyman stone setter shall set stone himself.

Section 17.—Foundations and walls, either of brick, stone or concrete, shall be done under the supervision of a practical mason.

Section 18.—Members of the U.O.A.B & S.M., No. 21, of the City of Chicago, County of Cook, of the B. & M.I.U., will not work on any building for any contractor or firm where two or more members in the same firm work on the wall laying brick, rubble or dimension stone or set cut stone or terra cotta. The contractor or the members of the firm working must be a practical mason.

Section 19.—Members of the both parties will not work on or take contract for any building or job where there remains money due to members of either of the parties to this agreement.

Section 20.—All bricklayers shall be obliged to have a trowel, brick hammer and plumb rule of their own, on all jobs of mason work. The bricklayer not furnishing said tools, after being given one day's notice, can be laid off and shall wait until pay day for his money. Contractors shall arrange a suitable place to keep tools.

Section 21.—Contractors are to observe the following rule: When a contractor applies to the Bricklayers' Hall for men, he shall notify that office when he has enough men on his job. Contractors advertising for bricklayers shall sign their names to all such advertisements.

Section 22.—Each employer shall have the right to teach his trade to apprentices, but no contractor or firm shall take more than one new apprentice each year, and they shall serve for a period of not less than three years, and be subject to the control of the Joint Board of Arbitration.

(3.) WORKING RULES OF HOD CARRIERS AND BUILDERS' LABOURERS IN CHICAGO.

Eight hours shall constitute a day's work, to be performed between the hours of 8 a.m. and 5 p.m. All labourers shall start ten (10) minutes before starting time in the morning and at noon for the purpose of preparing for the bricklayers and stone masons, so that they can start on time. If it becomes necessary to work before ten (10) minutes to 8 in the morning, to be ready for mechanics to go to work at 8 o'clock, such work shall be paid for at the rate of time and one-half.

Work performed between hours of 5 p.m. and 8 a.m. and also on Saturday afternoons, shall be paid for at the rate of time and one-half. No contractor shall work his labourers more than four hours on Saturday in any shift unless time and one-half is paid for all time worked more than four hours.

Double time to be paid for work performed on Sundays throughout the year, also for work done on the following five holidays (or days celebrated as such): New Year's Day, Decoration Day, Fourth of July, Thanksgiving Day and Christmas Day.

When work is carried on with two or three shifts of men working eight hours each, except as provided in Rules 1, 2 and 3, then only single time shall be paid for both night and day work during week days and double time for Sundays and the above-mentioned five holidays.

Wages thirty-seven and one-half cents [1s. 6½d.] per hour from July 1st, 1909, to May 1st, 1912, payable in lawful money of the United States, or checks.

The wages for caisson digging and lagging from July 1st, 1909, to May 1st, 1912, fifty-two and one-half cents [2s. 2½d.] per hour; for windlass and nigger-head men, forty-seven and one-half cents [1s. 11½d.] per hour.

Labourers shall be paid on the job and before twelve-thirty (12.30) p.m. every week on Saturdays. When a labourer is discharged he shall be paid in full, and also when he is laid off, if he demands it, except when the lay-off is caused by bad weather or joists high. When a labourer quits of his accord he shall receive his pay at the next regular pay day. Labourers shall receive no subs. Labourers shall be paid up to Thursday night.

Time checks, payable at the office of the employer, shall be considered valid, provided the labourer be allowed a half-hour's time for each mile he has to travel to get to the office. If he is not paid promptly upon his arrival at the office, and if he shall remain there during working hours until he is paid, he shall be paid the regular wages for such waiting time.

The labourers shall do all the labour work pertaining to masonry, in all its branches, and any other work directed by the contractor, his agent or foreman.

The building of all scaffolding for mason work.

Concrete work within the walls of any building or job.

The raising, moving and shoring of all buildings.

The labouring work excluded is the general excavations for buildings to the bottom of the basement floor level. If there are sub-basements or cellars covered by the whole building, then the general excavation shall be considered to extend to the bottom of floor of same, provided excavated material is loaded directly into wagons in the cellar and pulled out by teams without any intermediate handling.

The wrecking work excluded is where a whole building is entirely wrecked and removed to clear the site of same, but where a building is only partly wrecked or parts torn down for the purpose of building additions, alterations, remodelling, or repairs to same, such work is covered by this agreement.

Any trench going ten feet below the first basement floor shall be considered as caisson digging, and paid for at caisson rates.

(4.) AGREEMENT BETWEEN THE CARPENTERS' AND BUILDERS' ASSOCIATION AND THE CARPENTERS' EXECUTIVE COUNCIL OF CHICAGO, COOK COUNTY AND VICINITY.

(In effect from April 1st, 1909 to April 1st, 1912.)

Article 1.—This agreement made this 28th day of January, 1909, and in effect from the 1st day of April, 1909 (to April 1, 1912), by and between the Carpenters' and Builders' Association (Employers) and the Carpenters' Executive Council, party of the second part, for the purpose of preventing strikes and lockouts and facilitating a peaceful adjustment of all grievances and disputes which may arise from time to time between the employer and mechanics in the carpenter trade in Chicago and Cook County and vicinity.

Article 2.—*No Outside Interference.*—All parties to this agreement hereby covenant, contract and agree that they will not tolerate or recognize the right of any other Association, Union, Council or body of men not directly parties hereto, to interfere with the carrying out of this agreement, and that they will use all lawful means to compel their members to comply with the arbitration agreement and working rules as jointly agreed upon and adopted.

Article 3.—*Principles Upon Which This Agreement Are Based.*—All parties hereto, this day hereby adopt the following principles as an absolute basis for their joint working rules, and to govern the action of the Joint Arbitration Board as hereinafter provided for.

Section 1. That there shall be no limitation as to the amount of work a man shall perform during his working day.

Section 2. That there shall be no restrictions as to the use of machinery or tools.

Section 3. That there shall be no restriction of the use of any manufactured material, except prison made.

Section 4. That no person shall have the right to interfere with the workmen during working hours.

Section 5. The use of apprentices shall not be prohibited.

Section 6. The foreman shall be the agent of the employer. He shall be a Union carpenter, a competent mechanic at the trade and subject to the decision of the Joint Arbitration Board.

Section 7. That all workmen are at liberty to work for whomsoever they see fit.

Section 8. That all employers are at liberty to employ and discharge whomsoever they see fit.

Article 4.—*Hours.*—Eight hours shall constitute a day's work between the hours of 8 a.m. and 5 p.m., except on Saturday when work shall stop at 12 o'clock noon, with four hours' pay for that day.

Article 5.—*Overtime and Holidays.*—Double time shall be paid for all work done after the regular workday and there shall be an intermission of not less than thirty minutes before resuming work. Double time shall be paid for all work done from 12.30 Saturday noon until Monday morning 7.30 a.m. and the following five holidays or days celebrated as such: Decoration Day, Fourth of July, Thanksgiving Day, Christmas Day and New Year's Day. Sunday and holiday time to cover any time during the twenty-four hours of said calendar day.

Article 6.—Extra Shifts.—When work is carried on in two or more shifts the second and third shifts shall receive eight hours' pay for seven hours' work, any less than seven hours to be considered as overtime, unless owing to bad weather or conditions beyond control of contractor the same men shall not work on more than one shift. Double time for all Sundays and above-mentioned holidays.

Article 7.—Labour Day.—No work shall be done on Labour Day except by consent of the two Presidents.

Article 8.—Wages.—The minimum rate of wages to be paid from April 1, 1909, until July 5, 1909, shall be 56½ cents [2s. 4½d.] per hour, and from July 5, 1909, until April 1, 1912, the wages shall be 60 cents [2s. 6d.] per hour, payable in currency of the United States. The party of the second part shall receive the wages agreed upon by the Joint Arbitration Board in this trade under all circumstances, and it is further agreed by the parties of the first part to hire no one in this trade except whom he or they shall pay the wages agreed upon by the Joint Arbitration Board.

Article 9.—Pay Day.—It is agreed that the workmen shall be paid on Tuesday of each week. The wages to be paid on the work in full up to and including the Saturday night preceding pay day, and not later than quitting time. When the workman quits of his own accord he shall receive his pay on the next regular pay day. When a man is discharged or laid off, if he so requests, he shall be paid either in cash on the work or given a time check, with one hour extra for travelling time. Said extra hour to be added by the person giving the time check, which shall be paid upon the presentation at the office of the employer. And if it is not paid promptly upon his arrival at the office, and if he remains there during working hours, he shall be paid the minimum wages for such waiting time, Sunday or holiday time excepted.

Article 10.—Piece Work.—No member of the parties of the first part shall sublet piece or lump out their carpenter work. Neither shall any Journeyman who is a member of the party of the second part be permitted to take piece or lump work in any shape or manner nor work for any owner or contractor who does piece or lump work, whether he be a member of the party of the first part or not. Contracting firms having two or more members, then only one of them shall use the tools on any job.

Article 11.—The following items of carpenter work are covered by this agreement: The furnishing of all material by the party of the first part. By the party of the second part the labour required for all carpenter work in the erection and completion of any and all buildings and jobs. The erection of all staging and scaffolding (except that built by masons with horses and planks), all false wood work, all floors, wood centres for all arches, sidewalk and building protections, boxing for all concrete foundations, wall and piers, and all wood work in connection with other trades, cutting for butts, fitting and hanging of transoms and doors, including wardrobe and china closet doors, boring for locks, cutting for letter plates, coping and mitreing base, chair rail and plate rail; butting and nailing in all stops, building and erecting all stairs, fitting and applying all hardware.

Article 12.—Working With Non-Union Men.—The party of the second part shall not work with carpenters except they are affiliated with the Carpenters' Executive Council, and no member or members affiliated with the party of the second part shall leave his work because non-union men in any other line of work or trade are employed on any other building or job. No member or parties to this agreement shall work on any building or job where labourers or any other trade are permitted to do carpenter work of any kind. In case of any violation of this agreement the same shall be reported at once to the presidents of the association and union, or their representatives, parties hereto, and in case the presidents or their representatives cannot secure a settlement of such violations within 24 hours, work shall stop.

Article 13.—Steward.—Wherever two or more journeymen members of the second party are working together, a steward shall be selected by them from their number to represent them, who shall while acting as steward be subject to the rules and decisions of the Joint Arbitration Board. No salary shall be paid to a journeyman for acting as steward. He shall not leave his work or interfere with the workingmen during working hours, and shall perform his duties as steward so as not to interfere with his duty to his employer. He shall always while at work carry a copy of the working rules with him, and shall report all violations of this agreement.

Article 14.—Arbitration.—All parties hereto agree that any and all disputes between any member or members of the Employers' Association on the one side and any member or members of the Union on the other side, during the life of this agreement shall be settled by arbitration, in the manner hereinafter provided for and for that purpose all parties hereto agree that they will at their annual election each year, elect an arbitration committee to serve one year, except the Carpenters' and Builders' Association of Chicago. See Section Three of Article Five of their constitution—and until their successors are elected and qualified. In case of death, expulsion, removal or disqualification of a member or members of the Arbitration Committee such vacancy shall be filled by the Association or Union at its next regular meeting. The Arbitration Committee of each of the two parties hereto shall consist as follows: Five members from the Carpenters' and Builders' Association, and five members from the Carpenters' Executive Council, and they shall meet not later than the second Thursday in October of each year in joint session when they shall organise a Joint Arbitration Board by electing a president, secretary and treasurer and umpire. Said board shall meet in time to report complete findings on new agreement not later than the first of December of that year.

The Joint Arbitration Board shall have full power to enforce this agreement entered into between the parties hereto and enforce all lawful working rules governing both parties. When a dispute or grievance arises between a journeyman and employer, parties hereto or an apprentice and his employer, the question at issue shall be submitted in writing to the presidents of the two organizations and upon their failure to agree and settle it, or if one party to the dispute is dissatisfied with the decision it shall be submitted to the Joint Arbitration Board at their next regular meeting. If the Joint Arbitration Board is unable to agree, the umpire shall be requested to sit with them, and after he has heard the evidence, cast the deciding vote. All verdicts shall be decided by a roll call, be rendered in writing and be final and binding on all the parties to the dispute.

Article 15.—Who are Qualified to Serve on the Arbitration Board.—No member who is not actively engaged in the trade or who holds a public office, either elective or appointive, under the municipal, county or state or national government, shall be eligible to sit as the representative in this

Trade Arbitration Board, and any member shall become disqualified to sit as a member of this Joint Arbitration Board and cease to be a member thereof immediately upon his election or appointment to any public office or employment.

Article 16.—Umpire.—An umpire shall be selected who is in no wise affiliated or identified with the building industry, and who is not an employee or an employer of labour nor an incumbent of a political office.

Article 17.—Meetings.—The Joint Arbitration Board shall meet to transact routine business the first Thursday in each month, but special meetings shall be called on three days' notice by the presidents of the two organizations, or upon application of three members of the Joint Arbitration Board.

Article 18.—Fines.—The Joint Arbitration Board has the right to summon any member or members affiliated with any of the parties hereto, against whom complaints are lodged for breaking this agreement or working rules, and also appear as witnesses. The summons shall be handed to the president of the association or union to which the member belongs, and he shall cause the member or members to be notified to appear before the Joint Arbitration Board on a date set. Failure to appear when notified, except in the opinion of the board valid excuse is given shall subject the member to a fine of \$25.00 for the first offence, \$50.00 for the second and suspension for the third.

Article 19.—Salaries.—The salary of each representative on the Joint Arbitration Board shall be paid by the association or union he represents.

Article 20.—Quorum.—Seven members present shall constitute a quorum in the Joint Arbitration Board. If one or more members of the Arbitration Committee of either of the parties to this agreement be absent the other Arbitration Committee shall cast an equal number of votes on a division in the joint arbitration.

Article 21.—Fines as Result of Arbitration.—Any member or members affiliated with either of the two parties hereto violating any part of the agreement or working rules established by the Joint Arbitration Board shall be subject to a fine from \$10.00 to \$200.00. Such fines shall be imposed by the association or union in accordance with the rules and laws of the association or union, parties hereto, and all such fines shall be collected within thirty days after the date of levying of the fine and all fines collected shall be paid to the association or union to which the member or members belong. In no case shall the parties hereto be permitted to employ or work for any one who has been found guilty of violating any part of this article, if said fine is not collected within thirty days.

Article 22.—Rules for Arbitration Board and Parties Hereto.—All disputes arbitrated under this agreement must be settled by the Joint Arbitration Board, and in conformity with the principles and agreements herein contained, and nothing herein can be changed by the Joint Arbitration Board. No by-laws or rules conflicting with this agreement or working rules agreed upon shall be passed or enforced by either parties hereto, against any of its affiliated members in good standing.

*Working Rules to Govern Members of the Carpenters' Executive Council of Chicago
and Cook County.*

Rule No. 1.—No member shall work after a regular pay day established, without receiving his wages in full each week. Any violator of this rule shall be subject to a fine of not less than \$10.00, ruled off the job, or both, for one year.

Rule 2.—Any member accepting less than the minimum rate of wages on any job or shop shall be subject to a fine of not less than \$10 and shall not be permitted to work in said shop or on said job or for said contractor for a period of one year.

Rule 3.—No member shall be permitted to work with a member who has been suspended or fined unless said suspension or fine has been settled to the satisfaction of the Union, under penalty of a fine of not less than \$5.00.

Rule 4.—Any member found guilty of returning part of his wages or who solicits or gives part of his wages for the purpose of making presents to the foreman, time keepers or any other representatives of the employer shall be fined \$10.00, ruled off the job or both.

Rule 5.—Any member guilty of repairing, fitting or grinding his tools on his own time while employed by a contractor or builder shall be ruled off said job for one year and fined not less than \$10.00.

Rule 6.—Any member guilty of excessive rushing or work shall be reported, tried and fined not less than \$10.00, ruled off the job for one year, or both.

Rule 7.—Any foreman who makes a practice of hiring more men than he needs and not putting them to work shall be warned for the first offence, and if the offence is repeated shall be fined \$25.00, ruled off the job or both. The same penalty shall apply for using abusive language or rushing the men.

Rule 8.—No member shall work on any building or job where labourers or any other men are permitted to handle carpenter's tools or do carpenter work of any kind; any violator of this rule shall be reported by the steward or any other member who becomes aware of the violation and any member or members guilty of working under these conditions shall be subject to a fine of not less than \$10.00 for each offence.

Rule 9.—Any member refusing to give the actual conditions of a building or job when so requested by a business agent shall be reported and fined not less than \$5.00.

Rule 10.—Any member refusing to stop work when ordered by the business agent to do so, or using abusive language or acting in a way unbecoming a brother workman shall be fined not less than \$10.00.

Rule 11.—Any member or members going to or remaining on a job when the job is on strike, unless authorized to by the business agent shall be fined \$25.00 and ruled off the job.

Rule 12.—Any member bringing a sledge hammer, spike maul or a patent mitre box on any building or job shall be fined not less than \$5.00.

Rule 13.—No member shall be permitted to take contracts for carpenter work unless he furnishes material as well as labour for the same, under a penalty of not less than a fine of \$25.00.

Rule 14.—Any member bringing his tools on a job before securing work shall be fined not less than \$5.00.

Rule 15.—No member shall be permitted to work on Saturday afternoon unless the steward on the job has secured a permit from the president of the C.E.C. under penalty of not less than a fine of \$10.00.

Rule 16.—Any member or members putting up, or allowing to be put up any stairs not bearing a label adopted by the Carpenters' Executive Council shall be fined not less than \$10.00.

Rule 17.—Steward.—Where two or more journeymen are working together a steward shall and must be elected from their number, who while acting as steward shall be subject to the decisions of the C.E.C. He shall not leave his work unless in case of a dispute, when he shall immediately notify the office. Or in event of an accident to one of our members, in which case he shall take charge of the injured, gather the evidence showing the cause of the accident, and if necessary accompany the injured to the home, the hospital or the doctors. Any time lost while taking care of the injured shall be paid for by the C.E.C. The steward while at work shall and must always carry a copy of the working rules, and must make a monthly report of the conditions and number of men at work on the job, and shall report all violations to the C.E.C.

Clause 2.—The steward shall inquire of all carpenters on the job as to how they stand in their union, and must see that they are in possession of the current working card of the C.E.C.

A steward must be elected on all building jobs and shops under a penalty of \$10.00 on all members working on a building, job or shop where this section is not complied with.

Clause 3.—Each steward shall provide himself with a book, in which he must keep a correct list of the names and addresses of all members on the job and also record the number of the working card and the local or branch of which the member belongs.

Clause 4.—Any member while acting as steward shall have the power at any time when so requested by business agent or any other member on the job, to demand of any member to see his money and pay envelope, so that he may know if the member is receiving full wages or not. Any member refusing to comply when so requested by business agent, steward, or any member acting as steward, shall be reported and upon proof of guilt shall be fined not less than \$20.00.

Clause 5.—Each steward shall report to the C.E.C. office the exact location of the job, the name of the contractor, of the owner, and of the architect and of the foreman, and also the general conditions of the job. Any violator of this rule shall be fined not less than \$5.00.

Clause 6.—In no case shall a steward be discharged from any job because he has acted as steward, and should the steward be discharged the business agent shall stop all carpenter work on said job and in no case shall the members be permitted to return to work until the steward has been re-instated.

These rules may be amended by a resolution which shall be read at a regular meeting of the C.E.C., and if approved shall be sent to the District Council and Managing Committee for submissal to a referendum vote of the members.

Submitted by the By-Law Committee, Feb. 12, 1906, and approved on the same date by the Carpenters' Executive Council.

(5.) AGREEMENTS IN THE PRINTING TRADE IN NEW YORK.

(i.) Newspaper Offices.

1. Under this heading is included the production of all kinds of type-setting or type-casting machines.

2. Offices where all body type is set on machine shall be known as machine offices.

3. In machine composition all work must be time work. Piece work can not be allowed in any case.

4. All members of the Union employed on morning newspapers, except as hereinafter provided for, shall receive not less than \$5.16 $\frac{2}{3}$ [21s. 6 $\frac{1}{2}$ d.] per night, eight continuous hours (including thirty minutes for lunch) to constitute a night's work, the hours to be between 6 p.m. and 3 a.m. (Overtime per hour 96 $\frac{1}{2}$ cents [4s. 0 $\frac{7}{8}$ d.])

5. Men employed at day work for morning newspapers shall receive day rates (subject to third shift provision). Men employed at night work for evening newspapers shall receive night rates (subject to third shift provision).

6. All members of the Union employed on evening newspapers, except as hereinafter provided for, shall receive not less than \$4.66 $\frac{2}{3}$ [19s. 5 $\frac{1}{2}$ d.] per day, eight continuous hours (including thirty minutes for lunch) to constitute a day's work, the hours to be between 8 a.m. and 6 p.m. (Overtime per hour 87 $\frac{1}{2}$ cents [3s. 7 $\frac{1}{2}$ d.]) When called to work at or before 5 a.m., \$2 [8s. 4d.] extra shall be charged in addition to the overtime; and when called to work at or before 7 a.m., \$1 [4s. 2d.] extra shall be charged in addition to the overtime.

[The latter part of Section 6 has been interpreted to mean that men called between 5 a.m. and 6.30 a.m. shall receive two dollars [8s. 4d.] in addition to the overtime; and that men called between 6.30 a.m. and 7 a.m. shall receive one dollar [4s. 2d.] in addition to the overtime.]

7. Members of the Union employed on evening newspapers publishing Sunday editions, except as hereinafter provided for, shall receive not less than \$4.83 $\frac{1}{3}$ [20s. 3 $\frac{1}{2}$ d.] per day, eight continuous hours, including thirty minutes for lunch, to constitute a day's work, the hours to be between 8 a.m. and 6 p.m. (Overtime per hour, 90 $\frac{1}{2}$ cents [3s. 9 $\frac{1}{8}$ d.]) The rate for Saturday night shall be not less than \$5.66 $\frac{2}{3}$ [23s. 7 $\frac{1}{2}$ d.] per night of seven continuous hours, including thirty minutes for lunch, the hours to be between 6 p.m. and 3 a.m. (Overtime per hour, \$1.21 $\frac{2}{3}$ [5s. 0 $\frac{7}{8}$ d.]) Extras to receive fifty cents per day or night in addition to the above scale, with the exception of Saturday night, when the pay shall be \$5.66 $\frac{2}{3}$ [23s. 7 $\frac{1}{2}$ d.] . When called to work on Sundays between 8 a.m. and 6 p.m., shall be paid at the rate of \$1.00 [4s. 2d.] per hour; but in no case shall a member receive less than a day's pay. Overtime shall be paid for at the rate of time and a half. When called at or before 5 a.m., \$2 [8s. 4d.] extra shall be charged in addition to the overtime, and when called at or before 7 a.m., \$1 [4s. 2d.] extra shall be charged in addition to the overtime. The provisions of this paragraph will apply also to work done on holidays, on which the paper publishes no issue. The section of the scale providing for time for luncheon will also apply.

8. The scale for a "third shift" shall be \$5.66 $\frac{2}{3}$ [23s. 7 $\frac{1}{3}$ d.] per day, eight continuous hours (including thirty minutes for lunch) to constitute a day's work, the hours to be between 2 a.m. and 10 a.m. (Overtime per hour, \$1.06 $\frac{1}{4}$ [4s. 5 $\frac{1}{4}$ d].)

9. Newspaper offices using a third force are privileged to put on one make-up between the hours of 6 a.m. and 2 p.m. at the rate of \$5.66 $\frac{2}{3}$ [23s. 7 $\frac{1}{3}$ d.] per day, the same to be considered a regular situation.

10. Overtime, which shall apply to work done before as well as after the hours specified, shall be charged at the rate of one hour and a half, based on the regular scale for the specified hours, for every hour or fraction thereof so employed.

11. When a member accumulates overtime equivalent to a day's pay in a newspaper office he shall take a day off within the next financial week and put on a substitute. Chairmen are instructed to report all violations of this law to the open meeting of the Union.

12. No member working in the chapel is exempt from taking his overtime off, except the foreman of each shift.

13. Six days at day work or six days at night work shall constitute a situation, and no situation of a less number of days shall be allowed.

14. Extras may be put on in machine offices, either day or night, and shall receive 50 cents [2s. 1d.] in addition to the regular scale, except as provided in Section 7. Such extras must be put on from day to day.

15. In no case shall less than a day's pay be accepted by any member of the Union.

16. In machine offices no stints or slides shall be allowed.

17. No one holding a situation shall be allowed to work in any other office.

18. No "sub" shall be allowed to fill a situation and work as extra on morning or evening newspapers on the same day.

19. On all matter set in daily newspapers proofs shall be read and copy held by a member of the Union.

[The decision of the National Arbitration Board regarding Section 19 of the New York Typographical Union scale, decided by national arbitration on July 18, 1907, is that the section in question shall be interpreted to mean that none but union men shall be employed as proof readers or copyholders, but proof readers shall not be held responsible for errors when no copyholder is furnished.]

20. No member of the Union shall be held financially responsible for errors occurring in an advertisement, nor shall any member of the Union be held responsible for errors appearing in railroad matter.

21. In reducing force foremen can not lay off regular employees until the end of the fiscal week.

22. All compositors employed in offices where machines are introduced must have the exclusive privilege of learning and becoming familiar with their operation. No obstruction or restriction whatever shall be placed upon or stand in the way of learners other than that they are not practical printers.

23. Where an office introduces machines it shall take compositors from those already members of the chapel and instruct them. The minimum of competency shall be 24,000 ems per day or night of eight hours.

24. The officers of the Union are empowered to enter into a contract for at least one year with offices adopting the all-time scale.

25. All Union machine offices are prohibited from supplying machine composition to non-union offices.

26. The practice of a foreman selecting or designating a substitute is in direct contradiction to the regulations of Typographical Union No. 6 and of I. T. U. law. The regular shall be the person to select his own substitute, and shall in no way be responsible for the work performed by the same, but no foreman shall be compelled to accept a substitute who is incompetent or otherwise incapacitated, and if the regular's selection should fail to appear on time or should be incapacitated, the foreman shall direct the chairman to select or designate another substitute. A substitute selected according to the foregoing provisions shall receive a regular day's pay. Otherwise, 50 cents [2s. 1d.] additional as an extra.

27. The practice of interchanging, exchanging, borrowing, lending or buying of matter previously used, either in form of type, matrices or photo-engraved plates, between newspapers or job offices not owned by the same individual, firm or corporation, and published in the same establishment, is unlawful and shall not be allowed. Provided, that the reproduction of the original of such type, matrices or plates in type within four days shall be deemed a compliance with this law.

28. Offices have the privilege of using blocks or cuts furnished by out-of-town concerns who make yearly contracts, but this does not apply to transient out-of-town advertisements, which must be re-set before using.

29. On advertisements or other matter set for daily newspapers in job offices, the difference between the job and newspaper scale must be paid.

30. Advertisements reproduced in photo-engraving room must be re-set by compositors, except in instances where it is impossible to set said advertisements completely in the composing room.

31. Any member may be assigned work in any position in the composing room other than the position for which he was engaged, in case of emergency, and if such emergency position carries with it a higher rate of wages than the scale, he must receive while filling that position the rate paid for the same. This section shall not apply to the foreman.

32. On morning and evening newspapers twelve hours must intervene between the time of quitting and starting work, but no member of the Union shall be allowed to work more than twelve hours in any twenty-four. This shall not apply on Saturdays or Election day to evening newspapers publishing Sunday editions or to unusual emergencies.

33. Offices publishing morning and evening papers have the right to use advertisements and reading matter set up for the morning paper in the evening paper, and *vice versa*, or in both.

34. Chapels may provide for the time to go to lunch, but the foreman cannot keep an employee more than four hours before allowing lunch, except in cases of emergency. A second lunch time shall be allowed when more than two hours overtime are required.

Scale, Rules, &c. governing Machine-Tenders in Newspaper Offices.

35. The scale for machine-tenders shall be :—

| | | |
|-------------------------|--------|-------------------------------|
| For 1 or 2 machines | ... .. | \$19.50 [81s. 3d.] per week. |
| For 3 or 4 machines | ... .. | \$21.00 [87s. 6d.] per week. |
| For 5 to 8 machines | ... .. | \$25.00 [104s. 2d.] per week. |
| For 9 to 12 machines | ... .. | \$28.00 [116s. 8d.] per week. |
| For 13 or more machines | ... .. | \$30.00 [125s.] per week. |

36. Machine-tenders working at night shall receive \$5.00 [20s. 10d.] per week in addition to the above day scale.

37. A machine-tender shall have charge of all repairs on type-setting machines in plants of four machines or more. No printer member shall be allowed to act as machinist on any plant of more than three machines.

38. The regular working time of a machine-tender shall be six days or nights per week of as many hours each as are the regular hours of the operators in the office employed in operating the machines.

39. All time worked over and above these hours shall be considered as overtime, and shall be charged at the rate of one hour and a half for every hour so employed, based on the regular scale for the specified hours.

40. When a machine-tender shall have accumulated eight hours overtime he shall take a day off and put on a substitute.

41. No machine-tender holding a regular situation in an office will be permitted to attend to the repairs on machines in any office other than the situation in which he is employed, except in case of emergency, all such cases to be reported to the president of the branch as soon as possible.

42. Assistants to machine-tenders shall be classed as helpers or apprentices; all helpers and apprentices shall be registered in the books of the branch and the Union by the machine-tender or member under whose supervision they are employed; a helper having worked as such, and been registered for three consecutive years in any one office shall be entitled to be registered as an apprentice.

43. All offices of four machines or more shall be entitled to employ one helper and one apprentice to each machine-tender employed; said helpers and apprentices shall be under the direct supervision of the machine-tender, who shall instruct the apprentice in all branches pertaining to the type-setting machines in their respective places of employment, and shall work during the same hours as the machine-tender, under whose supervision they are employed; a helper shall do all necessary cleaning, but shall not handle tools, make repairs or adjustments, and where no helper is employed the apprentice shall do the helper's work.

44. Offices of three machines or less shall be entitled to employ an apprentice, said apprentice to be under the direct supervision of the member in charge of the plant, and to be subject to the same rules and regulations as govern apprentices in offices of four machines or more.

45. The term of apprenticeship of machine-tenders shall be at least four years.

46. The scale for apprentices shall be :—

| | | Year. | | | | |
|----------------------|-------|----------|----------|----------|----------|-----------|
| | | 1st. | 2nd. | 3rd. | 4th. | |
| For 1 to 5 machines | ... { | \$9.00 | \$10.00 | \$12.00 | \$13.50 | per week. |
| | | 37s. 6d. | 41s. 8d. | 50s. | 56s. 3d. | " |
| For 6 to 15 machines | ... { | \$10.00 | \$12.00 | \$13.50 | \$15.00 | " |
| | | 41s. 8d. | 50s. | 56s. 3d. | 62s. 6d. | " |
| For 16 or more | ... { | \$12.00 | \$13.50 | \$15.00 | \$18.00 | " |
| | | 50s. | 56s. 3d. | 62s. 6d. | 75s. | " |

47. Machine-tenders, machine-tenders' helpers or apprentices shall not be allowed to be in charge of the operation of machines casting slugs or type that take ink in printing.

Apprentices.

In newspaper offices, declared as such by the Union, apprentices may be employed in the ratio of one to every twenty men or a majority fraction thereof, but no more than four shall be permitted in any office.

In the first year an apprentice may be required to perform general work in the composing room at the discretion of the foreman.

In the second year an apprentice shall be employed at least fifty per cent. of his time at hand composition and distribution.

In the third year an apprentice shall be employed at least seventy-five per cent. of his time at hand composition and distribution, and shall receive one-half of the regular scale.

In the fourth year an apprentice shall be employed at least seven hours each day at hand composition and distribution, and shall receive one-half of the regular scale.

In the fifth year an apprentice shall be employed at least seven hours each day at hand composition and distribution, and in machine offices may practice on the machine, and shall receive two-thirds of the regular scale.

Apprentices shall be registered on the books of the Union and shall at all times be under the supervision of the chairman.

All registered apprentices shall be between the ages of sixteen and twenty-one. This age limitation shall not apply to any person employed on newspapers who shall register his desire to become an apprentice within sixty days after adoption of this scale.

Office boys (not apprentices) will be allowed to work proof presses, carry proofs and copy, and type on galleys, but shall not be allowed to handle type, proofs, copy or any printing material in any other manner whatever.

Weekly, Semi-Weekly and Tri-Weekly Papers.

On weekly, semi-weekly and tri-weekly papers the Book and Job Scale shall govern.

Priority Law (amended January 5th, 1908).

1. "To decrease the force, such decrease to be accomplished by discharging first the person or persons last employed, either as regular employees or as extra employees, as the exigencies of the matter may require. Should there be an increase in the force the persons displaced through such cause shall be reinstated in reverse order in which they were discharged before other help may be employed."

2. Priority of all members who received positions prior to January 1, 1907, shall date from time of receiving their positions.

3. Priority of all members who are substitutes and who held positions prior to January 1, 1907, and were laid off on account of slackness in work, shall date from time of receiving their positions.

4. Priority of all members who are substitutes, except those as provided above, shall date from time of depositing their cards in the office for the purpose of seeking situations.

5. Substitutes shall be classified by departments and shall only maintain priority in such department as they elect to substitute in.

6. Priority ceases upon the withdrawal of the card, provided said withdrawal shall be for the purpose of seeking employment elsewhere. Under this provision a Chairman is granted permission to permit a substitute to take employment elsewhere for a period of not longer than two weeks.

7. Any substitute may waive his claim to a situation without impairing his seniority, viz.: If A and B waive a situation and C takes it and then A and B receive situations the man receiving his position last shall be the first man laid off.

8. Shifts shall not be classified as departments.

*(ii.) Book and Job Work.**Time Charges.*

73. Time work as per scale.

74. Eight hours shall constitute a day's work, the hours to be between 7.30 a.m. and 5.30 p.m. Six days of eight hours shall constitute a week's work, the hours to be between 7.30 a.m. and 5.30 p.m.

75. Offices are permitted to arrange for a 48 hour week, provided, first, that each and every day's work shall be the same as to hours and minutes. Second, that on no one day shall the regular working time exceed eight hours and forty-five minutes, the hours to be between 7.30 a.m. and 5.30 p.m. Third, the time thus made up to be deducted from the regular working hours on Saturday. (See paragraphs 101 and 102.)

76. Men taken from piece work for time work, or time hands, shall not charge less than $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ or full hour.

77. The office must make its corrections according to copy on one proof, but the compositor must make these corrections on further proofs if they are rendered necessary through his neglect. Author's proofs and alterations from copy shall be paid for at the regular time charges.

78. When a compositor working by the piece is required to turn for sorts, or to take out bad letters and replace them, in consequence of faults in the casting, miscasts, or worn-out founts, he shall be paid at the regular time charge.

79. When a compositor working by the piece receives copy of contents, indices, or any other copy where more than the usual quantity of capitals, figures, periods and italics are used, the establishment shall furnish the compositor with the necessary sorts.

80. When a compositor working by the piece is required to make up furniture for letter press, stereotype or electrotype formes, he shall be paid for such work at the regular time charge.

81. Make-up shall be time work.

82. When compositors working by the piece are required to cut leads, rules, etc., or otherwise prepare material for use in composition, they shall charge for such time consumed. When matter set in a foreign language is distributed by piece hands for English composition, such distribution shall be paid for on time.

83. Members shall receive a full day's pay when called in to work on extra jobs, unless they are employed for a full day immediately following their engagement, in which case they shall only be paid the actual time worked. This shall not apply to men discharged for incompetency after two hours' trial.

84. Diagrams in circles shall be set on time.

85. Time occupied by alterations from copy, by casing or distributing letters not used by the compositor, etc., to be paid for at the scale rate for time hands.

86. When time clocks are used in an office sufficient time shall be allowed to "ring up," such time to be mutually agreed to between the office and the men.

87. Any member may be assigned work in any position in the composing room other than the position for which he was engaged, in case of emergency, and if such emergency position carries with it a higher scale than the scale which he has been receiving, he must receive, while filling that position, the scale provided for the same.

88. In the event of the emergency position carrying a lower scale than he has been receiving in his regular position, the payment for such emergency work must be at the same rate as that of his regular position.

Alterations.

89. Alterations from copy, as enumerated below, shall be "rung" by the proofreader and corrected by the office.

90. A change in the spelling of proper names, words from foreign languages, etc.

91. A change from the copy not provided for by any style of the office, nor by instructions given to the compositor when the copy is given out.

92. A change in the spelling or division of words not in accordance with the dictionary given by the office as a guide, and not provided for as above.

Overtime.

93. Overtime Based on the Minimum Scale.—All rates stipulated in the scale of prices are based on the minimum rate of wages, and members receiving in excess of the wages provided in the scale cannot refuse to work for scale rates when required to work overtime.

94. When piece compositors work beyond regular hours, they shall be paid at the scale rate for overtime of piece hands in addition to the matter set up; such extra time to be between the hours of 5.30 p.m. and 7.30 a.m., except as provided in paragraph 75.

95. When overtime is done, if work continues two or more hours one-half hour shall be allowed for meals and paid to both time and piece hands. Piece hands to receive the sum of thirty-three cents. This shall not apply to Saturday half-holiday.

96. When day hands are kept continuously employed till after 12 midnight, one-half hour shall be allowed for lunch; piece hands shall be allowed thirty-three cents.

97. Piece hands detained after the regular hours of composition shall be paid for any standing time at the scale rate for time hands' overtime.

Legal Holidays.

98. The following are the recognized legal holidays: Jan. 1, Feb. 12, Feb. 22, May 30, July 4, Labour Day, Election Day, Thanksgiving and Christmas. When men are required to work on legal holidays they shall receive double price and be employed for a full day.

Sundays.

99. When men are required to work on Sunday they shall receive double price and shall be employed for not less than one-half day.

100. If required to work after 12 o'clock midnight Saturday until midnight Sunday the following prices shall be paid:

Time Hands.—From 12 o'clock midnight Saturday to 7.30 a.m. Sunday, and from 5.30 p.m. Sunday to 12 o'clock midnight Sunday, triple time per scale, and from 7.30 a.m. to 5.30 p.m. Sunday, double time per scale.

Piece Hands.—From 12 o'clock midnight Saturday to 7.30 a.m. Sunday, and from 5.30 p.m. Sunday till midnight, double time in addition to matter set; and during Sunday, from 7.30 a.m. till 5.30 p.m., double matter set.

Saturday Half-Holiday.

101. During the months of June, July and August the regular working time on Saturday must end by 12.30 p.m. Members required to work beyond that hour on Saturdays during these months shall receive overtime, as per scale. Offices are permitted to arrange for a forty-eight hour week during these months as provided for in paragraph 75.

102. When members are employed for less than a full week they shall be paid single price for the regular working hours agreed upon by the office for making up for the Saturday half-holiday.

103. All piece compositors working on Saturday half-holidays shall be paid at the scale rate of overtime for piece compositors.

Foreign Languages.

104. Work in foreign languages shall be at the scale rates of the particular union having jurisdiction. Provided that in no case shall English composition be at a lesser rate than that of the Typographical Union. Nor shall foreign composition in English offices be done at a lesser rate or longer hours than is in vogue in offices under jurisdiction of such foreign language union.

Machine Scale.—Book Work and Weekly Papers.

105. Under this heading is included the production of all kinds of type-setting or type-casting machines. All jobs set partly or wholly by machine shall be considered machine jobs, and machine jobs must be all time-work, excepting as set forth in paragraph 110. Machine jobs shall be paid for at the scale rate. The hours to be between 7.30 a.m. and 5.30 p.m., except as heretofore provided for Saturdays. (See paragraphs 75, 101 and 102.)

106. Compositors employed on type-setting machines on weekly newspapers, periodicals, books, pamphlet work, or such work as is done in job or book offices, shall receive not less than machine operators' scale per week of 48 hours. The hours to be between 7.30 a.m. and 5.30 p.m.

107. Distributors on machines, unless journeymen or apprentices in the last year of their apprenticeship, shall not be allowed to distribute headlines, etc., neither shall they be allowed to practice on the keyboard or any part of the type-setting machine, correct proofs or lift matter from formes.

108. Overtime for day forces shall apply to work done before as well as work done after the hours and specified, shall be charged at the scale rate.

109. Compositors taken from the case to learn to operate machines shall be paid at the rate of \$15 [62s. 6d.] for the first four weeks, \$18 [75s.] for the next four weeks, and thereafter the full scale. No obstruction or restriction whatever shall be placed upon or stand in the way of learners.

110. In offices where the number of piece compositors exceed the number of working machines in the ratio of 3 to 1, or more, jobs may be set partly on the machines and partly by piece-hand composition, provided (1) that the copy be run without discrimination, with no culling of proof for the machines; (2) that the piece compositors be given at least forty hours composition during the week of forty-eight hours, or time work at the scale rate per hour in lieu thereof; (3) that all time work on job (except as above mentioned) shall be paid for at the scale rate for time hands.

111. Operators shall receive full day's pay when called in to work on extra jobs, unless they are employed for a full day immediately following their engagement, in which case they shall only be paid actual time worked. This shall not apply to men discharged for incompetency after two hours' trial.

112. When an office introduces machines it shall select its operators from members who have been employed in its composing-room for a period of at least three months. When the machines have been covered by one set of learners for the time specified in this scale, the office shall be free to select its operators from outside; provided that offices introducing machines to the number of two or more shall be entitled to engage one experienced operator from the outside.

113. A machine operator shall not act both as machinist and operator on any plant equipped with more than three machines.

114. Machinists may cast slugs and dashes.

115. The scale for night forces in book and job offices shall be \$27 [112s. 6d.] per week, 8 hours per night, 6 nights to constitute a week's work, the hours to be between 6 p.m. and 5 a.m., provided that if a third shift be put on the hours for the third shift shall be from 3 a.m. to 10 a.m., 6 nights a week, \$30 [125s.]. Twenty minutes to be allowed for lunch to men employed during the hours above specified.

116. Overtime for night forces shall apply to work done before as well as after the hours specified, and shall be charged at the rate of one hour and a half, based on the regular scale for the specified hours, for every hour so employed.

117. When members working on night shifts are required to work Sundays or legal holidays they shall receive double price.

118. Extras (meaning operators employed for less than a week) shall be entitled to 50 cents [2s. 1d.] per day extra. This does not apply to operators holding regular situations in the office.

119. *Broken Weeks for Regulars.*—An operator in a book office, holding a regular situation, when laid off part of a week for lack of copy shall not be considered an extra, the extra being distinctively an operator not holding a regular situation.

120. When operators have been employed for a full week, even though the week covered portions of two fiscal weeks, they are not to be considered as extras.

Machine-Tenders.

121. In accordance with legislation of the Executive Council, I. T. U., June 28, 1898, the machine-tenders of this union shall maintain a branch, to be known as "The Machine-Tenders' Branch of No. 6, I. T. U."

122. The officers of the branch shall consist of a committee of five members, to be elected annually in July by the members of the branch; one member of the committee shall be elected by the branch to serve as president of the branch, and one of the committee shall be elected to serve as secretary of the branch.

123. All machine-tenders of this union shall be enrolled on the roster of the branch; all applications for machine-tender's card shall be referred to the committee of the branch for investigation, who shall report the result of the same to the Membership Committee of this union.

124. The branch shall hold a regular monthly meeting during the week preceding the regular monthly meeting of this union; the meetings shall be conducted in conformity with the provisions of the rules of order of this union and Cushing's Manual; any matter affecting the interests of the trade in general or the interest of the machine-tenders' branch of the trade may be discussed; political or religious discussions shall not be allowed.

125. The expenses of holding branch meetings shall be defrayed by this union; the branch shall incur no expense in addition to that required for the holding of regular monthly meetings except by permission of the Executive Committee of this union.

126. All complaints of machine-tenders regarding infractions of the scale, or rules of the union, shall be submitted to the committee of the branch, who shall decide them, pending a meeting of the branch. Should any machine-tender feel aggrieved at the action of the branch, he shall have the right to appeal to the Executive Committee of the union, when the committee of the branch shall prepare and submit its case to the Executive Committee of this union, whose decision shall be binding until reversed by a two-thirds vote of the union at a regular meeting.

127. The committee of the branch shall meet at least once a week, and shall have authority to regulate and apportion the substitutes in order that the six-day and overtime law may not be violated.

128. Machine-tenders seeking subbing shall apply to the committee of the branch at the regular weekly meeting of the committee for such subbing, and it shall be the duty of the committee to immediately examine the applicant's qualification, and apportion him such subbing as may be in its power, within his qualifications; such substitutes will be required to report at the committee's headquarters between the hours of 8 to 10 a.m. and 5 to 7 p.m. daily. It shall be the duty of the committee to keep on file a list of all such substitutes and their addresses.

129. All records, proceedings, actions, etc., of the branch shall at all times be subject to the inspection of the Executive Committee of this union, or its duly authorized representative.

130. Machine-tenders' overtime must be based on machine-tenders' minimum scale.

131. A machine tender shall have charge of all repairs on type-setting machines.

132. A helper shall do necessary cleaning on type-setting machines, but shall not handle tools, make repairs or adjustments.

133. All book and job machine offices shall be entitled to one helper and one apprentice to each machine-tender. Boys or men employed as attendants on Lanston casting machines shall be classed as labourers and are not to be confused with machine-tenders, apprentices or helpers.

134. Helpers and apprentices shall be under the direct supervision of the machine-tender, who shall instruct the apprentices in all branches pertaining to the type-setting machines in their respective places of employment, and shall work during the same shifts as the machine-tender under whose supervision they are employed; where no helper is employed the apprentice shall do all necessary cleaning. No helper or apprentice will be permitted to take charge of any plant or repairs.

135. The term of apprenticeship shall be at least four years.

136. The scale for machine-tenders shall be :

| | |
|------------------------------|------------------------------|
| For 1 or 2 Machines | \$21 00 [87s. 6d.] per week. |
| For 3 or 4 Machines | 23 00 [95s. 10d.] per week. |
| For 5 to 8 Machines | 26 50 [110s. 5d.] per week. |
| For 9 to 12 Machines | 29 50 [122s. 11d.] per week. |
| For 13 or more Machines..... | 31 50 [131s. 3d.] per week. |

137. Machine-tenders working at night shall receive \$5 [20s. 10d.] per week in addition to the above scale.

138. The regular working time of the machine-tenders shall be six days or nights of as many, and the same, hours per day and week as the time of the regular operators on the machines in the same office as employed in ; all time worked over and above this, except Sundays and holidays, shall be considered as overtime and shall be paid for at the rate of time and one-half on the above scale ; Sundays and Legal Holidays to be paid for at the rate of double time ; Saturday half-holiday to be time and one-half.

139. The scale for apprentice machine-tenders shall be :

| No. of Machines. | 1st Year. | 2nd Year. | 3rd Year. | 4th Year. |
|---------------------|---------------------|---------------------|---------------------|---------------------|
| 1 to 5 | \$9 00 37s. 6d. | \$10 00 41s. 8d. | \$12 00 50s. | \$13 50 56s. 3d. |
| 6 to 15 | \$10 00 41s. 8d. | \$12 00 50s. | \$13 50 56s. 3d. | \$15 00 62s. 6d. |
| 16 or over | \$12 00 50s. | \$13 50 56s. 3d. | \$15 00 62s. 6d. | \$18 00 75s. |

140. All apprentice machine-tenders shall apply for probationary card at the expiration of the fourth year of their apprenticeship, dating from the date of registry as machine-tender apprentice.

141. All probationary machine-tender apprentices shall apply for machine-tender's card at the expiration of one year from the date of receiving probationary card ; provided, however, that the Executive Committee of this union shall have discretionary power to extend a probationary card another year.

142. Any matters arising not fully provided for in these rules shall be governed by the established rules and regulations of the I. T. U.

143. All resolutions and laws for the government of machine-tenders of this union not embraced in and a part of these laws, except as herein specified, are hereby declared null and void.

Apprentices.

144. The term of an apprentice shall be five years. During such time he may be assigned to do any work connected with the branch of the trade he is learning which his employer or foreman may deem proper, except as hereinbefore provided.

145. One apprentice shall be allowed to any office employing up to eight men. All offices having an excess over eight shall be entitled to one for every eight or major fraction thereof ; not to include copyholders or errand-boys ; such copyholders or boys to be allowed to sort and put away leads, furniture, cuts and plates, to set pie, to handle and prove galleys ; but not to set, make up or distribute type, nor break up formes, nor act as bankman ; nor shall copyholders or apprentices be allowed to read or revise proof. Provided, however, that no office shall be allowed more than seven apprentices.

146. Apprentices in the last year of their term shall receive not less than two-thirds of the regular scale.

147. All boys in an office, other than copyholders and errand-boys, shall be recognized as apprentices, and all apprentices shall be registered in a record book kept for that purpose, and be granted an apprentice's certificate, endorsed for each year of service.

148. Apprentices in their fifth year may revise proofs if so required, but shall not be allowed to do first reading.

149. Apprentices shall not be allowed to set any live matter on machines until the last three months of their apprenticeship.

150. All registered apprentices shall be between the ages of 14 and 20 years, and fifth year apprentices between the ages of 20 and 24 years.

(6.) AGREEMENT BETWEEN THE MILWAUKEE BREWERS' ASSOCIATION AND UNION No. 9, UNITED BREWERY WORKMEN (March 6th, 1909).

This Contract made between the Milwaukee Brewers' Association and Union No. 9 of the International Union of the United Brewery Workmen of America to be in force in Milwaukee County from the day of its date until the 1st day of March, 1912.

1. All workmen employed must be in possession of a working card issued by the Union. If union men of respective craft cannot be had, other men can be employed, who must, upon application, be taken into the Union. Watchmen and foremen who do not perform manual labour are exempt from belonging to the Union.

2. Eight hours, interrupted by one hour for dinner, constitute a day's labour. Six days shall constitute a week. Work to commence at 8 a.m. excepting in case of necessity, and then not earlier than 7 a.m. : this not to apply where shifts are worked, nor to men loading peddlers. Night shifts to nave off or change every four weeks.

3. Scale of wages to be paid Present higher wages are not to be reduced.

4. Overtime, Sunday labour and work done on holidays to be paid at the rate of one and one-half time. When necessary to work nine hours the extra hour to be paid single time. Wages to be paid every two weeks after working hours.

5. New Year's Day, Washington's Birthday, Decoration Day, Fourth of July, Labour Day, Thanksgiving Day and Christmas Day shall be considered legal holidays except for maltsters.

6. The following is work belonging to brewery men : Malthouse, brewhouse, cellars, washhouse, pitchyard, handling of full and empty packages, driving hoops, whitewashing on brewery premises, elevator men and packing cars.

7. One apprentice to every twenty-five brewery workmen can be employed, or where less than twenty-five men are employed in a brewery. Apprentice must not be over twenty-one years old at time of employment and apprenticeship shall be two years, during which time he is to work in all departments. Apprentice must have malthouse experience.

8. Workmen shall not receive beer during working hours, but shall receive one quart at noon and one quart at 5 p.m. after working hours.

9. Union made malt shall have the preference.

10. Members of this union being appointed on committee work or for any other service for their organization, shall be granted leave of absence.

11. Reason for discharge shall be given men. In case of sickness they should not be discharged, but will be re-employed in place assigned them by foreman. Substitute employed to fill vacancy can be discharged. But men shall not be discharged on account of slack work. They shall then be laid off in rotation for not longer than one week nor less than four hours.

12. Any difference of opinion arising in regard to the terms of this contract shall be decided by a Board of Arbitration, constituted in the following manner : Two shall be selected from the Milwaukee Brewers' Association and two from the local Executive Committee of the United Brewery Workmen of Milwaukee, within 48 hours, and in case these cannot agree the members of the Board shall elect a fifth member and his decision shall be binding to both parties. Men shall not leave work while arbitration may be pending.

13. If at any time during the life of this contract any Union or organization which is affiliated with, or a member of the American Federation of Labour, declares the product of any one of the Undersigned brewing firms boycotted or unfair, notice of such action by said organization should be given by the Milwaukee Brewers' Association to the International Executive of the United Brewery Workmen, and such International Executive hereby promises to investigate such matter immediately and if after investigation it is found that the respective brewer has not violated any existing contract, then a public declaration shall be issued by the National Executive denouncing said boycott, and in case of refusal then this contract to be null and void.

(7.) AGREEMENTS IN THE COAL MINING INDUSTRY.

(i.) Toledo Inter-State Agreement (April 17, 1908).

It is hereby agreed between the Operators' and Miners' representatives of Western Pennsylvania, Ohio and Indiana :

First : That the mining rates, day wage scale and general prices in existence in Western Pennsylvania, Ohio and Indiana in the year 1907 be reaffirmed.

Second : That internal differences both as to prices and conditions be referred for adjustment to the various districts affected.

Third : That the screen hereby adopted for the state of Ohio, Western Pennsylvania and the bituminous district of Indiana shall be uniform in size, six feet wide by twelve feet long, built of flat or akron-shaped bars of not less than five-eighths of an inch surface, with one and one-fourth inches between bars, free from obstructions, and that such screen shall rest upon a sufficient number of bearings to hold the bars in proper position.

Fourth : That the Block Coal District of Indiana may continue the use of the diamond screen of present size and pattern, with the privilege of run-of-mine coal, the mining price of which shall be determined by the actual screenings.

Fifth : That the eight hour day of forty-eight hours of six days per week is hereby reaffirmed.

Sixth : That an eight hour day means eight hours' work in the mine at usual working places for all classes of inside day labour. This shall be exclusive of the time required in reaching such working places in the morning and departing from same at night.

Regarding drivers, they shall take their mules to and from the stables, and the time required in so doing, shall not include any part of the day's labour, their work beginning when they reach the change at which they receive empty cars, but in no case shall the driver's time be docked while he is waiting for such cars at the point named.

Seventh : That when the men go into the mine in the morning they shall be entitled to two hours' pay whether or not the mine works the full two hours. But after the first two hours the men shall be paid for every hour thereafter by the hour, for each hour's work or fractional part thereof. If for any reason the regular routine work cannot be furnished the inside labour for a portion of the first two hours, the operators may furnish other than the regular labour for the unexpired time.

Eighth : That the term of this contract shall begin April 1st, 1908, and expire March 31st, 1910.

Ninth : That a general resumption of operations in Western Pennsylvania and Ohio (the mines in Indiana now being in operation) shall take place on Monday, April 20th, 1908.

Tenth : That the renewal of the mining rates, day wage scale and general prices existing in 1907 is on the condition of the approval of a two years' contract by referendum vote of the United Mine Workers of America.

Resolved, By representatives of the Interstate Joint Convention, composed of the operators and miners of Western Pennsylvania, Ohio and Indiana, that we condemn in the most vigorous and positive manner the practice of suspending the operation of mines, pending the investigation and adjustment of disputes arising under the terms of joint agreements in the various districts and sub-districts under the jurisdiction of this Interstate movement ; and we recommend that such provision be agreed upon by the operators' and miners' representatives in the various districts and sub-districts as will require the mine managers and mine workers to comply with the terms of the contract, and to adjust disputes without delay and without suspending the operation of mines.

(ii.) *Mine Rules, Pittsburg District No. 5, Pennsylvania.*

1. The hours of day labour at the mines to be from 7 o'clock a.m. until 12 o'clock noon, with one full hour for dinner, and from 1 o'clock p.m. until 4 o'clock p.m.
2. Wet entries to be agreed upon between Mine Boss and Miners.
3. On the question of thick slate in rooms and entries : All slate over 12 inches shall be considered "thick slate," and is to be paid for at the rate agreed upon between the Miners and Mine Boss, and in case they cannot agree, then it shall be left to the Superintendent and Miners for adjustment.
4. It is especially agreed that the run of mine price shall be, in thin vein pick mines 5817 cents per ton, and in thick vein pick mines 4964 cents per ton, and that two days' notice shall be given to miners when change is to be made from the run of mine to screened coal.
5. No mine to go on a run-off mine basis unless mutually agreed to by operator and miners.
6. That on the day that death by accident occurs in a mine, for that day only the miners may cease work, but under no circumstances shall a mine be laid idle for any funeral. This is, however, not to prevent individuals from attending a funeral.
7. The general conditions existing shall continue for the Scale Period April 1, 1908, to March 31, 1910.
8. Where a miner is required by the mine foreman to leave his work at the face to perform other labour, he shall be paid at the rate of \$2.56 [10s. 8d.] per day. Where a miner has no work at the face and is given other labour, he shall be paid the scale rates for such labour.
9. No miner or loader shall be required to unload slate in his room, except where the price is mutually agreed to between the miner and mine foreman.
10. All inside labour not mentioned on the scale is to receive a proportionate advance over 1905 prices.
11. The wages of the checkweighman will be collected through the pay office semi-monthly, upon a statement of time made by the checkweighman. The amount so collected shall be deducted on a percentage basis from the earnings of all miners engaged in mining coal, and shall be sufficient to pay the wages and legitimate expenses incident to the office.
12. The pay-statement shall be signed by the checkweighman, and his wages can be drawn from the office by the representative of the miners. Deductions for checkweighman's wages are to be given precedence over all others.
13. Deductions for Union dues as at present will be made through the office on properly signed authority from any man inside the mine. The amount of such deductions shall be stated by and paid to the Mine Committee, subject to the instructions of the men. When requested, the company will furnish a list of those paying. No deductions will be made for initiation fees, unless locally agreed between the Operators and Miners. There shall be no coercion or intimidation used to secure payment of Union dues by any man, but when Union dues are paid they shall follow deductions for Checkweighman, Accident and Death Benefit, Rent and Smithing.
14. Drivers will not be required to clean the company's stock.
15. Two loaders will have two rooms under ordinary conditions.
16. In turning rooms, it is understood that the present equivalent plan in the scale is based on twenty-one feet of stump, and room twenty-one feet wide, thicker stumps to be paid extra in the same proportion ; also, that where pick work has to be done in room turning to allow machine to cut, pick prices will be paid, except where only sufficient pick work is done to allow machine to turn, when the present practice at the various mines is to continue.
17. Where twelve foot places are driven by machines, a proportionate rate based on entry price shall be paid.
18. Where slate comes down, or is to be taken down, in breakthroughs between rooms, and has to be removed by loader, entry price shall be paid.
19. Where the mine foreman narrows a room down to twelve feet or less in going through a clay-vein or spar, narrow work prices shall be paid.
20. An equal turn shall be kept as far as practicable. This is not to interfere with development or necessary work.
21. All slate over twelve inches in thickness shall be paid for, not averaged with slate below twelve inches in thickness. At any mine where the weight limit exists on cars, it shall be abolished.
22. We hereby jointly agree to renew the scale and agreement in effect from April 1, 1906, to March 31, 1908, for a period of two years, commencing April 1, 1908, and ending March 31, 1910.

(8.) **CONDITIONS OF EMPLOYMENT WITH THE MILWAUKEE ELECTRIC RAILWAY AND LIGHT COMPANY.**

Agreement.—In consideration of being permitted to make application for employment by T. M. E. R. & L. Co. in accordance with its regulations, I hereby agree and with said T. M. E. R. & L. Co. as follows :—

(A) To submit to a medical examination by said Company's doctor and pay for the same One Dollar [4s. 2d.] ;

(B) Before entering upon work of trial period, to deposit with said Company, without interest, the sum of Twenty-five Dollars [£5 4s. 2d.] as a surety fund for faithful performance of my duty, and that said sum is to be held and applied by said Company in accordance with the receipt which it shall give me for said sum ; or to deposit with said Company, without interest, the sum of Five Dollars [20s. 10d.] as a surety fund for the faithful performance of my duty, and that said sum is to be held and applied by said Company in accordance with the receipt which it shall give me for said sum ; and in addition, to furnish a surety bond of One Hundred Dollars [£20 16s. 8d.] that will be satisfactory to T. M. E. R. & L. Co., and to pay for said bond the annual premium of One Dollar [4s. 2d.] ;

(C) To work under instruction on and during trial period, without pay, for such time as said Company may deem necessary ;

(D) That if I am discharged, or leave said Company's service voluntarily at any time during or after said trial period, I shall have no claim against said Company for services rendered or expenses incurred by me during said trial period ;

7. In all localities where there is no District Council the General Executive Board shall appoint a label secretary, who shall have charge of the distribution of the labels, and have control of the label stamp. The said secretary shall distribute the labels to a label custodian in each shop where the garments are cut, who shall in turn supply the custodian in each shop where the garments are made; the label stamp is to be supplied only to the custodian in the shop where the garment is made; care being taken that a system be used that will result in the legal and correct use of the label.

8. It shall be the duty of the General Executive Board to carefully supervise the work of the label secretaries from time to time, and should they discover that the label, or label stamp, is being misused, they are authorized to appoint a label secretary in that locality to take charge of the distribution of labels, and have control of the label stamp, until the next general convention of the I.L.G.W.U.

9. The label secretary should have a complete list of all the shops that are entitled to the use of the label, or label stamp, and when labels are called for, instead of giving the label personally to the contractor, it should be the duty of the label secretary to take the amount of labels required by the label contractor, visit the shop personally and satisfy himself as to the amount of work for which labels are wanted and hand them to the shop chairman.

10. The label secretary in performing such duties will be required to give his entire time if a large number of shops are to be placed in his control.

11. The label secretary to be paid for his services by the Local or Local Unions interested.

(10.) TRADE UNION LABEL CONTRACT (MINNEAPOLIS).

Agreement entered into this.....day of.....190....., by and between manufacturer of hereinafter called the Employer, and the International Union of Flour and Cereal Mill Employees, with headquarters at 316 Corn Exchange, Minneapolis, Minnesota, hereinafter called the Union, witnesseth :

1. The Union agrees to grant and lease to the Employer the right and privilege to have printed or stamped upon all packages containing flour and cereals manufactured in the mill or mills of said Employer, the following label, called hereinafter the Union Label.

The Union agrees to furnish to the Employer free of charge and without cost, either of the following facilities for the placing of the Union Label on his products, viz.: rubber stamp or electrotypes. The Union agrees to furnish above named facilities within reasonable time after the Employer notifies the officers of the Union of his election of the manner in which he desires to place the Union Label on his products.

2. In consideration of the above valuable privileges the Employer agrees to hire as employees and workers in his mill or mills only members of the International Union of Flour and Cereal Mill Employees, in good standing in said Union, and further agrees not to retain any employee or worker in his employment for more than thirty days after having received notice from the Union that such employee or worker is in arrears for his dues, or assessments, or is not in good standing with the Union. Provided, however, that membership in the International Union of Flour and Cereal Mill Employees will not be required of Engineers and Firemen who are members, in good standing, of the Union controlling their respective crafts.

3. The Employer agrees that he will not cause or allow the Union Label to be placed upon packages containing products not manufactured in his mill or mills. The Employer further agrees that he will not fill orders from the owners or managers of mills the employees of which are on a strike which has been sanctioned by the International Union of Flour and Cereal Mill Employees.

4. It is mutually agreed that the Union will not cause or sanction any strike, and that the Employer will not lock out his employees while this agreement is in force.

All question of wages or conditions of labour which cannot be mutually agreed upon shall be submitted to a Board of Arbitration chosen as follows :—The Employer shall select one member, who shall not be connected in any way with the Employer in business; the Union shall select one member, who shall not be a member of the Union, and the two members thus selected shall select a third member.

The decision of a majority of this Board of Arbitration shall be binding on the Employer, the Union and the employees.

5. The Union agrees to assist the Employer in procuring competent and experienced mill workers and employees to fill the places of any employees who violate Section Four of this agreement, or who may withdraw or be expelled from the Union.

6. The Employer agrees that the collector of the Union, whose credentials in writing shall be signed by the president of the Local Union, shall not be hindered or obstructed in the collecting of dues of members working in the mill or mills of the Employer.

7. The Employer agrees that the Union is the lawful owner of the Union Label, and that the Employer has only such rights and privileges as are specifically granted in this contract.

8. The Union agrees that no person except the International Secretary of the Union, or his deputy, upon his written order, shall have the right to demand or receive the rubber stamp or electrotypes from the Employer.

9. Should the Employer violate this agreement, he agrees to surrender, at once, to the International Secretary, or to his deputy, upon his written order, all rubber stamps or electrotypes bearing the imprint of the Union Label, and that the said International Secretary, or his deputy, upon his written order, may take such rubber stamps or electrotypes, wherever they may be, without being liable to damage or otherwise. The Employer further agrees that he will discontinue and stop using the Union Label in any form whatsoever upon any and all packages containing the product of his mill or mills, within fifteen days after receiving notice from the International Secretary that the Union considers that the Employer has violated this agreement or any part thereof.

10. Should the Employer, for any cause, fail to deliver the said rubber stamps, or electrotypes, he shall be liable to the International Secretary of this Union in the sum of Fifty Dollars as liquidated damages, to be recovered by the International Secretary, for the benefit of the Union, against the Employer.

Should the Employer fail to discontinue and stop using the Union Label upon any and all packages containing the products of his mill or mills, within fifteen days after receiving written notice from the International Secretary as provided in Section Nine of this agreement, he, the Employer, shall be liable to the International Secretary in the sum of Five Hundred Dollars as liquidated damages, to be recovered by the International Secretary in an action of contract, brought in the name of the International Secretary, for the benefit of the Union, against the Employer.

11. This agreement shall be in force until....., 190..... Should either party desire to alter, amend, or annul this agreement, said party must give a written notice thereof to the other party at least two months before the expiration of the agreement; and if the parties fail to give such notice this agreement shall continue in force for another year, and so on from year to year until such notice is given.

12. In case the Employer shall cease to do business, or the business or any major part thereof shall be transferred to other person or persons, firm or corporation, this agreement shall be ended and the above named rubber stamps and electrotypes shall be returned to the Union, and all rights and privileges appertaining to the use of the Union Label shall be forfeited, when a new agreement of similar tenor to this may be entered into.

(11.) JOINT ARBITRATION PLAN IN THE NEW YORK BUILDING TRADES.

Joint Arbitration Plan between the Building Trades Employers' Association and the Unions of the Building Trades of the City of New York.

Sec. 1. This Arbitration Plan shall govern the relations between the members of the Building Trades Employers' Association and the Unions, parties to this Plan, employed by them on buildings or structures under construction or alteration, and in such shops as were unionized and recognized as union shops by the Building Trades Employers' Association on or after July 3, 1903, and in the shops where trade agreements provide that this Plan shall govern; and it shall apply within all the territory known as Greater New York, unless otherwise specified in trade agreements. This plan applies to the mechanics of the trades and those helpers' organizations from which the mechanics of the trades are largely derived.

Sec. 2. The Unions as a whole or as a single Union shall not order any strike against a member of the Building Trades Employers' Association, nor shall any number of Union men leave the works of a member of the Building Trades Employers' Association, nor shall any member of the Building Trades Employers' Association lock out his employees.

Sec. 3. The Employers parties to this Arbitration Plan agree to employ members of the trade unions only, directly or indirectly, through sub-contractors or otherwise, on the work and within the territory as described in Section 1 of this Plan.

Sec. 4. There shall be a General Arbitration Board, consisting of two representatives from each Employers' Association affiliated with the Building Trades Employers' Association and two representatives from each Union recognized as a party to this Plan.

Sec. 5. The General Arbitration Board shall exercise the powers delegated to it by the several provisions of this Plan; shall determine the manner of adjustment of any dispute which is not specifically covered by this Plan; shall adopt and amend a Code of Procedure; and shall determine the manner in which and by whom the expenses of Special Arbitration Boards shall be paid.

Sec. 6. Each Association of Employers and each Union of Employees, parties to this Plan of Arbitration, shall elect semi-annually, two arbitrators and two alternates, who shall serve for six months or until their successors are elected. In case of the inability of an arbitrator and his alternate to attend, an Association of Employers or a Union of Employees may appoint a temporary substitute. All representatives of Employers' Association on the General Arbitration Board shall be engaged in, or officers of a corporation engaged in the trade they represent. All representatives of the Unions on the General Arbitration Board shall be working at their trade.

Sec. 7. Regular meetings of the General Arbitration Board shall be held once each month. Special meetings may be called by the Chairman or the Executive Committee, and shall be called upon the filing with the Secretary of a written request from five organizations represented in said Board.

Sec. 8. At all meetings of the General Arbitration Board and the Executive Committee a majority vote shall carry any question, including the election of officers; except a member call for a division, when, in order to carry a question or to elect an officer, it shall require a majority vote of the representatives of each side present and voting. In case of disagreement and inability of the body to agree upon a motion a conference committee shall be appointed, which shall report a motion or motions to the meeting.

Sec. 9. The Chairman and the Vice-Chairman of the General Arbitration Board shall be elected semi-annually by and from the members of the General Arbitration Board, and shall hold office until their successors are elected. One of these officers shall be an employer and the other an employee.

Sec. 10. The General Secretary shall be elected by the General Arbitration Board for a term of one year and shall serve until his successor is elected.

Sec. 11. The cost of maintaining the headquarters of the General Arbitration Board, including the salaries of the Secretary and his assistants, shall be divided equally between the Building Trades Employers' Association and the Unions collectively.

Sec. 12. The general arbitrators must be given power by the organizations they represent.

Sec. 13. The headquarters of the General Arbitration Board shall not be the meeting room nor the club rooms of any Association of Employers or Employees.

Sec. 14. There shall be an Executive Committee of the General Arbitration Board, which shall consist of twelve members of said Board, six of whom shall be elected by the representatives of the Unions in the General Arbitration Board, and six of whom shall be elected by the Employers' representatives in the General Arbitration Board.

Sec. 15. The Executive Committee shall exercise the powers delegated to it by the several provisions of this Plan; shall have control of all receipts and expenditures; shall act as a Board of Conciliation; shall exercise all the powers vested in the General Arbitration Board between the

regular meetings of said Board, except the power to amend the Code of Procedure and fix the expenses of Special Boards. It shall report all its proceedings to the General Arbitration Board. The Committee shall meet once a week or upon the call of the Secretary.

Sec. 16. The Executive Committee first elected shall divide itself by lot into six classes, so that one employer and one employee shall serve one, two, three, four, five and six months, respectively. At the expiration of the term of each committeeman his successors shall be elected to serve for a period of six months.

Sec. 17. All decisions of the Executive Committee shall be final and binding upon all the parties to this Arbitration Plan unless disapproved by the General Arbitration Board, in the following manner: Upon the receipt of the report of the Executive Committee any decision of the Executive Committee may be subject to review by the General Arbitration Board at the request in writing of an Association of Employers or Employees under seal of the organisation and endorsed by a majority vote of the representatives of either side present and voting. In the case of such review the question before the Board shall be, "Shall the decision of the Executive Committee be disapproved?" If the decision is disapproved the General Arbitration Board shall proceed to dispose of the question.

Sec. 18. All complaints shall be addressed to the Secretary, in writing, who shall endeavour to adjust them and report them to the Executive Committee.

Sec. 19. Where a trade agreement exists between an Employers' Association and a Union, all disputes in that trade shall be settled by a Trade Board of Arbitration with an umpire, if necessary. The decision of said Board or Umpire shall be final. Should the Trade Board fail to agree upon an umpire, or should either side fail to abide by the decision of the Trade Board or the umpire, the question shall be referred to the General Arbitration Board, for action, within twenty-four hours after such failure or refusal.

Sec. 20. Should a dispute arise in a trade in which there is no trade agreement between the Employers' Association and the Union of the trade, or between an Employer and a Union between whom there is no trade agreement, said dispute shall be referred to the General Arbitration Board.

Sec. 21. In the case of a dispute concerning a question of jurisdiction of trade or a dispute caused by conflicting provisions of two or more trade agreements, the complainant shall notify the General Secretary, and the Secretary shall immediately call a conference of the Unions and Employers' Associations interested. The conference shall settle the dispute by conciliation, if possible, or refer it to arbitration, if necessary. Pending the adjustment of the dispute, the work shall be performed by such mechanics members of unions parties to this Plan as the trade contractor for the work may have elected to employ. In case of refusal or failure on the part of any Union or Employers' Association concerned to adjust such a dispute in the manner above described, within twenty-one days after the filing of the complaint, the dispute shall be submitted to the General Arbitration Board or the Executive Committee, which shall determine whether the question at issue is a subject for arbitration. Should the General Board or Executive Committee decide that the question is a subject for arbitration, it shall refer the case to a Special Board, provided the dispute cannot be adjusted by conciliation.

Sec. 22. The work that has been heretofore recognized to be in the possession of a trade shall not be submitted to arbitration; provided, when possession is claimed by a party or parties to a jurisdiction of trade dispute, that question shall be decided by the Executive Committee, and in case of a disagreement the Executive Committee shall refer the question to an umpire. If the Executive Committee or the umpire decides that the work has not been in the possession of a trade, the question of who shall perform the work shall then be referred to a Special Board of Arbitration.

Sec. 23. "Unskilled trades" are hereby defined to be those of labourers, helpers or workers from whose ranks mechanics of a particular trade are not regularly recruited. Any difficulty arising in the unskilled trades may be adjusted in accordance with the provisions of this Plan, through the mechanics of the trade in which the unskilled are working; and should the mechanics of a trade repeatedly refuse to file a complaint it may be presented upon the written request of five organizations, parties to this Plan.

Sec. 24. Special Arbitration Boards shall consist of not less than four members, and shall be chosen from the members of the General Arbitration Board. They shall meet within twenty-four hours when notified by the General Secretary.

Sec. 25. It shall be the privilege of any Union or Employers' Association, through its representatives on the General Arbitration Board, to select the members of a special board to act for them, but no general arbitrator can act when the dispute is occurring in the trade which he represents. In case of the failure of any party to a complaint to select arbitrators within two weeks after an arbitration by a special board has been ordered, the Executive Committee shall select the necessary arbitrators.

Sec. 26. The Arbitration papers are to be drawn by the General Secretary, and shall contain a specific statement of the question in dispute, and a provision that all parties agree to abide by the decision of the Special Board or the umpire. The umpire must be selected before the case is opened. In case of refusal of any party to sign the arbitration papers, the Executive Committee shall determine, from the papers in the case, the specific question to be arbitrated.

Sec. 27. The Arbitration papers must be properly signed and sealed by the contending parties, each party receiving its copy. After a careful hearing of the case, stenographically reported, the verdict obtained by a majority vote, cast so as to include at least one representative of each of the contending parties, or a decision of the umpire shall be final and binding. No organization of Employers or Employees shall be permitted to alter, or amend, any decision or part thereof rendered by the General Board, Executive Committee or a Special Board of Arbitration.

Sec. 28. Members of Special Arbitration Boards who may be in the employ of members of the Building Trades Employers' Association are guaranteed re-employment by their firm or corporation when the Special Board on which they shall have served has disposed of the case.

Sec. 29. No lawyer is to act as arbitrator, counsel or advisor at any proceeding held under this Plan.

Sec. 30. Business agents of the unions, parties to this plan, shall be permitted to enter all shops, buildings or structures described in Section 1.

Sec. 31. When the conditions established by this Arbitration Plan are not maintained in a shop or on a job by employers or employees, not parties to this Plan, the Plan shall not apply in this particular shop or on the particular job for the time being ; provided, the non-maintenance is proven to the satisfaction of the Executive Committee of the General Arbitration Board and the dispute cannot be adjusted by it within twenty-four hours.

Sec. 32. The Building Trades Employers' Association agrees that its members and the labour unions collectively agree that the several unions and their members shall faithfully observe and abide by the provisions of this Plan, and the labour unions collectively agree to maintain the wages, hours and other conditions of employment prescribed by the several trade agreements and this Arbitration Plan, wherever members of any trade union, parties to this Plan, are employed within the territory covered by this Plan.

Sec. 33. After the date of the adoption of this Plan, no union shall become a party thereto without the consent of the General Arbitration Board, but should the General Arbitration Board disagree on the question of admitting a union, it shall refer the case to arbitration.

B.—APPRENTICESHIP REGULATIONS.*

(1.) RULES GOVERNING EMPLOYMENT OF REGULAR MACHINISTS' APPRENTICES.

(Chicago, Milwaukee and St. Paul Railway Company.)

The age of a regular machinist apprentice entering the service must not be less than sixteen or more than twenty-one years. He must be of good character and able to pass a physical examination, also a written examination at the office of the Superintendent of Motive Power with an average of not less than 75 per cent. in reading, writing, spelling, definition of words and arithmetic, including practical examples in mensuration.

Apprentices entering the shops of this Company will be given every reasonable opportunity for acquiring a knowledge of the trade for which they are apprenticed.

An apprentice who manifests no desire to learn, or adaptability for the trade, or who is negligent of or fails to conform to the rules of the shop, or who is ungentlemanly to his foreman or fellow workmen, will be dismissed from the service.

Apprentices shall serve four years and shall not in any case leave the service of the Company without good and just cause, except, however, that should an apprentice prove disqualified during the first six months, he may quit or the Company may transfer or dismiss him.

The following compensation will be allowed for a Regular Machinist Apprentice :

| | | | | | | | |
|----------|-----|-----|-----|-----|-----|-----|-----------------------------------|
| 1st year | ... | ... | ... | ... | ... | ... | 10 cents (5 <i>d.</i>) per hour. |
| 2nd " | ... | ... | ... | ... | ... | ... | 12 " (6 <i>d.</i>) " |
| 3rd " | ... | ... | ... | ... | ... | ... | 16 " (8 <i>d.</i>) " |
| 4th " | ... | ... | ... | ... | ... | ... | 20 " (10 <i>d.</i>) " |

At the expiration of the term of apprenticeship, if the apprentice has become proficient in his trade and has been entirely satisfactory in his work and conduct, and the conditions of the service warrant, he may be advanced to the rank of machinists. If so retained, he shall receive journeymen's pay.

No apprentice shall be permitted to work overtime, or on night shifts, during the first three years of his apprenticeship, except in cases of emergency. No apprentice shall be sent out on the road during his apprenticeship term, except to secure information on the trade or when doing test work. If required to work overtime, apprentices shall be allowed the usual excess time as is given regular mechanics for overtime work.

The first and each succeeding year of the apprentice's term of service will end twelve months from the date of entering the employ of the Company as such, providing he has been on duty 279 days. This provides for an absence of twenty six days in addition to the eight Legal Holidays on which the shops are closed. If absent in excess of this time, it must be made up before the next year begins. In case the shop is working less than ten hours per day, it will not effect the termination of the apprentice's year, as every day the shop runs and he is on duty, will be counted as one day in making up the total time for each year of service.

The apprentice who takes an interest in the work and makes usual progress in acquiring knowledge of the trade will be given an opportunity to obtain three months' instruction in Test Work provided there is any, and three months in the Drafting Office. The time in the Drafting Office may be extended to six months, the last three months to be after the conclusion of the four years' course but at the same rate of pay as the fourth year apprentice receives, providing he has acquired sufficient knowledge of the principles of Mechanical Drawing by private instruction and otherwise. It must be distinctly understood that the opportunity for experience in test work and in the Drafting Office is to be afforded only to those who have learned the principles of drafting as outlined above.

The Company will furnish all opportunity possible for the apprentice to secure a complete knowledge of the machinists trade during his apprenticeship. He may serve three years on the

* See also apprenticeship clauses in "wages agreements, working rules, etc.," Appendix I. A.

different machines and special jobs and he shall not serve more than six months on any one machine or special job, and one year on the floor, the course and time allotted to each class of work for the regular machinist apprentice will be as follows:—

| | | | | | | |
|--|-----|-----|-----|-----|-----|-----------|
| Machines (Small Lathes, Shapers, &c.) | ... | ... | ... | ... | ... | 6 months. |
| Floor | ... | ... | ... | ... | ... | 9 „ |
| Rods and Driving Wheels | ... | ... | ... | ... | ... | 3 „ |
| Pistons and Guides | ... | ... | ... | ... | ... | 3 „ |
| Valve Motion | ... | ... | ... | ... | ... | 3 „ |
| Air Brakes and Injectors | ... | ... | ... | ... | ... | 3 „ |
| Machines (Large Tools, Lathes, Planers, Slotters and Boring Mills) | ... | ... | ... | ... | ... | 9 „ |
| Roundhouse | ... | ... | ... | ... | ... | 6 „ |
| Test Work and Drafting Office | ... | ... | ... | ... | ... | 6 „ |

If an apprentice fails to qualify for or does not desire the experience in Test Work or Drafting Office, the time allotted for this work will be equally distributed between floor work and large machine tools.

It will be the duty of the General Foreman to see that each apprentice is advanced to the different classes of work and it will be the privilege of the apprentice to call his attention in writing whenever transfers are not made in accordance with the above schedule.

Apprentices in shops not equipped with a Testing Department or Drafting Office, may, if they desire, be transferred to Milwaukee Shops for the last six months of their apprenticeship.

An apprentice is to be governed by all shop rules and regulations that are in effect during his term of service or apprenticeship.

At the expiration of an apprentice's term of service a certificate will be issued to him stating the class of work he has finished.

(2.) TERMS OF APPRENTICESHIP FOR MACHINISTS EMPLOYED BY A PROVIDENCE ENGINEERING FIRM.

1. Applicants for admission to apprenticeship must be not less than sixteen nor more than eighteen years of age. They must be physically sound, of good moral character, and have received an education equivalent at least to that required for graduation from the public grammar schools of the City of Providence.

2. Application must be made in person; and, if accepted, the applicant's name will be registered and due notice given when he will be required to commence work.

3. The first six hundred and sixty hours (twelve weeks) of service shall constitute a term of trial. If the apprentice shall, during this term, prove satisfactory, and shall before the expiration thereof, execute, together with his father or guardian,—or if he have no father or guardian, then with some other responsible party,—an agreement in the form hereto annexed, then his apprenticeship shall date from the beginning of the term of trial and shall continue for the full term, unless sooner terminated as hereinafter stated.

4. Apprentices will be required to serve for the term of four years,—each year to consist of two thousand seven hundred working hours, which with the usual working week of fifty-five hours, is equal to two hundred and ninety-five working days. The remaining working days in each year will be allowed apprentices for recreation, at such time or times as the Company shall direct.

5. Apprentices will be required to perform their duties with punctuality, diligence and fidelity, and to conform to the rules and regulations which are or may be adopted for the government of the shops.

6. Apprentices are not allowed to use tobacco in the shops during working hours.

7. Apprentices shall make up lost time at the expiration of each year, at the rate of wages paid during said year; and no year of service shall commence until the apprentice shall have fully made up all time lost in the preceding year.

8. The Company reserves the right, whenever the state of business demands it, to shorten the hours of labour, or whenever for any reason it shall stop the works, to suspend apprentices wholly or in part; and the making up of time so lost shall be at the discretion of the Company.

9. The Company also reserves the right, in its sole discretion, to terminate its agreement with any apprentice also to discharge him from its employment for non-conformity with its rules and regulations, want of industry or capacity, indifference to his duties or improper conduct within or without the shops.

10. Apprentices will be paid for each hour of actual service (not including time allowed for recreation or time when work is suspended) the following wages:—for the first year, eight cents [4d.]; for the second year, ten cents [5d.]; for the third year, twelve cents [6d.]; and for the fourth year, fourteen cents [7d.]. If the Company shall terminate the apprenticeship during the time of trial, it will pay at the rate of eight cents [4d.] per hour for the time worked.

11. Wages will be paid on the regular pay-days of the Company, as they may be established from time to time.

12. The Company will faithfully instruct the apprentice in the machinist's art and trade, in their shops, during the term of apprenticeship.

13. Graduates of the Providence Manual Training High School, well recommended by the Principal, may have their term of apprenticeship shortened at the discretion of the Company.

(3.) APPRENTICESHIP CLAUSES OF THE MEMPHIS TYPOGRAPHICAL UNION, No. 11.

Sec. 12. This Union insists that proprietors and foremen, in making their selection of apprentices, shall employ boys of studious and moral habits, and recommend the indenture or full term contract system whenever practicable. After the first six months of apprenticeship this Union shall have control of and use its best effort for the moral, technical and practical training of apprentices in offices under its jurisdiction.

Sec. 13. The continuance of the term of apprenticeship of any apprentice after the first six months shall be contingent upon a satisfactory report from a committee of the Union relative to such person's educational and moral qualifications.

Sec. 14. Four years shall be the minimum term of service for an apprentice.

Sec. 15. Apprentices, upon entering offices under the jurisdiction of this Union, shall be registered by the Recording Secretary of this Union, and the term of apprenticeship shall date from such registration. A record shall be kept of such apprentices and a certificate issued to each, which certificate shall be presented to the union when application is made for membership, said certificate to be as follows :—

CERTIFICATE OF APPRENTICESHIP. (Memphis Typographical Union No. 11.)

This is to certify that.....has on this date entered the employ of..... as an apprentice.

..... Chairman of Office.
..... Recording Secretary.

Date.....

Sec. 16. In offices where more than one apprentice is employed they shall be classed as senior and junior apprentices; the senior apprentice may become a probationary member of this Union at the end of his third year of apprenticeship, and shall receive two-thirds of the wages of a journeyman at the existing scale of prices. Application for probationary membership shall be accompanied by the regular initiation fee. A ballot for apprentice applicants shall be taken in the same manner and governed by the same rules as those applying to the admission of journeymen. All apprentices, upon their admission, shall subscribe to the following obligation :—

"I,, do most solemnly promise that I will never divulge to any person or persons whomsoever, under any circumstances, anything I may see or hear at the meetings of this Union, or which may come to my knowledge through other means touching any business or legislation intended. All this I promise without any mental reservation."

Sec. 17. Offices employing less than three journeymen regularly shall be entitled to only one apprentice. Offices employing more than three and less than fifteen journeymen regularly shall be entitled to two apprentices, and no office shall be entitled to more than three apprentices. Offices having more than three apprentices must have a separate and distinct foreman to each department.

Sec. 18. All apprentices employed on daily or weekly newspapers, job or book offices must be employed the last two years of their apprenticeship on the case, and at all the intricate handiwork of the craft. More specifically speaking, this means that during the last two years of apprenticeship all apprentices in newspaper offices must be given an opportunity to thoroughly learn the different branches of newspaper work, with the exception that during the last six months they shall be given an opportunity to learn the typesetting machine; and in book and job offices they must be given an opportunity, during the last two years of apprenticeship, to learn those two branches of the craft by practically composing book or commercial job work at least four hours each day. Specializing apprentices is not considered advantageous to the apprentice and should be discouraged.

Sec. 19. During the last two years of apprenticeship the apprentice shall furnish the Chairman of the office with proofs and specimens of his work at least once every three months, which shall be properly indorsed by the Chairman and foreman and referred to the Investigating Committee, together with any other information bearing thereon. In offices where there is no Chairman, such proofs and specimens shall be submitted to the Chairman of the Executive Board.

Sec. 20. No apprentice shall leave one office and enter that of another employer without the written consent of his first employer or the President of the Union, and the date of each change of offices by the apprentice shall be recorded on the books of the Union.

Sec. 21. Any member of this Union who knowingly invites, entices or in any way influences an apprentice to use intoxicating liquors or drugs, to gamble or otherwise debauch or debase himself; or any member who participates with such apprentice in drinking, gambling, or other debasing practices, shall, upon conviction thereof, be deemed guilty of conduct unbecoming a union man and shall be fined \$5.00 for the first offence, and \$10.00 for each succeeding offence.

Sec. 22. Any apprentice or boy employed as "cub" in any union office who, prior or subsequent to such employment, has formed habits of immorality--drinking, gambling, etc.--and who persists in those habits, shall be recommended by the executive officers of this Union for discharge.

(4.) APPRENTICE RULES IN THE CHICAGO BUILDING TRADES.

Apprentice Rules adopted by the Joint Arbitration Board of the Carpenters' and Builders' Association and the Carpenters' Executive Council of Chicago and Cook County.

Carpenters' Apprentices.—Sec. 1. Each responsible party to this agreement shall have the right to teach his trade to apprentices and the said apprentices shall serve four years as prescribed in the apprentice rules as agreed upon by the Joint Arbitration Board, and shall be subject to the control of the said Arbitration Board.

Sec. 2. Apprentices shall be under the jurisdiction of the Joint Arbitration Board, which has the authority to control them and protect their interests subject to approved indentures entered into with their employers and the rules adopted by the Joint Board.

Sec. 3. The applicant for apprenticeship shall not be more than seventeen years of age at the time of making application, except under conditions satisfactory to the two Presidents. Applicants more than seventeen years old must bring satisfactory proof of having worked at the trade.

Sec. 4. The contractor taking an apprentice shall engage to keep him at work in the trade for nine consecutive months in each year, and see that during the remaining three months of the year the apprentice attends school during January, February and March, and a certificate of attendance from the principal of the school attended must be furnished to the Joint Arbitration Board as a compliance with this requirement, before he is allowed to work during the coming year.

Sec. 5. A contractor taking an apprentice shall keep him steadily at work or school; failing to do so, he shall pay him the same as though he had worked for him.

Sec. 6. In case an apprentice at the end of his term of four years, for want of proper instruction in his trade, is not a proficient workman, and if, after a thorough investigation the Joint Arbitration Board finds that the contractor to whom he was apprenticed did not give him proper instruction and an opportunity to learn his trade, he may be required to serve another year, with whom he and the Joint Arbitration Board may determine and at a rate of wages (less than minimum) in his trade they may determine; the difference between said rate and the minimum scale in his trade shall be paid him through the Joint Arbitration Board by the contractor to whom he was apprenticed.

Sec. 7. A contractor entitled to an apprentice may take one on trial for two weeks, provided that applicant holds a permit from the Joint Arbitration Board, and if after said trial, conditions are satisfactory to both parties, they will be required to sign indentures agreeable to the Joint Arbitration Board. If not satisfactory the contractor is not bound to indenture him, but he will be required to pay the boy six dollars per week for the two weeks. No boy will be allowed a trial with more than two contractors, or a contractor with more than two boys, consecutively.

Sec. 8. The rate of wages of an apprentice at the date of indenture shall in no case be less than \$312 for the first year, \$364 for the second year, \$442 for the third year, and \$572 for the fourth year, payable in lawful money of the United States, and shall be paid in fifty-two weekly instalments at the following rate per week of: \$6 [25s.] for the first year, \$7 [29s. 2d.] for the second year, \$8.50 [35s. 5d.] for the third year and \$11 [45s. 10d.] for the fourth year.

Sec. 9. The issuing of permits for an apprentice to work for another contractor when the one to whom he is apprenticed has no work, shall be left to the Joint Arbitration Board.

Sec. 10. All apprentices shall report to the Joint Arbitration Board at its meetings on the first Thursday of January and April of each year.

Sec. 11. The contractor shall not have more than two apprentices at any one time.

Sec. 12. Contractors shall be allowed apprentices on the following basis: Yearly average of four journeymen, one apprentice. Yearly average of ten journeymen, two apprentices.

It is agreed by the parties that this agreement shall be in force between the parties hereto until April 1, 1912.

(5.) MINOR'S LICENCE IN THE CITY OF BOSTON.

City of Boston.—Revised Regulations of 1898, Chapter 2, as amended by the Regulations of 1900, Chapter 1, and the Regulations of 1902, Chapters 1 and 3.

Minors' Licences.

Sec. 1. No minor between the ages of fourteen and twenty-one years shall, in any street or public place of the city of Boston, work as a bootblack, or sell or expose for sale any books, newspapers, pamphlets, fuel, fruits, provisions, ice, live animals, brooms, agricultural implements, hand tools used in making boots and shoes, agricultural products of the United States, or the product of his own labour or the labour of his family, unless he has a minor's licence, granted to him by the mayor and aldermen of said city, and issued to him by the clerk of committees of said city, for so working, or for so selling said articles, nor unless he complies with the terms of such licence.

Sec. 2. The clerk of committees of the city of Boston shall receive the application of the parent or guardian of a minor, or of any responsible citizen of Boston, for a licence for such minor to work as a bootblack, or to sell any or all the articles enumerated in the preceding section, and shall, when the mayor and aldermen pass a vote to that effect, issue a minor's licence and badge to such minor to go about from place to place in the city of Boston, and on the sidewalks in said city, to sell newspapers, or to work as a bootblack, or in the streets and other public places in said city to sell any or all of the other articles enumerated in the preceding section. Every such licence shall be issued and accepted on the condition that the minor shall comply with the terms of the following section, and said section shall be printed in the licence.

Sec. 3. The minor shall conform to the statutes, the ordinances of the city of Boston, and the regulations of the board of aldermen of said city; shall surrender his licence and badge to the clerk of committees of said city when notified that his licence has been revoked; shall not transfer or lend his licence or badge, nor furnish any unlicensed minor with newspapers or other articles to sell; shall not sell newspapers in or on any part of a street other than the sidewalk, nor in or on a street car without the permission of the company operating such car; shall not at any time while engaged in working as a bootblack, or selling articles in public places, congregate with other persons, nor make any unnecessary noise, nor in any way disturb or annoy persons as they pass, nor obstruct free passage on any sidewalk, crosswalk or entrance to any public place, nor occupy any stand with any other person, nor allow any unlicensed minor to assist or accompany him, nor allow idle persons to assemble or congregate around him, or around any stand occupied by him, nor so work or sell in any other place than that specified in his licence, when a place is so specified, nor at any time while so working or selling, fail to wear conspicuously in sight the badge furnished to him by said clerk of committees, nor fail to exhibit his licence to any police or other officer of said city if requested by him so to do. Any minor who violates any of said terms will be deprived of his licence and badge, and be fined.

C.—FACTORY BENEFIT FUNDS.

(1.) RULES OF THE EMPLOYEES' BENEFIT ASSOCIATION OF THE INTERNATIONAL HARVESTER COMPANY, CHICAGO (CONTRIBUTORY) (Organised September 1, 1908).

Object.

1. The object of the Benefit Association is to provide its members with a certain income when sick, or when disabled by accident, either on or off duty, and to pay to their families certain definite sums in case of death ; to create and maintain a fund which shall belong to the employees, be used in payment of benefits to them, and cost them the least money possible considering the benefits received.

Organization.

2. International Harvester Company, International Harvester Company of America, and subsidiary companies, have associated themselves with such of their employees as may join the same in the formation of this Benefit Association.

3. The Benefit Association is in the executive charge of a Board of Trustees consisting of members representing the plants and departments of the International Harvester Company, the International Harvester Company of America, and subsidiary companies, and a Superintendent.

The headquarters of the Superintendent will be at the general office of the Company in Chicago.

4. Definitions of terms.

5. The Benefit Fund will consist of contributions from members of the association, income or profit from investments, gifts or legacies to the Fund, and such contributions as may be made by the Company from time to time.

Company's Contribution.

6. At the end of each year, if the average membership in the Benefit Association during that year has equalled 50 per cent. of the average total number of employees in the Companies' manufacturing plants, the Company will contribute \$25,000.00 to the fund, and if such average membership has equalled 75 per cent. of such total number of employees, the Company will contribute \$50,000.00 to the fund. The Company agrees to temporarily advance funds when necessary for payments of benefits at due date ; to guarantee the safety of the fund and to pay semi-annual interest on the average balances at four per cent.

Handling of Fund.

7. The contributions from members shall be used only for the payment of benefits due to members of the Association, and the expenses of administration. If a surplus shall accumulate it shall remain under the control of the members of the Association, through their representatives on the Board of Trustees, and if a deficit arise the Company will make temporary advances to pay same.

Board of Trustees.

8. There shall be a Board of Trustees of thirty members to be chosen annually in December, to serve for one year from the first day of January next succeeding and until their successors shall take office, as follows :—

One half shall be chosen by the employees who are members of the Association ; one representative to be chosen by employees from each Works, including the Works of subsidiary and affiliated companies and the field force of the Sales and Collection Departments of the International Harvester Company of America.

An equal number shall be chosen by the Board of Directors of the Company.

The President shall be ex-officio, a member and chairman of the Board of Trustees, and entitled to vote. He shall have the power to appoint a temporary chairman to serve in his absence.

The number of Trustees may be increased or decreased after the first year by a majority vote of the Trustees, but at all times one-half shall be elected by the employees and one-half appointed by the Company.

The Superintendent of the Association shall be Secretary of the Board. He shall have no vote.

The Board of Trustees shall appoint and have general supervision over the Superintendent, and of the operations of the Association, and see that they are conducted in accordance with its regulations.

Trustees shall hold stated meetings, quarterly, on the fourth Thursday of January, April, July and October, at the general office of the Company, Chicago, and shall meet at other times at the call of the Chairman.

It shall be the duty of the Chairman to call special meetings of the Trustees upon the written request of seven of its members.

The necessary travelling expenses of Trustees, actually incurred, and pay or wages of such members for time engaged in travelling to or from meetings of the Board and attending same, shall be paid by the Company.

Annual Reports.

9. The Fiscal Year of the Association shall begin with the first day of January of each year. The first fiscal year shall be from September 1, 1908, to January 1, 1910.

The condition of the Fund at the close of each year shall be audited and reported on by a competent person or persons selected for that purpose by the Trustees elected by the members of the Association. A detailed report, including all receipts and disbursements, shall be printed annually, and members may procure copies on application. The books shall be open at all times to members.

Superintendent.

10. The Superintendent of the Benefit Association shall be appointed by the Trustees. Under the direction of the Board, he shall have charge of all business of the Association; employ necessary clerks and other assistants; prescribe the forms and blanks to be used; certify all bills and pay rolls; sign all orders for payments of benefits, furnish to the Board such reports as they may require, and decide all questions properly referred to him. He shall have authority to appoint physicians, medical examiners, and visiting nurses, and shall have general supervision of all medical and surgical affairs of the Association.

Medical Examiners.

11. Medical examiners shall make the required physical examination of applicants for membership in the Benefit Association, prepare applications, report the condition of sick or injured members, decide when members are disabled and when they are able to work, whether any disability shall be considered a relapse or original disability, and whether cause of disability shall be classed as due to sickness or accident, and perform such other duties as may be required of them by the Superintendent.

Medical examiners of the Association shall in each case make an examination of disabled members in order to report intelligently, and each member must choose and pay for his attending physician. No bills for medical or surgical attendance are paid by the Association unless the medical examiner finds it necessary to provide additional or different medical or surgical treatment, or to remove patient to a hospital in order to make possible reasonably prompt recovery. Bills to cover such cases will be paid by the Association after proper certification by the medical examiner.

Membership.

12. All employees of the International Harvester Company, International Harvester Company of America, and subsidiary companies who apply for membership and conform to the regulations, shall be members of the Association.

13. *Eligibility.*—(a.) Any employees in service on or before September 20, 1908, may become a member of the Association without medical examination and without age limit at any time prior to January 1, 1909.

(b.) Thereafter, any employee not over forty-five years of age may, upon passing a satisfactory medical examination and upon approval of his application by the Superintendent, become a member.

(c.) Further, any employee over forty-five years of age may, upon passing a satisfactory medical examination, and upon approval of his application by the Superintendent, become a member under the same regulations, except that the death benefits in such cases shall be only \$100.00.

14. *Temporary Lay-off.*—Any member who is temporarily relieved from service for a period not exceeding ninety days may retain his membership during such absence by paying his contributions each month in advance, the amount of contributions during such absence to be based upon previous two months average contributions.

15. *Leaving Service.*—When a member resigns from the service or leaves the service without notice, or absents himself without notice (unless he afterwards gives reasons satisfactory to the Superintendent), or is discharged, or is laid off for a period longer than ninety days,—his membership in the Association shall terminate with his employment, and he shall not thereafter be entitled to any benefits except for disability beginning and reported before such termination of employment and continuing without interruption.

Any employee leaving the service who has been a member of the Benefit Association for one year, or who was a member of the Association January 1, 1909, and has been in the service five years, may continue his membership in respect only of the minimum death benefit which he has held during the last year of employment, or of any smaller amount, upon making supplementary application therefor before termination of employment or within five days thereafter.

16. *Reinstatements.*—Any member paying full contributions during temporary leave of absence may be reinstated within ninety days without physical examination.

If any member contributing for death benefits only is re-employed, he shall resume full membership upon passing a satisfactory physical examination.

Applications.

17. Membership in the Benefit Association shall be based upon an application in the following form:—

Application for membership in Employees' Benefit Association of International Harvester Company.

No.....
Dept. or
Works

To the Superintendent of Employees' Benefit Association of International Harvester Company:

I,....., being.....years of age, and residing at No.....Street, in the City of....., in the County of....., and State of....., now employed by....., do hereby apply for membership in said Employees' Benefit Association, and agree to be bound by the regulations of said Association, a copy of which has been by me received, and by any other regulations of said Benefit Association hereafter adopted and in force during my membership.

I also agree, request and direct that said Company, by its proper agents, and in the manner provided for in such rules, shall, during the continuance of my employment, apply as a voluntary contribution from any wages earned by me under said employment two (2) per cent. of my wages for the purpose of securing the benefits provided in the regulations for a member of said Association.

Unless I shall hereafter otherwise designate in writing with the approval of the Superintendent of the Benefit Association, death benefits shall be payable to my wife (husband), if I am married at the time of my death ; or, if I have no wife (husband) living, then to my children, collectively, each to be entitled to an equal share, including as entitled to the parent's share the children of any dead child, or if there be no children or children's children living, then to..... if living, and if not living, to my father and mother jointly, or the survivor ; or if neither be living, then to my next of kin, payment in behalf of such next of kin to be made to my legal representative ; or if there be no such next of kin, or if proper claim is not made to the Superintendent within one year from the date of my death, the death benefits shall lapse, and the amount thereof shall become and remain a part of the Benefit Fund.

I also agree, for myself and those claiming through me, to be governed by the regulations providing for final and conclusive settlement of all claims for benefits or controversies of whatever nature, by reference to the Superintendent of the Benefit Association, and an Appeal from his decision to the Board of Trustees.

I also agree that any untrue or fraudulent statement made by me to the Medical Examiner, or any concealment of facts in this application, or any attempt on my part to defraud or impose upon said Benefit Association, or my resigning from or leaving the service of said International Harvester Company, International Harvester Company of America, or subsidiary company, or my being relieved or discharged therefrom, shall forfeit my membership in the said Benefit Association, and all rights, benefits and equities arising therefrom, except that such termination of my employment shall not (in the absence of any of the other foregoing causes of forfeiture) deprive me of any benefits to the payment of which I may be entitled by reason of disability beginning and reported before and continuing without interruption to and after such termination of my employment, nor of the right to continue my membership in respect of death benefit only, as provided in said rules.

I certify that I am correct and temperate in my habits ; that, so far as I know, I am now in good health, and have no injury or disease, constitutional or otherwise, except as shown in the accompanying statement made by me to the Medical Examiner, which statement shall constitute a part of this application.

In witness whereof I have signed my name hereto at....., in the County of....., State of..... this.....day of..... A. D. 19... ; this application to take effect on such date as may be designated by said Superintendent.

.....
Signature of Applicant.

Witness :.....

The foregoing application is approved at the office of the Superintendent of the Employees' Benefit Association, International Harvester Co., at Chicago, Illinois, this.....day of..... A. D. 19... ; to take effect the.....day of..... A. D. 19...

.....
Superintendent of Employees' Benefit Association.

Applications shall take effect on the date when approved by the Superintendent, and a Certificate of Membership shall be issued.

Note.—For employees who are not required to pass a medical examination upon application, part of clause (a) and part of clause (b) referring to medical examination will be waived.

18. *Physical Defects.*—If any applicant for membership has physical defects which would prevent the approval of his application if presented unconditionally, his application may nevertheless be approved ; provided that he executes an agreement in writing, satisfactory to the Superintendent, to the effect that he shall not be entitled under his membership to any benefits for disability caused by, arising from, or growing out of such defects ; such agreement to be attached to and to be made a part of his said application, and such modification of the prescribed forms of application is hereby authorized.

Contributions.

19. The word "Contribution" wherever used in these rules shall be held and construed to mean such designated portion of the wages payable by the Company to an employee as he shall have agreed in his application that the Company shall apply for the purpose of securing to him the benefits of the Benefit Association, or such cash payments as it may be necessary for a member to make for said purpose.

20. *Contributions from Wages—Due Dates.*—Contributions for any month will be due on the 1st and the 15th of that month, and will ordinarily be deducted from the member's wages due on these dates, or on regular pay days at each Works.

The Contributions shall be two per cent. of the wages received by the employee, and the Company shall make additional deductions at the same rate to cover absences not exceeding seven days.

If any member's contribution is omitted from the pay roll in error, the fact that such deduction has not been made shall not debar him or his beneficiary from benefits to which they would otherwise be entitled, and contribution shall be deducted from next pay roll.

21. *Cash Payment of Contributions.*—When a member has no wages on the pay roll, any contributions due from him must be paid in cash, in advance, to the Superintendent, otherwise he will be in arrears,

A member contributing for death benefits only shall make such cash payments direct to the Superintendent.

22. *Amount of Contribution for Death Benefit Only.*—Members who have left the service of the Company and retain their membership for death benefits as herein provided, shall contribute ten cents per month, in advance, for each one hundred dollars of death benefit, on the basis of last year's salary, but not more than \$2,000.00.

23. *Contributions During Disability.*—Members shall not make contributions for any time when declared disabled by the Medical Examiner, except as provided in the regulations. When full wage are paid the usual contribution shall be made.

24. *Arrears.*—When a member is in arrears he shall be entitled to no benefits, and if in arrears two months his right to reinstatement without physical examination shall cease without notice.

25. *Maximum Benefits.*—No member shall be allowed to contribute or receive benefits on the basis of more than \$2,000 annual compensation, but if his salary exceeds said amount, his contributions and benefits shall be calculated on said sum.

Benefits.

26. The following benefits shall be paid to members or beneficiaries entitled thereto, in accordance with the provisions of the regulations :

27. *Sickness Benefit.*—(a.) Payment for each working day, except for the first seven days of disability classed as due to sickness, for a period not longer than fifty-two weeks, at one-half of member's average wages on the basis of the last sixty days worked. A relapse shall constitute part of the disability in computing term of disability.

(b.) *Establishing Claims for Sickness Benefit.*—To establish a claim for sickness benefits there must be positive evidence of acute or constitutional disease sufficient to cause disability.

(c.) *Causes of Disability which shall be Classed as Due to Sickness.*—Disability resulting from infection of a cut, abrasion, scratch, puncture, or other wound, or from any injury, not immediately disabling, and not reported at the time of the occurrence of the accident causing the injury, or from poison, however taken into or acting upon the body, or from any overdose of medicine or drug taken by mistake, or from surgical operation necessary for the removal of some defect which would otherwise probably produce disability, or from sunstroke, or frost bite, shall be classed as due to sickness.

(d.) *Pregnancy.*—Benefits for disability due to pregnancy shall be limited to three months and said benefits shall be paid in a lump sum, provided in all cases, however, claimant shall have been a member of the Employees' Benefit Association for nine months.

28. *Accident Benefits.*—(a.) Payment for each working day or part of working day of disability classed as due to accident (either when at work or off duty) for a period not longer than fifty-two weeks at one-half of member's average pay, on basis of last 60 days worked.

(b.) *Establishing Claims for Accident Benefits.*—To establish a claim for accident benefits the accident must be reported immediately upon its occurrence, and there must be external, positive and visible evidence of physical injury by accident sufficient to cause immediate disability. In cases of alleged sprain, strain, wrench, and the like, where physical proof of disabling injury is lacking, the member must furnish substantial history, satisfactory to the Superintendent, of violence accidentally inflicted sufficient and liable to cause disabling injury, otherwise accident benefits will not be allowed.

29. *Benefits after Termination of Service.*—A member entitled to benefits for time after termination of service shall not be entitled to benefits on account of sickness beginning or injury occurring during such time, nor on account of death occurring in such time, unless directly due to the sickness and injury and occurring during the disability existing at the time of such termination of service, or unless he continues his membership in respect to death benefit only, in accordance with the foregoing.

Special Benefits in Case of Serious Accident.

30. *Feet and Hands.*—If a member receives accidental injuries producing the immediate severing of, or necessitating, in the opinion of a Medical Examiner of the Association, the amputation of a hand or foot at or above the wrist or ankle, he shall receive a total amount equal to one year's average wages.

In case of loss of both hands or both feet, or of one hand and one foot, he shall receive twice the above benefits, or a total amount equivalent to two years' average wages.

31. *Eyes.*—If a member receives accidental injuries resulting in the total and irrecoverable loss of sight of one eye, he shall receive a total amount equal to one-half his average yearly wage.

For the total and irrecoverable loss of the sight of both eyes, he shall receive the total amount of two years' average wages.

32. *Lump Settlements.*—In case of any grave injury or chronic sickness where the member desires to accept a lump sum in lieu of the benefits which might become due to him or on his account, and in full of all obligations of the Benefit Association arising from his membership, the Superintendent shall have authority to make full and final settlement with such member on such terms as may be agreed upon in writing. All such settlements shall be reported to the Trustees at its next meeting.

33. *Limitations.*—No member shall be entitled to disability benefits from the Association and a pension from the Company at the same time, but he may retain his membership for death benefit without regard to pension.

No member shall be entitled to receive benefits from sickness and accident disability at the same time.

34. *Relapse.*—In case of relapse in sickness disability occurring within two weeks, or a succession of sickness disability upon an accident, which lasted one week or more, the first seven days shall not be deducted in computing time of sick benefits; and where such immediately preceding accident disability lasted six days or less, the number of days to be deducted shall be seven, less the number of days of such accident disability.

35. *Payments.*—Benefits on account of continued disability will be paid semi-monthly.

Benefits for short periods of disability will be paid as soon as the amount due can be determined.

Benefits shall be paid only to the disabled member, or in accordance with his written order, when approved by the Superintendent, or to his legal representative.

Benefits shall be paid in conformity with the financial methods of the Company on orders drawn by the Superintendent, upon his receiving such documents respecting claims as may be required by him.

Death Benefits.

36. *Death from Sickness.*—Payment in case of death classed as due to sickness, of an amount equal to one year's average wages.

37. *Death from Accident.*—Payment in case of death classed as due to accident, of an amount equivalent to two years' average wages.

38. *Establishing Claims for Death Benefits.*—Claims for death benefits must be made within sixty days after the death of the member. To establish a claim for accident death benefit there must be external, positive, and visible evidence of physical injury by accident sufficient to cause death; death due to other causes shall be classed as due to sickness.

39. *Payment of Death Benefits.*—Death benefits, together with any unpaid disability benefit, shall be payable to the beneficiary of a deceased member upon proof of claim.

A part of the death benefit (not to exceed one hundred dollars) may, at the discretion of the Superintendent, be paid before final settlement, to meet funeral or other urgent expenses incident to the death of a member.

40. *Suicide.*—If a member commits suicide before the end of the first year of his membership the beneficiary shall receive in full satisfaction of all claims only such amount as the member has contributed for death benefits.

Disability.

41. Wherever the word "Disability" is used in these regulations, it shall be held to mean physical inability to work, by reason of sickness or accidental injury, and the word "Disabled" shall apply to members thus physically unable to work.

42. The decision as to when members are disabled and when they are able to work shall rest with the Medical Examiner of the Association, and his decision shall be final and binding upon the member, subject to the provisions of the regulations.

43. *Notification.*—When a Works member becomes disabled, he shall notify his timekeeper immediately or cause him to be notified; other employees shall notify their superior officers. In reporting disability, the member shall give his house address. If he fails to give notice until he recovers, he shall not be entitled to benefits unless he proves his disability to the satisfaction of the Superintendent and gives satisfactory reason for failure to give notice. If he gives notice during disability, but delays in so doing, he shall not be considered disabled before the day on which notice is given, unless he proves his disability before that day to the satisfaction of the Superintendent and gives satisfactory reason for delay in giving notice.

If a member becomes disabled when away from home, whether on business for his employer or on leave of absence, he shall not be entitled to benefits unless he reports his disability immediately, and proves it to the satisfaction of the Superintendent.

44. *Reports.*—When a member becomes disabled, he shall also, unless unable on account of his disability, report immediately to the Medical Examiner at his office, during business hours. A disabled member not confined to the house by his disability shall also report at the Medical Examiner's office from time to time as requested, and keep any other appointments made by the Examiner. Members who avoid the Medical Examiner or neglect to report or keep appointments shall not be entitled to benefits.

If a member who has been reported as able to work by the Medical Examiner is not able to work on the day set, he shall immediately notify his timekeeper, and the Medical Examiner, and report to the latter in person if possible; otherwise he shall not be considered disabled after the day set for his return to work.

45. *Absence.*—When a disabled member wishes to leave home, he shall obtain from the Medical Examiner written approval of absence for a specific time, shall furnish him satisfactory proof of disability, while absent, and report immediately to him on his return, otherwise he shall not receive benefits while absent.

46. *No Benefits when Disability is Due to Intoxication, etc.*—Benefits shall not be payable for disability directly, indirectly or partly due to intoxication, or the use of alcoholic liquors as a beverage, or to immoderate use of stimulants or narcotics, or to unlawful acts or immoralities, or to venereal diseases, however contracted, or to the results thereof, or to urethritis, orchitis, epididymitis, stricture or glandular swelling or abscess in the groin, however caused, or to fighting, unless in self-defence against unprovoked assault, or to other encounter, such as wrestling, scuffling, fooling, and the like, or to injury received in any brawl, or in any liquor saloon, gambling house or other disreputable resort.

During any such disability coming under this rule a member may contribute for and be entitled to death benefits only.

Examination.

47. Members shall not be entitled to benefits if they decline to permit the Medical Examiner to make or have made by any other physician such examination as he may deem necessary to ascertain their condition when claiming disability.

Disabled members must take proper care of themselves and have proper treatment. Benefits will be discontinued to members who refuse or neglect to follow the recommendations of the Medical Examiner.

(2.) PENSION SYSTEM OF THE INTERNATIONAL HARVESTER COMPANY AND SUBSIDIARY COMPANIES (NON-CONTRIBUTORY).

The Board of Directors after careful consideration of the subject and an examination of the various pension systems now in operation, have approved the following plan as the best and most liberal for employees who by long and faithful service have earned an honourable retirement.

The Directors establish this Pension Fund as an evidence of their appreciation of the fidelity, efficiency and loyalty of the employees.

In the administration of this pension system are associated International Harvester Company, International Harvester Company of America, and subsidiary companies.

Pension Board.

1. *Administration.*—The administration of the pension fund shall be in charge of a Pension Board consisting of five members who shall all be officers or employees of this Company or of affiliated or subsidiary companies, and shall be appointed annually by the Board of Directors of this Company, to serve for one year and until their successors are appointed and shall qualify.

2. *Officers.*—The Pension Board shall elect a Chairman and a Secretary from among its members, and the Treasurer of this Company shall be ex-officio Treasurer of the Fund. The Board may make and enforce rules for the efficient administration of the pension fund, subject to the approval of the Board of Directors. The Pension Board shall control the payment of pension allowances under the rules hereinafter stated.

3. *Quorum.*—A majority of the Pension Board shall constitute a quorum for all purposes.

4. *Representation.*—The members of the Board shall be so chosen that the principal departments of the business shall have representation.

Pension Fund.

5. The Treasurer of the Company shall be the custodian and Treasurer of the fund, and additions shall be made to said fund yearly, or from time to time according to the aggregate pension allowances and the amount available in the pension fund for payment of the same. Should the aggregate pension allowances exceed \$100,000 in any one year, then unless the Board of Directors increases the yearly amount usable for pensions, a new rate shall be established proportionately reducing all allowances.

Payments from this fund shall only be made in accordance with and by direction of the Pension Board.

Eligibility.

6. The Pension Board may authorize the payment of a pension to any retired employee on the following basis:—

(a.) All employees of this Company and of subsidiary and affiliated companies, engaged in any capacity, are eligible to pensions as hereinafter stated.

(b.) All male employees who shall have reached the age of sixty-five years and have been twenty or more years in the service, may, at their own request, or at the discretion of the Pension Board, be retired from active service and become eligible to a pension.

(c.) All male employees who have been twenty or more years in the service shall be retired at the age of seventy years on the first day of the calendar month following that in which they shall have attained said age, unless at the discretion of the Pension Board some later date be fixed for such retirement. Persons occupying executive positions are exempt from maximum age limit.

(d.) All female employees who shall have reached the age of fifty years and have been twenty or more years in the service, may at their own request, or at the discretion of the Pension Board, be retired from active service and become eligible to a pension.

(e.) All female employees shall be retired at the age of sixty years, on the first day of the calendar month following that in which they shall have attained the age, unless at the discretion of the Pension Board a later date be fixed for such retirement. Persons occupying executive positions are exempt from maximum age limit.

Definitions.

7. The terms "service" and "in the service" apply to all employees of the International Harvester Company, or of any affiliated or subsidiary companies which are now or may hereafter be owned or controlled by it, and of the International Harvester Company of America, who have received a stated and regular compensation from any of said companies. The term of service shall be reckoned from the date of commencing with the original company whose property and business shall have become those of the International Harvester Company, or any subsidiary companies, or of the International Harvester Company of America.

8. *Temporary Absence.*—A temporary lay-off on account of illness or of reduction of force is not to be considered as a break in the continuity of service, but when such absence exceeds six consecutive months it shall be deducted in computing the length of active service.

9. *Leaving Service.*—If a person, after leaving the service for more than two years, shall be re-employed, he shall be considered in his relation to the pension system as a new employee.

Pension Allowances and Conditions.

10. *Amount.*—The sums which the Board of Pensions may authorize to be paid monthly to employees retired at the age limit shall be as follows:—For each year of active service an allowance of one per cent. of the average annual pay during the ten years next preceding retirement; but no pension shall exceed \$100 per month, or be less than \$18 per month.

11. *Payment.*—(a.) Pension allowances shall be paid on the first of each month from the date of retirement until the death of employec.

(b.) At the discretion of the Pension Board these allowances may be continued to widows and orphans of a pensioner for a limited period.

(c.) Pension allowances shall be non-assignable, and an attempted transfer or pledge of the same shall not be recognised by the Pension Board and may in its discretion work a forfeiture thereof.

(d.) Pension allowances may be suspended or terminated by the Pension Board in cases of gross misconduct, or of any violation of the Rules, or, at its discretion, may be paid to some member of the family.

(e.) The acceptance of the pension shall not debar any retired employee from engaging in any other business which in the judgment of the Pension Board is not prejudicial to the interests of this Company or of any affiliated or subsidiary company, but he cannot re-enter service.

(f.) No payments for pensions shall be approved by the Pension Board until payments from any relief fund operated by this Company, or any affiliated or subsidiary company, shall cease.

Pension—How Computed.

12. The amount of pensions granted on account of advanced age will depend, as before stated, on two conditions: the number of years the person has served the Company, and the amount of his average wages per year for the ten years next preceding retirement. Thus, for illustration, if the average pay per year for the last ten years of active service equals \$600.00, and if the service has been continuous for twenty-five years, the pension would be twenty-five per cent. of \$600.00, or \$150.00 per year, or \$12.50 per month. Since the minimum pension has been fixed at \$18.00 per month, then to this regular percentage \$5.50 would be added, making the minimum sum of \$18.00.

In special cases where the term of service is less than twenty years, the pension and the amount of same, if any, will be determined solely at the discretion of the Board of Pensions.

Department Heads are expected to keep informed of the whereabouts and physical condition of former employees receiving pensions, and are required to advise the Secretary of the Board of Pensions of the death of the pensioner, and of any other circumstances which would affect his monthly payment.

A physical examination by a Company surgeon, or in case of female employees, by a surgeon approved by the Board of Pensions, will be required of employees who wish to be retired on a pension allowance because of incapacity.

How to Secure a Pension.

13. An employee wishing to apply for a pension should first take up the subject with the Superintendent at the works where he is employed, or the head of the department in which he is serving, or with a member of the Pension Board. A form will then be furnished, which must be filled out and signed, giving the necessary information concerning the applicant's age, length of service and wages. This formal application must be signed by the Works Superintendent, or head of department employing applicant, and then sent to the Secretary of the Pension Board at his office.

No Contractual Rights Conferred.

14. Neither the establishment of this system nor the granting of a pension, nor any other action now or hereafter taken by the Pension Board, or by the Officers of this Company, shall be held or construed as creating a contract, or giving to any officer, agent or employee a right to be retained in the service, or any right to any pension allowance, and the Company expressly reserves, unaffected hereby, its right to discharge without liability, other than for salary or wages due and unpaid, any employee, whenever the interests of the Company may in its judgment so require.

D.—MUTUAL PROVIDENT FUNDS AND ASSOCIATED CHARITIES.

(1.) CONSTITUTION OF THE PROVIDENT LOAN SOCIETY OF NEW YORK (Extracts).

Article I.—The name by which this Society shall be known is "THE PROVIDENT LOAN SOCIETY OF NEW YORK."

Article II.—Its objects are to aid such persons as the Society shall deem in need of pecuniary assistance, by loans of money at interest upon the pledge or mortgage of personal property.

Article III.—Section 1. The following persons shall be members of the Society:—(1) Its incorporators. (2) Such persons as its incorporators may associate with themselves at the meeting held to organize the Society on April 25, 1894. (3) Any person who may hereafter become a holder of a certificate of contribution to the Society of not less than \$500, and who may be elected a member by the vote or assent in writing of three-fourths of its Board of Trustees or of all the members of its Executive Committee.

Section 2. The Mayor of the City of New York, the Comptroller of the City of New York, the President of the Police Department, the President of the Department of Charities, and the President of the following named societies, viz., the Charity Organization Society of the City of New York, the Association for Improving the Condition of the Poor, the Society of St. Vincent de Paul, and the United Hebrew Charities, shall be *ex-officio* members of the Society.

Article IV.—The business and affairs of the Society shall be managed by a board of fifteen Trustees, all of whom shall be members of the Society, &c.

Article V.—The officers of the Society shall be a President, a Secretary, and a Treasurer. They must all be Trustees. . . . The Trustees may appoint, from time to time, such other officers or agents as they may deem expedient.

Article VI.—The Trustees shall elect at the same meeting at which officers are elected an Executive Committee of four, in addition to the President, Secretary, and Treasurer, who shall be *ex-officio* members of such Committee. Members of this committee shall hold office for one year and until their successors are elected. This committee shall exercise all the powers of the Board of Trustees, between the times of its meetings, which can be lawfully delegated.

Article VII.—The annual meeting of the Society shall be held on the first Monday of February in each year. Special meetings may be held at any time upon the call of the President or any ten members of the Society. Regular meetings of the Board of Trustees shall be held on the first Monday of February, April, and November. Special meetings of the Trustees may be held upon the call of the President or of any five members of the Board.

Article X.—Money for the corporate purposes of the Society shall be obtained from the following sources:—1. Gifts or bequests; 2. Contributions made on condition that the contributor shall receive a Certificate for the amount given entitling the holder thereof to such amount, not exceeding in any year lawful interest on the sum contributed, as the Trustees may determine to pay *pro rata* to certificate-holders out of earnings; 3. Loans at a rate of interest not exceeding the lawful rate.

Article XI.—The Society shall not charge or receive any interest on loans made by it of a greater amount than one-half of the interest which pawnbrokers are now authorized to charge by law.

(2.) CONSTITUTION OF THE ST. LOUIS PROVIDENT ASSOCIATION.

Article 1.—The Association shall be called the “St. Louis Provident Association,” and shall be composed of such annual contributors to its funds as shall be elected to membership by the Board of Directors.

Article 2.—The object of this Association shall be to look after the interests of the poor of St. Louis, not otherwise provided for by churches or other benevolent bodies; to provide them with suitable employment, when expedient, and otherwise to aid them in such ways as shall be deemed most judicious.

Article 3.—The powers of the corporation shall be exercised by a Board of thirty Directors. The officers of the Association shall be a President, Vice-President, a Secretary and a Treasurer. The Secretary and Treasurer need not be Directors of the Association. The President and Vice-President shall be chosen from the Members of the Board.

Articles 4 to 8 deal with matters of administration.

Principles, Objects and Methods.

This Association adopts and shall be conducted upon and under the following fundamental principles, rules and regulations :—

Section 1. (1st) In the case of all persons who are proper claimants upon the care of the Association, its charities shall be dispensed irrespective of religious belief, politics or nationality; Provided, however, to avoid interference with the sphere of other charitable associations, and to prevent applicants from receiving assistance from various charities at the same time, all applicants who are connected with an existing church or society, shall, in extreme cases, be visited and helped at once, whereupon a letter from the General Manager, with stamped envelope for return shall be sent to the church they may attend, or to such charity which seems to be more especially designed for them. If this letter is returned by such church or society, with the reason of refusal in writing thereon, the case shall then be entitled to further investigation by this Association.

(2nd) No person representing this Association in any capacity whatever, shall use his or her position for the purpose of proselytism.

(3rd) The ultimate aim of this Association is the physical and moral elevation of the indigent, and so far as it is compatible with this design, relief of their necessities to be extended.

(4th) So far as practicable for poor persons, who are capable of being wholly or partially self-supporting, employment to be the basis of relief, and for the unskilled, industrial training to be provided, the design being to make the poor a party to their own improvement and elevation in all practicable forms and extent of self-help.

(5th) Investigation before relief to be made invariably, except in cases requiring temporary emergent aid; in such cases subsequent investigation to be made.

Section 2. This Association is organized for the general purpose of promoting the welfare of such of the poor, the suffering, and the friendless in the City of St. Louis as are not otherwise provided for by the churches or other benevolent bodies or municipal charitable institutions; to provide safeguards against imposition upon the benevolent community by irresponsible societies and unworthy applicants; and to discourage and repress street begging and all forms of mendicancy and pauperism. Specific objects and methods of the Association include the following provisions :—

(1st) The establishment and maintenance of Provident Institutions for the purposes of temporary employment and industrial training and economic instruction; or shelter for the homeless; of aid to working women in the temporary care of their children; of encouragement to thrift, by inculcating habits of provident savings; and such other forms of aid to the poor and unfortunate as shall tend to create and foster the sentiment of self-respect and the purpose of self-dependence.

(2nd) The Administrative Office of the Association to constitute a Central Bureau of Information concerning the conditions and wants of the poor of the city, and on reference of particular cases for inquiry by persons having a legitimate interest therein to investigate the same, without charge, and report its results.

(3rd) To advance the general welfare of the poor by promoting social and sanitary reforms, and the enforcement of municipal sanitary regulations and ordinances relating to factories and tenement houses.

(4th) To check the evils of overlapping of relief by promoting and fostering cordial correspondence, and harmonious and efficient co-operation between the municipal authorities, the public and private charities, the churches and benevolent individuals, and so far as may be desired and sought to act and serve as a centre of inter-communication between them.

(5th) To promote the welfare of the really needy, and the worthy poor, by the exposure of deliberate imposture and fraud, and prosecution of such offenders.

(6th) The collection and diffusion of knowledge on all subjects connected with relief of the poor, and the maintenance of a free library of information on these subjects.

(7th) To encourage and promote attendance at school of children of proper age, and requiring that they be placed at school by parents who are beneficiaries of the Association unless unavoidable circumstances prevent.

Main Departments.

1.—*Central Office.*—1. A Bureau of Information concerning the charities of the city. 2. A medium of educational propaganda in the principles of organized charity. 3. An office for the general direction of the work of the Association.

4. Investigation Department.—Investigations are made for private persons, hospitals, dispensaries and other institutions. For this purpose and to ascertain whether new families that make application are suitable for care, the Association maintains a special corps of investigating agents in connection with the Registration Bureau.

5. Registration Bureau.—A confidential record of all investigations made by the Association, and of the action taken on behalf of families under its care. Information is given through the Central Office or by mail to those who have a legitimate charitable interest in the families concerned.

6. Application Bureau.—An office at which applicants for assistance are received. Those who are not found to be suitable candidates for action by the Association are directed to the proper sources of relief.

II.—*Wood Yard*.—To provide work for residents with families for a cash remuneration, and to test their willingness to work. Homeless men may earn meals and lodgings.

III.—*Woman's Lodges*.—A temporary shelter for homeless women and girls out of employment.

IV.—*Workrooms for Unskilled Women*.—Under charge of the Sewing Room Committee. To provide employment for women who need training in sewing and factory work. Payment is made in cash, clothing or groceries.

V.—*Laundry*.—Under charge of the Laundry Committee. To provide temporary employment for women with families.

VI.—*Provident Penny Savings Bank*.—For the encouragement of small savings.

VII.—*Publications*.—"The Charities Directory," published bi-annually, gives reliable information concerning the various charitable and beneficent institutions of the city; and "The Cautionary List," published at occasional intervals, warning against frauds.

VIII.—*Library*.—A reference library of applied sociology. All who are interested in charitable subjects are made welcome.

IX.—*Visiting Nurses' Department*.—Trained nurses employed to visit and care for sick poor.

X.—*Day Nursery*.—Day Nursery for children (infants up to six years). Care and instruction given. Charges, 5 cents a day.

XI.—*Men's Lodge*.—Shelter for homeless men. Opportunity given to men to earn supper, bath, lodging and breakfast, for three and one-half hour's work in wood yard.

XII.—*Cheap Baths for Men, Women and Children*.—Shower or hot baths. Hot and cold water. Charges, 5 cents for adults, children accompanied by parents free.

(3.) BY-LAWS OF THE BROOKLYN BUREAU OF CHARITIES (Extracts).

The "Brooklyn Bureau of Charities," organized in 1878 and incorporated in 1887, and the "Union for Christian Work in the City of Brooklyn," organized in 1866 and incorporated in 1871, were consolidated May 1, 1901, with the approval of a Justice of the Supreme Court under the name of "Brooklyn Bureau of Charities," pursuant to Chapter 559, Laws of 1895.

Article I.—Name.—The name of this Society shall be Brooklyn Bureau of Charities.

Article II.—Objects.—The general objects of the Society shall be to promote the welfare of the poor, the suffering, and the friendless in Brooklyn; and the methods shall include:

The promotion of cordial co-operation between Benevolent Societies, Churches, and individuals.

The maintenance of a body of Friendly Visitors to the poor.

The encouragement of thrift, self-dependence, and industry.

The provision of temporary employment and industrial instruction.

The collection and diffusion of knowledge on all subjects connected with the relief of the poor, and the maintenance of a free library of information on these subjects.

The prevention of imposition and the diminution of vagrancy and pauperism.

Article III.—Management.—Section 1. The property and management of the Society shall be vested in a Board of twenty-four Directors whose term of office shall be three years, or until their successors are chosen. Eight Directors shall be elected at each annual meeting to fill the places of those whose terms then expire.

Articles IV. to VII. relate to membership, meetings, officers, and executive committee.

Article VIII.—District Conferences.—Sec. 1. A District Conference shall be established so soon as practicable, in each Ward or other convenient division of the City. At the formation of a District Conference and whenever asked for by the Board of Directors or Executive Committee, the roll of membership of the Conference shall be submitted to the Board of Directors or the Executive Committee, and shall be subject to their approval.

Sec. 2. Each District Conference shall include all Friendly Visitors of the Society acting in the District, and all officers and members of Committees of the Society residing in the District.

Sec. 3. Each District Conference shall hold its annual business meeting in the second week in November. Each District Conference may elect its own officers and adopt such by-laws and rules as may further the objects of this Society, subject always to the supervision and approval of the Board of Directors and not in conflict with these By-Laws or such as the Directors may hereafter adopt. Minutes of all meetings shall be preserved.

Sec. 4. No Conference shall have authority to pledge the funds of the Society to any purpose whatever, nor shall it solicit or receive funds for the purpose of almsgiving; but it may collect money for the expense of its meetings and necessary stationery.

Sec. 5. The President or Secretary of each Conference shall submit to the Board of Directors, on or before the first day of May, an Annual Report of the work done by the Conference, which shall include the names of all Officers and Committees, and of all Friendly Visitors who have visited cases within the previous year, a classified statement of all cases reported or treated in the Conference during the year, and a statement of expenses and receipts of the Conference.

Sec. 6. The Secretary of each District Conference shall report to the General Secretary at the Central Office, the names and residences of officers or members of Committees, when chosen, and of Friendly Visitors whenever added to the Conference, and the names and residences and the description of all cases reported by Friendly Visitors of the Conference.

Article IX.—Friendly Visitors.—Section 1. Any person willing to visit the suffering and needy in the district of a Conference, for the purposes named in Article II., may be enrolled as a Friendly Visitor of that Conference by a vote of the Conference, and may be dropped by the same vote.

Sec. 2. It shall be the duty of a Friendly Visitor to visit the poor and distressed as a friend; to examine, in the spirit of kindness, the causes of their trouble; to do what can be done to remove those causes; to become acquainted with the ability which each may have, and aid in developing it and in finding ways in which it may be employed in self-help; through friendly intercourse,

sympathy, and direction to encourage self-dependence, industry and thrift ; to recommend whatever may be possible and wise to alleviate the sufferings of those whose infirmities cannot be cured or removed ; if material aid be necessary to obtain it from existing organizations so far as possible ; and in every case to promote in all practicable ways the physical and moral improvement of the families in the Visitor's charge.

Sec. 3. It shall be the duty of each Friendly Visitor to report to the Secretary of his or her District Conference from time to time, a detailed account of each case in his or her care and the progress made in treatment of the case.

Sec. 4. No Friendly Visitor shall use his or her position for any purpose of proselytism.

Article X.—Temporary Employment Agencies, etc.—Section 1. Wood Yards, Laundries, Work Rooms or other agencies for furnishing temporary employment to persons in need and for Industrial Education, and any other undertakings or instrumentalities for carrying out the declared purposes of the Society, may be established under direction of and by vote of the Board of Directors.

What the Society does for those desiring to bestow aid.

Maintains a registry containing information, accumulated through more than thirty years, relating to applicants for aid in Brooklyn. Information from the Registry is freely offered to inquirers charitably interested in relieving distress.

Prevents duplication in benevolent work, saves waste of gifts upon those seeking aid under false pretences, and increases the benefit which individuals and organizations can render to those needing help.

Conducts Conferences in different portions of the city, for the consideration of methods for helping the poor.

Offers its services freely to all, whether contributors or not.

What everyone can do to help the Society.

Patronize the wood yards and the laundries of the Bureau and thus afford the self-respecting poor opportunity to help themselves.

Send a contribution, as generous as possible, to the Treasury of the Bureau. Donations in goods of any kind, groceries, provisions, clothing, old linen and cotton cloth for the visiting nurses, rags for weaving into carpets, furniture, books and periodicals can be put to good use, and will be called for if notice is sent to one of the offices.

Employ men and women for odd jobs at manual labour through the Bureau. Opportunities for addressing envelopes and other simple clerical work especially solicited.

Visit the offices, industrial agencies, and day nurseries, and take a personal interest in the beneficiaries. The children in the Day Nurseries afford opportunity for much helpful service to themselves and the families to which they belong.

Help to arrange conferences among your friends and neighbours for considering the best methods of helping and preventing distress, and arrange if possible to visit one poor family.

Report to the Bureau every case of distress coming to your knowledge.

E.—BUILDING AND LODGING HOUSE REGULATIONS.

(1.) CHICAGO BUILDING ORDINANCE—EXTRACTS FROM REGULATIONS RELATING TO TENEMENT AND APARTMENT HOUSES (CLASS VI.).

Classification of Buildings.—“In Class VI. shall be included every tenement and apartment house ; that is to say, any house or building or portion thereof which is used as a house or residence for two or more families living in separate apartments.”

Thickness of Walls of Class VI.—Buildings of Class VI. shall conform to the following requirements :—

The thickness of enclosing walls of buildings of Class VI. shall be made in accordance with the following table, to wit :—

| | Basement and | Stories. | | | | | | | | | | | | |
|------------------|--------------|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
| One-story ... | ... | 12 | 8 | | | | | | | | | | | |
| Two-story ... | ... | 12 | 12 | 8 | | | | | | | | | | |
| Three-story ... | ... | 16 | 12 | 12 | 12 | | | | | | | | | |
| Four-story ... | ... | 20 | 16 | 16 | 12 | 12 | | | | | | | | |
| Five-story ... | ... | 20 | 16 | 16 | 16 | 12 | 12 | | | | | | | |
| Six-story ... | ... | 20 | 20 | 16 | 16 | 16 | 12 | 12 | | | | | | |
| Seven-story ... | ... | 24 | 24 | 20 | 20 | 16 | 16 | 12 | 12 | | | | | |
| Eight-story ... | ... | 24 | 24 | 24 | 20 | 20 | 16 | 16 | 12 | 12 | | | | |
| Nine-story ... | ... | 28 | 24 | 24 | 20 | 20 | 20 | 16 | 16 | 12 | 12 | | | |
| Ten-story ... | ... | 28 | 24 | 24 | 24 | 20 | 20 | 20 | 16 | 16 | 12 | 12 | | |
| Eleven-story ... | ... | 28 | 28 | 24 | 24 | 24 | 20 | 20 | 20 | 16 | 16 | 12 | 12 | |
| Twelve-story ... | ... | 32 | 28 | 28 | 24 | 24 | 24 | 20 | 20 | 20 | 16 | 16 | 12 | 12 |

Provided, however, in buildings of steel skeleton fireproof construction, thickness of walls shall be governed by the provisions of section 510 of this chapter.

Fire Escapes.—Every tenement house four or more stories in height shall be provided with a fire escape or fire escapes, such as are required by the statutes of this state and the ordinances of the city. In every case each separate apartment shall have direct access to at least one such fire escape

unless such apartment shall have direct access (without passing through any other apartment) to at least two separate flights of stairs leading to the ground, one of which is placed in front and one in the rear of such building, and one of which may be placed outside of the building; but where such separate apartment shall not have access to two flights of stairs, then there shall be a metal stairway between the balconies of every such fire escape, securely fastened to the walls of the building, not less than two feet wide, with a proper hand rail, instead of the usual vertical ladder. Every court in which there shall be a fire escape shall have direct and unobstructed access along the surface of the ground to a street, alley, or yard, opening into the alley or street, without entering into or passing through or over any building, unless by a four-foot wide fireproof passage on the court or ground level.

Stairs and Halls.—In Case of Alterations.—Requirements.—Every now existing and every new tenement house shall have at least two flight of stairs, which shall extend from the entrance floor to the top story. Such stairs and the public halls in every tenement house shall each be at least three feet wide in the clear, and every apartment shall be directly accessible from both such flights of stairs. If any existing tenement house be so altered as to increase the number of apartments therein, or if such building be increased in height, or if the halls and stairs therein be damaged by fire or otherwise to an extent greater than one-half the original cost thereof, the entrance, stair halls, entrance halls and other public halls of the whole building shall be made to conform to the requirements of this chapter as to new tenement houses.

Railings and Guards.—In every tenement house all stairways shall be provided with sufficient railings and guards.

Stairs in Non-Fireproof Buildings, Eighty to One Hundred and Twenty Rooms.—Every new non-fireproof tenement house containing over eighty rooms, exclusive of bath rooms, shall have one additional flight of stairs (over and above the flights hereinbefore provided for) for every additional eighty rooms, or fraction thereof; but if such building contains not more than one hundred and twenty rooms, exclusive of bath rooms, at the owner's option, in lieu of an additional stairway, the stairs and public halls throughout the entire building shall be at least one-half wider than is provided in sections 395 and 402 of this chapter.

Stairs in Fireproof Buildings, One Hundred and Twenty Rooms and upward.—Every new fireproof tenement house containing over one hundred and twenty rooms, exclusive of bath rooms, shall have one additional flight of stairs (over and above the flights hereinbefore provided for), for every additional one hundred and twenty rooms or fraction thereof; but if such building contains not more than one hundred and eighty rooms, exclusive of bath rooms, at the owner's option, in lieu of an additional stairway, the stairs and public halls throughout the entire building shall be made at least one-half wider than is provided in sections 395 and 402 of this chapter.

Entrance to Stairs.—Treads and Risers.—Every flight of stairs required in a tenement house shall have an entrance on the entrance floor from a street or alley, or from a yard or court which opens into a street or alley. All stairs except rear stairs, in new tenement houses, shall have risers not more than seven and three-quarters inches high and treads not less than nine and one-half inches wide, exclusive of nosings, except in winding stairs, where all treads at a point eighteen inches from the strings on the wall side shall be at least nine and one-half inches wide, exclusive of nosings.

Stairs and Stair Halls.—Over Three Stories.—Fire-resisting Glass.—The stairs and stair halls in all new tenement houses more than three stories and basement high shall be constructed of incombustible material throughout, except that the treads of stairs (not less than one and three-fourths inches thick) and all hand rails may be of hard wood. All windows in stair halls in new tenement houses more than three stories and basement high opening on inner courts or shafts, shall be of good quality fire-resisting glass.

Stair Hall Enclosed in Masonry.—Requirements and Exceptions.—(As amended Feb. 18, 1907). In every new non-fireproof tenement house all stair halls shall be enclosed on all sides, with the walls of solid masonry of the same dimensions and thickness as specified for enclosing walls. All windows in such stair halls shall have metal frames and sashes, glazed, fire-resisting glass and such windows shall be stationary. This section shall not apply to tenement houses which are not more than three (3) stories and basement high with only one apartment on each floor.

Frame Buildings not to be Enlarged.—No wooden frame tenement house within the fire limits shall be enlarged either by adding to its height or to its superficial area.

Space Occupied on Lot.—Plat Measurements.—No new tenement house, alone or with other buildings now or hereafter erected, shall occupy above the first story more than eighty-five per centum of the area of a corner lot or more than ninety per centum of the area of such corner lot, if such corner lot is bounded on three sides by streets or alleys, or more than seventy-five per centum of the area of any other lot, provided that the space occupied by fire escapes, constructed and erected according to law and not more than four feet wide, shall be deemed unoccupied.

At the time of applying for a permit for the erection of a new tenement house the applicant shall submit a plan of the lot showing the dimensions of the same and the position to be occupied by the proposed building, and the position of any other building or buildings that may be on the lot. The measurements shall in all cases be taken at the top of the first story and shall not include any portion of any street or alley.

Height.—How measured.—The height of a new tenement house shall not be more than one-half exceed the platted width of the widest street on which it abuts. Provided, however, that any distance the building sets back from the lot line shall be added to the width of the street in making this computation, but no existing tenement house shall be increased beyond such height. Such height shall be the perpendicular distance from the grade nearest the house to the highest point of the roof (not including as part of the roof any cornice or bulkhead less than eight feet high, or any elevator inclosure less than sixteen feet high). Where such street grade varies, the mean or average grade thereof opposite such house shall be the datum from which such height shall be measured.

Alley or Yard in Rear.—At the rear of every lot containing a new tenement house (unless the rear of such lot abuts upon a public alley at least ten feet wide) there shall be a yard open and unobstructed from the earth to the sky, except by fire escapes not more than four feet wide, constructed and erected according to law; every part of such yard shall be directly accessible from every other part thereof; such yard shall on corner lots (as above defined) have an area of at least eight per centum of the superficial area of the lot, and shall on other lots have an area of at least ten

per centum of the superficial area of the lot. Every such yard shall be increased one per centum of the superficial area of the lot for every story above three stories in height of the tenement house situated thereon, and in no case shall such yard separate any building on such lot by less than ten feet from the rear line of the lot as the nearest point of approach of such building to such rear line.

For the purpose of construing and enforcing this section, the rear of the lot shall be held and deemed to be that part of the lot that is farthest from the line of the street upon which the proposed building will face, and in case where the proposed building will stand upon a corner lot or tract of land abutting upon two streets and an alley in all such cases the proposed building or buildings may extend from the front to the rear of such lot or tract. Nothing herein contained shall conflict with or modify any other provision of this ordinance.

Courts.—Porches.—Every court of every new tenement house shall be open and unobstructed at every point thereof from the bottom thereof to the sky, save by fire escapes or stairs or landings constructed and erected according to law and projecting not more than four feet into courts, which courts shall communicate directly without obstruction into a street, alley or yard. Where porches are constructed in courts, the amount of area of unobstructed space in such courts shall be exclusive of space occupied by stairs and porches. No rear porch shall be constructed which is more than eight feet in width where the construction is of combustible material, and no such rear porches shall be inclosed with other than incombustible material as defined in section 506 of this chapter.

Habitable Rooms.—Windows.—Vent Shafts.—(As amended Nov. 25, 1907). In every new tenement house every habitable room, excepting water closet compartments and bath rooms, shall have all windows open direct upon a street, alley, yard or court. The total area of the windows opening from such room (other than water closet compartments and bath rooms) upon a street, alley, yard or court, shall be at least one-tenth of the floor area of that room, and the top of at least one window shall be not less than seven feet above the floor, and the upper half of that window shall be made so as to open its full width. No window in any such room (other than pantries, water closet compartments and bath rooms) shall have less than ten square feet glass area, and in no such water closet compartment or bath room shall the total window area be less than three square feet glass area, or the width of any window less than one foot; and when any window ventilating any water closet compartment or bath room in any new tenement house opens into a vent shaft, no window from any room other than a water closet compartment, bath room, pantry or hall shall open into such vent shaft.

Sizes of Inner Courts.—Lot Line Courts.—The "inner courts" of all new tenement houses as defined in section 389 of this chapter shall have areas and minimum widths in all parts not less than the widths and areas, as follows:—

| Buildings. | Square feet. | Least width. |
|------------|--------------|--------------|
| 2 stories | 100 | 6 feet |
| 3 stories | 120 | 7 feet |
| 4 stories | 160 | 8 feet |
| 5 stories | 250 | 12 feet |
| 6 stories | 400 | 16 feet |
| 7 stories | 625 | 20 feet |
| 8 stories | 840 | 24 feet |

"Lot Line Courts" shall have areas and minimum widths in all parts not less than one-half of those specified in the above table of "inner courts."

Sizes of Outer Courts.—The "outer courts" of all tenement houses defined in section 389 of this chapter shall have not less than the following widths for their minimum in all parts:—

| Buildings. | Least width. |
|------------|-----------------|
| 2 stories | 3 feet |
| 3 stories | 3 feet 6 inches |
| 4 stories | 4 feet |
| 5 stories | 8 feet |
| 6 stories | 6 feet |
| 7 stories | 10 feet |
| 8 stories | 12 feet |

If the outer or lot line court has windows on opposite sides of the same, the least widths given in the above table for outer courts shall be doubled.

Sizes and Height of Rooms.—Attic and Janitor's Rooms.—In every new tenement house, all rooms, except water closet compartments and bath rooms, shall be of the following minimum sizes: In each apartment there shall be at least one room containing not less than one hundred and twenty square feet of floor area, and every other room shall contain at least seventy square feet of floor area. Each room shall be in every part not less than eight feet six inches high from the finished floor to the finished ceiling, but an attic room need be eight feet six inches high in but one-half of its area; provided, that in a basement apartment used for janitor's use only such room or rooms shall be not less than eight feet high in the clear.

Changes in Existing Rooms.—No room in any now existing tenement house shall hereafter be constructed, altered, converted or occupied for living purposes unless it contains a window having a superficial area not less than one-twelfth of the floor area of the room, which window shall open upon a street or alley or upon a yard or court having a superficial area of not less than twenty-five square feet; or unless such room adjoins another room in the same apartment, which other room shall have such a window opening upon such a street, alley, yard or court, and between which two adjoining rooms there shall be a sash window having at least fifteen square feet of glazed surface, the upper half of which shall be so made as to open easily.

Windows.—Courts.—Attic.—No room in any now existing tenement house which has no such window, as aforesaid, opening upon a street or alley upon a yard or court having a superficial area of not less than twenty-five square feet, shall hereafter be constructed, altered, converted or occupied for living purposes, unless it contains a floor area of at least sixty square feet and also at least six hundred cubic feet of air space; nor unless every part of the finished ceiling of such room be at least eight feet

distant from every part of the finished floor thereof; provided, that an attic room need be eight feet high in but one half of its area, and such attic room shall not be used for purposes of human habitation other than as a sleeping room.

Quantity of Air for each Person.—No room in any tenement house shall be so occupied that the allowance of air to each person living or sleeping in such room shall at any time be less than four hundred cubic feet for each such person more than twelve years old and two hundred cubic feet for each such person at the age of twelve years or under.

Alcoves.—(As amended Feb. 18, 1907). Alcove rooms must conform to all the requirements of other rooms, except that in one or two story existing buildings which it may be desired to raise or alter, every alcove shall be deemed a separate room for all purposes within the meaning of this ordinance, except such an alcove, as adjoining another room, has at least twenty per centum of entire wall surface of alcove opening to another room.

Light in Halls.—Recesses.—Returns.—Doors in.—In every new tenement house every public hall shall be lighted by at least one window in each story opening directly upon a street, alley, yard or court, or by a skylight. Such window shall be so placed that light may pass directly through it and the hall to the opposite end of the hall, or else there shall be at least one window opening directly upon a street, alley, yard or court in every twenty feet in length or fraction thereof of every such hall, except in so much of any entrance hall as lies between the entrance and the flight of stairs nearest the entrance. In any such public hall, recesses or returns, the length of which do not exceed twice the width of the hall, will be permitted, without an additional window, but otherwise each recess or return shall be regarded for the purposes of this section as if it were a separate hall. Any part of a public hall which is shut off from any other part by a door or doors shall be deemed a separate public hall within the meaning of this section.

Windows in Public Halls.—In every new tenement house one at least of the windows provided to light each public hall or part thereof shall have a glass area of at least twelve square feet.

Inner and Outer Vent Shafts.—Dimensions.—Inner or outer vent shafts of all tenement houses as defined in section 389 of this chapter shall be of the following dimensions :—

| Building. | Feet. | Width. |
|------------------|-------|--------|
| 2 stories | 22½ | 3 feet |
| 3 stories | 27 | 3 feet |
| 4 stories | 36 | 3 feet |
| 5 stories | 48 | 5 feet |
| 6 stories | 72 | 6 feet |
| 7 stories | 96 | 8 feet |
| 8 stories | 120 | 8 feet |

Cellar and Basement.—Ceilings.—Ventilation.—(As amended Nov. 25, 1907). All cellars and basements shall be ventilated at each end, and where boilers or furnaces are located the ceiling over the boiler or furnace extending for two feet beyond boiler or furnace in each direction, shall be covered with metal lath and plastered, or any other incombustible material approved by the commissioner of buildings.

Damp-proofing.—Basement Walls and Floors.—Every new tenement house shall have all its outside walls below the adjacent ground level plastered on the outside with Portland cement or treated with other approved damp-proofing material, and such walls, as high as the ground level, shall be laid in cement mortar. The basement or cellar shall have a floor of Portland cement concrete not less than three inches in thickness.

Cellar Changed for Living Purposes.—Requirements.—Height.—In no now existing or new tenement house shall any room in the cellar be constructed, altered, converted or occupied for living purposes; and no room in the basement of a tenement house shall be constructed, altered, converted or occupied for living purposes, unless all of the following conditions of this chapter be complied with, and at least one-third of the height of the basement shall be above grade for building; provided, in each case it shall be at least four feet above the street grade. Such rooms shall be at least eight feet six inches high in all now existing or new tenement houses in every part from floor to ceiling, except as provided for janitor's use only in section 417 of this chapter.

Water Closet.—There shall be appurtenant to such room or apartment a water closet conforming to the regulations and ordinances of the city relating to water closets.

Sinks.—Requirement.—In every new tenement house there shall be in each apartment at least one proper sink with running water. In every now existing tenement house there shall be on every floor, at least, one proper sink with running water, accessible to all the tenants of that floor, without passing through any other apartment, if there be not one such sink in each apartment. In no tenement house shall there be woodwork inclosing sinks located in the public halls; the space underneath sinks shall be left entirely open.

Access to and Windows in Water Closets.—Artificial Light.—In every new tenement house there shall be a separate water closet in a separate compartment within each apartment accessible to each apartment without passing through any other apartment, provided that where there are apartments consisting of only one or two rooms there shall be at least one water closet for every two apartments. Every water closet compartment in every new tenement house shall have a window opening upon a street, alley, yard, court or vent shaft, and every water closet compartment in every existing tenement house shall be ventilated by such a window, or else by a proper ventilating pipe running through the roof. Every water closet compartment in every tenement house shall be provided with proper means of artificially lighting the same. If fixtures for gas or electricity are not provided in any such compartment, then the door thereof shall have ground glass or wire glass panels or transoms.

Sanitary Requirements.—No drip trays shall be permitted in new tenement houses. All water closet fixtures in every new tenement house shall be constructed and set up conformably to the requirements of the department of health. All privy vaults used in connection with any existing tenement house shall be replaced by water closets, constructed and set up in conformity with the provisions of this ordinance, whenever connection with a public sewer is in any way practicable, and the department of health of the city shall be the sole judge as to the practicability of such connection with the public sewer. At least one such water closet shall be provided for every two apartments in

each existing tenement house, and such water closets may be located in the yard if necessary. If so located, long hopper closets may be used, provided all traps, flush tanks and pipes be protected against frost.

Stairways.—Fire Escapes to be free from Incumbrance.—No incumbrance of any kind shall at any time be placed before, upon or against any stairway, steps or landings or fire escapes in or upon any tenement house. All fire escapes upon tenement houses shall be kept in good order and repair, and every exposed part thereof shall at all times be protected against rust by durable paint.

Access to Water Closets.—In every apartment of three or more rooms in every new tenement house convenient access from the outer door of the apartment to every living room and to every bedroom and to every room used as a bedroom and to at least one water closet compartment shall be provided other than through any bedroom or room used as a bedroom.

Changes or Alterations.—Permits.—Every new tenement house and all changes or alterations in any existing tenement house shall conform to the requirements of this chapter. No new tenement house shall be begun, nor shall any changes or alterations in any existing tenement house, such as are referred to in this chapter, be begun until a permit therefor shall have been issued by the building department of the city. Such permit shall be issued only upon an application by the person for whom the building is to be erected or altered, and after approval of the plans and specifications of such tenement house or such changes or alterations by the health department of the city whenever such approval is required by law or ordinance.

Notice to be sent to Commissioner of Buildings to Inspect.—Certificates to be issued.—Notice to Inspect to be filed.—It shall be the duty of the owner, or his agent, when a tenement house is in course of erection, to notify the commissioner of buildings of the city when the building is or will be ready for lathing, and the commissioner shall, within three days of the time specified, cause an inspection to be made, and if the construction is found to be in accordance with the requirements of this chapter, he shall issue, or cause to be issued, a certificate to that effect; otherwise he shall cause the penalties provided in section 445 of this chapter to be enforced. The commissioner shall file for reference the notice received and shall also file a copy of the certificate in the office of the building department.

Yards, Courts, etc.—Any tenement house not conforming in itself and in its yards, courts, areas and shafts to the requirements of this chapter shall not be occupied, or if found occupied, shall forthwith be vacated upon notice from the commissioner of buildings; and such tenement house shall not again be occupied until made to conform in all respects with the provisions of this chapter, notwithstanding the issuance of a building permit for the erection or alteration of such building.

Penalty for Violations.—Any owner, lessee, tenant, occupant or agent of any tenement house, or any architect, contractor, builder or foreman superintending or in charge of the work of construction of any tenement house, violating, disobeying, neglecting or refusing to comply with or resisting the enforcement of any of the provisions of this chapter shall be fined not less than ten dollars nor more than two hundred dollars for each offence; and any violation of any provision of this chapter, if continued after the first fine is imposed, shall, for every week of such continuance, be punished by an additional fine of not less than ten dollars nor more than two hundred dollars.

Provisions of this Chapter not to Apply to Existing Buildings except under Certain Circumstances.—Nothing in this chapter contained shall be considered as requiring alterations in the construction or equipment of buildings in existence at the time of the passage of this ordinance and which at the time of their construction were built in compliance with the ordinances then in force, unless such buildings shall not have sufficient or adequate means of egress therefrom or ingress thereto by reason of insufficient or inadequate stairway or stairways improperly located or insufficient or inadequate elevators or elevator equipment, doors, fire escapes, windows or other means of egress or ingress.

If, however, it is desired to enlarge or in any manner materially modify the construction of any existing building, or to make any change in its use or occupation which will transfer it from one class, as defined by this chapter, to another class, then before such enlargement or structural change or modification of building is made, or before such change in its use or occupation may be made, the entire building shall be reconstructed or modified in such manner as to bring the same, when enlarged or altered, or when occupied for its new and different purposes, into accordance with the provisions of this chapter.

Commissioner shall Notify.—Where it shall appear to the said commissioner that any such building has inadequate or insufficient means of egress therefrom or ingress thereto, as aforesaid, he shall notify the owner, agent or person in possession, charge or control of such building of such fact and direct him forthwith to make such alterations and changes in the construction or equipment of such building as are necessary to be made in order to promote the safety of the occupants of such building and of persons using the same and of the public.

(2.) BUILDING REGULATIONS OF BOSTON.

Statutes of 1885.

An Act in relation to the Preservation of Health in Buildings of the City of Boston.

Chapter 382.—Sec. 1. Every building in the city of Boston used as a dwelling, tenement or lodging house, or where persons are employed, shall have at all times such number of good and sufficient water closets, earth closets, or privies as the board of health of said city may determine, but the occupants of any two or more of any such buildings may use such closets or privies in common, provided the access is easy and direct; and said board shall not require more than one such closet or privy for every twenty persons.

Sec. 3. (As amended by Chapter 450, Section 3, of Acts of 1889.) Every building hereafter converted into or used for a tenement house or lodging house shall in addition to all other requirements of law conform to the provisions of this act, and every such building shall be carefully inspected at least twice a year under the direction of the board of health, and whenever said board has made an order concerning said building a re-inspection shall be made within ten days after said board has been informed that the order has been complied with.

Sec. 11. Every such building shall have adequate chimneys running through every floor, with an open fireplace or grate, or place for a stove, properly connected with one of said chimneys, for every family and set of apartments; shall have proper conveniences and non-combustible receptacles for ashes and rubbish; shall have water furnished at one or more places in such house, or in the yard thereof, so that the same may be adequate and reasonably convenient for the use of the occupants thereof; and shall have the floor of the cellar properly cemented, so as to be water-tight.

Sec. 12. Every such building used for a tenement or lodging house shall have suitable receptacles for garbage and other refuse matters, and shall not be used as a place of storage for any combustible article, or any article dangerous to life or detrimental to health; nor shall any horse, cow, calf, swine, pig, sheep, or goat be kept in said building.

Sec. 13. Every such building, and the yard, court, passage, area, and alleys belonging to the same, shall be kept clean and free from any accumulation of dirt, filth, garbage, or any refuse matter, to the satisfaction of the board of health.

Sec. 14. (As amended by Chapter 450, Section 5 of Acts of 1889). The tenant of any lodging house or tenement house shall thoroughly cleanse all the rooms, floors, windows, and doors of the house, or part of the house, of which he is the tenant to the satisfaction of the board of health, and the owner or lessee shall well and sufficiently, to the satisfaction of said board, whitewash or otherwise cleanse the walls and ceilings thereof once at least every year, in the months of April or May, and have the privies, drains, and cesspools kept in good order and the passages and stairs kept clean and in good condition. Whenever there shall be more than eight families living in any tenement house in which the owner thereof does not reside, there shall be, when required by the board of health, a janitor, housekeeper or some other responsible person, satisfactory to said board, who shall reside in said house and have the charge thereof.

Sec. 15. The owner, agent of the owner, and keeper of any lodging or tenement house, or part thereof, shall, when any person in such house is sick of fever, or of any infectious, pestilential, or contagious disease, and such sickness is known to such owner, agent, or keeper, give immediate notice thereof to the board of health, and thereupon said board shall cause the same to be inspected and cleansed, or disinfected, at the expense of the owner, in such manner as they may deem necessary; and may also cause the blankets, bedding, and bed clothes used by any such sick person to be thoroughly cleansed, scoured, and fumigated, and in extreme cases to be destroyed.

Sec. 16. The halls on each floor of every such building shall open directly to the external air, with suitable windows, and shall have no room or other obstructions at the end, unless sufficient light and ventilation is otherwise provided for said halls in a manner approved by the board of health.

Sec. 17. No person shall, without a permit from the board of health, let or occupy, or suffer to be occupied, separately as a dwelling or place of lodging and sleeping, any cellar or underground room whatsoever, unless the same be in every part thereof at least seven feet in height, measured from the floor to the ceiling thereof; nor unless the same shall have been so let or occupied before the passage of this act, nor unless the same be for at least one foot of its height above the surface of the street or ground adjoining, or nearest to the same; nor unless there be, outside of and adjoining the said vault, cellar, or room, and extending along the entire frontage thereof, and upwards from six inches below the level of the floor thereof, up to the surface of the said street or ground, an open space of at least two feet and six inches wide in every part; nor unless the same be well and effectually drained by means of a drain, the uppermost part of which is one foot at least below the level of the floor of such vault, cellar, or room; nor unless there is a clear space of not less than one foot below the level of the floor, except where the same is cemented; nor unless there be appurtenant to such vault, cellar, or room, the use of a water closet or privy, kept and provided as in this act required, nor unless the same have an external window opening of at least nine superficial feet clear of the sash frame, in which window opening there shall be fitted a frame filled in with glazed sashes, at least four and a half superficial feet of which shall be made so as to open for the purpose of ventilation: *provided, however,* that in case of an inner or back vault, cellar, or room, let or occupied along with a front vault, cellar, or room, as a part of the same letting or occupation, it shall be a sufficient compliance with the provisions of this act if the front room is provided with a window as hereinbefore provided, and if the said back vault, cellar, or room is connected with the front vault, cellar, or room, by a door, and also by a proper ventilating or transom window, and, where practicable, also connected by a proper ventilating or transom window, or by some hall or passage, with the external air; *provided, further,* that in any area adjoining a vault, cellar, or underground room, there may be steps necessary for access to such vault, cellar, or room, if the same be so placed as not to be over, across, or opposite to said external window, and so as to allow between every part of such steps and external wall of such vault, cellar, or room, a clear space of six inches at least, and if the rise of said steps is open; *and provided, further,* that over or across any such area there may be steps necessary for access to any building above the vault, cellar, or room, or to which such area adjoins, if the same be so placed as not to be over, across, or opposite to any such external window.

Sec. 18. (As amended by Chapter 450, Section 6 of Acts of 1889). The board of health may by a vote limit the number of occupants in any tenement or lodging house, or in any part or parts of the same, and shall in such case cause a notice stating such number to be affixed conspicuously in such building and served on the owner, agent or person having the charge thereof. If the number is exceeded said board may order the premises vacated, and they shall not be again occupied until said board shall so permit, upon being satisfied that the vote will be complied with. Said board may make such further regulation as to overcrowding, ventilation and occupation of such houses and the cellars thereof and of buildings where persons are employed, not inconsistent with other laws, as they deem proper.

Sec. 19. Every owner and agent, or person having charge, of a tenement or lodging house shall leave his address with the board of health, and shall have legibly posted on the wall or in the entry of such tenement or lodging house the name and address of such owner and of the agent or person having charge of the same; and service upon parties whose address is out of the city, of any papers or notices required by this act, or any act relating to the preservation of health, or by any proceedings to enforce any of their provisions, shall be sufficient, if made by sending a copy of such paper or notice through the mail to the address of the person or persons so designated as owner, agent, or person having charge of such tenement or lodging house; and service upon parties whose address is in the city, by leaving such copy at said address.

Sec. 20. Every officer of the board of health, and every officer upon whom any duty or authority is conferred, shall have free access to every part of any lodging or tenement house, when required, in the proper execution of the duties of his office.

Sec. 21. Any court having equity jurisdiction, in term time or vacation, may, on the application of the board of health, by any suitable process or decree in equity, enforce the provisions of this act, and may, on such application, issue an injunction to restrain the use or occupation of any building or structure in the city of Boston, erected, altered, or used in violation of this act.

Sec. 22. Any person violating any provision of this act shall be punished by a fine not exceeding one hundred dollars, or by confinement in the house of correction not exceeding sixty days, unless another penalty is specifically provided herein.

Sec. 23. Every member of said board of health, and every inspector acting under said board, shall before entering upon the duties of his office take and subscribe an oath before the city clerk of said city that he will faithfully and impartially discharge such duties, and the city clerk shall make and keep a record of such oath. Every member of said board and every such inspector who enters upon and discharges such duties without having taken and subscribed such oath shall be liable to a penalty of one hundred dollars, but such omission shall not render invalid any act or proceeding of said board.

Sec. 24. This act shall take effect upon its passage.

Statutes of 1897.

An Act for the further Protection of Public Health in the City of Boston: as amended by Section 1 of Chapter 222 of the Acts of 1899.

Chapter 219.—Sec. 1. Whenever the board of health of the city of Boston shall be of opinion that any building or any part thereof in said city is infected with contagious disease, or by reason of want of repair has become dangerous to life, or is unfit for use because of defects in drainage, plumbing, ventilation, or in the construction of the same, or because of the existence of a nuisance on the premises which is likely to cause sickness among its occupants, said board may issue an order requiring all persons therein to vacate or cease to use such building or part thereof stated in the order, for reasons to be stated therein as aforesaid. Said board shall cause said order to be affixed conspicuously to the building or part thereof, and to be personally served on the owner, lessee, agent, occupant or any person having the charge or care thereof; if the owner, lessee or agent cannot be found in the said city, or does not reside therein, or evades or resists service, then said order may be served by depositing a copy thereof in the postoffice of said city, postpaid and properly inclosed and addressed to such owner, lessee or agent at his last known place of business or residence. Such building or part thereof shall be vacated within ten days after said order shall have been posted and mailed as aforesaid, or within such shorter time, not less than forty-eight hours, as in said order may be specified, and said building shall be no longer used; but whenever said board shall become satisfied that the danger from said building or part thereof has ceased to exist, or that said building has been repaired so as to be habitable, it may revoke said order. Whenever in the opinion of the board of health any building or part thereof in said city is because of age infection with contagious disease, defects in drainage, plumbing or ventilation, or because of the existence of a nuisance on the premises which is likely to cause sickness among its occupants or among the occupants of other property in said city, or because it makes other buildings in said vicinity unfit for human habitation or dangerous or injurious to health, or because it prevents proper measures from being carried into effect for remedying any nuisance injurious to health, or other sanitary evils in respect of such other buildings, so unfit for human habitation that the evils in or caused by said building cannot be remedied by repairs or in any other way except by the destruction of said building or of any portion of the same, said board of health may order the same or any part thereof to be removed; and if said building is not removed in accordance with said order said board of health shall remove the same at the expense of the city.

Sec. 2. The city of Boston shall pay the damages sustained by the owner of the building by the destruction of the same, or part thereof, as determined on agreement between said board of health and said owner, and if they cannot agree the same shall be determined by a jury of the superior court for the county of Suffolk, on petition of said owner or board within one year after said destruction, in the same manner as damages are determined for the taking of land in laying out streets and highways in the city of Boston.

Sec. 3. This act shall take effect upon its passage.

(3.) BOSTON LODGING HOUSE REGULATIONS.

Statutes of 1894.

An Act to Regulate Public Lodging Houses in the City of Boston.

Chapter 414.—Sec. 1. Every building in the city of Boston not licensed as an inn, in which ten or more persons are lodged for a price for a single night of twenty-five cents or less for each person, shall be deemed a public lodging house within the meaning of this act.

Sec. 2. The board of police for said city may license persons to keep public lodging houses in said city. No fee shall be charged for such license, and it shall expire on the thirtieth day of April next after the granting of the same. Every such license shall specify the street or other place, and the number of the building, or give some other particular description thereof, where the licensee shall exercise his employment; and the license shall not protect a person exercising his employment in any other place than that so specified.

Sec. 3. No such license shall be granted until the inspector of buildings of said city has certified that the building is provided with sufficient means to escape in case of fire, and that suitable appliances are provided for extinguishing fires and for giving alarm to the inmates in case of fire; and said inspector may from time to time require such alterations to be made or such additional appliances to be provided as may in his judgment be necessary for the protection of life and property in case of fire.

Sec. 4. No such license shall be granted until the board of health has certified that the building is provided with a sufficient number of water closets and urinals, and with good and sufficient means of ventilation; and said board may from time to time require the licensee to thoroughly cleanse and disinfect all parts of said building and the furniture therein, to the satisfaction of said board.

Sec. 5. In every public lodging house a register shall be kept in which shall be entered the name and address of each lodger, together with the time of his arrival and departure, and such register shall at all times be open to the inspection of the police.

Sec. 6. The keeper of every public lodging house shall at all times when required by any officer of the building department, the health department, or the police department, give him free access to said house or any part thereof.

Sec. 7. Whoever presumes to keep a public lodging house, or is concerned or in any way interested therein, without being duly licensed as hereinbefore provided, shall be punished by a fine not exceeding one hundred dollars; and any keeper of a public lodging house who violates any of the provisions of this act shall be punished by a fine of one hundred dollars, and the licensing board shall immediately revoke his license.

Sec. 8. This act shall take effect upon its passage.

Rules for Lodging Houses, March 22, 1898.

Ordered, That the following regulations be and the same are hereby adopted by the Board of Health for the government of lodging houses:—

1. The means for light and ventilation shall be satisfactory to the Board of Health and beyond the control of lodgers.

2. All floors and stairways must be sound, smooth, and either painted or shellacked.

3. There shall be allowed no less than 300 cubic feet of space to each lodger in sleeping-rooms.

4. Open and spacious dormitories shall be preferred.

5. Single or small rooms are forbidden except by special permit of the Board of Health.

6. No carpeting shall be on floors or stairways.

7. There shall not be less than two horizontal feet between the sides of any two beds.

8. All bedsteads must be single and of iron.

9. Blankets will be required and "comforters" will be prohibited.

10. Mattresses shall be covered with a waterproof covering.

11. No person shall be permitted to retire or sleep in his day clothing.

12. No person who is not clean shall be allowed to retire without a bath.

13. A new applicant for lodging shall not be lodged unless he shall have first taken a shower bath. A lodger shall not be lodged for more than seven consecutive nights unless he shall have taken a shower bath. For the purpose of this section a "new applicant" shall be interpreted to mean a person who has not been lodged at the same place the night previous.

14. Water-closets (one to every 20 lodgers), lavatories and shower bath, with hot and cold water, all with open plumbing, shall be furnished on each floor, and the floors to same shall be of marble, slate or concrete.

15. All movable receptacles for excretions are prohibited.

16. Smoking in sleeping-rooms is prohibited.

17. All stairways, fire-escapes, and other means of exit in case of fire shall be in accordance with the statutes and ordinances on that subject, and to the satisfaction of the Building Commissioner.

18. Stoves for heating are forbidden except by special permission of the Board of Health.

19. The use of portable kerosene lamps is prohibited.

20. A reliable watchman shall be in attendance at all hours of the night.

F.—WORKING MEN'S BUILDING SOCIETIES.

(1.) CONSTITUTION OF BALTIMORE "ROYAL OAK" PERPETUAL BUILDING ASSOCIATION.

Article 1.—Name and Object.

This Association shall be known as the "Royal Oak Perpetual Building Association of Baltimore City," and shall have for its object the accumulation of a fund from which to make loans to members who wish to acquire a homestead, or to meet any other financial need.

Article 2.—Number of Shares.

Sec. 1. The number of shares of stock in this Association shall be limited to 5,000.

Sec. 2. The par value of each share shall be \$130 00.

Article 3.—Time and Place of Meeting.

The Place of Meeting of this Association and of the Board of Directors shall be in the city of Baltimore.

There shall be held an annual meeting of the shareholders of the Association, between the 1st and 15th of December of each year, at such place as the Board of Directors shall select, to hear the annual report of the President, and transact any other business that may arise.

Special meetings of the Association shall be called by the President, on the written request of ten members.

The weekly payments shall be made to the Secretary on such an evening of each week as may be designated in the by-laws from time to time.

Article 4.—Membership.

Sec. 1. This Association shall be composed of those persons of legal age and standing, who shall sign this constitution and subscribe to one or more shares. Minors may hold shares through their legal representatives.

Sec. 2. All members will be allowed to vote or participate in the proceedings of each meeting of the Association in person or by proxy. Minors or females shall only vote through those legally authorized to represent them.

Article 5.—Officers.

Sec. 1. The affairs of the Association shall be managed by twelve Directors who shall elect from among themselves a President, a Vice-President, a Treasurer and Secretary. The Directors shall be elected at the annual meeting of the Association and hold office until their successors assume charge.

The Board of Directors shall fill all vacancies that may occur.

Sec. 2. The following officers shall be required to furnish bond :

The President, in the sum of not less than \$1000.00.

The Secretary, in the sum of not less than \$1000.00.

The Treasurer, in the sum of not less than \$2000.00.

The sufficiency of the securities offered shall be considered by a special Committee of three members of the Association, to be appointed by the Board of Directors.

Article 6.—Board of Directors.

The Board of Directors shall manage all the affairs of the Association, subject to the constitution and by-laws of the Association. They shall invest the funds of the Association from time to time, in any manner which they consider most advantageous to the Association.

Article 7.—Removal of Officers.

Any officer of this Association may be removed or suspended for cause, by the vote of two-thirds of the shareholders present at any regular or special meeting of the Association.

Article 8.—Shareholders, Dues, Fees, etc.

Sec. 1. Shareholders shall pay for each and every share they hold in this Association an entrance-fee of 25 cents, and the sum of 25 cents every week thereafter until the weekly dues and dividends shall on each share amount to \$130.00.

Sec. 2. All money received shall be in bankable funds.

Sec. 3. If a member in arrears shall resume his payments, they shall be credited in the following order : firstly, all fines and advances made, if any, by the Association to protect the property given as security, as fire insurance, taxes, water rent, etc. ; secondly, the dues, the oldest arrearage to be deducted first, until the arrears are paid. When the fines amount to as much as the weekly dues paid on unredeemed shares, such shares shall be forfeited to the Association, and the holder thereof shall to that extent cease to be a member.

Sec. 4. Whenever the weekly dues paid by a member, together with the dividends thereon, shall amount to the sum of \$130 per share, the holder of such share or shares shall draw that amount in cash as soon as there is sufficient money in the treasury not otherwise appropriated, and he shall be bound to accept the sum of \$130 per share as soon as such amount is available. He shall, however, be entitled to six per cent. interest per annum on deferred payments, but shall not be entitled to further dividends.

Sec. 5. Any transfer of shares will be subject to a transfer-fee of 25 cents per share. No assignment of shares shall be valid unless attested by the Secretary, who shall record the same on the books.

Article 9.—Division of Profits.

Sec. 1. The profits of the Association shall be ascertained semi-annually up to the first of each May and November, and shall be held for six months as a Reserve Fund against losses that may occur in the meantime. This Reserve Fund shall then be divided pro rata among all shareholders, according to the amounts that stood to their credit when said profits were ascertained and which holdings have not been withdrawn in the meantime.

Sec. 2. No distinction in crediting the dividends shall be made between free and redeemed shareholders.

Article 10.—Withdrawal of Free Shares.

Sec. 1. Any member may withdraw his free shares upon a written notice to the Board of Directors and shall be entitled to the amount standing to his credit, less the amount of fines that may be charged against him, provided, there are sufficient funds in the treasury not otherwise appropriated previous to his withdrawal.

Sec. 2. He shall be entitled to six per cent. interest per annum from date of notice of withdrawal, if not paid off within 60 days, but in that case he shall not be entitled to any dividend, except such which has already been declared and credited to his account previous to notice of withdrawal.

Article 11.—Redemption of Shares, Loans, etc.

Sec. 1. Every member shall be entitled to a loan of \$130.00 on each of his free shares, upon giving satisfactory security.

Sec. 2. Applications for loans shall be made in writing, stating the security offered, and shall be accompanied by \$1.50 to defray the expenses of three members of the committee who will be appointed to visit the premises offered as security. In case this property is located outside the old city limits, the amount to be paid shall be determined by the Directors.

Sec. 3. If satisfactory security be not given within four weeks' time, the money shall revert to the Association, and the member shall pay interest and all expenses incurred by reason of his application for a loan.

Sec. 4. Members who have redeemed their shares shall pay weekly, besides their regular dues, the sum of 15 cents interest for every \$130 received until the amount of dues and dividends paid on their redeemed shares shall equal the sum advanced. Their security will then be released.

Sec. 5. Members receiving loans must bear all expenses incident to the transaction.

Sec. 6. They must produce evidence that all incumbrances in arrears are paid. The property must be kept insured against loss by fire in a company acceptable to the Board, and the policies shall be so framed that all losses are payable to the Association to the extent of its interest. The mortgager shall at any time, when demanded, produce receipts showing that all incumbrances on the property have been paid. Should he fail to do so, the Association may pay the incumbrance and deduct same from the mortgager's weekly dues until such outlay is refunded, or foreclose the mortgage.

Sec. 7. If any member, who has received a loan, fails to pay the weekly dues for eight (8) weeks, the Association may compel payment by the sale of the mortgaged property.

Sec. 8. Holders of free shares may withdraw the amount paid on account of each of their free and unpledged shares, and the dividend shall cease on the account withdrawn. In case they should take an equal or less number of new shares immediately after receipt of the money on the withdrawn shares, they shall be entitled to re-enter without paying any new entrance-fee.

Sec. 9. Members who have mortgaged their property or given other security for loans advanced on redeemed shares, may obtain a release by paying to the Association the difference between the sum standing to their credit and the full par value of their redeemed share or shares, provided they pay a withdrawal fee on the following basis :

If released within one year from the time the loan was made, the withdrawal fee shall amount to Three Dollars per share.

If released within the second year, \$2.50 per share.

" " third " 2.00 "

" " fourth " 1.50 "

" " fifth " 1.00 "

If released after five years and before the regular time, fifty cents per share.]

Article 12.—Fines.

Sec. 1. Should a member neglect to pay his weekly dues by the time specified, he shall be subject to a fine of five (5) cents per share for each failure.

Sec. 2. Any member absenting himself from the annual meeting shall be liable to a fine of fifty (50) cents, unless excused by sickness or absence from the city.

Article 13.—Alterations.

This Constitution shall not be altered or amended unless by an affirmative vote of over one half of all the shares held by the members.

(2.) CONSTITUTION OF MEMPHIS WORKING MEN'S BUILDING AND LOAN ASSOCIATION.

Article 1.

Sec. 1. This Association shall continue to be known as the Workingmen's Building and Loan Association of the City of Memphis, and shall have for its object the accumulation of a fund, which may be loaned on good security to the members thereof, to aid them in procuring homes, and such other investments as are provided for in this Constitution.

Article 2.—Stock.

Sec. 1. The stock of this Association may be issued in successive series of 200 dollars per share, the number of shares in each new series to be determined by the Board of Directors.

Article 3.—Membership.

Sec. 1. The members of this Association shall be white residents of the United States, who shall have subscribed for one or more shares of stock and signed this Constitution; unmarried women and minors may own stock in this Association when represented by a guardian or competent agent, who may exercise all the rights and privileges that would otherwise belong to said woman or minor; married women may hold stock in this Association free from the debts or claims of their husbands; no one person shall hold more than fifty shares of stock in this Association.

Sec. 2. Each member shall be entitled to one vote only, and no member shall be permitted to vote by proxy on any business matter; Provided, That the officers shall be elected either in person or by proxy by a majority of the votes cast, each share representing one vote.

Sec. 3. Members can transfer their shares to others by notifying the Secretary, and paying a transfer fee of ten cents for each share transferred, the purchaser to sign the Constitution.

Sec. 4. Any member wishing to withdraw one or more shares of his or her stock, which is not pledged to the Association, shall give thirty days' notice in writing, to be filed with the Secretary. At the expiration of said thirty days, the withdrawing stockholder shall be entitled to receive the amount actually paid in on such stock, and such proportion of profits that may have accrued as the Board of Directors may determine to be just and equitable, deducting from the amount all dues, fines and penalties that are charged against the withdrawing stockholder; Provided, That at no time shall more than one-half the funds in the treasury be subject to the demands of withdrawing stockholders without the consent of the Board of Directors.

Sec. 5. Upon the death of a stockholder, the legal representatives may continue to enjoy the rights and privileges that belonged to the deceased by signing the Constitution and fulfilling the obligations that would have devolved on the deceased, or they may withdraw the stock of the deceased under the provisions of Sec. 4 of Article 3 of this Constitution.

Sec. 6. All stock upon which dues, fines, penalties or interest are unpaid is hereby declared to be pledged to the Association to secure the payment of the same.

Sec. 7. Members failing to pay their instalment dues shall be fined on each share five cents per month for each and every month's dues until paid.

Sec. 8. In case of non-payment of instalments or interest by borrowing members for the period of six months, it shall be the duty of the Board of Directors to enforce the terms of the deeds of trust held as security in accordance with the provisions of an Act of the Legislature passed March 19, 1875, approved March 23, 1875.

Article 4.—Payment of Instalments.

Sec. 1. On each share of stock there shall be paid an instalment of one dollar per month in advance, and any person wishing to subscribe for stock subsequent to the issue of a series shall pay up all instalments which may have become due in the series in which the said stock may be taken or issued, and such premiums as the Board of Directors may require.

Article 5.—Officers.

Sec. 1. The officers of this Association shall consist of a President, Vice-President, Secretary, Treasurer and seven Directors, two of whom shall be the President and Vice-President of the Association, who shall be elected annually by ballot, at the regular annual meeting of the Association, and shall hold their office for the term of one year, or until their successors are qualified.

Article 6.—Duties of Officers.

Sec. 1. It shall be the duty of the President, and in his absence the Vice-President, to preside at all meetings of the Association and Board of Directors; to preserve order therein; to administer the laws of the Association, and perform such other duties as may be prescribed in this Constitution or the by-laws in pursuance thereto.

Sec. 2. It shall be the duty of the Secretary to keep accurate minutes of the proceedings of the Association and Board of Directors. He shall keep a strict and correct account with the members, receive all moneys paid to the Association, pay the same over to the Treasurer at least once a month, taking his receipt as voucher therefor; he shall hold himself responsible for the correctness of his account, and perform such other duties as may be required by the Directors. To secure the faithful performance of his duties he shall enter into a bond, with two sureties, in a sum not less than five thousand dollars, and shall receive for his services such compensation as the Board of Directors may allow.

Sec. 3. It shall be the duty of the Treasurer to receive all moneys paid to the Association from the Secretary, giving him a receipt for the same. He shall pay all drafts ordered by the Board of Directors, attested by the President and Secretary. He shall keep a correct account of all moneys received and paid out, and his books and accounts shall be subject at all times to the inspection of the Directors. He shall, when requested, make a report of the financial affairs of the Association. To secure the faithful performance of his duties he shall enter into a bond, with two or more sureties, in a sum not less than ten thousand dollars. He shall deliver over to his successor in office all moneys, books, papers and properties of every kind belonging to the Association within two weeks after the election and qualification of his successor; and for the faithful performance of his duties he may receive such compensation as the Directors may allow.

Sec. 4. It shall be the duty of the Board of Directors to have charge of all the business of the Association, and to constantly look after its welfare. They shall have full control of all contracts, bonds, deeds, mortgages, moneys, papers, books and property of every kind belonging to the Association. They may appoint an attorney and all other agents whose services may be required, and regulate their compensation. They shall fill all vacancies until the next annual election. Their meetings shall be held monthly for the transaction of business, and such meetings shall be open and free to all the members of the Association. No compensation shall be allowed the Directors.

Article 7.

Sec. 1. At the stated monthly meetings of the Directors, the funds on hand, not otherwise appropriated, if to the amount of two hundred dollars or more, shall be offered for loan.

Sec. 2. Every member shall be entitled to a loan not exceeding the par value of any number of shares held by him or her. Provided, however, that no member shall be entitled to a loan on more than fifteen shares at one bidding.

Sec. 3. Choice of priority of loan shall be bid of premium, and the member bidding the highest premium for priority or privilege, shall have the first choice of loan, when the remaining funds, if any, shall be loaned in like manner.

Sec. 4. Interest on all loans shall be at the legal rate of interest from the time of making said loans, and shall be paid in monthly instalments in advance, and at the same time that the regular dues are paid: and such loans shall be for the purpose of enabling the borrower thereof to secure a home, or for the purchase of other real estate, or for the improvement of the same, and for no other purpose whatever, and the loan shall be secured by deed of trust on unencumbered real estate.

Sec. 5. No member shall be entitled to bid on or receive a loan, or to vote on any question whatever who is in arrears for monthly instalments, interest, fines or penalties.

Sec. 6. Securities must be offered within five days after the loan is granted, and when approved and accepted by the Board of Directors, the borrower shall be entitled to the loan; or the money may be invested by the Board of Directors for the benefit and under the direction of the borrower.

Sec. 7. Should the securities, from any cause whatever, be found defective, insufficient or unsatisfactory to the Directors, the loan shall not be made, and in case a loan is awarded to a member, and said member shall fail or neglect to offer security, or shall offer security that is not approved, the proposed borrower shall be charged with one month's interest and all necessary expenses, and the money relouaned at the next stated meeting.

Sec. 8. Should it be ascertained that members having taken a loan are using the same for any purpose not contemplated in this Constitution, it shall be discretionary with the Directors as to further loans to said members.

Sec. 9. All claims for dues, interest, fines, expenses and penalties shall be held as a lien against the stock of delinquent members, and when there are six months' dues remaining unpaid the stock shall be declared forfeited and revert to the Association ; Provided, the holder of said stock shall be entitled to receive the same amount that would be paid to stock withdrawn at the time payments ceased to be made, less all claims held by the Association against said stock. New stock may be issued instead of any stock cancelled or withdrawn, under the direction of the Board of Directors.

Article 8.—Surplus Funds.

Sec. 1. If at any time there should be a surplus fund on hand, the Board of Directors may invest the same in the purchase of real estate and erection of buildings thereon, in the name and as the property of this Association, and they may sell or dispose of the same in their discretion for the benefit of the Association ; but no money or property shall be disposed of under this Article except by a three-fourths vote of all the members of the Board of Directors.

Sec. 2. Should the Board of Directors deem it expedient, funds may be used in retiring unmatured stock.

Article 9.—Liquidation.

Sec. 1. When the stock of the oldest series shall reach its ultimate or par value, and all losses and gains adjusted thereto, there shall be paid to each member holding unpledged shares the sum of two hundred dollars per share. And all securities held in trust on stock pledged for loans, shall be quit-claimed and satisfied, and the said shares revert to the Association ; Provided, that all claims, of whatever kind, against the stock or securities of any member, must be fully paid up before such stock shall be redeemed or securities cancelled.

Sec. 2. If after the liquidation as provided for in Sec. 1 of this Article, there should be a surplus still remaining, the same shall be divided *pro rata* to their respective interests among all the members of such series.

Article 10.—Amendments.

Sec. 1. The Association shall have power to make and adopt such By-laws, Rules and Regulations as they may deem expedient, not repugnant to this Constitution.

Sec. 2. This Constitution shall not be altered or amended, except at an annual or special meeting, and after one month's notice in writing, and published at least three times in two daily newspapers published in the city of Memphis, and then by an affirmative vote of at least three-fourths of all the members present.

Amendment to the Constitution.

Sec. 3. The Association may issue prepaid and paid-up stock in shares of one hundred dollars each, subject to such by-laws as may be adopted ; Provided, that the total amount of such stock outstanding at any time shall not exceed \$100,000.

G.—HOUSE AGREEMENTS.

(1) BALTIMORE.

This Agreement, entered into thisday of.....190... ..between
....., Agents, and.....

Witnesseth, that the said....., Agents, doth let unto the said
.....the property known as.....
for the term of.....beginning on the.....day of.....190.....at the
rate of.....dollars per month payable.....in advance in sums of
.....dollars on the.....day of each.....unless this lease
be sooner terminated as hereinafter provided.

The said.....covenants to pay the said rent when due and payable ;
that.....will not assign this lease or sublet the premises hereby demised without permission in
writing of said Lessors ; that.....will keep the said premises in order and repair during the said
term or any succeeding term hereunder ; and when vacating will surrender said premises in the same
condition and in as good order as when received, ordinary wear and tear excepted ; that.....
will do nothing to impair or contravene policy or policies of insurance on the said premises or
increase the present rate of insurance thereon ; that.....will comply with all City Ordinances ;
that.....will pay all meter water rents and all other water rent except the charge to house alone ;
that.....will use the premises only for the purpose of.....
.....and agrees that no lettering or signs shall be painted on the walls
of said premises without permission in writing of the said Lessors.

In case the said rent or any part or portion thereof be at any time due and unpaid the said.....
....., Agents, shall have the right to distrain for and by all lawful means recover
the same.

Upon any default by the tenant in any covenant or condition hereof, this lease at the option of the said..... Agents, shall be at an end and thereupon the said..... shall be and hereby agrees to become a tenant from..... to..... at \$..... per..... and to remove from and quit the said premises immediately after..... days' written notice being served upon said tenant or tacked or left on the premises aforesaid.

In case of a partial damage to the said premises by fire, so as to materially affect the usefulness of said premises for which they are demised, the same shall be repaired as speedily as possible at the expense of the said Lessors, and a partial abatement of the rent shall be made until said damage has been repaired.

In case of the total destruction of the said premises by fire or of such damage as shall render the same totally unfit for occupancy, this lease upon the surrender and delivery to said Lessors of said premises by said tenant together with the payment of the rent then due and a proportionate part thereof to date of such surrender terminate and be at an end.

And it is mutually understood and agreed that either said Lessors or Lessee may terminate this lease at the expiration of said term or of any succeeding term hereunder by a written notice served at least..... days prior thereto, and in such event the said Lessors shall have the privilege to post the premises "For Sale" or "For Rent" ten days prior to expiration of term, and the said Lessee agrees to show the premises. If no such notice be given, this agreement shall continue in force after the expiration of the said term or succeeding term for another term of..... months, subject to all covenants and conditions of this contract.

Signed and sealed, &c.

(2) LOUISVILLE.

Lease.—

....., the undersigned, this..... day of....., 190....., rent from....., lessor..., the following described property in the city of Louisville, Ky. :

..... to be used for..... by..... commencing....., 190....., for..... month....., and to continue thereafter from month to month, and by the month only, at the will of the lessor...or....., with the privilege to either party to terminate this lease by giving to the other a one month's written notice to commence to run at the beginning day of the rental month following the serving of the notice.

In consideration of which..... agree to pay, as rental, the sum of..... Dollars and Cents, in advance, on the first day of each and every rental month. Said rental to be paid promptly, as other moneys when due, without any demand or notice being made for the same, at the office of....., Agent for said lessor..., or elsewhere in Louisville, Ky., that the lessor... may at any time require.

Should..... fail to pay any month's rent when it becomes due, then the said lessor... has the right to enter and take possession of the premises, and no notice to quit or demand shall be necessary to recover possession.

..... agree further :—

Not to sub-let any part of the premises without the written consent of the lessor.

Not to deface, destroy, remove, or permit the same, any part of the premises; nor to throw any slops, waste or rubbish into the water closets, privy vault, on the roofs or about the premises anywhere.

I agree to keep no dogs, chickens or such like that may be objectionable to the lessor....

To keep good order about the premises, and not to permit the visiting of any improper persons there.

..... hereby lease the premises in its present condition, and any repairs needed at any time during..... occupancy..... agree not to demand of the lessor... nor hold said lessor... liable in any way, on account of the same.

That upon the violation of any of the conditions of this lease by myself..... the said lessor... has the right at any time to declare this lease void and forfeited and to enter into possession of the premises without any demand or notice being given.

Witness, &c.

H.—LAWS AND REGULATIONS RELATIVE TO THE PREPARATION AND SALE OF FOOD.

(1) FEDERAL FOOD AND DRUGS ACT.*

(This Act was passed June 30, 1906, and came into operation January 1, 1907.)

AN ACT for preventing the manufacture, sale, or transportation of adulterated or misbranded or poisonous or deleterious foods, drugs, medicines, and liquors, and for regulating traffic therein, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

Sec. 1. That it shall be unlawful for any person to manufacture within any Territory or the District of Columbia any article of food or drug which is adulterated or misbranded, within the meaning of this Act; and any person who shall violate any of the provisions of this section shall be guilty of a misdemeanour, and for each offence shall, upon conviction thereof, be fined not to exceed

* In addition to this federal law the various States, with few exceptions, have general food laws, for the most part of recent date. Since the passing of the National Food and Drugs Law of 1906 about 30 States have enacted new food laws.

five hundred dollars or shall be sentenced to one year's imprisonment, or both such fine and imprisonment, in the discretion of the court, and for each subsequent offence and conviction thereof shall be fined not less than one thousand dollars or sentenced to one year's imprisonment, or both such fine and imprisonment, in the discretion of the court.

Sec. 2. That the introduction into any State or Territory or the District of Columbia from any other State or Territory or the District of Columbia, or from any foreign country, or shipment to any foreign country of any article of food or drugs which is adulterated or misbranded, within the meaning of this Act, is hereby prohibited; and any person who shall ship or deliver for shipment from any State or Territory or the District of Columbia to any other State or Territory or the District of Columbia, or to a foreign country, or who shall receive in any State or Territory or the District of Columbia from any other State or Territory or the District of Columbia, or foreign country, and having so received, shall deliver, in original unbroken packages, for pay or otherwise, or offer to deliver to any other person, any such article so adulterated or misbranded within the meaning of this Act, or any person who shall sell or offer for sale in the District of Columbia or the Territories of the United States any such adulterated or misbranded foods or drugs, or export or offer to export the same to any foreign country, shall be guilty of a misdemeanour, and for such offence be fined not exceeding two hundred dollars for the first offence, and upon conviction for each subsequent offence not exceeding three hundred dollars or be imprisoned not exceeding one year, or both, in the discretion of the court: *Provided*, That no article shall be deemed misbranded or adulterated within the provisions of this Act when intended for export to any foreign country and prepared or packed according to the specifications or directions of the foreign purchaser when no substance is used in the preparation or packing thereof in conflict with the laws of the foreign country to which said article is intended to be shipped; but if said article shall be in fact sold or offered for sale for domestic use or consumption, then this proviso shall not exempt said article from the operation of any of the other provisions of this Act.

Sec. 3. That the Secretary of the Treasury, the Secretary of Agriculture, and the Secretary of Commerce and Labour shall make uniform rules and regulations for carrying out the provisions of this Act, including the collection and examination of specimens of foods and drugs manufactured or offered for sale in the District of Columbia, or in any Territory of the United States, or which shall be offered for sale in unbroken packages in any State other than that in which they shall have been respectively manufactured or produced, or which shall be received from any foreign country, or intended for shipment to any foreign country, or which may be submitted for examination by the chief health, food, or drug officer of any State, Territory, or the District of Columbia, or at any domestic or foreign port through which such product is offered for interstate commerce, or for export or import between the United States and any foreign port or country.

Sec. 4. That the examinations of specimens of foods and drugs shall be made in the Bureau of Chemistry of the Department of Agriculture, or under the direction and supervision of such Bureau, for the purpose of determining from such examinations whether such articles are adulterated or misbranded within the meaning of this Act; and if it shall appear from any such examination that any of such specimens is adulterated or misbranded within the meaning of this Act, the Secretary of Agriculture shall cause notice thereof to be given to the party from whom such sample was obtained. Any party so notified shall be given an opportunity to be heard, under such rules and regulations as may be prescribed as aforesaid, and if it appears that any of the provisions of this Act have been violated by such party, then the Secretary of Agriculture shall at once certify the facts to the proper United States district attorney, with a copy of the results of the analysis or the examination of such article duly authenticated by the analyst or officer making such examination, under the oath of such officer. After judgment of the court, notice shall be given by publication in such manner as may be prescribed by the rules and regulations aforesaid.

Sec. 5. That it shall be the duty of each district attorney to whom the Secretary of Agriculture shall report any violation of this Act, or to whom any health or food or drug officer or agent of any State, Territory, or the District of Columbia shall present satisfactory evidence of any such violation, to cause appropriate proceedings to be commenced and prosecuted in the proper courts of the United States, without delay, for the enforcement of the penalties as in such case herein provided.

Sec. 6. That the term "drug," as used in this Act, shall include all medicines and preparations recognised in the United States Pharmacopœia or National Formulary for internal or external use, and any substance or mixture of substances intended to be used for the cure, mitigation, or prevention of disease of either man or other animals. The term "food," as used herein, shall include all articles used for food, drink, confectionery, or condiment by man or other animals, whether simple, mixed, or compound.

Sec. 7. That for the purpose of this Act an article shall be deemed to be adulterated:

In case of drugs:

First. If, when a drug is sold under or by a name recognised in the United States Pharmacopœia or National Formulary, it differs from the standard of strength, quality, or purity, as determined by the test laid down in the United States Pharmacopœia or National Formulary official at the time of investigation: *Provided*, That no drug defined in the United States Pharmacopœia or National Formulary shall be deemed to be adulterated under this provision if the standard of strength, quality, or purity be plainly stated upon the bottle, box, or other container thereof although the standard may differ from that determined by the test laid down in the United States Pharmacopœia or National Formulary.

Second. If its strength or purity fall below the professed standard or quality under which it is sold.

In the case of confectionery:

If it contains terra alba, barytes, talc, chrome yellow, or other mineral substance or poisonous colour or flavour, or other ingredient deleterious or detrimental to health, or any vinous, malt, or spirituous liquor or compound or narcotic drug.

In the case of food:

First. If any substance has been mixed and packed with it so as to reduce or lower or injuriously affect its quality or strength.

Second. If any substance has been substituted wholly or in part for the article.

Third. If any valuable constituent of the article has been wholly or in part abstracted.

Fourth. If it be mixed, coloured, powdered, coated, or stained in a manner whereby damage or inferiority is concealed.

Fifth. If it contain any added poisonous or other added deleterious ingredient which may render such article injurious to health : *Provided*, That when in the preparation of food products for shipment they are preserved by any external application applied in such manner that the preservative is necessarily removed mechanically, or by maceration in water, or otherwise, and directions for the removal of said preservative shall be printed on the covering or the package, the provisions of this Act shall be construed as applying only when said products are ready for consumption.

Sixth. If it consists in whole or in part of a filthy, decomposed, or putrid animal or vegetable substance, or any portion of an animal unfit for food, whether manufactured or not, or if it is the product of a diseased animal, or one that has died otherwise than by slaughter.

Sec. 8. That the term "misbranded," as used herein, shall apply to all drugs, or articles of food, or articles which enter into the composition of food, the package or label of which shall bear any statement, design, or device regarding such article, or the ingredients or substances contained therein which shall be false or misleading in any particular, and to any food or drug product which is falsely branded as to the State, Territory, or country in which it is manufactured or produced.

That for the purpose of this Act an article shall also be deemed to be misbranded :

In case of drugs :

First. If it be an imitation of or offered for sale under the name of another article.

Second. If the contents of the package as originally put up shall have been removed, in whole or in part, and other contents shall have been placed in such package, or if the package fail to bear a statement on the label of the quantity or proportion of any alcohol, morphine, opium, cocaine, heroin, alpha or beta eucaine, chloroform, cannabis indica, chloral hydrate, or acetanilide, or any derivative or preparation of any such substances contained therein.

In the case of food :

First. If it be an imitation of or offered for sale under the distinctive name of another article.

Second. If it be labeled or branded so as to deceive or mislead the purchaser, or purport to be a foreign product when not so, or if the contents of the package as originally put up shall have been removed in whole or in part and other contents shall have been placed in such package, or if it fail to bear a statement on the label of the quantity or proportion of any morphine, opium, cocaine, heroin, alpha or beta eucaine, chloroform, cannabis indica, chloral hydrate, or acetanilide, or any derivative or preparation of any of such substances contained therein.

Third. If in package form, and the contents are stated in terms of weight or measure, they are not plainly and correctly stated on the outside of the package.

Fourth. If the package containing it or its label shall bear any statement, design, or device regarding the ingredients or the substances contained therein, which statement, design, or device shall be false or misleading in any particular : *Provided*, That any article of food which does not contain any added poisonous or deleterious ingredients shall not be deemed to be adulterated or misbranded in the following cases :

First. In the case of mixtures or compounds which may be now or from time to time hereafter known as articles of food, under their own distinctive names, and not an imitation of or offered for sale under the distinctive name of another article, if the name be accompanied on the same label or brand with a statement of the place where said article has been manufactured or produced.

Second. In the case of articles labeled, branded, or tagged so as to plainly indicate that they are compounds, imitations, or blends, and the word "compound," "imitation," or "blend," as the case may be, is plainly stated on the package in which it is offered for sale : *Provided*, That the term blend as used herein shall be construed to mean a mixture of like substances, not excluding harmless colouring or flavouring ingredients used for the purpose of colouring and flavouring only : *And provided further*, That nothing in this Act shall be construed as requiring or compelling proprietors or manufacturers of proprietary foods which contain no unwholesome added ingredient to disclose their trade formulas, except in so far as the provisions of this Act may require to secure freedom from adulteration or misbranding.

Sec. 9. That no dealer shall be prosecuted under the provisions of this Act when he can establish a guaranty signed by the wholesaler, jobber, manufacturer, or other party residing in the United States, from whom he purchases such articles, to the effect that the same is not adulterated or misbranded within the meaning of this Act, designating it. Said guaranty, to afford protection, shall contain the name and address of the party or parties making the sale of such articles to such dealer, and in such case said party or parties shall be amenable to the prosecutions, fines, and other penalties which would attach, in due course, to the dealer under the provisions of this Act.

Sec. 10. That any article of food, drug, or liquor that is adulterated or misbranded within the meaning of this Act, and is being transported from one State, Territory, District, or insular possession to another for sale, or, having been transported, remains unloaded, unsold, or in original unbroken packages, or if it be sold or offered for sale in the District of Columbia or the Territories, or insular possessions of the United States, or if it be imported from a foreign country for sale, or if it is intended for export to a foreign country, shall be liable to be proceeded against in any district court of the United States within the district where the same is found, and seized for confiscation by a process of libel for condemnation. And if such article is condemned as being adulterated or misbranded, or of a poisonous or deleterious character, within the meaning of this Act, the same shall be disposed of by destruction or sale, as the said court may direct, and the proceeds thereof, if sold, less the legal costs and charges, shall be paid into the Treasury of the United States, but such goods shall not be sold in any jurisdiction contrary to the provisions of this Act or the laws of that jurisdiction : *Provided, however*, That upon the payment of the costs of such libel proceedings and the execution and delivery of a good and sufficient bond to the effect that such articles shall not be sold or otherwise disposed of contrary to the provisions of this Act, or the laws of any State, Territory, District, or insular possession, the court may by order direct that such articles be delivered to the owner thereof. The proceedings of such libel cases shall conform, as near as may be, to the proceedings in admiralty, except that either party may demand trial by jury of any issue of fact joined in any such case, and all such proceedings shall be at the suit of and in the name of the United States.

Sec. 11. The Secretary of the Treasury shall deliver to the Secretary of Agriculture, upon his request from time to time, samples of foods and drugs which are being imported into the United States or offered for import, giving notice thereof to the owner or consignee, who may appear before the Secretary of Agriculture, and have the right to introduce testimony, and if it appear from the examination of such samples that any article of food or drug offered to be imported into the United States is adulterated or misbranded within the meaning of this Act, or is otherwise dangerous to the health of the people of the United States, or is of a kind forbidden entry into, or forbidden to be sold or restricted in sale in the country in which it is made or from which it is exported, or is otherwise falsely labeled in any respect, the said article shall be refused admission, and the Secretary of the Treasury shall refuse delivery to the consignee and shall cause the destruction of any goods refused delivery which shall not be exported by the consignee within three months from the date of notice of such refusal under such regulations as the Secretary of the Treasury may prescribe: *Provided*, That the Secretary of the Treasury may deliver to the consignee such goods pending examination and decision in the matter on execution of a penal bond for the amount of the full invoice value of such goods, together with the duty thereon, and on refusal to return such goods for any cause to the custody of the Secretary of the Treasury, when demanded, for the purpose of excluding them from the country, or for any other purpose, said consignee shall forfeit the full amount of the bond: *And provided further*, That all charges for storage, cartage, and labour on goods which are refused admission or delivery shall be paid by the owner or consignee, and in default of such payment shall constitute a lien against any future importation made by such owner or consignee.

Sec. 12. That the term "Territory" as used in this Act shall include the insular possessions of the United States. The word "person" as used in this Act shall be construed to import both the plural and the singular, as the case demands, and shall include corporations, companies, societies and associations. When construing and enforcing the provisions of this Act, the act, omission, or failure of any officer, agent, or other person acting for or employed by any corporation, company, society, or association, within the scope of his employment or office, shall in every case be also deemed to be the act, omission, or failure of such corporation, company, society, or association as well as that of the person.

Sec. 13. That this Act shall be in force and effect from and after the first day of January, 1907.

(2.) MUNICIPAL FOOD REGULATIONS OF CLEVELAND.

Title I.—Cattle, &c.

Sec. 1. No person shall sell or offer for sale the meat or other product of any cattle, sheep, or swine other than that bearing the official stamp or license of the Government inspector or of the City Inspector.

Sec. 2. No person shall slaughter any cattle, sheep, or swine, except in the slaughter houses licensed by the Board of Health, or in the slaughter houses under government inspection.

Sec. 3. It shall be unlawful for any person in the city of Cleveland to engage in the business of slaughtering animals for food, packing them for market or rendering the offal, fat, bones or scraps from such animals, or any dead carcass, or any animal matter whatsoever, or to engage in the manufacture of or production of fertilizer or glue, or the cleaning or rendering of intestines, unless he shall, upon recommendation of the Chief Veterinarian have obtained a permit for such business.

The City Clerk is hereby authorized to issue a permit for such business only to such person or persons who have first applied in writing for the same to the Superintendent of Sanitation and are by him recommended; such permit to be signed by the Mayor. In all such cases the application shall specify the place and the character of the business for which a permit is desired, and the applicant shall pay into the City Treasury for such permit, when the same covers four footed animals, the sum of ten dollars per annum, and when the permit is limited to the slaughtering and preparation for food of chickens, ducks, geese, turkeys, game birds and other fowls, the sum of two dollars per annum, which said sum shall be credited to the sanitary fund.

Sec. 4. Any proprietor or other person in charge of any slaughter house or abattoir, upon making application to the Health Office for a permit shall file a sworn statement, that said slaughter house or abattoir complies in every way with the sanitary regulations of the Board of Health, and specifically with the following requirements:

- (a.) All killing floors to be constructed of cement or closely joined, oiled boards.
All other floors to be constructed of cement or of closely joined, sound boards.
All killing floors to be supplied with sufficient supply of hot and cold water.
All floors to be so constructed that they can be readily flushed and drained.
- (b.) Vats for holding blood to be constructed of non-absorbent material.
- (c.) Tankage for offal to be sufficient and of a design approved by the Chief Veterinarian.
- (d.) All rooms except the cooler to have one square foot of window space for every four square feet of floor space.
- (e.) All yards, where animals are kept before slaughtering, to be covered, paved and drained.
- (f.) All coolers to be provided with proper ventilation subject to the approval of the Chief Veterinarian.
- (g.) Proper toilet facilities for all employees, including wash stands with hot water, and sanitary closets, to be provided.
- (h.) The building to conform to the provisions of the building code for such class of construction.

Any person making application to the Health Office for a permit to slaughter and prepare for food chickens, ducks, geese, turkeys, game birds, and other fowls shall file a sworn statement that the place for slaughtering and preparing the same complies with the following requirements:

- (a.) To have a cement floor, at least 10 x 12 feet in area, properly drained and connected with a sewer.
- (b.) To contain a receptacle for scalding, having a hood and proper vent.
- (c.) To be provided with sufficient coops having closely joined, sound floors.

Sec. 5. No person shall bring into the city for sale or offer for sale, or shall sell or offer for sale, the meat of any cattle, sheep, swine, fish, game, fowl or poultry which is blown, tainted, heated, soured, raised, stuffed, putrid, impure, or which for any other reason is unfit for human food.

Sec. 6. No person shall bring into the city for sale, or shall sell or offer for sale any cattle, sheep, swine, fish, game, fowl or poultry which is diseased, unsound, unwholesome, or which for any other reason is unfit for human food.

Sec. 7. No person shall bring into the city for sale, or shall sell or offer for sale the meat of any cattle, sheep, swine, or game which, when killed, were within two weeks of parturition.

Sec. 8. No person shall bring into the city for sale, or shall sell or offer for sale the meat of any cattle, sheep, swine, fish, game, fowl or poultry which may have died from accident or disease and which has not been properly killed or slaughtered, bled, cleaned and dressed.

Sec. 9. No person shall bring into the city for sale, or shall sell or offer for sale, the meat of any calf which when killed, was less than four weeks old.

Sec. 10. No person shall bring into the city for sale, or shall sell or offer for sale the meat of any pig, which, when killed, was less than five weeks old.

Sec. 11. No person shall bring into the city for sale, or shall sell or offer for sale the meat of any lamb, which when killed, was less than eight weeks old.

Sec. 12. No person shall carry or transport through any street, alley or thoroughfare the carcass or meat of any cattle, sheep, swine, fish, game, fowl or poultry, except it be covered so as to be thoroughly protected from dust and dirt.

Sec. 13. No person shall keep any cattle, sheep, swine, game, fowl or poultry in any place in which water, food, and ventilation are not sufficient for the preservation of a healthy and safe condition.

Sec. 14. Any person having for sale the meat of any cattle, sheep, swine, fish, game, fowl, or poultry, shall keep the place in which it is stored or offered for sale in a cleanly and wholesome condition, and free from noxious odours.

Sec. 15. No person shall permit the carcass, body, or meat of any cattle, sheep, swine, fish, fowl or poultry to lie or hang or be offered for sale outside of any market or similar place, or in any open window or doorway.

Sec. 16. No person shall keep the carcass, body or meat of any cattle, sheep, swine, fish, fowl or poultry, in any refrigerator or ice box except such as is constructed in accordance with the provisions of Sec. 5, Title XII., Part II., of the Plumbing Code.

Sec. 17. No person shall sell, or offer for sale, any cattle, sheep, swine, fish, game, fowl or poultry or the meat thereof, which any Government or City Inspector or Market Superintendent or assistant thereof has condemned.

Title II.—Rules Governing the Inspection of Meat by the Meat Inspectors.

Sec. 1. No person shall bring into the city for sale, or shall offer for sale or sell any carcasses, parts of carcasses, or meat products, which cannot by marks, brands, labels or transfer slips be identified as being duly inspected and passed by an Inspector of the Board of Health or of the United States Government.

Sec. 2. No carcasses, parts of carcasses, or meat products, which cannot by marks, brands, labels or transfer slips, be identified as being duly inspected and passed by an Inspector of the Board of Health or of the United States Government, shall be allowed to enter a slaughtering establishment.

Sec. 3. The slaughtering of animals shall be conducted on week days, between the hours of 6.30 a.m. and 5.30 p.m., except in certain cases of emergency, when permission to slaughter may be granted by the Chief Veterinarian, or except in the case of injury or other extraordinary cases, when it is necessary to kill animals out of established hours, in which case the carcasses of all such animals, with the viscera attached, and all other viscera identifiable, shall be held for inspection and duly identified by the inspector or his assistants at the abattoir with a signed statement from the manager of the abattoir, stating the whole number of each head of animals so slaughtered. No slaughtering shall be conducted on Sundays after 12 o'clock, noon, except in cases of emergency, without the permission of the Chief Veterinarian, such permission to be obtained 24 hours in advance. Managers of abattoirs shall inform the inspector in charge or his assistant when slaughtering has been concluded for the day, and the hour at which it will begin on the following day.

Sec. 4. An ante-mortem examination shall be made of all animals arriving at the stock yards and intended for slaughter at abattoirs, at which the Board of Health has established inspection, when said animals are weighed; or, if not weighed, this inspection shall be made in the pens. All animals found upon ante-mortem examination to be affected with any of the conditions or diseases named below shall be marked by placing in the ear a metal tag bearing the words: "Cleveland Rejected," and a serial number, or by such other marks as may be necessary to insure their identification.

(a.) Hog cholera.

(b.) Swine plague.

(c.) Anthrax or charbon.

(d.) Rabies.

(e.) Malignant epizootic catarrh.

(f.) Pyaemia and septicaemia.

(g.) Mange, or scab (unless the animals are satisfactorily dipped.)

(h.) Actinomycosis, or lumpy jaw.

(i.) Pneumonia, pleurisy, enteritis, peritonitis, and metritis.

(j.) Texas fever.

(k.) Tuberculosis.

(l.) Hemorrhagic septicaemia.

(m.) Blackleg.

(n.) Animals in an advanced stage of pregnancy (showing signs of preparation for parturition) or which have recently (within ten days) given birth to young.

(o.) Any disease or injury which, causing elevation of the temperature or affecting the system of the animal, will make the flesh unfit for human food.

(p.) Animals too young and immature to produce wholesome meat.

(q.) Animals which are badly bruised, injured, or show tumors, abscesses or suppurating (sic) sores.

(r.) Animals too emaciated and anaemic to produce wholesome meat.

Such rejected or condemned animals shall at once be removed by the owners from the pens containing animals which have been inspected and found to be free from disease and fit for human food, and shall be satisfactorily disposed of.

When animals so tagged are taken to an inspected establishment for slaughter, they shall be accompanied by a permit signed by the inspector in charge of the yards; this permit shall, upon the arrival of the animals at the abattoir, be delivered to the inspector on post-mortem duty at the time, and the animal shall be duly identified by an employee of the abattoir to such inspector on the killing floor and before the skins are removed.

When the animals are not inspected in the stockyards the inspector in charge of an establishment or his assistant shall carefully inspect all animals about to be slaughtered in the pens of said establishment and no animal shall be allowed to pass to the slaughtering room until it has been so inspected.

Animals rejected when showing signs of preparation for parturition shall not be slaughtered, nor for ten days after parturition. Pregnant and parturient animals may be removed by permit for stock or dairying purposes except when they are affected with or have been exposed to the contagion of any disease.

Sec. 5. The inspector or his assistant shall carefully inspect at the time of slaughter all animals slaughtered at said establishment and make a post-mortem report of the same to the Health Office. The head, tail, caul, or fat enclosed in the omentum of the animal and the entire viscera shall be retained in such manner as to preserve their identity until after the post-mortem inspection has been completed, in order that they may be identified in case of condemnation of the carcass. Should the carcass of any animal on said post-mortem examination be found diseased or otherwise unfit for human food, it shall be marked with a condemnation tag, the same to be attached with wire and sealed, and the diseased organs or parts thereof, if removed from the carcass, shall also be marked with a condemnation tag.

The condemnation tag shall accompany the condemned carcass or its parts into the tank.

Sec. 6. All animals rejected on ante-mortem examination and all animals passed on ante-mortem examination which are slaughtered at inspected abattoirs, and are found upon post-mortem examination to be affected with any other diseases or conditions named below shall be disposed of according to the following instructions. It is to be understood, however, that owing to the fact that it is impracticable to formulate rules covering every case, and to designate at just what stage a process becomes loathsome or a disease becomes noxious, the final disposition of these not specifically covered by these rules will be left to the judgment of the inspector in charge. [List and description of diseases.]

Sec. 7. All inspected abattoirs shall provide a suitable room in which condemned carcasses and parts shall be held until such time as the inspector or his assistant may be present to supervise the tanking thereof. Such room shall be arranged for locking with a padlock, which will be furnished by the Health Office, the key of the same to remain in the possession of the inspector or his assistant.

(a.) If, after inspection has been established a reasonable length of time, the abattoir management does not provide a suitable retaining room of sufficient size, or fails to tank condemned carcasses regularly on the day of their condemnation, such condemned carcasses shall be saturated with kerosene, as described below, and locked on the rail pending their final disposition.

Sec. 8. All condemned carcasses and parts shall be tanked as follows:

After the lower opening of the tank has been sealed by an inspector the condemned carcasses and parts shall be placed in the rendering tank in the morning, and immediately a sufficient force of steam shall be turned into the tank to destroy effectually the meat for food purposes before the killing for the day is completed; or the condemned portions may be placed in the tank at the close of the day, or when killing is suspended, and both ends of the tank sealed, after which steam shall be turned into the tank until the meat is destroyed. Wire and lead seals shall be provided by the Health Office for sealing tanks.

(a.) A sufficient quantity of low grade offal (uteri, floor scrapings, trimmings from gutters and benches, skimmings from catch basins, unemptied intestines, omasa, paunches emptied but not washed, &c.), shall be tanked with all condemned carcasses (except those tanked for lard) to effectually render the ultimate product unfit for human food, or, if such offal cannot be obtained, the carcasses may be thoroughly slashed with a knife, then saturated with kerosene and placed in the tank.

(b.) The seals of tanks containing condemned material shall be broken by an inspector, when the tank is emptied during regular hours, and at other times satisfactory arrangements for the breaking of such seals shall be made with the inspector in charge.

Sec. 9. When an establishment has no facilities for thus destroying condemned carcasses, such carcasses shall be removed from the premises, upon numbered permit, issued by the inspector in charge, to rendering works designated by him, and there destroyed under his supervision in the manner described above.

Sec. 10. Carcasses may be taken to the cooling room after marking with the condemnation card, in cases where only a portion of the carcasses is condemned, and when such portion cannot be removed without damage to the carcass until it is properly chilled. After chilling, the condemned portions shall be cut out and removed to the tank or to the retaining room, as provided for whole carcasses. Condemned parts that can be removed without damage to the carcass shall be tanked as described above.

Sec. 11. All condemned carcasses and parts shall be disposed of only in the presence of an inspector, and the report of the disposition shall be made by him upon the blank form provided therefor.

Sec. 12. All carcasses or portions thereof that are condemned by the inspector shall be disposed of or rendered unfit for food in any manner that the inspector in charge shall indicate. In case any person fails to comply with these instructions, the Board of Health shall have the power to revoke his licence.

Sec. 13. No persons shall remove tags, labels, or brands from condemned carcasses or parts thereof.

Sec. 14. Carcasses or parts of carcasses which leave an official establishment shall be marked by the inspector with a numbered label or brand issued by the Health Office for this purpose, and a record of the same shall be sent to the Health Office.

(a.) Carcasses or parts of carcasses which go into the cutting room of an abattoir or are used for canning purposes shall not be labeled. Those which are to be shipped from one abattoir to another for canning or other purposes shall not be labeled.

(b.) Managers of abattoirs shall give due notice to the inspector or his assistant of all intended shipments and of all expected receipts of meat in cars, and no meat or meat products shall be received at an official establishment unless the inspector or his assistant has full knowledge concerning the same.

(c.) The seals upon cars in which meat is received at official abattoirs may be broken when it is necessary to unload such cars during the absence of the inspector or his assistant, provided the seals which are broken, together with a memorandum of the initials, number and contents (pieces and weight) of such car be promptly delivered by the owners or managers of the abattoir to the inspector or his assistant.

Sec. 15. Each article of food product, whether in cans, barrels, firkins, kits, boxes, canvas, or other wrappers, made from inspected carcasses, shall bear a label containing the official number of the establishment from which said product came, and also a statement that same has been properly inspected.

Sec. 16. No stamps, tags, labels, &c., shall be allowed to remain loose about the abattoir or office, and inspectors are instructed to use such additional safeguards, as in their judgment will be necessary properly to account for every stamp, tag, label, &c., issued, and to have the work of affixing so carefully supervised that nothing but inspected products will be marked.

(a.) Any stamps, tags, seals, or labels damaged or not used shall not appear upon the reports as having been affixed to inspected articles, but shall be returned to the inspector in charge and a report made as to the reasons for their return.

(b.) No meat or food product shall contain any substance which lessens its wholesomeness, nor any drug, chemical, or dye (unless specifically provided herein), or preservative, other than common salt, sugar, wood smoke, vinegar, pure spices, and saltpetre. Inspection and sampling of prepared meats and meat food products by employees of the Department of Health and Sanitation shall be conducted in such manner and at such times as may be necessary to secure a rigid enforcement of this regulation.

Sec. 17. Reports of the work of inspection carried on in every establishment shall be daily forwarded to the Health Office by the inspector in charge, on such blank forms and in such manner as may be specified by the Board of Health or the Superintendent of Sanitation.

Sec. 18. The inspector in charge shall promptly notify the Superintendent of Sanitation of any changes in the firm names of the official establishments at his station.

Sec. 19. Whenever an abattoir suspends operations, the inspector shall promptly notify the Superintendent of Sanitation of all employees whose duties are affected by such suspension, and forward his recommendation as to the number to be furloughed without pay. During such suspension only such employees shall be retained as are actually necessary to supervise the shipments of inspected products from the abattoir.

Title III.—Milk.

Sec. 1. No person shall bring into the city for sale, or shall sell or offer for sale, any milk without a permit from the Superintendent of Sanitation.

Sec. 2. No person shall bring into the city for sale, or shall sell or offer for sale, any milk which has been obtained from any milk dealer, dairyman or other person not having a permit or the official licence based on the approval of the Chief Veterinarian.

Sec. 3. Any dairyman, milk dealer or other person, upon application to the Health Office for a permit to sell or deliver milk shall file a sworn statement giving his name and address, the number of cows he owns or has charge of, the average amount of milk (estimated) which he sells each day, the names, addresses and licence numbers of all persons from whom he buys milk, the average amount of milk (estimated) which he buys from them each day, the average amount of milk (estimated) sold by each of them each day and the number of cows owned by or in charge of each.

Sec. 4. No persons shall bring into the city for sale, or shall sell or offer for sale, any milk :

- (a.) Containing more than "88 per cent." of water or fluids.
- (b.) Containing less than "12 per cent." of milk solids.
- (c.) Containing less than three per cent. of fats.
- (d.) From which any part of the cream has been removed.
- (e.) Having a specific gravity of less than 10 and 29 hundredths (10.29).
- (f.) Containing any boracic or salicylic acid, formaldehyde or other foreign chemical.
- (g.) Containing any pathogenic bacteria.
- (h.) Containing bacteria of any kind, more than 500,000 per cubic centimeter.
- (i.) Drawn from any cow having a communicable disease, or from a herd which contains any diseased cattle, or from a herd the attendants of which are afflicted with or have been exposed to any communicable disease.
- (j.) Drawn from any cow within 15 days before or after parturition.
- (k.) Drawn from any cow which has been fed on garbage, refuse, swill, moist distillery waste, or other improper food.
- (l.) Having a temperature, or which has been kept at a temperature higher than 55 degrees Fahrenheit.
- (m.) Which has existed or has been kept under conditions contrary to the provisions of this Code.

Provided that the first five sub-divisions of this Section shall not apply to milk sold under the name of "Skimmed Milk," as provided in Section 5, of this Title.

Sec. 5. No person shall bring into the city for sale, or sell or offer for sale, milk from which the cream has been removed, either in part or in whole, unless sold as skimmed milk, and unless on both sides of the vehicle from which such milk is sold, in letters not less than one inch in height the words

"Skimmed Milk," or if not sold from a vehicle, upon each and every vessel from which such milk is sold, there be painted a bright, red band in width at least one-tenth the height of said vessel, or displayed in plain and legible manner, the words "Skimmed Milk."

Sec. 6. No person shall bring into the city for sale, or sell or offer for sale, any so-called skimmed milk containing less than nine and three-tenths per cent. of milk solids.

Sec. 7. No person shall ship or store any milk in any basement, cellar, refrigerator, milk house, dairy, or other place unless such place have one square foot of window space to each four square feet of floor space. Such place shall be provided with a cement floor, properly drained and shall contain a vat made of non-absorbent material large enough to store all milk. Windows and doors shall be provided, from May 1st to September 30 inclusive, with sound screens, of mesh sufficiently fine to keep out flies and other insects.

Sec. 8. No person shall store any milk in any basement, cellar, refrigerator, milk-house, dairy, or other place which is within 15 feet of any closet or privy vault or cesspool or any horse or cow stable or any chicken or poultry yard or coop.

Sec. 9. Every person using in the sale or distribution of milk a delivery wagon or other vehicle, shall keep the same at all times in a cleanly condition and free from any substance liable to contaminate or injure the purity of the milk.

Sec. 10. Every person using in the sale or distribution of milk a delivery wagon or other vehicle, shall keep the name of the owner thereof, and the number of the wagon licence, in letters not less than two inches in height, upon the side of said delivery wagon or other vehicle.

Sec. 11. Every person using in the sale or distribution of milk a delivery wagon or other vehicle, shall, from May 1st to September 30th inclusive, have and keep over said delivery wagon or other vehicle, a covering of canvas or other material, so arranged as adequately to protect the contents thereof from the rays and the heat of the sun.

Sec. 12. No person shall bottle any milk upon any delivery wagon or vehicle, or in any other place than a milk house, dairy or other building where milk is regularly stored and sold.

Sec. 13. No person or dealer shall give, furnish, sell, or offer for sale, or deliver any milk, buttermilk, whey, sour milk, skimmed milk or cream in quantities less than one gallon, except in sanitary bottles, sealed with a suitable cap or stopper, and except where the milk is sold at the milk-house or dairy, when the same may be dipped (and the dipped milk shall not be carried on the street in any other than a covered vessel), but the milk-house, dairy or other place in which milk is handled or stored shall be located no less than 15 feet from any water closet or privy vault or cesspool, or any horse or cow stable or any chicken or poultry yard or coop, and the milk house, dairy or other place shall be a room which is not used for any other purpose than the handling and storing of milk.

Sec. 14. No person shall transfer any milk intended for sale from one can, bottle, or receptacle into another can, bottle, or receptacle, on any street alley or thoroughfare, or upon a delivery wagon or other vehicle or in any exposed place in the City of Cleveland, except in a creamery, milk depot, or in the enclosed premises of the customer of the dealer in milk.

Sec. 15. No person shall remove from any dwelling in which exists any case of communicable disease, any bottles or other receptacles which have been or which are to be used for containing or storing milk, except with permission of the Health Officer.

Sec. 16. No person shall use any milk ticket more than once.

Sec. 17. No person shall keep any cow without a permit from the Health Office.

Sec. 18. No person or dealer shall sell, offer for sale or deliver any milk, buttermilk, whey, sour milk, skimmed milk, cream, Dutch cheese or other milk product in quantities exceeding one gallon unless the can or receptacle containing the same is securely sealed by lock and chain, wire or other contrivance equally efficient, provided, however, that the persons or dealers engaged exclusively in the wholesale delivery or sale of milk, buttermilk, whey, sour milk, cream, skimmed milk, Dutch cheese or other milk product from wagons not carrying milk in bottles, may deliver the same from unsealed cans or receptacles; and provided, further, that said wagon or wagons shall have inscribed conspicuously thereon in plain letters, not less than three inches in height, the words: "Wholesale Delivery."

Title IV.—Rules Governing the Inspection of Milk by the Dairy Inspectors.

Sec. 1. The dairies of all persons shipping milk for sale in Cleveland will be inspected and rated according to the following provisions:—

(a.) *Cows.*

Condition and Healthfulness—Perfect Score 10.

(Two points will be deducted if cows are in poor flesh, and eight points if not tuberculin tested.)

Cleanliness—Perfect Score 5.

(All cows clean, 5; good, 4; fair, 3; medium, 2; poor, 1; bad, 0.)

(b.) *Stables.*

Construction of Floors—Perfect Score 5.

(If the floor is of cement or stone flag in good repair, 5; brick or matched board in good repair, 4; ordinary wooden floor in good repair, 3; one half wood and one half cement, 3; half wood, cement or other material and half dirt, 2; any material in poor repair, 1; if no floor allow 0.)

Cleanliness—Perfect Score 5.

(If stables are thoroughly clean, including windows, walls and ceiling, 5; deduction will be in proportion to dirt, cobwebs, &c.)

Light—Perfect Score 5.

(For four square feet per cow 5 points will be given; 3 square feet per cow, 4; two square feet per cow, 3; one square foot per cow, 2; six square inches per cow, 1; less than six square inches per cow, 0.)

Ventilation—Perfect Score 4.

(If ventilation is good 4 points will be given; deductions will be made in proportion for lack of ventilation; if all windows are closed and no attempt at ventilation is made 0 will be allowed.)

Water Supply.

| | | | | | | | | | | |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|
| For cows | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 |
| For milk house | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 |

Milk House.

| | | | | | | | | | | |
|----------------------------------|-------|----------|-------|-------------|-------|-------|-------|-------|-------|---|
| Construction | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 |
| Equipment | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 |
| Cleanliness | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 |
| Care and cleanliness of utensils | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 |
| Is house detached? | ..... | Lighted? | ..... | Ventilated? | ..... | ..... | ..... | ..... | ..... |  |

Milkers and Milking.

| | | | | | | | | | | |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| Health of attendants | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5. |
| Cleanliness of milking | ... | ... | ... | ... | ... | ... | ... | ... | ... | 10 |

Handling the Milk.

| | | | | | | | | | | |
|----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|
| Prompt cooling | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 |
| Efficient cooling | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 |
| Storing at low temperature | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 |

Total score 100

Sanitary conditions are—Excellent.....Good.....Medium.....
 Poor.....
 Suggestions by inspector.....

Milk or cream from dairies falling below 45 in the rating as indicated above, will be excluded from sale in Cleveland during 1908; milk or cream from dairies falling below 50 will be excluded from sale in Cleveland during 1909.

Title V.—Vegetables, Fruit, Bread, Pastry, Confections, &c.

Sec. 1. No person shall bring into the city for sale, or shall sell or offer for sale, any decayed or damaged vegetables or fruit.

Sec. 2. No person shall manufacture, or shall bring into the city for sale, or shall sell or offer for sale, bread stuffs, cake, pastry, candy, confections or other articles of food :

- (a.) Containing any substance which lowers, depreciates, or injuriously affects its quality, strength, purity or wholesomeness.
- (b.) Containing any cheaper or inferior substance than it is represented to contain.
- (c.) Which is in imitation of or sold under the name of any other article.
- (d.) From which any valuable or necessary ingredient has been abstracted or omitted.
- (e.) Which is coloured, coated, polished, powdered or by any other means is made to appear of greater value than it is.

Sec. 3. No person shall expose, sell or offer for sale, any bread stuffs, cake, pastry, candy, confectionery, or dried fruits, outside of any building, in any open window or doorway, or on any sidewalk, street, alley, or thoroughfare, except they be covered so as thoroughly to protect them from dust and dirt.

Sec. 4. No person or dealer shall sell, offer for sale, or deliver any oysters in quantities less than five gallons, except in earthenware crocks or vessels of non-absorbent material.

Sec. 5. No person shall sell or offer for sale any butter or cheese except the same be covered so as to protect it thoroughly from dust and dirt.

Title VI.—Bake Shops and Confectionery Establishments.

Sec. 1. Any place used for producing, mixing, compounding or baking, for selling or for the purpose of a restaurant, bakeshop, or hotel, any bread, biscuit, crackers, rolls, cake, macaroni, pie, or any food products, of which flour or meal is the principal ingredient, shall be deemed a bake shop. The regulations of this title shall apply also to places, rooms or buildings where candy is prepared or manufactured.

Sec. 2. Any place used as a bake shop shall be provided with floors of closely-joined impervious material which can be thoroughly cleaned.

Sec. 3. Every baker or other person in charge of any bake shop shall keep the floors, side walls, ceilings, woodwork, fixtures, tools, machinery and utensils in a thoroughly clean and sanitary condition and every bake shop shall be provided with adequate ventilation so as to insure a free circulation of air at all times.

Sec. 4. The door and window openings of every bake shop shall, from May 1st to September 30th inclusive, be provided with sound screens of mesh sufficiently fine to keep out flies and other insects.

Sec. 5. The side walls and ceilings of every bake shop shall be well plastered or sheathed with metal, wood or tile. All plastered walls or ceilings shall be kept lime washed or calsomined or shall be painted with oil paint, and all wood work in every bake shop shall be well oiled and painted and washed clean.

Sec. 6. Every bake shop shall be provided with adequate plumbing, including suitable wash stands and water closets. No water closets shall be entered from or shall be in direct communication with the bake shop. Every wash stand in a bake shop shall be provided with clean towels at all times.

Sec. 7. No person shall sleep in a bake shop, and the sleeping places of persons employed in bake shops shall be kept separate from the place where flour or meal or food products are handled or stored.

Sec. 8. No domestic animals shall be permitted in a bake shop or place where flour or meal is stored in connection with a bake shop.

Sec. 9. Every owner or person in charge of a bake shop shall be required to keep himself and his employees in a clean condition and suitably clothed while engaged in the production, handling, or selling of bakery products, and shall provide a dressing room separated from the bake shop and from the place where flour and meal is stored or kept.

Sec. 10. Receptacles for expectoration of impervious material, cleaned at least once in every 24 hours, shall be maintained and kept by the person in charge of every bake shop and no attendant or other person shall spit on the floor, side walls or on any place in such a bake shop.

Sec. 11. Smoking, snuffing, or chewing tobacco is forbidden in a bake shop. Notice forbidding all persons to use tobacco or to spit on the floor or side walls shall be posted in every bake shop.

Sec. 12. No person who has tuberculosis, a venereal, or other communicable disease shall work in a bake shop and no person in charge of such bake shop shall require, permit, or suffer such a person to be employed.

Sec. 13. Every bake shop which shall not be kept in a cleanly condition, free from rats, mice and vermin and from matter of an infectious or contagious nature, is hereby declared to be a public nuisance and it shall be the duty of the Superintendent of Sanitation to cause the same to be abated.

(3.) MUNICIPAL REGULATIONS RELATIVE TO THE HANDLING AND SALE OF MILK IN CHICAGO.

(i.) *Milk Depôts.*

Licence.

Rule 1. Application for Licence.—Application for a milk licence shall be made in writing to the Commissioner of Health. Such application shall set forth the name and residence of the applicant, if an individual, and the names and residences of the principal officers if the applicant is a corporation, together with the location of the place for which such licence is desired. Such application shall also state whether the milk is to be sold in a store, depôt, or also from a delivery wagon. It shall further state whether the milk and cream is to be sold in bottles exclusively or in bulk and bottles. It shall also state if cows are to be kept, and if so shall state the number.

Rule 2. Inspection and Investigation of Previous Record.—No application for licence shall be approved by the Commissioner of Health after May 1, 1908, if the records of the milk division show that the depôt, store or any part of the establishment in which the business is to be conducted is in an unsanitary condition.

If the applicant's record is not on file in the office, or if he is newly engaging in the milk business, an inspection of his place shall be made within five days after making the application, to determine the sanitary conditions. No application for licence shall be approved if applicant has a bad record.

The applicant if refused a licence on account of bad sanitary conditions, or for repeated adulterations of milk and cream, may make application to the Commissioner of Health for a hearing. The Commissioner of Health may then recommend the applicant for a licence, if he is satisfied that the regulations of the Department will be complied with in the future.

Rule 3. Revoking of Licence.—If at any time after the granting of such licence the holder fails to comply with the sanitary regulations of the Department, or repeatedly sells or offers for sale, or has in his possession for the purpose of selling, milk and cream below the grade prescribed by the ordinances or rules of the Department of Health, the Chief Food Inspector shall recommend to the Commissioner of Health that his licence be revoked with or without further notice. Said Commissioner of Health may grant the defendant a hearing, if he deems this necessary.

Rule 4. Re-issuing of Revoked Licence.—If all the regulations of the Department have been complied with the Commissioner of Health may recommend that the licence be re-issued.

Rule 5. Licence Exhibited.—Every milk dealer shall post his licence in a conspicuous place on the premises for which it has been issued.

Milk Depôts.

Rule 6. Definition.—By "Milk Depôt" is meant any place, house or room where milk is received from the farm, or large wholesale dealer in bottles or cans and prepared for distribution. The milk depôt shall not be used for any other purpose, nor shall any other business be conducted therein.

Rule 7. Where to be Established.—No milk depôt shall be established or maintained in a room or rooms which communicate directly with any living rooms, kitchen, sanitary closet, laundry or stable and places where animals are kept or slaughtered. No milk depôt shall be maintained which communicates in any way with a horse or cow barn and shall be separated therefrom by an air and odour proof partition or wall. After May 1st, 1908, milk depôts shall not be maintained in any building where horses and cows are kept. The immediate vicinity of the milk depôt, especially the place within ten feet of the doors and windows thereof, shall be kept free from the accumulations of rubbish, garbage, manure and any other putrefying, decomposing, infectious and bad smelling substances.

Rule 8. Construction.—The floor shall be smooth, free from crevices and defects, and water tight. When below the street level it must be constructed of impervious material, such as cement, asphalt or tiles laid in cement. It shall be well drained and the drains must be trapped and ventilated. The walls and ceilings shall be smooth, tight and free from unnecessary projections, niches, &c., and kept well painted or lime washed.

Windows.—Glass space corresponding to fifteen per cent. of the floor space shall be provided. All windows must be so located as to admit light freely, and be unobstructed.

Screens.—Between May 1st and November 1st all windows shall be provided with fly and dust screens and all doors shall be provided with self-closing door screens.

Ventilation.—All depôts shall be provided with adequate ventilation by means of windows, air shafts, air ducts or other mechanical apparatus, if required, so as to ensure free circulation of fresh air at all times.

Rule 9. Wash Rooms.—Wherever milk is bottled or otherwise prepared a separate room shall be maintained for the purpose of receiving, storing and cleaning cans, bottles and utensils, known as the "wash room." This shall be separated from that part of the milk depôt where the milk is stored and

bottled, known as the "milk room," by a complete partition and door. The wash room shall be so located that dirty utensils do not have to pass through or be received in the room where the milk is handled or prepared. The floor of the wash room shall be so arranged that its drainage does not run into the milk room. Dirty cans and utensils shall not be taken into, kept, or stored in the milk room.

Rule 10. Appliances.—Vats shall be constructed preferably of impervious material and should have a smooth inner surface. They shall be provided with dust-proof covers and be drained indirectly into the sewer. The water in the vats shall be kept clean, sweet and free from sediment and odour. The vats shall always be kept clean, free from dust, slime, sediment or milk crusts. The temperature of the water shall not be above fifty degrees F.

Refrigerator and Ice Boxes.—The inner wall of the compartment of the refrigerator and ice boxes where the milk is kept shall be smooth and preferably metal or porcelain lined. The floor shall be drained indirectly into the sewer. The milk compartment shall be kept clean and free from any odour. Nothing but milk, cream and butter shall be stored in the ice box.

Bottling Machine.—The bottling machine shall be so constructed that it can readily be taken apart and cleaned, especially the springs and plungers. It shall be cleaned thoroughly every day, and when not in use it shall be kept covered with a clean cloth.

Drying Racks.—Drying racks shall be provided on which bottles can be placed in an inverted position, for proper drainage and drying. In no instance shall bottles be inverted in bottle cases for the purpose of draining and drying.

Pasteurizers and Separators.—Pasteurizers and separators shall be so constructed that all parts, including pipes, can be readily cleaned and sterilized. These appliances must be kept scrupulously clean, inside and outside, at all times.

Rule 11. Utensils.—All shipping cans, bottles, dippers, skimmers, measures, strainers, stirrers and other utensils must be so constructed that all parts are absolutely free from spaces where milk can accumulate or soak in, so that it cannot be removed by simple washing. The surface coming in contact with milk and cream must be smooth and free from excessive rust. All utensils must be kept scrupulously clean, inside and outside, at all times. Utensils must be kept in good repair and free from rough surfaces of any kind. When not in use they should be kept dry, inverted and on specially provided racks or hooks, when possible. Bottle caps must be kept in clean, covered, dry and dust proof receptacles.

Rule 12. Maintenance and Care.—The floor shall be kept clean and scrubbed. Dry sweeping and dusting is not to be permitted. The walls and ceiling, shelves, windows and all other surfaces must be clean and kept free from dust by washing or wiping with a damp cloth. Unnecessary articles such as boxes, old utensils, reserve stock, blankets, harnesses, lanterns, paint cans, oil cans, and other articles not required in the milk business shall not be kept in the milk depôt. Dogs and cats should be kept out. Children should not be permitted to play or gather in the milk depôt.

Rule 13. Attendants.—Every person in charge of such milk depôt shall keep himself and his employees in a clean condition and cleanly clothed while engaged in the bottling, pouring, measuring, and skimming of milk. Smoking, snuffing or chewing of tobacco is forbidden in a milk depôt, and a plain notice shall be posted forbidding all persons from using tobacco or spitting on the floor.

Rule 14. Communicable Diseases.—No person with consumption, venereal diseases or communicable skin disease shall work in a milk depôt or engage in the handling of milk. When typhoid, scarlet fever, diphtheria, small pox, measles or chicken pox occur in the house or families of any one engaged in the handling of milk, it shall be the duty of the milk dealer to notify the Division of Food Inspection at once of this fact, so that the necessary regulations can be enforced in co-operation with the Bureau of Contagious Diseases to prevent the spread of disease. No one afflicted with or convalescent from typhoid, scarlet fever, diphtheria, small pox, measles, chicken pox, or any other communicable disease shall engage in the handling of milk or cream, nor enter a milk depôt. When typhoid fever, scarlet fever, diphtheria or small pox exists in the house or families of any one engaged in the handling of milk, he shall at once discontinue his work in the milk depôt and vehicles. The depôt and wagon shall be declared infected, if any one with or convalescent from typhoid, scarlet fever, diphtheria, or small pox, or residing in a house or apartment where these diseases exist, has worked therein, together with all milk and cream therein, except such cans as are still properly sealed and closed and have not been opened since they were closed and sealed in the country. No person convalescent from contagious disease or living in houses or premises in which contagious disease exists shall re-engage in the handling of milk until the Bureau of Contagious Diseases has enforced suitable quarantine regulations and the necessary disinfection has been done by the department. No individuals residing in a quarantined house or place shall be permitted to enter a milk depôt.

Rule 15. Operation.—All milk shall be stored at a temperature not above fifty degrees F. No can or bottle of milk shall be completely submerged in impure water or water from impure or insanitary ice. Impure ice, especially such ice sold for refrigerating purposes only, must not come in contact with milk and milk utensils or be used in water of milk vats. Sour milk must not be permitted to stand in the farmers' cans. Nothing except milk, cream or butter shall be permitted in the milk vats, ice boxes, and coolers. Returned empty bottles and other utensils must be thoroughly cleaned and sterilized before being taken into the milk room.

City Dairies.

No cow or cows shall be kept in the city for the purpose of producing milk, except in conformity with the following rules:—

Rule 36. Permit to keep Cows required.—A permit to keep cows must be secured from the Health Department for each location, meaning thereby each barn or closely related system where such cows are to be kept. The application for this permit must show:—

- (a) the number of cows;
- (b) the cubic feet of air space;
- (c) the facilities for disposing of manure;
- (d) the ventilation;
- (e) the distance from human habitation;
- (f) the facilities for excluding flies.

Rule 37. Location.—No cows shall be stabled within thirty feet of a residence, the distance being measured in a straight line from the nearest point of the stable to the nearest point occupied by a person.

Rule 38. Construction.—A permit shall not be issued unless the facilities are such that the stable shall have ample ventilation, to wit: three thousand cubic feet of fresh air per cow or other animal per hour, or unless the stables are clean, well lighted and capable of being so maintained. Manure and urine must be cared for so as not to become a nuisance. The barn must be so constructed that flies cannot reach the animal or the manure.

Rule 39. Revoking of Permit.—The permit shall be cancelled if the premises are not kept clean, or the manure is allowed to accumulate, flies breed or congregate therein, or the place becomes or is allowed to become a nuisance.

Rule 40. Cows must be Free from Tuberculosis.—Cows kept for the purpose of producing milk shall be tested with tuberculin once each year. The results of such tests shall be open to the inspection of the Health Department at all times. No tubercular cow or markedly under nourished cow shall be allowed in any herd or stable, except a special permit be granted therefor. The milk from such cows shall be pasteurized at a temperature not less than one hundred and seventy-five degrees F. for more than thirty seconds in a stream not more than one-quarter of an inch thick before it shall be deemed fit for human food.

Rule 41. Keeping and Care of Milk.—Milk from cows held in the city shall not be kept in the same room with the cows nor any other animal, nor in any place ventilating into such room.

Rule 42. Standards of Purity for such Milk.—The milk in all particulars shall conform to the same rules and regulations as those pertaining to country produced milk.

Rule 43. Maintenance.—The stables shall be cleaned every day. The manure shall be hauled away every day from May 1st to October 1st and once a week for the remainder of the year, provided the stable is within two hundred feet of a house. If the distance to the nearest house is over two hundred feet then it shall be hauled away not less often than once a week.

Rule 44. Keeping of Cows.—No cows shall be confined in any yard or tethered on any street or common within thirty feet of any dwelling, church, school, store or hall.

Where an owner tethers a cow on a street or common he shall maintain the tether zone free from anything which may make it a nuisance.

Rule 45. Maintenance of Nuisance Prohibited.—Nothing in these rules shall be construed as allowing the maintenance of a nuisance.

Rule 57. Sanitary Standard for Milk.—All milk sold, offered for sale, kept with the intention of selling or sent to the city for the purpose of selling must be free from dirt, foreign material and sediment. Not more than a perceptible sediment shall be left on a piece of white linen cloth four inches square when a quart of well mixed milk is strained through it. Milk on arrival in the city must not contain more than one million bacteria per cubic centimeter from May 1st to September 30th and not over five hundred thousand bacteria per cubic centimeter between October 1st to April 30th. Milk for delivery to the consumer shall not contain an excessive number of bacteria. The sale of milk containing over three million bacteria per cubic centimeter is prohibited and the dealer selling or offering for sale such milk shall, after three examinations of his milk on successive days by the bacteriologist and showing bacterial counts above three million, be prohibited from selling milk until the method of production and handling of his milk supply has been properly regulated by the department. The sale of milk containing tubercle, typhoid, diphtheria or other pathogenic bacteria is prohibited. The sale of milk containing excessive numbers of putrefying and gas producing micro-organisms is prohibited.

Milk Delivery and Milk Vehicles.

Rule 23. Transported in Closed Receptacles and in Covered Wagons.—Milk shall not be transported in open or improperly closed cans and receptacles. It shall be properly protected from the dust and the sun's rays with adequate covering. This covering shall be clean, non-odorous and free from dust. Wagons used for the delivery of milk to consumers shall be covered with material that will allow of washing and shall always be kept clean. The interior of the wagon shall be kept clean, free from milk crusts and odour of any kind. Drivers' seats shall be divided off from the compartment or compartments where the milk and cream are kept. The compartments where milk and cream are kept shall be tight and opened only when necessary for the removal of their contents.

Rule 24. Preparing and Bottling of Milk on Street Prohibited.—Milk and cream shall not be prepared or bottled in the street or in a vehicle. The distribution of milk and cream into specially constructed pouring cans shall be done in the milk dépôt, and is prohibited upon the street. Milk for delivery in bulk shall be carried in covered pouring cans, provided with a spout or faucet. Milk shall not be dipped from farmers' or stock cans for delivery to the consumer.

Rule 25. Temperature of Milk.—The milk for delivery to the consumer on the wagons shall not be above seventy degrees F.

Rule 26. Utensils.—Here the same rules shall apply as for utensils used in the milk dépôt. See Rule 10.

Rule 27. Attendants and Communicable Diseases.—Same rule shall apply as for milk dépôts. See Rules 13 and 14.

(ii.) *Stores.*

Licence.

Rule 1. Application for Licence.—As above.

Rule 2. Inspection and Investigation of Previous Record.—As above.

Rule 3. Revoking of Licence.—As above.

Rule 4. Re-Issuing of Revoked Licence.—As above.

Rule 5. Licence Exhibited.—As above.

Stores.

Rule 28. Definition.—These shall include all places and rooms where milk is sold together with other foodstuffs, such as groceries, meats, bakery goods, delicatessen articles and confectionery.

Rule 29. Location.—Such stores must be separated by tight fitting doors and a complete partition from living rooms, kitchen, laundries, sanitary closet, sleeping rooms and from places where horses, cattle, fowl and other animals are kept or slaughtered.

Rule 30. Construction.—Stores where milk is sold must be properly lighted and ventilated. Between May 1st and November 1st the windows must be fitted with fly screens and the doors with self-closing door screens.

Rule 31. Appliances.—Vats shall be the same as those required for milk depôts. See Rule 10. The cover of the vat shall be so constructed that the dust does not fall into the box when the lid is raised.

Ice Boxes and Refrigerators.—The compartment where milk and cream is kept shall be separated by an impervious water and odour proof partition from all other compartments and by a non-leaking partition from the ice chamber. The inner surface of this compartment where milk and cream is kept shall be smooth and preferably metal or porcelain lined. The floor shall be similarly constructed. Free and adequate drainage shall be provided; the drain connecting indirectly with the sewer shall be trapped and ventilated. The ice box shall be kept scrupulously clean at all times and entirely free from any odour. Milk and cream shall not be kept in ice boxes with any other foodstuffs except butter. Milk shall not be kept in the ice box for the purpose of souring or making cheese. All milk and cream kept in such ice boxes shall be considered as milk and cream for sale and hence must be up to the standard required by the City Ordinance. Unclean utensils, cans and bottles shall not be kept in the ice box. The doors and covers of such ice boxes shall be dust proof and so constructed that upon opening the dust on the outer surface does not fall into the milk compartment.

Rule 10. Appliances.—As above (1st clause).

Rule 32. Utensils.—Utensils shall be kept in the manner as required for milk depôts. See Rule 10.

Rule 11. Utensils.—As above.

Rule 33. Maintenance and Care.—The entire place shall be kept in a good sanitary condition and free from unnecessary articles, garbage and rubbish. The air shall be kept pure and free from deleterious odour. In the immediate vicinity of the vat and ice box, to a distance of at least five feet, no fermenting or putrefying substances or things with deleterious odours shall be kept, such as cheese, pickles, sauer kraut, fresh, salted and smoked fish, soap, aromatic oils. Kerosene and kerosene cans shall be kept fifteen feet distance from the milk boxes.

Rule 34. Communicable Diseases.—Same rules as for milk depôts. See Rule 14.

Rule 14. Communicable Diseases.—As above.

Rule 35. Operation.—All milk shall be stored at a temperature not above fifty degrees F. No can or bottle of milk shall be completely submerged in impure water or water from impure or insanitary ice. Sour milk must not be permitted to stand in the farmers' cans. Empty cans and bottles must be cleaned and washed with hot water before returning to the wholesale dealer or farmer. In selling bulk milk stir the contents of the can thoroughly and thus prevent unintentional skimming.

Rule 57. Sanitary Standard for Milk.—As above.

*An Ordinance Prohibiting the Sale of Bulk Milk in Stores—Passed by the City Council
June 22, 1908.*

Sec. 1. No person, firm or corporation shall sell, offer for sale, expose for sale or keep with the intention of selling any milk or cream in stores or in other places where other merchandise than milk or cream is sold unless the milk or cream is kept, offered for sale, exposed for sale, or sold in tightly closed and capped bottles or receptacles of a similar character, such as shall be approved by the Commissioner of Health of the City of Chicago.

Sec. 2. Any person, firm or corporation who shall violate any of the provisions of Section 1 shall be fined not less than five nor more than one hundred dollars for each offence.

Sec. 3. This ordinance shall be in full force and effect from and after its passage and due publication.

(iii.) Ordinance requiring Tuberculin Test of Cows.

Be it ordained by the City Council of the City of Chicago :
Milk.

Sec. 1. No milk, cream, buttermilk or ice cream shall be sold, offered for sale, exposed for sale or kept with the intention of selling within the City of Chicago after January 1st, A.D. 1909, unless such milk or cream or the milk or cream contained in buttermilk and ice cream, be obtained from cows that have given a satisfactory negative tuberculin test within one year; the cows having been satisfactorily tested shall be marked "tuberculin tested" and shall be numbered and a certificate shall be filed with the division of milk inspection of the Department of Health of the City of Chicago upon forms furnished by the Commissioner of Health, giving the number, a brief description of the animal, the date of the taking of said test and the name of the owner. Said certificate shall be signed by the person making such test; provided, however, that from January 1st, 1909, for a period of five years, to wit, until January 1st, 1914, milk or cream or buttermilk and ice cream made from milk or cream, obtained from cows not tuberculin tested or not free from tuberculosis, may be sold within the City of Chicago if the milk or cream from said cows is pasteurized according to the rules and regulations of the Department of Health of the City of Chicago.

Sec. 2. Any milk, cream, buttermilk or ice cream offered for sale, exposed for sale or kept with the intention of selling within the City of Chicago which shall be found within the City in violation of Section 1, shall be forthwith seized, condemned and destroyed by the milk and food inspectors or other duly authorized agents or employees of the Department of Health of the City of Chicago.

Sec. 3. This ordinance shall be in full force and effect from and after January 1st, 1909.

Butter.

Be it ordained by the City Council of the City of Chicago :

Sec. 1. No butter shall be sold or offered for sale or kept with the intention of selling in the City of Chicago after January 1st, 1909, unless such butter be made from milk or cream obtained from cows that have given a satisfactory negative tuberculin test within one year ; provided, however, that from January 1st, 1909, for a period of five years, to wit, until January 1st, 1914, butter made of milk obtained from cows not tuberculin tested or not free from tuberculosis may be sold in the City of Chicago if the milk or cream from which such butter was made was pasteurized according to the rules and regulations of the Department of Health of the City of Chicago.

Sec. 2. It shall be unlawful to sell any butter in the City of Chicago, unless there be stamped on the package in plainly legible letters of not less than one-eighth inch type : " Made of milk (or cream) from cows free from tuberculosis as shown by tuberculin test," or, " Made from milk (or cream) pasteurized according to the rules and regulations of the Department of Health of the City of Chicago."

Sec. 3. Any butter offered for sale, exposed for sale or kept with the intention of selling in the City of Chicago, which shall be found within the city in violation of this ordinance, shall be forthwith seized, condemned and destroyed by the milk and food inspectors or other duly authorized agents or employees of the Department of Health of the City of Chicago.

Sec. 4. This ordinance shall be in full force and effect from and after January 1st, 1909.

Cheese.

Be it ordained by the City Council of the City of Chicago :

Sec. 1. No domestic cheese shall be sold or offered for sale or kept with the intention of selling in the City of Chicago after January 1st, 1909, unless such cheese be made from milk or cream obtained from cows that have given a satisfactory negative tuberculin test within one year ; provided, however, that from January 1st, 1909, for a period of five years, to wit, until January 1st, 1914, domestic cheese made of milk obtained from cows not tuberculin tested or not free from tuberculosis, may be sold in the City of Chicago if the milk or cream from which such cheese was made was pasteurized according to the rules and regulations of the Department of Health of the City of Chicago.

Sec. 2. It shall be unlawful to sell any such cheese in the City of Chicago unless there be stamped on the package in plainly legible letters of not less than one-eighth inch type : " Made of milk (or cream) from cows free from tuberculosis as shown by tuberculin test," or " Made from milk (or cream) pasteurized according to the rules and regulations of the Department of Health of the City of Chicago."

Sec. 3. Any cheese offered for sale, exposed for sale, or kept with the intention of selling in the City of Chicago, which shall be found within the city in violation of this ordinance, shall be forthwith seized, condemned and destroyed by the milk and food inspectors or other duly authorized agents or employees of the Department of Health of the City of Chicago.

Sec. 4. This ordinance shall be in full force and effect from and after January 1st, 1909.

(4) BAKERY ORDINANCE OF CHICAGO.

Sec. 1. Any place used for any process of mixing, compounding or baking, for sale or for purposes of a restaurant, bakery or hotel, any bread, biscuits, pretzels, crackers, buns, rolls, macaroni, cake, pies, &c., or any food product of which flour or meal is a principal ingredient, shall be deemed a bakery for the purposes of this ordinance.

Sec. 2. No person, firm or corporation shall establish, maintain or operate any such bakery without having first been licensed so to do by the city, except that no licence shall be required for the purpose of conducting a private bakery in the kitchen of a dwelling, where the baking is done in an ordinary kitchen range. Every person or corporation establishing, maintaining or operating any such bakery shall annually, on the first day of May of each year, pay a licence fee of \$5 per year for a licence for each bakery so maintained, which licence shall be issued for a period ending with the first day of May following ; provided, however, that upon furnishing proof satisfactory to the Commissioner of Health and to the City Collector that the applicant was not theretofore liable for the licence fee and maintained no bakery without a licence prior to the date fixed in the application, a licence may be issued for the unexpired half of a municipal year upon payment in advance at the rate of Five Dollars per year, as hereinbefore specified.

Sec. 3. Any person or corporation desiring to establish, maintain or operate a bakery, as defined in this ordinance shall make application in writing to the Commissioner of Health for a licence. Such application shall set forth the name and residence of the applicant if an individual, or the names and residences of the principal officers of the applicant if a corporation, together with the location of the place for which such licence is desired. Such application shall also state the maximum number of persons to be employed in such bakery, the number of rooms or apartments therein, and any other facts concerning the proposed bakery which the Commissioner of Health may desire to have stated in such application.

Sec. 4. Within five days after the receipt of such application it shall be the duty of the Commissioner of Health to make, or cause to be made, an examination of the place described in such

application, for the purpose of ascertaining whether the location of such proposed bakery, the construction and lighting thereof, the amount of space therein and the sanitary arrangements are sufficient so that the public health or the health of the persons to be employed in such proposed bakery will not be endangered.

If the said Commissioner shall be satisfied that the proposed bakery will be kept and maintained in accordance with the provisions of this ordinance, he shall transmit such application to the Mayor, with his approval endorsed thereon; whereupon the Mayor shall issue, or cause to be issued, to such applicant upon payment to the City Collector of the licence fee herein required, a licence authorizing such applicant to keep, conduct or maintain a bakery at the place described in such application, for and during the period of such licence. No licence for the keeping of a bakery shall be issued unless the application for such licence shall be approved by the Commissioner of Health.

Sec. 5. If at any time after the granting of such licence the Commissioner of Health shall certify to the Mayor that the public health or the health of the persons employed in any such bakery is endangered by the maintenance of such bakery, it shall be the duty of the Mayor to revoke the licence therefor.

Sec. 6. Every such licence granted under the provisions of this ordinance shall be posted in a conspicuous place in the bakery for which such licence is issued.

Sec. 7. Every place used as a bakery shall be kept in a thoroughly clean and sanitary condition as to its floors, sidewalls, ceilings, woodwork, fixtures, furniture, tools, machinery, and utensils. All rooms used for that purpose shall be provided with adequate ventilation by means of windows, air shafts or air ducts and other mechanical apparatus, if required, so as to insure a free circulation of fresh air at all times.

The doors and window openings of every such bakery shall, during the summer season, be fitted with self-closing wire screen doors and wire window screens. The sidewalls and ceilings shall be well plastered or sheathed with metal or wood sheathing or tiled. All plastered walls and ceilings shall be kept well lime-washed or calcimined, or shall be coated with oil paint, and all interior woodwork in every such room shall be kept well oiled or painted with oil paint and washed clean.

Every such bakery shall be provided with adequate plumbing and drainage facilities, including suitable wash sinks and water closets. No water closet shall be entered from or shall be in direct communication with a bakery.

Sec. 8. No person shall sleep in a bakery, and sleeping places of the persons employed in a bakery shall be separate from the rooms where flour or meal or food products are handled or stored. If the sleeping places are on the same floor as the bakery the Commissioner of Health shall require them to be maintained in a dry and sanitary condition. No domestic animals, except cats, shall be permitted in a bakery or place where flour or meal is stored in connection with a bakery, and suitable provisions shall be made to prevent nuisance from the presence of cats.

Every owner or person in charge of such bakery shall be required to maintain himself and his employees in a clean condition and suitably clothed while engaged in any process of manufacturing, handling or selling of bakery products.

Cuspidors of impervious material and kept in clean condition shall be provided and maintained by the person in charge of every bakery, and no employee or other person shall spit on the floor or sidewalls of the bakery or place where the food products of such bakery are stored.

The smoking, snuffing or chewing of tobacco is forbidden in a bakery. Plain notices shall be posted in every such place forbidding all persons from using tobacco or spitting on the floor.

No person who has consumption, scrofula, or venereal disease, or any communicable skin disease, shall work in any bakery, and no owner or person in charge of such bakery shall require, permit or suffer such person to be employed in any bakery.

Sec. 9. No person, firm or corporation shall store flour or meal for the use of such establishment or for the manufacture of food products except in dry and well ventilated rooms. Every bakery and room used for the storage of materials and food products shall be so arranged that the shelves, cupboards, trays, troughs, bins, cases and all other appliances for handling and storing the same can be easily removed, perfectly cleaned, and no such materials or products shall be stored in rooms having floors below the street level at a distance less than one foot above the floor of the room.

Sec. 10. Every bakery which shall not be kept in a cleanly condition and free from rats, mice and vermin and from matter of an infectious or contagious nature is hereby declared to be a public nuisance, and it shall be the duty of the Commissioner of Health to cause the same to be abated.

Sec. 11. No bakery shall be established after the passage of this ordinance in any room, basement or cellar in which the clear height between the finished floor and the finished ceiling is less than eight feet and six inches, or in any basement or cellar which is not well drained and thoroughly dry, or in any such location which is not in such communication with the outer air as to allow of adequate lighting and ventilation without the use of windows opening directly upon the street, sidewalk or alley, and no such bakery shall hereafter be established in any room or place, the floor of which is at a depth greater than five feet below the street, sidewalk or alley level adjacent to the building.

The floor below the street level in all bakeries shall be constructed of impervious material, cement or asphalt, or of tiles laid in cement, and may, if desired, be covered with a hardwood floor having tight joints.

(Sec. 12 is cancelled by an amendment of June 22nd, 1908.)

Sec. 13. The Commissioner of Health and the inspectors and employees of the Department of Health, shall have the right at all times to enter and inspect and make such record of the condition of any bakery as they may deem necessary, and if such inspection shall disclose a lack of conformity with this ordinance the Commissioner of Health shall require such changes, alterations and renovations as he may deem necessary to restore compliance with this ordinance.

Sec. 14. Any person or corporation violating any of the provisions of this ordinance shall be fined not less than ten dollars nor more than one hundred dollars for each offence. Every day on which any such bakery shall be maintained, kept, carried on, or operated in violation of the terms of this ordinance shall be construed as a separate and distinct offence.

Sec. 15. Sections 187 and 188 of Chapter 13 of the Revised Municipal Code of Chicago of 1905 are hereby repealed.

Sec. 16. This ordinance, excepting as hereinbefore provided, shall take effect from and after its passage, approval and due publication.

(5.) MILK "SCORE CARDS" ADOPTED BY THE INSPECTORS OF THE NEW YORK DEPARTMENT OF HEALTH.

(The Annual Report of the Department of Health for the administrative year ending December 31st, 1907, states (p. 140):—"The success of the Score Card system in its practice has been best shown; perhaps, by the action of a number of the larger milk companies in giving notice to their patrons that in the future the full contract price will apply only to those dairies scoring 60 per cent. or over; a somewhat lower price being given for milk from dairies scoring under 60 per cent. and the milk from dairies scoring under 50 per cent. not being accepted at all. In certain instances a premium is paid for the milk from dairies scoring 70 per cent. and over.")

(i.) Dairy Inspection Score Card.

184 F—1908.

Perfect Score 100 per cent.
Score Allowed.....per cent.

File No.....

DEPARTMENT OF HEALTH.
City of New York.

Dairy Inspection.

Division of Inspections.

1. Inspection No.....Time.....A.P.M. Date.....190
2. Dairyman.....P.O. Address.....
3. Township.....County.....State.....
4. Owner.....Party Interviewed.....
5. Milk delivered at.....Formerly at.....
6. Creamery on.....R.R.....Branch.....Miles to N.Y.....
7. Creamery operated by.....Address.....
8. Distance of farm from creamery.....Occupied farm since.....
9. No. of Cows.....No. Milking.....No. Quarts produced.....
10. All persons in the households of those engaged in producing or handling milk are free from all infectious disease
11. Date and nature of last case on farm.....
12. A sample of the water supply on this farm taken for analysis 190.....and found to be
13. Size of cow barn, length.....feet. Width.....feet. Height of ceiling.....
14. Dairy Rules of the Department of Health are.....posted

| | Perfect. | Allow. |
|---|----------|--------|
| <i>Stable.</i> | | |
| 15. Cow stable is.....located on elevated ground with no stagnant water, hog-pen, or privy within 100 feet | 1 | ..... |
| 16. Floors are.....constructed of concrete or some non-absorbent material | 2 | ..... |
| 17. Floors are.....properly graded and water-tight | 2 | ..... |
| 18. Drops are.....constructed of concrete, stone or some non-absorbent material | 2 | ..... |
| 19. Drops are.....water-tight | 2 | ..... |
| 20. Feeding troughs, platforms or cribs are.....well lighted and clean | 1 | ..... |
| 21. Ceiling is constructed of.....and is.....tight and dust proof | 2 | ..... |
| 22. Ceiling is.....free from hanging straw, dirt or cobwebs | 2 | ..... |
| 23. Windows No.....total square feet..... There is.....2 square feet of window light for each 600 cu. ft. air space | 2 | ..... |
| 24. Window panes are.....washed and kept clean | 1 | ..... |
| 25. Ventilation consists of.....which is sufficient 3, fair 1, insufficient 0 | 3 | ..... |
| 26. Air space is.....cubic feet per cow. (600 and over-3) (500 to 600-2) (400 to 500-1) (under 400-0) | 3 | ..... |
| 27. Interior of stable painted or whitewashed on.....which is satisfactory 2, fair 1, never 0 | 2 | ..... |
| 28. Walls and ledges are.....free from dirt, dust, manure or cobwebs | 2 | ..... |
| 29. Floors and premises are.....free from dirt, rubbish or decayed animal or vegetable matter | 1 | ..... |
| 30. Cow beds are.....clean | 1 | ..... |
| 31. Live stock, other than cows, are.....excluded from rooms in which milch cows are kept | 2 | ..... |
| 32. There is.....direct opening from barn into silo or grain pit | 1 | ..... |
| 33. Bedding used is.....clean, dry and absorbent | 1 | ..... |
| 34. Separate building is.....provided for cows when sick | 1 | ..... |
| 35. Separate quarters are.....provided for cows when calving | 1 | ..... |

| | Perfect. | Allow. |
|--|----------|--------|
| 36. Manure is.....removed daily to at least 200 feet from the barn (.....ft.) | 2 | ..... |
| 37. Manure pile is.....so located that the cows cannot get at it | 1 | ..... |
| 38. Liquid matter is.....absorbed and removed daily and.....allowed to overflow and saturate ground under or around cow barn | 2 | ..... |
| <i>Cow Yard.</i> | | |
| 39. Cow yard is.....properly graded and drained | 1 | ..... |
| 40. Cow yard is.....clean, and free from manure | 2 | ..... |
| <i>Cows.</i> | | |
| 41. Cows have.....been examined by Veterinarian. Date.....190... Report was | 5 | ..... |
| 42. Cows have.....been tested by tuberculin, and all tuberculous cows removed | 5 | ..... |
| 43. Cows are.....all in good flesh and condition at time of inspection | 2 | ..... |
| 44. Cows are.....all free from clinging manure and dirt. (No. dirty.....) | 4 | ..... |
| 45. Long hairs are.....kept short on belly, flanks, udder and tail | 1 | ..... |
| 46. Udder and teats of cows are.....thoroughly cleaned before milking | 2 | ..... |
| 47. All feed is .....of good quality and all grain and coarse fodders are..... free from dirt and mould | 1 | ..... |
| 48. Distillery waste or any substance in a state of fermentation or putrefaction is.....fed | 1 | ..... |
| 49. Water supply for cows is.....unpolluted and plentiful | 1 | ..... |
| <i>Milkers and Milking.</i> | | |
| 50. Attendants are.... ..in good physical condition | 1 | ..... |
| 51. Clothing of milkers is.....clean | 1 | ..... |
| 52. Hands of milkers are.....washed clean before milking | 1 | ..... |
| 53. Milking is.....done with dry hands | 2 | ..... |
| 54. Fore milk or first few streams from each teat is.....discarded | 2 | ..... |
| 55. Milk is strained at.....and.....in clean atmosphere | 1 | ..... |
| 56. Milk is.....cooled to below 50° F. within two hours after milking and kept below 50° F. until delivered to the creamery..... | 2 | ..... |
| 57. Milk from cows within 15 days before or 5 days after parturition is..... discarded | 1 | ..... |
| <i>Utensils.</i> | | |
| 58. Milk pails have.....all seams soldered flush | 1 | ..... |
| 59. Milk pails are.....of the small mouthed design, top opening not exceeding 8 inches in diameter. Diameter..... | 2 | ..... |
| 60. Milk utensils are.....rinsed with cold water immediately after using and washed clean with hot water and washing solution | 2 | ..... |
| 61. Racks are.....provided to expose milk pails to live steam or to the sun | 1 | ..... |
| 62. Milking stools are.....clean | 1 | ..... |
| <i>Milk House.</i> | | |
| 63. Milk house has.....hog-pen, manure pile or privy within 100 feet | 1 | ..... |
| 64. Milk house has.....direct communication with.....building | 1 | ..... |
| 65. Milk house has.....sufficient light and ventilation | 1 | ..... |
| 66. Floor is.....properly graded and water-tight | 1 | ..... |
| 67. Milk house is.....free from dirt, rubbish and all material not used in the handling and storage of milk | 1 | ..... |
| 68. Milk house has.....running or still supply of pure clean water | 1 | ..... |
| 69. Ice is.....used for cooling milk and is cut from... .. | 1 | ..... |
| <i>Water.</i> | | |
| 70. Water supply for utensils is from a.....located.....feet deep and apparently is.....pure, wholesome and uncontaminated | 5 | ..... |
| 71. Is.....protected against flood or surface drainage | 2 | ..... |
| 72. Privy or cesspool is.....located within 100 feet (.....feet) of source of water supply | 2 | ..... |
| 73. Stable, barn-yard, pile of manure or other source of contamination is..... located within 200 feet (.....feet) of source of water supply | 1 | ..... |
| | 100 | |

.....
Inspector of Foods.

(ii.) Creamery Score Card.

175 F—1908

DEPARTMENT OF HEALTH.
City of New York.

Perfect Score 100.
Score allowed.....per cent.

Division of Inspections.

Creamery Report.

File.....Inspection No.....Time.....A. P. M. Date.....190.....
 Location.....P.O. Address.....
 County.....State.....
 On.....R. R.....Branch.....Miles to N.Y.
 Owner.....Address.....
 Operator.....Address.....
 Manager.....is.....licensed. Number of help.....
 All persons engaged in handling milk are.....free from any infectious disease. Number of patrons.....
 Average Butter Fat test for dairies at present.....Milk received daily.....Lbs., Qts., Cans
 Milk train leaves daily at.....A.P.M. Arrives at.....N.Y. Milk Platform.
 Method of Pasteurizing.....Machine used.....
 Cream is made by hand-skimming, separating.....Living quarters are.....located in Creamery.
 Butter, Cheese, Condensed Milk, Casein or Milk Sugar are.....made on the premises.
 Department of Health Rules are.....posted.

Shipments to Customers.

| | | | |
|---------------|---------|-----------|--------------|
| Name | } | Cans Milk | } Marks..... |
| Address | | | |
| Name | } | Cans Milk | } Marks..... |
| Address | | | |

| | Perfect Score. | Allowed. |
|---|----------------|----------|
| 1. Premises surrounding creamery are.....clean | 2 | ..... |
| 2. Receiving room is.....partitioned off from main milk room | 2 | ..... |
| 3. Weigh vats and storage tanks are.....covered when in use | 4 | ..... |
| 4. Milk handling room is.....used exclusively for handling milk | 1 | ..... |
| 5. Is.....separate from where cans are washed | 1 | ..... |
| 6. Is.....separate from where engine or boiler is located | 1 | ..... |
| 7. Is.....well lighted by.....windows | 2 | ..... |
| 8. All odours and steam are.....carried to the outside air | 3 | ..... |
| 9. Walls and ceiling are.....sheathed and dust-tight | 2 | ..... |
| 10. Are.....painted with some light coloured paint | 1 | ..... |
| 11. All ledges are.....clean and free from dust and dirt | 2 | ..... |
| 12. Floors are.....free from dirt, rubbish or pools of drainage | 2 | ..... |
| 13. Are.....made of concrete, stone or some non-absorbent material | 5 | ..... |
| 14. Are.....water-tight | 2 | ..... |
| 15. Are.....so graded that all drainage is discharged at one or more points | 2 | ..... |
| 16. Strainers in floor are .....at least 6 inches in diameter | 1 | ..... |
| 17. Space beneath creamery is.....dry | 3 | ..... |
| 18. Is.....free from waste or rubbish | 1 | ..... |
| 19. Drains are.....of earthenware or iron | 2 | ..... |
| 20. Are.....water-tight | 2 | ..... |
| 21. Are.....continuous from the floor level to point of disposal | 2 | ..... |
| 22. Are.....protected against freezing | 1 | ..... |
| 23. Drainage is.....satisfactorily disposed of | 5 | ..... |
| 24. Milk pumps and pipes for milk, can.....be readily taken apart | 1 | ..... |
| 25. Are.....thoroughly cleaned daily | 2 | ..... |
| 26. All steam and water pipes are.....painted and clean | 1 | ..... |
| 27. Milk vats are.....in good repair | 1 | ..... |
| 28. All tin joints are.....soldered flush | 1 | ..... |
| 29. Are.....thoroughly cleaned daily | 2 | ..... |
| 30. Milk cans are.....washed with hot water and washing solution | 2 | ..... |
| 31. Are.....rinsed out with clean water | 1 | ..... |
| 32. Are.....exposed to live steam for at least two minutes | 2 | ..... |
| 33. All milk is.....protected from dust and dirt while in pools | 2 | ..... |
| 34. Is.....protected while in mixing vats or over aerators | 2 | ..... |
| 35. Is.....received at a temperature not above 60° F. | 3 | ..... |
| 36. Is.....kept below 50° while held or handled on premises | 2 | ..... |
| 37. Cooling tanks are.....water-tight | 1 | ..... |
| 38. Are.....made of some non-absorbent material | 1 | ..... |
| 39. Are.....supplied daily with clean water or filled with clean ice | 1 | ..... |
| 40. Water supply is.....ample for all the needs of the creamery | 5 | ..... |
| 41. Water supply is.....apparently free from all contamination and is from | 10 | ..... |
| 42. Storage tank for water is.....cleaned regularly | 1 | ..... |
| 43. Is.....covered or protected against dirt | 1 | ..... |
| 44. Attendants are.....cleanly in their habits | 2 | ..... |
| 45. Garments worn by such employees are.....clean | 2 | ..... |
| 46. Privy, water closet, earth closet, tight vault is.....satisfactorily located | 2 | ..... |
| 47. Is.....in a cleanly condition | 1 | ..... |
| 48. Spitting or smoking in any part of the building is.....allowed | 2 | ..... |
| Remarks | | |
| ..... | 100 | ..... |

(iii.) *Milk Store Score Card.*

DEPARTMENT OF HEALTH: CITY OF NEW YORK.

Address..... Borough of.....Permit No.....Granted.....190.....

Name..... Business.....

Date of Inspections.

| | Perfect Score. | | | | | | | | | | | | | | | | | | | |
|---|-------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 1. General surroundings are clean, 10. Fairly clean, 5. Dirty, 0 | 10 | | | | | | | | | | | | | | | | | | | |
| 2. Ventilation is good, 2. Fair, 1. Bad, 0 | 2 | | | | | | | | | | | | | | | | | | | |
| 3. Lighting is good, 2. Fair, 1. Bad, 0 | 2 | | | | | | | | | | | | | | | | | | | |
| 4. Walls and ceiling are clean, 2. Dirty, 0 | 2 | | | | | | | | | | | | | | | | | | | |
| 5. Floors are clean, 2. Fairly clean, 1. Dirty, 0 | 2 | | | | | | | | | | | | | | | | | | | |
| 6. Attendants are apparently free from contagious disease ... | 8 | | | | | | | | | | | | | | | | | | | |
| 7. Are cleanly in their habits | 4 | | | | | | | | | | | | | | | | | | | |
| 8. Wear clean clothing | 3 | | | | | | | | | | | | | | | | | | | |
| 9. Wear clean, white suits | 2 | | | | | | | | | | | | | | | | | | | |
| 10. Store is selling milk exclusively, 15. Is selling milk, dairy products, and goods in sealed packages, 10. Is selling milk and bakery products, 8. Is selling milk and cooked foods, or general groceries, 6 ... | 15 | | | | | | | | | | | | | | | | | | | |
| 11. Milk after its receipt and before sale is kept in a cleanly manner | 4 | | | | | | | | | | | | | | | | | | | |
| 12. At a temperature not above 50° F., 5. Otherwise, 0 ... | 5 | | | | | | | | | | | | | | | | | | | |
| 13. Milk during sale is kept in a clean, properly drained ice box, used only for milk, 15 | 15 | | | | | | | | | | | | | | | | | | | |
| Other foods kept in ice box, 8. Milk kept in a clean, well covered ice tub, 10 | | | | | | | | | | | | | | | | | | | | |
| 14. Utensils are clean, 5. Dirty, 0 | 5 | | | | | | | | | | | | | | | | | | | |
| 15. Are sterilized before use | 2 | | | | | | | | | | | | | | | | | | | |
| 16. Seams are soldered flush | 1 | | | | | | | | | | | | | | | | | | | |
| 17. Milk kept at a temperature of 45° F. or below, 15. 45° to 50°, 10. 50° to 55°, 3. 55° or above, 0 | 15 | | | | | | | | | | | | | | | | | | | |
| 18. A lactometer is used in testing the milk | 1 | | | | | | | | | | | | | | | | | | | |
| 19. A thermometer is used in testing the milk | 2 | | | | | | | | | | | | | | | | | | | |
| Total score | 100 | | | | | | | | | | | | | | | | | | | |
| Remarks : | | | | | | | | | | | | | | | | | | | | |
| | Dealers Supplying Milk. | | | | | | | | | | | | | | | | | | | |
| | Inspector. | | | | | | | | | | | | | | | | | | | |

K.—THE CRUSADE AGAINST TUBERCULOSIS IN NEW YORK.

The following measures operative in New York are enumerated in 'The Campaign against Tuberculosis in the United States,' compiled under the direction of the National Association for the Study and Prevention of Tuberculosis, by Philip P. Jacobs (New York, 1908), pp. 388, 389 :—

"The revised Sanitary Code of 1898 contains complete prohibition of promiscuous spitting in public. The law, however, is very poorly enforced, as a general rule.

"After a period of preliminary study and observation lasting seven years, the Board of Health passed a series of resolutions on February 13th, 1894, designed to assist in the accomplishment of its aims for the suppression of this disease. One of these resolutions involved the reporting of certain classes of tuberculosis. In compliance with it, 4,166 cases were reported in 1894 ; 5,818 in 1895, and 8,344 in 1896, and the Department was enabled without opposition, or the imposition of undue hardship upon individuals, to extend its educational work and protect a large number of persons from exposure to infection. By the year 1907 the Department was receiving annually reports of over 22,000 cases.

"In order to establish more firmly, and to extend the work carried on under the resolutions above mentioned on January 19th, 1897, the following amendment to the Sanitary Code was adopted by the Board of Health.

"Section 153.—That pulmonary tuberculosis is hereby declared to be an infectious and communicable disease, dangerous to the public health. It shall be the duty of every physician in this city to report to the Sanitary Bureau in writing, the name, age, sex, occupation, and address of every person having such disease who has been attended by, or who has come under the observation of, such physician for the first time, within one week of such time. It shall also be the duty of the commissioners or managers, or the principal, superintendent, or physician of each and every public or private institution or dispensary in this city, to report to the Sanitary Bureau in writing, or to cause such report to be made by some proper and competent person, the name, age, sex, occupation, and last address of every person afflicted with this disease, who is in their care, or who has come under their observation within one week of such time. It shall be the duty of every person sick with this disease, and of the authorities of public and private institutions or dispensaries, to observe and enforce all the sanitary rules and regulations of the Board of Health for preventing the spread of pulmonary tuberculosis."

(In the present Sanitary Code, Sections 133 and 138, all forms of tuberculosis are considered to be infectious and communicable.)

"The objects in view were both to prevent the extension of pulmonary tuberculosis, and also to promote the recovery of those already suffering with the disease. The Health Department estimates that 85 per cent. of all living cases are reported. This system of registration has resulted in a steady reduction of the death-rate from tuberculosis, in spite of the large increase in population.

"The activities of the Health Department of Greater New York may be summarised along the five following lines :—

- "1. All cases of pulmonary tuberculosis occurring in the city of New York are registered at the Department of Health.
- "2. Every person suffering from pulmonary tuberculosis is furnished with instructions as to the measures to be taken to prevent its extension.
- "3. All premises which have been occupied by persons suffering from pulmonary tuberculosis are, on death or removal, disinfected with formaldehyde, or renovation is ordered.
- "4. Charitable assistance or hospital care is provided so far as is possible for all cases wishing or requiring such assistance or care.
- "5. The general public is educated as to the nature of the disease, the precautions to be taken against its spread, the advisability of institution and sanatorium treatment, &c.

"The Health Department conducts three special tuberculosis clinics, a hospital for advanced cases, and a sanatorium for incipient cases. The Department of Charities conducts a large hospital on Blackwell's Island, and is building a hospital of eight hundred beds on Staten Island.

"The educational work of the Health Department includes the distribution of literature in large quantities, holding of exhibitions, and the giving of free public lectures."

The New York Department of Health has published a "Handbook of Help for persons suffering from pulmonary tuberculosis (consumption)," in which the following occurs :—

WHAT TO DO FOR PERSONS SUFFERING FROM PULMONARY TUBERCULOSIS.

1. *Diagnosis.*

The first step to be taken in a suspected case of pulmonary tuberculosis is to make sure that the patient is suffering from the disease.

Any person, child or adult, suffering from persistent cough, loss of weight, &c. (see Section II), should be referred to their own physician for examination. If unable to pay a private physician they should be referred to one of the special tuberculosis dispensaries. (See Directory of Dispensaries and Clinics, Section VI.)

In the Borough of Manhattan ample and excellent provision is made for the diagnosis and treatment of cases of pulmonary tuberculosis by the Association of Tuberculosis Clinics.

This consists of seventeen special dispensaries, each caring for all patients coming from a certain section of the city and each having a capable staff of attending physicians, and also a staff of nurses who visit the patients at their homes in order to see that the necessary precautions are observed, that the advice given is followed out, and that any untoward circumstances be abolished as far as possible.

All applicants living outside of the dispensary district wherein they seek dispensary care are refused treatment at the said dispensary of original application, and are referred by card to the dispensary caring for the district of their residence. So that before referring the patient to one of

these dispensaries care should be taken that the patient goes to the proper dispensary. Patients who can only attend at night are given treatment at the Manhattan and Brooklyn Clinics of the Department of Health.

An early physical examination by a competent physician, or at a special tuberculosis dispensary, often discloses the unsuspected presence of tuberculosis, which, if treated in time, may be arrested. Neglect and carelessness have much to do with the high death rate from tuberculosis. Last year 10,147 persons died in New York City from this largely preventable and often curable disease.

2. Examination of Sputum.

Send a specimen of sputum to the Department of Health, 55th street and Sixth avenue, New York City, or to one of the drug stores throughout the city acting as a supply station of the Department. (A directory of these drug stores will be sent on request.)

The examination of the expectoration or sputum from suspected cases of tuberculosis is essential for diagnosis. Many heretofore unsuspected cases are recognized in this way. The Department of Health examines such specimens free of charge, sending the report to the attending physician, the organization, institution or layman forwarding the specimen, or to the patients themselves if there is no physician in attendance. No charge is made for the examination. Well-corked sputum jars and blank slips for information can be obtained free at any of the numerous drug stores throughout the city which are depots for the diagnostic outfits, antitoxin and vaccine issued by the Department of Health. After obtaining the specimen in accordance with the instructions given on the sputum slip, the specimen and slip are to be left at the same drug store, whence they will be taken to the Diagnosis Laboratory of the Department of Health, examined and the report sent as stated above. In connection with the examination of sputum two things must be borne in mind: 1. The failure to find tubercle bacilli in the sputum does not mean that the person has not tuberculosis. Bacilli do not usually appear until the disease is moderately well advanced, and are usually absent in early or incipient cases. The bacilli may not be found on the first one or two examinations, and be present later. So several specimens should be sent in doubtful cases. 2. The number of bacilli found has little or no relation to the extent of the disease. Sputum from very early cases may show innumerable bacilli, while that from old chronic cases may fail to contain them at all. But the more numerous the bacilli and the more profuse the expectoration, the more dangerous the patient is to others.

3. The Treatment of Tuberculosis at Home.

Refer cases to one of the special tuberculosis clinics. (See Section III, I and Section VI.)

As a rule, sufferers from pulmonary tuberculosis are better off in sanatoria or in hospitals than at their homes. In some cases, however, the patient will not or cannot leave the city, being forced to continue at work, &c. Such patients, if unable to pay a private physician, will receive free treatment and advice at one of the special tuberculosis dispensaries. Nurses visit them at their homes and give full oral and written instructions as to how they should live and what precautions they should take in order to avoid transmitting the disease to others. Medicines are furnished free, also paper spit cups, &c. Arrangements are also made for daily outings on ferry boats ("day camps") by the Health Department, Vanderbilt, and Bellevue tuberculosis clinics.

4. Charitable Assistance.

Refer cases to one of the various charitable organizations.

In cases where it seems advisable to give charitable aid to the patients or their families in the form of money, groceries, coal, ice, &c., the various large charitable organizations should be notified by letter or telephone; for non-Jewish cases either the Association for the Improvement of the Condition of the Poor, 105 East 22d street; or the Charity Organization Society, 105 East 22d street; for Jewish cases, the United Hebrew Charities of the City of New York, 356 Second avenue; for Brooklyn cases, the Brooklyn Bureau of Charities, 69 Schermerhorn street, Brooklyn, &c. Visitors are sent to investigate the case and proper steps are taken to give relief.

5. The Removal of Early Favourable Cases to Sanatoria.

Refer cases to the Department of Health, or to one of its borough offices.

The best results in the treatment of tuberculosis are obtained by the provision of plenty of fresh air, rest and suitable food, together with such medicines as may be required. All these requirements are best met by treatment in a country sanatorium, such as the N. Y. State Hospital for Incipient Tuberculosis at Ray Brook in the Adirondacks, the Otisville Sanatorium of the Department of Health, &c.

Almost all the country sanatoria receiving cases from New York set a limit on the class of cases received, only incipient or early favourable cases being taken.

By incipient tuberculosis is meant the very early stage of the disease, where the amount of lung involved is very small (usually the extreme upper portion of one lung), where there is no fever or other constitutional disturbance, and in which the sputum does not contain any tubercle bacilli. The presence of tubercle bacilli in the sputum usually means the softening and breaking down of the lung and that the disease has progressed beyond the incipient stage. "Early favourable" cases may show a larger amount of involvement of the lung and bacilli in the sputum, but should have no fever, and should be in fair physical health and able to do light work if required.

As it is of the greatest importance that treatment should be begun early, application for admission to a sanatorium should be made immediately upon the diagnosis of pulmonary tuberculosis being confirmed. As these patients often feel so well it is often difficult to convince them of the gravity of the disease and of the great importance of the earliest possible treatment. This must be insisted on. Delay usually means death.

All suitable patients should be referred to the Bureau of Dependent Adults of the Department of Charities, foot of East 26th street, Borough of Manhattan. There the patients are examined as to their financial resources, and eligibility as regards citizenship, &c. If suitable, they are then referred

to one of the official State examiners for examination. Only the earliest and most favourable cases are admitted to the New York State Hospital for Incipient Tuberculosis at Ray Brook in the Adirondacks. It is useless to try to obtain admission for advanced cases to any of the free sanatoria.

Early favourable cases (where the patients are able to do light work) are sent to the Sanatorium of the Department of Health at Otisville, N. Y. More advanced cases with tubercle bacilli in the sputum are sent to Riverside Sanatorium of the Department of Health on North Brother Island. Treatment in all of these institutions is free. Where it is desired that the patient be admitted to one of the semi-private sanatoria (Adirondack, Loomis, &c.) communication should be held directly with the institution. (See Section VII.)

A word of warning must be spoken here against the practice of sending patients with tuberculosis to the South or South-west or to the "country" without having made definite plans for their future, or arrangements for their medical care. It is far better for an advanced case to remain in one of the city hospitals until the end than to put him to the expense and exhaustion of a long trip taken for no purpose. Further, such patients, ignorant and untaught as to the necessary precautions to be taken constitute active sources of danger to those about them, and a number of communities in the West and South-west have protested vigorously, and with right on their side, against the promiscuous unloading upon them of cases of tuberculosis from the East. With no money, and no opportunity to make money, they are worse off by far than at their homes.

6. Hospital Care for Advanced Cases.

Application for the admission of cases of tuberculosis to the large tuberculosis hospitals in New York City (Metropolitan, St. Joseph's, Seton and St. Vincent's, Staten Island) should be made to the Department of Charities (telephone 3350 Madison). The Department of Health will also arrange for the admission of patients to such hospitals, but time is lost thereby. In Manhattan, in case of emergency, such as destitution, &c., where an ambulance is required, patients can be sent directly to Bellevue Hospital, 26th street and East River, by telephoning the hospital in whose ambulance district the patient lives. These hospitals furnishing ambulance service and their districts are as follows (list).

7. Forcible Removal of Dangerous Cases.

Notify the Department of Health, 55th street and Sixth avenue, New York City. Telephone 4900 Columbus.

When the health of children or others is menaced by the presence of a person with pulmonary tuberculosis who cannot or will not take the necessary precautions regarding the destruction of sputum, &c., or is careless about expectoration, the Department of Health has the power to remove such person, by force if necessary, to Riverside Sanatorium, on North Brother Island, and to detain the patient there as long as may be necessary. Simple destitution is not sufficient ground for such removal, however, and such action is only taken in extreme cases. On receipt of the telephone message an inspector visits the case at once and recommends suitable action.

8. Disinfection of Premises, Bedding, &c.

Notify the Department of Health. The Department of Health disinfects premises vacated by persons suffering from pulmonary tuberculosis. Such disinfection consists of formaldehyde fumigation of the rooms and the removal of the bedding and clothing used by the patient. Formaldehyde does not injure clothing, pictures, and other property. The bedding and clothing are disinfected by heat and are returned or destroyed, as may be desired. There is no charge for this service. When premises are in very bad condition, and the medical inspector of the Department reports to that effect, an order is issued by the Department against the landlord or agent, requiring the necessary painting, papering, whitewashing, &c., to be done before the premises are re-occupied by new tenants.

CARDINAL MAXIMS FOR THE TUBERCULOUS.

The tuberculous patient under treatment at home by a private physician or by one of the special tuberculosis clinics is, of course, given full directions as to his mode of life, precautions to be observed, &c. But certain of the instructions are of prime importance and will bear almost indefinite repetition. Everyone coming in contact with persons suffering with tuberculosis should, therefore, lay stress on the following points to the family as well as to the patient.

1. Pulmonary tuberculosis is not an incurable disease.

If treatment is begun early most cases can be cured by good food, fresh air and rest, and such medicines as the doctor prescribes. These conditions are best obtained in the country sanatoria. Time or money should not be wasted on advertised cures or advertising doctors—they are worthless.

2. *The instructions given the patient and his family by the doctor and the nurse should be followed out in every particular.*

3. *It is not dangerous to live with a person suffering from tuberculosis if the matter coughed up by him be promptly destroyed, and he covers his mouth while coughing.*

If the sputum coughed up be rendered harmless he may frequently not only do his usual work without giving the disease to others, but may also thus improve his own condition and increase his chances of recovery. The sputum should not be expectorated upon the floor, carpet, stove, wall or sidewalk, but always, if possible, in a cup for that purpose. The cup should contain water, so that the matter will not dry, or better, carbolic acid in a five per cent. watery solution (six teaspoonfuls in a pint of water). This solution kills the germs. The cup should be emptied into the water closet at least twice a day and carefully washed with boiling water. When the patient is away from home the matter coughed up should be received in a pocket flask made for this purpose. If cloths must be

used they should be immediately burned on returning home. If handkerchiefs be used (worthless cloths, which can be at once burned, are far better) they should be boiled at least half an hour in water by themselves before being washed. When possible, the matter should be received into cups or flasks. Paper cups are better than ordinary cups, as the former, with their contents, may be burned after being used. A pocket flask of glass, metal or pasteboard is also a most convenient receptacle to spit in when away from home. Cheap and convenient forms of flasks and cups may be purchased at many drug stores. Patients too weak to use a cup should use moist rags, which should at once be burned. If cloths are used they should not be carried loose in the pocket, but in a waterproof receptacle (tobacco pouch), which should be frequently boiled. The patient's soiled wash-clothes and bed linen should be handled as little as possible when dry, but should be placed in water until ready for washing.

4. *Great care should be taken by the tuberculous to prevent their hands, face and clothing from becoming soiled with sputum.*

If they do become thus soiled they should be at once washed with soap and hot water.

5. *A tuberculous patient should never swallow his expectoration.*

6. *He should have his own bed, and, if possible, his own room.*

He should not kiss other members of the family, and as far as possible his personal belongings (towels, pipes, &c.) should be used by him alone.

7. *He should always have an abundance of fresh air—the windows should be open day and night*

8. *No dry dusting or cleaning should be allowed.*

Rooms should be cleaned daily, but in order to prevent the raising of dust all floors should be well sprinkled before sweeping, and all dusting, &c., done with damp cloths.

9. *No children should play on the floor of a room used by tuberculous patients.*

Such children are prone to develop tuberculous meningitis, enteritis, &c.

Since the Department of Health began its campaign against spitting, and has removed advanced cases to hospital, furnished sputum cups, and enforced disinfection of rooms vacated by persons with tuberculosis the death rate from tuberculosis in children under fifteen years has fallen from 7.10 per 10,000 to 2.6.

10. *Excessive use of alcoholic drinks is harmful in tuberculosis.*

Even beer and malt liquors should be taken only on the advice of the doctor.

11. *Unnecessary exertion should be avoided.*

The more rest the better.

12. *A hopeful, cheerful disposition is one of the best remedies for pulmonary tuberculosis.*

HOW TO AVOID CONTRACTING PULMONARY TUBERCULOSIS.

The first and most important rule to be observed in order to avoid contracting tuberculosis is to keep as strong and healthy as possible. When the tubercle bacilli get into the body or lungs of a weak or sickly person they often grow and produce tuberculosis.

Of the greatest importance for the maintenance of good health are fresh, pure air in the home, school room and work room, proper food, cleanliness, temperance in all things, leading a regular life, and living out of doors as much as possible.

Fresh, pure air can be obtained by (a) keeping out of doors and avoiding dust; (b) by admitting plenty of fresh air several times a day to the room in which one lives or works or studies; (c) by keeping at least one window of the bedroom open all night; and (d) by cleaning with damp cloths or brooms (never use a dry broom or duster) to prevent the dust from arising in the room.

Whenever a cough, no matter how slight, lasts more than two weeks, one should go to a doctor or dispensary and have his lungs examined.

Putting the fingers, coins or pencils into the mouth are practices which should be strictly avoided.

Everyone should take a warm bath with soap at least twice a week and those who can should have a cold bath every morning.

The excessive use of alcoholic drinks is most injurious, as it weakens the body so that it cannot resist disease germs.

Catching of colds can be avoided by (a) always having plenty of fresh air night and day and taking a cold bath every morning; (b) keeping away from and complaining of persons who have a cough and who spit on the floor or sidewalk; (c) avoiding exposure to cold or damp after such diseases as measles and whooping cough; (d) keeping the feet dry and avoiding exposure to colds or winds when very warm or very tired; and (e) avoiding close, overheated rooms crowded with people.

L.—RACIAL CLASSIFICATION OF IMMIGRANTS.

In its official documents the United States Immigration Commission publishes the following list of "the principal countries of birth of the residents of the United States and the races within each country":—

| | | |
|-----------------------|---------------------------------|--------------------------------|
| United States : | Finland : | Russia : |
| American White. | Finnish. | Armenian. |
| American Negro. | | Finnish. |
| American Indian. | France : | German. |
| | French. | Hebrew. |
| Austria-Hungary : | Hebrew. | Lithuanian. |
| Bohemian (Czech). | Germany : | Polish. |
| Bosnian. | German. | Russian. |
| Bulgarian. | Hebrew. | |
| Croatian. | Polish. | Scotland : |
| Dalmatian. | | Scotch. |
| German. | Greece : | |
| Hebrew. | Greek. | Servia : |
| Hervat. | Macedonian. | Servian. |
| Herzegovinian. | | |
| Italian (North). | India : | Spain : |
| Magyar (Hungarian). | East Indian or Hindu. | Spanish. |
| Montenegrin. | | |
| Moravian (Czech). | Ireland : | Sweden : |
| Polish. | Irish. | Swedish. |
| Roumanian. | Scotch Irish. | |
| Ruthenian (Russniak). | | Switzerland : |
| Servian. | Italy : | French. |
| Slovak. | Italian (North). | German. |
| Slovenian. | Italian (South). | Italian (North). |
| | | |
| Belgium : | Japan : | Turkey in Asia : |
| Dutch. | Japanese. | Armenian. |
| Flemish. | | Greek. |
| French. | Korea : | Hebrew. |
| | Koreans. | Syrian. |
| | | Turkish. |
| Bulgaria : | Mexico : | |
| Bulgarian. | Mexicans. | Turkey in Europe : |
| Macedonian. | | Bulgarian. |
| | Montenegro : | Greek. |
| Canada : | Montenegrin. | Hebrew. |
| Canadian, English. | Servian. | Macedonian. |
| Canadian, French. | | Montenegrin. |
| | Netherlands (Holland) : | Servian. |
| China : | Dutch. | Syrian. |
| Chinese. | Flemish. | Turkish. |
| | | |
| Denmark : | Norway : | Wales : |
| Danish. | Norwegian. | Welsh. |
| | | |
| England : | Portugal (Azores, Cape Verde) : | West Indies (Cuba, Porto Rico, |
| English. | Portuguese. | Hayti, Bahamas) : |
| Hebrew. | | Cuban. |
| Irish. | Roumania : | English. |
| Scotch. | Hebrew. | Negro. |
| Welsh. | Roumanian. | Spanish. |

M.—THE EMPLOYMENT OF NEGROES IN SKILLED TRADES.

The following are extracts from an article on "The Negro Skilled Mechanic in the North," by Mr. R. R. Wright, junior, in "The Southern Workman" for March, 1909:—

"According to the Census of 1900, there were then 275,116 Negroes in manufacturing pursuits on the mainland of the United States. Of these, 51,144 were in Northern States and 223,972 in Southern States. In other words, there were 311 Negroes in this class of occupation to every 10,000 Negroes in the country: there were 562 Negroes following mechanical pursuits in the North to every 10,000 Negroes in the North, and 283 Negroes following such pursuits in the South to every 10,000 Negroes

in the South. The following table, taken from the United States Census of 1900, gives the principal occupations pursued by Negroes of this class in the North and South :—

PRINCIPAL SKILLED OCCUPATIONS OF NEGROES, NORTH AND SOUTH.

CENSUS OF 1900.

| OCCUPATIONS. | Continental United States. | North. | South. | Per cent. in the North. |
|---|----------------------------|--------|---------|-------------------------|
| MALES. | | | | |
| Total in manufacturing and mechanical pursuits | 241,934 | 43,991 | 197,943 | 18·2 |
| Blacksmiths | 10,083 | 1,140 | 8,943 | 11·2 |
| Boot and shoemakers and repairers | 4,506 | 707 | 3,799 | 15·7 |
| Brick and tile makers | 9,931 | 3,489 | 6,442 | 34·1 |
| Carpenters and joiners | 21,067 | 1,664 | 19,403 | 7·9 |
| Charcoal, coke, and lime burners | 3,861 | 598 | 3,263 | 15·5 |
| Coopers | 2,953 | 185 | 2,768 | 6·3 |
| Engineers and firemen (not locomotive) | 10,215 | 2,531 | 7,684 | 24·8 |
| Iron and steel workers (not otherwise specified) | 12,642 | 3,788 | 8,854 | 29·9 |
| Machinists | 1,253 | 427 | 831 | 39·9 |
| Marble and stone cutters | 1,252 | 295 | 957 | 23·6 |
| Masons (brick and stone) | 14,370 | 4,452 | 9,918 | 20·9 |
| Miners and quarrymen | 36,439 | 8,851 | 27,588 | 24·3 |
| Painters, glaziers, and varnishers | 5,749 | 1,261 | 4,488 | 21·9 |
| Plasterers | 3,748 | 1,209 | 2,543 | 32·3 |
| Plumbers, gas and steam fitters | 1,192 | 317 | 875 | 26·6 |
| Printers, lithographers and pressmen, &c. | 1,119 | 471 | 648 | 42·1 |
| Saw and planing-mill employes | 33,156 | 558 | 32,598 | 1·7 |
| Tailors | 1,531 | 413 | 1,118 | 26·9 |
| Tobacco and cigar factory operatives | 10,232 | 839 | 9,393 | 8·1 |
| Turpentine distillers | 5,688 | 2 | 5,686 | * |
| Whitewashers | 2,355 | 934 | 1,421 | 39·6 |
| Woodworkers (not specified) | 1,518 | 221 | 1,297 | 14·6 |
| WOMEN. | | | | |
| Dressmakers | 12,514 | 4,235 | 8,279 | 33·8 |
| Seamstresses | 11,451 | 1,724 | 9,727 | 15·1 |
| Tobacco and cigar factory operatives | 5,117 | 167 | 4,950 | 3·3 |

* Less than one-tenth per cent.

“This table shows that in nearly every one of the more important mechanical trades in which Negroes are engaged, there is, in proportion to the Negro population in each section, a larger number of Negro mechanics in the North than in the South. The Negroes of the North form a little more than ten per cent. of the total Negro population, but in some trades they form more than four times as large a proportion of the Negro workers in these trades. More than two-fifths of the entire number of Negro printers and pressmen, and almost as large a proportion of Negro iron and steel workers, and of Negro whitewashers, live in the North; more than a third of the dressmakers, and of brick and tile makers, and more than one-fourth of the stationary engineers and firemen, plumbers, gasfitters, and tailors are in the same section.

“In the principal occupations the Negroes form a smaller percentage of the total number of Negroes in the trades, in the following occupations only: carpenters and joiners, in which they form 7·9 per cent.; coopers, 6·3 per cent.; tobacco and cigar factory operatives, in which they are 8·1 per cent.; saw and planing mill employes, of whom there were 1·7 per cent.; and turpentine distillers, in which only two Negroes were returned in the North. The results of this table are probably directly opposed to the observations of many people. But this is so because the observations have been largely in the cities. The large proportion of Northern Negroes is in the cities and the manufacturing and mechanical pursuits are largely city pursuits. A more accurate comparison between the North and the South would therefore consist of a presentation of conditions among Negroes in the cities of each section.

“Confining the comparison to the cities,* there is not the large preponderance in favour of the North as shown in the former table. Indeed, in most of the trades, the Southern cities still have a larger number of workmen than the cities of the North and also a larger proportion. But the increase in the number of mechanics in the Northern cities is more uniform than in the Southern cities. There has been a gradual increase of Negro mechanics in the Northern cities, while on the other hand the increase in the Southern cities is considerably slower, and in many cases there is actual decrease. In Boston, in only four of the trades mentioned was there a decrease; namely, among the blacksmiths and wheelwrights, boot and shoemakers, machinists, and tailors. In Philadelphia and Indianapolis, there was a decrease in two trades; namely, among boot and shoemakers, brickmakers, and potters in Philadelphia, and cabinetmakers, upholsterers, and marble and stone-cutters in Indianapolis. In Cincinnati, there was a decrease in only one trade, that of carpenters and joiners, while in Pittsburg and Chicago, there was a decrease of Negro workmen in none of the trades. The total decrease in the Northern cities was 279 as against a total increase of 2,366, being a net increase of 2,087 Negro mechanics during the decade from 1890 to 1900. On the other hand, of the Southern cities, Atlanta, Georgia, decreased in blacksmiths and wheelwrights, cabinetmakers, and upholsterers, carpenters and joiners, plasterers and printers, engravers, &c. Baltimore decreased in blacksmiths and wheelwrights, boot and shoemakers, brickmakers and potters, butchers, carpenters and joiners, plumbers, gasfitters, and tailors; Nashville, Tenn., decrease in blacksmiths and wheelwrights, boot and shoemakers, brickmakers and potters, butchers, carpenters and joiners, machinists,

* Boston, Chicago, Cincinnati, Philadelphia, Pittsburg, and Indianapolis in the North, and Atlanta (Georgia), Baltimore, New Orleans, Memphis, and Richmond (Virginia) in the South.

marble and stone cutters, brick and stone masons, painters, glaziers, and plasterers; New Orleans decreased in boot and shoemakers, carpenters and joiners, iron and steel workers, machinists, tailors, and dressmakers; Memphis, Tennessee, decreased in plasterers and printers. Richmond, Virginia, decreased in blacksmiths and wheelwrights, boot and shoemakers, cabinetmakers and upholsterers, carpenters and joiners, iron and steel workers, machinists, marble and stone cutters, painters, glaziers, etc., plasterers, plumbers, gasfitters, and tailors. The total decrease in the six Southern cities was 1,887, while the total increase was 1,754, a net decrease of 133 Negro mechanics in Southern cities. This comparison shows important tendencies; the North slowly but surely increasing, the South struggling to hold its own.

"Although there has been a general increase of Negroes in skilled mechanical trades in the North during the past two decades, yet, as compared with the white population, the Negroes of the North fall far short of having their proper proportion of mechanics. The Negroes are 4.8 per cent. of the total population of Philadelphia, but they form only 1.2 per cent. of those in manufacturing and mechanical pursuits; 3.5 per cent. of the Negroes of Pittsburg are engaged in this class of occupations, while the Negroes are 5.3 per cent. of the population. In Boston the proportion of Negro population is 2.1 per cent. of the whole population, while employees in manufacturing and mechanical trades are only 0.7 per cent.; in Chicago the Negroes are 1.8 per cent. of the total population, and 0.6 per cent. of the total workers are in mechanical trades; in Indianapolis 9.4 and 3.2 per cent. are the respective percentages of the Negroes in the total population and in mechanical pursuits; and in Cincinnati the percentages are respectively 4.4 and 1.5. Of these cities Philadelphia has the smallest proportion and Pittsburg the largest, other cities having about one-third their proper proportion of Negroes in manufacturing and mechanical pursuits.

"The cause of the scarcity of Negroes in the trades is often said to be chiefly race prejudice; but there are other causes which are much more easily described. In the first place, there are the very meagre opportunities for Negroes to learn trades. In the North there are but few schools where the Negro boy or girl can learn a mechanical trade. It follows that it is practically impossible for the large proportion of Negro children born in the North to learn trades. The North therefore has to depend most largely for its Negro mechanics upon Southern sources; and it remains a fact that the large proportion of Negro mechanics in the North are of Southern birth and training. Another reason why there are few Negroes in the North in mechanical trades is the competition that exists in the North. Negro workmen are not infrequently deficient in one or both of the things most necessary in competition—speed and accuracy. As a rule, the Negro who has learned his trade in slavery, and his son who learned under him in the South, cannot do work with the same accuracy and finish as the white workman in the North; or if they can do the work with the same degree of accuracy, they generally take a much longer time to do it. Still another reason is that in the North conditions of work contain less of the personal element, and every man is expected to work regularly, to report promptly, and to let nothing interfere with his work. Many Negroes who have had opportunities in the North have lost them because they have not learned the lessons of regularity and punctuality. A fourth very important reason has to do with labour organizations. As a rule Negroes are ignorant of the value of labour organizations, or, if they know their value, they are quite unable to organize themselves. They complain generally because they are excluded from, or rather not heartily invited into, labour unions; and their efforts have generally ended with their complaints. Yet they have not usually proved that they are desirable union members, either by organizing themselves or by any active, intelligent interest in labour union affairs in cases where they are admitted to white unions. They have not (largely because of lack of numbers but also because of former training and lack of industrial intelligence) made themselves a desirable quantity for the labour unions, except in some rare and notable cases; and the unions do not yet see that they should hand over to them the privileges and advantages which it has taken them years of struggle and agitation and organization to gain.

"Notwithstanding the difficulties, there is a steady increase in Negro mechanics and they are gradually learning, in the school of hard experience, how to overcome many of the obstacles which now hinder them. The extent of the progress among Negro mechanics is not known to the public. For, in a city like New York, or Chicago, or Philadelphia, where tens of thousands of mechanics are employed, a hundred Negroes would hardly be noticed; and if they increased to a hundred and fifty the increase, though fifty per cent., would create no stir. If they were transferred, however, to a small Southern town they would be very conspicuous; but as it is now, a million or more people in the large city are absolutely ignorant of them, and one finds out about them only through special investigation. Furthermore, if some of these Negro mechanics in large Northern cities should do the same amount of business in the Southern towns that they now do in New York, or Chicago, or Indianapolis, or Philadelphia, they would be rated as most successful contractors. But in the environment in which they are placed, where the building business often averages over a million dollars per week, they are practically lost, and it is difficult for the casual observer to measure their progress.

"Yet, in a few trades in some cities of the North, Negroes form a larger proportion of the workmen than they do of the population. For example, in Pittsburg, where the Negroes are 5.3 per cent. of the population, they formed at the Census of 1900 more than 20 per cent. of the brick and tile makers, about 9 per cent. of the stationary engineers and firemen, 14 per cent. of the brick and stone masons, 8 per cent. of the plasterers, over 10 per cent. of the paper hangers; and of the iron and steel workers, who constitute Pittsburg's chief skilled mechanical workers, the Negroes comprise 3.9 per cent. In Chicago 1.8 per cent. of the population are Negroes, but 3.1 per cent. of the plasterers, 5.5 per cent. of the paper hangers, and 17.4 per cent. of the whitewashers are Negroes. In New York the Negroes are 1.8 per cent. of the population but comprise 5.7 per cent. of the stove, furnace, and grate makers.

"The gaining of a foothold in the North has been no easy task for the Negro mechanic. Every large Northern city has scores of men who were rated as mechanics in their Southern homes but who are now engaged in domestic and personal service. In Philadelphia, for example, there are fully twice as many Negroes, who claim to be mechanics, working in other lines of endeavour, as are following their trades. The fierceness of competition, and the 'struggle for existence' can be well illustrated by recounting the experiences of the Negro mechanic in the North. His chief problem is to *get work*. Often he has come from a section where there was plenty of work, and where he had but little

difficulty in securing it, where every contractor knew him and he knew every contractor; or he may have been a contractor himself. But in the large city it happens often that there are two or more men who want every job. If he is not a first-class mechanic he generally gives up and enters one of the numerous avenues of domestic and personal service, where competition is not so great. Necessity drives him to this. If he has more than the average pluck and the average skill, he still continues to hunt work. Occasionally he succeeds as a journeyman. But in the majority of cases, if he is a carpenter, bricklayer, painter, plasterer, or connected with some other branch of the building trades, he becomes a "contractor" in that branch, and takes small jobs of repairing and altering. In the large cities there are scores of these jobbers who seldom hire anyone, and who rarely have any one job of as much as a thousand dollars. Yet they make a living."

N.—NATIONAL NEGRO BUSINESS LEAGUE.

The following draft constitution for local branches is published by the National Negro Business League (president, Mr. Booker T. Washington):—

"We, the coloured citizens of.....desiring to stimulate greater activity and growth in business enterprises among our people in the city of.....and vicinity, and feeling the need of constant co-operation and conference for mutual advice among the members of the race already engaged in business, and to encourage others of the race to go into business and to promote an interest on the part of the race to give support to business enterprises conducted by its members, and also desiring to co-operate with The National Negro Business League, have formed this organisation and framed the following Constitution."

[Here follow clauses dealing with Title, Officers, Duties of Officers and Committees.]

Membership.

"All persons of good character over sixteen years of age, who are engaged in some kind of legitimate business, or other honourable calling or who believe in stimulating and giving support to enterprises shall be eligible to membership by a majority vote of the members present at the meeting at which said name or names are proposed. The membership beginning only after the joining fee,cents or.....dollars has been paid."

[Other clauses follow dealing with Time of Meeting, Order of Business, Expulsion of Members, and Quorum.]

The National Negro Business League also publishes the following: "Suggestions for organising and maintaining Local Business Leagues":—

Organisation.

In organising Local Leagues, great care should be taken to select the most responsible as well as reliable business men and women in the community. They should be duly impressed that a Business League must not go down for want of interest.

Meetings.

There should be held under the auspices of each Local League, at least one public meeting during the year, in which something informing and encouraging should be said concerning the business uprising among negroes of the community. Business men and women should be invited.

To interest White People.

Successful and well disposed white business men should be invited from time to time to talk to the League on business matters, and in this way, have the new things, and progressive things in business matters explained.

Business Direction.

Each Local League should aim to know everything that is proper for it to know concerning the various kinds of business carried on in its community, and if possible, know the financial standing of the business men and women, such as the amount of business done, methods, number of people who get employment, salaries, or wages paid, &c.; if this is done, it will be possible to get such reports at the National Conventions as will be of great value as evidence to the negro's progress.

Membership.

Any person engaged in business or having retired from business, or desiring to promote business enterprises, is eligible to membership in the National Negro Business League, upon the payment of an annual fee of \$2.00, or a life membership fee of \$25.00, or by holding credentials as a representative from a regularly organised and chartered Local League, under the auspices of The National Negro Business League.

Serving the Community.

A well organised and wide awake Local League can be of great service to the town or city in which it is organised. Some of the things that are possible for it to do are as follows:—

(1.) To keep a list of the young men and women who are intelligent, trained, and qualified to fill responsible places as clerks, accountants, salesmen, janitors, porters, &c.; in this way a League can do much in getting suitable occupations for as many as are competent, especially so in Northern States.

(2.) In protecting the community against fraudulent schemes, as false Stock Companies, that are gotten up solely for the purpose of defrauding coloured people.

(3.) In fostering an interest in civic affairs, such as sanitation, clean yards, cultivating pride in making attractive in appearance the home districts of our people, and in other ways, showing an interest in everything that may make up a better community life.

How to organize a Local Business League.

1. Consult with a half dozen of the business people of your community. Do not wait for another to do this, make it your business.

2. Show them the advantages to be derived from an interchange of ideas and the wisdom of holding such meetings.

3. Call a public meeting through personal invitations and notices through the churches.

4. Get the ministers and professional men interested.

5. Hold the meeting and proceed with the business, even if only a few are present.

6. Let the person who took the lead in having the meeting called state its object and tell of the value of a Local Negro Business League.

7. Choose some person to preside for the time being and another to keep the minutes.

8. A committee of five should be appointed on constitution and while this committee is looking over the constitution already prepared by the National Organiser to see if changes are necessary and what these should be, the meeting can spend its time in listening to short addresses on business and the importance of working together.

9. The committee on constitution should report as soon as possible.

10. If the committee reports favourably on the constitution submitted, let it be adopted. When the vote is finally taken on the constitution, it should be done by a rising vote.

11. Immediately after the adoption of the constitution the election of officers should be proceeded with, and the following should be the initial corps of officers :—President, vice-president, secretary, and treasurer.

These officers shall be elected for one year, or until their successors are elected and qualify. A separate vote should be taken on each officer.

12. The time and place of regular meetings should be determined at this meeting. The meetings should begin at 8 o'clock and adjourn not later than 10 o'clock. Promptness and punctuality should be the rule of the League.

13. The secretary of the League, immediately after its organisation should write promptly to the National Organiser, sending him detailed information as to the business status of negro business persons and the list of officers and members, with their addresses.

14. A half hour should be devoted to the discussion of one of the following subjects :—

Suggested Subjects for Discussion.

1. How to unify the Coloured people in the business interests of the community.

2. What the professional men, ministers, teachers, doctors, lawyers, &c., can do to assist the business men and women.

3. What the business men can do to assist the professional men.

4. Patronising negro business enterprises.

5. What new business can be established in the community.

6. How can the business enterprises already established be improved.

7. How to secure additional country trade.

8. If a bank does not exist, can one be established and supported ?

9. If a millinery establishment does not exist, can one be established and supported, &c., &c. ?

10. If a shoe store or gent's furnishing store does not exist can one be established and supported ?

11. If a drug store does not exist, can one be established and supported ?

APPENDIX II.

UNEMPLOYMENT IN THE UNITED STATES.

Any attempt to form a numerical estimate of the amount of industrial unemployment existing in the United States at a given date would prove futile, owing to the fact that comprehensive statistics on this subject, or even such partial statistics as would justify general deductions, are not available. This is a branch of labour statistics with which the Federal Department of Labour has not dealt hitherto, while only two State Labour Departments publish periodical returns of trade union unemployment in any way analogous to those collected by the British Board of Trade since 1887, and published in the *Labour Gazette* since 1893.

The Bureau of Statistics of Labour of the State of New York has, since June, 1899, published quarterly percentages of unemployment among members of the trade unions of that State and, since June, 1903, similar percentages have been calculated monthly (but published half-yearly) by that Bureau for certain representative unions in the State. The Bureau of Statistics of Labour of Massachusetts has, since March, 1908, collected trade union statistics of unemployment at the end of each quarter, and these are published in the State Labour Bulletin. Monthly percentages of unemployed were published regularly by the American Federation of Labour from January, 1900, until October, 1909. These percentages were based upon returns furnished by certain of the trade unions affiliated to the Federation, but as the aggregate membership of the unions reporting formed less than 4 per cent. of the total officially known membership of the trade unions of the United States, the results could not be regarded as representative of the American labour market.

Such periodical statistical data of an official character as are available are, therefore, limited to the trade union unemployment returns published for the States of New York and Massachusetts. The fact that these States contain less than one-seventh of the total population of the United States would alone make it unsafe to apply the results of the returns to the country generally. But the acceptance of the returns as adequately representing the condition of the labour market in the States themselves is also open to serious objections, and these objections apply with additional force to any use of the figures for the purpose of international comparison. The membership of the trade unions reporting their unemployed in the two States forms but a small fraction of the total number of wage-earners in these States. The latest complete official classification of occupied persons in the United States is that based on the Federal Census of 1900, and comparison shows that the membership of the unions in the State of New York reporting in December, 1909, formed only about 5 per cent. of all persons of 16 years and over engaged in trade and transportation, and in manufacturing and mechanical pursuits in 1900, while in the metal trades alone the proportion was 5.6 per cent., and in the textile and clothing trades 4.4 per cent. Similarly, the membership of the Massachusetts unions reporting at the same date formed about 13 per cent. of all persons of 16 years and over engaged in trade and transportation and in manufacturing and mechanical pursuits according to the Census of 1900; while the ratio in the metal and textile trades separately was 9 and 6 per cent. respectively, though in the clothing trades a proportion of 21.9 per cent. was reached.

The objections to the use of figures for the purpose of international comparison are still stronger. An indispensable condition for the trustworthiness of statistics of this kind is that the returns should be confined to trade unions paying unemployed benefit; otherwise the possibility of inaccurate enumeration is considerable. The British, like the German, figures relate exclusively to unions of this kind, and those of Denmark almost wholly so; of the workpeople included in the French returns about 30 per cent. belong to unions paying unemployed benefit; the proportion in Belgium is about 84 per cent., and in Norway 65 per cent. In the trade unions of the United States, however, this form of benefit is still rare, and it is a reasonable inference that the completeness of the enumeration of their unemployed members would be seriously affected in consequence.

A further important consideration that invalidates international comparison is the disproportionate manner in which the various trades are represented in the statistics for the different countries. From this standpoint the returns both for New York and Massachusetts might be assumed to have a tendency to make the general percentage of unemployment in these States appear unduly high. This results from the fact that in these returns, as compared with the returns for certain European countries, under-representation is given to certain trades which are not specially liable to great fluctuations in employment, and a decided over-representation to trades in which the contrary tendency prevails.

Of industries in which, in the United Kingdom, comparatively little absolute unemployment (as distinguished from partial employment or short time) occurs, the textile industry was represented in the British returns by 17 per cent. of the total membership of unions reporting in December, 1909, and in the Massachusetts returns by only 7 per cent.; while the coal mining industry was represented in the British returns by 20 per cent. of the total membership, and not at all in the New York and Massachusetts returns.

On the other hand, the building and woodworking trades, which are specially exposed to cyclical and seasonal unemployment, were represented by 34 per cent. of all members reported in New York and 23 per cent. in Massachusetts; while the proportion was 13 per cent. in the United Kingdom. Again, the transport trades, in which likewise there is much fluctuation, were represented by 16.7 per cent. in New York State and 18 per cent. in Massachusetts, while they had no representation in the British returns.

Midway between the trades which normally represent the two extremes of minimum and maximum unemployment may be named the metal trade group; here the membership of the trade unions reporting at the same date formed 8.1 per cent. of the whole in New York and 6 per cent. in Massachusetts, while the corresponding proportion in the United Kingdom was 38 per cent.

It is obvious, therefore, that the statistics for New York and Massachusetts give a relatively very large representation to trades which are characterised by violent fluctuations of employment, *i.e.*, the building and woodworking and transport trades. So important, indeed, is this representation in the case of New York that the omission of the figures for these trades from the returns for December, 1909, would reduce the unemployed percentage by nearly two-fifths.

While, for the reasons stated, no statistics of unemployment exist which can be accepted as representative of the country as a whole, there is evidence that periods of trade depression produce in the United States a temporary displacement of labour which is at least as serious as any that occurs in European countries. At the same time it is desirable to bear in mind certain aspects of the question of unemployment in the United States which are to some extent peculiar to the country and which have an important bearing upon the difficulties, social and personal, which a period of industrial depression creates.

Thus there is at all times a considerable interchange of labour between different trades. The American workman is very adaptable, and the rapid growth of industry especially when accompanied, as is the case, by an increasing sub-division of labour, enables and at times compels him to change from one occupation to another. In times of industrial depression this movement from one class of employment to another takes, in general, a downward direction; that is to say, the more skilled workman who, as such, is not needed for the time being, takes the place of the less skilled workman, and the latter in turn displaces the unskilled labourer. Hence there is a tendency for the greatest burden of unemployment to fall upon the lowest stratum, and that is composed in the main of foreigners. For this reason unemployment is far less conspicuous and less vocal than in this country. In some large American towns foreign labour is represented by as many as two or three dozen different nationalities and languages, and this diversity, with the antipathies which often accompany it, leads to disunity and to a certain inarticulateness in a matter of common concern like unemployment. Moreover, there is probably always the consciousness in the mind of the more recent immigrants, and especially of the less established classes among them, that their presence in the country is a matter for which they themselves are responsible, and this takes some force out of their grievance; if they are not satisfied with the prevailing conditions they should return home. Experience shows that in times of severe depression the immigrant aliens do, in fact, return to Europe in large numbers. A large proportion of them are young unmarried men, and during the crisis of 1908 very many of them went home. This was also the case with a considerable proportion of the married men whose families had remained in Europe, and the effect of this return stream of migration was greatly to relieve the pressure of unemployment in certain parts of the States. The returns of the American Immigration Department show that during the year July, 1907, to June, 1908, 395,073 alien emigrants (*i.e.*, departing aliens, whose residence has been in the United States, who intend to reside permanently abroad) left the country, while the number of alien immigrants who arrived in that year was 782,870, as compared with 1,285,349 in 1906-7 and 1,100,735 in 1905-6.

Further, in periods of trade depression competition in the industrial labour market is sensibly relieved owing to the fact that many opportunities for alternative employment exist in the States, and, in case of need, are freely embraced. The great towns and the important manufacturing industries of America are of more recent growth than those of England, hence a much larger proportion of the native-born urban workers come from the country. Often they have parents or other relatives living on farms, and in times of depression young men go on these farms, where they make themselves useful in return for board and lodging. Even if they have no friends in the country, they can often get work there in summer. In the same way the negroes in the iron and steel and coal mining industries of the South who were thrown out of work in 1907 were in request on sugar and cotton plantations. The supreme position of agriculture in the States also tends to give great importance to this outlet for the superfluous labour of the towns. It may be noted also that wages in the United States are high relatively to the cost of food, with the result that in a time of depression earnings may suffer a considerable diminution before the level of actual privation is reached.

APPENDIX III.

WAGES AND HOURS FORMS USED IN ENQUIRY.*

Confidential.

I.—BUILDING TRADES.

Predominant Rates of Wages and Hours of Labour in 1909 of the principal classes of Adult Able-bodied Wage-earners employed by the undermentioned firm.

NOTE.—Particulars furnished will be regarded as strictly confidential, and will be used only for statistical purposes. No individual return will be published.

| PRINCIPAL CLASSES OF WAGE-EARNERS. <small>(The Rates of Wages quoted should be those for able-bodied men between the ages of 21 and 55 years.)</small> | Approximate Number of Men of each Class to which this Return refers. | Usual Mode of Payment. <small>T—Time. P—Piece.</small> | Predominant Rates of Wages per Hour or Week* generally paid in February, 1909. | Usual Number of Working Hours per Week (mealtimes and overtime excluded) in Summer. |
|---|--|---|--|---|
| | | | \$ cts. | |
| Foremen | | | | |
| Bricklayers | | | | |
| Stonemasons | | | | |
| Stone Cutters | | | | |
| Carpenters | | | | |
| Plasterers | | | | |
| Plumbers | | | | |
| Structural Ironworkers ... | | | | |
| Painters | | | | |
| Labourers— | | | | |
| Hod Carriers | | | | |
| Bricklayers' Labourers | | | | |
| Masons' Labourers ... | | | | |
| Plasterers' Labourers | | | | |
| | | | * In the case of workmen not paid by time please state the amount most frequently earned by them (by piece, task, &c.) during an ordinary week, in summer, without overtime. | |

REMARKS.

Name of Firm.....

Address.....

Date....., 1909.

* On all the forms it was stated that the information asked for was for the use of the British Labour Department, London, England.

WAGES AND HOURS FORMS USED IN ENQUIRY.

Confidential.

II.—FOUNDRIES, MACHINE SHOPS, BOILER-MAKING, SHIP-BUILDING, &c.
(New Work, Not Repairs.)

Predominant Weekly Rates of Wages and recognised Hours of Labour in February, 1909, of certain classes of Adult Able-bodied Wage-earners employed by the undermentioned firm.

(Particulars furnished will be regarded as strictly confidential and will only be used for statistical purposes. No individual return will be published.)

| CLASSES OF WAGE-EARNERS. (The Rates of Wages quoted should be those for able-bodied men between the ages of 21 and 55 years.) | Approximate Number of Men of each Class to which this Return relates. | Usual Mode of Payment. T—Time. P—Piece. | Predominant Rates of Wages* for a full ordinary week (without overtime) in February, 1909. | | Usual Number of Working Hours per Week, meal-times and overtime excluded. |
|--|---|---|--|----------------|---|
| | | | Time Workers. | Piece Workers. | |
| <i>Foundries and Machine Shops—</i> | | | \$ cts. | \$ cts. | |
| Foremen | | | | | |
| Iron-moulders | | | | | |
| Fitters | | | | | |
| Turners (metal) | | | | | |
| Blacksmiths... .. | | | | | |
| Pattern-makers | | | | | |
| Labourers | | | | | |
| <i>Boiler-making, Ship-building, &c.—</i> | | | | | |
| (Please strike out the portion of the above heading which does not apply). | | | | | |
| Foremen | | | | | |
| Angle-Iron Smiths :— | | | | | |
| Boiler-making... .. | | | | | |
| Ship-building | | | | | |
| Platers (Heavy) :— | | | | | |
| Boiler-making... .. | | | | | |
| Ship-building | | | | | |
| Platers (Light) :— | | | | | |
| Boiler-making... .. | | | | | |
| Ship-building | | | | | |
| Riveters :— | | | | | |
| Boiler-making... .. | | | | | |
| Ship-building | | | | | |
| Calkers | | | | | |
| Holder-up | | | | | |
| Platers' Helpers | | | | | |
| Labourers | | | | | |

REMARKS.

* The average weekly amount of any bonus earned under the premium system should be added to the ordinary weekly wages.

Name of Firm.....

Address.....

Date....., 1909.

WAGES AND HOURS FORMS USED IN ENQUIRY

Confidential.

III.—PUBLIC UTILITIES.

*Predominant Weekly Rates of Wages and usual Hours of Labour in 1909 of the principal classes of Adult Male Able-bodied Wage-earners employed by**

.....
* Please state whether Municipality or Company, giving name.

City..... State.....

| Principal Classes of Wage-earners (between the ages of 21 and 55 years). | Approximate Number of Men of each Class to which this Returns refers. | Usual Mode of Payment. T-Time. P-Piece. | Predominant Weekly Rates of Wages for a full ordinary Week, without overtime, in February, 1909. | Usual Number of Working Hours per Week (mealtimes and overtime excluded) in Summer. |
|--|---|--|--|---|
|--|---|--|--|---|

Street Construction, Paving and Cleaning.

| | | | | |
|---------------------------|--|--|--|--|
| Foremen | | | | |
| Pavers | | | | |
| Pavers' Helpers | | | | |
| Road Menders | | | | |
| Scavengers | | | | |
| Road Sweepers | | | | |
| Drivers, Teamsters | | | | |

Waterworks (distribution).

| | | | | |
|------------------|--|--|--|--|
| Foremen | | | | |
| Labourers | | | | |

Gasworks.

| | | | | |
|------------------|--|--|--|--|
| Foremen | | | | |
| Stokers | | | | |
| Labourers | | | | |

Electric Light and Power Works.

| | | | | |
|---------------------|--|--|--|--|
| Electricians | | | | |
| Fitters | | | | |
| Stokers | | | | |
| Labourers | | | | |

Tramways.

(Electric, Steam, Horse—please strike out the words which do not apply).

| | | | | |
|---------------------------|--|--|--|--|
| Drivers (Motormen) | | | | |
| Conductors | | | | |

REMARKS.

Date.....1909.

Signed.....

WAGES AND HOURS FORMS USED IN ENQUIRY.

Confidential.

IV.—VARIOUS TRADES.

Predominant Weekly Rates of Wages and Usual Hours of Labour in February, 1909, of the principal classes of Adult Male Able-bodied Wage-earners employed by the Undermentioned Firm.

N.B.—As the rates of wages may show a wide range, you are asked to state the rates paid to a majority of the wage-earners in each class.

Particulars furnished will be regarded as strictly confidential and will be used only for statistical purposes. No individual returns will be published.

| PRINCIPAL CLASSES OF WAGE-EARNERS. (The Rates of Wages quoted should be those for able-bodied men between the ages of 21 and 55 years). | Approximate Number of Wage-earners of each Class to which this Return relates. | Usual Mode of Payment. T—Time. P—Piece. | Predominant Rates of Wages for a full ordinary Week, without overtime, in February, 1909. | | Usual Number of Working Hours per Week (mealtimes and overtime excluded). |
|--|--|---|---|----------------|---|
| | | | Time Workers. | Piece Workers. | |
| Foremen <i>Skilled Workmen—</i> (Specify the Occupations) | | | \$ cts. | \$ cts. | |
| <i>Other Workmen—</i> Labourers Teamsters, Drivers— (One horse) ... (Two horses) ... | | | | | |

REMARKS.

Name of Firm.....

Address.....

Date.....1909.

RENT FORM USED IN ENQUIRY.

Confidential.

RENT OF DWELLINGS IN THE OCCUPATION OF WAGE-EARNING FAMILIES IN THE MONTH OF FEBRUARY, 1909.

City.....Ward.....State.....

| NUMBER AND NAME OF STREET. | State Type of Dwelling: single, two family house, flat, or tenement; front or rear. | Number of Habitable Rooms in each Dwelling. (Include kitchen, garret and basement; but exclude vestibule, bathroom, wash-house, cellar, etc.) | Rent per Calendar Month, February, 1909. | What Charges does the Rent include: Water, Heating, Light, &c. (state amounts)? | Number of Dwellings of the same Rental containing the same number of Habitable Rooms. |
|--|---|---|--|---|---|
| NOTE.—Use separate line for dwellings which differ in number of habitable rooms or in rent. 1 2 3 4 5 6 7 8 9 10 | | | \$ cts. | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

SUPPLEMENTARY PARTICULARS.

State predominant nationality of occupiers in above neighbourhood :

Where possible give rents per calendar month in October, 1905 (indicating by the marginal numbers as above the dwellings to which these rents refer) :

Other remarks :

PRICES FORMS USED IN ENQUIRY.

Confidential.

I.—MEAT.

Retail Prices of Meat of the Qualities most generally consumed by Wage-earning Families.

City..... State.....

Source of particulars furnished: for example, Retail Store, Market

Name

Address..... Date.....

NOTE.—Particulars furnished will be regarded as strictly confidential and will be used only for statistical purposes. No individual return will be published.

| DESCRIPTION. | Prices per lb. in February, 1909. | | | REMARKS. Please indicate here, in addition to other remarks, any local peculiarities of cut or name that may affect price. Also state whether home-killed, chilled or frozen. |
|--------------------------|-----------------------------------|----------|---------------|--|
| | Maximum. | Minimum. | Most General. | |
| <i>Beef:—</i> | | | | |
| Fresh : | | | | |
| Roasts—Round ... per lb. | | | | |
| " Rib prime.. " | | | | |
| " Rib second | | | | |
| cut ... " | | | | |
| " Chuck or | | | | |
| short ribs " | | | | |
| Steaks—Round ... " | | | | |
| " Sirloin ... " | | | | |
| Shin without bone... | | | | |
| " with bone ... " | | | | |
| Plate " | | | | |
| Brisket " | | | | |
| Flank " | | | | |
| Bouillon (for soup)... | | | | |
| Salt (or corned) : | | | | |
| Plate " | | | | |
| Navel " | | | | |
| Brisket " | | | | |
| <i>Mutton or Lamb:—</i> | | | | |
| Leg " | | | | |
| Breast " | | | | |
| Loin " | | | | |
| Chops " | | | | |
| Shoulder " | | | | |
| Neck " | | | | |
| <i>Veal:—</i> | | | | |
| Cutlets " | | | | |
| Rib chops " | | | | |
| Loin chops " | | | | |
| Breast " | | | | |
| Neck " | | | | |
| <i>Pork:—</i> | | | | |
| Fresh—Loin " | | | | |
| Spare rib " | | | | |
| Shoulder " | | | | |
| Chops " | | | | |
| Corned (wet salt or | | | | |
| pickled) " | | | | |
| Dry salt " | | | | |
| Salt—Ham " | | | | |
| " Shoulder " | | | | |

PRICES FORMS USED IN ENQUIRY.

Confidential.

II.—GROCERIES, &C.

Retail Prices of Commodities of the Qualities most generally consumed by Wage-earning Families.

City..... State.....

Source of particulars furnished—(for example : Retail Store, Market, Etc.) :

Name.....

Address Date.....

(NOTE :—Particulars furnished will be regarded as strictly confidential and will only be used for general and statistical purposes. No individual return will be published.)

| COMMODITY. | Unit of weight or measure to which the prices given apply. | Prices in February, 1909. | | | REMARKS. |
|--|--|---------------------------|--------------------|-------------------------|----------|
| | | Maximum \$ cts. | Minimum \$ cts. | Most general \$ cts. | |
| Tea | per lb. | | | | |
| Coffee | per lb. | | | | |
| Sugar—Loaf | per lb. | | | | |
| White Granulated | per lb. | | | | |
| Brown | per lb. | | | | |
| Breakfast Bacon—Rib in | per lb. | | | | |
| Boneless | per lb. | | | | |
| Eggs | per doz. | | | | |
| Cheese (state kind) | per lb. | | | | |
| Butter—Fresh | per lb. | | | | |
| Oleomargarine | per lb. | | | | |
| Potatoes—Irish | per half peck [7½ lbs.] | | | | |
| Sweet | per lb. | | | | |
| Flour (Wheaten—Household) | per bag of 24½ lbs. | | | | |
| Bread (Wheaten) | per loaf of.....lb. | | | | |
| Milk (state whether delivered (D) or not). | per quart. | | | | |
| Milk—Condensed | per can of.....lb. | | | | |
| Coal—(state kind) | per bushel [80 lbs.] | | | | |
| Coke | per half bushel [20 lbs.] | | | | |
| Kerosene | per gallon. | | | | |

BUDGET FORM USED IN ENQUIRY.

Confidential.

PART I.

Income and Expenditure of a Wage-earning Family.

Statement showing Total Weekly Income and Weekly Expenditure on Food, Rent, &c.

(All particulars furnished will be regarded as strictly confidential and will not be published ; the information they contain is required solely for statistical purposes. Names need not be given.)

- 1. City..... State.....
- 2. Occupation of head of family.....
- 3. Total number in family living at home.....

Country of birth { Husband.....
 { Wife.....

| Number. | Ages. | | | | |
|------------|-------------------|--|--|--|--|
| Children { |Male, aged | | | | |
| |Female, aged | | | | |

- 4. Average Weekly Income :—
 - (a) Earnings of the Husband: { From principal occupation \$.....
 { From supplementary occupation \$.....
 - (b) Earnings of the Wife \$.....
 - (c) Earnings of the Children :—
 - Male, number at work..... Amounts earned by each { \$.....
 { \$.....
 - Female, number at work..... Amounts earned by each { \$.....
 { \$.....
 - (d) Other regular income of the family (*specify nature*) \$.....
- Total Income of Family \$.....

- 5. House Rent per calendar month.....
 (N.B.—Should the house belong to the family, please state the rent of a similar house in the neighbourhood. \$.....)

- 6. Number of habitable rooms occupied, including the kitchen.....
 (N.B.—Vestibules, bath rooms, wash houses, cellars, &c., not to be counted.)

BUDGET FORM USED IN ENQUIRY.

PART II.

Confidential.

Details of Household Expenditure of food &c., for an ordinary week in 1909.

(N.B.—You are particularly requested to *strike out* all articles of food in the following list which are not habitually used in your household.)

| ARTICLES OF FOOD. | Weight or Measure of Quantity Consumed per Week. | Cost per Week. | ARTICLES OF FOOD. | Weight or Measure of Quantity Consumed per Week. | Cost per Week. |
|---|--|----------------|--|--|----------------|
| | | \$ cts. | | | \$ cts. |
| Bread—Of Wheat ... lb. | | | Olive Oil ... pint | | |
| Of Rye ... lb. | | | Cheese ... lb. | | |
| Other ... lb. | | | Milk—fresh ... quart | | |
| Flour—Wheat ... lb. | | | Milk—condensed ... lb. | | |
| Rye ... lb. | | | Eggs ... number | | |
| Buckwheat and other lb. | | | Tea ... lb. | | |
| Corn and Cornmeal ... lb. | | | Coffee ... lb. | | |
| Cakes, Crackers, Dough-nuts, etc. ... lb. | | | Cocoa and Chocolate ... lb. | | |
| Rolls, Buns, and Biscuits lb. | | | Sugar ... lb. | | |
| Macaroni, Noodles, Spag-hetti, etc. ... lb. | | | Molasses and Syrup pint | | |
| Rice, Barley, Sago, etc.... lb. | | | Vinegar, Pickles and Condiments .. pint | | |
| Oatmeal and Breakfast Cereals ... lb. | | | Fruits (fresh, dried, and canned) and Jams ... lb. | | |
| Potatoes (Irish, etc.) ... lb. | | | Other articles of food not specified above — | | |
| Sweet Potatoes, Yams, etc. ... lb. | | | | | |
| Dried Peas and Beans ... lb. | | | | | |
| Sweet Corn ... lb. | | | | | |
| Green Vegetables—Salad, Tomatoes, etc. ... | | | | | |
| Canned Vegetables ... lb. | | | | | |
| Meat—Beef (fresh and corned) ... lb. | | | | | |
| Mutton and Lamb ... lb. | | | Beer and Cider ... pint | | |
| Pork (fresh and salt) lb. | | | Spirits ... pint | | |
| Bacon, Ham, Head-cheese, etc. ... lb. | | | Coal ... bushel [80 lbs.] | | |
| Veal ... lb. | | | Coke half bushel [20 lbs.] | | |
| Sausage ... lb. | | | Wood ... | | |
| Poultry ... lb. | | | Kerosene ... gallon | | |
| Fish of all kinds ... lb. | | | | | |
| Lard, Suet, Dripping ... lb. | | | | | |
| Butter ... lb. | | | | | |
| Oleomargarine ... lb. | | | | | |
| | | | Total ... | | \$ |

Average weekly cost of Meals consumed away from home (in Restaurants, Eating-houses, etc.) \$ _____

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Prices (Retail) of, at—

New York 47; Atlanta 60; Augusta 71; Baltimore 86; Birmingham 98; Boston 116; Brockton 127; Chicago 151; Cincinnati 160; Cleveland 171; Detroit 184; Duluth 196; Fall River 207; Lawrence 218; Louisville 230; Lowell 242; Memphis 256; Milwaukee 269; Minneapolis—St. Paul 282; Muncie 287; New Orleans 298; Newark 307; Paterson 315; Philadelphia 336; Pittsburg 356; Providence 369; St. Louis 380; Savannah 393.

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Persons Occupied, Number of, in, at—

New York 16, 17, 20; Atlanta 52; Baltimore 75; Birmingham 90; Boston 105; Brockton 119; Chicago 133, 138; Cincinnati 155; Cleveland 164; Detroit 176; Duluth 188; Fall River 200; Lawrence 211; Louisville 221; Lowell 234; Memphis 246; Milwaukee 260; Minneapolis—St. Paul 273, 274; New Orleans 291; Newark 300; Paterson 310; Philadelphia 321; Pittsburg 342; Providence 360, 361; St. Louis 372; Savannah 385.

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